TOWN OF FAIRFAX
NOTICE OF PUBLIC HEARING

Notice is hereby given to the residents of the Town of Fairfax, Vermont that the Fairfax Planning Commission will hold a hearing on July 17, 2018 at 7:00pm at the Town Office, 12 Buck Hollow Road, Fairfax, VT to consider for adoption of the draft Fairfax Town Plan 2013 pursuant to Chapter 117 of Title 24, Section 4387 and 4384 of the Vermont Statutes Annotated.

The draft Fairfax Town Plan includes eight (8) sections and four (4) appendices: Purpose; Implementation; Community Profile; Local Economy; Community Facilities, Utilities and Services; Infrastructure: Housing, Transportation, and Energy; Land Resources and the Built Environment; Compatibility with the Region and Adjacent Communities; Appendix 1– Community Data; Appendix 2-Fairfax Historical Record; Appendix 3-2017 Fairfax Town Survey Results; Appendix 4-Fairfax Enhanced Energy Plan. A full text of the draft Fairfax Town Plan is on file at the Fairfax Town Clerk's Office.

According to Title 24 of the Vermont Statutes Annotated, town plans must be readopted every five years or they will expire. The current Fairfax Town Plan expires on September 3, 2018. The purpose of the hearing is to receive public comments on the adoption of the updated plan and to discuss any comments provided by the public.

REPORT ON TOWN OF FAIRFAX MUNICIPAL PLAN UPDATE

Over the past year, the Fairfax Planning Commission has been working to complete an amendment to the "Town of Fairfax, Vermont Municipal Plan." This effort is part of a continuing planning process that guides the Town's decisions for future growth. The planning process conforms to the State's four planning goals of Chapter 117, Section 4302, which strive for a comprehensive planning process that includes *citizen participation*, the *consideration for the consequences of growth*, and *compatibility with surrounding municipalities and encouragement of municipalities to work creatively together to develop and implement plans.*

The current Town of Fairfax, Vermont Municipal Plan expires on September 3, 2018. The proposed municipal plan amendment provides an update to the 2013 plan and incorporates an enhanced energy plan enabled per 24 V.S.A. §4352. The enhanced energy plan consists of a new Energy Chapter (Section 6, Appendix 4), updated energy-related goals and policies (Section 6, Appendix 4), and new energy-related implementation actions (Section 2, Appendix 4).

The plan update does alter the designation of land area in Fairfax by including maps that are required to be included in the enhanced energy plan. These maps, and language associated with the maps, will help the Town, developers, and the Vermont Public Utility Commission understand where future renewable energy facilities may or may not be sited in the community. The solar and wind maps in the Energy Plan (Appendix 4), in particularly, alter the designation of land. These maps designate three areas: "Prime" areas where there is potential for solar or wind electricity generation, but do not contain any known "constraints" that may restrict the development of a future renewable energy facility. "Base" areas have also been identified. "Base" areas may have potential for future renewable energy generation, but may contain a "secondary constraint," a natural resource worthy of protection that could limit future development of renewable energy facilities. Lastly, the remaining areas either do not contain any resource potential and/or encompass a "known" constraint, an area that likely contains a natural resource and that shall be protected from all future development of renewable energy facilities.

Since the energy maps affect the entire Town, it is not possible to definitively determine the effect of the proposed change in the designation of land on a specific "surrounding area." The proposed change in the designation of land will not increase traffic. The proposed change in the designation of land will have positive long-term benefits to the municipality based on the creation of additional municipal tax base and little to no need for additional public facilities. The amount of land which is subject to the change in the designation of land includes the entire municipality since the maps created are based on a data and methodology that includes the whole town. This is regardless of whether or not the land is currently considered vacant (or not vacant). The suitability of the areas that have been designated is based on the methodology explained in the preceding paragraph which takes into consideration appropriate alternative locations, alternatives uses for the area under consideration, and the probable impact of the

proposed change on other areas similarly designated. The proposed size and boundaries of the areas designated as “prime” or “base” are appropriate with respect to the proposed use of such areas, the land capability of these areas, which is based on the best available data regarding solar and wind generated electricity potential and location of natural resource “constraints,” and the existing development in the area.

