

# Canaan Town Plan



Draft January 2025

# Acknowledgements

This update was drafted by the Northeastern Vermont Development Association (NVDA) with resources from the Agency of Administration’s Municipal Technical Assistance Program (MTAP) funding.

Outreach work included multiple town visits, multiple interviews with residents, and attendance at Planning Commission meetings.

Canaan Naturally Connected (CNC) heavily supported this document by providing their 2024 survey (Appendix A), meeting minutes, and imagery to help build this plan.

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## Overview

In February 2024, Canaan’s Planning Commission and Town Clerk reached out to the Northeastern Vermont Development Association (NVDA) for consultation regarding their town plan expiring. At the time, the State of Vermont’s [Municipal Technical Assistance Program](#) (MTAP) was still accepting municipal assistance requests and the Town Clerk put in a request for direct technical assistance on updating the town plan. NVDA and the Town agreed to a statement of work that included planning guidance at meetings, a review of town documents and research on present conditions, community engagement, local capacity building, drafting of the document, and assistance with the adoption of the plan.

## Purpose

The purpose of this plan is to guide local governance at an important moment for the direction of the community, particularly as it involves capital investment, public planning, and any potential zoning amendments.

This plan also intends to be an active resource for residents, with links and sources to relevant local, regional, and state information. The Town Plan gathers resources to present to the community while stating the directions the community would like to go and the goals they would like to achieve.

## How to Use This Plan?

This plan is not a regulatory document. It is to be used as a visionary guide for planning and legislative processes for the next eight years and beyond. Planning supports a number of non-regulatory initiatives, such as:

- **Village Center Designation:** This is a non-regulatory designation for core village areas. Owners of commercial properties can receive tax credits for re-investment in their properties.
- **Grant Writing:** Some grant programs, such as the Vermont Community Development Program (VCDP), require an adopted Municipal Plan in order for a town to receive grant funding for housing or economic development projects. Other grant programs will consider funding for initiatives that are consistent with the Municipal Plan. Almost all grant standings will increase if the topic for which you are seeking funds for is an expressed interest in the Town Plan.
- **Act 250 Development & Section 248 Hearings:** The intent of a Municipal Plan is considered in Act 250 hearings, as well as Section 248 hearings for telecommunications and energy projects. To be effective in this capacity, specificity about desired development patterns and outcomes is essential.

- **Town Forests:** The Town can purchase lands for the purpose of preservation, public recreation, protection of wildland habitat, watershed protection, and/or timber management for the purpose of maintaining the health and intactness of those forestlands.

The goals, strategies, and priority actions serve as a blueprint for building opportunities and resources that give directly back to the community. This plan serves as a guiding support for municipal officials in future-decision making while meeting the requirements of ([24 V.S.A. § 4382](#)).

Once adopted, the Planning Commission and Selectboard should work together to build timelines, evaluations, and build capacity for what is pursued by the town. Ultimately, this plan intends to be a building block for future town plans to come.

## Responsibility Key

The Planning Commission wanted this plan to show clear responsibility delineation for the potential strategies laid out in this plan, who does what with whom. Canaan is fortunate to have many committees and groups established that hold valuable information and resources on how best to execute, develop, and refine any strategies laid out in this plan. There is a wealth of invested individuals at the community level who seem eager and ready to help.

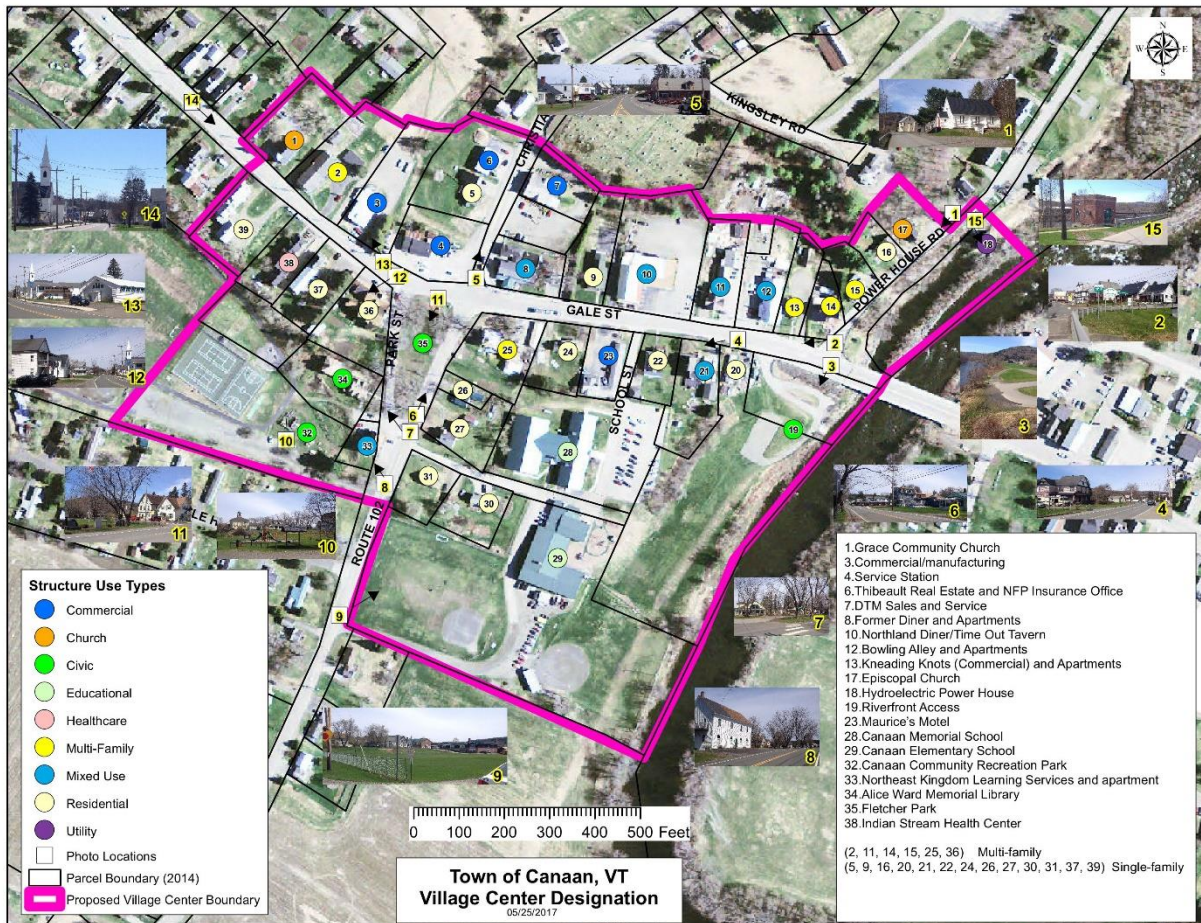
Below is a color key of these committees and groups in addition to the local governance. At the end of each section there will be goals for the section and possible strategies to execute those goals.

<b>Broadband Committee (BC)</b>
<b>Canaan Community Forest (CCF)</b>
<b>Canaan Historical Society (CHS)</b>
<b>Canaan Naturally Connected (CNC)</b>
<b>Canaan Schools/CTE (CS/CTE)</b>
<b>Planning Commission (PC)</b>
<b>Recreation Committee (RC)</b>
<b>Revolving Loan Fund Committee (RLFC)</b>
<b>Selectboard (SB)</b>
<b>Solid Waste Review Committee (SWRC)</b>
<b>Town Clerk (TC)</b>
<b>Wastewater Committee (WWC)</b>
<b>Zoning Board (ZB)</b>



## Changes Since Last Plan

The previous Planning Commission sought and obtained Village Center Designations for both Canaan Village and Beecher Falls, incredible assets to focus efforts, tax credits, and building restoration within these boundaries.

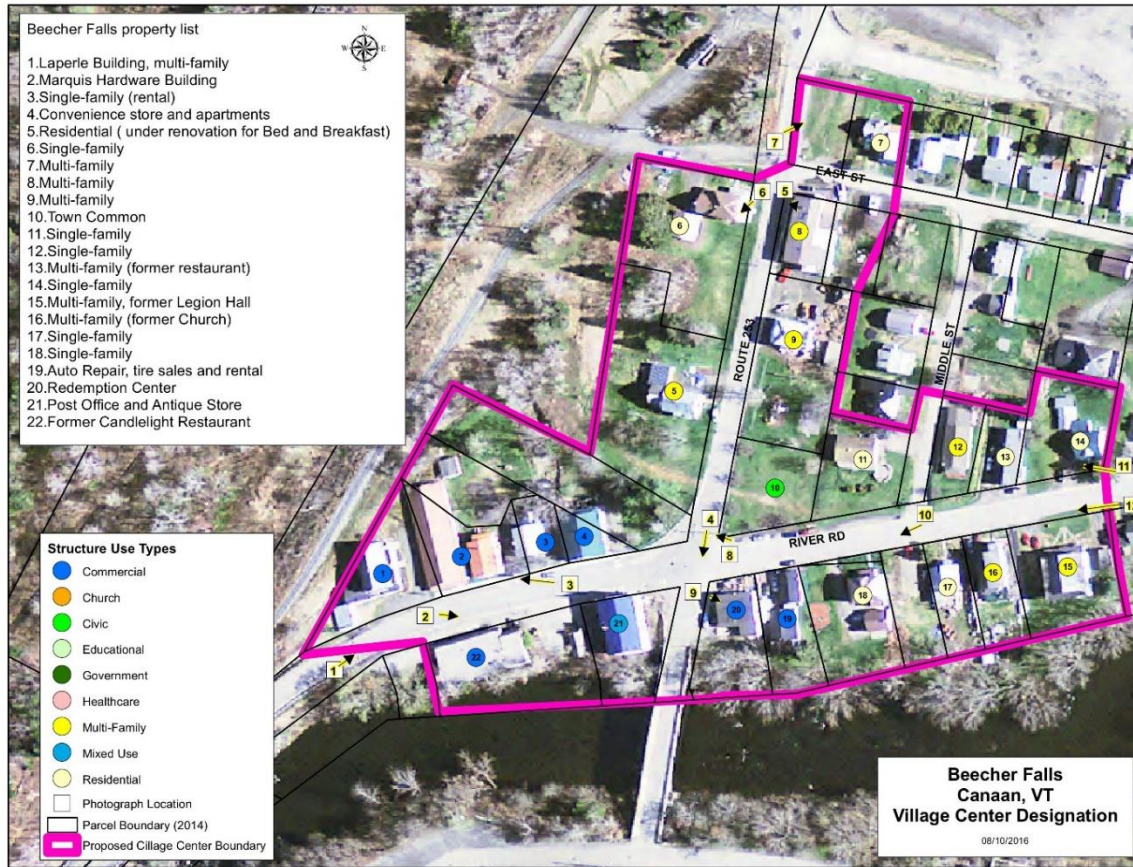


Canaan Village Center, 2017

The 2017 Town Plan, the Planning Commission engaged in all planning activities and draft writing. The 2024 plan update was written by the consultant from NVDA with heavy influence from Canaan Naturally Connected which included a survey they conducted in early 2024. The Planning Commission met monthly with NVDA's consultant.

The Planning Commission intends to have this plan provide measurable and accountable outcomes to ensure that this plan is useful and can track changes and results to the next plan.

New requirements to town plans include 1) a section pertaining to the future use of local and regional forest blocks and habitat connectors ([Act 171](#)), 2) a section that addresses the acknowledgement of [Act 47](#), or the HOME Act, which limits exclusionary housing practices.



Beecher Falls Village Center, 2017

## Regional Context

Canaan is one of the most unique Vermont towns regarding its borders, sharing boundaries with New Hampshire and Quebec. Canaan relies on amenities provided in Stewartstown and Colebrook and has and seeks a unique partnership in sustainability and resilience with the West Stewartstown community. Despite a river and a state border, Canaan’s and Stewartstown’s futures are linked.

In Essex County, Canaan has long been the most developed village in the area, especially considering the history of employment with Ethan Allen. It has traditionally been a small service center in the region with its excellent library, business, and social services and it is vital for the community and region to continue that role in tandem with other growing towns.

Canaan continues to seek partnerships with local communities in building resiliency.



# Implementation Plan & Priority Actions

Request and establish a Community Visit form Vermont Council on Rural Development (VRCD)	<b>Associated Goals:</b> Establish stronger planning mechanisms to rebuild community planning
	<b>Timeline:</b> Immediately
	<b>Responsibility:</b> Any local official can request a Community Visit
	<b>Resources:</b> <a href="https://www.vtrural.org/community-visits/">https://www.vtrural.org/community-visits/</a>

The Planning Commission must meet regularly with committed members from committees and groups. Explicit support and direction from Selectboard	<b>Associated Goals:</b> Establish stronger planning mechanisms to rebuild community planning; Continue infill development in village centers
	<b>Timeline:</b> Town Meeting Day 2025
	<b>Responsibility:</b> Selectboard; Invested Community Members
	<b>Resources:</b> <a href="https://accd.vermont.gov/community-development/town-future;">https://accd.vermont.gov/community-development/town-future;</a> <a href="http://vpic.info/Publications/Reports/PlanningManual/ChapterThree.pdf">http://vpic.info/Publications/Reports/PlanningManual/ChapterThree.pdf</a>

Fill Municipal positions by offering trainings and/or greater incentives	<b>Associated Goals:</b> Establish stronger planning mechanisms to rebuild community planning
	<b>Timeline:</b> Immediately
	<b>Responsibility:</b> Selectboard
	<b>Resources:</b> <a href="https://www.vlct.org/">https://www.vlct.org/</a>

Update zoning so as to minimize forest fragmentation through subdivision of land and focus development incentives in Village Centers	<b>Associated Goals:</b> Protect forest habitats from further fragmentation; Continue infill development in Village Center designations; Shape the future of the village to be walkable, safe, and equitable for families and workers
	<b>Timeline:</b> 1-3 Years
	<b>Responsibility:</b> Planning Commission; Zoning Board; Zoning Administrator; Selectboard
	<b>Resources:</b> <a href="https://vtfishandwildlife.com/conserve">https://vtfishandwildlife.com/conserve</a> ; <a href="https://vnrc.org/healthy-forests-wildlife/forest-fragmentation/">https://vnrc.org/healthy-forests-wildlife/forest-fragmentation/</a> ; <a href="https://legislature.vermont.gov/statutes/section/24/117/04414">https://legislature.vermont.gov/statutes/section/24/117/04414</a>

Planning Commission should work with Selectboard to identify potential locations and properties near or within Village Center designations that would be suitable for appropriately scaled multi-unit housing	<b>Associated Goals:</b> Be proactive in addressing housing availability and affordability needs; Continue infill development in village centers; Continue infill development in Village Center designations
	<b>Timeline:</b> 1-5 Years
	<b>Responsibility:</b> Planning Commission; Selectboard
	<b>Resources:</b> <a href="https://bipartisanpolicy.org/blog/zoning-environmental-review-reforms-vermont/">https://bipartisanpolicy.org/blog/zoning-environmental-review-reforms-vermont/</a> ; <a href="https://vnrc.org/wp-content/uploads/2024/06/DRAFT-H.687-Overview-As-Passed-By-the-Legislature-6-14-24.pdf">https://vnrc.org/wp-content/uploads/2024/06/DRAFT-H.687-Overview-As-Passed-By-the-Legislature-6-14-24.pdf</a> ; <a href="https://www.vlct.org/land-use">https://www.vlct.org/land-use</a>

The actions above represent what the town should put its focus on first. The goals and strategies throughout this plan are intended to reinforce and support these initial actions. These actions are designed to build capacity and resiliency for the community.

*The following policies are put forth:*

- a. To maintain services and facilities at or above current levels.
- b. To accept our responsibility for our waste by maintaining a recycling plan and other related programs.
- c. To provide for residential housing in the existing villages;
- d. To provide for a range of lot sizes that encourage more efficient land use;
- e. To protect historic resources through a range of programs, both regulatory and non-regulatory;
- f. To ensure the availability of safe and affordable child care and integrate child care issues into the planning process
- g. To ensure that the implementation of the above policies are consistent with the preservation of scenic and historic features; and consistent with the wise use of natural resources, including irreplaceable natural areas.
- h. To encourage development to concentrate toward village centers
- j. Ensure that communications infrastructure blend into the landscape while serving the community.



Coffeehouse – Thicker Than Water. Canaan Naturally Connected



## Introduction

Canaan is in the extreme northeastern corner of Vermont in the County of Essex. It is bounded on the north by the Province of Quebec, Canada and on the east by the Connecticut River. The towns of Pittsburg, Clarksville, Stewartstown, and Colebrook are all to the east in New Hampshire; and on the west and south by the towns on Norton, Averill, and Lemington, Vermont. The land area of Canaan is 21,992 acres.

The majority of Canaan is hilly woodland. Open farmland runs along the Connecticut River from the village of Canaan to the southernmost border of the Town and from the village of Beecher Falls to the northeast corner of the Town, and along Leach Stream from the village of Canaan northwest to the Canadian border. Vermont Route 102 begins at Canaan village and continues south along the Connecticut River to Lemington on the southernmost border. Vermont 253 begins at Canaan village and continues northeast to the Canadian border. Vermont Route 114 also begins at Canaan village and runs west to Averill. Vermont 141 branches off from 114 north of Canaan village and runs to the Canadian border.

Wallace Pond, Canaan's only recreational lake, is situated on the Canadian border, with more than half of the pond in Canada.

Canaan was chartered by the State of Vermont in 1782 with actual settlement occurring in 1795. Most of the early settlers were farmers who initially established farms in the hilly areas away from the Connecticut River. Gradually, settlement dispersed throughout the Town. Lumbering was a major economic activity with annual log drives on the Connecticut River. In 1888, a railroad line began operating through Beecher Falls with connections to southern New England and extending north to Lime Ridge, Quebec.

Six years later, the Beecher Falls Manufacturing Company, taking advantage of the rail service, began furniture manufacturing operations with initial employment of about 150 people. The combination of the railroad, the furniture factory and lumbering resulted in further settlement being concentrated in the river valleys, particularly the villages of Beecher Falls and Canaan. The furniture company now operates under the name Beecher Falls Division of Ethan Allen, Inc. The sawmill operations remain and continue to this day with the milled products being delivered to the Orleans, Vermont plant. The sawmill and peripheral operations currently employ approximately 100 people. The buildings have had some of their manufacturing equipment sold and/or transferred to other Ethan Allen manufacturing facilities.

Most retail stores are located across the border in New Hampshire which have no sales tax. This has resulted in particularly strong economic ties with the neighboring towns of Colebrook and Stewartstown.

The Town of Canaan has several municipal-owned properties which help to enhance its appeal, including Fletcher Park, the Canaan Recreation Park, and the Canaan Community Forest.

Fletcher Park was given to the community by Charles Fletcher in the late 1800's and is located in the heart of Canaan village.

In 1988, the Town purchased a total of 10.6 acres of open land across Vermont Route 102 from the school playing fields to use as a recreational park. The park was named the Canaan Recreation Park in memory of Don Sipe. In 2001, the Catholic Diocese of Burlington donated a parcel of land which was incorporated in a new paved walking/running path constructed that year.

In September of 2013, the Tillotson Family Fund donated 424 acres of land formerly owned by the Tillotson family to the Town as the Canaan Community Forest. 368 of these acres are conserved under an easement held by the Vermont Land Trust.

## Community

As part of the vision for this plan, one of the main objectives is highlighting the importance of community and the presence that exists in Canaan to promote greater social capital. The community has endured numerous changes in the past two decades that have been a challenge to keep up with, with many people moving out to seek or be nearer to more dependable employment. Housing availability has declined, and a once thriving and iconic local industry in Ethan Allen greatly reduced its economic impact on the region.



Paint and Sip. Canaan Naturally Connected

Yet, the people who have stayed work to reshape and revision how the town could look going forward and cherishing the assets it has today – abundance of beautiful landscapes,

long-standing neighbor friendships of people that look out for you, wonderfully intact historic preservation, and a growing number of local assets and groups.

People in Canaan take pride in their independent nature and “can do” attitude. The myriad of activities conducted by members of the community demonstrate that if given a task they will successfully carry it out with a high degree of competence and professionalism.

[Canaan Naturally Connected](#) (CNC) is a local non-profit and community trust that has been integral in keeping engagements intact and building community connections. One of the few well-established community trusts in the NEK, they’ve done an amazing job organizing events, conducting outreach, and establishing achievable goals within the community. With the recent acquisition of the St. Paul’s Episcopal Church, the group looks to revive the location as a community center to hold local get together and familial memories.

The Gathering Place, as it will be called, will be an attractive and supportive place for creative and entrepreneurial people and enhance the development of the creative economy in the area.

CNC has overwhelming support from the community and has built and sustained numerous partnerships with the local school system, local churches, government officials, Northeast Kingdom Community Action, American Legion Post 47, Ethan Allen Factory, Connecticut River Artisan Group, Northeast Kingdom Learning Service, Customs and Border Protection, Canaan Historical Society, Canaan Recreational Park, Metallak ATV Club, Kiwanis, Canaan Key Club, Northeast Kingdom Collaborative, and the North Country Chamber of Commerce to ensure the project is successful.

## Creative Placemaking

Part of CNC’s dedication is to bring cultural vibrance and local appreciation to the forefront of town. Some of the recent additions to local vibrancy include welcome signs and banners, the Beecher Falls mural, improvements in Fletcher Park, a map of Canaan and what it offers, a local business directory, the Beecher Falls Park gazebo, vouchers for the homeless, and much, much more.



Creative placemaking can create partnerships, like the work the [Community Builders Hub](#) does based in Colebrook. The Community Builders Hub main intentions are to let people know about activities, events, and building local pride and friendships. Memories, cultural enclaves, and opportunities for inclusion can all be enhanced through creative placemaking activities.

## Events

In 2024, the Town celebrated the opening of the splash pad at the recreational park with an ice cream social. Dozens of people attended to show their appreciation, proving both that the community wants to have reasons to get together and that when the town sets its sights on completing something good for the community, they do it in stellar fashion

Canaan holds a host of events, some long-standing and others newer.



Courtesy photos Community Builders Hub

- Moose Festival
- Softball Tournament
- Porker/Casino Night
- Connecting the North Country
- Trunk or Treat
- Chili Cook-Off
- IT/Computer Classes
- Winter Craft Series
- Scarecrow Contest

### Alice M. Ward Memorial Library

The local library is also one of Vermont’s crown jewels of historic preservation. Owned and maintained by the Town, the Town has continued to maintain, renovate, and improve the converted home. Most recently, the Town received competitive grant funding from the Department of Libraries totaling \$900,000. The project will be for interior renovations for ADA compliance and improved patron centered useability, including a new HVAC system and new windows.

*Goal:* Establish and promote rotating series of community events

*Goal:* Prioritize community mental health

*Goal:* Connect newer or seasonal residents to long-standing residents

*Goal:* Increase partnership and programming with nearby communities

#### *Strategies*

- Establish a welcome center board in Fletcher Park as center of local information for visitors and residents alike **(CNC)**
- Historical Buildings dinner and/or walking tour to promote historical assets **(CHS)**
- Develop a Rotating Porch Gathering Series to build community and meet new people **(CHS) (CNC)**

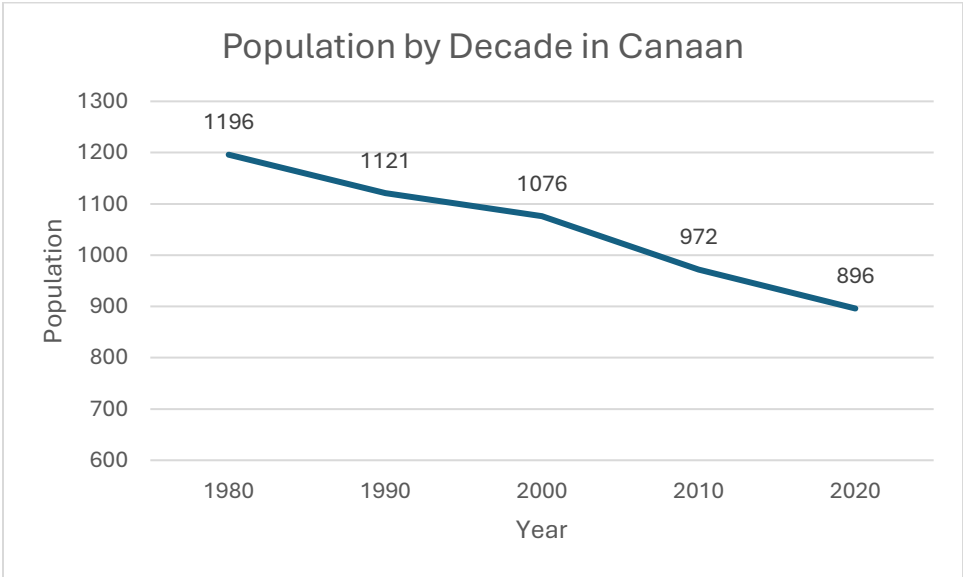
# Community Profile for Canaan

*Note: The following data are provided by the American Community Survey 5-year estimates. These data, estimates compiled from 2018-2022 and 2008-2012, are intended to give a snapshot of changes over approximately a ten-year span. They are used to inform census data that is retrieved every ten years, however contextually they are not intended to be used as specific and accurate data. The data are used as a way to inform planning and decision making through notable changes in community demographics. Because of the rural scale and population of the town and region, these data do have a wider margin of error and therefore should only be taken to address trends and not literal counts.*

*Data for population and housing, however, were pulled from the U.S. Decennial Census and therefore are accurate representations.*

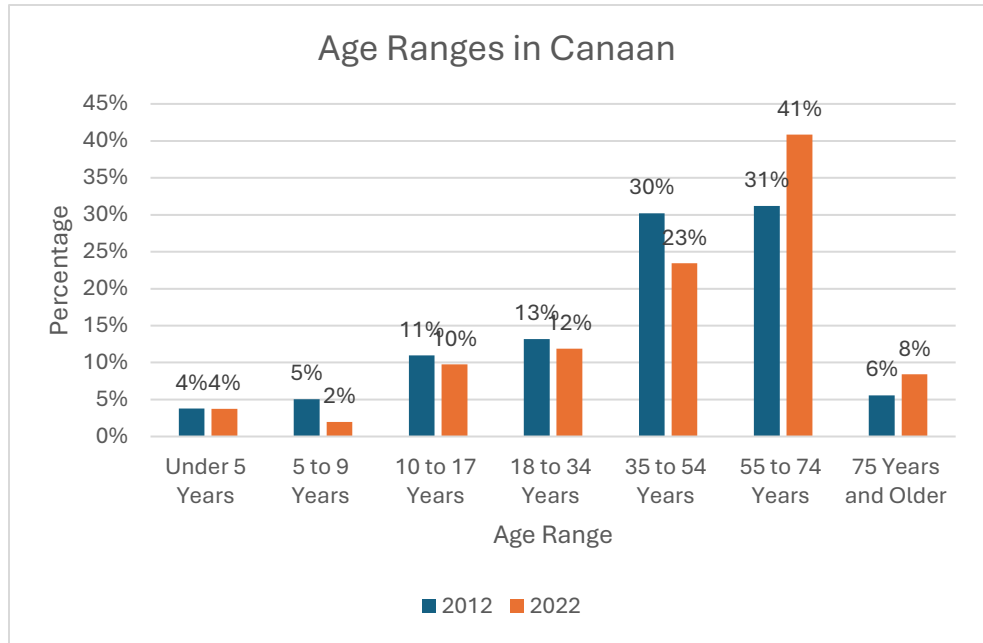
## Population in Canaan

According to the U.S. Census, population has steadily decreased in Canaan. With a total population of 896 in 2020, Canaan has experienced an 8% decline in population from the previous decade and a 17.5% decrease since the 2000 census. This has been an occurring trend since the population peaked in the 1980 census, suggesting that economic development in the area has been a challenge for some time.





