

NEWFANE TOWN PLAN

Adopted July 16, 2018

What is a plan?

A plan is a picture for the future that has clear goals for creating that future. It focuses on what matters most to communities and identifies the actions that will turn that vision into a reality and creates a way to measure achievements.

This Draft Town Plan Update / Re-adoption is built on the foundation laid by the hard work and expertise of the many Planning Commissioners that have preceded us.

We, the 2018 Newfane Planning Commissioners appreciate the opportunity to serve the current and future people of Newfane Vermont.

April 2018

Lynn Forrest, Chair Marcia Hylan, Secretary Bob McCandless, Past Secretary Angela Litchfield Sanborn Ken Estey

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INTRODUCTION

THE NEWFANE TOWN PLAN

This Town Plan provides a frame of reference to guide the Town of Newfane in meeting its broad needs and achieving its diverse objectives. The goals, policies, and recommendations expressed within this Plan, along with the various Town Plan maps, will serve as recommendations to guide the Town's efforts in land use planning and growth management, the provision of public services and facilities, environmental protection, economic development and land conservation.

A big key to the planning process is listening to the residents, and expressing a shared community vision in the Town Plan. The values and character of the Town are vital to the citizens of Newfane and why they choose to live here. Thus, while change and growth are inevitable and often desirable, it is important that they be planned for and implemented in ways that enhance the essence of our Town, rather than degrade it.

Newfane is a rural town with four compact villages, defined by diversified terrain with large hills and deep valleys, farmland and vast tracts of forest. The vision for the future of the Town of Newfane must be mindful of its characteristic qualities, while creating room for economic growth and development.

TOWN PLAN REVISION PROCESS

Preparing a town plan is one of the most important responsibilities of the Planning Commission. Authority to prepare and implement the Newfane Town Plan is granted to the Town through the Vermont Municipal and Regional Planning and Development Act (24 V.S.A., Chapter 117). The Act establishes 14 fundamental Statewide Planning Goals as specified in section 4302, and four fundamental Process Goals to guide town, regional, and state planning efforts. Through the Town Plan review and update process, the Newfane Planning Commission determined that each of the state goals is directly relevant to the Town.

The 2018 Town Plan is a re-adoption and partial update of the 2013 Town Plan, which was a re-adoption of prior Town Plans. The current Town Plan This Plan update was developed by the Planning Commission with the assistance from the Windham Regional Commission (WRC).

To guide the 2018 Town Plan update process, provide for public participation, and solicit ideas, a Town Wide Survey was conducted using Survey Monkey, an online survey service, during November through December 2017. The survey was available online and in paper copy format at a community forum, the town office, library and post offices. The survey identified concerns, visions and recommendations of residents. The highest concerns were "Protecting the character of the Town and Villages, protecting scenery and natural resources and providing adequate job opportunities." Survey results were distributed at Town Meeting 2018 and are on the town's website. Survey results are in Appendix 4.

It is the intention of the Planning Commission to fully update all sections of the Town Plan during 2018-2019 using input from community forums and a detailed community survey, the questions of which will be based on the responses in the 2017 survey and community forum. This process will be partially funded by a 2018 Municipal Planning Grant received from the Vermont Agency of Commerce and Community Development.**STRUCTURE OF THE NEWFANE TOWN PLAN**

The Town Plan is based on a set of broad goals which collectively help to identify the direction the Town will take for the next eight or more years. These goals represent generalized value statements which are more fully defined by the information and analysis found in each of the Town Plan chapters.

The Community Profile chapter establishes an informational snapshot of Newfane. The remaining chapters address the required elements of a town plan and, where applicable, are supported by mapped information. These chapters highlight special issues which face the Town of Newfane, present policy statements regarding those issues, and outline a series of implementation recommendations to be carried out by the community over the next eight or more years. The recommendations include a notation of who the responsible party may be. Together, Town Plan policies and recommendations chart a specific course which will help Newfane to achieve its broad planning goals.

The maps have been prepared to assist planners, public officials and citizens to understand Newfane and to assist in the planning process, governmental and business decisions. These maps are for planning purposes only. Together with Town Plan policies, these maps will be used by the Planning Commission as a guide for appropriate bylaws and other measures necessary to implement the Town Plan.

INTERPRETATION OF THE TOWN PLAN

Throughout the text of this Town Plan many of the policy statements and recommendations steps include imperative verbs. "Should" 'or "may" means that an action encouraged but not mandated, whereas "shall" or "must" means that an action is required.

COMMUNITY GOALS

The statements listed below represent the various Planning and Process Goals adopted by the Town of Newfane. These goals directly reflect those set forth by Vermont Statute Municipal and Regional Planning and Development in Chapter 117 of, Title 24 Municipal and County Government.

Planning Goals

- 1. Plan development so as to maintain the historic settlement pattern of compact village centers surrounded by rural countryside.
- 2. Encourage a strong and diverse economy that provides satisfying and rewarding job opportunities and that maintains high environmental standards, and to expand economic opportunities.
- 3. Provide access to quality educational opportunities for all of Newfane's residents.
- 4. Plan for safe, convenient, economical, and energy efficient transportation systems that respect the integrity of the natural environment, including public transit options and lanes for pedestrians and bicycles.
- 5. Identify, protect, and preserve important and historic features of Newfane's landscape, including significant natural and fragile areas; outstanding water resources including ponds, rivers, aquifers,

- shore land, and wetlands; significant scenic roads, waterways, and views; important historic structures, sites or districts, archaeological sites and archaeologically sensitive areas.
- 6. Maintain and improve the quality of air, water, wildlife, and other land resources.
- 7. Manage forestlands so as to maintain and improve forest blocks and habitat connectors.
- 8. Encourage efficient use of energy and the development of renewable energy resources.
- 9. Maintain and enhance recreational opportunities for residents and visitors.
- 10. Encourage and strengthen agricultural and forest industries.
- 11. Provide for the wise and efficient use of Newfane's natural resources, to facilitate the appropriate extraction of earth resources, and to encourage the proper restoration and preservation of the aesthetic qualities of the area.
- 12. Preserve and improve the integrity of forest blocks to maintain habitat connectors (wildlife corridors)
- 13. Support the availability of safe and affordable housing for all residents.
- 13. Plan for and support an efficient system of public facilities and services to meet existing and future needs.
- 14. Ensure the availability of safe and affordable child care and integrate child care issues into the planning process.
- 15. Encourage a flood resilient community.

Process Goals

- 1. Establish a coordinated and comprehensive policy framework and planning process to guide local decisions.
- 2. Encourage citizen participation at all levels of the planning process.
- 3. Consider the use of resources and consequences of growth and development in Newfane.
- 4. Coordinate with neighboring communities to develop and implement compatible municipal plans.
- 5. Strategies to protect long-term viability of agricultural and forestlands should be encouraged and should include maintaining low overall density.
- 6. Encourage the manufacture and marketing of value-added agricultural and forest products
- 7. Encourage the use of locally-grown food products.
- 8. Encourage sound forest and agricultural management practices.
- 9. Plan public investment so as to minimize development pressure on agricultural and forest land.
- 10 Include Hazard Mitigation in Town planning

ADJACENT TOWNS & THE REGION: HOW THE NEWFANE TOWN PLAN RELATES

In the next eight year period (2018-2026) the Planning Commission will continue to work towards ongoing coordination of Newfane's Town Plan with the plans of neighboring municipalities and the Windham Regional Commission. Many issues are expected to be of concern to Newfane citizens and will likely cross Town boundaries such as: road corridor planning (Route 30), watershed planning, affordable housing, and emergency management. The Town of Newfane is committed to working with its neighbors through local and planning initiatives.

The Newfane Town Plan is compatible with the goals and policies of the Windham Region Plan (adopted in 2014) as well as the town plans of Dummerston, Marlboro, Brookline, Townshend, Wardsboro and Dover. The proposed land use districts do not conflict with those in the neighboring towns. For example, there are large contiguous areas of unfragmented habitat that extend beyond the town borders into the neighboring towns; lands along Route 30 are Rural in Newfane and Rural Residential in Dummerston. Newfane and Brookline are separated by the West River and both plans have policies to maintain and enhance water quality in the River. The lands in Newfane bordering Dover, Marlboro, Wardsboro, and Townshend are similarly designated to perpetuate the rural land uses that currently exist and where applicable, protect valued natural resources and physical constraints on the landscape.

NEWFANE COMMUNITY PROFILE

This introductory Community Profile identifies and quantifies the social, economic, and physical changes which have taken place in and around Newfane over the years. It establishes an important foundation or the review and understanding of subsequent sections of this Town Plan.

Point to keep in mind: Some of the data in this report is based on the *American Community Survey*. Data published in 2012 are rolling 5 year estimates and do not reflect actual counts like population, age or gender. These estimates are useful when analyzing trends in small populations, but should be used cautiously when making direct comparisons; they are estimates over a period from 2008 to 2012 and have a relatively large margin of error. The American Community Survey is conducted year round to gather "period" data, unlike the decennial census which is only conducted every ten year and collects "point-in-time" data.

POPULATION TRENDS

Town of Newfane's Population: 1,808. (Source: American Community Survey, 2011-2015. ***) Newfane's population increased from 1,129 in 1980 to 1,680 in 2000, an increase of nearly 49%. Imagine if we were to have a similar increase from 2000 to 2030. We could expect a population of 2,521 in 2030 and not the projected 1,865 (see below for population projections).

But since the 1990s, the rate of our population increase has tapered off. Since 1990, the increase in our population has been 16%. Since 2000, the increase in our population has been less than 8%. See Appendix 3

Bottom line: the most generous projections of Newfane's growth see only 55 additional Newfane residents 13 years from now!

These very modest trends in population growth are consistent with Windham County and with Vermont as a whole.

Newfane Population 1980 to 2015 2000 1,808 1,726 1,680 1,555 1500 1,129 1000 500 0 1980 1990 2000 2010 2015

Table 1: Newfane Population 1980 to 2015

Source: US Census

*** NOTE: Definitive information about Newfane's population must await the next United States Census in 2020. The 2015 American Community Survey population number of 1,808 is an estimate (not an actual count at one point in time such as the U.S. Census) compiled over a five year period of surveys.

Population Trends for Newfane, Windham County, and the State of Vermont

Newfane Population Projection from 2010 to 2020

2010	2020	% increase	
1,726	1,819	5.4%	

Newfane's projected population increase of 5.4% from 2010 to 2020 is less than the 6.4% projected for our surrounding towns, more than the 4.4% projected for all of Windham County and more than the 4.4% increase also projected for Vermont.

But consider our surrounding towns' % increase from 2010 to 2020:

Brookline	12.8% to a population of 598
Dover	2.3% to 1,150
Dummerston	1.3% to 1,889
Marlboro	8.5% to 1,170
Townshend	8.8% to 1,341
Wardsboro	12.3% to 1,011

Newfane Population Projection from 2010 to 2030

2010	2030	% increase
1,726	1,865	8.1%

Newfane's projected population increase of 8.1% from 2010 to 2030 is less than the 9.8% for our surrounding towns, but more than the 6.6% projected for all of Windham County and more than the 7.1% increase projected for Vermont.

Again, compared to surrounding towns' % increase from 2010 to 2030:

Brookline	21.1% to a population of 642
Dover	1.9% to 1,145
Dummerston	1.2% to 1,886
Marlboro	13.8% to 1,227
Townshend	14.9% to 1,405
Wardsboro	20.1% to 1,081

Bottom Line: For better or for worse, we are not keeping up with the growth patterns of our closest neighbors.

Source of B. Population Trends: "State of Vermont Population Projections report (August 2013)," http://accd.vermont.gov/sites/accdnew/files/documents/CD/CPR/ACCD-DED-VTPopulationProjections-2010-2030.pdf. The report features two sets of projections for town, county, and state population trends. The charts above use the higher projection estimates for 2020 and 2030. (The lower estimates show flat and even decreasing population numbers from 2010 to 2020 and 2030!)

AGE DISTRIBUTION

A comparison of age cohort data over time shows where changes in the population are occurring. When analyzing the population data from 2000 and 2010 for the Town (see Table 2) the following observations are made:

- There has been a significant increase in the population of those people who will likely enter retirement in the next 10 years (age 45-59). At the same time, the age groups entering the working population (late teens and early twenties) are small.
- The population of people in the childbearing ages has generally decreased.

The U. S. Census generally considers the childbearing years to be aged 15-44, with the 25.1 years as the average age of women when they give birth for the first time.

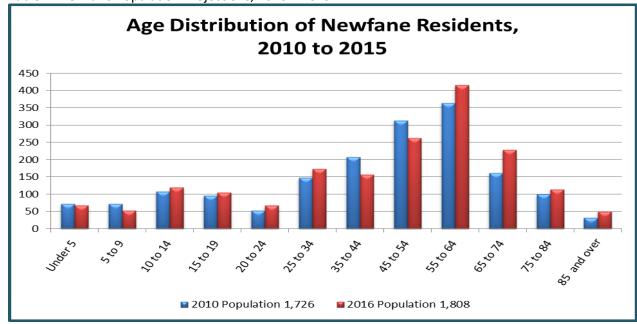


Table 2: Newfane Population Projections, 2010 – 2015

Source: 2010 US Census 20American Community Survey

*** NOTE: Definitive information about Newfane's population must await the next United States Census in 2020.

POPULATION PROJECTIONS

Population projections are of interest in projecting future housing, facility and service needs. Predicting future population trends however, is made difficult by influences from outside the community -including social, economic and political influences which often impact changes in local and regional population.

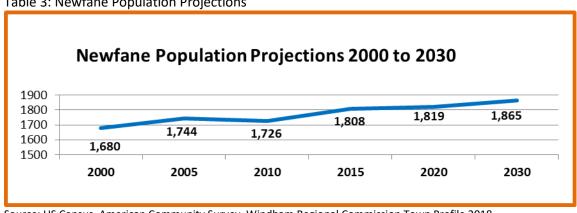


Table 3: Newfane Population Projections

Source: US Census, American Community Survey, Windham Regional Commission Town Profile 2018

Newfane will continue to grow. Based on Vermont Department of Health population projections, Newfane's population is expected to grow to 1,819 residents by the year 2020 and to 1,865 residents by 2030 (Table 3)

Figure 1: Town Profile: Overview

TOWN OF NEWFANE

Town Profile 2018



Overview

Newfane is the shire town of Windham County, housing the Windham County Courthouse on the town common. Newfane's villages include Newfane, South Newfane, and Williamsville.

Road classifications (miles) VTrans 2017:

Class I: 0.00

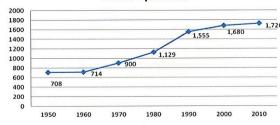
Class 3: 47.05

Class 2: 16.90

Class 4: 0.66



Town Population



The population of Newfane rose from 1680 to 1726 people from 2000 to 2010, an increase of 3%.

In 2010, the median age of the town was 49, up seven years from 2000. Windham County's median age was lower at 44.9 years. See Reference 1 on page 4 for population distribution by age group.

Population Trends in Surrounding Towns

Town	1990	2000	2010	% Change 1990-2000	% Change 2000-2010
Newfane	1,555	1,680	1,726	8%	3%
Brookline	403	467	530	16%	14%
Townshend	602	649	679	8%	5%
Wardsboro	654	854	900	31%	5%
Dover	994	1,410	1,124	42%	-20%
Marboro	924	978	1,078	6%	10%
Dummerston	1,863	1,915	1,864	3%	-3%

2018 Profile Series: Newfane

Newfane Town Profile 2018 Windham Regional Commission April, 2018

NEWFANE POPULATION CHARACTERISTICS

Bottom Line: Trends From 2000 To 2015

Older: Median Age in 2000: 42.1 years

Median Age in 2015: 51.8 years

60 & over in 2000: 16% of population

60 & over in 2015: 33%

0-19 years, 2000: 26% of population

0-19 years, 2015: 19%

Households w/ individuals under 18: 2000: 229 or 33% of all households

2010: 401 or 23.2% of all households

(2015 data not available)

Overwhelmingly White: 2000: 99.1% of population

2015: 99.9%

INCOME CHARACTERISTICS

Census data offers detailed information regarding the income characteristics of Newfane's residents. This information provides an important framework for understanding social, economic, and housing needs of various segments of Newfane's population, For the purposes of this discussion, "household income" includes the income of the householder, and all other persons 15 years old and over living in the household, whether related or not. Table 4 shows a breakdown of household incomes in Newfane for the 47 cases reported in the 2010 census.

Table 4: Actual Household Income in Newfane

Household Income	1990	2000	2010	2016
less than \$15,000	15%	10%	0%	7%
\$15,000 - \$35,000	39%	25%	29.8%	30%
\$35,000 - \$50,000	24%	20%	10.6%	11%
\$50,000 +	22%	44%	59.6%	52%
Median household income	\$42,075	\$45,735	\$68,125	\$53,060

Source: U.S. Census, 2016 from American Community Survey

As reported by the 2010 Census, median household income in Newfane was \$68,125, up dramatically from \$45,735 reported in 2000, and the 1990 median household income of \$42,075. This was higher than both the Windham County's median household income of \$46,714 and the State of Vermont median household income of \$51,841. Based on 2000 and 2016 numbers, it appears that there probably were households that had income less than \$15,000, but were not included in the count.

Per the 2011-2015 American Community Survey, the estimated median income for Newfane was \$53,060, a decrease of 22%. While appearing higher than Windham County \$50,917, Newfane's median household income appears lower than the state of Vermont's median income of \$56,104. It could represent higher income earners moving out of Newfane to better paying jobs elsewhere in the state.

The Economic Conditions of the Town Plan – will review in more detail our local economy, but a snapshot of overall economic vitality but can be suggested in the following 3 measurements:

Median Income: 2000: \$45,735

2016: \$53,060

Poverty Level: 2000: 5.1% of individuals below poverty level

2012: 7.7% * 2016: 11.2% *

Households earning less than \$25,000 2000: 25.4%

2015: 26.6%

The 2017 Federal Poverty Level I \$20,420 for a family of 3 \$24,600 for a family of 4

According to the Census, 5% of the Town's population fell below the poverty level in 2000, below Windham County (9%) and the state (9.4%).

An estimated 11.2% of the town's population was below the poverty level in the period 2012-2016, an increase from the 2008-2012 period when it was 7.7%, and in 2000 when it was 5.1%. *Until the 2020 census is complete, we will not know for sure, but the trend for Newfane appears to be an increase in poverty levels.*

NEWFANE EMPLOYMENT CHARACTERISTICS

Table 5: Newfane Employment Characteristics

Occupation Category	Number Employed	Percentage Employed 2015*
Employed Population 16 Years and Older		
Management, business and finance	112	13%
Computer, engineering and science	42	5%
Education, training, library and social service	141	16%
Arts, design, entertainment, sports and media	45	5%
Healthcare practitioner and healthcare support	86	10%
Protective services, maintenance, food services, personal care	87	10%
Sales and office occupations	186	21%
Fishing, farming, forestry, construction, repair and maintenance	114	13%
Production, transportation, and material moving	73	8%
Total	886	100%

^{* (}ACS number w/ margin of error +/- 3.9%)

Newfane's resident employment by industry saw decreases in the finance and transportation and warehouses sector and increases in the wholesale and other services sectors since the 2008-2012 period. During the period 2012-2016, 34.0% of Newfane residents worked in Newfane, including 22.6% of residents that worked at home.

^{* (}ACS number w/ margin of error +/- 3.9%)

HOUSING TRENDS

Newfane is a community dominated by single-family homes (Table 6); census data indicates occupied primarily by year-round residents. Census data indicates that 74% of all housing units in Newfane in 2000 were year-round residences; in 2010 that figure was 72%.

Table 6: Newfane Housing by Type of Structure

						10 or		
	1 unit	1 unit	2 units	3-4 units	5-9 units	more		Total
Type of	detached	attached	in	in	in	units in	Mobile	Housing
Structure	Home	Units						
1990	715	17	45	19	8	0	54	8583
2000	848	10	33	17	4	1	58	971
2010	1,048	933	45	8	0	0	56	1,090

Source: U.S. Census,

NOTE: Definitive information about Newfane's population must await the next United States Census in 2020.

These figures exclude "other" such as boats, vans, or recreational vehicles that the Census Bureau counts as housing units.