The Fairfax Town Plan includes eight (8) sections: Section 1. Purpose; Section 2. Implementation; Section 3. Community Profile; Section 4. Local Economy; Section 5. Community Facilities, Utilities and Services; Section 6. Infrastructure: Housing, Transportation, and Energy; Section 7. Land Resources and the Built Environment; Section 8. Compatibility with the Region and Adjacent Communities; Appendix 1. Community Data; Appendix 2. Fairfax Historical Record; Appendix 3. 2017 Fairfax Town Survey Results; and Appendix 4. Fairfax Enhanced Energy Plan. These chapters are consistent with the 14 goals established in Chapter 117, Section 4302. These goals aim to: maintain the historic settlement pattern of compact village centers separated by rural countryside; provide a strong and diverse economy with rewarding job opportunities; broaden access to educational and vocational training opportunities for people of all ages; provide for safe, convenient, economic, and energy efficient transportation systems; to identify, protect, and preserve important natural and historic resources; to maintain and improve the quality of air, water, wildlife, and land resources; to encourage the efficient use of energy and development of renewable energy resources; to maintain and enhance recreational opportunities; to encourage and strengthen agricultural and forest industries; to provide for the wise and efficient use of natural resources; to ensure the availability of safe and affordable housing; to plan for, finance, and provide an efficient system of public facilities and services; and to ensure the availability of safe and affordable childcare. The chapters also contain all 12 required elements for a municipal plan established in Title 24, Chapter 11, Section 4382.

The Town of Fairfax’s Development Regulations are based on the information compiled and the goals expressed within the Municipal Plan. Fairfax Planning Commission members have spent many hours discussing and compiling this document and would sincerely like to receive your feedback. A Planning Commission public hearing will be held at the time and place stated in the accompanying Notice of Public Hearing.

Appendix 1: Community Data

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Part 1: Residents

Population

The population of Fairfax has grown immensely from 1970 to 2010 (Table 1.1 and Figure 1.1). Fairfax saw the biggest growth from 1990 to 2000 when the population increased by over a thousand people; a change that increased the town population by fifty percent. The population is still growing as seen by the 4% increase in the five years from 2010 to 2015.

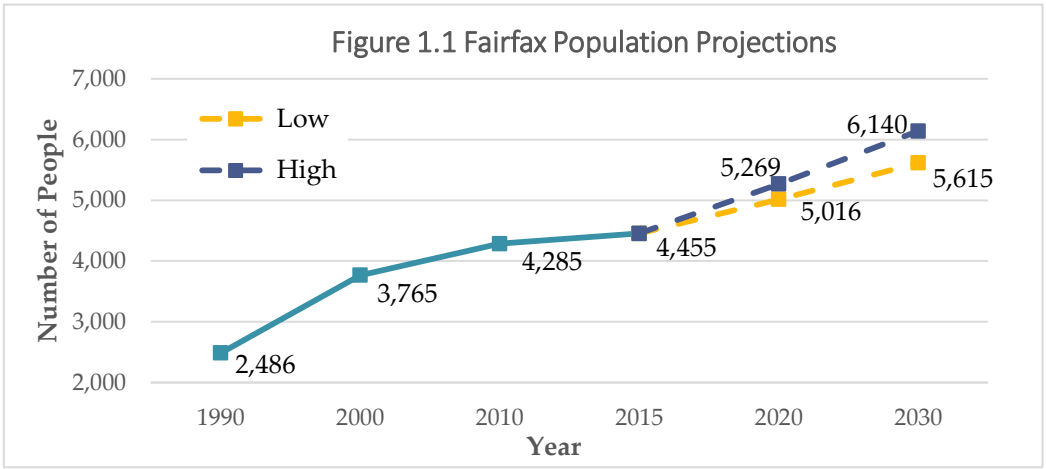
Table 1.1 Population Trends and Projections, 1950 - 2030

	Fairfax	Percent Change	Percent of County Total	Franklin County	Percent Change
1950	1,129	-	3.8%	29,894	-
1960	1,244	10.2%	4.2%	29,473	-1.4%
1970	1,366	9.8%	4.4%	31,281	6.1%
1980	1,805	32.1%	5.2%	34,788	11.2%
1990	2,486	37.7%	6.2%	39,980	14.9%
2000	3,765	51.4%	8.3%	45,417	13.6%
2010	4,285	13.8%	9.0%	47,746	5.1%
2015	4,455	4.0%	9.2%	48,418	1.4%
2020 Low	5,016	17.1%*	10.2%	49,253	3.2%
2020 High	5,269	23.0%*	10.2%	51,810	8.5%
2030 Low	5,615	31.0%*	11.1%	50,739	6.3%
2030 High	6,140	43.3%*	11.0%	55,647	16.5%