Going further, Canaan is experiencing the [aging out](#) phenomenon that’s occurring throughout the state, with steady declines in children 18 and under, declines in its Millennial population, and increases in people aged 55 and over. A decline in working families aged 18-54 and decline in children under 18 suggest a departure in families.



## Housing in Canaan

Under the U.S. Census Bureau definition, family households consist of “two or more individuals who are related by birth, marriage, or adoption, although they also may include other unrelated people.” Nonfamily households consist of “people who live alone or who share their residence with unrelated individuals.” In general, Vermont’s uptick in non-family households is attributed to the increase in people who live alone, especially seniors, which has some significant implications for future housing needs and services.

Family households have decreased by about 11%. About 18% of occupied households have children present.

Canaan’s households have not only seen a decrease in average household size (2.3 to 2.0) but have even seen a decrease in housing units altogether. This could be from a decrease in mobile or temporary homes; however, data suggest that there has been some removal of single-unit housing. Approximately 32% of the total housing stock is left vacant, virtually all due to seasonal secondary homeownership.

Total Housing Units in Canaan	
2010	632
2020	609
Occupied Households in Canaan	
2010	439
2020	414

An average household size of 2.0 is very low. Over one-third of the population lives alone while only 16.5% of households are larger than two people. While there are some multi-unit developments in town, about 85% of housing are single units.

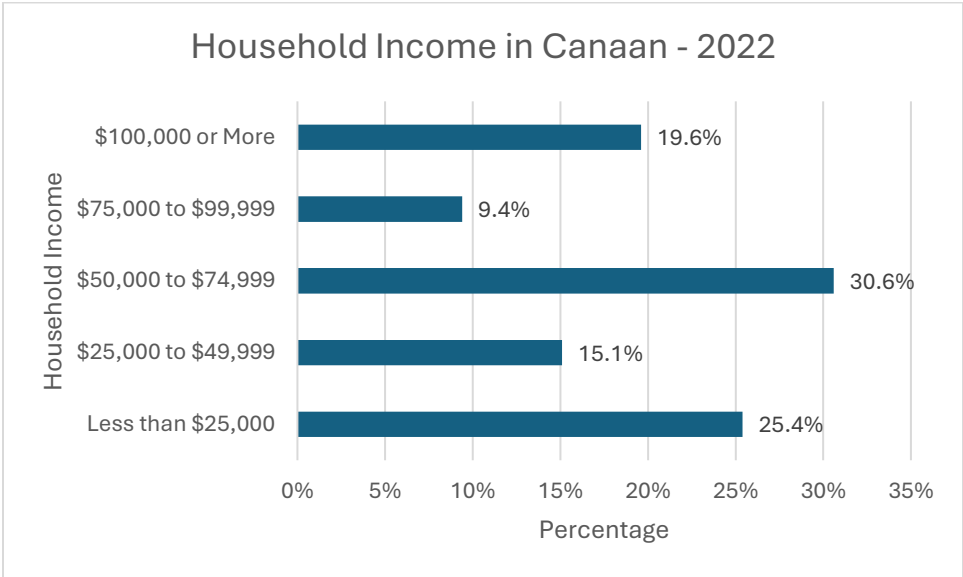
Median household value was \$129,700 in 2022. While this is a 22% increase since 2012, it remains below Essex County’s median household value at \$151,200. A large portion of the community’s housing stock remains affordable, as 92% is valued under \$300,000.

Median House Value for Owner-Occupied Housing	Canaan	Essex County
2012	\$106,300	\$123,300
2022	\$129,700	\$151,200

Overall, while it is strange for a community to lose over 5% of its housing stock between censuses, it is in line with the longstanding trend of the town losing its population. While housing value is affordable, it is possible these houses could have been demolished or abandoned. Decreased average household sizes aligns with increasing age in population, suggesting a large gap in attractiveness for the workforce community.

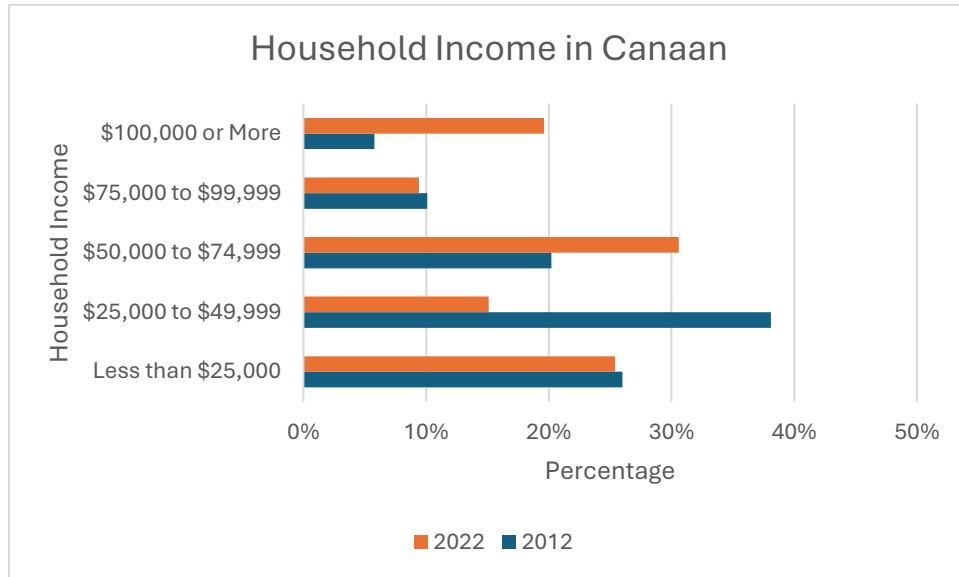
**Income**

Median income in Canaan has increased considerably in the past decade, from \$40,455 in 2012 to \$53,942 in 2022. However, there is a range of disparity between household incomes as reflected by the groups below with less than \$25,000 and more than \$100,000.



Additionally, when looking back ten years prior, we see very little change in the demographic of households who earn less than \$25,000. Incomes between \$25,000 and

\$49,999 more than halved, while there has been a threefold increase in household income greater than \$100,000.



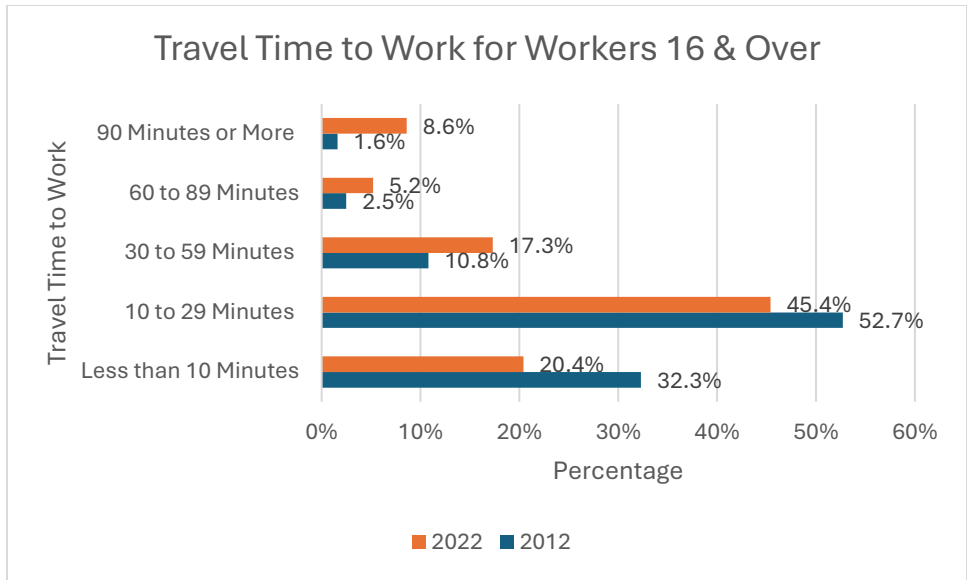
It’s an odd juxtaposition to have 83% of households with 1-2 people in them yet almost 20% of households make over \$100,000. The steep decline in workforce household income suggests a quality of life working and living in Canaan is less attainable than it once was, unless you can afford it without employment. There has been a larger increase in households with no earnings, up 31% in 2022; a 9% increase from 2012.

### Education & Employment

About 82% of the population over 25 years of age has their high school diploma. Of the population aged three years and over, about 18% are enrolled in school. The unemployment rate is about 7.2%. The highest reported occupations are Manufacturing, Retail, and Education, Healthcare, and Social Services.

Overall, the workforce in Canaan represents more of the general population than it did 10 years ago. Over 52% of the population in 2022 over 16 is employed, compared to 46% in 2012. However, this workforce has had to drastically change their lifestyles on where to work and how long to commute. In 2012, almost one-third of the population worked locally and traveled less than 10 minutes to work. In 2022 this has dropped to 20%, while travel times over 30 minutes have doubled in this timeframe. Workers traveling 90 minutes or more have increased from 1.6% to a staggering 8.6%.



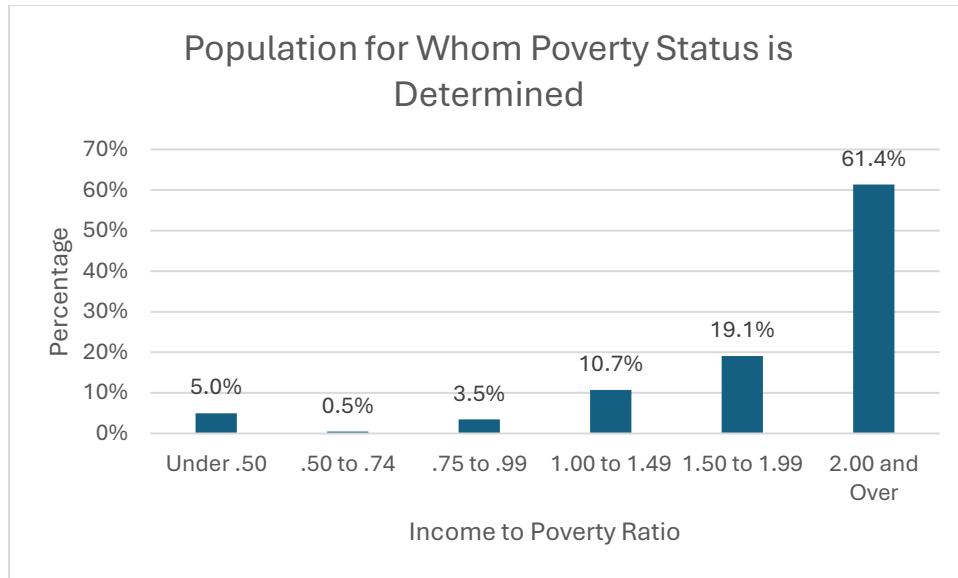


## Economic Stability

Of the owner-occupied households (meaning those that are neither rented nor left vacant for seasonal uses), 43% of households currently have a mortgage. 29% of households are considered cost-burdened or paying 30% of their income on housing costs. 9% are severely cost-burdened.

<b>Occupied Housing Units in Canaan</b>	
Housing Units with a Mortgage	42.7%
Homeowners Who are Paying at Least 30% of Income for Ownership Costs	29.4%
Homeowners Who are Paying at Least 50% of Income for Ownership Costs	9.2%

Using the income to poverty ratio, 9% of the population had a ratio under 1.00 and were considered under poverty. This is compared to 13.2% for Essex County as a whole. Conversely, 61% possess an income to poverty ratio over 2.0, which is considered doing well. This is lower than the county level at 64%. Poverty rates have decreased by over 4% in the last ten years. Over 93% of the population under 18 are determined to be above poverty.



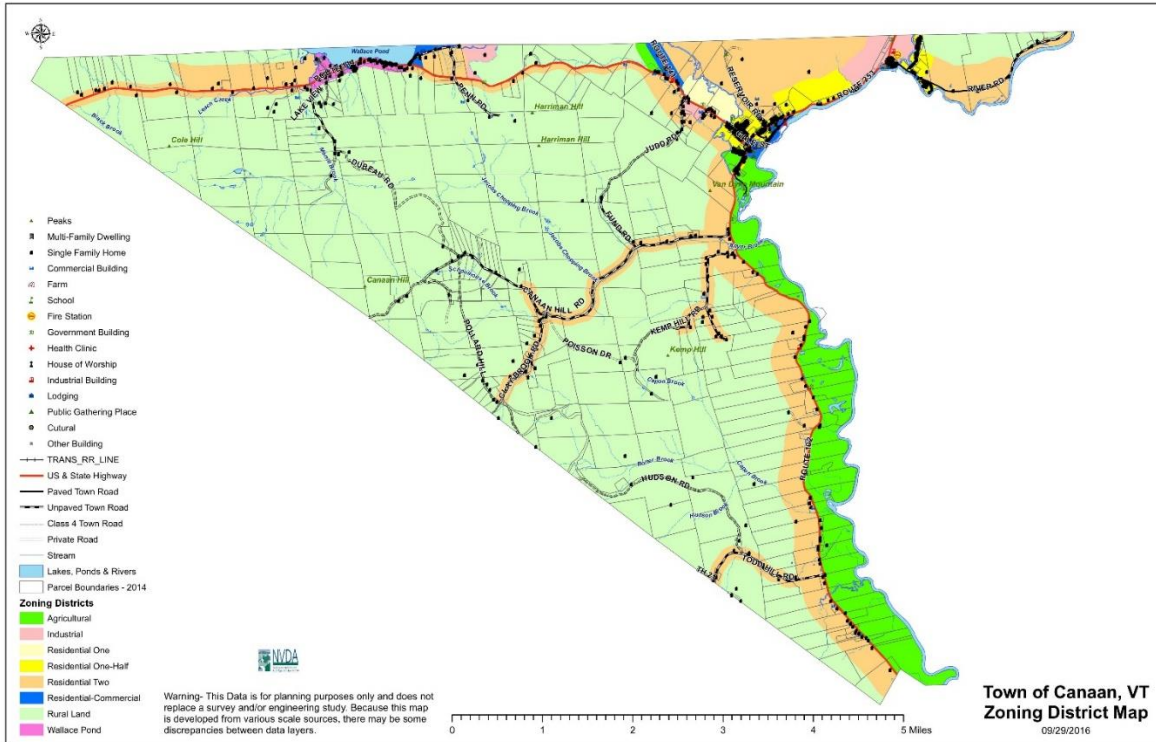
## Takeaways

Canaan has seemed to experience a steep decline in working families investing in homeownership in the community. Sharp increases in travel times to work indicate that a decline of local employment has been occurring and that those who have decided to stay must travel to regional areas of employment such as Newport, St. Johnsbury, and across borders. Combining a shrinking workforce with the strange phenomenon of losing housing units along with a 15% increase in population aged 65 and older and it's clear that its decline in population is tied to a lack of economic development and commerce. There is also the situation of older people not being able to downsize out of their homes.

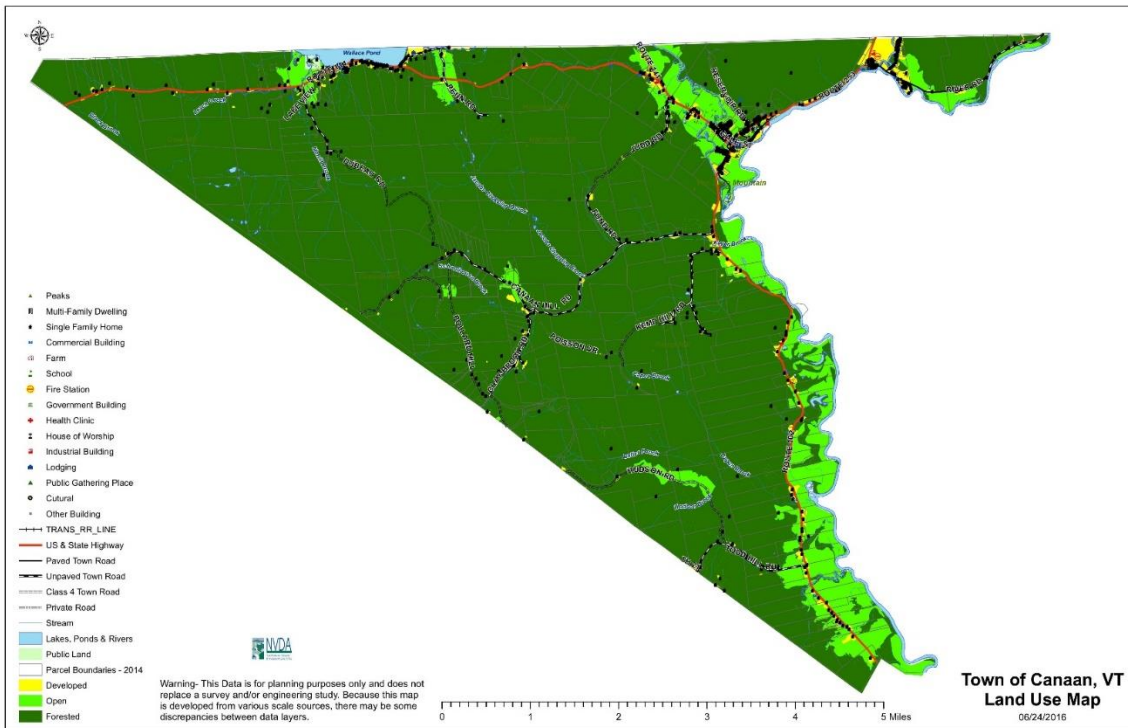
As ownership turnover has occurred, there has been and 13% increase in housing stock left vacant for seasonal uses. Additionally in this timeframe, household incomes over \$100,000 have increased by almost 14%. While these two data points aren't directly connected, it's safe to suggest that many new residents have arrived with different incomes, spending power, and social needs.

Meanwhile, the demographic of households that earn less than \$25,000 annually has remained. With 5% of the population having income to poverty rate at 0.5 or lower, there remain acute welfare needs that had pre-existed. There seems to be three general groups in demographics – those that are severely cost-burdened and may not have employment, working families who have had increased incomes enough to support increased travel costs (and other costs) to remain residing in Canaan, and those with much more income that may allow them the ability to live seasonally.

# Land Use



Note: Health Clinic (Indian Stream Clinic) is now located in West Stewartstown.



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## Existing Conditions

Canaan has many uses and unique natural features that shape how land is utilized. The town is defined by two condensed villages with long, meandering roads to approach them. Marked by borders to the north and east, the town serves as a gateway to Canada and New Hampshire.

Shallow soils, steep slopes, stream banks, and flood plain areas limit prime agricultural land to the riverbanks and favor forestry inland. The natural resources of Canaan are integral both to its current existence and to its future potential. The largest area of steeply sloped land is in the central portion of the Town limits. Within this area there are four hills, all over 1500 feet high. In addition, most of the land west of Vermont Route 253 between Canaan village and Beecher Falls is steeply sloped.

Canaan is one of the few towns in the Northeast Kingdom with a long history of manufacturing, with the establishment of Ethan Allen in Beecher Falls in 1932. Though the ripple effect of the reduction of the facility is still being felt, this history provides precedence that Canaan can once again seek industry for the future.

Canaan is also one of the few towns in the region to implement zoning as a tool to direct growth and residential, commercial, and industrial development uses. The [town's bylaws](#) and zoning were most recently updated and approved in 2018. Detailed descriptions of each district are below.

## Non-Regulatory Means

Canaan's municipality and residents both use non-regulatory means for controlling and directing the use of land. In 2017, The Canaan Planning Commission acquired [village center designations](#) for both Canaan Village and Beecher Falls Village in an effort to attract new businesses, facade restoration, and overall vitality. As a tool for public investment, commercial property owners can seek tax credits, training, and technical assistance through tax credits and priority consideration for state grants.

Through the use of Vermont's Current Use Program, it is clear that many of Canaan's residents value and cherish open working lands, putting 38 parcels of land into the [Current Use Value Appraisal Program](#), amounting to 7,410.92 acres conserved through the state-run program, according to ANR's Atlas. 32 parcels have active forest management plans and 6 are assessed as agricultural land, which has a different [appraisal value](#).

Lastly, the [Johnson Farm Wildlife Management Area](#) and the [Canaan Community Forest](#) represent iconic examples of conservation and preservation for the entire state. Through conservation easements and generous donations, these lands preserve irreplaceable

habitats, bring resilience to a warming climate, and provide opportunity for engagement and interaction with the natural environment.

## Changes in Recent Legislation That May Affect Zoning Regulations

The Town's local government will have to work through their zoning regulations to see how their requirements have shaped land use, as well as review recent changes in state law.

*S. 100 HOME Act*- Passed in 2023, The HOME Act ends the ability of a municipality to implement exclusionary zoning and lengthy permitting processes. It aims to focus density in areas where development exists by allowing multi-unit development by right in places served by municipal water (W) and wastewater (WW). In particular, the Town should look at amendments in their zoning laws regarding multiunit dwelling of 4 units in areas served by water and wastewater, as they are now required as permitted use.

Vermont Natural Resources Council provides a good [summary of the bill](#), a summary of the changes include:

- Municipalities cannot require more than one parking space per unit
- Municipalities must allow duplexes and multi-unit dwellings where single-unit homes are allowed.
- Accessory Dwelling Units (ADUs) must not be more restrictive than single-unit homes
- Requirements and allowances in areas served by municipal water and wastewater

*Act 181* – Passed in 2024, Act 181/H.687 works to modernize and reform Act 250 land use laws. It aims to achieve the conservation goals established in 10 V.S.A. § 2802 and 24 V.S.A. § 4302 while providing a regulatory framework that support the vision for Vermont of resilience and biodiversity protection in the face of climate change through location-based jurisdiction. Since the Town already has strong wastewater/water capacity, there may be an opportunity to establish a Tier 1B area, if the town can adopt subdivision regulations in accordance with 24 VSA 4418. Further details can be read in this [overview](#).

*Act 171* – Enacted in 2016, Act 171 works to promote strategies to maintain intact forests in Vermont. It requires municipalities and regional planning commissions to identify areas that are important as forest blocks and habitat connectors and to plan for development in these areas to minimize forest fragmentation. The Town could update specific zoning districts as well as develop overlay zones to maintain the abundance of priority habitat and wildlife connectivity in town.

## Zoning Districts

Canaan currently has a zoning bylaw that establishes eight zoning districts in Town:

- Industrial (IND)
- Residential-Commercial (R-C)
- Residential One-Half (R ½)
- Residential One (R-1)
- Residential Two (R-2)
- Agricultural (AGR)
- Rural Lands (RL)
- Wallace Pond District (WP)

*Industrial*

The Industrial District (IND) encompasses the lands occupied by and in the immediate vicinity of Ethan Allen Inc. in Beecher Falls village, an area on the south side of Vermont Route 114 west of Canaan village; and an area on the north side of Vermont Route 114 between Harriman Hill and Wallace Pond. These areas serve as locations for the establishment of a variety of types of manufacturing and commercial activities to provide employment opportunities and broaden the tax base in Canaan. All uses within this district are subject to site plan approval which requires that certain standards with respect to traffic areas, circulation and parking, landscaping and screening are met.

Minimum Lot Size		Minimum Yard Dimension (Ft)		
Area (acres)	Width (ft)	Front	Each-side	Rear
1	100	20	20	20

*Residential-Commercial*

The Residential-Commercial District (R-C) provides for a mixture of residential and commercial uses at a high density of development in four locations: (1) an area within the village of Beecher Falls; (2) an area within the village of Canaan; (3) an area adjacent to Vermont Route 141; (4) an area adjacent to the Canaan Post Office on Vermont Route 253; (5) an area at the east end of Wallace Pond. Uses are subject to site plan and/or conditional use approval which require conformance to certain standards with respect to impact on the community and the character of the area. A list of permitted uses is listed in the bylaws.