In 2010, of the **1,**090 housing units, 771 were occupied, 649 (84%) were owner-occupied and 122 (16%) were renter occupied; 23 were vacant. In 2000, of the 693 occupied housing units, approximately 83% were owner-occupied, with the remaining units renter occupied.

Between 2000 and 2010 the number of occupied housing units grew by 11%. Owner occupied units grew by 11%, while renter occupied units increased by only 3%

There <u>appeared</u> to be a 23% decrease in the number of seasonal units from 2000 to 2010, possibly the result of seasonal homes converted to year-round residences and due to the change in categorizing previous vacation structures without water or sewer (camps) as seasonal and those that could be 4 season homes as residential.

LAND USE

EXISTING LAND USE

The Town of Newfane covers approximately 24,400 acres in the West River Valley of Windham County. In terms of local settlement patterns, Newfane has been described as a microcosm of Vermont, with four separate villages (Newfane Village, Williamsville, South Newfane and Brookside) connected by a network of local roads. Each village is a uniquely clustered settlement, dominated by older, historic homes with small commercial and community-related services. These village centers are surrounded by a more rural, forested landscape which has experienced residential growth over the years. Housing development has been targeted most significantly in many of the more rural back-road-areas of the community, including areas on and around Parish Hill Road, South Wardsboro Road, Timson Hill Road, and Newfane Hill Road (see Existing Land Use Map). Little new development has occurred in the villages of Williamsville and South Newfane or in the more inaccessible western-central geographic areas of Newfane.

The manner and intensity in which land is used in Newfane has changed little between 2012 and 2017. Table 7 compares the distribution of parcels by land use category as reported in the Town's Grand List for the years 2012 and April 2017. The number of commercial parcels in Newfane has declined slightly, farms have increased.

Table 7: Newfane Housing by Structure

Land Use Category	Parce	Parcels		Percent Change
Years	2012	2017		2012-2017
Residential*	661	854	193	29%
Vacation (Seasonal)*	313	111	-202	-65%
Commercial	28	23	-5	-17%
Commercial Apartments	1	1	0	0
Utilities & Cable	3	3	0	0
Current Use Agricultural (Farm)**	3	6	2	67%
Misc Land, Woodland, Forest, Misc	177	173	4	2.3%
Non-Taxable	45	44	-1	-2%
Total Taxable Parcels***	1,332	1,299	-33	-2.5%
Unlanded Mobile Homes ***	145	128	-17	-12%
Total	1,377	1,344	-26	

Source: Newfane Grand List Abstracts, 2012 and 2017

^{*} Residential includes Landed Mobile Home properties

^{*} Part of the change is due to the re-categorization of Vacation/Seasonal homes as required by the State of Vermont. In 2017 only "camps", without either water, septic or heat were to be considered seasonal. If a home has vacation use, but can be a year round residence, it is now considered Residential. Note - not all vacation homes in Newfane have been reclassified as Seasonal; otherwise the Seasonal number would be significantly lower and Residential higher.

**The Vermont Land Use Appraisal Program (LUAP, commonly referred to as Current Use) encourages sound forest and farm management practices in exchange for a reduction in property taxes.

For many local residents decreased taxes help to alleviate some of the financial burdens of long-term ownership. The number of actual farms is hidden within CU Agricultural, residential and commercial categories in the Grand List.

*** As adjacent parcels were combined under the same ownership the number of parcels declined from 2012 to 2017. Also, Kindle Farm School was recognized as a school and was removed from the tax rolls.

****The majority of Unlanded Mobile Homes are located at the Kenolie Campground which closes November through March.

Newfane's rural character is clearly defined by its vast acres of forest land. While the ongoing parcelization of local forests and agricultural fields could one day jeopardize the community's rural character as well as its long term productivity capabilities, the number of acres enrolled in the Vermont Land Use Appraisal Program (LUAP, commonly referred to as Current Use) has increased since 35% since 2012.

Approximately 9,450 acres of forest land and 375 acres of farmland were enrolled in the Current Use program in 2004. As of March 31, 2017 12,828 acres of forest land, and 703 acres of farm and other agricultural land were enrolled in the Current Use program, totaling 13,530.98 acres- a 37% increase.

In 2017 40% of property ownership was homestead and 60% as non-resident or commercial compared to the state which reports 51% homestead. In addition of the 89 parcels in the Current Use program, only 22%, or 2,926 acres were owned by Town residents. The ownership by non-resident owners, although supporting the Town and schools, has a social impact on the Town which must be recognized.

FUTURE LAND USE

In order to encourage a pattern of development that conforms to the goals and policies outlined in this Plan, the following general land classification system is proposed for the Town of Newfane. This system is based upon the delineation of districts which are described below and depicted on the Proposed Land Use Map. Together, descriptive and mapped information present a generalized picture of the Town as it should be developed in accordance with sound planning practices. The classification of lands into Resource, Village and Rural districts has been formulated to generally be consistent with the various other maps included in this Town Plan which identify natural features, resource and opportunities and limitations for development.

This chapter and map are not regulatory devices, except for their possible application to the Act 250 development review process. The implementation of this classification will require further definition, adjustment, and clarification as the Town considers zoning amendments and other means of reaching its objectives, as outlined in various sections presented throughout this Plan.

A brief explanation of the criteria, purposes, and suggested development guidelines for each district follows.

RESOURCE DISTRICT

The Resource District includes large areas of land that serve as watershed areas and/or are characterized by the presence of steep slopes, shallow soils, important wildlife habitat, and large blocks

of un-fragmented forest. For the most part, these lands have very limited access to improved public roads. Much of this land is unsuitable for development. These areas are generally in a natural state and contribute positively to the perception of the rural character,

The Resource designation is intended to be a statement indicating the Town's commitment to the proper management of and protection of these sensitive areas. These areas should be placed in the least intensive zoning classification. Lands within the Resource District should be used for forestry, low-intensity recreation and open space. Residential development should be at very low densities which can be sustained by minimal infrastructure improvements, cause minimal environmental degradation, and which will not cumulatively create the future necessity or expectation of increased levels of municipal services. Commercial and industrial uses are not appropriate in the Resource District.

Resource District Policies

- 1. Restrict development to uses and activities that will not diminish the ecological function, scenic and natural beauty, and natural character of these areas.
- 2. Give lands in the Resource District high priority when considering long-term conservation efforts.
- 3. Protect wildlife corridors that join tracts of resource land and important wildlife habitat in order to avoid fragmentation.
- 4. Direct new residential development away from critical natural resources.

VILLAGE DISTRICT

These areas include the lands within Newfane Village, South Newfane and Williamsville as well as additional lands that appear suitable' for future village growth. Each village is a uniquely clustered settlement dominated by older, historic homes and interspersed with small commercial and community-related services. Village areas are served by Newfane's two major highways, Route 30 and Dover Road. The additional lands are convenient to the existing village, offer few or slight limitations for development, and can be developed for village uses without causing undue damage to resource values.

The purpose of the Village District is to preserve the historic integrity and support the traditional role of the village as the focus of many of the social and economic activities which support the surrounding community, and to provide for residential and commercial development, as well as governmental uses that serve the needs of the village and the community. Vacant or underused structures and infill development should accommodate new development. Infill development should respect the historic character and function of the area. Efforts to enhance pedestrian accessibility are encouraged. The existing density should be maintained or increased in order to support the vitality of the village.

Village District Policies

- 1. Allow a mix of commercial, residential, and civic uses.
- 2. Maintain the traditional social and physical character and scale in the three villages.
- 3. Promote opportunities for pedestrian traffic.
- 4. Encourage infill development and the appropriate reuse of vacant or underused existing structures in the villages.

Village Center Designation

The villages of Newfane, Williamsville and South Newfane villages were awarded Village Center Designation by the Vermont Department of Agency of Commerce and Community Development on June 27, 2017. See Economic Development section for detail.

RURAL DISTRICT

The Rural District comprises areas which are already committed to development, easily accessible from the existing road system, or which appear capable to be developed. Residential uses dominate the Rural District. There is a mix of commercial development along Route 30 that includes retail, service and office uses

The purpose of the Rural District is to accommodate low to moderate density development that is consistent with existing land uses and sensitive to the limitations of the land. Residential uses and accessory uses (including home businesses or industries) are permitted. Non-residential uses, including small business, retail, and office uses are acceptable land uses for the Rural District provided that such uses are planned to be small in scale, are located on a paved road, are not primary or dominant uses in the area, do not adversely conflict with existing or planned residential uses, and do not adversely affect the rural character.

Rural District Policies

- 1. Allow a mix of rural land uses including residential, home occupations, land based industries (agriculture, forestry, and resource extraction), commercial and outdoor recreation so long as these uses are compatible with one another and do not cause excessive noise, pollution or disturbance.
- 2. Develop lands at densities that will contain rural sprawl.
- 3. Restrict commercial development to paved roads. Require appropriate site planning and landscape design of commercial uses to minimize negative impacts of strip development.
- 4. Maintain the character of the area and minimize the burden on municipal services and facilities.
- 5. Promote cluster development as a means of preserving open space and productive resources. Clustering should concentrate buildings in specific areas on a development site to allow the remaining land to be used for recreation, common open space, and preservation of environmentally sensitive features. It may or may not include a reduction in lot area, coverage maximums or an increase in density.
- 6. Manage agricultural lands and forest lands to promote a long-term sustained yield of crops and timber products.

Land Use Recommendations

- 1. Revise zoning regulations for conformance to the Town Plan; review minimum lot sizes, setback requirements and permitted and conditional uses. (Planning Commission)
- 2. Establish a committee to determine the number and types of farms within Newfane and support local farming efforts. (Planning Commission) (Selectboard)

COMMUNITY FACILITIES & SERVICES

LOCAL GOVERNMENT

Government Structure

The Town and Village of Newfane are separately incorporated municipalities. Village residents are also Town residents, taxpayers and voters. Town residents living outside Newfane Village do not pay Village taxes, and cannot vote on Village matters.

The Town governs services and facilities that serve all residents, including roads and planning and zoning. It is through the combined efforts of elected officials, appointed officials and hired employees that the services of the Town are provided. Town government is overseen by a five-member Selectboard. Other elected officials, including the Town Clerk, Town Treasurer, Delinquent Tax Collector, and three Listers are also actively involved in Town government. Elected officials such as Moderator, Grand Juror, Town Agent, Constable and Justices of the Peace serve their respective roles as may be required. Many officials are appointed by the Selectmen, including the Road Commissioner, Zoning Administrator, Sewage Officer, Animal Control Officer, members of the Planning Commission and the Development Review Board also actively participate in Town government. A host of other appointed positions and committees serve on an "as needed" basis. Hired employees include an Administrative Assistant and a five-member Road Crew which includes a Road Foreman.

Newfane Village is governed by a three-member Board of Trustees, a Clerk, a Treasurer and an Auditor. The Village is responsible for the sidewalks, street lights and Union Hall.

Facilities

Located just south of Newfane Village on Route 30 the Newfane Town Office sits on approximately 2 acres. The building was built in 1924 and served as the grade school before being converted into the Town Offices in 1987. Currently, the Town Clerk, Treasurer, Listers, Zoning Administrator and Administrative Assistant work in the office on varying daily schedules.

Built in 1997, the Town Garage is located on Depot Road near the Town Forest. The old Town Garage, located near the intersection of Grimes Hill Road and Depot Road in Williamsville, is used for storage. The Community Resources and Utilities Map shows the location of the various buildings.

Williamsville Hall is located in the center of Williamsville near the intersection of Dover Road and Timson Hill Road. Constructed in 1910, the Hall has been used as a gathering place for community functions and meetings. Recent improvements to the Hall include a new septic system, disability access, painting of the exterior and refinishing of the hardwood floors.

Union Hall, built in 1832 and located in Newfane Village just south of the Newfane Common, is owned by the Village of Newfane and operated by the Village Trustees. Over the past few years, numerous repairs and renovations have been made, including rebuilding the steeple. The Village Trustees anticipate the need to continue normal maintenance including painting in the upcoming years.

LIBRARIES

The Moore Free Library is located on West Street in Newfane Village. The library is a private charitable trust administered by up to seven appointed trustees. It does not receive funds from the Town and is supported by volunteers. The Friends of the Library Group assists in raising additional funds and finding needed volunteers.

The library maintains a book collection and is open from 1:00 to 5:00 on Tuesday, Wednesday and Friday, 2:00 to 7:00 on Thursday and 10:00 to 1:00 on Saturday. While the library's primary purpose is to provide books and information, it has also provided cultural opportunities in the Town. The Robert L. Crowell Art Gallery, located on the library property, houses an art collection that was donated to the library and hosts concerts and community events. The library maintains a 24/7 online with internet archive, e-books, continuing education courses, research databases and genealogy resources.

The library was expanded and renovated, adding two rooms and handicapped accessible bathroom and ramps. Given the size of the building space is an ongoing concern. As the format of the various materials change (e.g. audio cassette to CD), storage needs will continue to change. Technology means library utilization no longer requires patrons to be present in the library building. The library's Board of Trustees 5 year plan includes purchasing and maintaining hardware and software, so that patrons of all ages will feel comfortable using computers

The Little Library was opened in the South Baptist Church in December 2016 in the Baptist Church. Books are leant and borrowed by community members.

PUBLIC SAFETY SERVICES

Fire Protection

The NewBrook Fire Department, located on Route 30 responds to fires, hazard conditions, and mutual aid calls to neighboring departments. NewBrook Fire Department also responds to emergency rescue calls. There are active volunteer firefighters in the fire department which belongs to the region's mutual aid system. The department is responsible for fire prevention within the community, maintenance of facilities and equipment, training of members, and participation in community events. Funds for these services are approved annually by Newfane voters as special appropriation items. The majority of funds needed to cover the department's' annual operating costs are secured through local fundraising efforts, including weekly Bingo and the Ladies Auxiliary.

Police Protection

The Town of Newfane does not have its own police force. Instead the community relies upon the State Police, from its barracks in Westminster. Newfane Village maintains a contract with the Windham County Sheriff Department in Newfane Village. These agencies respond to local complaints and emergency calls. Safety issues, including traffic/speed enforcement, have been areas of frequent citizen concern.

Emergency Rescue Services

The NewBrook Fire Department acts as a first responder for emergency situations in Newfane. Emergency rescue and ambulance transport services are provided by Rescue, Inc. in Brattleboro and Townshend. Funds to support these services are approved annually by Newfane voters as special appropriation items.

Emergency Planning

Newfane has a Local Emergency Operations Plan (LEOP) to help organize the Town in case of an emergency. The LEOP contains basic emergency preparedness essential for responding to local emergencies. It includes critical phone numbers, contact persons, and critical facilities. Steps are listed in the plan as to what to do in case an emergency arises. The Town has appointed an Emergency Management Director who is responsible for coordinating the Town's response to emergency situations. The Town has designated five emergency shelters: NewBrook Fire House, the Town Garage, Newfane Elementary School, Newfane Congregational Church and the Town Office.

Newfane also has a FEMA approved Local Hazard Mitigation Plan (LHMP). The LHMP has proactive actions, projects, activities and processes taken before an emergency to reduce or eliminate long-term risk to people and property from hazards and their impacts. Examples of recommended mitigation actions include developing an outreach program for residents that identify and define their risk to multi hazards and considering hazards as an integral component of the Town Plan.

SOLID WASTE

Recyclables containers were removed from the property next to the Town Office in 2017 and a committee was formed by the Selectboard to study the trash and recycling needs. The committee created a survey in which 49% of respondents chose to let individuals choose their own method of disposing of trash and recyclables. However, responses to the Planning Commission's Town Wide Survey and discussion at the 2018 Town Meeting showed this continues as a very large concern of residents and will need to be addressed in the future.

RECREATION

The NewBrook Elementary School grounds offer a ball field, a soccer field, basketball hoops, and a playground with an extensive array of climbing and swinging equipment. All of these facilities are maintained by the school and are available for public use. In May 2006, voters authorized the Newfane School District to purchase the approximately 13 acre parcel of land that is adjacent to the NewBrook Elementary School.

The Town owns two forested parcels in Williamsville; one on the east bank of the Rock River near the old dam, the other, the Newfane Town Forest which is located south of the new Town Garage. Under the direction of the Newfane Conservation Commission, three hiking trails were created and maintained in the Newfane Town Forest.

Aldrich swimming hole (Indian Love Call) is located on private lands along the Rock River off of Williamsville Road and has been used for swimming and picnicking for many years. This swimming area has been the focus of public debate regarding ways in which to deter trespassing on private lands and mitigate health hazards resulting from a lack of available sanitary facilities.

The West River Trail is being planned in communities both north and south of Newfane. The goal is to establish a 36-mile scenic trail through the West River Valley, stretching from Londonderry to Brattleboro. To date, trail work has been concentrated in Londonderry, Jamaica and Townshend. When

the project becomes viable in Newfane, the Town will evaluate its role in the development of the trail through Newfane.

ARTS & CULTURE

Arts and Culture enhance the sense of place and community in all aspects. They create vibrancy in a town by providing opportunities for residents and visitors to share and explore bringing communities together where they live, work and play.

The Town of Newfane is committed to expanding access and appreciation of the arts through private and public partnerships. In addition to the many talented and creative artists and performers, there are unique restaurants and stores that sell authentic food and handmade goods. Nestled in the Town are local farmers who sell their products, creating a great foundation for buying fresh, local foods.

Many talented artisans make their home in Newfane. From the British Clockmaker to Rock River Artists, Village Yoga to art galleries, Rock River Players to musicians and architects, antique restorers, landscapers and even a taxidermist. Newfane embraces these public and private groups and encourages their growth. More arts and cultural entities in the town will attract a greater population looking to visit here and support our local economy.

MEETING PLACES

There are a number of community facilities that offer places for the public to gather (see Table 8). Some of the facilities are owned by the Town while others are owned by separate entities.

Table 8: Meeting Places in the Town of Newfane

Meeting Place	Location	Accommodation
Union Hall	Newfane Village Common	150
Williamsville Hall (formerly Williamsville Grange)	Dover Road, Williamsville	125
NewBrook Fire Department	Route 30	125+
NewBrook Elementary School	Route 30	100+
South Newfane "Old Schoolhouse"	Dover Road, South Newfane	50+
Moore Free Library & Crowell Gallery	West Street, Newfane Village	50
Newfane Town Office	Route 30	50

CEMETERIES

Table 9 provides an inventory of Town-maintained cemeteries. All spaces in the Town-owned cemeteries are currently committed.

Table 9: Inventory of Town Maintained Cemeteries

		First	Number of
Name	Location	Burial	Graves
Betterly	Dummerston Town Line	1825	26
Wheeler	Sunset Lake Road	1817	22
Newfane Hill	Newfane Hill Road	1795	168
Perry Family	Near Brookline Bridge	1837	11
Parish	Parish Hill Road	1811	78
Wardsboro Road	Wardsboro Road (right side)	1812	90
Wiswall Hill Road	Wiswall Hill Road (top)	1827	44
Holland	Route 30	1795	28

HISTORIC RESOURCES

Many of Newfane's historic buildings have retained the essence of their original historic character, and together they form an excellent example of a well-preserved Vermont village scape.

The Newfane Village Historic District includes most of the Village of Newfane, incorporating some 60 principal buildings. The only other structure in Newfane which is currently on the National Register is the Williamsville Covered Bridge, built in the early 1870s and was rebuilt in 2010. The National Historic Register affords historic structures protection from any adverse impacts resulting from projects involving federal funds; it may also make available financial assistance for restoration and preservation.

The following are listed on the Vermont State Register of Historic Sites and Structures Survey and are identified as having significant historical value, and as such, deserving of protection and continuing maintenance so that they may continue to contribute to the Town character and quality of life:

- Williamsville Village
- South Newfane Village
- Newfane Hill Settlement
- Concrete arch bridge (Bridge #12) over the Rock River in Williamsville; built in 1934
- > Steel truss bridge (Bridge #49) over the Rock River on Parish Hill Road in South Newfane; built in 1936
- Newfane Railroad Station of the West River Railroad, depot and water tank buildings

EDUCATIONAL SERVICES

Public Schools: Elementary Education

Newfane is a member of the Windham Central Supervisory Union which includes the towns of Jamaica, Townshend, Newfane, Brookline, Marlboro, Wardsboro, Dover, and Winhall. Students from Newfane and Brookline attend the NewBrook Elementary School from kindergarten through 6th grade. A comparison of enrollment figures, as well as some other education trends is shown in Table 10. After a period of sharp increases in the 1980s, enrollment at the Elementary School hit a peak of 187 students

in 1992. Enrollment in the early 2000s ran at an average of 118 and was slightly increasing with a high of 152 students in the 2009-2010 year. There appears to be a downward trend mirroring the state's decline in school age population.