Source: U.S. Census Data (1950-2010 Decennial, American Community Survey 2011-2015), ACCD Population Projections 2020-2030
*Percent change from 2010 population

It is difficult to make accurate population projections for small population bases, but they nonetheless are useful planning tools. Population projections are based on past trends in birth, deaths and migration thus they provide a good estimate of future conditions. The Vermont Agency of Commerce and Community Development produced a report in August 2013 calculating projections based on past trends from the 1990-2000 ("high growth") time period and 2000-2010 ("low growth").

Table 1.1 and Figure 1.1 show the two scenarios of the population change over the next 20 years. Based on these projections, Fairfax could potentially experience continued growth of 17-23% by 2020



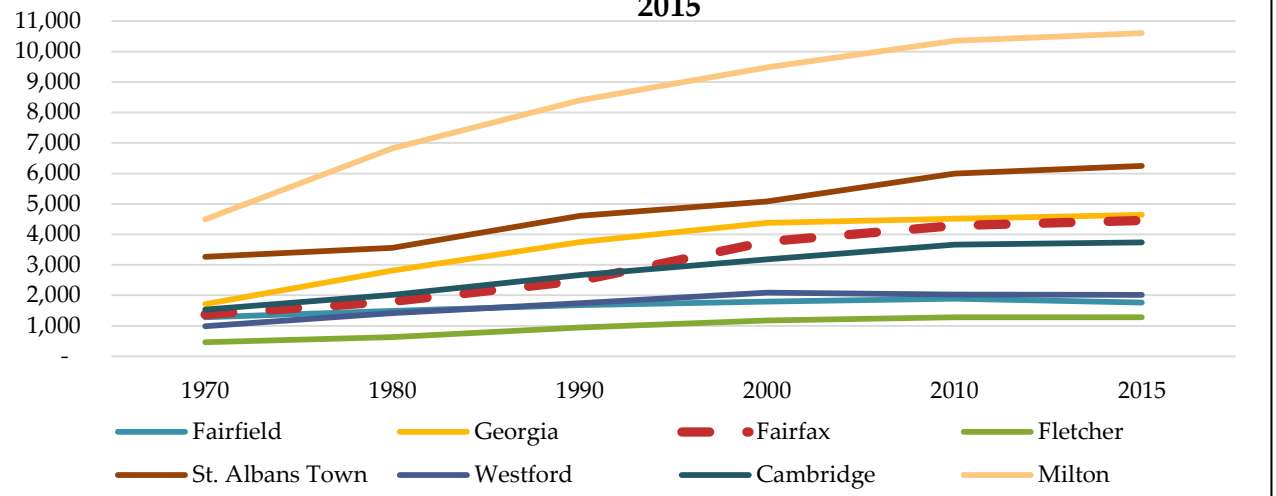
with growth increasing to 31-43% by 2030. The two dotted lines in Figure 1.1 indicate two population growth scenarios, as projected by the Vermont Agency of Commerce and Community Development report. Both projections predict the population of Fairfax will continue grow at rates that the community has been accommodating for four decades. The growth rate of Fairfax has kept up with or been greater than neighboring towns.

Table 1.2 Population of Fairfax and the Surrounding Area, 1970-2015

	1970	1980	1990	2000	2010	2015	%Change 1990-2000	%Change 2000-2010	% Change 2010-2015
St. Albans Town	3,270	3,555	4,606	5,086	5,999	6,249	10.4%	18.0%	4.2%
Fairfax	**1,366**	**1,805**	**2,486**	**3,765**	**4,285**	**4,455**	**51.4%**	**13.8%**	**4.0%**
Georgia	1,711	2,818	3,753	4,375	4,515	4,641	16.6%	3.2%	2.8%
Milton	4,495	6,829	8,404	9,479	10,352	10,610	12.8%	9.2%	2.5%
Cambridge	1,528	2,019	2,667	3,186	3,659	3,737	19.5%	14.8%	2.1%
Franklin County	31,281	34,788	39,980	45,417	47,746	48,418	13.6%	5.1%	1.4%
Fletcher	456	626	941	1,179	1,277	1,279	25.3%	8.3%	0.2%
Westford	991	1,413	1,740	2,086	2,029	2,013	19.9%	-2.7%	-0.8%
Fairfield	1,285	1,493	1,680	1,800	1,891	1,764	7.1%	5.1%	-6.7%

Source: VermontHistory.org, U.S. Census Data 1970-2010 Decennial, American Community Survey 2011-2015

Figure 1.2 Population of Fairfax and Neighboring Towns from 1970-2015



The Town of Fairfax covers a 41.7 square mile area equivalent to 26,688 acres. Fairfax has a population density of 102.8 people per square mile which is about double the density of Franklin County as a whole.