Minimum Lot Size		Minimum Yard Dimension (Ft)		
Area (acres)	Width (ft)	Front	Each-side	Rear
½	100	30	15	20

*Residential One-Half*

This district (R ½) is intended to be primarily for single- and two-family dwellings at a higher density of development than Residential-1. Various other uses that complement the

district may be allowed. The R ½ district includes areas within both village centers and along the west side of Vermont Route 253 between Canaan and Beecher Falls.

Minimum Lot Size		Minimum Yard Dimension (Ft)		
Area (acres)	Width (ft)	Front	Each-side	Rear
½	100	30	15	20

### *Residential-One*

The Residential-One (R-1) District is primarily for residential use in a rural setting at a higher density of development than the Residential-2 District. All other uses within the district are conditional and require site plan approval. The R-1 District includes areas within the villages of Beecher Falls and Canaan.

Minimum Lot Size		Minimum Yard Dimension (Ft)		
Area (acres)	Width (ft)	Front	Each-side	Rear
1	150	30	15	20

### *Residential-Two*

The Residential-Two (R-2) District is primarily for residential use in a rural setting at a higher density of development than the Rural Lands. This district includes areas which are served by an adequate year-round road system.

Minimum Lot Size		Minimum Yard Dimension (Ft)		
Area (acres)	Width (ft)	Front	Each-side	Rear
2	200	30	20	20

### *Agricultural*

The Agricultural (AGR) District is intended to preserve major areas of prime agricultural land while allowing other uses that are secondary to agricultural use. Areas designated AGR begin in Canaan village and continue south on the east side of Vermont Route 102 to the Lemington Town line.

Minimum Lot Size		Minimum Yard Dimension (Ft)		
Area (acres)	Width (ft)	Front	Each-side	Rear
10	400	30	35	50

### *Rural Lands*

The Rural Lands (RL) District includes areas of the Town that have a low density of development as they are generally mountainous, remote from densely developed areas and generally not served by an adequate year-round road system.

Minimum Lot Size		Minimum Yard Dimension (Ft)		
Area (acres)	Width (ft)	Front	Each-side	Rear
100	400	30	50	50

### *Wallace Pond District*

The Wallace Pond District (WPD) includes that area of Town where the lake is situated on the north side of Vermont Route 114 and a section on the south side of the road.



Minimum Lot Size		Minimum Yard Dimension (Ft)		
Area (acres)	Width (ft)	Front	Each-side	Rear
2	200	20	10	20

### *Flood Hazard Areas*

The Zoning By-Law also includes requirements with respect to development in flood hazard areas. This allows the town to participate in the [National Floodplain Insurance Program \(NFIP\)](#) and increases the amount of state reimbursement of assistance funds through the [Emergency Relief Assistance Fund \(ERAF\)](#).

### **Other Uses**

#### *Federal and State Agency Properties*

U.S. Customs and Border Protection maintains two ports of entry in Canaan: one on Vermont Route 141 and another on Vermont Route 253. Both of these buildings are listed on the National Registry of Historic Places and were constructed in the early 1930's. A Border Patrol station in Canaan on Route 114 was completed in 2012. There are United States Post Offices in both Beecher Falls and Canaan.

#### *Recreation*

Town-owned land used for recreational purposes include Fletcher Park in Canaan Village, Beecher Falls Park, playing fields adjacent to the school buildings, the 10.6-acre Community Recreation Park which includes active and passive recreational facilities, and the Community Forest, which contains trails used for hiking, snowmobiling and snowshoeing. All-terrain vehicles (ATVs) are permitted on the designated trails which connect with New Hampshire trails, serving as a draw to recreational users.

The Canaan Community Forest Committee has developed a management plan for the forest. In January of 2013, the Town received a \$73,000 Tillotson grant for the purpose of enhancing the local educational, recreational and economic opportunities of the land. \$30,000 of the grant was used to fund a pilot diversified agriculture program serving juniors and seniors to prepare them for careers in agriculture, forestry and the biological sciences.

The State Department of Fish and Wildlife maintains a boat launch/fishing access on the west end of Wallace Pond. The Town maintains a public access/boat launch on the Connecticut River just south of the Route 114 bridge to New Hampshire.

The Johnson Farm Wildlife Management Area (WMA), between Route 102 and the Connecticut River, is another area providing opportunities for passive recreation. The 266-acre WMA was established in 2012, part of 849-acres of farmland and natural areas previously owned by Bill and Ursula Johnson.

## Land Use Choices to Consider

The use of the [Planned Unit Development \(PUD\)](#) provisions in Section 320 of the Town zoning ordinance is a way to preserve large blocks of forested or agricultural land in the Agricultural and Rural Lands districts while allowing for the creation of smaller house lots. With such an acute need for multiple types of housing, the establishment of the PUD is a very forward-looking establishment in the town's bylaws and could be a platform to include multiple agencies in designing of such. The Town would do well to target large areas of open land in or near the Village Center designated area for Canaan and explore the potential of working with landowners.

With the outspoken need of housing, well-paying jobs, and working families to fill them, a planned, coordinated effort is required to address these needs. Establishing an advisory committee working with local and regional partners such as NEKCA, Canaan Naturally Connected, SASH, The Community Builders Hub, Ethan Allen, and more to develop a vision, identifying potential land parcels, and identifying community needs for such a design is an ambitious, yet realistic long-term goal for the municipality to pursue. The Town could use a [Municipal Planning Grant](#) as a way to conduct a feasibility study directed by this advisory committee.

In addressing zoning updates, the Town should acknowledge the trending correlation between the decrease of connected forest habitat along the R-2 areas and from general subdivision of land. Working in requirements to preserve forest connectivity should be a priority in future land use decisions.

Additionally, the Town does not have zoning protection in place of wetlands or forests. Currently, the Town is not considering stronger regulations regarding natural resources but understands the importance of such and will make it a priority to discuss in the near future.

Ultimately, engaging the larger community and working to get people involved in the decision-making process through education and incentives can not only help build that local vision for making Canaan a family destination but build greater community engagement. The Town could establish a [Capital Improvement Program](#) (CIP) to guide these hopeful investments and zoning changes in the future.

*Goal:* Continue infill development in Village Center designations

*Goal:* Shape the future of the village to be walkable, safe, and equitable for families and workers

*Strategies*

- Develop a stakeholder task force with the purpose of establishing concept designs of appropriately scaled housing to meet housing needs **(PC) (SB)**
- Establish a Capital Improvement Program (CIP) to plan for long-term budget expenditure **(PC) (SB)**
- Identify & attract specific industries to fulfill missing working demographics **(PC)(SB) (RLFC)**
- Review zoning regulations to ensure growth management and reduce rural subdivision sprawl **(PC) (SB) (ZB)**
- Incorporate Complete Streets designs into vision for Canaan and Beecher Falls centers to increase walkability, commerce, and vibrancy. **(PC) (ZB)**
- Ensure that relevant local land use regulations are enforced by incorporating checks and balances in zoning review processes. **(PC) (SB) (TC) (ZB)**
- Explore levers of municipal authority to lessen the burden of increasing property taxes on longstanding residents from the changes of adjacent land values. **(SB)**
- Work with NVDA to Ensure that zoning bylaws reflect the vision for the Town **(PC) (SB) (TC) (ZB)**

## Housing

### Existing Conditions

In concert in seeing a decline in population, Canaan has experienced a decline in overall housing stock as well as a decline in the condition of the current housing stock, making it all the more difficult to fill that void left by working-class families.

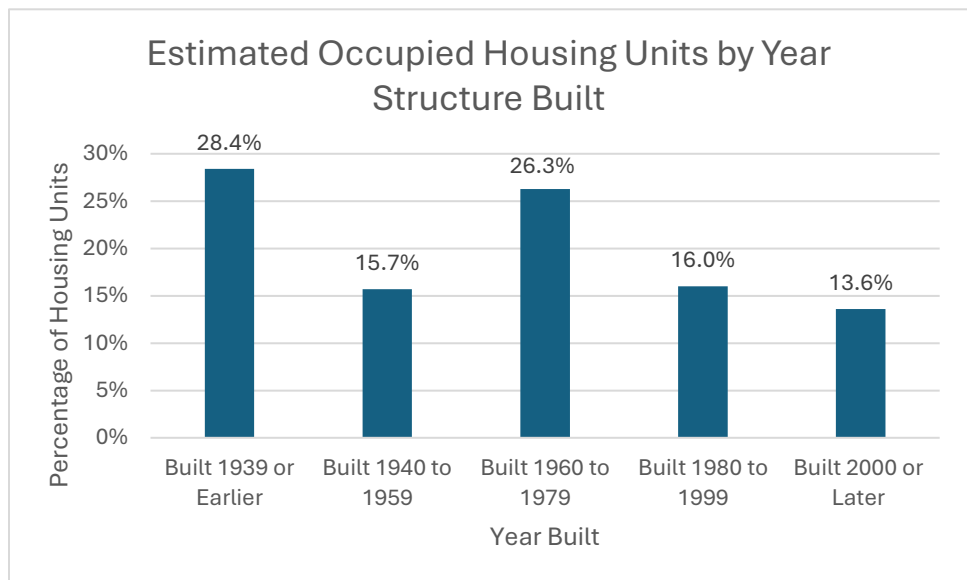
Total Housing Units in Canaan	
2010	632
2020	609
Occupied Households in Canaan	
2010	439
2020	414

Source: US Census

Most of Canaan’s housing is centrally located. Small-lot parcels are grouped in Canaan Village Center and Beecher Falls Village Center with open lands just beyond the village centers. Seasonal camps and residents run the shores of Wallace Pond. Between Route 102 and the Connecticut River lies abundant rich agricultural lands, and uphill up are numerous large-lot rural residences. Most housing within town limits are single-unit dwellings (about 85%). There are some multi-unit dwellings and a handful of mobile home units, including the Canaan Mobile Home Park.

Housing Parcels by Type. Source: Canaan Annual Reports					
	2019	2020	2021	2022	2023
R-1 (<6 acres)	281	274	272	286	287
R-2 (>6 acres)	117	108	112	117	117
S-1 (vacation home <6 acres)	55	57	59	45	45
S-2 (vacation home >6 acres)	37	40	39	29	29
<b>Total</b>	<b>490</b>	<b>479</b>	<b>482</b>	<b>477</b>	<b>478</b>

Though Census data shows a decline in housing units, Annual Reports for the town display relative stagnation, with the largest difference being seen in a decline in seasonal homes. These could be residents who



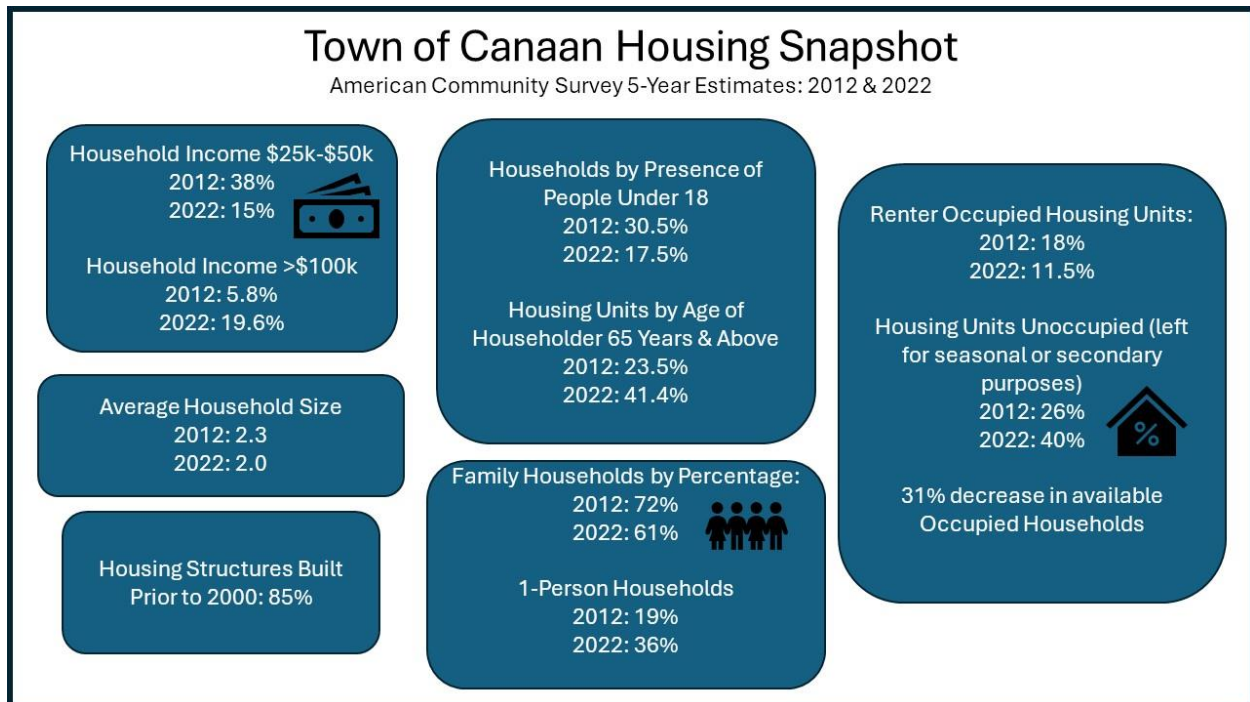
have converted seasonal properties into year-round residences.

Most of the community’s housing stock was built prior to 2000, with 28% having been built prior to 1940. This is a social vulnerability for many of the community with inefficient heating envelopes or the ability to cool homes in warmer summer months. The deterioration of the housing stock has been highlighted by the community over the course of the years and is a strong factor in housing availability.

Most of this housing is owned with little chance for newcomers to move in. Rental units have been in steep decline and one-person households have almost doubled from 2012 to



2022. Further, as households with children present have almost halved, housing units with householders aged 65 and above have increased by about 18%. This data suggests that people are aging in-place without the ability to downsize, keeping a large portion of the housing stock unavailable. Much of the existing housing stock is likely held by aging homeowners that have nothing to downsize into the area, limiting the availability of affordable housing turnover for potential newcomers.

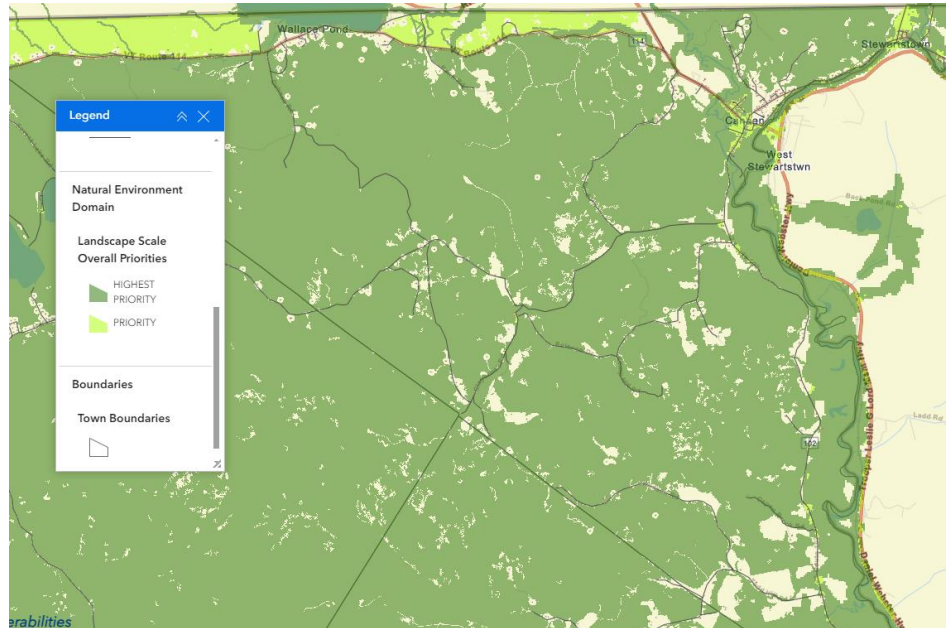


According to the US Census, Canaan has actually lost housing for the second decade in a row and has overall seen a 31% decrease in available occupied housing stock according to the American Community Survey’s 5-year Estimates. In conjunction, housing units left vacant for seasonal purposes have increased by about 14%. Though S-1 and S-2 homes have declined slightly, a greater proportion of the existing housing stock has been left vacant for seasonal uses. This can be seen in the increase in seasonal homes and a decrease in available occupied homes.

Deteriorating housing, an aging community in oversized housing without the ability to downsize, and an increase in seasonal housing have all provided unique stressors to what has traditionally been a workforce community. Even if Canaan was able to tap into a workforce that could work remotely or establish a new industry in town to create jobs, providing suitable housing stock for any such developments would be a serious hindrance.

## Rural Sprawl and Priority Habitat

The increase in housing developments in the more rural, forested areas have contributed to a large decrease in woodlands and contiguous forested habitat. The image taken from the [Municipal Vulnerability Indicator](#) shows numerous patches

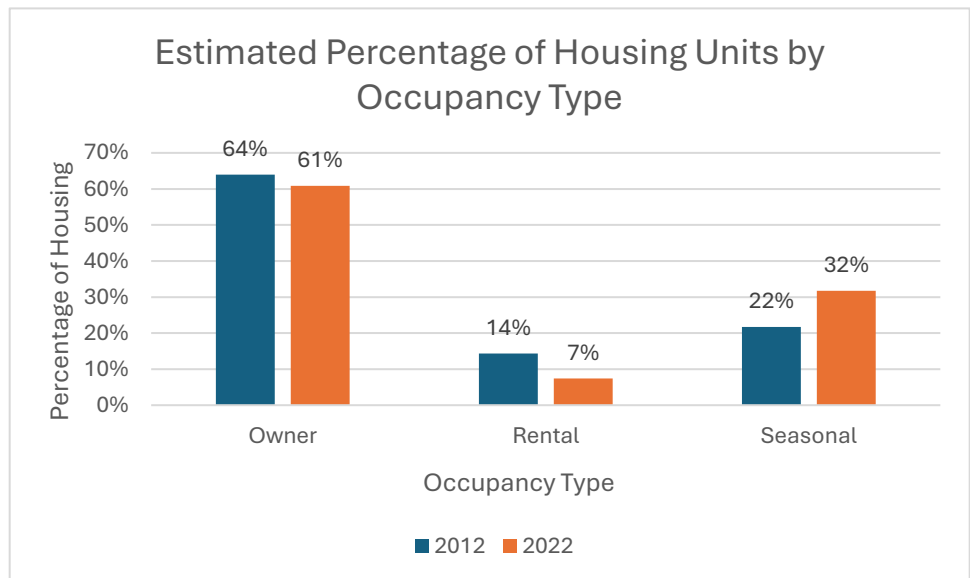


of priority habitat removed from residential development. When parcels are subdivided and properties are developed in a fashion that removes forested woodlands, wildlife loses its habitat and wildlife resiliency is reduced.

The Town should review changes and development in (R-2) zoned lands as it relates to a loss of woodland acreage and consider how to better protect these assets.

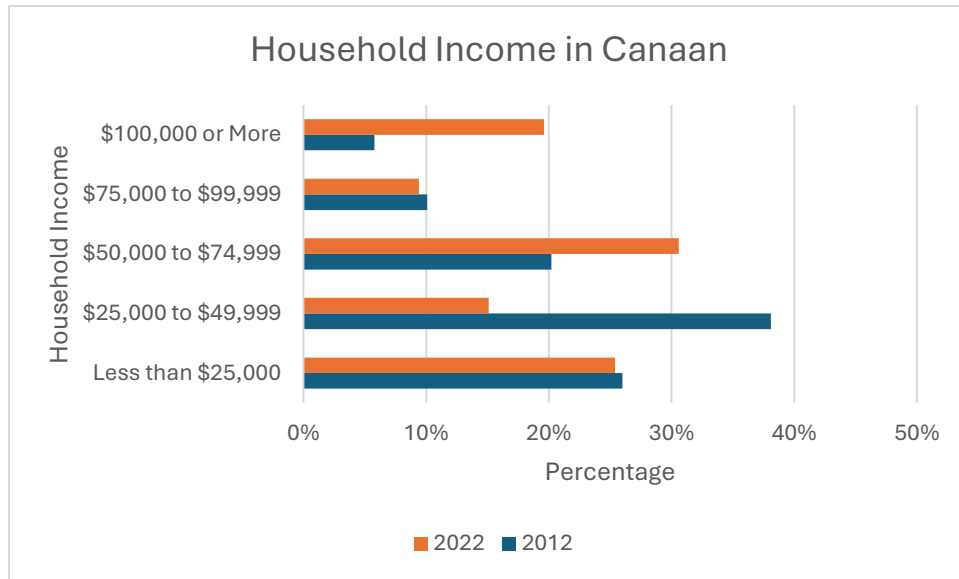
## Missing Middle

Canaan is at an inflection point of its middle class departing from town, with no available housing for new working-class people to move in, much less



working-class jobs available nearby to move to. While more data can be found at [Vermont Housing Data](#), the data below shows owner-occupied and rental housing has declined while seasonal housing has increased.

Additionally, households with median incomes between \$25,000 and \$50,000 have decreased dramatically, suggesting that working families living in Canaan has steeply declined. Not only does this create a social gap, but the disparity between a declining housing stock and a declining regional workforce makes housing opportunities for families very difficult. Almost 40% of owner-occupied residents are paying more than 30% of their income on housing, suggesting that residents are stretching their means to take what housing they can get.



### *How Land Use Regulations Have Informed Housing*

According to the town’s zoning permit index, since 2012 there have been 18 subdivision permits issued, 15 permits issued for camps, and 19 issued for residential homes. Canaan currently does not have subdivision regulations.

With the passing of Senate Bill 100, Canaan will have to review their lot sizes and allowable uses within areas served by water and wastewater. For example, multi-unit dwellings of four or fewer units are permitted use and require lot-size minimums of five or more units per acre are allowable in water-wastewater.

### **How to Move Forward**

Canaan has numerous opportunities ahead of itself to reinvigorate the community through housing opportunities. The Town has excellent water and wastewater infrastructure and connectivity to open land near the Canaan Village Center. The Town could consider acquisition of land as an investment in their community’s housing, working with [Municipal Bonds](#). This method would provide the community with a lot of control over how it would like to see it developed, assisting in its local home affordability by helping with permitting and other development costs on the front-end. Focusing housing on mixed-income

development and housing for an aging community would provide more housing opportunity and open up existing housing stock.

Establishing multi-unit apartments within Village Centers will help bolster availability of attainable housing, increase community vitality, and promote a more walkable environment with a higher demand from more residents. There are parks, historic structures, scenic viewpoints, and access to food all within walking distance of the town center.

### *Available Resources*

Canaan School's Building Trades Program, run by Canaan's Career & Technical Education (CTE), is an innovative program that has previously benefitted existing housing stock and local homeowners. During the school year, students enrolled in this program have renovated older homes in the community in need of major repairs, and the program and its students have helped revitalize several local homes over the past decade. Ensuring this program continues and has the resources and support it needs from the town to remain a valuable resource is an important step in keeping the aging housing stock usable and building trade skills among the youth.

For renters, the [Section 8 Housing Choice Voucher](#) program provides rental assistance administered by the Vermont State Housing Authority (VSHA). This program utilizes privately owned existing housing stock. Tenants in the Section 8 program are free to select their own housing unit provided the unit meets housing quality standards and certain rent limitations. Other programs available to renters include:

- The [Shelter Plus Care](#) program, which provides rental assistance to homeless people with disabilities.
- The [Vermont Housing Improvement Program](#) offers forgivable loans and grants for housing improvements, and this might be a powerful incentive for rehabbing aging housing stock.
- The [Family Unification](#) program, which provides rental assistance to families to prevent separation of children from their families.
- [The Mainstream Housing](#) program, which funds rental assistance for non-elderly disabled families.

Since rental units available on the market may not meet housing quality standards, another program which could be of assistance is [USDA's Multi-Family Housing Direct Loan program](#). This program provides competitive financing for the construction or repair of affordable multifamily rental housing for low-income, elderly, or disabled residents.



For homeowners that are low income, [USDA's Single Family Housing Repair Loan & Grant program](#) provides low interest loans to families with incomes below 50 percent of the area median income, and grants to low-income householders aged 62 or older who are not able to repay a loan. In addition, Rural Edge, the regional non-profit housing organization, operates a Revolving Loan Fund that assists low-income homeowners in making necessary health, safety, and accessibility repairs to their homes.

If you are in need of temporary or emergency housing, [NEK Community Action](#) can help connect to specialized housing services. They have transitional housing based in Newport. NVDA also has an extensive [list of state and regional services](#).

*Goal:* Be proactive in addressing housing availability and affordability needs

*Goal:* Continue infill development in village centers

### *Strategies*

- Consider ways to acquire land and prepare for planned housing development in design and scale that matches current housing stock **(PC) (SB) (RLFC) (WWC) (SWRC) (ZB)**
- Look for assisted living opportunities, establishment of local elder housing communities, or other ways to allow aging populations to move out of single-family homes while still securely aging in place. **(RLFC) (CNC) (PC)**
- Review current zoning regulations as to how they have shaped housing in Canaan to better inform future land use outcomes **(PC) (ZB)**
- Explore stakeholder-designed Planned Unit Development that could fulfill other social, cultural, and economic needs in the community **(RLFC) (CNC) (PC)**
- Review zoning districts to encourage any new development to be within walking distance of village centers and increase public transportation. **(PC) (TC) (ZB)**
- Provide information to low-income residents and landlords about the rental assistance and home renovation assistance available through Vermont State Housing Authority (VSHA), United States Department of Agriculture (USDA), and Rural Edge. **(PC) (TC) (CNC)**

## Economic Development

### Existing Conditions

Essex County is the least populated county in Vermont with a 2022 population of 5,976. According to the [2024 Vermont Economic and Demographic Profile Series](#), both per capita

income and average annual wages are well below state averages. The county has the lowest wages in the state as well as the smallest labor force in the state. Since 2010, the county's labor force has decreased by 13.5%, while the population per square mile in Essex County is 1/7<sup>th</sup> of the state.