Table 10: NewBrook Elementary School Trends by School Year

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Total School Enrollment	141	125	120	128	120
Classroom Teachers	8.4	7.4	7.4	7.2	7.4
Kindergarten Teachers	1	1	1	1.3	1
Other Teachers	-	-	2.1	2	2.7
Paraprofessionals*	7	4	4	6	6
Student Teacher Ratio	15	14.9	11.4	12.3	10.9
Total Staff	20.07	16.78	21.55	23.1	24.8
Average Teacher Salary	\$42,403	\$43,483	\$44,151	\$45,147	\$46,480

^{*2012-13} and 2014-15 Teacher Aids

Sources: Vermont Department of Education

Data is based on total number of students enrolled as of October 1 of a given year. The data includes Early Essential Education, Pre-Kindergarten and Kindergarten.

The last addition to the NewBrook Elementary School was completed in 1996. The school is comprised of a library, administrative wing, conference room, as well as classrooms. A playground and ball fields are also located at the school. Outside school hours, the facility is used by various organizations on an ongoing basis.

In 2018 a solar array installation was completed by Encore Renewables and NewBrook is receiving revenue from its lease. Clean, less expensive power is being locally produced just beyond the tree line right on NewBrook Elementary School property. The school will be using the installation and an electric air-to-air heat pump system to model responsible stewardship for NewBrook students. The other elementary schools in the WCSU and Leland & Gray will benefit from these savings as well.

Public Schools: Secondary Education

Students from Newfane attend Leland and Gray Union High School, which is located in Townshend, from 7th through 12th grade. The facility currently has a total student body of approximately 295, 77 of which are from Newfane (2016-2017). Enrollment peaked at 440 students in the year 2003-2004 and has been declining since. (See tables 11 and 12). Some students in grades 11 and 12 take advantage of comprehensive career training at the Southern Vermont Career Education Center in Brattleboro.

Table 11: Leland & Gray Middle / High School: Trends by School Year

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Total School Enrollment	371	348	362	347	315	295
Newfane Enrollment	94	101	90	94	79	77
Classroom Teachers (FTE)	32.4	32	32.7	31	33	
Student Teacher Ratio	11.4	10.8	11	11.1	9.5	

Data sources: National Center for Education Statistics, U.S. Department of Education, the U.S. Census Bureau and the Vermont Agency of Education, SchoolDigger and Leland & Gray Union High School

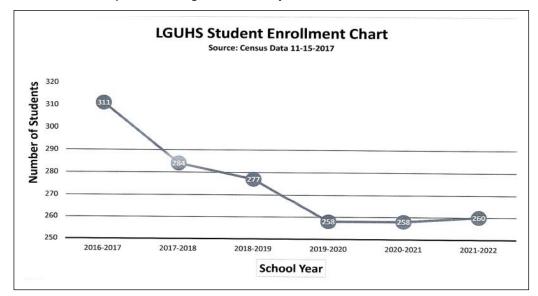


Table 12: Leland & Gray Middle / High School: Projected Future Enrollment

Source: Leland & Gray UHS 2018 Annual Report

Private Schools

Located North of Newfane Village, Kindle Farm School operates the Individual Needs programs at a property referred to as "Kindle Farm Central." Kindle Farm Central also houses the main administrative offices for the Kindle Farm School.

Even further north, Kindle Farm operates an approximately 100-acre High School campus that straddles the Newfane-Townshend town line. The property hosts the High School and Multi-age Classrooms as well as the Vocational Programs, currently enrolling 65 students ages 7 to 20.

Childcare

In addition to education for school-aged children, child care and early childhood education are important components of the Newfane community and its future. Although childcare is not a service provided by the community, it can be an important concern for existing and prospective families, especially in regards to finding quality, affordable service.

Timson Hill Preschool in Williamsville is currently the only preschool operating in Newfane. However, in addition to NewBrook Elementary Pre-K, the following are Act 166 Pre-K's serving NewBrook families: Sunny Lane Daycare, Horizon Early Learning, Hilltop Montessori, Mulberry Bush, Brattleboro Centre for Children, The Dover School, Townshend Pre-K and Winston Prouty.

The local demand for child care services is difficult to measure by looking at statistics alone because they do not take into account stay-at-home parents, out-of-town childcare options or alternative childcare options that parents might have available to them.

As illustrated in the Community Profile section of this Plan, there has been a decrease in the number of Newfane residents that are of the typical childbearing age. However, there has also been an increase in the number of residents since 2000. If the Town continues to grow, it is possible that that there will be more working parents moving to Newfane and therefore, a need for additional local child care.

Continuing Education

Adult education opportunities for Newfane residents are available regionally. The Community College of Vermont has a learning center in Brattleboro that offers associate degrees, career related certificates, and credit and non-credit training programs. Local colleges include Union Institute and University, Vermont Technical College, School of International Training (SIT), Marlboro College and Landmark College. In addition there are opportunities to further education in the arts at Brattleboro School of Dance, River Gallery School, SoBo Studio, Vermont Jazz Center, Silver Moon School of Feng Shui, Brattleboro Environmental Education Center (BEEC), New England Youth Theater (NYET), New England Center for Circus Arts (NECCA) and the Brattleboro Music Center.

COMMUNICATIONS

The Federal Telecommunications Act of 1996 governs federal, state and local government oversight of wireless facility siting. The Act preserves state and local regulatory authority for the placement, construction or modification of wireless facilities with some limitations. In 2002, the Selectboard adopted an interim telecommunications bylaw that is no longer in effect. Newfane should implement a telecommunications ordinance or bylaw to ensure that the placement of wireless facilities are sited in appropriate locations and satisfy applicable public health and safety concerns.

COMMUNITY FACILITIES, SERVICES POLICIES

- 1. Provide adequate public facilities and services without exceeding the Town's fiscal capacity.
- 2. Plan community facility improvements to minimize development of actively managed agricultural and forest lands.
- 3. The takeover of any privately owned facility, such as roads (which must first be built to Town specifications) or water system and sewage systems (which would need to comply with state regulations) shall only be undertaken after careful study of its fiscal impact on the Town.
- 4. Implement strategies for reducing and/or minimizing increases in the overall cost of Town government
- 5. Make new investments in the library in a manner that will serve the community needs.
- 6. Support the fire departments, rescue services and law enforcement services which directly serve Newfane residents and businesses.
- 7. Design buildings and site development so as to minimize the risks of fire and to maximize the fire departments' ability to combat fires. Designs shall be in conformance with the manpower and equipment capabilities of the fire departments.
- 8. Prepare for and respond effectively to an emergency situation through the appropriate use of community resources.
- 9. Manage Newfane's solid waste in an efficient, affordable, and environmentally sound manner.
- 10. Encourage the reduction of the overall quantity of waste generated in Newfane and support programs that provide public education for the safe disposal of hazardous waste materials generated within Newfane.
- 11. Provide a variety of recreational opportunities for all Newfane residents.

- 12. Provide high quality educational programs and amenities which creatively and flexibly meet state mandates and adequately prepare the community's students for life.
- 13. Integrate the school and community and support the use of the Newfane Elementary School for community activities.
- 14. Provide the highest quality education as is possible while keeping within the financial capabilities of the Town.
- 15. Support Town and regional efforts to increase the availability and affordability of child care.
- 16. Maintain and improve the availability of education and vocational training opportunities and resources to develop the full potential of all residents.
- 17. Protect, maintain and encourage the use of Newfane's historic structures.
- 18. Require that the placement, construction or modification of wireless facilities comply with Newfane's land use and policies.
- 19. Encourage the expansion of telecommunications receiving equipment at existing facilities, if the expansion is deemed to be in the best interest of the public.

COMMUNITY FACILITIES AND SERVICES RECOMMENDATIONS

- 1. Seek assistance from appropriate state and regional agencies. (All Local Boards)
- 2. Participate in appropriate state and local development reviews to enhance the Town's ability to manage development in a way that minimizes impacts on public infrastructure and facilities. (Selectboard or its designee, Planning Commission)
- 3. Investigate options to bury power lines in Newfane Village. (Village Trustees)
- 4. Educate the public regarding the history and value of historically and architecturally significant structures and sites in Newfane (Town, Historical Society)
- 5. Project necessary school capital expenditures. (School Board)
- 6. Continue to encourage the participation of qualified volunteers from the larger community in the School. (Selectboard, School Board, School Administration)
- 7. Support local non-profit organizations such as Newfane Anew Community Volunteers (NACV), Lion's Club, NewBrook Volunteer Fire Department and Ladies Auxiliary, The American Legion, Garden Club, Friends of the Library, The Windham County Historical Society, Williamsville Hall Committee and the South Newfane Community Association. (Selectboard)
- 8. Explore opportunities for educational regional programs and services as a means of reducing costs while meeting educational needs. (School Board, School Administration)
- 9. Propose and enact a Telecommunications Ordinance. (Selectboard, Planning Commission)
- 10. Add designated emergency shelters in South Newfane and Williamsville such as the South Newfane Baptist Church, Williamsville Hall and South Newfane Schoolhouse.
- 11. Utilize Town owned properties acquired through emergency buyouts for recreational purposes.

TRANSPORTATION

EXISTING TRANSPORTATION SYSTEM

Newfane is located between the regional economic hub of Brattleboro, the Stratton Mountain resort area to the north and the Deerfield Valley recreational area to the west. These areas are linked by two major roadways, Route 30 which follows the course of the West River through the eastern portion of Newfane, and the Williamsville (Depot) and Dover Roads, which, following the Rock River, passing through Williamsville, South Newfane and Brookside Villages on to Route 100 providing access to several ski areas.

There are over 70 miles of roads in Newfane, the majority of which are Town roads. (see Table 13). The Town's network of roadways is categorized by the state's town highway classification system, which refers primarily to highway conditions (see the Transportation System Map). This system is the basis on which the state allocates highway aid to municipalities.

Table 13: Roads, Highways and Trails in Newfane

ROAD CLASS	2	3	4	TOTAL MILES
Town Roadways	16.90	47.05	0.66	64.611
State Highways				5.662
Legal Trails				12.49
TotaL				82.763

Source: Vt. Agency of Transportation Maps, Feb. 2017.

The Selectboard is responsible for the maintenance and repair of public roads in Newfane. This includes the responsibility of issuing access and excess weight permits on roads and bridges to prolong the life and reduce maintenance of these structures.

Newfane has adopted local policies on road and bridge design specifications. The adoption of these policies helps to reduce town matching requirements in some highway grant programs, as well as ensuring that the replacement of these facilities are up to current design and consistent throughout the town. Many substantial projects were prompted by the damages caused by Hurricane Irene, and emergency repairs were made on an as needed basis.

The village of Newfane has partial sidewalk systems. The sidewalk system in Newfane Village is heavily used and dates back to the early 1900's. All of the major destinations within the Village are conveniently accessed by foot. Approximately 44% of the sidewalk in Newfane Village is located along Route 30 and under state jurisdiction. The remaining 56% is located along local streets. The Town of Newfane assumes maintenance responsibility for local streets in Newfane Village, while the Village assumes maintenance responsibility for the sidewalks. The Village of Newfane received both local funding and funding from the Vermont Agency of Transportation to make sidewalk and traffic calming improvements to portions of West Street in the Village. (see Transportation Map).

The Village of Williamsville has a small section of sidewalk across from the brown church and the Williamsville Hall. This section of sidewalk often gets used as a space for parking.

The Village of South Newfane has no sidewalk through the village. The only section of sidewalk to be found is on Bridge 14 that crosses the Marlboro Branch of the Rock River on Dover Road. The speeding of traffic through the village, plus the lack of sidewalk make this area a dangerous place for pedestrians, although many in the village do walk along this road anyway.

The Brookside village section has no sidewalks.

TRAFFIC CALMING

Traffic calming is a term used to describe various design and traffic techniques intended to reduce speeds or redirect traffic flow. There are a number of techniques including speed tables, rumble strips, curb bump-outs, lane shifts, narrower streets and roundabouts. Speeding has been a long term complaint in the villages of Newfane. To date the actions that have been taken are: dynamic striping in 2005 on Route 30 as drivers entered Newfane Village, a project with the Windham Regional Council (WRC) to determine speed limits and signage placement, and more recently, portable radar speed signs. The dynamic striping has since worn away and has not been repainted. A Traffic Calming Committee was formed to research the issue in 2008 and was disbanded in 2009.

A radar speed sign is an interactive sign, that displays vehicle speed as motorists approach. The purpose of radar speed signs is to slow cars down by making drivers aware when they are driving at speeds above the posted limits.

PARKING

There is a lack of adequate parking spaces in three of the Town's villages and the closeness of parked cars to speeding through traffic continues to be a safety concern. The lack of safe parking is most noticeable in the vicinity of the Williamsville Hall and the South Newfane Schoolhouse. The narrow road and pedestrian-motor traffic mix works as long as drivers slow to the marked village speeds and pedestrians and bikers remain alert.

BRIDGES

Newfane has 42 bridges. Increased car and heavy traffic has taken its toll on the bridges. The Green Iron Bridge (BR-49) that connects Parish Hill to Dover Road in South Newfane is currently accommodating heavy truck traffic that is being detoured around the Williamsville Covered Bridge. Bridge 49 is under an Historic Bridge Preservation Easement Agreement between the Town of Newfane and the State of Vermont. Under this agreement, the town is responsible for maintenance and the state is responsible for repairs. In order for the weight and permit limits to be effective in slowing bridge deterioration, aggressive enforcement measures need to be taken.

The only remaining covered bridge in Newfane is the Williamsville Covered Bridge. Located on Dover Road, this bridge between Williamsville and South Newfane has served as an historical focal point in the valley for residents and tourists. It is listed as a historic structure with the National Register of Historic Places and the Vermont Division for Historic Preservation. The bridge was rebuilt in 2010. It now accommodates 40,000 lbs. Heavier vehicles, or those taller than the bridge opening, must detour one extra mile between the villages over BR-50 and BR-49 to reenter Dover Road.

Historic bridges are a particularly valuable cultural asset of many towns and decisions about how to preserve and use them (and sometimes whether to do so) can be difficult. The Town of Newfane has historically shown strong support for keeping the working bridge a covered bridge. South Newfane's bridge 14 was recently replaced after being severely damaged in Hurricane Irene. Bridge 48 over the Smith Brook in Newfane was repaired in the fall of 2017.

The Arch bridge (BR -12) in Williamsville is in much needed repair and slated for replacement in 2022-23. The Arch Bridge was the first of its kind constructed in Vermont and is listed on the Reinforced Concrete Arch Preservation Plan as a bridge of exceptional historical significance. However, the repairs on the existing structure would be so extensive and short lived that a full replacement is necessary.

PUBLIC TRANSIT

In Newfane public transportation options are limited, as is the case in most rural communities. The automobile is, and most likely will continue to be in the foreseeable future, the principal means of transportation for Newfane residents. However, in a recent survey by the Planning Commission, the desire for public transportation was strong (40%). Typically, those who use public transportation are the elderly, those under 18, and those who live below the poverty level that don't have vehicles.

The data has shown that our population is aging. Added to those are persons who have lost their license, through DUI's or those who have above the acceptable points against their license. For those on parole or probation it is of the utmost importance that they make it to their appointments so that they don't go back to jail and can return as productive members of their community. Route 30 was included in a Congestion Mitigation and Air Quality Grant Application in 2006. However, the funding for that has dried up. Currently there is the Elderly and Disabled (E&D) service for medical appointments and Dial-a-Ride program through the Connecticut River Transit (CRT). The Dial-a-Ride program only works if there is an E&D service bus in the area. The town contributes to the (CRT) operational costs through appropriations approved at the annual Town Meeting. Funding continues to be a problem.

The lack of public transit to the Southern Vermont area also hampers tourism. Travel from Brattleboro by Bus or Amtrak is difficult with one bus and train leaving for Hartford or Boston airports daily. The train to Boston from Brattleboro is a 7 hour ride and there is no return train. Shuttles are available at \$100/person/ride.

There is one Uber driver registered in Newfane; Brattleboro, Putney and West Dover each have a small taxi service company. There is a carpool parking lot at the Town Office that was grant financed, but is minimally used.

FUTURE TRANSPORTATION SYSTEM

The following are the major elements of Newfane's vision for its transportation system. This vision calls for transportation systems and programs that serve people's needs, while minimizing negative impacts on communities, the environment and the character of the town. The attached Projects to Enhance the Existing Transportation Map will be updated to reflect that two of the projects have been completed, one is underway and one is still under consideration.

ROAD AND BRIDGE IMPROVEMENTS

Newfane has completed many projects in the last few years as part of the commitment of the Town to provide safe and efficient roads. Work on the Williamsville (Depot) Road's bank stabilization is on-going. The Arch Bridge is slated for replacement in 2022-23. The new bridge will resemble the current one, but it will be wider, from 17.6ft to 18ft.

The state has put forth a Municipal General Roads Permit Program to guide towns in complying with Act 64, Vermont's Clean Water Act. This program focuses on upgrading drainage ditches and culverts to prevent erosion and mitigate effects of severe weather. A current project is on Sunset Lake Road. The Town has received two grants to work on ditches and replace culverts.

The town keeps an infrastructure inventory that is updated about every 3 years. The inventory includes the conditions of paved roads as well as the bridges and culverts. The inventory is put into the Vermont Culvert and Bridge Inventory System, a computer based system that inventories and evaluates local road conditions. It sets up a maintenance schedule that minimizes the required local funding match on road projects and helps Newfane budget for ongoing repairs, thus preventing an unreasonable burden on taxpayers.

SIDEWALKS, PATHS AND BICYCLE ACCOMMODATION

Walking as a form of transportation and leisure is strong in Newfane Village and must be supported. Included in the Planning Commission's survey, many people expressed a need for a crosswalk in Newfane village. Most favored the spot on Route 30 by the General Store and the Bank. Another mentioned the need for a crosswalk by WW Building Supply and the soon to be Fat Crow Restaurant. There are also many residents that walk in the Villages of Williamsville and South Newfane, however there are no sidewalks and speeding cars are an ongoing problem. There has long been a desire for a walking path between the two villages.

The need to identify and provide biking routes and other supporting infrastructure throughout the Town is ongoing, especially where the shoulders are very narrow. The entrances to Newfane Village are two such spots. Route 30 is a popular biking route for locals and tourists. Places for bicyclists to park/store their bikes, such as a bike rack, in the village would be helpful to both the cyclists and the Newfane businesses.

TRAFFIC CALMING/SPEED ENFORCEMENT

Speeding on Dover Road and Route 30 continues to be a serious problem and threat to the safety of residents. A particularly dangerous section for pedestrians is in South Newfane on the Dover Road between the Green Iron Bridge and the South Newfane Schoolhouse. A combination of factors contributes to this: an intersection, the narrow width while on an incline and curve affecting visibility.

The town recently purchased portable radar speed signs that can be moved around from location to location. More traffic calming measures must be put in place. A traffic calming tactic the town might consider on some roads is narrowing the appearance of the roads by

changing where the lines of the road are painted. According to AARP's Walkable and Livable Communities Institute, injuries from vehicle crashes rise as the width of a road increases. In the recent survey by the Newfane Planning Commission 23.8% said that speeding through the villages was a problem. Enforcement has been ineffective as it is inconsistent and is not a viable option.

ROAD POLICIES

Preservation of the rural character is a priority to Newfane residents. In order to preserve the rural character an evaluation and revision of the Town's road design standards should be undertaken. Street design should take into account function, efficiency, safety, and aesthetics. It should consider, where feasible, accommodating walkers and bicyclists. With the increase of severe weather events, it will be important to follow the guidelines for the design and maintenance of culverts and ditches according to Act 64, Vermont's Clean Water Act. Many towns are replacing culverts to accommodate for 50 year flood levels, but that may not be enough and 100 year flood levels should be considered, especially in flood prone areas. The Vermont State Design standards provide clear technical direction balancing the many factors that need to be considered.