Table 1.3 Population Density as of 2010

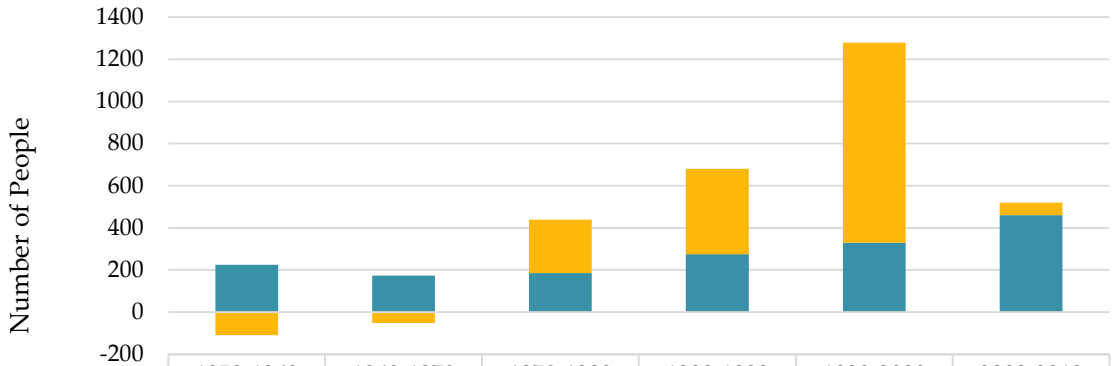
	People per square mile
Fairfax	102.8
Franklin County	49.6
Vermont	67.9

Source: U.S Census 2010, NRPC Data

From 1990 to 2000 most of the Town's population growth was due to in migration of new residents to Fairfax. The natural increase of the population has remained steady and was highest from 2000 to 2010.

Figure 1.3 Components of Fairfax Population Change

Net Migration + Natural Increase = Population Change

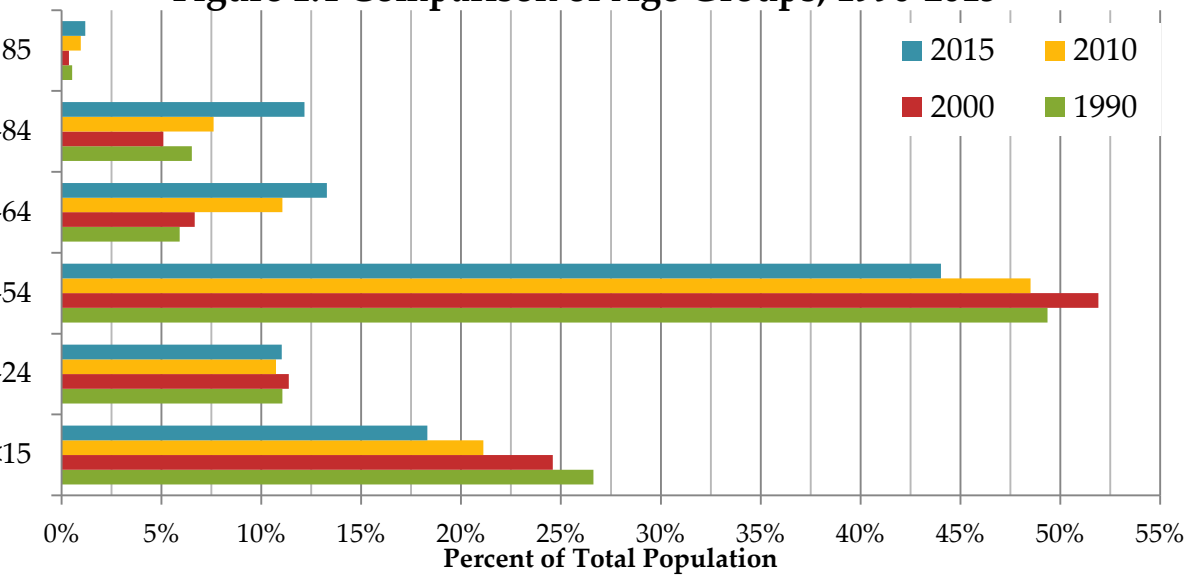


	1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010
Net Migration	-110	-51	253	406	949	60
Natural Increase	225	173	186	275	330	460