With this backdrop, maintaining industries that provide livable wages is a clear challenge for the North Country. Conversely, finding people to work in what available jobs there are is challenging for business owners. Closures of factories, The Colebrook newspaper, the Balsams hotel, and Hill's department store in Coos County, New Hampshire over the years haven't made things easier. Most centrally to Canaan was the reduction of over 250 workers in the Ethan Allen manufacturing facility. These stark changes in declining opportunities in the region have had rippling effects in housing, commerce, and community as people and families look elsewhere for viable employment. This can reduce savings, consumer spending, and time with your family and community.

While some local industries require adaption to changing markets and revenue conditions, Canaan and the North Country at large must look forward with innovation in determining what new workforce industries to attract and how to attract workers to sustain those businesses. The region must also look holistically at how each community can support other local communities. The local economy for Canaan *must* be supported by regional influences, just as the vibrancy of the region's economy depends on local ingenuity and investment. Stewartstown and Canaan are directly linked in this regard.

### Types of Local Economy

The land-based economy is a critical part of the Northeast Kingdom's traditional landscape that preserves open spaces and enhances the region's scenic beauty. The forest industry is also an integral part of the region's economic and social identity, and logging continues to be a locally important economic activity.

There are a few sustaining businesses in Canaan and Beecher Falls Villages, including a motel, a restaurant and bowling alley, consignment shop, an ice cream shop, pet grooming, and more. The Town works to keep a complete list of [local businesses](#) to support the community, as does the [North Country Chamber of Commerce](#).

Canaan also possesses a couple opportunities to utilize the town and region tourist economy, namely in [agritourism](#), off-road trail recreation, and lake and wildlife recreation.

*Agritourism* – Maple sugaring, organic farming, carriage rides, harvest festivals, and other land-based attractions can bring people to the area and bring new revenue streams for local businesses with the right model. Supporting these types of entrepreneurs is vital to maintaining culture and rural traditions of land and can bring local jobs quickly.

*Off-Trail Recreation* – The [Canaan Border Riders Snowmobile Club](#) manages and maintains roughly 96 miles of groomed trails that connect to New Hampshire and Quebec. [VAST](#) maintains a mapping system for all of Vermont while the New Hampshire State Parks provides [club and trail information](#) for Northern New Hampshire. These trails are a premiere network for Northern New England and already attract numerous seasonal riders. Considering businesses that support this recreation sector could provide stable revenue.

*Lake & Wildlife Recreation* – Whether it’s fishing, hunting, kayaking in Wallace Pond, hiking in the [Silvio O. Conte National Fish & Wildlife Refuge](#), cycling on rural back roads, or backcountry camping, the region provides numerous of options to attract outdoor enthusiasts to come into town. Capitalizing on this disposable income through guided trails, specialty experiences, or food and beverage options can help bring in supportive economic revenue.

Lastly, though Canaan is in the furthest corner of the state in the least populated county, bordering both Canada and New Hampshire presents unique partnerships. [North Country Chamber of Commerce](#) and [Go North](#) are excellent, established resources to build capacity and research understanding which new enterprises could be supported by existing assets and industries.

As Canaan looks to attract businesses or storefronts, ensuring local businesses meet local needs to match supporting industries can build stability and job security.

### **Other Industries to Consider**

If Canaan truly wants to have the missing workforce return from the downsizing of Ethan Allen, it will have to also consider both how to attract them and where to house them. Given that the town’s local water and wastewater facilities were recently updated in the past decade, the town possesses the infrastructure to attract both. Therefore, the town could use the 2012 Beecher Falls NCIC feasibility study as a starting point for considering a new industry.

Big-thinking considerations like health care, modular housing manufacturing, EV cell battery manufacturing, or something forward thinking that can both provide blue-collar employment and [new-collar employment](#) while benefiting the region at-large. The Town could set up an advisory group with interested parties from other local towns to make an informed decision on which types of industries to attract. The Town could also work directly the [Canaan CTE Program](#) to consider the attraction of industries that could directly employ learned skills in their career programs.

With the appropriate planning and marketing, Canaan has the potential to be a destination for remote workers from numerous industries. With developing broadband infrastructure, a

wonderful historical village, quality schooling, established water, waste water infrastructure, and waste management, and affordable housing stock (though limited), those who truly wish to find a serene and quiet lifestyle with the outdoors at your fingertips would find Canaan a premier location to relocate.

## Resources to Support Local Economic Development

Though a small town, Canaan has numerous assets both locally and regionally to help local entrepreneurs, working families, and residents seeking employment.

### *Revolving Loan Fund*

In addition to regional and state sources of funding for business startups, ([Working Lands Enterprise Board](#), [Vermont Community Development Program](#), business loans, etc.) Canaan has its own [revolving loan fund](#) that is available to qualified businesses and individuals who need funding to start a new business or expand an existing one. Interested applicants can submit a business plan to the Town. Your business plan must create new jobs for the town to qualify.

### *Child Care*

The expense of creating and running a childcare center is a concern for providers, and the expense of paying for it are a concern of working families. For families where both parents work, (including self-employed), are attending school, have a special health care needs, or other particular service needs, Vermont provides a childcare subsidy on a sliding scale based on family size and monthly income. You can learn more about this program at [Bright Futures](#). The State of Vermont also holds information regarding [Child Care Financial Assistance](#) in relation to the Bright Futures program and has an up-to-date [search database](#) of licensed childcare providers.

Locally, NEKCA is working on designing and retrofitting a childcare facility in the old health clinic on Gale Street with the goal of opening in Spring, 2025. The facility intends to serve between 10-15 kids.

### *PTV Workforce Development Program*

In April of 2020, the Preservation Trust of Vermont developed a [workforce development program](#) with the Northern Border Regional Commission through which the Canaan Building Construction & Restoration Carpentry program was awarded \$100,000 to develop trade skills that directly impact the rehabilitation of local historical buildings. Eugene Reid, the Building Trades Instructor, helped corral this grant money and spearheaded practical learning skills that were directly applied to local assets. Aside from building restoration, outcomes of the grant included increased enrollment for the CTE program and greater area interest in restorative programs.



### *Village Center Designation*

The Vermont [Village Center Designation](#) program supports the revitalization efforts of small and medium-sized historic centers. Commercial buildings in a designated village center can benefit from an array of tax credits for physical improvements to the building, and the municipality earns additional points on certain grant applications. Village Center designation is appropriately located in the commercial/civic core, and a single town can have multiple designated Village Centers. In 2017, the Planning Commission sought and acquired designation for both the Canaan Village and Beecher Falls Village. [Act 181](#), which was passed in July of 2024, removed the requirement of renewal applications, allowing the town to utilize their limited capacity in using the designations rather than maintaining them.

### *North Country Career Center*

The [North Country Career Center](#) is another Career and Technical Education (CTE) program based in Newport. While many of their programs cater to high school students for work-based learning opportunities, they also offer adult technical education courses.

### *Micro Business Development Program*

The State of Vermont also offers assistance to start and grow and micro business through the [Micro Business Development Program](#). By applying and entering into their program, you have the opportunity to work with other business owners, gain access to technology resources, classes, and workshops to help build your vision for entrepreneurship.

### *Increasing Broadband & Technical Education Support*

Canaan is like many other towns that has experienced the importance and shortcomings of having unreliable and insufficient broadband access for the community, especially in the wake of the COVID-19 pandemic. While some areas outside the villages are innately difficult to provide reliable service in some areas, Canaan has joined the NEK Community Broadband CUD (Communications Union District), which is working to bring fiber broadband to all addresses in the NEK. Canaan is mapped under the [service area](#) region that is USDA Reconnect Grant Funded, with fiber engineering, permitting, and design of implementation underway. Learn more about [NEK Broadband](#).

Both Canaan Naturally Connected (CNC) and NEKCA work to offer digital equity and technology classes. Reach out to each group to learn more about what is being offered and when.

*Goal:* Attract workforce industry and work-from-home industry

*Goal:* Bolster tourism industry by adapting to warmer climate

*Goal:* Support small and cottage industries to bring vitality and vibrance to community

*Goal:* Establish Town as a travel through destination

### *Strategies*

- Develop jobs board in the area to help ensure all residents have access to employment opportunities. **(TC)**
- Embrace the economic downscaling of the community to better meet existing needs and conditions **(SB) (PC)**
- Promote town's beauty as a destination on Rt 102 to increase tourism **(PC) (CNC)**
- Reach out to Kingdom Trails Association (KTA) to learn more about their private land partnerships in establishing their mountain bike trails to explore viability of local/regional mountain bike trails system. **(PC) (CNC) (RC)**
- Lean into established asset of snowmobile trails, utilizing for ATV as well, as a regional attraction **(PC) (CNC) (RC)**
- Encourage and assist local businesses into the micro business development program to build economic resiliency **(PC) (CNC) (RLFC)**
- Ensure broadband capacity is sufficient for all local businesses so that they can maintain their business and online footprint **(PC) (BC) (RLFC)**
- Increase the availability of childcare and develop the childcare workforce by building a registration. **(RLFC) (PC) (CNC) (CS/CTE)**

## Facilities

### Existing Conditions

Canaan has numerous high-quality, efficient services to offer its small town. Many dedicated officials and volunteers help bring essential infrastructure, social learning services, and safety services.

However, the Town has had trouble filling positions within the municipality with qualified candidates with experience in town government administration, which poses efficiency and continuity issues as well as increased strain on current local officials to do more.

While Canaan may struggle to fill some municipal positions, it also carries a lot of great infrastructure and capacity to manage that through numerous intact committees. The Planning Commission should receive regular reports from the various committees, non-profits, and groups in town to stay well-informed and receive qualified recommendations from the respective groups.

## Broadband and Cell Service

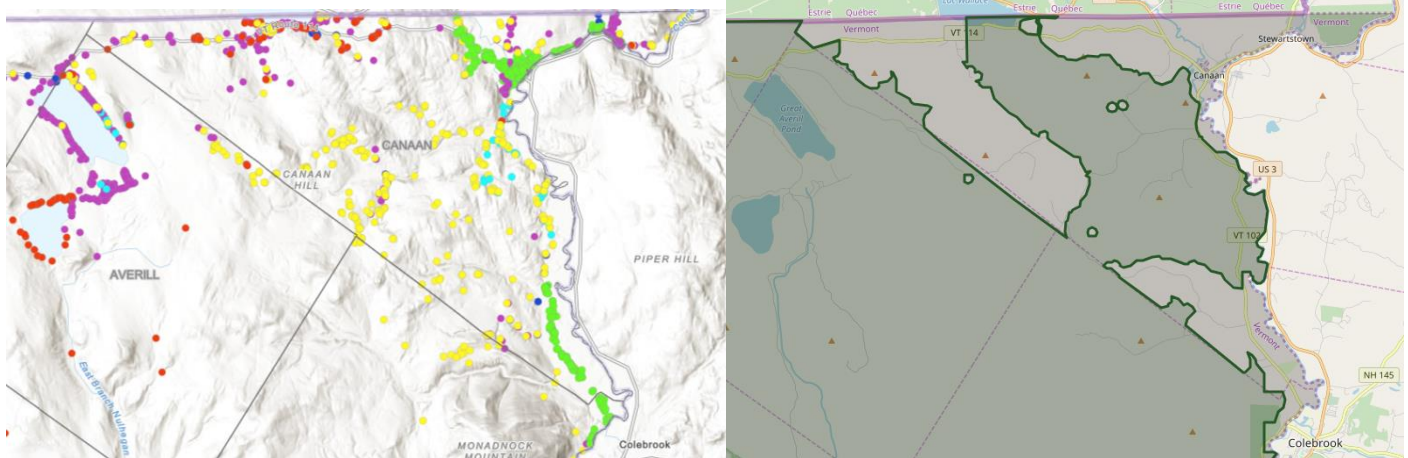
While progress has been made in some areas, the Town still lacks appropriate broadband connectivity to ensure access and efficiency of these services, a necessity in moving forward economically. The region has fallen behind in the availability of more advanced telephone and data transmission technologies. This limits economic development in Canaan and surrounding areas. This deficiency was well documented in the previous Town Plan and was even highlighted in a NY Times article in 2006.

The hilly terrain interferes with line-of-sight transmissions such as cellular telephone signals. The current low population may be viewed by provider companies as a disincentive to development or improvement. Additionally, adjacent communities in Essex County have even less coverage and less population to create incentive, posing a unique challenge of isolation for the town.

While the town received infrastructure laid by VTEL, the Department of Public Service's [interactive broadband map](#) show limited access beyond Canaan Village, Beecher Falls, and the south stretch of 102.

NEK Broadband has secured funding for the area through the [USDA Reconnect Grant Funding](#) program. Design, engineering, and pole licensing are underway, and the construction of the network should begin in 2025 and finish in 2026. While this coverage won't [service](#) all of Canaan, it will surely stand to increase services. NEK Broadband's mission is to make sure everyone in Caledonia, Essex and Orleans Counties (as well as Wolcott in Lamoille County) has access to high-speed internet from at least one provider.

NEK Broadband recently merged with Central Vermont Fiber and will eventually be known as NEKVC Broadband.



Left Image: [Broadband Availability](#) by E911 Address.

Right Image: [NEK Broadband](#) service area for Canaan

Addressing adequate cell and broadband coverage must be a priority for the town. The Town should stay attuned to USDA and Rural Development funding opportunities to continue building cell and broadband capacity. The [Vermont Council of Rural Development](#)

can provide technical assistance to keep the progress moving. The Town's Broadband Committee should provide regular updates to the Planning Commission.

## Town Office

The present Town Office is a brick building located on Vermont Route 253 next to the Post Office. It was initially constructed and used by the Community National Bank who sold it to the Town in 1980. A new restroom was added on the ground floor in 1997. To be ADA compliant, a handicapped entrance was added in 2008 and a chair lift in 2010 to provide access to the lower level. Numerous local clubs and organizations make good use of the building throughout the year. In 2016, a new propane generator was installed so that the Town Office can act as a command center in case of an emergency.

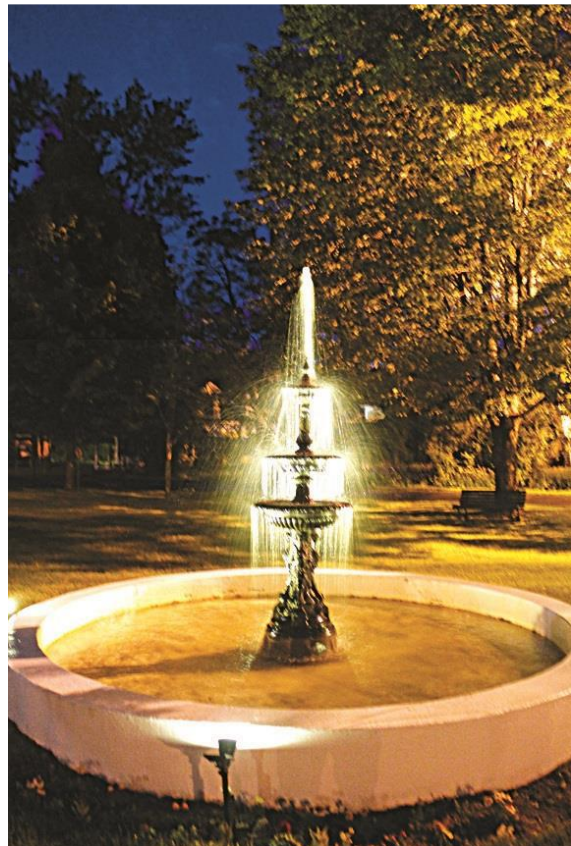
The Town Barn is located off Vermont Route 253 near the Town Office. In 1997 the original barn was torn down and a new pole barn, 24'X 72', was built by the Canaan Building Trades class and was completed in 1998. Concrete pads were installed in 2009.

## Town Library

In 1933, Alice M. Ward willed her home to the Town of Canaan for use as a public library. The library is located adjacent to Fletcher Park in the center of Canaan village and in 1980 was recognized as a building in the National Register of Historic Places. This building is owned and maintained by the Town.

The library was awarded \$900,000 among 14 Vermont libraries that received a total of \$15.9 million in competitive grant monies with funding from the U.S. Department of Treasury through the American Rescue Plan Act (ARPA). The project will include interior renovations for ADA compliance and improved usability that include an HVAC system and new windows.

The library is an integral lifeline of resources for Canaan and broader communities, including access to broadband, children playgroups, meeting spaces, social offerings, and is also home to the Canaan Historical Society as a museum of cherished local heritage.



## Town Properties

The Town owns several properties including three open cemeteries: the Alice Hunt Cemetery, the Canaan Village Cemetery, and the South Canaan Cemetery. The Town also



has several older cemeteries, the locations of which can be found on the maps located at the Town Office.



Courtesy photo Donna Jordan Photo/The Colebrook Chronicle

The Town owns Fletcher Park, which was originally donated to the Town in 1896. Canaan Recreation Park, an amazing multi-use park that has a small playground, baseball and soccer fields, basketball and tennis courts, and a walking path around the property. It is an asset for all generations to use. The Town also opened their splash pad with a well-attended event in August of 2024, showing the great things the town and community can do together.

Community members, however, have voiced a desire for winter or indoor recreation, and that the feasibility of a recreation/community center akin to RecFit in St. Johnsbury or a YMCA model would be worth exploring.

The Town also owns the Community Forest and a small meadow lot in the village.

Canaan has a Trust Fund that is will to the cemeteries, library, schools, churches, and roads, as well as the care for Fletcher Park. The total funding allocation can be reviewed in the Annual Report.

## Water Systems

The Canaan and Beecher Falls villages are served by separate water systems. The Canaan Selectboard voted on August 20, 2004, to establish a new water district: Canaan Fire



District #2 (CFD#2) comprising all the Vermont assets of the former Riverside Waterworks from Ethan Allen Inc. Well capacity is two hundred gallons per minute with a maximum yield estimated to be over 250 gallons per minute. The district serves approximately 120 households, including Riverside village in New Hampshire.

Canaan Fire District #1 recently upgraded nearly all their water mains. Canaan Fire District #2 has been working hard to get meters installed for households. The districts holds meetings open to the public every other month.

Fire District #1 is the service area of the Canaan-West Stewartstown wastewater treatment facility includes single family residential customers, apartments, two mobile home parks, motels, restaurants, offices, schools, gas stations, a Homeland Security border station, a bowling alley, the Ethan Allen Furniture Company and the Coos County Nursing Hospital and Correctional facility.

The estimated residential population that can be served is approximately 1,000 persons.

Canaan Fire District #1 entered the [Great American Water Taste Test](#) and won best water in the State of Vermont in 2022. The water system underwent upgrades in 2016 and 2018 from funding received by the USDA, implementing a new filtration method and improved distribution.



April Busfield (right) and Gary Leach at Canaan Fire District #1. Credit: Vermont Rural Water Association

## Wastewater System

The Wastewater Treatment Facility is going on a decade of operation with the new upgrades to the facility. It has a current capacity of six thousand gallons per day and has infrastructure capacity for more if needed. It has also provided a small stream of revenue and cost offset for the town as it can serve neighboring communities in time of slow input.

The Wastewater Joint Commission meets quarterly on the second Tuesday of January, April, July, and October at 5:30.

Infrastructure-wise, Canaan is in fantastic shape with their water and wastewater facilities to provide high quality services to the current community while having the capacity to serve more people.

## Fire Protection

The Town has a Fire Warden that issues fire permits each year. Residents should seek permits for [open burning](#) and ensure smart fire safety. The Fire Warden expressed appreciation for the community’s role in preventing forest fires in the annual report.

The Beecher Falls Volunteer Fire Department (BFVFD) was organized in 1943 to protect the Beecher Falls Manufacturing plant (now Ethan Allen Inc.). The coverage area eventually grew to include the towns of Averill, Avery’s Gore, Canaan, Norton and Warrens Gore in Vermont as well as West Stewartstown, Clarksville and the Halls Stream area in New Hampshire and a total of 5 adjacent towns in Quebec.

BFVFD has experienced a downward trend in volunteer membership and are not able to provide support responding to medical emergencies without more licensed medical personnel.

## Police Protection

Since 2022, the Town has contracted police services to the county sheriff's department, currently contracted for 23 hours a week. While the department intends to increase patrol hours to meet requested contract hours, some local community members have felt the change in local policing and the lack of local law enforcement. One of the goals of the previous Town Plan was explicit in maintaining the current levels of police and fire service.

## Health and Emergency Services

The 45<sup>th</sup> Parallel Ambulance is a non-profit based in Colebrook, NH that serves Canaan among eight other towns. They are supported by an annual contribution from Town taxes and a user service charge. It is a full-time paramedic level service, offering advanced life support, critical care transport services, and larger specialty care and trauma centers. The number of licensed medical personnel have been declining as the active members have been aging out of the profession.

Total 911 calls have increased since 2020, as have interfacility transfers (ITF). The 45th Parallel EMS partnered with Life Safety Institute, LLC from Concord, NH, to assist with EMS education in getting more people licensed.

	2018	2019	2020	2021	2022	2023
911 Calls	705	627	717	723	876	798
IFT	389	449	442	561	490	518
Total Calls	1094	1076	1139	1284	1366	1316

As the Town continues to age, many people in the planning process have also expressed a need for a local physician and/or pharmacy outlet to reduce the burden of traveling to Colebrook for limited hours. The Indian Stream Health Center moved to West Stewartstown and is only open one day a week, highlighting both the need and challenge of sustaining a health center and attracting the appropriate workforce. The importance of local availability of elder care was established in the prior Town Plan. Attracting a rideshare program specific

to helping residents with their physician and pharmacy needs might be a plausible solution as well.

Home health care, assisted living areas, and long-term care are all vitally important to keeping Canaan's community intact. Thinking about how investments can support this and how families can care for their loved ones in the planning process is paramount for the Planning Commission.

## Waste and Transfer

In 2006, Canaan purchased land next to the wastewater treatment plant for a solid waste transfer station. The Town also voted to build a transfer station, which began operating in August 2008. The Town is an independent waste management town and does not belong to a waste management district.

The Town of Canaan has a Solid Waste Management Plan which is consistent with and meets the requirements of Act 148, the State Materials Management Plan, the Regional Plan, the Town Plan, the Zoning Ordinance, and the Town Waste Management Ordinance. There is a solid waste review committee that meets quarterly to ensure all requirements of our Solid Waste Management Plan and the timelines to meet all the requirements for Act 148. All required timelines are addressed in the town's [Solid Waste Implementation Plan \(SWIP\)](#). The SWIP covers both our transfer station and stump dump.

Canaan accepts waste from Town residents only, but share our Household Hazardous Waste Events with Lemington, VT, and is a collection site for electronic waste and therefore are required to accept electronic waste from local towns in Vermont at no direct cost to the Town of Canaan. We are a member of the Coos County Recycling Center located in Stewartstown, NH, which serves eight towns. The Northeast Resource Recovery Association (NRRRA) in NH is another resource for training and managing recyclables not handled at our recycling center. Non-recyclable materials go to the Mt. Carberry landfill in Gorham, NH.

*Goal:* Ensure childcare, healthcare, and eldercare needs are met

*Goal:* Establish stronger planning mechanisms to rebuild community planning

*Goal:* Create more municipal revenue without raising taxes

### *Strategies*

- Appoint Planning Commission members from members of each committee in town, including but not limited to Broadband Committee, Recreation Committee, Wastewater Committee, Solid Waste Review Committee, Revolving Loan Fund Committee, Fire District Prudential Committee, Canaan Historical Society, Canaan Forest Committee, Canaan Naturally Connected, Canaan Technical Center, and Canaan Schools/Essex North Supervisory Union. **(SB)**

- Separate the duties of the Planning Commission and Zoning Review Board to ensure planning for the community is prioritized **(SB)(TC)**
- Continue to seek grant funds as appropriate to enhance and improve Town-owned properties. **(SB)(TC) (PC)**
- Continue to pursue dependable broadband for all, ensuring local business needs and opportunities are met **(PC) (BC)**
- Establish Student Government Internships, similar to Emerging Planners/ [Young Planners Groups](#), to both build and diversify youth career skills while providing capacity assistance to the municipality. **(SB)(TC) (PC)(CS/CTE)**
- Lay a vision Capital Investing Program (CIP) that helps bring families back **(SB)(PC)**
- Explore the feasibility of a recreation/community center in town, understanding the challenges Colebrook had in maintaining one. **(PC) (RC) (CCF) (CNC)**
- Support NECKA's efforts in establishing a childcare and development center **(SB) (CNC) (PC)**
- Canaan's Local Emergency Operations Plan should be regularly reviewed for accuracy. **(TC) (SB)**
- Reestablish local law enforcement to maintain and promote safety **(SB)**

## Education

### Existing Conditions

The Canaan Schools serve students from Canaan and the surrounding school districts, as well as from neighboring New Hampshire towns and have a high level of dependency from the region. Canaan Schools is the sole school within the Essex North Supervisory Union, serving area students grades Pre-K through 12. The school has a robust curriculum with numerous assets to the community and to continuing education.