ACCESS MANAGEMENT

All access to town roads (curb cuts, driveway permits) is subject to the Town's "Access and Work in the Right-of-Way" Policy which requires that an individual apply for a permit, which if approved, is then issued by the Selectboard. Newfane's present Zoning By-law requires the Development Review Board to consider certain traffic-related criteria during reviews. However, the Newfane Zoning Bylaw should be updated to include best access management practices.

Access management standards and guidelines will offer an additional and practical way to promote safe, efficient traffic operations and avoid undesirable development practices along highways. These standards might include requirements for minimum separation distance between driveways or between driveways and a corner or intersection; driveways that serve more than one lot, parking areas that serve more than one lot, business circulation access between two lots, and where appropriate, directing access onto secondary streets rather than the main arterials.

GROWTH CONSIDERATIONS

There is a strong link between transportation facilities and land use patterns. The capacity of Newfane's roads and bridges plays an important role in defining potential opportunities and limitations for growth throughout the community and therefore directly influences where development can and cannot feasibly be located. Local roads that are excessively narrow or steep or which have bridges with limited capacity have a significant impact on safe and efficient delivery of essential residential services, such as oil and gas for home heating, school bus transportation, and emergency services. For some roads it is not feasible to bring them up to date to meet the town standards. Therefore, keeping development away from these areas has

the dual advantage of helping the community control the high cost of road maintenance required in areas with steep topography and other physical limitations, and preserves the character of the Town's rural areas.

PUBLIC TRANSIT

A Route 30 bus route to Brattleboro with a dedicated bus stop in Newfane is desired. It rated high in the 2017 Planning Commission Survey. Long term parking needs to be accommodated. The Town Office may be appropriate bus stop and parking area and should be investigated. A bike rack here would also be helpful to those who would bike to the bus stop. The benefits of public transportation are numerous: it would ease traffic congestion, provide access and level the playing field for those who cannot drive or don't have a car, and reduce greenhouse gases. Funding continues to be a main source of difficulty.

TRANSPORTATION OBJECTIVES

- Provide a convenient road system with service that is commensurate with the need while
 respecting the natural environment, maintain the community's rural character and historic
 sites, and ensuring public safety.
- 2. Maintain Town roads, bridges and sidewalks to safely accommodate vehicular traffic and pedestrian movement.
- 3. Encourage energy-efficient modes of transportation such as regional public transit, carpooling, bicycling, and walking.
- 4. To initiate traffic calming, no improvements of the main road from East Dover to Williamsville Station should be constructed for the specific purpose of expediting motor traffic flow to or from Deerfield Valley recreation areas.

TRANSPORTATION RECOMMENDATIONS

- 1. Continue to pursue state and federal grants for the maintenance and improvements of the Town's street and highway system, bridges, sidewalks, and other improvements where feasible. (Selectboard, Village Trustees)
- 2. Review Vermont Agency of Transportation proposed construction projects to ensure consistency with the Newfane Town Plan. (Selectboard)
 - Existing roads that are not suited to accommodate the Town standards for roads should be noted and accepted as such and maintained with best practices guided by the State of Vermont.
- 3. Invite public participation in transportation project hearings to get feedback from residents. (Selectboard)

- 4. Install traffic calming measures for Route 30 and Dover Road. (Selectboard)
 - **a.** Repaint the dynamic striping on Route 30 at both entrances to Newfane Village.
 - **b.** Provide a crosswalk for Newfane Village for the General Store and Peoples Bank.
 - **c.** Meet with folks from Williamsville and South Newfane Villages to get feedback on placement of future traffic calming measures.
 - **d.** On those roads deemed appropriate, consider visually narrowing the road as a means to slow traffic.
- 5. Research, propose, and review Access Management standards for appropriate roads in Town. (Selectboard, Planning Commission)
- 6. Place a bike rack in Newfane Village. The Newfane Market, lawn in front of the Sheriff's Office, or Town Offices are possibilities. (Selectboard)
- 7. Research, propose and adopt updated road specifications, including Act 64. (Selectboard or designee)
- 8. Review and replace culverts to accommodate 50-100 year flood levels. (Selectboard)
- 9. Publicize the carpool parking lot at the Town Office.
- 10. Work to establish a bus route through the Village and establish a permanent bus stop. As funding is critical the town of Newfane may consider setting more money aside to support this route; a special committee may be the best way to make this happen. (Selectboard, special committee)

HOUSING

Physically, socially and economically housing is one of the most important elements in the lives of most Newfane residents. In order to maintain a stable and demographically diverse community, an adequate supply of local housing is necessary. Maintaining an adequate supply means that sufficient numbers of housing units should be available at varied prices, sizes, and locations to meet the needs of Newfane's changing population.

EXISTING CONDITIONS

Housing Stock

The Community Profile chapter of this plan provides information on housing trends in Newfane. Table 14 provides a summary of Newfane's housing in 2000 and 2010. 99 dwellings were added to the overall housing unit stock from 2000 to 2010. In 2010, 89.6% of Newfane residents live in single family detached dwellings. Mobile homes account for 5.3% of all housing units and two-or-more-family dwellings 5.1% are the next most prevalent accommodation types.

Table 14: Newfane Housing Stock and Occupancy Status

Unit Type	2000	2000 % of	2010	2010 % of
		total		total
Total housing units	977		1090	
Occupied housing	693	71%	771	72%
Owner occupied	573	47%	649	60%
Renter occupied	120	12%	122	11%
Seasonal	255	26%	282	26%
Vacant	29	3%	23	2%
Average household size	2.42		2.67	
Number of households	693		771	

Source: U.S. Census – Definitive information about Housing Stock and Occupancy Status must await the next United States Census in 2020.

Information from the 2010 Census showed that there were 122 occupied rental housing units and 7 vacant rental units in Newfane, or 12% of all of Newfane's housing units. Based on sample on the 122 occupied rental housing units, approximately 43.2% of the rental units were in single family homes while two-family structures accommodated approximately 38.9% of the rental units.

AFFORDABLE HOUSING

Meeting the housing needs of low and moderate income citizens in Newfane is a challenge. Housing prices continue to rise in Newfane (see Table 15). The Town does not have a large supply of mobile homes or multi-family housing units which, by their very nature, are often most affordable to low and moderate income households. There are currently no subsidized housing units in Town.

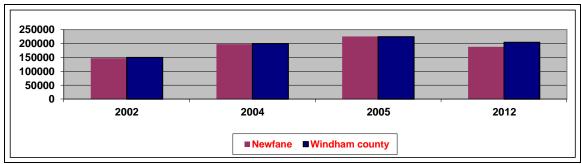


Table 15: Housing Cost Trends of Primary Residences South Newfane and Windham County

Source: Vermont Department of Taxes

Affordable housing is housing that a family with an income at or below the median income for the area can afford without spending more than 30% of its income on monthly housing costs. One way to determine if housing is affordable is to use household income to determine what a household can afford. Table 16 calculates typical house values that various households could afford. The median income is determined by U.S. Department of Housing and Urban Development (HUD). The monthly expense assumes that no more than 30% of total income is spent on housing costs. To calculate the typical house value the Vermont Housing Data mortgage calculator was used. This value assumed payments for mortgage, property tax and insurance on a house bought with a 5 percent down payment and a 30-year fixed mortgage at 3.8%.

Table 16: Household Incomes, Monthly Expenditures and House Value in 2010

Household size	2010 Median Income	Monthly Expense	Affordable House Value
Two person	61,667	1,542	227,500
Three person	76,518	1,913	282,500
Four person	76,857	1,921	284,000

Source: U.S. Department of Housing and Urban Development, Vermont Housing Data

Monthly housing costs for renters includes rent and utilities while monthly housing costs for homeowners include mortgage payments, insurance and property taxes.

With the median sales price of houses in Newfane in 2010 at \$210,000 it is clear that even median income households have difficulty finding homes to buy in Newfane.

Home sales in Newfane:

The 2016-2017 average sale prices were \$158,511 when undeveloped land parcels were not included, \$160,486 when including land sales (30 sales).

The 2017-2018 average sale prices were \$237,295 when undeveloped land parcels were not included, \$218,917 when including land sales (44 sales).

The median sales price of houses in Newfane increased from \$210,000 in 2016/2017 to \$230,000 in 2017/2018. It is important to note that, "median" divides a group in half, meaning that half are above the median figure and half are below. For those that make less than the median income the housing situation is even more difficult. Therefore, a variety of housing types are needed to meet the needs within the affordable category.

Newfane recognizes the need to promote affordable housing. In accordance with state law, the Zoning Bylaw permits accessory units and treats them as single family uses. The zoning bylaw also allows more than one dwelling unit on a property without requiring a subdivision if adequate acreage and setbacks are available.

Windham Windsor Housing Trust operates a Housing Rehabilitation Loan Program. The program is designed to improve and maintain housing of income- eligible residents by rehabilitating existing housing to meet or exceed HUD standards. It is a revolving low-interest loan program.

Several regional programs also address housing affordability. The Brattleboro Area Community Land Trust provides affordable rental housing to low and moderate income households, including families and individuals, persons with disabilities or special needs, and the elderly. The Land Trust can also provide income-eligible homebuyers with a subsidy towards the purchase of a qualifying home. In addition, homebuyers under this program have access to below market rate mortgages as well as financial assistance with closing costs. The Land Trust is committed to preserving the affordability of housing in perpetuity by conveying parcels of land to individual homeowners through long-term land leases. Southeastern Vermont Community Action Agency (SEVCA) provides referrals to area shelters landlord lists, and assists individuals in completing applications for affordable housing possibilities.

Future Housing

Rural housing development trends in Newfane raise land use issues and concerns that make it important to have clear regulatory tools in place to mitigate the costs of dispersed, large lot development on the cost and effective delivery of municipal and community services, the cost of local housing, the impact of parcelization and the impact to Newfane's rural character and natural resource base.

Newfane will continue to work to address the need for affordable housing in the Town. Working with the private sector, nonprofit organizations, and other agencies, Newfane will support housing programs and services that will enable the community to meet basic needs for safe and affordable housing, including that needed by families, low-income households and special needs populations.

Newfane should explore various strategies for encouraging the construction of housing to meet the needs of median moderate and low income households. Strategies that the Town should consider include density bonuses, permitting cluster housing developments, working with the Windham Windsor Housing Trust, and investigating centralized water and/or sewer in the villages.

Housing Policies

- 1. Promote the development of a diverse, safe and affordable housing to meet the range of needs of all Newfane residents, including those of low and moderate incomes.
- 2. Promote housing development within the historic settlement areas of Newfane, South Newfane and Williamsville villages.

- 3. Encourage collaboration with non-profit housing organizations, government agencies, private lenders, developers and builders in pursuing options to meet the housing needs of local residents.
- 4. Preserve the rural qualities of Newfane by siting new housing so as to respect the existing natural environment and preserve the greatest amount of open space.
- 5. Support housing locations that are in close proximity to village centers.
- 6. Support development of alternative houses, such as tiny, movable houses, tree houses, yurts, and earth covered houses, as well as alternative building materials.
- 7. Support incorporation of energy efficiencies in all new development.

Housing Recommendations

- 1. Continue to promote the affordable home repair program administered by Windham Housing Trust and other options for owners to rehabilitate housing structures so that they are safe and sanitary and can remain active in the Town's housing stock. (Selectboard)
- 2. Make available information on opportunities for homeowners to add an accessory dwelling unit. (Zoning Administrator)
- 3. Review, and revise as necessary, the Zoning Bylaws to facilitate affordable housing. (Planning Commission)
- 4. Address possible changes in lot size to accommodate better clustering. (Planning Commission)
- 5. Develop policies and appropriate standards for alternative housing that support all economic levels of Newfane Residents. (Planning Commission)

Figure 2: Housing

Housing



From 2000 to 2010, the number of housing units in Newfane rose from 977 to 1,090, a 12% increase, while total households rose from 693 to 771, an 11% increase.

The median gross monthly rent in the period 2008-2012 was \$917. In comparison, Windham County's median gross monthly rent was \$849.

Since 1990, seasonal housing as a percentage of total housing fell by approximately 8% in Newfane. In 2010, seasonal housing accounted for 25.9% of all housing; the percentage was 26.1% in 2000, and 34.0% in 1990.

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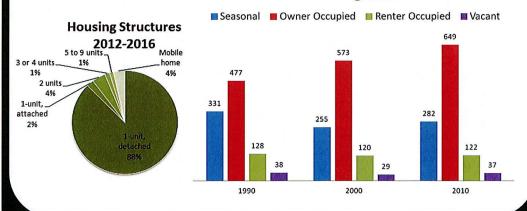
What is a household?

"A household includes all the persons who occupy a housing unit as their usual place of residence. A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters". (U.S. Census Bureau)

	1990	2000	2010
Seasonal/ Recreational	331	255	282
Total Units	974	977	1,090
% of Total Housing for Seasonal Use	34.0%	26.1%	25.9%

	1990	2000	2010	
Average Household Size (Persons)	2.64	2.42	2.24	
Number of Households	616	693	771	

Housing Units



2018 Profile Series: Newfane

Newfane Town Profile 2018

Windham Regional Commission, April 2018

2

NATURAL RESOURCE USE & CONSERVATION

WETLANDS

Wetlands are a unique and valuable natural resource in Vermont. Wetlands are generally defined as permanently or seasonally wet areas which have saturated soils at least part of the year, support wetland plant species and contain aquatic life. Marshes; swamps, bogs and seasonally flooded fields are examples. Primary wetland values include fish and wildlife habitat, flood and erosion protection, nutrient and pollution filtration, ground water recharge, aesthetic diversity, and sites for educational and recreational activities. Several state and federal laws provide protection for wetlands including the U.S. Army Corp of Engineers permits, Act 250, and the Vermont Significant Wetlands regulations, In conjunction with these laws, local planning and regulation measures are essential to the long-term protection of wetland areas.

"National Wetlands Inventory Maps" have been provided to the Town of Newfane to assist the community in identifying "Significant Wetland" sites. Significant Wetlands are categorized as Class I and II wetlands. These maps delineate the location of known wetlands in the Town; wetlands information is shown on the Natural Resources Map. Newfane has many wetland areas consisting of upland forested wetlands small ponds, stream wetlands, shrub swamps, and emergent marshes.

Wetlands Policies

- 1. Plan and implement development around Significant Wetlands in a manner which maintains the functions of the wetlands and does not result in runoff or direct discharge into them.
- 2. Protect Significant Wetlands from development by maintaining an undisturbed, naturally vegetated buffer, strip around the wetland edge sufficient to ensure the integrity of the wetland.

Wetlands Recommendations

1. Amend the zoning bylaw to require a minimum of a vegetated buffer strip around the edge of a mapped or otherwise documented wetland. (Planning Commission)

GROUNDWATER RESOURCES

Groundwater is an extremely valuable natural resource in the Town of Newfane because it provides the primary source of potable drinking water for residents. Groundwater is water that has infiltrated into the soil through sand, gravel, or rock. The area where groundwater is stored is called an aquifer. Aquifer recharge areas for the Town of Newfane are not currently mapped.

The greatest threats to groundwater resources are created by human activity. Failed or inadequately designed septic systems are potential sources of groundwater pollution. Of particular concern is the water quality in Newfane's villages, where lot sizes are small and development is dense. Failed septic systems can affect the quality of life; threaten public health and the environment. Septic system failures are not easily remedied due to the density of existing on-site septic and water systems.

Other potential sources of groundwater contamination include landfills, abandoned dumps, leaking underground petroleum storage tanks, salt and treated sand storage piles, manure storage areas, fertilizer and pesticide application, and uncontrolled dumping of homeowner waste products and

petroleum. Federal and State regulations exist to help protect groundwater quality. However research, planning and regulation measures, and sound land use practices carried out at the local level are also needed to protect Newfane's groundwater supplies.

Groundwater Policies

- 1 Protect areas that are identified as having high groundwater potential by limiting development.
- 2. Prohibit development in areas where the topography and soil conditions are likely to cause contamination of surface or subsurface waters or the failure of waste disposal systems.
- 3. Require that all new or modified onsite septic systems are properly designed and permitted in accordance with state rules and regulations.
- 4. The underground and above ground storage of fuels, chemical substances and other toxic or hazardous materials shall only be permitted in full compliance with all applicable state regulations (Vermont Department of Environmental Conservation and Department of Labor and Industry) and local/zoning.
- 5. Require that businesses comply with all applicable state regulations pertaining to the storage and management of chemical and to toxic substances and hazardous waste.
- 6. Prohibit road salt storage areas from locating within the 100-year flood hazard area, well head protection areas, or shoreland areas of surface waters and wetlands.
- 7. Store road salt and salted sand on impervious surfaces and undercover.

Groundwater Recommendations

- 1. Evaluate the need for future community water and/or sewage systems in Newfane's village areas. (Selectboard, Planning Commission)
- 2. Make information available to land owners on the proper maintenance and care of' wells and septic systems. (Town Health Officer)

SURFACE WATER RESOURCES

Surface waters (rivers, streams, brooks, ponds and some wetlands) and their surrounding shore lands are prominent landscape features in Newfane. They provide important fish and wildlife habitat and recreational opportunities for local residents and visitors, and contribute significantly to the rural character and scenic beauty of the community.

Newfane's major surface waters, depicted on the Natural Resources Map and the Existing Land Use Map include the following rivers, brooks and ponds: West River, Rock River, Baker Brook, Smith Brook, Hunter Brook, Wardsboro Brook, Adams Brook, Joy Brook, Stratton Brook, Benis Brook, Marie Brook, Ada's Brook, Marlboro Branch, and Kenney Pond. There are a number of smaller privately developed ponds in the Town as well, some of which provide water for firefighting. The majority of the local rivers, brooks and streams are classified by the State of Vermont as Class B Waters. This classification means that the water quality is suitable for bathing and recreation, irrigation and agricultural uses, has good fish habitat and aesthetic value, and is acceptable for public water supply with filtration and disinfection. There are some streams in the southeastern portion of Town near Lost Mile Road that are classified by the State of Vermont as A waters because they feed into the drinking water supply for the Town of Brattleboro.

The Rock River, Baker Brook, Joy Brook, Adams Brook and Smith Brook contain significant populations of game fish, including brook trout, brown trout, Atlantic salmon and small-mouth bass. Local brooks and rivers also contain limited yet important, threatened and endangered species and wildlife habitat (see section on Wildlife) and have been identified as having unique "landscape features" including rock outcrops along the Rock River and Adams Brook, and historic resources along the Rock River and Smith Brook.

Two important issues associated with the protection of Newfane's surface waters are water quality and wildlife habitat. By protecting these values, the Town will also protect many other values and uses associated with surface waters and their adjacent shore lands. Protecting water quality and wildlife habitat will, to a great extent, depend upon maintaining the integrity of local shorelands. Removal of vegetation along the stream banks and adjacent shorelands can raise stream temperatures and, in turn, lead to deterioration of cold-water fisheries. Poor streambank management can cause stream sedimentation which eliminates fish spawning and nursery areas, stressing adult fish. In addition, the removal of vegetation along the shoreland areas can destroy habit which is important for waterfowl reproduction and winter deer movements. Property owners should also be aware that streambank erosion can result in lost land and lowered property values.

Newfane falls entirely within the West River Watershed. In 1999, the West River Watershed Alliance (WRWA) created an action plan, which included a Riparian Forested Ecosystem Inventory of the Rock River sub-basin which was funded by the Federal Clean Water Act (604b). The project, completed largely by Newfane residents, surveyed the condition of the banks of the Rock River from its headwaters in Dover to the West River.

The Southeast Vermont Watershed Alliance (SeVWA) includes the watersheds of Southeastern Vermont rivers. SeVWA has continued and expanded the water quality monitoring service that began on the West River in conjunction with Vermont Agency of Natural Resources (ANR) and the Connecticut River Conservancy (formerly known as the CT Watershed Council.) Services to Newfane and other Basin 11 towns include an ongoing multiphase stream geomorphic assessment of the entire West River Basin, structural enhancements for public access sites along the West River riparian buffer inventories of the West River and its tributaries, and a continuing long-term water quality monitoring and runoff evaluation.