Net Migration is the number of people leaving or moving to Fairfax, Natural Increase is the difference between number of births and deaths. Source: Vermont Department of Health, U.S. Census 2000, 2010, Northwest Regional Planning Commission Data

Since 1990 the percent of the population under the age of 15 has decreased by 8.3% and the percent of households that can be classified as newly "empty nesters" (55-64) has increased by 7.4%. The percent of residents that are 25 to 54 years old represents the majority of the labor force as well as the typical age range for households with children. Tracking the change in the age of community aids planning for housing needs and future services.

Figure 1.4 Comparison of Age Groups, 1990-2015



The median age in Fairfax has increased by 7.9 years to 39.5 years since 1990, which is similar to the change in median age of Franklin County.

Table 1.4 Median Age				
	1990	**2000**	**2010**	**2015**
Fairfax	31.6	33.9	38.7	39.5
Franklin County	31.8	35.7	39.6	39.9
Source: U.S. Census 1990, 2000, 2010, American Community Survey 2011-2015				

Table 1.5 shows the jobs by industry of Fairfax residents. A quarter of Fairfax residents are in the educational services, health care, and social assistance sector which includes teachers, home health aides, and nurses.

Table 1.5 Employment of Fairfax Residents by Industry		
AVAILABLE WORKFORCE	**2010**	**2015**
Population 16 years and over	3,063	3,575
Civilian employed population 16 years and over	2,358	2,673
INDUSTRY	**Percent of Total**	
Agriculture, Forestry, Fishing and Hunting, & Mining	2.1%	3.4%
Construction	5.9%	12.8%
Manufacturing	16.3%	12.1%
Wholesale Trade	2.5%	-
Retail Trade	12.5%	5.3%
Transportation and Warehousing, and Utilities	5.4%	2.2%
Information	2.3%	1.1%
Financial (Finance, Insurance, & Real Estate)	2.3%	4.5%
Professional, Scientific, Management, Administrative, & Waste Management Services	7.9%	10.4%
Education, Health Care, & Social Services	25.6%	24.5%
Arts, Entertainment, Recreation, Accommodation, and Food Services	5.1%	5.1%
Other Services, except Public Administration	4.9%	5.1%
Public Administration	7.2%	13.6%
Source: US Census 2010, American Community Survey 2011-2015		

Part 2: Economy

Economic Conditions

Fairfax has a much higher median household income than Franklin County and Vermont as a whole and an extremely low poverty rate at 1.7%.

Fairfax has a very low unemployment rate at 3.3% which is lower than Franklin County's (4.9%) and Vermont (5.5%). But the unemployment rate in Fairfax has risen 1.1% since 2010.

Table 2.1 Income and Poverty Profile,2015

	Income		% Population Below Poverty level
	Per Capita	Median Household	
Fairfax	$32,441	$70,795	1.7%
Franklin County	$28,394	$58,199	8.7%
Vermont	$29,894	$55,176	11.5%

Source: American Community Survey 2011-2015

Fairfax Labor Market

Employment trends are generally measured through changes in "covered employment" by occupational sector; this data represents employers who make contributions to unemployment insurance for each "covered" position. While this typically captures the greater majority of all employment, it does not include those who are self-employed.

Table 2.2 Employment Status of Fairfax Residents in 2015

Population 16 years and over	3,575	100%
In labor force (18years+)	2,780	77.8%
Civilian labor force	2,764	77.3%
Armed Forces	16	0.4%
Employed	2,673	74.8%
Unemployed	91	2.5%
Not in labor force	795	22.2%
Unemployment Rate	(X)	3.3%

Source: American Community Survey 2011-2015

Covered employment has risen in Fairfax since 1995, increasing from 488 total covered employees in Fairfax in 1995 to 872 employees in 2015 (see Table 2.3). This uptick in total reported employment can be seen in the following industries: agriculture, manufacturing, trade, professional and business services, health and education services, and local government. Private health and educational services includes: technical and trade schools, ambulatory services, social assistance.