Essex North Supervisory Union (ENSU) has two districts- Canaan School District and the Northeast Kingdom Choice School District which is composed of 10 small towns with school choice (Bloomfield, Brunswick, East Haven, Granby, Guildhall, Kirby, Lemington, Maidstone, Norton, and Victory). ENSU also oversees education for the Unified Towns and Gores.

The school is host to numerous community engagement events and community support efforts, which can be viewed on their school website.

Canaan Schools collaborates with the Island Pond Health Center to provide dental for Canaan Schools students. Many students take advantage of this, and priority is given to students already enrolled in this program or those who are without a dentist and or lack dental care for greater than a year.

The elementary and high schools are in two adjacent buildings on a five-acre lot overlooking the Connecticut River in Canaan village. The high school building, built in 1946, is a wood and steel framed masonry building. A gymnasium and library were added in 1977 replacing the original gym. Basic facilities in the high school include: six general classrooms; a stage and gym with locker and shower facilities; a library/media center; a science laboratory; an art classroom; a music classroom; special education offices, a meeting room and offices for the principal, athletic director and a mail/copy room.

The elementary school building, constructed in 1960, is a steel framed masonry building with a three-room addition that was completed in 1986. It has 7 general classrooms, a multi-purpose room/cafeteria (shared with the high school) an office space for special services, and a nurse's area. The building also includes the CTE area housing Building Trades, Diversified Agriculture, Woodworking and Business Classrooms.

[Canaan Technical Education](#) is a tremendous local and regional asset, offering a diverse range of learning opportunities and continuing education that offers its students career-building skills to further develop. Courses include Fire and EMS, animal husbandry, woodworking and manufacturing, business administration and tech, education and medical, welding, and sugaring. Many of these skills can be further groomed into local careers.

The High School building is equipped with a back-up generator, which allows the building to be used as the Community Shelter in case of an emergency.

According to the Department of Education's Enrollment Report, Canaan Schools had a 2023 enrollment of 170, down from 192 in 2016. There are about 50 staff members. The existing school classroom facilities can absorb growth of approximately 50%.

### [After School Programs](#)

One aspect lacking support for the school, students, and their parents is a viable after-school or summer program. Up until this past summer, the school was operating a very successful after-school program from [ARPA-funded](#) monies that had expired. 71 kids were using it, establishing a strong need for continuing learning, activities, and parental support.

Unfortunately, the school providing itself childcare without funding assistance was not a viable long-term solution. Without a community center, recreation center, or a place to



offer after-school programming to the school's youth, this absence puts an increased burden on families as well as Canaan Schools.

*Goal:* Prioritize childcare and after-school learning activities to support children and their working parents.

*Goal:* Support the practical learning and career development skills offered by the Canaan School CTE Program

### *Strategies*

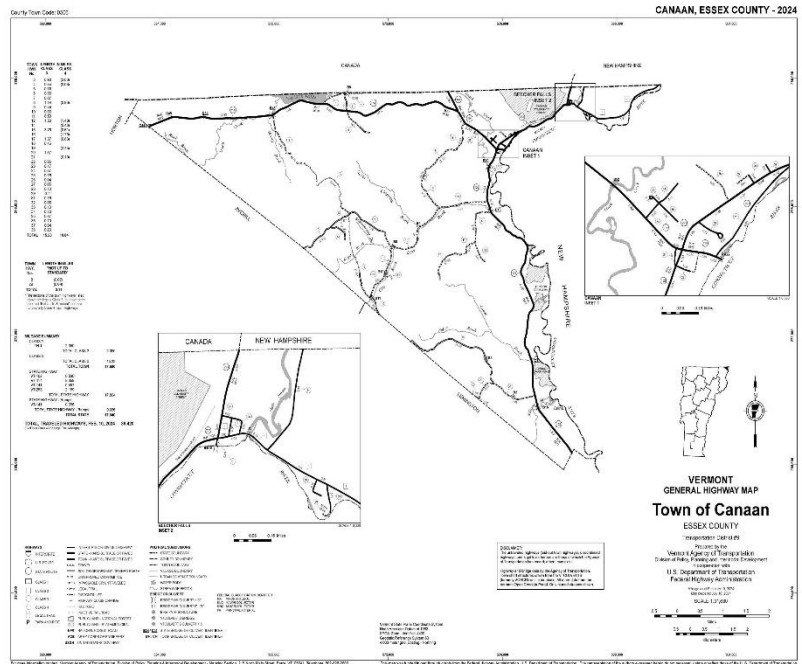
- Work with school officials to alleviate money handling by school to Town to ensure funding and grant opportunities aren't lost **(SB)(PC)(CS/CTE)**
- Work with school officials to strategize a more balanced support system between school, town, and supervisory union to maintain the assets of the Canaan Schools. **(SB)(PC)(CS/CTE)**
- Continue to implement collaborative learning opportunities from the Technical Education Center, Canaan Community Forest, and more for continued career development of locals. **(SB)(PC)(CS/CTE)**
- Invest in targeted [professional development programs](#) for teachers to enhance their skills in the classroom to invest in both student's and teacher's futures. **(PC)(CS/CTE)**
- Explore what workforce developing funding from [Vermont Student Assistance Corporation](#) can assist Canaan Schools. **(PC)(CS/CTE)**

# Transportation

## Existing Conditions

Resting in the Northeast corner of the state, Canaan has limited route access within state lines, yet numerous routes that cross state and international borders. Arterial roads of Vermont Routes 102 and 114 access east-west and south, with Route 253 heading north into Canada. Directly across the river, Route 3 in New Hampshire provides access to Pittsburg and Colebrook. Canaan has the ability to be seen both as remote and connected to numerous areas of Northern New England.

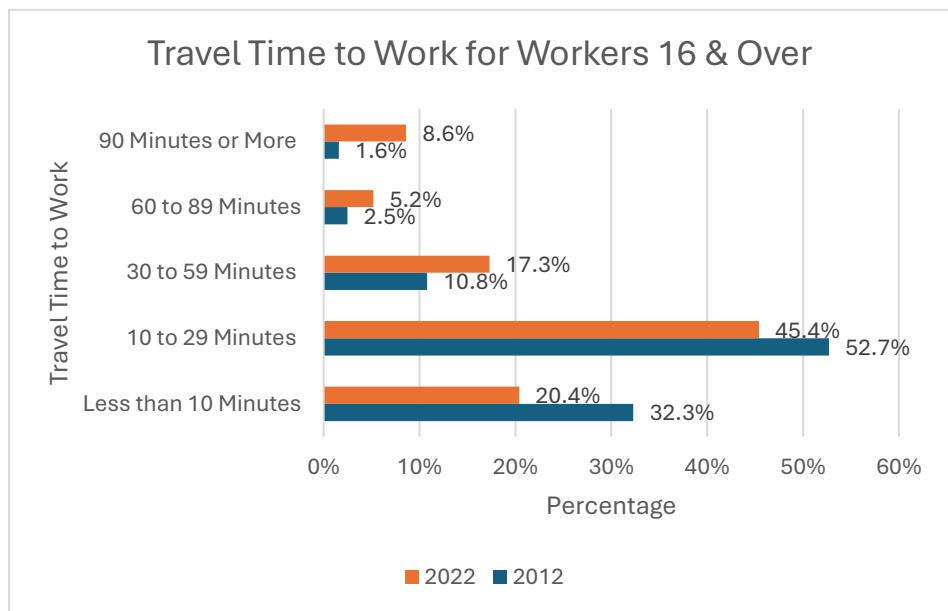
2024 Canaan Highway Map



There are 46.1 miles of highway in Canaan of which Vermont Routes 102, 114 and 253 account for nearly half or 17.84 miles. Town Highways consist of:

- Class II: 2.35 miles
- Class III: 15.08 miles
- Class IV: 10.86 miles

Numerous residents travel long ranges for work outside of town, and very few people actually live *and* work in Canaan. 72% of workers in Canaan commute from a different town. About 14% of the local community travels over 60 minutes for work a day. Generally, travel



times have increased significantly in the past decade.

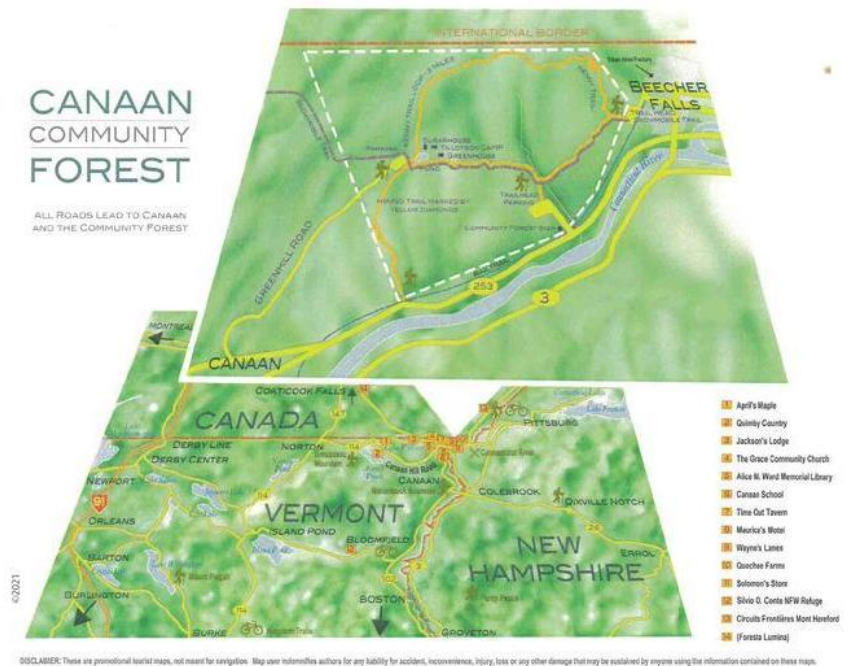
## Resources for Maintaining Roads

Canaan remains in compliance with the VT [Municipal Roads General Permit \(MRGP\)](#) status and permitting. The Town adheres to State of Vermont Town Road and Bridge Standards required for the Town to receive state aid for highways, which is necessary to meet the annual costs of maintaining roads. Adhering to these standards is also one of the requirements to receive a certain level of public assistance from the State following a presidentially declared disaster. The town's [Road Erosion Inventory progress report](#) shows that the Highway Department is making good progress on tracking and improving segments.

Towns can apply for funding through the [Better Roads Program](#) for both the inventory and remediation process. The [VTrans Grants in Aid](#) Program provides technical support and grant funding to help with slope stabilization and culvert replacements. There is technical assistance through the [VTrans Maintenance District](#), [Vermont Local Roads](#), and NVDA.

## Walkability in Canaan

Trail systems within the Canaan Community Forest provide for ATV users, bicyclists, hikers, and snowshoers. In the winter, there is a network of snowmobile trails in the Community Forest and across private land via easements that are part of the Vermont Association of Snow Travelers (VAST) network, maintained locally by the Canaan Border Riders Club. Written descriptions of the trails within the Canaan Community Forest are provided on the [Canaan website](#), along with maps of selected areas. The trails connect with key recreational resources and other trail systems including the Connecticut River Paddlers Trail, the Connecticut River Recreational Trail in New Hampshire, and the New Hampshire-Vermont Commerce Trail.



There is interest amongst the community to connect the community forest to the recreation park, expanding the overall walkability, health, and wellness of the community. The forest trails connect to Greenhill Rd. Developing safe paths or sidewalks on Christian Hill Rd. would establish a huge asset to all local residents, both in accessibility and exercise. The Recreation Committee could look into other suitable areas for local trail networks.

## Connectivity to the Region and Beyond

Canaan is in a unique position to be roughly three hours from the nearest metropolitan area in any direction. The [town website](#) lists travel times and regional airports. The Concord Coach Lines comes up as far as Littleton, NH. Locally, there is the Colebrook Taxi, as well as the [Tri-County Transit Door-to-Door](#) service that is available from Stewartstown to Colebrook. The community can also reach out to the North Country Council in Northern New Hampshire for other similar services.

There is a definite need for more alternative transportation options for people. The [Rural Community Transportation](#) service operates throughout the Northeast Kingdom and allows you to [schedule a ride locally](#). However, having a more reliable, scheduled service would be a boon for community members' access to jobs and services.

Increasing carpooling and public transportation opportunities will lessen emissions. The Town can also explore and prepare for the gradual conversion to hybrid and/or EV vehicles within Vermont by establishing an electric charging station. Charging stations and funding opportunities will be a priority for the state government.

There is volunteer rideshare programs that residents can look into from the [Vermont Public Transportation Association](#). The Northeastern Vermont Development Association (NVDA) offers a few different options to help area residents access or share rides for work, school, medical appointments, and social events. Residents can also register and join the [Go Vermont](#) database that connects people who are looking to carpool around the state.

*Goal:* Ensure the people of Canaan's transportation needs are met and access to services are available

*Goal:* Ensure safe and comprehensive walkability for all users

*Goal:* Expand availability of supportive transportation services

### Strategies

- Develop walking paths network that center the Recreation fields and the Canaan Community Forest (RC)(PC)

- Establish need for Rural Community Transportation (RCT) routes to increase employment opportunities **(PC)**
- Continue to participate in Road Foreman meetings facilitated by Northeastern Vermont Development Association (NVDA) to keep up on funding opportunities **(SB)**
- Continue to meet the requirements of the Municipal Road General Permit **(SB)**
- Coordinate with Colebrook in providing a health-service oriented rideshare to ensure healthcare and physician needs are met **(SB)(PC)**

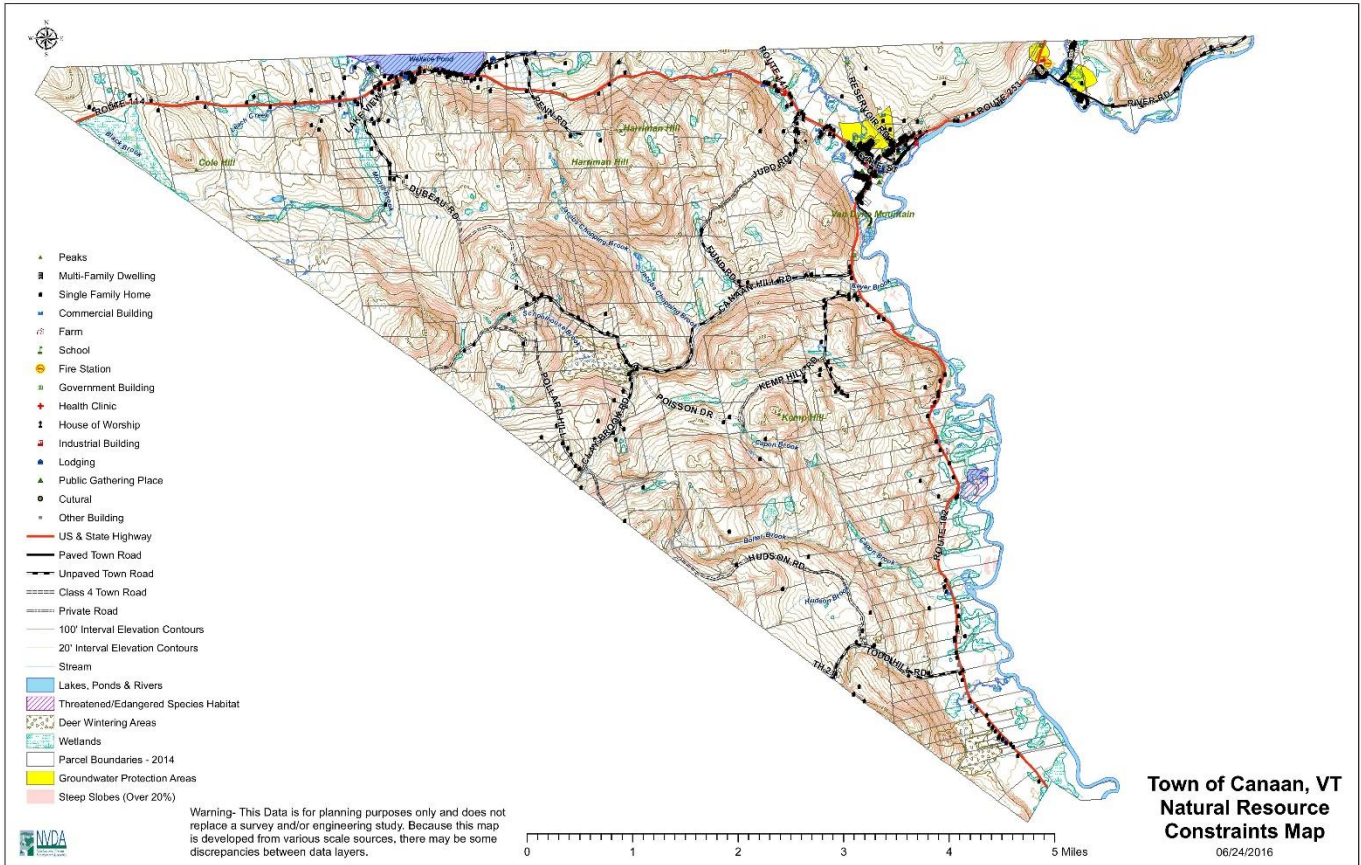
## Natural, Scenic, & Historic Resources

### Existing Conditions

Canaan possesses an abundance of beauty that is cherished by locals, residents, and visitors. The views are rural and agricultural and can be found along the Connecticut River valley, the Canaan Community Forest as well as our town roads: Clay Brook Road, Canaan Hill Road, and its spurs; the Fund Road and Judd Road; Kemp Hill Road and Todd Hill Road as well as the Hudson Road. Visitors go to these locations for moose viewing, as these are some of the areas where there is a good chance of seeing them. Viewsheds along Lake Wallace are unrivaled.

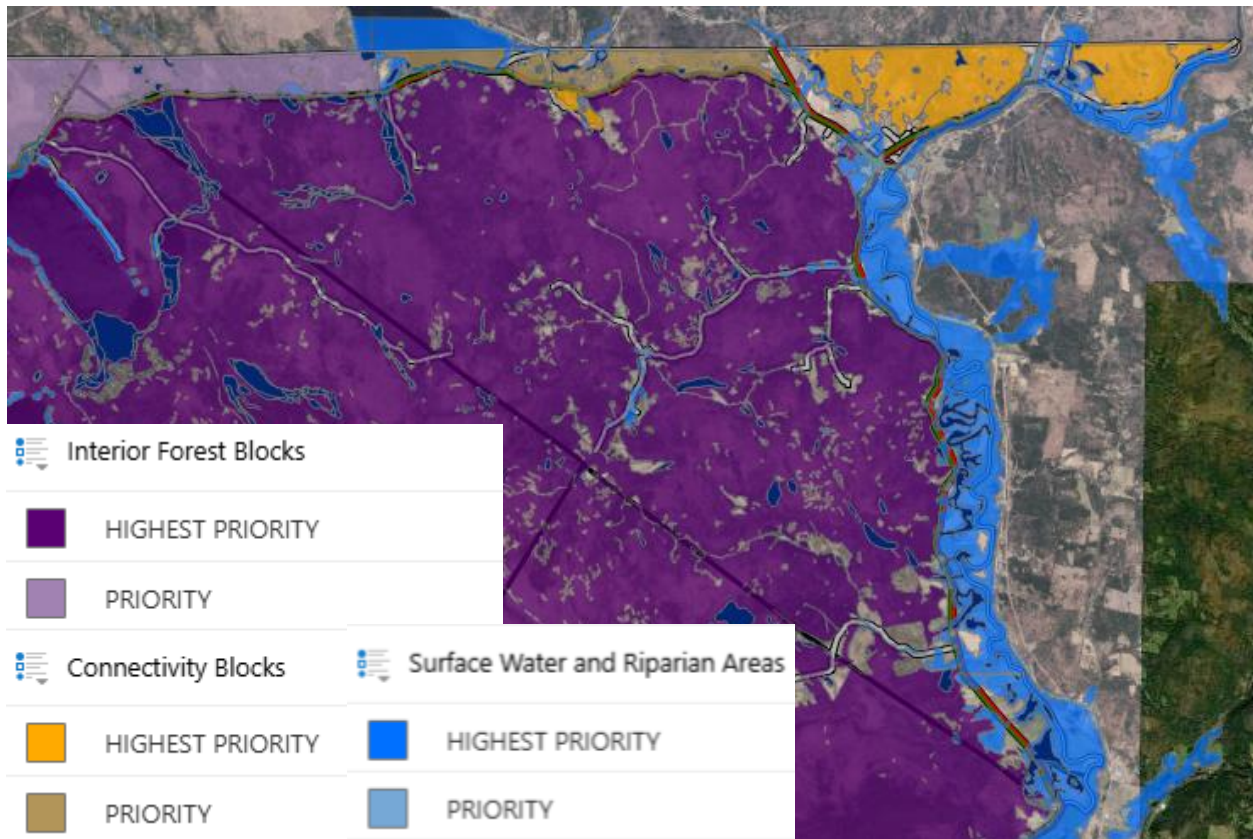


Canaan rests just south and west of the Alpine layer of the [Boreal Forest](#) (or taiga) ecoregion that spans across eight countries across the northern part of the world. The circumboreal belt represents about 30% of the global forest area, contains more surface freshwater than any other biome, and stores [approximately 208 billion tons of carbon](#). Resilience to climate change, diversity of species, maintaining property land value, and a general appreciation of the outdoors are all wrapped up in protecting these forestlands in Canaan and beyond.



Note: Health Clinic (Indian Stream Clinic) is now located in West Stewartstown.

After the enactment of [Act 171](#) in 2016, towns are required to identify priority forest blocks and habitat and are encouraged plan for development in a way that minimizes forest fragmentation. [Forest blocks](#) are areas of contiguous forest and other natural communities and habitats, such as wetlands, ponds, and cliffs, that are unfragmented by roads, development, or agriculture. Practically all of Essex County is considered part of the Highest Priority Interior Forest Blocks. Towns have numerous avenues to protect land through regulation and through non-regulative means. The Vermont Fish & Wildlife points to numerous resources in [Conservation Planning](#).



Interior Forest Block, Connectivity Blocks, and Riparian Areas. Source: [BioFinder](#).

### Tools for Forest Protection

Both the municipality and its residents have shown that preservation and conservation is important. The [Johnson Farm Wildlife Management Area \(WMA\)](#) is a premiere example of multi-jurisdiction collaboration in protecting valuable ecosystems while still operating agricultural uses. The WMA is known for its premiere paddling and bird viewing.

The Town also has the Canaan Community Forest, a 424-acre land, 364 of which are conserved with the [Vermont Land Trust](#). The land not in trust is used for a range of applied student classes that include forestry, earth sciences, sugar-mapling, and more.



Source: [Northern Forest Center](#)

Residents have also taken conservation into their own hands, putting 38 parcels of land into the [Current Use Value Appraisal Program](#), amounting

to 7,410.92 acres conserved through the state-run program, according to ANR's Atlas. 32 parcels have active forest management plans and six are assessed as agricultural land, which has a different [appraisal value](#).

The town could look into numerous other ways of protecting forestlands, wetlands, and farmlands, including establishing resource protection districts, incorporating review standards into their zoning bylaws that address forest and wildlife resources (especially in R-1/2 & R-2 lands), and update subdivision regulations of new development as to minimize forest fragmentation. A full list of [options and guidance](#) were created by the ANR concerning Act 171.

Coordinating with groups already invested in conservation would be a wise consideration for the town. The [Headwaters Subcommittee](#) is a multi-jurisdictional group that convene on preservation topics in the local region. Additionally, the [Connecticut River Watershed Partnership](#) has far-reaching coordination and congressional backing

## Recreation in the Area

One of the quickest returns in protecting the natural environment is being able to enjoy it through recreation. Canaan already has one of the best recreational assets in the region in Canaan Recreation Park. The new splash pad will undoubtedly attract local families to play for the day and spur small impacts of economic development. There is an updated playground, walking path, playing fields, and basketball/tennis courts.

Fletcher Park was given to the community by Charles Fletcher in the late 1800's and is located in the heart of Canaan village.

Part of the progress in the Canaan Community Forest has been a 3-mile walking trail loop.

Canaan is a popular destination for snowmobiling and ATV riding and is central to worldclass trails that span New Hampshire and Canada. The [Canaan Border Riders](#) is a local group that helps to maintain 96 miles of these groomed trails. They are also a community asset in supporting and connecting other local attributes. Snowmobiling (and ATV in the warmer months) can be utilized as a [tourist attraction](#) with the right programming and local partnerships, especially with a motel in town.

Other recreational opportunities in the region include hiking, camping, boating, skiing, golfing, hunting, fishing, birding, and other wildlife appreciating hobbies.

## Scenic Places

Entering Canaan from the West and South offers landmark scenic views along Wallace Pond and the Connecticut River. Wallace Pond is a spectacle for boating, kayaking, and fishing. Roughly two-thirds of the lake is in Canadian territory, and numerous sections of



this natural feature are home to Common Loons and Blue Herons. Along the Connecticut River are numerous places to stop for a short hike, picnic, and wildlife viewing. In particular, the North Country is a premiere destination for moose-watching, culminating in the Annual [Moose Festival](#) in late August.

## Historic Places

The [Canaan Historical Society](#) is located on the second floor of the Alice Ward Library and holds a treasure trove of local artifacts and significant events for its local community. Any resident or interested individual that would like to learn more about the history of the region and the development of the town should make a visit. Logging was a historical mainstay.



Source: Canaan Historical Society

Other historical sites include cemeteries, village parks, the Alice Ward Library building, two Customs Houses, as well as other properties listed by the Vermont Division for Historic Preservation. The historic restoration of Grace Community Church, located in the center of Canaan on Gale Street, was recently awarded a 2016 Preservation Award from the Preservation Trust of Vermont.