See the Agency of Natural Resources, Department of Environmental Conservation's website for additional information: http://dec.vermont.gov/watershed/map/basin-planning/basin11

Newfane's current zoning bylaw provides some measure of surface water protection. Construction of dams is not permitted on many local brooks, structures must be set back from streams a minimum distance of 75 feet; special pollution controls address surface water contamination from heat, liquid and solid waste.

Surface Water Policies

- 1. Maintain Newfane's surface waters and shorelands in their natural state and maintain or enhance the chemical, physical and biological quality of Newfane's surface waters.
- 2. Prohibit the removal of mature trees and activities which kill or injure vegetation so as to cause destabilization and/or erosion of stream banks.
- 3. Require that new development within or adjacent to shoreland areas be designed to result in

- stable river and stream banks and cause minimal disturbance to the riparian environment.
- 4. Require that development or construction activity not result in increased rates of storm water runoff to Newfane's surface waters or cause surface waters to become silted, contaminated or otherwise degraded.
- **5.** Prohibit the construction of private in-stream ponds and dams.

Surface Water Recommendations

1. Establish zoning techniques such as vegetated buffers and overlay districts to protect surface waters and propose amendments to the Zoning Bylaw where appropriate, (Planning Commission).

HISTORICAL FLOOD HAZARDS

REGIONAL FLOODING

Aug. 28, 2011 - The Federally Declared Disaster DR-4022, Tropical Storm Irene, tracked northeast across eastern New York and western New England during Sunday, August 28th, producing widespread flooding, and damaging winds across the region. The greatest impact from Irene across southern Vermont was due to heavy to extreme rainfall, which resulted in catastrophic flooding. Rainfall amounts generally averaged 4 to 8 inches. Much of the rain which fell occurred within a 12 hour period, beginning early Sunday morning, and ending Sunday evening. Route 9, the main route across southern Vermont was closed. Numerous evacuations were reported.

LOCAL FLOODING

Rains from Tropical Storm Irene caused an extreme flash flooding and fluvial erosion hazard event in Southeast Vermont on August 28, 2011, to include the Town of Newfane. More than 30 properties were damaged or destroyed. Portions of Dover Road in South Newfane and Williamsville crumbled into the Rock River were unpassable, causing the collapse of the Historic Grist Mill in Williamsville. Numerous bridges were damaged.

FLOOD RESILIENCE PLAN

Background

In 2013 Vermont enacted Act 16, "An act relating to municipal and regional planning and flood resilience, which requires that all municipal and regional plans effective after July 1, 2014 include a "flood resilience element" pursuant to the purpose and goals of 24 V.S.A. § 4302 - Purpose; Goals - subsection (c)(14):

- (14) To encourage flood resilient communities.
 - (A) New development in identified flood hazard, fluvial erosion, and river corridor protection areas should be avoided. If new development is to be built in such areas, it should not exacerbate flooding and fluvial erosion.

- (B) The protection and restoration of floodplains and upland forested areas that attenuate and moderate flooding and fluvial erosion should be encouraged.
- (C) Flood emergency preparedness and response planning should be encouraged.

Act 16 also amended 24 V.S.A. § 4382 - The plan for a municipality - adding a twelfth element to the requirements for a municipal plan, specifically to include a flood resilience plan:
(a) A plan for a municipality . . . shall include the following:
(12)

- (A) A flood resilience plan that:
 - (i) <u>identifies</u> flood hazard and fluvial erosion hazard areas, based on river corridor maps provided by the Secretary of Natural Resources pursuant to 10 V.S.A. § 1428(a) or maps recommended by the Secretary, and <u>designates</u> those areas to be protected, including floodplains, river corridors, land adjacent to streams, wetlands, and upland forests, to reduce the risk of flood damage to infrastructure and improved property; and
 - (ii) <u>recommends policies and strategies to protect the areas identified and designated</u> under subdivision (12)(A)(i) of this subsection and to mitigate risks to public safety, critical infrastructure, historic structures, and municipal investments. (emphasis added)
- (B) A flood resilience plan may reference an existing local hazard mitigation plan approved under 44 C.F.R. § 201.6.

Fluvial Erosion

By statutory definition, "fluvial erosion" means the erosion or scouring of riverbeds and banks during high flow conditions of a river. Most of the flooding damage experienced in Vermont is from the power of moving water causing the sudden destruction of under-sized culverts and erosion of stream banks supporting roads and buildings. Providing a river the room it needs to slow the flow, over time can allow it to function as a responsive system and avoid repeated losses to public infrastructure and investments.

Erosion (and deposition) along a stream or river is natural. Sometimes, efforts to stop this process in one place can make it worse in others. Rivers, streams, and their channels are changing constantly in response to the inputs of water, energy, sediment and debris that pass along them. Every few years a stream fills to bankfull and the shape of the channel responds to this force by cutting deeper into some streambanks and also by depositing sediments in the quiet inside bends. This process is visible as an "S" shaped form that slowly changes position.

If the stream cannot spill out of its banks, the power of the trapped water increases and the channel either digs down or cuts out further to the sides. Where the roads and buildings are nearby these adjustments to the channel's shape can become dramatic and costly.

A river is in geomorphic equilibrium when its water, energy, sediment, and debris are in balance. In this condition a river is neither building up sediment in the channel nor losing sediment from its bed. Importantly, a river in equilibrium has not become overly deep and can continue to overflow onto its floodplains. The water that spills onto the floodplain slows down, and the velocity of the water still in the channel does not become excessively powerful.

In order to protect roads and buildings it is important to be sure that the river is able to function as well as possible upstream and downstream. We need functional streams and rivers with room to adjust (River Corridors) and intact floodplains to moderate the impact of high water events.

River Corridors and Floodplains

River Corridors and floodplains are different but related. The River Corridor is the area that provides the physical space that the river needs to express its energy and meander without it having to dig down. The River Corridor includes a 50-foot buffer on either side of the fluvial erosion hazard area to prevent disturbance in this area and allow for bank stabilization. In statute the area is defined as: "River corridor" means the land area adjacent to a river that is required to accommodate the dimensions, slope, planform, and buffer of the naturally stable channel and that is necessary for the natural maintenance or natural restoration of a dynamic equilibrium condition and for minimization of fluvial erosion hazards, as delineated by the Agency of Natural Resources in accordance with river corridor protection procedures.

A floodplain is the area where water flowing out over a river bank can spread out and slow down. The floodplain as defined by FEMA is the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or, most commonly, the 100-year flood.

River Corridors and floodplains overlap a great deal. One on top of the other there might be 60-90% overlap. However, there are areas in the River Corridor that will be eventually shaped by the channel - although they may be currently high and dry - and other areas in the floodplain that will be under water during a large flood, but which the river channel may not need to access to maintain its geomorphic equilibrium.

The extent of a River Corridor is based on calculations including such things as the meander belt of the stream, soils, watershed size and gradient, and channel width. The extent of floodplains is based on calculations such as stream peak flow history and frequency.

Regulatory Flood Hazard Designations

There are two types of regulatory flood hazard designations and two sets of official maps that identify those flood hazards in Vermont: inundation hazard areas are identified by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs): fluvial erosion hazard areas are identified by the VT Agency of Natural Resources on River Corridor maps.

Newfane has land, homes and businesses that are susceptible to the two types of flooding impacts: inundation and fluvial erosion. Inundation flooding occurs during high water events on the Rock and West Rivers. Fluvial erosion occurs in areas both in and out of the flood hazard area (floodplain) as mapped by the Federal Emergency Management Agency (FEMA). Both inundation flooding and fluvial erosion are potential hazards along the West River, Rock River, Marlboro Branch, Baker Brook, Wardsboro Brook, Smith Brook, Joy Brook as well as along the streams that drain watersheds extending to our border with the towns of Brookline, Dummerston and Marlboro.

Inundation Hazard

Towns participating in the National Flood Insurance Program (NFIP) must regulate development in areas designated on the FIRMs that show the floodplain that FEMA has calculated would be covered by water in a 1% chance annual inundation event, also referred to as the "100 year flood" or base flood. This area of inundation is called the Special Flood Hazard Area (SFHA). FIRMs may also show expected base flood elevations (BFEs) and floodways (smaller areas that carry more current). FIRMS are only prepared for larger streams and rivers. The Town of Newfane has areas of inundation hazard flood risk mapped by FEMA.

Fluvial Erosion Hazard

A significant portion of flood damage in Vermont occurs outside of the FEMA mapped floodplain areas and along smaller upland streams, as well as along road drainage systems that fail to convey the amount of water they are receiving. Property owners in such areas outside of SFHAs are not required to have flood insurance. Vermont ANR's river corridor maps show the area needed to address the fluvial erosion hazards, which may be inside of FEMA-mapped areas, but often extends outside of those areas. River corridor maps delineate areas where the lateral movement of the river and the associated erosion may be more of the threat than inundation by floodwaters. Elevation or flood-proofing alone may not be protective of structures in these areas, as erosion can undermine structures. ANR released statewide river corridor maps in late 2014. The Town of Newfane has areas of River Corridor mapped by ANR.

Flood Hazard Regulation

Inundation

For federal flood insurance to be available to property owners though the National Flood Insurance Program (NFIP), a municipality must adopt and administer flood hazard area regulations. These can be within local zoning regulations or adopted as a free-standing bylaw. A community's flood hazard regulations must apply to at least the Special Flood Hazard Areas identified by FEMA. They regulate new structures and place restrictions on other types of activities, such as fill within the floodplain. They specify land, area and structural requirements to be adhered to within the SFHA. *The Town of Newfane has adopted and administers flood hazard area regulations.*

Erosion

To address Act 16, to protect citizens, infrastructure, and the environment, and to qualify for maximum Emergency Relief and Assistance Fund state match in the event of a disaster, a town must adopt and administer River Corridor protection standards as part of its flood hazard area regulations. These can be within local zoning regulations or adopted as a free-standing bylaw. *The Town of Newfane should adopt and administer River Corridor protection standards as part of its flood hazard area regulations.*

Addressing Flood Resilience

This plan <u>identifies</u> flood hazards as the Special Flood Hazard Areas (SFHAs) shown on the NFIP FIRMs and identifies fluvial erosion hazard areas as those shown on the ANR River Corridor maps. Further, this Plan <u>designates</u> both those identified areas as areas to be protected, including floodplains, river corridors, and land adjacent to streams, wetlands, and upland forests, to reduce the risk of flood damage to infrastructure and improved property. In addition, this plan incorporates by reference the town's Local Hazard Mitigation Plan approved under 44 C.F.R. § 201.6. Finally, this plan <u>recommends the following policies and strategies</u> to protect the designated areas to mitigate risks to public safety, critical infrastructure, historic structures, and municipal investments.

Flood Resilience Policies & Recommendations:

- It is the policy of the town to foster the protection and restoration of river corridors, floodplains, wetlands, and upland forested areas that attenuate and moderate flooding and fluvial erosion.
 - The Town of Newfane should adopt and administer River Corridor protection standards as part of its flood hazard area regulations.
 - The Town will be familiar with Flood Insurance Rate Maps (FIRMs) that delineate areas that could be inundated by water during flooding. (Selectboard, Development Review Board, Zoning Administrator)
 - The Town will be familiar with ANR River Corridor maps that delineate the land area adjacent to streams and rivers that are required to accommodate a stable channel. (Selectboard, Development Review Board, Zoning Administrator)
- It is the policy of the Town to protect floodplains, river corridors, land adjacent to streams, wetlands, and upland forests through adoption and administration of flood hazard area regulations governing development in designated Special Flood Hazard Areas and River Corridors, in order to reduce the risk of flood damage to infrastructure, improved property, people, and the environment.
 - The Town will pursue a flood resilience management approach whose essential components are to identify and map flood and fluvial erosion hazard areas based on studies and maps provided by the Vermont ANR Rivers Program, and designate those areas for protection to reduce the risk of flood damage to infrastructure and private property. (Selectboard, Planning Commission)
 - ➤ The Town will update the Flood Hazard Areas Regulations to include regulation of river corridors, and include provisions for advance notification of and specific limits on new development activities in identified flood hazard areas, fluvial erosion areas, and/or River Corridors, based on regulatory templates developed by the ANR DEC Rivers Program. (Selectboard, Planning Commission)
- Policy: New development in identified flood hazard, fluvial erosion, and river corridor protection
 areas should be avoided. If new development is to be built in such areas, it should not exacerbate
 flooding and fluvial erosion.
 - The Town will regulate any new development in identified flood hazard areas, fluvial erosion hazard areas, and/or River Corridors to ensure that development does not exacerbate flooding and fluvial erosion, and extend these provisions to development activities that might increase the amount and/or rate of runoff and soil erosion from upland areas. (Zoning Administrator, Development Review Board)
- Policy: The protection and restoration of geomorphic equilibrium, floodplains and upland forested areas that attenuate and moderate flooding and fluvial erosion should be encouraged.
 - ➤ The Town will further pursue a flood resilience management approach by implementing their Local Hazard Mitigation Plan and other strategies for restoring the stream geomorphic equilibrium conditions and enhancing the emergency preparedness that will mitigate the risks to public safety, critical infrastructure, historic structures, and municipal investments. (Selectboard)

- Policy: Flood emergency preparedness and response planning are encouraged.
 - The Town will include flood emergency and preparedness and response planning in the *Local Emergency Response Plan*. (Selectboard)
 - The Town will educate property owners regarding what they can do to reduce the risk of flood damage to infrastructure, improved property, people, and the environment. (Selectboard, Zoning Administrator, Development Review Board)

See Appendix 4 for the *Expanded Community Report for Newfane* by Flood Ready Vermont, which shows which Flood Hazard Mitigation Actions Newfane has adopted, and the date of adoption and approval by the state. (Selectboard) Additional information is available at http://floodready.vermont.gov/.

WILDLIFE RESOURCES & SPECIAL NATURAL FEATURES

The presence of abundant and diversified plant and animal species enhances the overall quality of life in Newfane by serving important ecological, educational, scenic and recreational functions. Fish, wildlife, and many plant populations also provide a practical barometer to the quality of Newfane's environment. Wildlife habitat and natural areas which support unique plant and animal populations require special protection from development activity.

Perhaps the greatest threat to Newfane's significant upland wildlife species is the gradual process of "parcelization" caused by dividing larger holdings into small lots. As land becomes fragmented, populations of large predators and herbivores, such as bear, coyotes, deer, moose, bobcat, fisher, and many valued songbirds that are normally found in wooded habitats characterized by less intense human use, are diminished.

Planning so that large portions of a town (and adjoining communities) are left forested minimizes many of the detrimental effects of parcelization on wildlife without sacrificing all the benefits to people that development often brings. Low density development and clustering, leaving large expansions of connected wooded habitat and buffer strips along waterways, will help to protect important wildlife habitat and corridors.

Deer Wintering Areas

Deer wintering areas provide relief from harsh climatic conditions. Wintering areas can be utilized by generations of deer over many decades if appropriate habitat conditions are maintained. Residential, commercial/industrial development within or adjacent to a deer wintering area decreases the amount of land available to deer and erodes a town's deer population, eventually decreasing the number of deer within the town.

The Natural Resources Map identifies deer wintering areas within the Town of Newfane as inventoried by the Vermont Department of Fish and Wildlife. Approximately 25% of Newfane's land area is designated as important deer wintering range, with the greatest concentration of lands located in the central western and northeastern areas of the community.

Bear Habitat

The black bear is a sensitive environmental indicator of the quality of Vermont's remote forestland. According to the Vermont Fish and Wildlife Department, Newfane contains substantial bear habitat. The area encompasses the most westerly one-third of Newfane's geographic area and serves as a gateway from the east to the corridor of bear habitat which runs throughout the entire central portion of Vermont.

Rare Species and Exemplary Natural Communities

There are some animal and plant species in Newfane that are considered rare and/or endangered by state and federal guidelines (see Table 17). Rare plants and animals contribute to the natural heritage and character of the local and regional communities. The Vermont Nongame and Natural Heritage Program (NNHP) has identified and mapped rare plants and animals in Newfane (see Natural Resources Map), Protection of these areas and species should be a high priority when consideration of new development and access is proposed.

Table 17: Special Natural Features: Exemplary Natural Communities & Rare Plant and Animal Habitat

Species/Community	Recommendations/Protection Needed
High diversity bivalve community of brook floater	Erosion and siltation resulting from brook land clearing,
(Alasmidonta varicose), threatened status in	grading sand construction of bridges, roads and other
Vermont	structures can bury and kill these bivalves. A lower
	water quality would potentially eliminate the bivalves.
Brook floater, Rivershore grassland Tubercled orchis,	See above. Erosion is also a threat to the rare plant
(Plantanthera flava var. hebiola), state threatened	community at the site.
Riverweed (Podosstemum ceratophyllum)	
Brook Floater;Tubercled orchis	See above
Leaffy-bracted aster (Aster foliaeus)	Location is only very approximate; this species is found
	along the river bank.
Brook floater	See above
Large-leaved sandwort (Moehringia macrophylla);	No herbicide spraying
grown in road cut	
Canada burnet (Sanguirora Canadensis)	Is scattered along the banks of the West River in 3
	towns, including Newfane. This is known only from the
	West River in Vermont.

Source: Nongame and Natural Heritage Program Department of Fish and Wildlife

Wildlife Resources & Natural Feature Policies

- 1. Avoid fragmentation of large blocks of significant wildlife habitat and maintain connectivity between habitat blocks as corridors for wildlife migration. Encourage cluster development where it can accomplish these objectives.
- 2. Protect bear habitat and deer wintering areas from development and other uses that may threaten the ability of the habitat to support these animals.
- 3. Protect and preserve rare and endangered plants, animals and natural communities.
- **4.** Minimize stream crossing that will impact aquatic life.

Wildlife Resources & Natural Features Recommendations

- 1. Obtain information on matters relative to the protection of forest resources, fish and wildlife areas, and areas of special natural features. (Conservation Commission)
- Protect wildlife habitat through the development of land use regulations that are sensitive to valuable habitat areas. Such measures. could include performance standards, buffer strip requirements, additional streambank setbacks requirements for low density development, and cluster development (Planning Commission)

AIR QUALITY

With little industrial development and a limited number of commercial farms, Newfane's air quality is generally good. The greatest concern to Newfane's air quality is from wood stove smoke and automobile exhaust. This is particularly true within the higher density residential areas of the community through which Newfane's network of major roads pass. Other potential sources of air pollution include local sand and gravel extraction activity.

Newfane's air quality is also affected by pollutants from distant sources, including acid rain precipitation originating in other states. These pollutants include heavy metals, the acid products of sulfates and nitrogen oxides, and ozone, all of which can damage Newfane's poorly buffered soils and water and plant and animal life.

Clean air is an essential component of Newfane's environment. While protecting Newfane from long-distance airborne pollutants is extremely difficult, at the local level measures can be implemented to minimize the potential impact of certain types of development and the cumulative effects of development on Newfane's overall air quality. For example, Newfane's zoning bylaws provide performance standards for all existing and potential development in Newfane. Air pollution in the form of odors, smoke, fly ash, fumes and gases is regulated by specific standards against which development activities are measured.

Air Quality Policies

1. Require that all development or land use activity comply with state and federal air quality standards and regulations.

Air Quality Recommendations

1. Review the air quality standards outlined in the Newfane Zoning Bylaw. (Planning Commission)

NOISE POLLUTION

Newfane does not have a noise ordinance, but has a policy in Rural District, see page 15, and otherwise defers to state regulations. The State of Vermont does not have regulations that set community noise exposure criteria, but does legislate noise during construction and in shooting ranges. In addition, Vermont statutes specifically speak to *Noise in the Nighttime in* 13 VSA § 1022.

FOREST RESOURCES

Like most communities throughout the West River Valley, Newfane's forests represent a major asset to the Town. Forests provide wood products, maple syrup, recreational areas, wildlife habitat and scenic areas and serve as a vital component in the natural water cycle. As noted in the Community Facilities and Services section of this Plan, there are two Town-owned parcels of forested land - the Newfane Town Forest and land along the east bank of the Rock River near the old dam in Williamsville.

As Newfane continues to grow, the community's forested areas may become increasingly fragmented, resulting in smaller parcels of forest land and diminished opportunities for economically viable timber management. One important statewide effort to stem the loss of productive forest land is Vermont's Use Value Appraisal Program whereby local landowners pay taxes based on the use value of their land, rather than the fair market value. The State reimburses the community for a portion of the difference between the taxes assessed at these two values. In exchange for a reduction in property tax landowners develop and implement long-term forest management plans. According to the Newfane Grand List, in 2017 there were 12,828 acres of forest land in Newfane enrolled in Current Use, approximately 52.6% of the town's total 24,389 acres.