Non-covered employment is more difficult to measure because information is self-reported by those who own their own businesses. The main categories of employment not captured as "covered" are the self-employed, railroads, and small-scale agriculture activities.

Table 2.3 shows the total number of establishments and employment by industry sector over time in Fairfax. Major employers based on covered employment continue to be the public school system, wholesale trade, manufacturing and construction. From 2005 to 2015 there were increases in jobs in several sectors including: construction (28%), manufacturing (24%),

wholesale trade(61%), education, health and social services (336%) and local town government (42%). Both the postal service (-20%) and public school system (-10%) lost jobs during this time period.

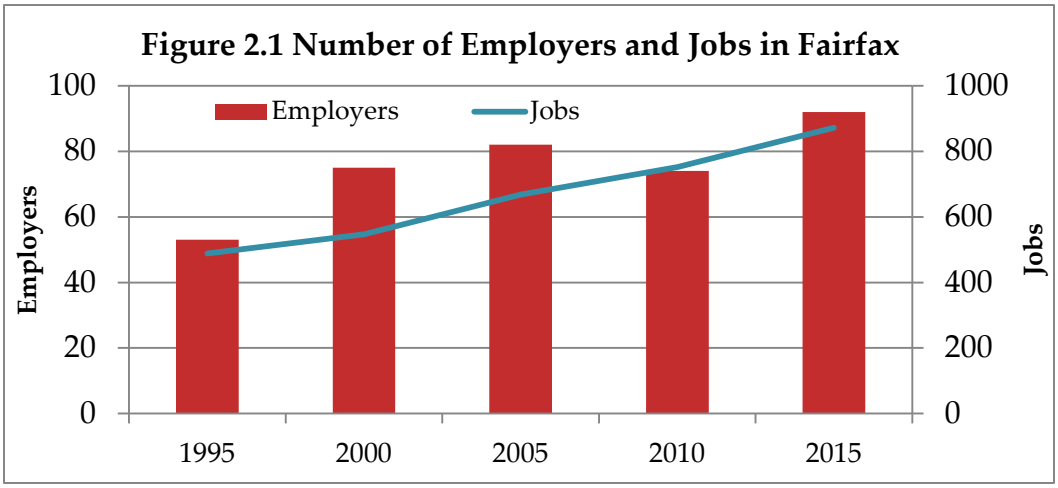


Table 2.3 Labor Force of Fairfax Employers from 1995 to 2015.

Industry Sector	Establishments 2015	Employment 2015	Establishments 2010	Employment 2010	Establishments 2005	Employment 2005	Establishments 2000	Employment 2000	Establishments 1995	Employment 1995
Total Covered - all ownerships	92	872	74	752	82	668	75	547	53	488
Private ownership	88	636	70	531	77	467	70	370	47	346
Agriculture, forestry, fishing and hunting	6	34	3	17	3	18	2	(c)	1	(c)
Construction	13	87	13	68	23	68	20	48	13	59
Manufacturing	7	139	7	105	8	112	3	(c)	5	(c)
Trade, Transportation, and Utilities	20	214	18	193	16	133	20	144	11	65
Information (Data Processing, Hosting & Related Services)	1	(c)	2	(c)	2	(c)	1	(c)	-	-
Financial (Finance, Insurance, & Real Estate)	7	21	4	(c)	4	19	3	(c)	1	(c)
Professional & Business Services	16	41	10	31	4	(c)	7	11	4	(c)
Education, Health & Social Services	9	48	5	26	4	11	2	(c)	3	29
Leisure (Accommodation & Food Services)	2	(c)	3	25	5	52	2	(c)	3	(c)
Other Services, except public administration (ex. Repair and Maintenance, Personal Services)	7	34	6	34	8	34	11	40	7	33
Federal Government - Postal Service	1	8	1	8	3	10	3	10	3	9
Local government - Education Services	1	155	1	176	1	172	1	151	1	109
Local government - Public administration	2	73	2	37	1	19	1	16	1	18
Executive, legislative and general government	1	27	1	17	1	19	1	16	1	18
Administration of human resource programs	1	46	1	20	-	-	-	-	-	-

(c) - Data cannot be released, does not meet confidentiality standards.
Source - Quarterly Census of Employment and Wages Program (QCEW) by the Vermont Department of Labor

Part 3: Community Services, Facilities, & Utilities

Local Government

Personnel

Town Manager

The Fairfax Town Manager serves as chief administrator and provides general supervision of Town affairs, and works to ensure that the business of the town is administered in a manner that is consistent with the public good. The Town Manager is responsible for development and oversight of the Town budget, financial planning and management, personnel administration, facility management, procurement, public works, community development and public relations.