*Goal:* Protect forest habitats from further fragmentation

*Goal:* Improve walkability

*Goal:* Establish Town as a Travel-Through Destination

### *Strategies*

- Identify locations for trail connectivity and sidewalks to improve walkability  
**(PC)(CCF)(RC)**
- Consider a historic preservation district to access funding opportunities  
**(CHS)(PC)(SB)**

- Establish a long-term site for the Historical Society (PC) (CHS)
- Create a promotional pamphlet based on nature, outdoor, and recreational assets to improve tourist attractions (PC) (CCF) (RC)
- Develop Best Management Practices (BMP) for forests on all parcels over 10 acres to improve forest integrity and resilience (PC) (SB) (CCF)
- Ensure all residents with land over 25 acres are aware of the Current Use Program (PC) (SB) (TC) (CCF) (ZB)

## Energy

### Existing Conditions

"According to the U.S. Census Data, in Essex County nearly 70% of homes burn fossil fuels (oil and propane) for heating, followed by 30% wood heating. In fact, oil is often the back-up fuel source for homes that primarily burn wood for heat. While the region has no utility fossil gas, propane was used by 15% of homes. Electricity is used the least, at just 1% for household heating needs."

As in many of the towns in Vermont, Canaan uses several different forms of energy, which come from a variety of sources. [Vermont Electric Co-Op](#) serves the entire Town of Canaan. Basic house connectivity is available in the villages and along the highways; far up in the hills, there are “off the grid” dwellings. Three-phase electrical service, necessary for heavier uses, is available along Vermont Routes 114, 102, 253, and 141. Vermont Electric Cooperative upgraded the transmission lines along Route 102 in Canaan to three-phase power in 2015. According to them, this improvement will improve reliability and flexibility to buy from lower-cost power producers.

The age of housing stock is likely the most significant contributor to the overall thermal usage in Canaan, with nearly one-third of NEK housing units built prior to 1940. Older homes are likely to be poorly insulated, driving up energy consumption and costs. Weatherization programs and assistance provided by NETO and Efficiency Vermont are a critical first step, alongside beneficial electrification, to drive down thermal energy burden in Canaan and improve occupants’ comfort and health.

Heating oil, propane gas, wood pellets and other stove fuels are supplied by a few area distributors. Firewood is also locally available. Motor fuels are sold at service stations in and around Canaan.

A large natural gas pipeline is located in Beecher Falls, but there are no local connections.



Canaan has historically used hydroelectric power. Eversource of New Hampshire has an active hydroelectric generating station in Canaan village, making clean electricity when there is sufficient flow.

Given the rural nature of the region, outsourcing of amenities, and travel times required for employment, Canaan transportation energy use is higher than most towns accounting for more than one-third of energy use estimates.

## Enhanced Energy Plan

The **Town of Canaan** supports the goals of [NVDA's Regional Energy Plan](#), adhering to Vermont's Act 174, and aligning with [Vermont's 2022 Comprehensive Energy Plan](#) (CEP), and [Vermont's 2021 Climate Action Plan](#). To meet state energy and climate goals, Vermont is planning for a major shift away from fossil fuels in the transportation, heating (thermal), and electricity sectors to renewable sources of energy, efficiency in all sectors, and increase in-state renewable energy generation. Energy efficiency and conservation, as well as efforts to reduce energy burden remain at the forefront. Even with these aspirations, it is important to be clear-eyed about where Vermont can focus its sustainability efforts ([EAN 2024 Report](#)):

- Second highest per capita greenhouse gas (GHG) emissions in New England
- Third highest average energy burden in the U.S. (8.3%)
- Among the four states with the highest reliance on fossil fuel oil and propane for home heating
- Highest annual vehicle miles traveled (VMT) per capita in the Northeast

It is important to incorporate equity and justice into all energy planning aspects. As goals, objectives and actions are considered and implemented, it is critical to consider three questions to empower more inclusive decision-making in Canaan and across the NEK:

1) Who is helped? 2) Who is harmed? 3) Who is missing?

In alignment with NVDA's Regional Energy Plan, Canaan aspires to follow the overarching goals and principles detailed in the Energy Equity Project (EEP) Framework:

- Everyone has continuous access to energy.
- Everyone lives in a healthy, safe, and comfortable home.
- No one spends more than 6% of their income on energy bills.
- According to the [Vermont Municipal Vulnerability Indicators \(MVI\) Tool](#), the following factors have been flagged for climate vulnerability in Canaan because they are above or below Vermont state averages. Therefore, special consideration and

inclusion of these more vulnerable populations should be incorporated into local planning efforts.

**Below State Average:**

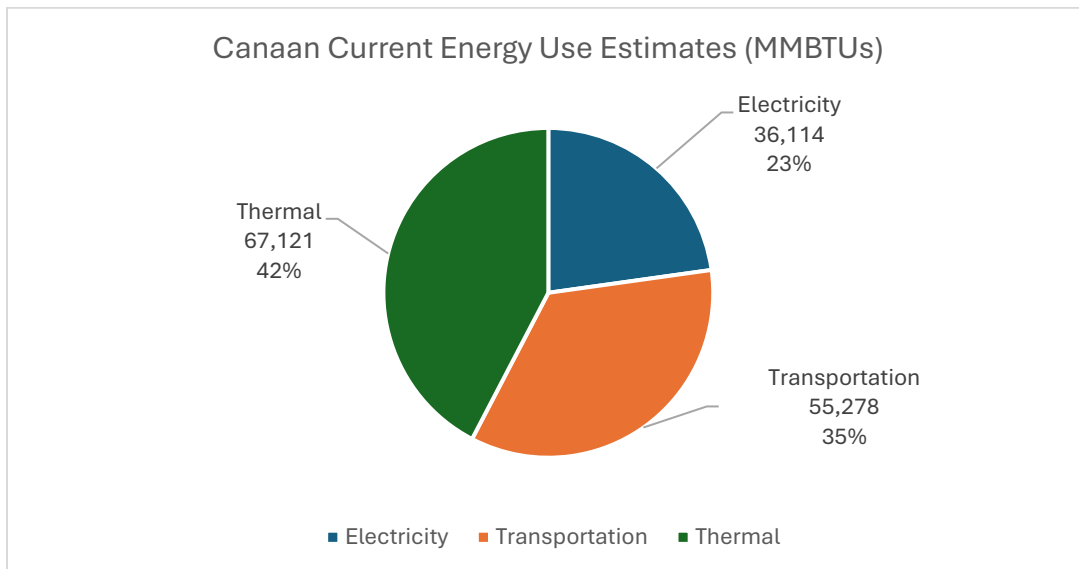
- Income-level

**Above State Average:**

- Senior or elderly residents
- Residents with disabilities
- Residents experiencing linguistic isolation
- African American residents
- Outdoor workers
- Energy & transportation burden
- Percentage of houses built before the year 2000

**Canaan, VT - Energy Analysis and Targets:**

The data in this section is intended to provide an overview of current energy use in Canaan and a sense of the trajectories and pace of change needed to help meet the State’s climate and energy goals. According to NVDA estimates, the thermal sector (residential and commercial heating and hot water) is the largest at 42%, followed by the transportation sector at 35%, and then electricity at 23 percent.



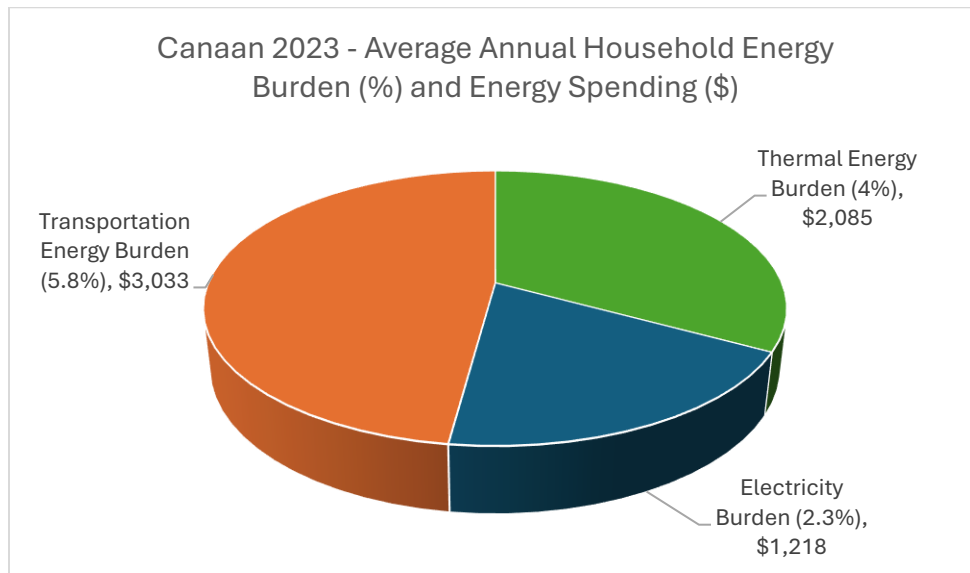
**Sources:** Current energy estimates were developed using multiple sources with assistance from NVDA in August 2024, including the Vermont Department of Public Service, Efficiency Vermont, U.S. Census American Community Survey, and Vermont Department of Labor.

## Analysis of Resources, Needs, Scarcities, Costs, & Problems:

Energy burden is one way to understand the impact of energy expenses on Vermont households. It calculates how much Vermonters spend on electricity, heating, and driving, as a percentage of their households' income. Nationally, an energy burden *greater than 6%* (excluding transportation) is considered high and is correlated with a “greater risk for respiratory diseases, increased stress and economic hardship, and difficulty in moving out of poverty” (ACEEE). According to the [2023 Efficiency Vermont Energy Burden Report](#):

- About half of NEK communities have > 6% combined thermal + electricity energy burden
- Over one-third of NEK communities have > 6% transportation energy burden

Canaan’s total energy burden is over 12% (including transportation, electricity and thermal). That equates to nearly \$6,500 in annual energy expenses across the average household. The pie chart below shows the breakdown of average energy spending for households in Canaan, with transportation burden highest, followed by thermal (heating), then electricity. Reducing reliance on fossil fuels can have significant benefits when it comes to lowering costs for those who face the highest energy burdens.

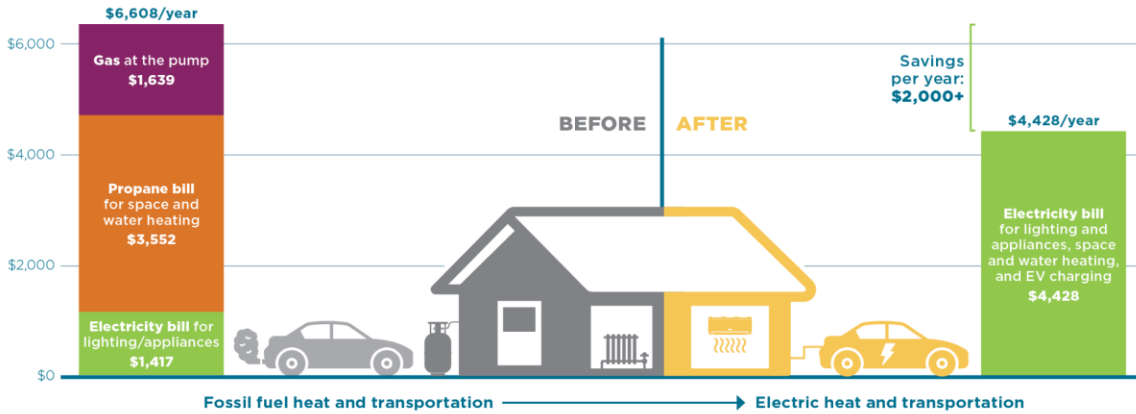


**Source:** [2023 Efficiency Vermont Energy Burden Report](#)

NEK households with lower and fixed incomes typically use *less* energy than those with higher incomes, yet on average, spend *more* of their income on energy expenses, like heating, electricity, and transportation. High energy burdens can increase the risk of transitioning into poverty or of experiencing long-term poverty by 150-200% ([EAN 2024](#)).

Weatherization and switching away from fossil fuels to more electrification are effective ways to reduce household energy burden and increase comfort.

### Estimated annual energy bill costs for a sample Vermont single-family household, before and after electrification



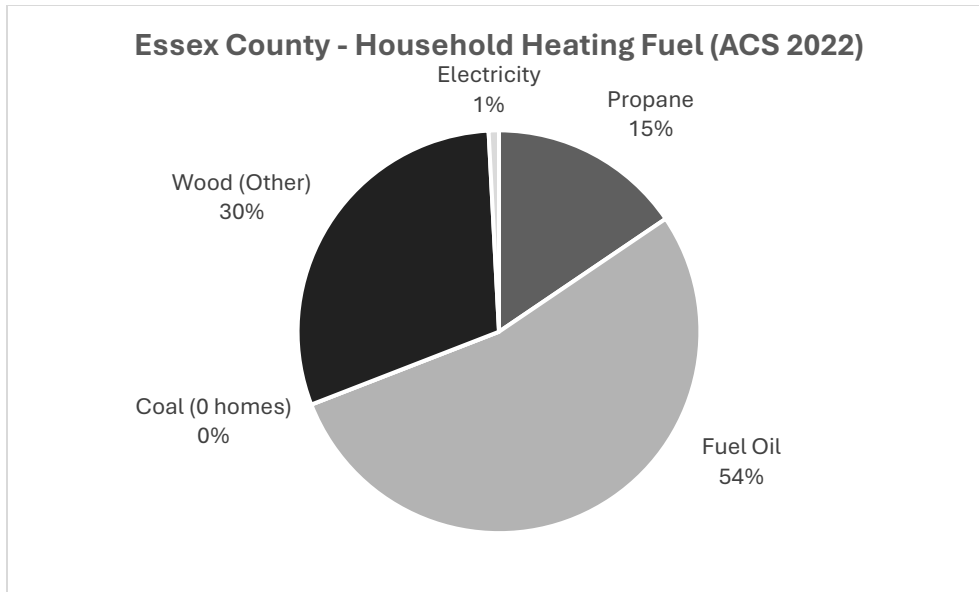
**Sources:** Energy bill savings calculated based on the average monthly prices for propane, gasoline, and electricity in 2023, from the Vermont Department of Public Service and EIA. Electricity bill costs for lighting and appliances reflect statewide average annual household electricity expenditures (Efficiency Vermont, "Vermont Energy Burden Report," 2023). Annual transportation fuel costs calculated using average fuel efficiency of 23.4 MPG for vehicles registered in VT from the 2021 Vermont Transportation Energy Profile and VT average annual vehicle miles traveled (VMT) of 11,084 miles/year from the Federal Highway Administration. **Note:** Actual energy bill savings will depend on a number of factors, including a household's electricity rate. Several Vermont utilities offer lower electric rates for managed EV charging, providing additional savings to households with access to those rates. Upfront equipment/vehicle costs vary based on model and incentive eligibility; because of this variance, upfront costs are not quantified here. Savings estimates are for a one car household. Savings will be higher for households replacing multiple gas vehicles with electric vehicles.



## Current Energy Use across Three Sectors (Thermal, Transportation, Electricity)

### #1 - Thermal/Heating (42% of Canaan's Energy)

The data below describes how occupied homes are heated in Essex County. According to the U.S. Census Data, nearly 70% burn fossil fuels (oil and propane) to heat their homes, followed by 30% wood heating. In fact, oil is often the back-up fuel source for homes that primarily burn wood for heat. While the region has no utility fossil gas, propane was used by 15% of homes. Electricity is used least, at just 1% for household heating needs. As of 2023 in Canaan, there are a cumulative total of 13 cold climate heat pumps, 19 heat pump water heaters, and a total of 31 out of 331 occupied homes weatherized according to the [EAN Vermont Energy Dashboard](#).



**Source:** [U.S. Census Bureau](#). "Physical Housing Characteristics for Occupied Housing Units." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2504, 2022.

The age of housing stock is likely the most significant contributor to the overall thermal usage in Canaan, with nearly one-third of NEK housing units built prior to 1940. Older homes are likely to be poorly insulated and leakier, driving up energy consumption and costs. Weatherization programs and assistance provided by NETO and Efficiency Vermont are a critical first step, alongside beneficial electrification, to drive down thermal energy burden in Canaan and improve occupants' comfort and health.

### *#2 - Transportation (35% of Canaan Energy)*

It is estimated that there are 687 fossil-fuel burning light-duty vehicles in Canaan, each driving an average of 15,000 miles a year. According to Efficiency Vermont records, there are two registered plug-in hybrid electric vehicles in Canaan as of 2023.

### **Increasing Transportation Equity - Transportation Demand Management (TDM)**

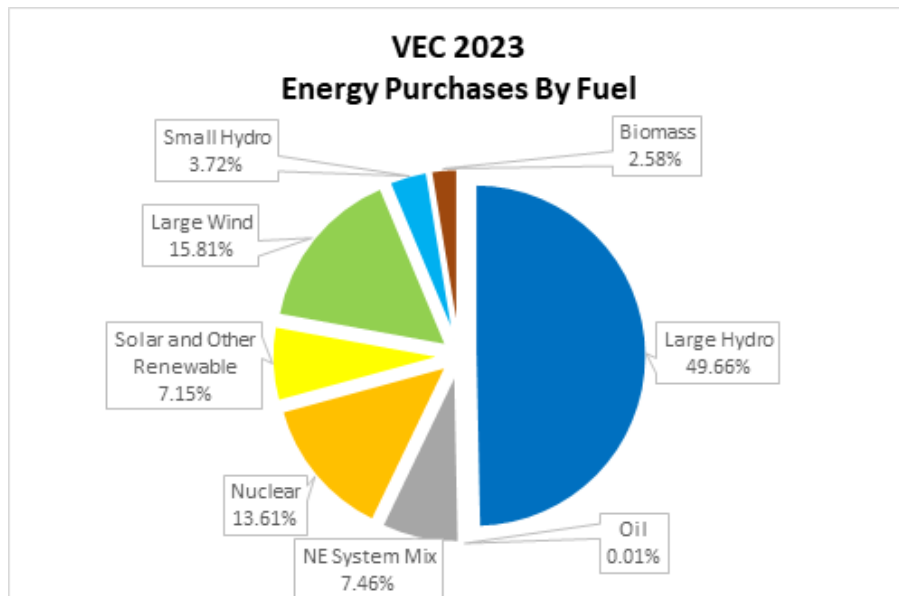
Transportation infrastructure that increases the quality and types of available transportation choices is referred to as Transportation Demand Management, or TDM, and is a priority of the Vermont Comprehensive Energy Plan. Multi-modal choices like public transit, carpooling, ridesharing, bicycling, and walking — all of which provide alternatives to getting around by single-occupancy vehicle — can increase the affordability of transport for Vermonters, encourage economic development in village centers and promote an active and healthy lifestyle. Multi-modal transportation that connects people to jobs and services (affordably and conveniently) can reduce single-occupancy trips, lower



transportation costs and fossil fuel pollution, while improving health and economic opportunities. As transportation and land use policies are considered for Canaan, it will be important to closely work and plan with, not just for, our most impacted community members. This will help ensure that NEK transportation energy burden, the highest in the state, is reduced equitably and that people with low incomes, disabilities, older Vermonters, and renters do not struggle to afford electric vehicles, electric bikes/scooters, charging equipment, and other desired mobility options. Please see NVDA’s Regional Plan for suggested land use and transportation strategies that encourage not only reduced transportation energy consumption, but also offer important health equity benefits.

### #3 - Electricity (23% of Canaan’s Energy)

Canaan receives electricity from the Vermont Electric Cooperative (VEC) distribution utility. VEC can buy power through contracts with counterparties or purchase power through the ISO-New England energy market. VEC’s long-term power supply needs are projected based on forecasts conducted every three years and detailed in their Integrated Resource Plan (IRP) required by the VT Public Utilities Commission (PUC). Below is VEC’s breakdown of electricity purchases by fuel type in 2023 from their website.

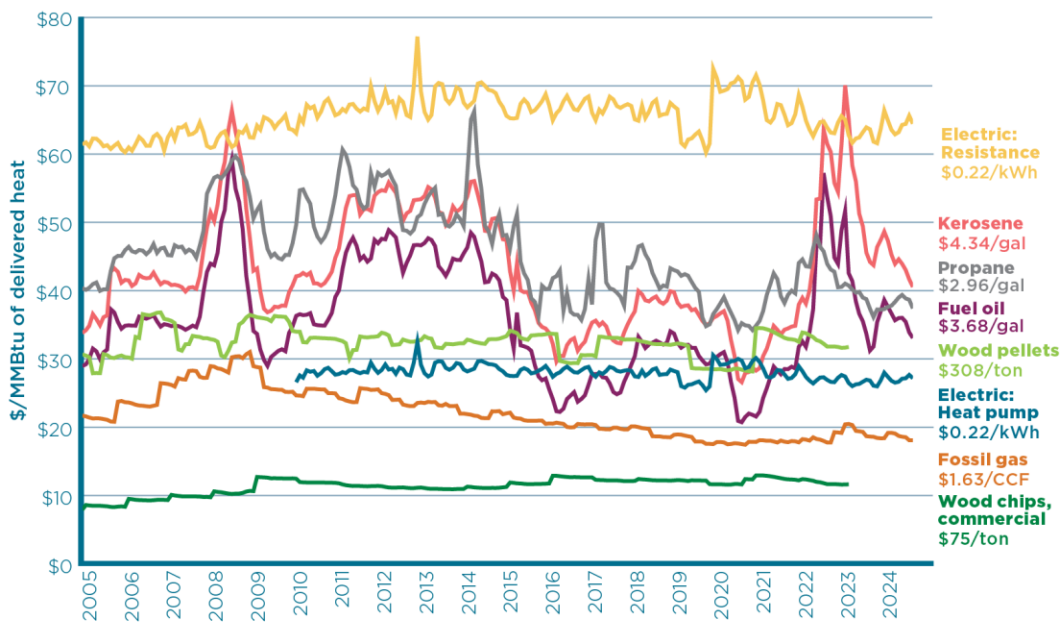


**Source:** <https://vermontelectric.coop/electric-system/power-supply>

In addition to incentives and other energy transformation programs, VEC’s [Community Solar](#) program offers Co-op members the opportunity to sponsor panels on VEC solar arrays for either 10 or 20 years and receive a fixed, guaranteed monthly credit on their electric bill, which can help reduce energy burden.

According to Efficiency Vermont data provided to NVDA in 2024, Canaan’s average residential electric usage was 5,648 kilowatt hours (kWh) a year, slightly less than the Vermont annual average of 6,337 kWh from 2021 through 2023. For comparison, the United States’ average annual residential electricity usage was 10,500 kWh, an average of about 875 kWh per month (EIA, 2023). It is worth noting that electricity consumption patterns are expected to increase as more beneficial electrification takes place. In Vermont, renewable heat sources have historically seen less price volatility over time than fossil fuel options, meaning efficient heating systems powered by electricity can help reduce energy burden over time. The following EAN chart shows the cost of various Vermont heating options through June 2024.

### Cost comparison of different heating fuel options over time (adjusted for inflation, June 2024 dollars)



**Sources:** Fuel oil, propane, kerosene prices: VT Department of Public Service, Retail Prices of Heating Fuels, 2024. Fossil gas: VGS, 2024. Electricity: EIA, 2024. Wood chips, wood pellets: Biomass Energy Research Center, 2023. **Notes:** Electricity prices presented here are a statewide average but vary by utility territory. The reason propane is usually more expensive per MMBtu than fuel oil but less expensive on a per gallon basis is because propane has a lower energy content per gallon (66% of the energy of fuel oil per gallon). Prices reflect data availability at the time of publication: through June 2024. Prices shown are in June 2024 dollars, using the U.S. Bureau of Labor Statistics Consumer Price Index.



### LEAP - Low Emissions Analysis Platform - Hypothetical Targets for 2025, 2035, and 2050

The following LEAP projections estimate the rate of technological adoption across the thermal, transportation, and electricity sectors needed to meet Vermont Climate Action Plan (CAP) goals. These are hypothetical targets to help imagine the pace at which the

Town might consider weatherizing its building stock, switching to efficient, electric heating (cold climate heat pumps and heat pump water heaters) and transitioning to electric vehicles.

Regional Residential Weatherization - New Retrofits						
Scenario	2020	2025	2030	2035	2040	2050
Baseline Scenario	1,105	2,283	3,372	4,408	5,480	7,745
CAP Mitigation	1,766	6,221	10,677	13,446	16,215	21,752
<b>Canaan</b>	<b>1.20%</b>	75	128	161	195	261

Regional Residential New Heat Pump Water Heaters						
Scenario	2020	2025	2030	2035	2040	2050
Baseline Scenario	388	457	460	463	466	476
CAP Mitigation	388	5,650	12,200	18,817	25,509	25,819
<b>Canaan</b>	<b>1.20%</b>	68	146	226	306	310

CAP Mitigation Regional Residential New Cold Climate Heat Pumps						
Technology	2020	2025	2030	2035	2040	2050
VT Targets	1,427	8,597	15,822	23,112	30,468	34,060
<b>Canaan</b>	<b>1.20%</b>	103	190	277	366	409

CAP Mitigation Regional Commercial New Cold Climate Heat Pumps (CCHP)						
	2020	2025	2030	2035	2040	2050
VT Targets	178	3,201	6,365	9,680	11,898	12,380
<b>Canaan</b>	<b>1.8%</b>	58	115	174	214	223

CAP Mitigation Regional Passenger Car EV and PHEV Stock						
Vehicle Type	2015	2025	2030	2035	2040	2050
Battery Electric	20	985	4,253	10,159	16,127	23,926
Plug In Hybrid	50	187	175	144	91	33
VT Targets	70	1,172	4,428	10,303	16,218	23,959
<b>Canaan</b>	<b>1.44%</b>	17	64	148	234	345

CAP Mitigation Regional Light Duty Truck EV and PHEV Stock						
Vehicle Type	2015	2025	2030	2035	2040	2050
Battery Electric	3	1,158	6,896	16,217	24,560	33,073
Plug In Hybrid	33	122	168	161	107	40
VT Targets	36	1,280	7,064	16,378	24,667	33,113
<b>Canaan</b>	<b>1.44%</b>	18	102	236	355	477

## Renewable Energy, Storage, Transmission & Distribution Resources

In support of the State’s goal of 90% energy from renewable sources by 2050, each region in Vermont has a set of renewable energy generation targets. Generation targets can be met through a variety of renewable technologies, including solar, wind, geothermal, hydro and biomass. Because NVDA’s region already generates a disproportionate share of renewables relative to our low population, the Northeast Kingdom is well on track for its contributions to the 2050 targets for renewable energy generation, based on our population and energy resource potential. See the updated NVDA Regional Energy Plan for more information about renewable energy, storage, transmission, and distribution resources relevant to Canaan, and specifically the “NEK Policy on the Development of Renewable Energy Resources” ([NVDA 2023 Enhanced Energy Plan, pg. 17](#)) which can be used to identify areas unsuitable for development, but more importantly guide decision-making around identified potential (and preferred) areas for renewable energy development to meet regional energy demand, reduce energy burden, and contribute to the state energy and climate goals. Underlying assumptions were made about suitability factors, such as slope and direction of land, elevation and wind speeds, and access and proximity to grid-related infrastructure.