Forests provide Vermonters with enormous benefits and a range of critical goods and services. A thriving forest economy, functioning natural systems, and Vermont's quality of life rely on maintaining healthy forests across our landscape. Forests benefits include water supply and water quality protection, flood control and protection, wildlife habitat and biodiversity, clean air, carbon sequestration, outdoor recreation, and scenic beauty. Forests also provide cultural, spiritual, and intellectual enrichment benefits. All of these benefits are known as ecosystem services because of the value they provide. Without forests, these services would need to be replaced and at a great expense.

HISTORY OF FORESTS IN VERMONT

Although forests cover 74% of the state today, at the time of European settlement, forests covered almost all of Vermont. Wide-scale clearing began in the early 1800s and reached its peak in the mid to late 1800s and reduced forest cover to about 35% of the state. Over the last century westward expansion, the decline of the sheep industry and reduced timber harvesting have contributed to the steady regrowth of Vermont's forests. Today's forests are the result of a major reforestation.

At present, reforestation is slowing as commercial and residential development increases. For the first time in a century, Vermont is experiencing an overall loss of forest cover. While it is hard to pin down the exact amount of acreage, a US Forest Service report indicates Vermont may have lost up to 69,000 acres of forest land between 2010 and 2015.

FOREST BLOCKS

A look at the larger pattern shows our forests are being fragmented by rural sprawl. It occurs incrementally, beginning with cleared swaths or pockets of non-forest within an otherwise unbroken expanse of tree cover. Over time, non-forest pockets tend to multiply and expand. Eventually the forest is fragmented and reduced to scattered, disconnected forest islands. The remnant forest islands resulting from this fragmentation are surrounded by land uses that threaten the health, function, and value of them for animal and plant habitat, and for human use. As forest fragments become smaller, practicing forestry can become operationally impractical, economically nonviable, and culturally

unacceptable. In turn, we lose the corresponding and significant contributions that forestry makes to our economy and culture.

Forests provide Vermonters with enormous benefits and a range of critical goods and services. A thriving forest economy, functioning natural systems, and Vermont's quality of life rely on maintaining healthy forests across our landscape. Forests benefits include water supply and water quality protection, flood control and protection, wildlife habitat and biodiversity, clean air, carbon sequestration, outdoor recreation, and scenic beauty. Forests also provide cultural, spiritual, and intellectual enrichment benefits. All of these benefits are known as ecosystem services because of the value they provide. Without forests, these services would need to be replaced and potentially at a great expense.

Forest pattern addresses the configuration of forest blocks and habitat connectors. The pattern is the degree to which forest blocks and habitat connectors connect across the landscape or within a particular town. A healthy forest pattern is one where a town's largest forest blocks connect to one another via smaller forest blocks and riparian areas. These large blocks also connect to large forest blocks beyond the town boundaries. This healthy forest pattern is a network of contiguous streams and forest blocks that extends across town, interrupted only by a few roads or non-forest land cover.

HABITAT CONNECTORS

Habitat connectors refers to land or water that links larger patches of habitat within a landscape to allow for the movement, migration, and dispersal of animals and plants. They can be a forest block, riparian area, or a specific road crossing that wildlife repeatedly use. Examples include small habitat blocks that serve as stepping stones between core forest, riparian habitat along streams and rivers, strips of forest cover between developed areas, hedgerows, or fencerows. Sizes can range from a fraction of an acre to one or two hundred acres.

Movement of animals from one habitat patch to another is the most common function attributed to habitat connectors. This is true for both wide and small ranged animals. Bobcats and black bears might use connections quite frequently, whereas spotted salamanders might use them only a few nights each spring to move from hibernation sites to breeding pools.

Habitat connectors should be considered at two scales: **landscape** and **local. Landscape scale** connectivity is important for connecting populations of wildlife over large areas or within a region. This allows for genetic variability and ensures migration. Examples of a large forest pattern that includes forest blocks and habitat connectors are the connections between the Green Mountains of Vermont and the White Mountains of New Hampshire. The habitat connectors between both mountain ranges allow for diverse and abundant wildlife populations that are able to withstand the effects of disease or other significant impacts. At this large scale, there is some overlap between forest blocks and habitat connectors. Very small forest blocks of minimal habitat or forestry value can function as connecting habitat. These smaller blocks serve an important connectivity role at a large landscape scale.

Habitat connectivity at the **local scale** occurs where roads overlap with the network of connected habitat. In some cases, fish and wildlife movement associated with specific road crossing areas is seasonal, as evidenced by salamander spawning migrations in early spring. In other cases, movement could be simple happenstance of an animal curious for new food sources on the other side of the road. Many species of wildlife are selective to specific habitat conditions along roads and are faithful to crossing them in the same place as long as those habitat conditions persist.

FOREST BLOCKS AND HABITAT CONNECTORS WORKING TOGETHER

The effects of forest fragmentation are minimized by maintaining an ecologically functional landscape. In Vermont, an ecologically functional landscape is one with large areas of connected forest, riparian areas, wildlife habitat and natural communities. A high degree of diversity and connectivity is needed to be resilient to shifts in ecological processes and to allow species to access required habitat. The degree of ecological functionality and connectivity varies with landscape condition. Conservation of only narrow threads of vegetative cover within a developing landscape will not maintain an area's ecological values, biological diversity, or plant and animal habitat needs. However, vegetative corridors can serve as habitat connectors. Conservation of vegetative corridors in conjunction with the maintenance of forest blocks with diverse habitat conditions will assist in supporting ecosystem functions and related public benefits.

An ecologically functional landscape is especially important in the context of climate change. Populations of species are already adjusting their home ranges to adapt to new conditions. Northward migration is occurring in response to warming temperatures, as well as in response to more complex changes in soil moisture and micro-climates. Movement resulting from climate change may also occur in more than one direction. Therefore, the overall network of connected lands and waters made up of forest blocks and habitat connectors in Vermont and throughout the northeast region is instrumental in allowing for migration of both plants and animals as our climate changes. .

DEFINITIONS

FOREST BLOCK: a contiguous area of forest in any stage of succession and not currently developed for non-forest use. A forest block may include recreational trails, wetlands, or other natural features that do not themselves possess tree cover, and uses exempt from regulation under subsection 4413(d) of this title.

FOREST FRAGMENTATION: the division or conversion of a forest block by land development other than by a recreational trail or use exempt from regulation under subsection 4413(d) of this title.

HABITAT CONNECTOR: land or water, or both, that links patches of wildlife habitat within a landscape, allowing the movement, migration, and dispersal of animals and plants and the functioning of ecological processes. A habitat connector may include recreational trails and uses exempt from regulation under subsection 4413(d) of this title. In a plan or other document issued pursuant to this chapter, a municipality or regional plan commission may use the phrase "wildlife corridor" in lieu of "habitat connector."

RECREATIONAL TRAIL: a corridor that is not paved and that is used for hiking, walking, bicycling, cross-country skiing, snowmobiling, all-terrain vehicle riding, horseback riding, and other similar recreational activity.

Table 18: Benefits and Ecosystem Services of Forest Blocks and Habitat Connectors.

BENEFITS	FOREST BLOCKS & HABITAT CONNECTORS	
Forest Products Economy	The harvest and manufacturing of forest products contributes \$1.4 billion in annual economic output to Vermont's economy.	
Economics of Scenery, Fall Foliage, Tourism, and Recreation	A large percentage of recreation and tourism activities are vitally linked to the forest and money flowing in to Vermont's economy can be attributed directly or indirectly to forest based recreation and tourism.	
Flood Protection	Healthy forests play a vital role in absorbing water and moderating its movement across the landscape. Although forests cannot prevent large floods outright, they do temper their frequency, intensity, and extent, which in turn significantly reduces the loss of life and damage to property that serious flooding causes.	
Clean Water Supply	Forests provide clean water for drinking, recreation and habitat. This contribution reduces, and in some cases eliminates, the need for expenditures related to manmade infrastructure designed to ensure clean water.	
Clean Air	Tree leaves serve as sponges for many air pollutants removing them from circulation where they do harm to humans. Fine particulate air pollution has serious human health effects, including premature mortality, pulmonary inflammation, accelerated arteriosclerosis, and altered cardiac functions. Forests intercept many air pollutants and store them temporarily on leaves and ultimately on the forest floor and within soil.	
Wildlife Habitat	Forests provide the habitat for a great number of wildlife species. Vermonters value wildlife, and recognize how wildlife uses and shapes our environment. Wildlife provides other benefits that are rarely recognized by the general public such as pest control, seed dispersal, pollination and nutrient cycling. These contributions and others are critical for proper ecosystem functioning and sustainable delivery of ecosystem services from our forests.	
Biological Diversity	Forests provide crucial habitat for healthy and sustainable populations of native plants and animals.	
Climate Change Mitigation	Forests pull carbon from the atmosphere and store it in the soil, trees and other vegetation. This process of carbon sequestration regulates atmospheric carbon, thereby moderating the rate of climate change and its associated impacts.	
Public Health	Forests improve human health and contribute to Vermont's unique and exceptional quality of life. See also benefits under clean water, clean air, and climate change.	
Cultural Heritage	Vermonters value the working landscape and recreational heritage.	
For more information on the benefits of forests and habitat connectors see the 2015 Vermont Forest Fragmentation Report at vtforest.com.		

Source: PLANNING A Key Step Toward Protecting Forests and Wildlife Resources, Act 171 Guidance, Draft 12/14/17

FOREST RESOURCE POLICIES

- 1. Direct growth to locations that will not negatively impact Newfane's valuable forest resources
- 2. Protect the ecologic and economic viability of Newfane's forests.
- 3. Encourage the sale or gift of land rights to land trusts or private conservation groups to maximize forest land and contiguous forest tracts.
- 4. Encourage the local manufacture and marketing of value-added forest products.
- 6. Avoid fragmentation of large blocks of significant wildlife habitat and maintain connectivity between habitat blocks as corridors for wildlife migration.

FOREST RESOURCE RECOMMENDATIONS

- 1. Implement land use regulations that will allow for the cluster development outside of the forest blocks in order to prevent the fragmentation of large tracts of forest land and to protect locally significant forest lands within those tracts. (Planning Commission)
- 2. Complete a full analysis of Newfane's forests in compliance with Act 171
- 3. Consider appropriate steps to encourage the voluntary protection of agricultural and forest lands. (Conservation Commission)
- 4. Develop strategies to protect long-term viability of agricultural and forestlands and to maintain low overall density.
- 5 Encourage the manufacture and marketing of value-added agricultural and forest products
- 6. Encourage the use of locally-grown food products.
- 7. Encourage sound forest and agricultural management practices.
- 8. Plan public investment so as to minimize development pressure on agricultural and forest land.
- 3. Coordinate with Vermont Land Trust regarding the management of large blocks of undeveloped forest and land. (Selectboard, Conservation Commission)
- 4. Encourage landowners to seek technical forestry expertise to develop a forest management plan and institute proper timber management techniques. (Select Board, County Forester)
- 5. Resurrect the Village Tree Committee to survey, plant and supervise the location of additional shade trees within Williamsville and South Newfane.

AGRICULTURAL RESOURCES

Although much of Newfane's valleys and lower hills were once cleared for subsistence farming, primary agricultural soils are limited to a few localized areas within the community. Many old farms have been abandoned and allowed to revert back to forest. Many local residents are involved in farming activity, including small-scale truck farming, nursery and greenhouse production, having and the raising of livestock for meat and fiber production. These operations offer job opportunities and access to fresh locally grown goods and help to retain the open, rural character of the Town.

Newfane's agricultural resources, although marginal on a regional scale, are nevertheless valuable. The long term preservation of locally important farmlands and the productive capacity of primary agricultural soils will ensure that future generations have adequate opportunities for food and fiber production. Farmland protection can be part of a larger effort to retain natural systems and processes such as wetlands, watersheds, aquifer recharge areas, flood plains, and wildlife habitat. In addition, the presence of working farms and the open space provided between fields and wooded hillsides enhance Newfane's scenic quality which, in turn, directly contributes to local tourism.

The Newfane Conservation Commission compiled a local agricultural product guide to raise awareness about local agriculture. The guide highlights 29 area farms and provides contact information and direction.

Agricultural Resources Policies

- 1. Devote primary agricultural soils, as defined by Act 250, to agricultural uses or to uses that do not diminish their potential for agriculture.
- 2. Direct growth to locations that will not negatively impact Newfane's valuable agricultural resources which include primary agricultural soils and active farms.
- 3. Support local, regional and state efforts to protect agricultural resources so long as landowners are ensured a reasonable use of their property.
- 4. Encourage the local manufacture and marketing of value-added agricultural products.
- 5. Support the sale or gift of land rights to land trusts or private conservation groups to maximize prime agricultural soils and the preservation of locally important farmlands.

Agricultural Resources Recommendations

- 1. Explore various agricultural resource protection strategies which may be applicable to Newfane, including but not limited to, incentive programs, land use controls, and a transfer of development rights program. (Planning Commission)
- **2.** Locate and name all the farms in the Town of Newfane. (Conservation Commission, Planning Commission)

EARTH AND MINERAL RESOURCES

Newfane contains relatively rich supplies of mineral resources compared to many of its neighboring communities. There are abundant sand and gravel deposits along the West River, Rock River, Marlboro Branch, Smith Brook, Baker Brook, and along Route 30. Deposits of ultramafics (talc, soapstone and serpentine) are located in the western most sections of the community, particularly along the Newfane/Dover border.

Extensive land development activity in Windham County over the past decade has increased the need for sand and gravel resources for construction, building foundations, septic systems and driveways, as well as regular maintenance of these facilities. Resistance to sand and gravel extraction operations in

neighboring communities, however, has placed a disproportionate burden on Newfane to meet increased regional demand for mineral resources. This demand has had a major impact on the natural and social environments of localized areas of Newfane.

While Newfane's sand and gravel operations are economically important to the Town and the region, they clearly present special land use problems which must be adequately addressed in order to protect the health, safety and welfare of the general public. By their very nature, sand and gravel pits can be one of the most visibly destructive intrusions of any local land use regularly practiced in Newfane. Of particular local concern are the following issues:

- 1) Degradation of surface and groundwater quality through site erosion and discharges of contaminants into exposed surface areas
- 2) Destruction of important wildlife habitat
- 3) Deterioration of scenic beauty
- 4) Localized air and noise pollution
- 5) Property devaluation
- 6) Structural deterioration of the Town's local bridges and roads, and the associated cost of repairs, through repeated transporting of heavy loads of sand and gravel
- 7) Traffic and pedestrian hazards caused by increased truck traffic on local roads
- 8) Lack of adequate enforcement by the state to ensure compliance with state permit requirements. While Newfane has had many sand and gravel pits over the years, there are an estimated five active sand and gravel pits (Table 18) as of June 2012. Local commercial sand and gravel pit operators sell their products to area contractors and to the towns of Wilmington, Dover, Marlboro, Readsboro and Newfane.

Table 19: Sand and Gravel Pits in Newfane		
Name of Pit	Location	Size
Plimpton Excavating	Off Route 30 (Double D Dr)	11.5 acres of 13.5 used for mining
Thrower/Dessaint	Depot Road	15 acres of 60.5 used for mining
A.S. Clark & Sons	River Road	6 acres of 8 used for mining
Fitzpatrick Excavating	VT Route 30	40.6 acres of 42.66 used for mining
Holcomb/Bell	Off Dover Road (Holcomb Rd)	10 acres of 67.5 used for mining

Part of the difficulty in mitigating the negative impacts of local sand and gravel extraction is the fact that state and local permits are not required for many smaller operations in Newfane that have been in operation for many years. This is a result of the provisions of "grandfathering" which exist in both local zoning regulations and in Act 250 law. In both cases, a substantial change in use, including increased rates of extraction or the use of new equipment within the pit, will trigger local and state permit review requirements. The burden of alerting local and state officials of substantial changes often falls upon concerned neighbors and citizens.

As development pressures continue within the region the citing of new earth and mineral extraction operations and the expansion of existing operations in Newfane will clearly be proposed. It is in the interest of both the Town and developers to know, in advance of beginning new extraction activity, whether or not a specific site is "appropriate" for the extraction of earth and mineral resources.

Information regarding the location of deposits and guidelines for identifying the suitability of sites for extraction operations are critical elements in local land use planning. Clearly, contractors, landowners, development interests, and local planners face the dual challenge of providing access to the resource while maintaining a healthy natural and social environment.

Earth & Mineral Resources Policies

- 1. Protect earth and mineral deposits which provide aquifer recharge or are located in other environmentally-sensitive areas from development.
- 2. Require that plans for earth and mineral resource extraction include measures to minimize noise and adverse impacts on aesthetics, ground and surface waters, air quality, adjacent properties, traffic on local roads and bridges, wildlife habitat, adjacent properties, and the character of the area.
- **3.** Require that all proposals for earth and mineral extraction include a site rehabilitation plan that ensures the possibility of future use of the land.

Earth & Mineral Resources Recommendations

- 1. Amend the Newfane Zoning Bylaw to include conditional use review of all proposed mineral extraction operations, and require such operations to meet strict health, safety and environmental performance standards. Under conditional use approval, submission of an excavation plan and a site restoration plan should be required. (Planning Commission)
- 2. Continue coordination with appropriate law enforcement agencies to enforce restrictions on local roads and bridges. (Selectboard)

SCENIC RESOURCES

Newfane's landscape is one of the community's most valuable assets. Back roads and trails, open lands, waterways, wetlands, forested hilltops and historic village areas all contribute to the quality of life for the community's residents and visitors.

Scenic resource protection measures available to the Town include outright purchase of scenic lands, scenic easements or development rights, review of the scenic impact of public investment activities, designation of scenic roads, public education, and regulation through zoning and subdivision regulations. Maintaining scenic quality requires coordination of these and other techniques.

Scenic Resources Policies

- 1. Protect and preserve areas of high scenic value including river corridors, scenic travel ways, scenic vistas, and other landscapes and sites.
- 2. Minimize visual impacts of communications towers and other high-elevation structures through location, design, siting and color choice.

Scenic Resources Recommendations

- 1. Identify, define and map significant scenic resources in Newfane. (Planning Commission, Conservation Commission).
- 2. Consider appropriate measures to protect scenic vistas. (Planning Commission)

ENERGY

Energy resources are necessary for transportation, heating, and electricity generation. Sufficient and affordable energy supplies are important to a town's growth and economic development. Currently Newfane's energy needs are being met although affordability is increasingly problematic.

LOCAL ENERGY CONSUMPTION

Newfane has a variety of energy resources available including electricity from public utilities, fuel oil, gasoline; and propane from local suppliers. Newfane residents heat their homes primarily with fuel oil. The remaining homes are primarily heated with wood, propane, electricity, and other fuels. Solar, hydro, wind, and photovoltaic energy sources are beginning to be used locally at a residential scale

A major electrical distribution line crosses Newfane. The Vermont Electric Power Company (VELCO) operates and manages transmission of electrical energy throughout Vermont. Electricity is supplied within Newfane by Green Mountain Power (GMP).

ALTERNATIVE ENERGY SOURCES

Solar

Increasing energy costs from traditional sources are resulting in an increased use of alternative energy sources to supplement home heating and electrical generation. Currently, burning fuel wood and use of wood pellet stoves are common. Other sources that Newfane residents can take advantage of include solar and wind.

Solar is one of the most exciting renewable energy sources because it can be accessible to almost anyone who is interested in reducing their carbon footprint and saving money over time. Solar projects come in all sizes from small-scale rooftop and small arrays near homes to large-scale utility sized solar farms powering thousands of homes.

As solar power has become more affordable, homeowners have taken advantage of tax credits to install solar arrays. The Town encourages residential and business solar installations to take advantage of measures that will result in passive solar energy for heating and lighting.

The Town of Newfane has a 500-kilowatt generating solar facility built at NewBrook Elementary on school land. The project included the solar array and 23 Air-to-Air heat pump units were completed in 2017. There is also an approved site at the former Newfane Town Landfill.