NVDA has provided Canaan with maps depicting solar, wind, woody biomass and hydroelectric renewable energy potential in the Town. All maps are included in the appendix of this Plan. Based on Canaan’s population and energy resource potential, shown on the maps provided by NVDA, sufficient land has been identified to reasonably contribute to Vermont reaching its 2050 targets for renewable electric generation. For context, approximately one acre of land can host ~300-kW solar array. For rural areas, solar arrays offer positive co-benefits when combined with agriculture, also known as agrivoltaics. Additionally, siting renewable generation (possibly combined with energy storage such as a battery) in proximity to key food resources like food shelves, community gardens/fridges, grocery stores, etc. can be a way to improve access to local, more affordable, and healthier food options.

### **Canaan Existing Renewable Energy Capacity:**

- Solar - 204 kW total capacity (17 existing sites: largest 41 kW; smallest 3 kW)

### **Canaan Potential Renewable Energy Generation with No State Constraints:**

- Solar - 233 acres (Agrivoltaics - 218 acres)
- Wind - 123 acres
- Geothermal - Closed Loop Systems: 139 acres; Open Loop Systems: 140 potential sites

- Woody Biomass - 15,127 acres
- Hydroelectric - none existing

## Canaan Energy Pathways: Goals, Objectives & Actions

The following NEK Energy Pathways goals and objectives are aligned with the Vermont Climate Action Plan and Comprehensive Energy Plan. For the full, detailed list of recommended implementation actions for achieving regional goals and objectives please reference the [NVDA 2023 Regional Enhanced Energy Plan, pg.18](#). The Town is supportive of the NVDA Regional Energy Plan Pathways as they will help achieve the targets identified earlier in this Enhanced Energy Plan. In addition, the Town has set and is committed to its own local energy implementation actions, detailed below in italics, within each goal and their objectives.

### ***GOAL #1 – Help shift the Region’s Energy System to meet the goals of Vermont’s energy and greenhouse gas reduction goals while balancing economic vitality and affordability.***

- **Objective:** Reduce regional energy burden and fossil fuel pollution to support the State’s climate and weatherization goals.
  - *Develop an incentivized weatherization action and implementation plan for housing units built before 1940*
  - *Actively advocate for expansion on Rural Community Transportation (RCT) routes to regularly serve Canaan*
- **Objective:** Promote climate-ready and resilient buildings and communities.
  - *Continue to maintain Local Emergency Management Plan (LEMP) so as to identify heating and cooling shelters for the community. Ensure the community is aware of locations and why they are important/when they are needed.*
  - *Continue to pursue weatherization grants for municipal and historical buildings*
- **Objective:** Support the development of new, community-scale renewable energy in the region to meet the Vermont Comprehensive Energy Plan’s goal of using 90% renewable energy by 2050, in a manner that is affordable, equitable, and respects the natural environment and its inhabitants.
  - *Actively plan for renewable sites in an inclusive, community-driven environment using NVDA's Energy siting maps. Task Energy Committee with engaging focus groups of community member neighboring targets sites.*



## **GOAL #2– Decrease Transportation Energy Burden Costs & Fossil Fuel Pollution**

- **Objective:** Promote a shift away from single-occupancy vehicle (SOV) trips and reduce fossil-fuel Vehicle Miles Traveled (VMT) in the NEK.
  - *Work with adjacent communities to develop a North Country rideshare program that is supported through appropriations from each municipality*
- **Objective:** Shift away from gas/diesel vehicles to electric or other non-fossil fuel transportation options.
  - *Invest in EV charging infrastructure to support growth in EV use locally and regionally.*

### *Strategies*

- Regulate renewable energy devices to the extent permitted to ensure planned growth and compatibility to town **(SB)(PC) (ZB)**
- Connect residents to utility and energy assistance groups and non-profits to aid with energy burdens **(PC) (TC)**
- Establish an Energy Committee to ensure a path towards energy resilience **(SB)**
- Develop an Enhanced Energy Plan to provide the Town with a clear energy direction and consumption goals **(SB) (PC) (TC)**

## Flood Resilience

### Existing Conditions

Canaan is a flood resilient community that values nature as its ally in mitigation risks from natural hazards. Like the values of its people when it comes to looking out for each other, numerous lands are protected through easements and trusts. Some are invaluable to their flood protection. The [Johnson Farm Wildlife Management Area](#) (WMA), is a success story for Essex County of 1,023 acres along six miles of Connecticut River shoreline. These lands are interspersed with many of the region’s agricultural lands.

As a town that has experienced flood episodes in the past, maintaining resilience and understanding how flooding and other natural hazards can affect the community can help planning efforts to reduce damage and financial costs. Canaan is bordered on the east by the Connecticut River with numerous rivers, brooks, and streams within the town that drain into the river. Additionally, much of Canaan’s physical landscape is forested uplands with a

mix of wetlands and shrublands, all with natural capacity to hold water. Maintaining these forests reduces runoff from east sloped hills to the Connecticut River.

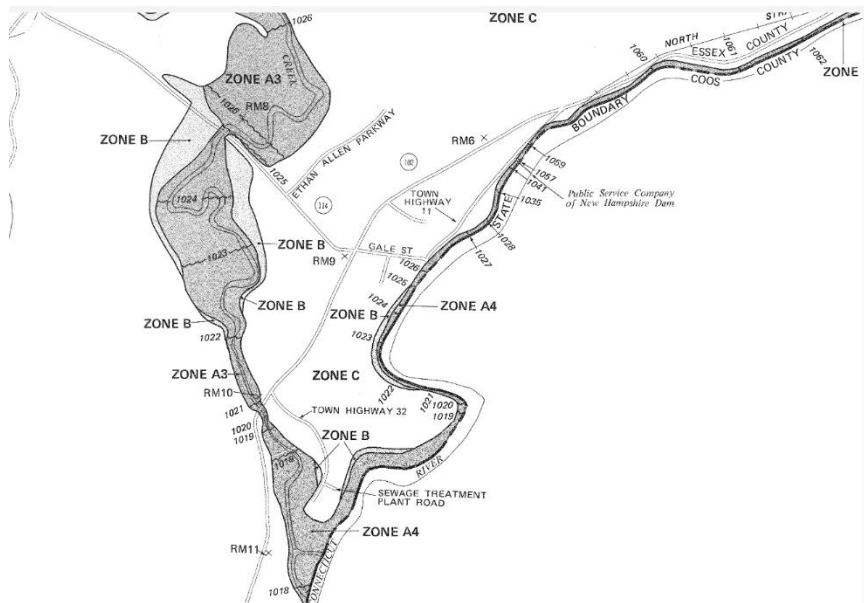
The previous Town Plan highlighted the risk of having the wastewater treatment plant within a floodplain and river corridor and mentioned numerous inundation points along critical access roads. The sites include the intersection of Halls Stream Rd and River Rd in Beecher Falls (in the SFHA), and the multiple sections where Leach stream crosses Rt. 114. Proactive planning protecting this resource and local water is a priority for the town.

### FEMA Special Flood Hazard Areas (SFHA)

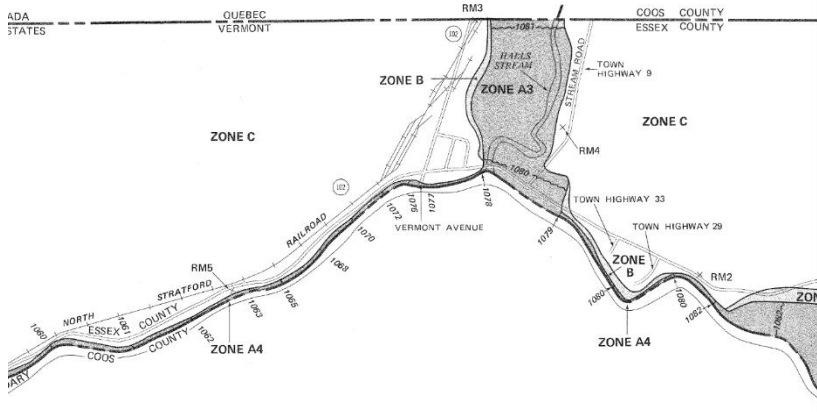
Canaan's Flood Insurance Rate Map (FIRM) was last updated in 1980 and is not digitized. The Town has been a member of the National Flood Insurance Program since 1980. The Town has flood hazard regulations that regulate development on land that is within the area of special flood hazard area, as depicted on the FIRM. The Town's flood hazard regulations, which are incorporated in the Town's zoning bylaw, were last updated in 2018 with the previous plan update.

Membership in the NFIP enables property owners in the FEMA-mapped flood hazard area to obtain flood insurance. While the firm maps are outdated and simplistic, it is estimated that approximately [53 structures](#) are in or near the flood hazard areas mapped by FEMA, or 9% of the built environment. Only three of those buildings have flood insurance in force. As FEMA rolls out their [new maps](#) for the region, the town will need to review their flood bylaws and update buildings within the Special Flood Hazard Area (SFHA), as the number of structures and facilities within the SFHA area likely to increase.

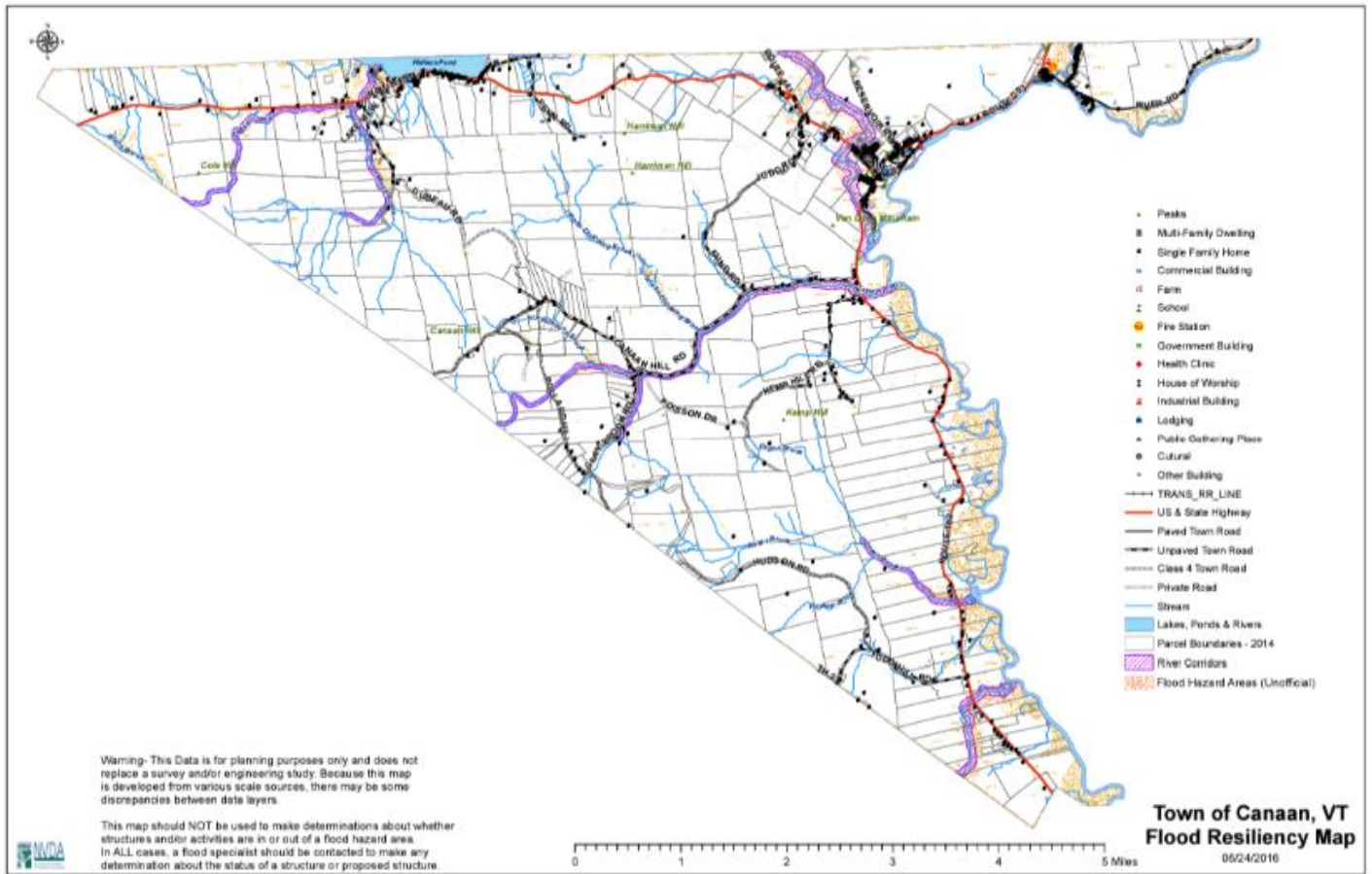
With the current rate map the town's two villages do possess some flood risk. Beecher Falls is near the confluence of Halls Stream and the Connecticut River and is adjacent to the 100-year flood zone. Canaan village is nestled between the Connecticut River and Leech Creek, and the Canaan Sewage Treatment Plant resides at the confluence of these two waterways.



Canaan Village. Shaded portions are in the 100-year floodplain. Source: FEMA



Beecher Falls. Shaded portions are in the 100-year floodplain. Source: FEMA



Flood Resiliency Map. Created by NVDA (2016). Note: Health Clinic (Indian Stream Clinic) is now located in West Stewartstown.

## Local Hazard Mitigation Plan (LHMP)

Canaan’s Hazard Mitigation Plan was approved for an update in June of 2024. The most significant hazard identified for the town were:

Severe winter storm	Climate Change (Extreme Cold and Heat)	Flooding (including fluvial erosion/dam breach)
Fire (structure/remote)	Infectious Disease	High Winds

Within the plan, there is thorough research and informed, detailed tasks for these actions to mitigate the impact and extent of damage to these hazards. Having, and using, an updated LHMP is crucial to flood resilience, as not only does it keep the town prepared but enables access to numerous sources of funding to implement the specific actions.

The following general actions to reduce vulnerability to these hazards, each with specific tasks to meet these actions:

- Action #1: Reduce vulnerability to flooding by evaluating capabilities of existing road and storm water management infrastructure, public education and through municipal services and regulations.
- Action #2: Improve resilience to severe winter storms.
- Action #3: Reduce impact of extreme hot and cold temperature durations.
- Action #4: Raise public awareness of hazards and hazard mitigation actions.
- Action #5: Reduce risk and impact of major infectious disease events.
- Action #6: Reduce risk and impact of fire hazards.
- Action #7: Reduce impact of high wind events.

## Emergency Relief Assistance Fund (ERAF)

The Emergency Relief Assistance Fund (ERAF) helps Vermont municipalities repair damaged infrastructure after a presidentially declared disaster. FEMA funds 75% of the cost and the remaining 25% needs to be met by the Town and State. The State of Vermont will contribute 7.5% of the costs, yet as incentives to increase the state’s flood resiliency, towns can be eligible for up to 12.5% or 17.5% of the total costs.



Credit: State of Vermont Flood Ready

The breakdown of steps to take are below.

<b>Mitigation Actions that Increase ERAF Assistance</b>	
<b>12.5% Rate</b>	
Participate in NFIP by maintaining flood hazard regulations	
Locally adopted road and bridge standard	
Local Emergency Management Plan (LEMP)	
FEMA Approved Local Hazard Mitigation Plan	
<b>17.5% Rate</b>	
Adopt local River Corridor Protections	

Currently, the town has kept up with the four required actions to meet the 12.5% threshold. With assistance declaration normally in the millions of dollars, Canaan could have access to tens of thousands of dollars in assistance with locally adopted river corridor protections. Essex County has experienced 27 declared disasters since 1973, 14 of which have been declared since 2014. The town and residents can keep track of the [Flood Ready Community Report](#).

<b>FEMA Declared Disasters in Essex County</b>	
<b>Type of Disaster</b>	<b>Number of Disasters</b>
Severe Storm & Flooding	19
Severe Winter Storm	4
Biological (COVID-19)	2
Hurricane	3

### River Corridor Protections

The [River Corridor Program](#) is a voluntary protection that towns can implement to further protect river flow dynamics from human encroachment and therefore increase flood and ecosystem resilience. The town can implement river corridor plans by adding a section in their flood hazard bylaws limiting structure development within 50 ft by using the river mapping system utilized from geomorphic assessments. For larger streams and rivers with a drainage of two square miles or larger, a larger setback may be required. Learn more about [river corridors](#).

Leech Creek is a stream that flows from Forest Lake in Averill, where it meets Morrill Brook and enters Wallace Pond. It then travels east of the pond, crossing borders and meanders towards the Canaan Village Center until it meets the Connecticut River. There is a 16.7 [river corridor easement](#) just northwest of town of donated land that protects the channel meander, pivotal for flood resilience for the town center. A river corridor easement includes:



- Transfer of channel management rights to a land trust
- No new structures/development within the river corridor
- A minimum 50 ft. riparian buffer of native woody vegetation whose location floats with the river

Unfortunately, the State of Vermont has not mapped river corridors for the Connecticut River.

### Other Tools to Consider

Below are a list of links and resources residents and town officials can use to make the best-informed decisions about staying resilient toward natural disasters:

<a href="#">ANR Biofinder</a>
<a href="#">Municipal Vulnerability Indicator (MVI)</a>
<a href="#">NOAA Storm Events Database</a>
<a href="#">ANR Natural Resource Atlas</a>
<a href="#">Transportation Resilience Planning Tool (TRPT)</a>
<a href="#">FEMA National Flood Hazard Layer (NFHL)</a>
<a href="#">Vermont Flood Ready Atlas</a>
<a href="#">Upper Connecticut Basin 16 Tactical Basin Plan (2021)</a>

Appendix B has an Essex County focused chart of conservation groups and resources.

*Goal:* Update floodplain regulations in wake of new FEMA mapping. Remain a participant in the National Floodplain Insurance Program (NFIP).

*Goal:* Prioritize boreal forest connectivity between the Silvio O. Conte Wildlife Refuge and forestland in north and west in Canada and New Hampshire

*Goal:* Maintain water quality resilience

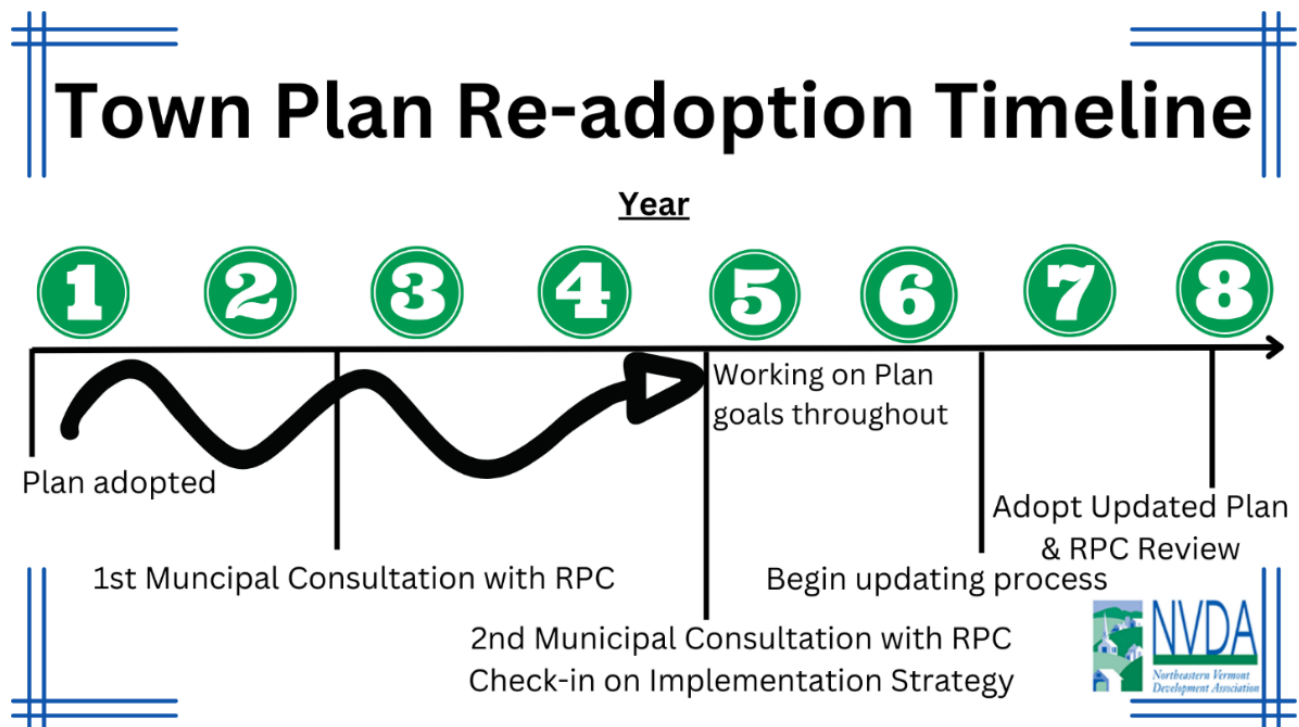
### Strategies

- Receive regular updates from watershed restoration projects like Connecticut River Watershed Project **(PC) (SB) (WWC)**
- Establish greater connectivity and coordination with the vast number of groups and organizations in the region dedicated to forest stewardship and watershed restoration by using the Essex Conservation Group Summary Chart **(PC)**
- Review and amend zoning text so as to minimize forest fragmentation **(PC) (SB)(CCF) (ZB)**
- Attend meetings regarding floodplain mapping and regulations, or general climate-related vulnerabilities **(PC) (SB) (WWC) (TC)**
- Establish River Corridor Protections **(PC) (SB)**

## Evaluating the Plan

Evaluating progress, both in performance and conformance with the community, is one of the most important steps in developing a comprehensive plan. The town's municipal government should work to create benchmarks for achievement as this plan is utilized and referenced, to build progress and capacity for the town. Instituting timelines, group evaluations, and developing committees to pursue goals in this plan are basic tools to ensure this plan is functional to the community and does not accumulate dust off the shelf.

Below is a basic timeline created by NVDA to keep the town on a basic framework towards updating their next plan. Between now and 2033, Canaan should be actively working to implement this plan as it is adopted. With the guidance of two consultations with NVDA, the town's Planning Commission will be prepared to keep continuity through plan conformance, enabling a smoother process in updating their plan.