Electrical Storage

Tesla also has marketed a whole house lithium ion battery support panel. Vast majority of residential solar energy systems are connected to the electrical grid. When panels are producing more electricity than the home needs, excess is fed back into the power grid. In most cases you receive a credit and utility balance is sent back to into the grid. When the home uses more electricity than the solar panel generates, you can use those credits instead of having to pay more on your utility. This is what is known as Net Metering.

Heat Pumps

Heat pumps offer an energy-efficient alternative to furnaces and air conditioners. Like your refrigerator, heat pumps use electricity to move heat from a cool space to a warm space, making the cool space cooler and the warm space warmer. During the heating season, heat pumps move heat from the cool outdoors into your warm house and during the cooling season, heat pumps move heat from your cool house into the warm outdoors. Because they move heat rather than generate heat, heat pumps can provide equivalent space conditioning at as little as one quarter of the cost of operating conventional heating or cooling appliances.

The most common type of heat pump is the air-source heat pump, which transfers heat between a building and the outside air. Today's heat pump can reduce electricity use for heating by approximately 50% compared to electric resistance heating such as furnaces and baseboard heaters. High-efficiency heat pumps also dehumidify better than standard central air conditioners, resulting in less energy usage and more cooling comfort in summer months.

Green Mountain Power and Vermont Efficiency have financing options that support the installation of air-to-air heat pumps.

Outdoor wood furnaces or boilers

The Town encourages landowners to manage their forest resources in a manner that can provide a sustainable resource for home heating. Outdoor wood furnaces or boilers are gaining popularity as a home heating method. These are free-standing combustion units located outside the home or structure that is to be heated. When used properly these systems can be a clean and economical way to heat a house and water. The State of Vermont has regulations pertaining to these systems. Towns are permitted to have their own ordinances regulating outdoor wood furnaces.

Wind

Small, home based wind energy systems can be used to augment or replace other energy supplies. The feasibility of using one of these facilities is dependent on elevation and wind speeds. Homeowners with a home base wind system do have the opportunity to connect to the power grid and sell excess electricity generated to the power company under a system called net-metering. Under Vermont law, municipalities can only regulate wind systems that are not tied into the power grid. Newfane does not currently regulate small, home based wind systems; for safety purposes, regulation should be considered.

Electric Vehicles

Alternative resources for energy are becoming more prevalent in specific areas of the country for electric vehicles (EV) and solar powered generators used in homes during power outages. As more and more EV are produced and improved upon, charging stations across the country will become more prevalent to aid travelers on extended journeys. Tesla Corporation has created auto charging stations now in areas where EV are prevalent. The Fat Crow Restaurant in Newfane has three such hookups. Private residences, businesses and work places are installing charging stations as EV become more and more commonplace.

The average EV has a 100 mile range but the average driver covers only about 30 miles a day so an at-

home charging station would keep such a vehicle fully charged every day. EV ranges are now reaching 300 miles on a single charge. EV charging times per Tesla can take from 6-8 hours at a regular electrical hookup, 1-4 hours at a charging station or twenty minutes at a Fast Charging station but all particulars are based on charging station accessibility, wait time and the required vehicles length of charge. Cost for charging at a public access points can vary as charging stations can set their own charging fees right now for start rate cost, time rate per minute cost and Kwh charge rate. As more and more EV flood the market, regulations to stabilize those rates will most likely come to be. Tesla's latest EV box charges up to eight times faster than a regular outlet. Average electrical fee is plus or minus .12/Kwh in U.S. so for a 100-200 mile drive on a single charge; it would run about \$7.20

ENERGY CONSERVATION

Newfane is dependent upon energy generated from outside its borders. Energy conservation is one way to reduce this dependency and develop more efficient use of energy. The fluctuating costs of energy (e.g., gasoline, heating fuels) are expected to increase local interest in conservation measures. Newfane should, as a community, help to encourage the efficient use of energy and the development of renewable energy resources. This can be accomplished through local land use planning and solid waste management activities.

Energy savings can be realized by retrofitting existing buildings with insulation, more efficient doors and windows, weather-stripping, compact fluorescent lights, and more efficient appliances. The Southeastern Vermont Community Action (SEVCA) offers a Weatherization Program that can help income-eligible homeowners and renters. SEVCA can also provide assistance in the event of a heating emergency. Efficiency Vermont, a state program, offers rebates on Energy Star lighting and appliances.

Recycling can help reduce air and water pollution as well as environmental degradation resulting from the extraction of natural resources. Newfane residents are encouraged to recycle their solid waste materials through hired hauler or at the Windham Solid Waste Distribution Center in Brattleboro.

Effective land use planning can promote energy conservation. Targeting new development towards areas located close to the community's major roads and existing settlements will minimize the energy consumed by residents' commuting, reducing the energy required to deliver essential services. Decisions concerning capital expenditures on roads and other municipal infrastructure should be mindful of energy conservation.

Newfane continues to support land use activity which promotes the production and use of renewable resources, such as forest management practices. The siting, design and construction of buildings strongly influences the amount of energy needed for heating as well as the amount of electricity needed for lighting. Proper subdivision design, building orientation and landscaping provide opportunities for energy conservation. Designs incorporating passive solar space and domestic hot water heating, natural lighting and photovoltaic electricity production contribute to energy conservation.

As noted in Economic Development, Employment categories and Travel Time, 87% of Newfane's working residents travel out of town for employment. Newfane can participate in various regional efforts to develop energy-efficient modes of transportation, including public transit, carpooling and bicycling. The

Town can also work with neighboring communities to share public facilities and services, where possible.

ENERGY CONSERVATION POLICIES

- 1. Encourage energy conservation by promoting development that concentrates growth near the village centers, allows for cluster housing, site buildings for solar gain and minimize road construction.
- 2. Make Town-owned buildings as energy efficient as possible.
- 3. Encourage the use of onsite or locally-obtained renewable energy resources as long as implementation is consistent with resource conservation policies outlined in this Plan.
- 4. Support energy conservation and energy-efficiency programs of SEVCA, Efficiency Vermont and Energy Star Homes.
- 5. Promote strategies that reduce driving, such as carpooling, public transit and infrastructure that can support telecommuting.

ENERGY CONSERVATION RECOMMENDATIONS

- 1. Monitor municipal energy use and, where feasible, implement energy conservation measures and the use of renewable energy sources. (Selectboard)
- 2. Make information available regarding local and statewide organizations with programs that provide information on how to become more energy efficient, and how to manage resources to ensure sustainable use. (Selectboard)
- 3. Complete energy mapping per VT Act 174.
- 4. Evaluate and propose methods to allow for clustered housing. (Planning Commission)
- 5. Evaluate and propose regulations for residential wind energy systems and an ordinance for outdoor wood furnaces. (Planning Commission, Selectboard)

ECONOMIC DEVELOPMENT

Introduction to Economic Development

Economic development is one of the primary reasons that people choose to organize themselves into villages, towns and cities. People develop resources collectively to create a "commonwealth" where all share in the prosperity and the goods of life. Poorly planned economical development can lead to a societal imbalance causing a disparity in opportunity. This is a contradiction of the common good and violates human dignity; not everyone is able to participate in and contribute to the community in which they live. The challenge of economic development is felt and seen everywhere at the kitchen table poring over mounting bills and when looking at our streets and the landscape as we walk and drive from village center to village center.

Newfane's Economy - One Economy or Many?

The Town of Newfane does not have one "economy" but participates in many. To be sure, one economy is local and made up of locally-owned businesses such as restaurants, lodging and services. Non-locally owned businesses contribute to the well-being and prosperity of residents and non-residents alike. Yet another economy is located well outside of Newfane where residents depend on employment in other towns, cities, and even other states far from Newfane.

The Town of Newfane is embedded in a river valley and along a major numbered state road, Route 30. The Town is located within a county, a region, a state, and, arguably, even urban contexts far afield. We think of ourselves as rural, but what is possible for us depends as much, if not more, on the influence of surrounding towns, cities and states for whatever prosperity it can secure. The Town of Newfane may have operated and thrived on its own in the distant past, but nowadays we have to negotiate a complex relationship between small town goods and services and the larger economic picture that undergirds what is possible here. For example, could Newfane Market exist without tourists during ski season or leaf season? Our economy is never completely our own and if we are to thrive, we have to think regionally in cooperation with other entities.

The Central Challenge in Newfane's Economy

The Town of Newfane takes great pride in the historic character of its four villages (Newfane, Williamsville, South Newfane and Brookside) which is an economic driver and attracts residents, businesses, and tourists. Yet, the desire to develop our economy (literally, to manage, administer, and expand our resources) competes with a natural desire to preserve what makes the Town of Newfane unique and special. The central challenge is how to balance our historic character with the need for an economy that invites the widest possible participation.

In the 2017 Town-wide Survey this challenge appeared numerous times with many respondents desiring more employment opportunities and expanded housing, while still wanting to preserve the character of the town. As the Planning Commission moves forward with additional community forums and focus groups, this will make for lively discussions.

Home occupations and resource industries are located throughout Newfane. Home occupations continue to serve an important role in Newfane by allowing for local economic development, encouraging the creation of new businesses and providing flexible or accessible working conditions for

residents. The Town recognizes the need of some residences to use their place of residence for limited non-residential activities. However, this must be balanced with the need to protect the character of its residential areas and to protect the neighborhoods from nuisance. Another challenge is when home occupations that were once traditional or customary have evolved into commercial enterprises which may no longer compatible with residential areas. In the near future new home industries, such as Air BnB, computer technologies and online sales such as eBay, will broaden the scope of our challenges and opportunities.

Employment Categories and Travel Time

Newfane's businesses are primarily located on paved roads in and around Newfane Village and, to a lesser extent, in South Newfane and Williamsville. Local businesses include a building supply company, a town market, nurseries, antique dealers, book store, repair shops, education, tourist hospitality, artisans, antique restorers, auto mechanics, skilled tradesmen a once thriving seasonal flea market, eating and lodging establishments, and professional services. Forestry and agricultural businesses represent a large portion of Newfane businesses including sugaring, truck farming, animal husbandry and bee keeping, sand and gravel extraction. Home businesses are a growing component of Newfane's economy. Residents travel to nearby Townshend and Brattleboro as well as Keene, New Hampshire for most of their major goods, including groceries and pharmacy needs.

An economy is not only about business entities but about employment. Newfane's employment profile can be summarized in the five categories below. (For more detailed analysis of Newfane's employment profile by category, see Appendix 1 and 2016 Town Profile by Windham Regional Commission.)

Table 20: Employment by Occupation

Employment Category: 2015	Number Employed	Percentage of Employed
Management, business, science, and arts occupations	399	45%
Service occupations	114	13%
Sales and office occupations	186	21%
Natural resources, construction, and maintenance occupations	114	13%
Production, transportation, and material moving occupations	73	8%
Total	886	100%

The total <u>travel time to work</u> is one indication of the number of employed working in the Town of Newfane itself. According to a fairly conservative read of the total travel time to work (that is, any commute taking 20 minutes or more), the percent of people who work outside of Newfane is 67%.

If a commute taking 15 minutes or more is considered to be work outside of Newfane, the percent of people working outside of Newfane jumps to 87%. However, almost 71% of all workers have a commute of 30 minutes or less suggesting that a regional approach to employment is a necessity. That is, while Newfane may not be supplying workplaces for a substantial percentage of its employed residents within town limits, people are finding work in neighboring towns and villages. (Read the data and draw your own conclusions in Appendix 2, Newfane's Employment Profile – Transportation and Travel Time to Work.)

In short, Newfane is a classic "bedroom town" – we might want more economic development but will it disturb our sleep? Residents are rightly concerned about noise, sound, and light incursions into the natural environment.

FACTORS AFFECTING ECONOMIC DEVELOPMENT

Newfane supports economic development that meets the social and economic needs of its residents while preserving the environment's ability to support it. As Newfane plans for its economic growth, the following factors must be considered:

Infrastructure: Adequate infrastructure is essential to support economic activities. Newfane does not have a public water or sewer system anywhere in Town. This limits the scale and type of businesses which can locate in Town.

Land Use: An area of concern is the spread of commercial development along Route 30 north and south of Newfane Village. Consideration must be given to the future needs of these areas by maintaining flexibility to allow for the expansion of business operations while preventing expansion of commercial growth that is out of scale with existing development along the Route 30 corridor.

Regulatory Environment: In 2004, the select Board voted to form a Development Review Board (DRB). The DRB is responsible for all local development review functions, which establishes consistency in the conditions attached to the permit.

Newfane has zoning bylaws and adopted subdivision regulation. This fact makes the entire Town a "10 acre town" in the Act 250 process. This means that state has jurisdiction over all commercial projects affecting 10 acres or more. This is important as Act 250 permits can take considerable time and expense.

Village Center Designation & A Summary of Revitalization Efforts (by village)

One of the most significant economic developments in the Town of Newfane included the amendment to the 2013 Town Plan to include support for Designated Village Centers for Newfane, South Newfane, and Williamsville. Village Center Designation (VCD) is a State of Vermont initiative. According to the Agency of Commerce and Community Development, VCD is a "community revitalization program [that] helps maintain or evolve small to medium-sized historic centers with existing civic and commercial buildings. The designation supports the historic center and targets training and financial incentives to bring additional public and private investment to spark village revitalization." (See http://accd.vermont.gov/community-development/designation-programs/village-centers, accessed March 3, 2018).

As the application for VCD notes, "the purpose of the village zoning district is to preserve the historic integrity and support the traditional role of the village as the focus of many of the social and economic activities that support the surrounding community, and to provide for residential and commercial development, as well as governmental uses that serve the needs of the village and the community." VCD is a direct attempt to balance the competing priorities of preserving the Town of Newfane's historic character with the need for economic development.

The Amendment to the Town Plan to include a statement supporting Village Center Designation was adopted by the Selectboard on February 20, 2017. See page 65

Figure 3: Income & Employment

Income & Employment

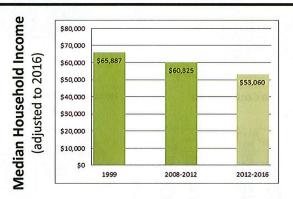
WINDHAM REGIONAL COMMISSION

2012-2016 Less than

Household Income

Understanding the American Community Survey

Data published in 2012 are 5 year **estimates** and do not reflect actual counts like population, age, or sex. These estimates are useful when analyzing tends in small populations, but should be used cautiously when making direct comparisons; they are estimates over a period from 2008 to 2012 and have a relatively large margin of error. The American Community Survey is conducted year round to gather "period" data, unlike the decennial census which is only conducted every ten years and collects "point-in-time" data.

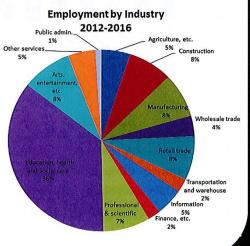


An estimated 11.2% of the town's population was below the poverty level in the period 2012-2016, an increase from the 2008-2012 period where it was 7.7%. In comparison, 14.0% of individuals were below the poverty level in Windham County in the period 2012-2016.

The median estimated household income in the period 2012-2016 decreased from 2012 to \$53,060. To compare Newfane's median income with neighboring towns, see Reference 2 on page 4.

Newfane's resident employment by industry saw decreases in the finance and transportation and warehouses sectors and increases in the wholesale and other services sectors since the 2008-2012 period

During the period 2012-2016, 34.0% of Newfane residents worked in Newfane, including the 22.6% of residents that worked at home. See Reference 3 on page 4 for details on travel, and Reference 4 for details on Newfane's household vehicle ownership.



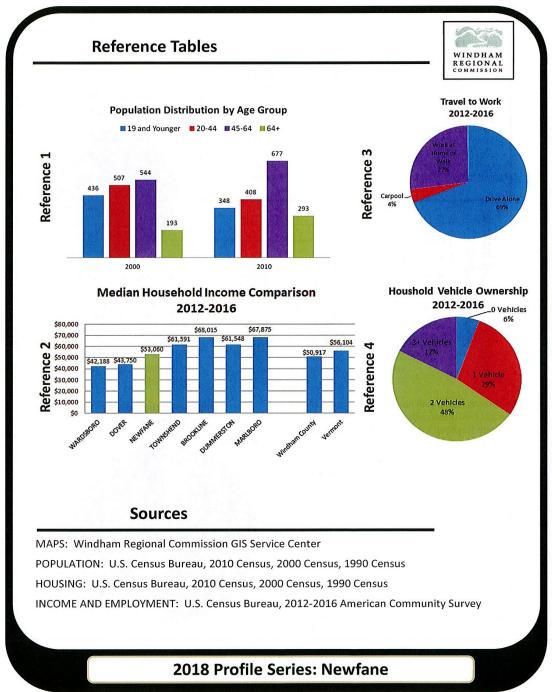
2018 Profile Series: Newfane

2

Newfane Town Profile 2018

Windham Regional Commission, April 2018

Figure 4: Reference Tables



Newfane Town Profile 2018

Windham Regional Commission, April 2018

Adopted Amendment to the Newfane Town Plan

The Town of Newfane supports the development of, and intends to apply for, Village Center Designation for the three villages in the Town of Newfane, Newfane Village, Williamsville and South Newfane.

The Village Center (VC) designation is non-regulatory; it is not a zoning overlay, nor is it a historic district. The VC designation process recognizes and encourages local efforts to revitalize Vermont's traditional village centers. Designated VCs receive priority consideration for state grants and other resources. Commercial property owners in designated VCs are eligible for tax credits to support building improvements (accd.vermont.gov). There is no financial burden on the Town for having designated Village Centers. Village Center Designation will support, encourage and expand community interaction, enhancing the assets of the three villages of Newfane, such as the Village Green and Union Hall in Newfane Village, Williamsville Hall in Williamsville, and the little schoolhouse in South Newfane.

Village Center Designation will provide the opportunity to improve connectivity and alternative transportation options such as ride sharing, bike paths and traffic calming, thereby improving the quality of life for residents and visitors alike.

Village vitality will be enhanced by being Designated Village Centers. The Village Center program provides opportunities for eligible projects within the designated areas to receive technical assistance and state funding. The program includes a variety of tax credit incentives to help reduce the costs of façade and life-safety/ADA compliance code related improvements, and some data and network installations and related HVAC costs. Eligible projects are given priority consideration for Municipal Planning Grants, grants from the Agency of Transportation, Agency of Natural Resources and the Community Development Program (CDBG.) In applying for Village Center Designation, the Town will:

- a. explain how designation helps implement the relevant goals in this Plan, linking the goals in the Plan to the relevant purposes and benefits of State designation. The plan shall explain previous, current and future revitalization activities.
- b. include the designation boundary on at least one map.

Village Centers offer the benefit of economical uses of public facilities, and services; we can preserve more of our forests and open spaces for future generations; our children have easier access to friends and community life in these small population centers; and, being close to neighbors, citizens are better able to take care of each other.

The following is a summary of previous and ongoing revitalization activities (by village) from the Town of Newfane's application for Village Center Designation. The revitalization activities were implemented by a number of parties, public and private.

All Villages:

- 1. Newfane's Planning Commission hosted a "Walk the Villages" event in October 2016 to educate residents and to gain feedback about Village Center Designation in the villages of South Newfane, Williamsville and Newfane. John Bennett from Windham Regional Commission, Richard Amore, Planning & Project Manager and Caitlin Corkins, Tax Credits & Grants Coordinator from Vermont Department of Commerce and Community Development walked with residents through the rain listening and answering questions. This was followed by an evening public presentation in Union Hall by Richard Amore and Caitlin Corkins.
- 2. Newfane Anew Community Volunteers (NACV) installed US Flags along VT Route 30 in Newfane Village and along Dover Road within the Villages of Williamsville and South Newfane.
- 3. Two cell towers have been installed and are now working throughout Newfane.
- 4. Expansion of the use of Front Porch Forum for events and activities.
- 5. Purchased and installed portable radar speed limit signs for traffic calming; these are moved throughout the villages.