# Appendix

## A. Canaan Naturally Connected Survey, 2024

### CNC SURVEY 2024 RESULTS

#### COLOR CODES

No color – senior winter events

Yellow – mixed grade high school lunch

Green – middle school

Light blue – adult at school

#### WHAT PART OF LIVING IN THE COMMUNITY DO YOU LIKE?

- Everyone is friendly and helpful
- The small-town community willing to help other people
- The friendliness
- I like the people and how devoted they are to their town
- The people that live here are very helpful
- The people
- Peace & quiet
- A lot of people join in and participate in events that go on
- If someone is in need, the community sticks together
- I love the library and the Historical Society
- Walking path around the Rec Park
- Others
- Friendly, a good place to live, good school, people help each other out
- The nature and surroundings (and it's not very urban/congested)
- People, fellowship
- Hanging out with people
- The beauty of nature in the area. I love the area, it is so beautiful
- Community togetherness
- The sense of community, helping neighbors
- The size
- Kindness & helping others
- Quiet North Country! Friendliness
- Being in the Northeast Kingdom all my life. The outdoors
- Like living in small community

- The people and the nature (hiking trails, lakes, etc.)
- I love events like this today. I also enjoyed the last art event. I also love the library and the book club that they have. I think the organization CNC does a fabulous job and support its purpose and values.
- Access to nature, local beauty and interpersonal friendships
- Love events like this one
- Stewartstown
- The sports program/recreation
- Sports/recreation
- Sports/recreation
- Not much social interaction
- Lots of good people
- Not that much people
- Not many people
- Being with friends
- Being in a small area
- Being able to hang out with friends
- Everyone know everyone
- It's a small town
- Outdoors
- Forest
- The outdoors
- Woods
- The people
- Not that many people
- Outdoors
- Outside
- Outdoors
- Show each other support

#### WHAT PART OF LIVING IN THE COMMUNITY NEEDS WORK?

- More things to do for youth, more work on drugs and mental health
- More activities
- More events
- Transfer station, softball weekend (why drinking on school is a liability, speeding on School Street
- Attitudes & noise (bad & too much)
- Advertising the events going on
- More things to do
- All the dumpy places
- Lower taxes
- Jobs for younger people

- We hiked the Canaan Nature Park (Community Forest) and it doesn't appear to be maintained. Lots of trees down. Would love to see it used and maintained.
- A few houses need work in the area
- More restaurants to eat at, cards and games
- Affordable transportation
- Exactly what you are attempting. Groups – knitting, crochet, quilting, painting, crafts.
- Rural transportation
- More MD's doing rural work
- Volunteers to help with clean up for senior citizens
- More volunteering/programs, such as Lion's Club, Big Brother/Sister Program, Meals on Wheels
- Community needs to better value history of regions and importance of preservation; including green space. Integration of Quebec neighbors and history
- More activities
- The rec park
- The rec park
- The rec park
- Drugs are bad
- Less potholes
- More stores
- Less people
- Activities
- More activities
- Activities/things to do
- School hours
- Cleaning the town
- Fun stuff
- More buildings
- Trash clean up
- More fun stuff
- More fun things to do
- Communication
- More hangout spots
- Things to do
- Things to do
- More resources to help those less fortunate

**WHICH SERVICES WOULD YOU LIKE TO SEE PROVIDED?**

- More funds and services for the elderly
- Theatre for movies and plays
- A place to socialize
- More mental health and substance abuse treatment programs



- A coffee shop
- Things (events) later for people who work
- Line dancing
- Elderly transportation
- More community events – hikes, art classes, games, etc.
- More free rides to other areas (ie. The pool in Lancaster to do aerobics.)
- Senior rides
- Teach gardening
- Art, drama, walking group
- Anything that attracts people with NO arguing
- Skating rink at Fletcher Park with volunteer maintenance (kids helping adults)
- Gym, coffee shop like Bessie's
- Great suggestions on the reverse side of sheet
- Coffee shop, bookstore, cultural events
- I think a weight lifting gym should be added so people don't have to go all the way to Lancaster
- A place for teens to get together and hang out
- A place for teenagers to get together and hang out
- A place for teenagers to hang/get together
- Free bumper car, oculus, chocolate
- Free food
- I don't know
- Food, games
- Entertainment
- More areas to bring kites(?)
- Entertainment
- Games
- Speakers
- Movie theater
- Movie service, video game tournaments
- Movie theater, game tournaments
- Movie theater
- Gaming, movie theater
- Movie theater, video game tournaments
- Arcade
- Movie theater
- More hangout spots
- Places that you can hang out in
- Place to go and hangout with friends
- Teen activities, service groups to help elderly and those less fortunate

**ANY EVENTS THAT YOU WOULD LIKE TO SEE HAPPEN?**

- A movie night for everyone, card day or games
- Plays, movie theatre
- Comedian, Celtic dance, plays, old movies, meet & greet so we can meet new people
- Food truck rally, small concerts, flea market, all these in one event
- Public hangings of trouble makers
- Game night or afternoon
- Birthday dinner once a month with cake
- Basket classes with “Linda”
- Tour of the new Border Patrol Station
- Hand & arm exercises (playdough/rolling pin) PT exercises
- Bingo
- Friday After Five, live music
- More community events
- Dance
- Music and Art
- Weekly cribbage games, other card games, Scrabble
- Mystery Book Club, snowshoeing
- Any events are a plus
- The ones we have are great! I went to Cabin Fever party last weekend and it was fun
- More senior events, also adolescent and children events
- Summer concerts and movies outside, dances and bands. Expert speakers (history, wildlife, botonists) & book authors
- Pot luck once a month
- Balance exercises
- Writers, artists, one room movie theatre, cultural events, bookstore, coffee in the mornings, drama performances, gather and do crafts together, old movies, pop-ups (community teaching), harvest soup & bread nights
- Line dancing
- Arts/craft class
- Bingo/music combination
- Educational program
- List of things to do in the North Country area
- Singalongs
- Yoga
- Thai chi classes
- Bingo
- Medieval dinner
- For a proper(?) gym that's 24 hours, more team activities, stuff that supports mental health
- Game/movie night
- Game/movie night
- Game/movie night
- Buffet

- Buffet
- No
- Fireworks
- Lazer tag
- Small concerts festival type(?) activities
- Lazer tag, bumper cars, paintball, concerts
- Games
- Dance party
- Gaming
- Rainbow 6 Seige tournament
- Rainbow 6 Seige tournament
- Some kind of riding group
- Rainbow 6 Seige tournament
- Rainbow 6 Seige tournament
- Movies
- After school support, community meals, young and old mixers

#### WHICH PART OF THE TOWN NEEDS IMPROVEMENT?

- More advertisements of school events that community members to see
- Clean up properties
- Cops. We need more coverage.
- Let Mark do his job at the transfer station. We don't need the pressure of Selectmen trying to micromanage the facility
- The Center and parts of Gale Street
- Clean up around homes that have trash around them
- More people to volunteer
- Communication between organizations, more people helping
- Sidewalks
- Less drug use
- Community Forest trails need maintenance
- Canaan Community Forest
- Colebrook needs new sidewalks. Colebrook also needs new signs that are at the entry points (need paint)
- Center of Town and preservation of green space
- I honestly don't know
- The rec park
- The park
- The park
- Potholes, stop signs
- Potholes
- Road

- The roads
- Things to do
- Things to do
- School
- The park
- School
- Route 114
- The park
- The school
- The school
- School
- The park
- Public places
- The public places – park

**WHAT SKILLS WOULD YOU BE WILLING TO HELP CNC OUT WITH, EITHER IN THE COMMUNITY CENTER OR EVENTS?**

- Anything (Ed Cunningham)
- Cooking, set up, clean up (Sally Masson)
- Love to volunteer, would be willing (Marie Noyes)
- Donation (Bob McComiskey)
- Anything that I can do (Terry Kimball)
- I am willing to help out with anything (Lucille Cunningham)
- Maybe a bingo night (Scott Leigh)
- Art classes, events (Kim Morrow)
- Labor on park/Community Forest (Martha Barksdale)
- Whatever help is needed (Becky Bunnell)
- Cooking (Teenia Lemire)
- Town Clean Up Day, maybe monthly (Noreen Labrecque)
- Ask me what help is needed, and if I can, I will gladly do it (Darcy Gray)
- Maybe cooking (Glenn Blazys)
- Trail maintenance at the Community Forest
- Some graphic design, general volunteer experience, writing, community outreach
- I would love to help out in any way I could help (Thank you for having this event. The food was excellent and great entertainment)
- Whatever is needed the most
- Construction
- Design
- Design
- Games
- Illegible response

- I might help with setting it up
- Whatever is needed – educational, work, money

#### LAST EVENT IN APRIL

- Arts/craft class
- Bingo/music combination
- Educational program
- List of things to do in the North Country area
- Singalongs
- Yoga
- Thai chi classes
- Bingo
- Medieval dinner

## B. Ecological Conservation Resources

Group/Association	Initiative/Program	What do they do/ How can they help?	Weblink
<b>Government Programs</b>			
USDA & State of Vermont	Conservation Reserve Enhancement Program	Voluntary land retirement program that helps agricultural producers protect environmentally sensitive land, decrease erosion, restore wildlife habitat, and safeguard ground and surface water.	<a href="#">Conservation Reserve Enhancement Program</a>
Vermont Fish & Wildlife	Manages West Mountain WMA, Maidstone Lake State Park	WMA that spans north of Maidstone Lake and into Brunswick and Ferdinand. Biodiverse habitat. VF&W maintains fishing access to Maidstone Lake. Owns Dam. Source of State funding, oversight, and coordination	<a href="#">Maidstone State Park</a>
State of Vermont	Current Use Program	Property tax assessment enrollment program where private landowners can have their land appraised at its current use (farming or forestry) value as opposed to fair market value.	<a href="#">Current Use Program</a>
Vermont Department of Forests	Forestry Actions Plans	Legal framework for forest conservation and sustainability. Resource and education capacity.	<a href="#">Forest Action Plans</a>

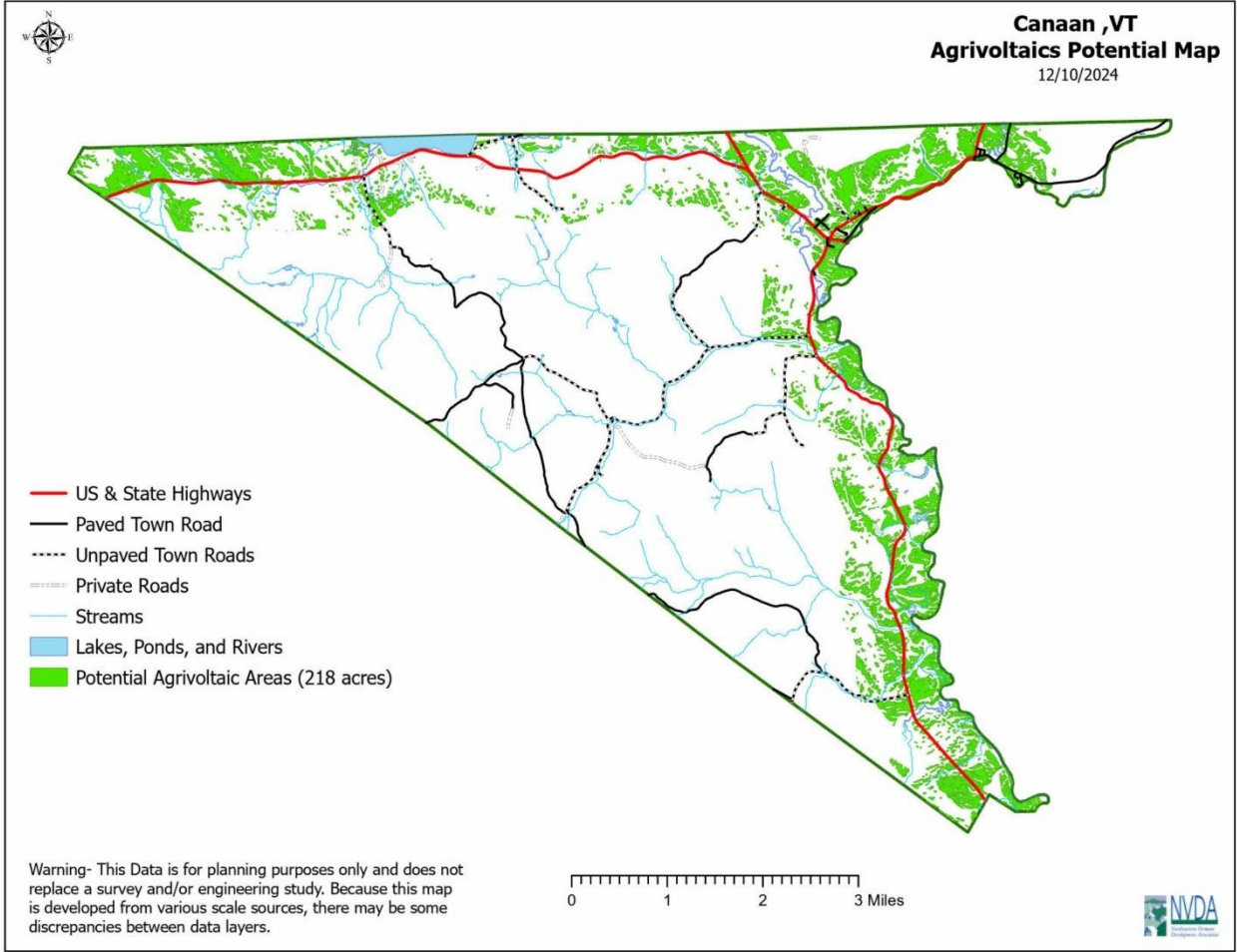


Agency of Natural Resources	Lake Watershed Action Plans	Assessment and planning tool that is used to identify the greatest threats to a specific lake ecosystem. Technical guidance. Targeted needs and possible sources of funding. Adaptive capacity. Process can be considered for funding under CWIP	<a href="#">Lake Watershed Plans</a>
	Forest Legacy Program	Federal Grant Program to protect forestlands. Source of funding. Fee simple, easements, or TDR	<a href="#">Forest Legacy Program</a>
	Basin 16 Tactical Basin Program- Upper Connecticut River Direct Drainages	Coordinate strategies to protect watershed, fisheries, and floodplains. Nitrogen loading. Water Quality. Resource guidance. Data gathering.	<a href="#">Basin 16</a>
Vermont Natural Resources Council (VNRC)	Forest Protection, Clean Water, Climate Action, etc.	Can assist in resource capacity, guidance, private property advocacy. Can assist in capacity for Current Use, Transfer of Development Rights (TDR), etc.	<a href="#">VNRC</a>
<b>Statewide Associations</b>			
Vermont Land Trust	Environmental Conservation	Woodlands protection, climate change mitigation. Invasive species reduction. Land restoration, adaptive capacity, land management assistance/guidance	<a href="#">Vermont Land Trust</a>
Vermont Woodlands Association	Tree Farm Program	The goals of the Tree Farm Program are disseminating information about the benefits of proper forest management and establishing good forest management practices on as many acres as possible	<a href="#">VT Tree Farm Program</a>
	Legacy Planning	Capacity building, educational outreach for Current Use, coordinated multi-lot management	<a href="#">VT Woodlands Association</a>
Northeast Wilderness Trust	Wild Carbon Program	Wild Carbon offset credits are generated only on recently protected wildlands that are permanently conserved with a legally binding Forever-Wild Conservation Easement.	<a href="#">Wild Carbon</a>
			<a href="#">NE Wilderness Trust</a>
<b>Regional Groups</b>			

The Nature Conservancy	Family Forest Carbon Program	Program intended to support land and private forest owners to optimize their land for carbon sequestration.	<a href="#">Family Forest Carbon</a>
	Maidstone Bends Preserve: Preserved lands in NH and some in Maidstone	91-acre Andritz property/Potter Farm. 46 more acres in Vermont. 164 acres total of floodplain forest protected. Over 72 species or birds. Improves drinking water, provides essential habitat	<a href="#">Maidstone Bends Preserve</a>
Essex County Natural Resource Conservation District	NRCC Clean Water Design, Rural Fire Protection, Roadside Signs of Conservation Practices, etc.	Local non-profit that does state and federal coordination and organization. Funding through NRCC. Land owner resource.	<a href="#">Essex County NRCD</a>
Connecticut River Conservancy	Committed to maintaining and preserving the water quality of the Connecticut River watershed	Tree planting for healthy riverbanks, protection of biodiversity, preparing for floods, reducing invasive species, etc.	<a href="#">CT River Conservancy</a>
Northwoods Stewardship Center	Forest Stewardship, Education, trail maintenance	Non-profit grassroots organization that does youth employment and education. Assistance in trail building, lake restoration	<a href="#">Northwoods Stewardship Center</a>
<b>Grassroots Organizations</b>			
Trout Unlimited Vermont - Connecticut River Valley Council	Dedicated to cold-water fisheries and watersheds throughout Vermont	Coordination of resources. Active involvement. Stream assessment, tree plantings, regulatory review	<a href="#">Trout Unlimited- CT River</a>
Vermont Family Forests	Forest Ecosystem Conservation	Assistance in forest management, ecological research, education and adaptive capacity. Consultation	<a href="#">VT Family Forests</a>
Vermont Center for Ecostudies	Bird monitoring, Threatened and Endangered Species Protection	Science center for conservation. Resource and adaptive capacity. Data gathering.	<a href="#">VT Center for Ecostudies</a>
Native Fish Coalition	Protect, preserve, and restore wild native fish populations through stewardship of the fish and their habitats	Can assist in restoring populations of brook and lake trout, salmon, cusk, whitefish, pike, pickerel, in Maidstone Lake and other surface lakes. Resource assistance, adaptive capacity. Education. Advocacy	<a href="#">Native Fish Coalition</a>

Case Studies			
The Nature Conservancy	Gray Mist Farm, NH	Case Study for any farms along the west side of the Connecticut River seeking conservation outcomes, support, and restoration	<a href="#">Gray Mist Farm</a>
Vermont Land Trust	Johnson Farm WMA - conserved operating farm	Excellent case study for agriculture land management along the Connecticut River	<a href="#">Johnson Farm WMA</a>

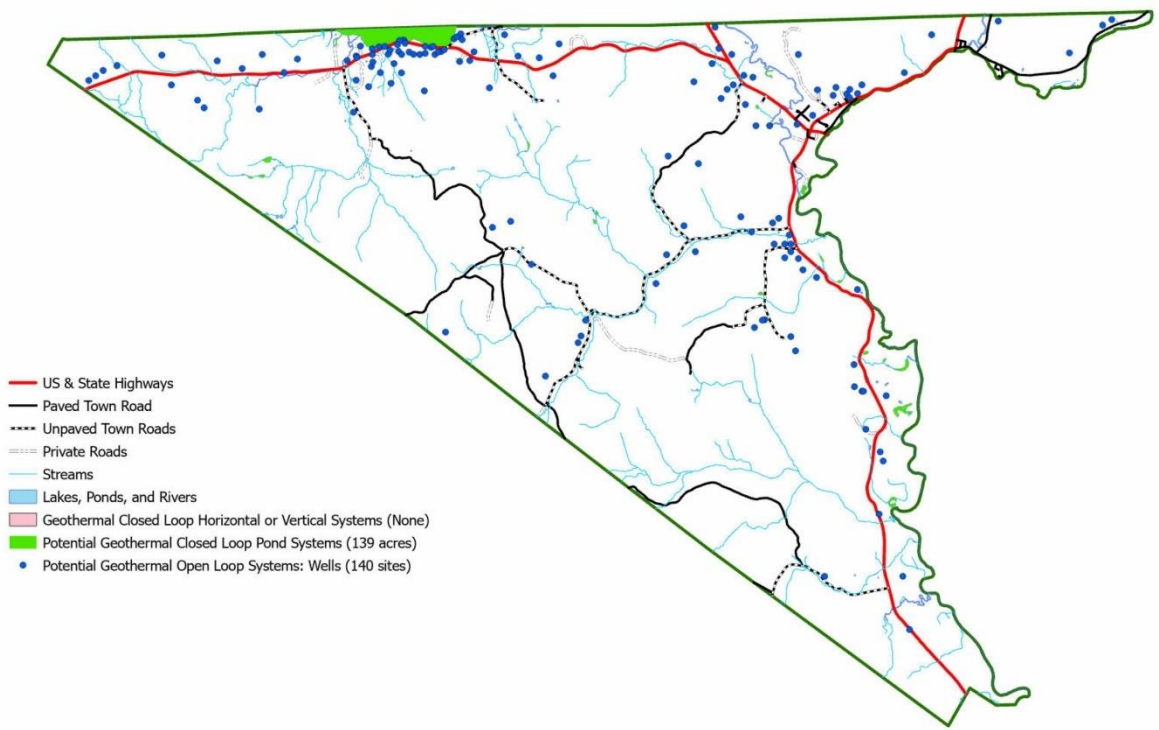
### C. Maps





### Canaan, VT Geothermal Potential Map

12/10/2024



- US & State Highways
- Paved Town Road
- - - Unpaved Town Roads
- · · · Private Roads
- Streams
- Lakes, Ponds, and Rivers
- Geothermal Closed Loop Horizontal or Vertical Systems (None)
- Potential Geothermal Closed Loop Pond Systems (139 acres)
- Potential Geothermal Open Loop Systems: Wells (140 sites)

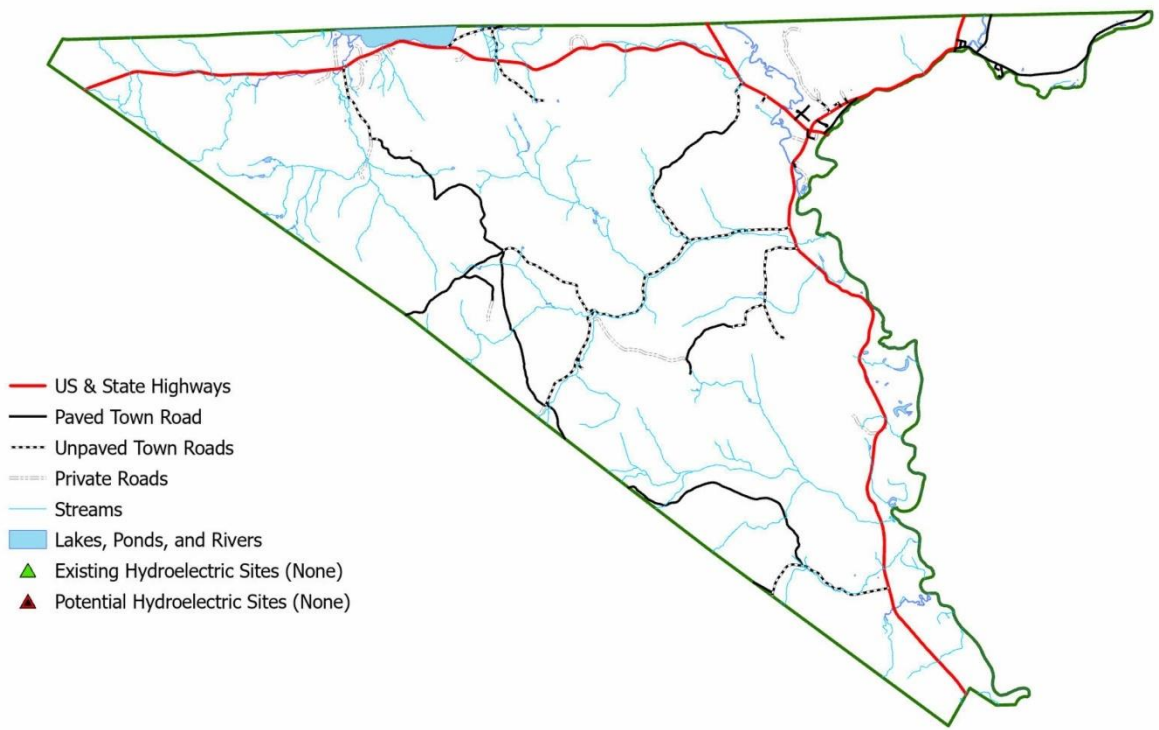
Warning- This Data is for planning purposes only and does not replace a survey and/or engineering study. Because this map is developed from various scale sources, there may be some discrepancies between data layers.





### Canaan, VT Hydroelectric Potential Map

12/10/2024



Warning- This Data is for planning purposes only and does not replace a survey and/or engineering study. Because this map is developed from various scale sources, there may be some discrepancies between data layers.

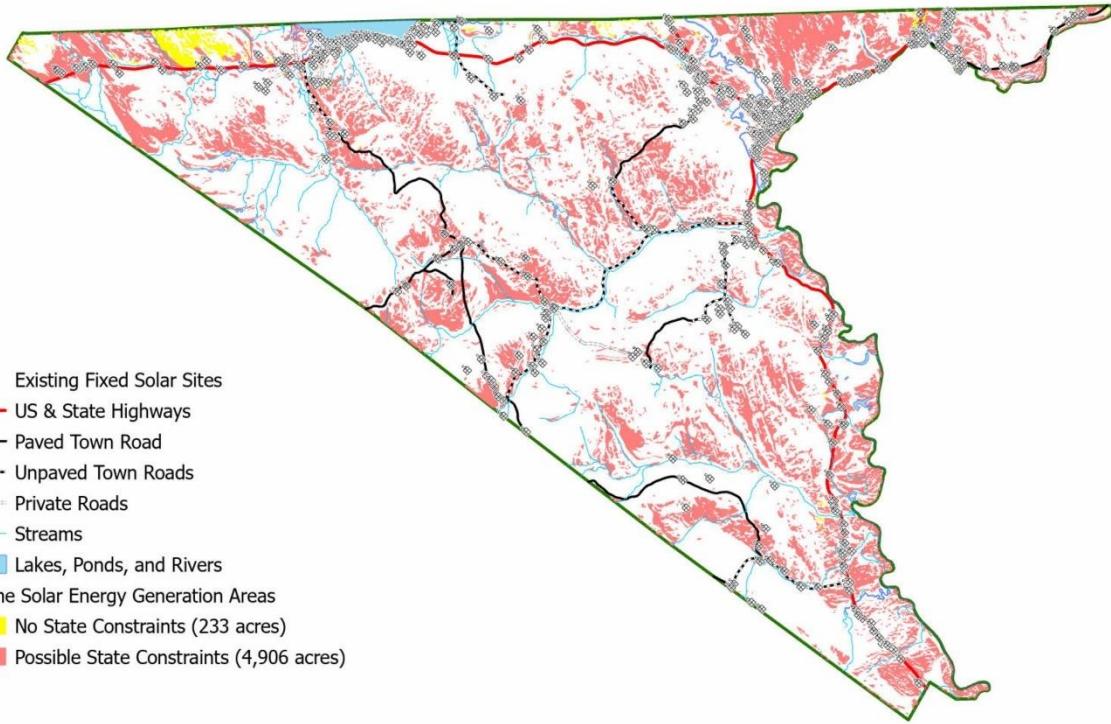






# Canaan, VT Solar Energy Potential Map

12/10/2024



- ⊗ Existing Fixed Solar Sites
- US & State Highways
- Paved Town Road
- - - - Unpaved Town Roads
- ⋯ Private Roads
- Streams
- Lakes, Ponds, and Rivers
- Prime Solar Energy Generation Areas
  - No State Constraints (233 acres)
  - Possible State Constraints (4,906 acres)

Warning- This Data is for planning purposes only and does not replace a survey and/or engineering study. Because this map is developed from various scale sources, there may be some discrepancies between data layers.