Newfane Village:

- 1. Developed a village revitalization plan led by Windham Regional Commission and funded by an EDA disaster recovery grant.
- 2. Established the Park & Ride at Newfane Town Office through a VTrans grant.
- 3. Reopened the expanded The Four Columns Inn and Artisan Restaurant.
- 4. Opened the Fieldstone Lodge B&B
- 5. Opened Village Yoga.
- 6. Established a trail network that connects The Four Columns Inn and the Fieldstone Lodge B&B, connecting guests at the Fieldstone Lodge B&B to the Four Columns Restaurant.
- 7. Created a visitor/tourist center at Four Columns Inn.
- 8. Moore Free Library hosts concerts and art exhibits.
- 9. Moore Free Library hosts an annual community tag sale fundraiser on the Common. Community groups such as Newfane Anew Community Volunteer (NACV) and the Newfane garden club participate as vendors to raise funds for their organizations.

- 10. Annual Columbus Day Heritage Festival that draws thousands to the village (Newfane Congregational Church).
- 11. Purchased and rehabilitated the Newfane Railroad Depot (Windham County Historical Society); held the Grand Opening of the West River Railroad Museum, Newfane Railroad Station in October 2017. The Station's Water Tank House will be the final phase of the property restoration process. It is likely that the Tank House is the only surviving structure of this type in Vermont.
- 12. Operates the Newfane Anew Community Volunteer organization (NACV) that provides:
 - a. Holiday lighting of the Common.
 - b. Summer Concerts on the Common.
 - c. Winterfest Celebration with Santa, crafts, caroling and soup dinner at the church.
 - d. Pumpkin carving and Halloween haunted house silhouettes on the Common.
 - e. Assist with Library's community tag sale fundraiser on the Common.
- 13. Operators of the Newfane Creamery are currently (April 2018) rebuilding the restaurant that had been destroyed by fire; projected opening of a new restaurant in the summer, 2018.
- 14. Fayetteville Antiques located in the previously closed Newfane Country Store; opened in fall 2017.

South Newfane & Williamsville

South Newfane and Williamsville are home to contemporary artists whose creativity bolsters the local economy and keeps these tiny villages vibrant. Once a year, these artists organize the Rock River Artist's Tour, when they open their studios to the public. This event gives visitors a reason to travel this stretch of river that links Williamsville and South Newfane through geography, history, and the arts.

South Newfane

- 1. South Newfane Schoolhouse holds concerts and community events.
- 2. South Newfane Village Little Free Library opened in in December 2016 in the South Newfane Baptist Church.
- 3. Annual Old Home Day & Potluck by the South Newfane Baptist Church
- 4. New boiler and many repairs to the South Newfane Baptist Church.
- 5. Purchase of the South Newfane Inn; planned opening in 2018.

Williamsville

- 1. Opening of The Eatery (2014) in what was once the Williamsville General Store. Their use of regional, local to table fare, wood fired pizza and extensive brew list draws locals and visitors from all over.
- 2. Expanded use of Williamsville Hall for Senior Meals, Mother's Day breakfast, community meetings and pot lucks, theater, talent show, dances, movies, game nights and other community activities.

- 3. Purchase and renovation of the Williamsville Bread & Breakfast by owner of the Williamsville church across the road (no longer a church). Weddings and celebrations are being held in these jointly owned properties. The properties sit between Williamsville Hall and The Eatery restaurant.
- 4. Timson Hill Preschool, a one room schoolhouse and family cooperative, is an integral part of the Williamsville Village. They host an annual Spring Fair, a "Rabbit Run" and annual fundraiser in the Williamsville Hall.
- 5. There are town forest trails that start at the Town Garage on Williamsville Rd. Trails are maintained by the Newfane Conservation Commission.

POSSIBLE FUTURE REVITALIZATION ACTIVITIES

(source: Village Center Designation application)

All Villages

- 1. Investigate and implement strategies for expanded traffic calming in South Newfane, Williamsville and Newfane. Continue exploring other ideas and solutions to this continuing problem. Survey results pinpointed traffic speed as the top concern in all villages.
- 2. Increase membership and participation in the Newfane Anew Community Anew group by promoting the organization and activities.
- 3. Organize a lawn sale fundraiser for the three Newfane villages. The proceeds from each village could benefit the maintenance of a civic building in its respective village.
- 4. Organize an annual impromptu Snowman Festival with Newfane's three villages.
- 5. Collaborate with the Vermont Digital Economy Project (VDEP) to establish free public Wi-Fi hotspots in the village centers.
- 6. Install seasonal displays and planters in public spaces.
- 7. Develop Master Plans for all villages.
- 8. Organize a wooden sculpture event for Newfane's three villages. Each village could have its own theme.

Newfane Village

- 1. Establish a visitor information kiosk in the village core with maps and information, including local historical sites, outdoor recreational activities and visitor amenities. Expand upon the Four Columns Inn tourist information table.
- 2. Seek opportunities to expand distribution, and update if necessary, the self-guided tour pamphlet entitled "A Walk through Historic Newfane Village."
- 3. Construct a public restroom, with possible locations in the Village or the Park and Ride. Explore alternative, cost-effective options such as composting toilets.

- 4. Negotiate with Connecticut River Transit (CRT) to establish a public transit route along the Route 30 corridor. Designate a bus stop in the Village and/or the Park & Ride.
- 5. Install pedestrian walkways connecting the Village to Loop Road and Loop Road to Bruce Brook Road.

Williamsville

- 1. Insulate Williamsville Hall to allow year round use.
- 2. Promote Town Forest Trails and the Manitou Project, *Community with Nature*, a 235 acre woodland preserve adjacent to the Town Forest.

Williamsville/South Newfane

- 1. Design and implement a public greenspace with pedestrian amenities on the two Hazard Mitigation Grant Program (HMGP) buyout properties.
- 2. Construct a shared-use (pedestrian/bike) path following the river between South Newfane and Williamsville. The trail would also connect the villages to town greenspaces to be located at the Hazard Mitigation Grant Program (HMGP) buyout properties.
- 3. Develop a kiosk or other public place that can be used year round to post events and notices.

South Newfane

Develop a plan and implementation strategy to improve parking in South Newfane.

Economic Development Policies

- 1. Promote economic development that provides for the wise and sustainable use of Newfane's natural resources and preserves overall environmental quality.
- 2. Encourage the development of home-based work and entrepreneurial ventures which preserve and revitalize Newfane's rural character and have no adverse impact on the community's environment or infrastructure.
- 3. Prevent scattered development
- 4. Encourage local manufacturing and marketing of value-added agricultural and forestry products.

Economic Development Recommendations

- 1. Propose and adopt regulations that provide flexibility in allowing various types of non-residential activity at residences residential activity at residences in order to adequately provide for the needs and protection of residents. (Planning Commission and Select Board)
- 2. Provide for the adaptive re-use of buildings in the Zoning Bylaw. (Planning Commission)
- 3. Participate in economic development planning with neighboring towns through the lead efforts of the Windham Regional Commission, Brattleboro Development Credit Corporation, and the Brattleboro Area Chamber of Commerce. (Planning Commission & Selectboard)

Town Plan Maps

A series of maps has been prepared to assist the Planning Commission, public officials and citizens understand Newfane. These maps are for planning purposes only. Together with Town Plan policies, these maps will be used by the Planning Commission as a guide for appropriate bylaws and other measures necessary to implement the Town Plan. They should not be depended upon as the only basis for investment and development decision. The Town of Newfane disclaims any liability for losses incurred through inappropriate or improper use of these maps.

Map 1.	Existing Land Use
Map 2.	Proposed Land Use
Map 3.	Community Resources
Map 4.	Transportation System Map
Map 5.	Projects to Enhance the Existing Transportation System
Map 6.	Natural Resources Map
Map 7.	Newfane Designated Village Center
Map 8.	Williamsville Designated Village Center
Map 9.	South Newfane Designated Village Center
Map 10	Special Flood Hazards & River Corridors

Appendix 1

Newfane's Employment Profile – Employed Population: 16 years and over

	Ne	wfane tow	n, Windham	County, Vo	ermont
	Total	Male	Percent Male	Female	Percent Female
Subject Estimate Estimate	Estimate				
Civilian employed population 16 years and over	886	420	47.4%	466	52.6%
■ Management, business, science, and arts occupations:	399	150	37.6%	249	62.4%
Management, business, and financial occupations:	112	55	49.1%	57	50.9%
Management occupations	85	38	44.7%	47	55.3%
Business and financial operations occupations	27	17	63.0%	10	37.0%
Computer, engineering, and science occupations:	42	12	28.6%	30	71.4%
Computer and mathematical occupations	24	7	29.2%	17	70.8%
Architecture and engineering occupations	0	0	-	0	-
Life, physical, and social science occupations	18	5	27.8%	13	72.2%
Education, legal, community service, arts, and media occupations:	186	74	39.8%	112	60.2%
Community and social services occupations	18	5	27.8%	13	72.2%
Legal occupations	0	0	-	0	-
Education, training, and library occupations	123	40	32.5%	83	67.5%
Arts, design, entertainment, sports, and media occupations	45	29	64.4%	16	35.6%
Healthcare practitioner and technical occupations:	59	9	15.3%	50	84.7%
	44	5	11.4%	39	88.6%
Health technologists and technicians	15	4	26.7%	11	73.3%
Service occupations:	114	47	41.2%	67	58.8%
Healthcare support occupations	27	3	11.1%	24	88.9%
Protective service occupations:	10	10	100.0%	0	0.0%
Fire fighting and prevention, and other protective service workers including supervisors	10	10	100.0%	0	0.0%
Law enforcement workers including supervisors	0	0	-	0	-
Food preparation and serving related occupations	23	9	39.1%	14	60.9%
Building and grounds cleaning and maintenance occupations	40	25	62.5%	15	37.5%
Personal care and service occupations	14	0	0.0%	14	100.0%
■ Sales and office occupations:	186	68	36.6%	118	63.4%
Sales and related occupations	85	37	43.5%	48	56.5%
Office and administrative support occupations	101	31	30.7%	70	69.3%

Newfane tow			n, Windham County, Vermont			
	Total	Male	Percent Male	Female	Percent Female	
Subject	Estimate	Estimate	Estimate	Estimate	Estimate	
■ Natural resources, construction, and maintenance occupations:	114	88	77.2%	26	22.8%	
Farming, fishing, and forestry occupations	26	10	38.5%	16	61.5%	
■ Natural resources, construction, and maintenance occupations: Farming, fishing, and forestry occupations Construction and extraction occupations Installation, maintenance, and repair occupations Production, transportation, and material moving occupations: Production occupations Transportation occupations	59	59	100.0%	0	0.0%	
Installation, maintenance, and repair occupations	Total Male Male Female Female					
Production, transportation, and material moving occupations:	73	67	91.8%	6	8.2%	
Production occupations	52	46	88.5%	6	11.5%	
Transportation occupations	11	11	100.0%	0	0.0%	
Material moving occupations	10	10	100.0%	0	0.0%	

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

 ${\bf Appendix~2}$ Newfane's Employment Profile – Transportation and Travel Time to Work

	Newfane town,	Windham Cou	nty, Vermont
	Total	Male	Female
Subject	Estimate	Estimate	Estimate
Workers 16 years and over	832	407	425
MEANS OF TRANSPORTATION TO WORK			
Car, truck, or van	72.6%	72.2%	72.9%
Drove alone	71.4%	71.3%	71.5%
Carpooled	1.2%	1.0%	1.4%
In 2-person carpool	1.2%	1.0%	1.4%
In 3-person carpool	0.0%	0.0%	0.0%
In 4-or-more person carpool	0.0%	0.0%	0.0%
Workers per car, truck, or van	1.01	1.01	1.02
Public transportation (excluding taxicab)	0.0%	0.0%	0.0%
Walked	3.5%	1.0%	5.9%
Bicycle	0.4%	0.7%	0.0%
Taxicab, motorcycle, or other means	0.0%	0.0%	0.0%
Worked at home	23.6%	26.0%	21.2%
PLACE OF WORK			
■ Worked in state of residence	90.7%	91.6%	89.9%
Worked in county of residence	85.9%	84.3%	87.5%
Worked outside county of residence	4.8%	7.4%	2.4%
Worked outside state of residence	9.3%	8.4%	10.1%
Living in a place	2.5%	3.2%	1.9%
Worked in place of residence	1.2%	1.0%	1.4%
Worked outside place of residence	1.3%	2.2%	0.5%
Not living in a place	97.5%	96.8%	98.1%
Living in 12 selected states	100.0%	100.0%	100.0%
Worked in minor civil division of residence	33.5%	33.2%	33.9%
Worked outside minor civil division of residence	66.5%	66.8%	66.1%
Not living in 12 selected states	0.0%	0.0%	0.0%

	Newfane town	, Windham Co	unty, Vermont
	Total	Male	Female
Subject	Estimate	Estimate	Estimate
■ Workers 16 years and over who did not work at home	636	301	335
TIME LEAVING HOME TO GO TO WORK			
12:00 a.m. to 4:59 a.m.	6.9%	8.0%	6.0%
5:00 a.m. to 5:29 a.m.	3.0%	5.6%	0.6%
5:30 a.m. to 5:59 a.m.	2.4%	5.0%	0.0%
6:00 a.m. to 6:29 a.m.	10.1%	14.0%	6.6%
6:30 a.m. to 6:59 a.m.	8.5%	9.3%	7.8%
7:00 a.m. to 7:29 a.m.	21.2%	17.3%	24.8%
7:30 a.m. to 7:59 a.m.	16.0%	16.3%	15.8%
8:00 a.m. to 8:29 a.m.	9.1%	8.3%	9.9%
8:30 a.m. to 8:59 a.m.	6.3%	7.3%	5.4%
9:00 a.m. to 11:59 p.m.	16.5%	9.0%	23.3%
TRAVEL TIME TO WORK			
Less than 10 minutes	9.0%	5.6%	11.9%
10 to 14 minutes	7.1%	4.7%	9.3%
15 to 19 minutes	17.1%	19.9%	14.6%
20 to 24 minutes	23.9%	23.6%	24.2%
25 to 29 minutes	13.5%	15.0%	12.2%
30 to 34 minutes	7.7%	9.6%	6.0%
35 to 44 minutes	6.0%	5.6%	6.3%
45 to 59 minutes	10.2%	10.0%	10.4%
60 or more minutes	5.5%	6.0%	5.1%
Mean travel time to work (minutes)	25.7	26.5	24.9
VEHICLES AVAILABLE			
■ Workers 16 years and over in households	830	405	425
No vehicle available	1.7%	0.0%	3.3%
1 vehicle available	15.7%	14.1%	17.2%
2 vehicles available	55.4%	56.3%	54.6%
3 or more vehicles available	27.2%	29.6%	24.9%
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Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Newfane's Population Profile

Appendix 3

	Newfane town, Windha	m County, Vermont
Subject GENDER AND AGE Total population Female Male Under 5 years 5 to 9 years 10 to 14 years 15 to 19 years 20 to 24 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 59 years 60 to 64 years 65 to 74 years 75 to 84 years 85 years and over Median age (years) 18 years and over 62 years and over 63 years and over Male Female 65 years and over	Estimate	Percent
GENDER AND AGE		
Total population	1,808	1,808
Female	933	51.6%
Male	875	48.4%
Under 5 years	68	3.8%
5 to 9 years	52	2.9%
10 to 14 years	119	6.6%
15 to 19 years	105	5.8%
20 to 24 years	67	3.7%
25 to 34 years	173	9.6%
35 to 44 years	156	8.6%
45 to 54 years	262	14.5%
55 to 59 years	211	11.7%
60 to 64 years	204	11.3%
65 to 74 years	228	12.6%
75 to 84 years	114	6.3%
85 years and over	49	2.7%
Median age (years)	51.8	(X)
18 years and over	1,499	82.9%
21 years and over	1,422	78.7%
62 years and over	489	27.0%
65 years and over	391	21.6%
18 years and over	1,499	1,499
Male	722	48.2%
Female	777	51.8%
65 years and over	391	391
Male	196	50.1%

	Newfane town, Windham	County, Vermont
Subject	Estimate	Percent
Female	195	49.9%
RACE		
Total population	1,808	1,808
One race	1,802	99.7%
Two or more races	6	0.3%
One race	1,802	99.7%
White	1,800	99.6%
American Indian and Alaska Native	2	0.1%
Two or more races	6	0.3%
White and American Indian and Alaska Native	6	0.3%
Race alone or in combination with one or more other races		
Total population	1,808	1,808
White	1,806	99.9%
American Indian and Alaska Native	8	0.4%
HISPANIC OR LATINO AND RACE		
Total population	1,808	1,808
Hispanic or Latino (of any race)	16	0.9%
Puerto Rican	6	0.3%
Other Hispanic or Latino	10	0.6%
Not Hispanic or Latino	1,792	99.1%
White alone	1,784	98.7%
American Indian and Alaska Native alone	2	0.1%
Two or more races	6	0.3%
Two races excluding Some other race, and Three or more races	6	0.3%
CITIZEN, VOTING AGE POPULATION		
Citizen, 18 and over population	1,497	1,497
Male	722	48.2%
Female	775	51.8%

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Expanded Community Report for Newfane

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Emergency Relief and Assistance Fund (ERAF) - State Post-Disaster Funding

Flood Hazard Mitigation Actions	Action Dates		Responsible	ERAF Status
1. 2013 Road and Bridge Standards	02/17/2013		Newfane	Yes
2. Local Emergency Operations Plan	05/01/2017		Newfane	No
3. National Flood Insurance Program	06/05/1989		Newfane	Yes
4. Local Hazard Mitigation Plan	05/22/2015		Newfane	Yes
5. River Corridor Protection				No
ERAF Rate for Actions 1 - 4:12.5%,	Actions 1 - 5: 17.5%	ERAF Rate for:	Newfane	7.5%
66 Buildings in	the Special Flood Haz	ard Area (SFHA) (es	stimated from e911 s	ites).

AF Rate for Actions 1	1 - 4:12.5%, Actions 1 - 5:17.5% EKAF Rate for: Newtane 7.5	70
66	Buildings in the Special Flood Hazard Area (SFHA) (estimated from e911 sites).	
12	Flood Insurance Policies in SFHA (Zone A, AE, AO, A 1- 30)	
18%	Percent of buildings in the SFHA with flood insurance in force.	
3	Critical or public structures in SFHA or 0.2% flood hazard area (est. from e911 sites.)	
6%	Percent of buildings in the SFHA.	_
06/05/1989	National Flood Insurance Program (NFIP) (Enrollment Date)	_
DFIRM	Flood Insurance Rate Map Standard (Digital FIRM (DFIRM), Rough Digital, Paper)	_
Newfane	NFIP Status: Regular Program	_
	Community Rating System (CRS)	Τ
No	Local Emergency Operations Plan (LEOP) ERAF Status valid for Newfane?	Τ
05/01/2017	LEOP - annual update after Town Meeting and before May 1.	Τ
Yes	Local Hazard Mitigation Plan (LHMP) ERAF Status valid for Newfane?	Τ
05/22/2015	LHMP - Valid for 5 years from FEMA final approval date	Τ
EMA Formal Approval	LHMP - Status of review (Plans currently in review are valid for ERAF).	Τ
No	River Corridor Protection in Newfane?	
	River Corridor Interim Protection Status for ERAF valid for Newfane?	
07/22/2013	Municipal Plan - Valid for 5 years from adoption date	
09/18/2008	Zoning Adoption / Amendment Date	
	Hazard Area Regulation Adoption / Amendment Date	
Yes	2013 Road and Bridge Standards	
64.610	Town Highway Mileage in Newfane	
02/17/2013	Newfane Road and Bridge Standards and Adoption Date	
3/19/2018	Newfane_Certificate of Compliance with Road and Bridge Standards and Date	
	Town Highway Network Inventory Date	
80%	Town Highway Structures Grant Rate (State match 80% or 90%).	
70%	Class 2 Roadways Grant Rate (State match 70% or 80%)	
District 2	Project Manager email for VTrans Maintenance District 2	

- Note: if you have updated information please let us know:

 1. Road Standards and Certificates contact your VTrans District Project Manager: District 2

 2. Local Emergency Operations Plans or Local Hazard Mitigation Plans contact your Regional Planner
- 3. For other questions please contact VT DEC Flood Ready Atlas- River Corridor and Flood Hazard Maps

FLOOD READY VERMONT

The Newfane Town-Wide Survey Results exist as separate document.

The survey is posted online at www.NewfaneVT.com.

Requests for a paper copy can be emailed to NewfanePC@gmail.com or mail a request to:

Town of Newfane

Planning Commission

PO Box 36

Newfane, VT 05345.