Selectboard

The Town of Fairfax is managed by a five member Selectboard elected during the March Town meeting and serving for three-year or two-year staggered terms. The primary responsibilities of the Selectboard are to provide for the general health and welfare of the community, to see to the maintenance of the roads, to draft the town budget, and to set a tax rate. The budget is presented at Town Meeting for approval by the voters. The Selectboard also appoints the members of Town commissions.

Town Clerk

The Town Clerk is elected for a three year term. Duties of the office include maintenance of Town land records, overseeing elections, maintaining the voter check list and issuing licenses for which the town has authority.

Treasurer

The Treasurer is elected for a three year term; this position handles the collection of taxes banking, and accounting for both the Town and the School District.

Assessors

The Assessors are elected for three-year staggered terms; the primary duties are to assess property and maintain the Grand List. The most recent assessment was completed in 2005. Property evaluations are at 94% (2008) of fair market value.

Board of Civil Authority

The sixteen members of the Board of Civil Authority validate the voter checklist before each election and assist in counting votes. In addition, the board hears appeals of property appraisals and must view each property in question. All five Selectboard members serve on the board. The remaining members are Justices of the Peace, who automatically serve as

members of the Board of Civil Authority. The five members nominated by each political party are elected by the people. The Town Clerk serves as clerk of the board; in addition, the Town Clerk has the power to cast a vote in the event of a tied vote on the board.

Animal Control Officer

Deals predominately with issues concerning dog complaints in town.

Health Officer

The Vermont Commissioner of Health appoints the Health Officer on the recommendation of the Selectboard. The Health Officer is responsible for protecting the Town against the cause, spread and development of disease.

Planning and Zoning Department

The Planning and Zoning Department includes the Zoning Administrator and the Planning Commission and DRB Coordinator. The Zoning Administrator is the enforcement officer for the Town's ordinances and Development Regulations and administers the development review process on behalf of the Town. Specifically, the Zoning Administrator issues zoning permits in accordance with the Town's Development Regulations. The Planning Commission and DRB Coordinator assists the Planning Commission and the Development Review Board with meeting notices, meeting minutes, and issuing decisions in accordance with the Town's development review process.

Public Works Department (Highway, Water, & Sewer)

The Fairfax Public Works Department includes the Fairfax Road Crew, the Fairfax Water Department, and the Fairfax Sewer Department. The full time road crew employed by the Town of Fairfax is made up of one foreman, and two crew members. The full-time crew is responsible for winter and summer maintenance of all Town roads. They also make any necessary repairs to the town water distribution lines. The Selectboard assumes the duties of road commissioners, instituting a regular maintenance program and continually evaluating pending projects. Part-time help is hired by the Town as needed.

The Selectboard assumes the duties of Water and Sewer Commissioners. The Fairfax Utility Department (Water and Sewer) has employed a full-time supervisor since August 1996. In addition, there is one part-time office manager and two part-time Utility Department assistants. Several improvements to existing systems have been made.

Public Safety Services (Police, Fire, & Rescue)

The Town Constable is primarily responsible for traffic safety issues in conjunction with the County Sheriff's Department. The Constable is elected annually at March Town Meeting; if no

one runs for the position the Selectboard will appoint a Constable. The Town does not have a Constable at this time.

The Fairfax fire department is made up of one regular staff member and the rest of the members are "paid on call" for a response. The department responds to calls ranging from auto crashes, carbon monoxide alarms, hazardous materials, hazardous conditions, automatic fire alarms, public event standbys, and fires of all types.

Rescue services are contracted with Fairfax Rescue.

Recreation Department

The Recreation Department consists of a Recreation Director, a Maintenance and Operations position, and a Forest Supervisor. The Recreation Department is supported by a recreation advisory board comprised of town residents.

Legislative Representation

The Town of Fairfax is Vermont Legislative District Franklin-2. As a municipality of Franklin County, Fairfax participates in electing two representatives to the Vermont State Senate.

Town Commissions

Planning Commission

The Planning Commission consists of five members appointed by the Selectboard for four year staggered terms. Primarily, the commission is responsible for preparing the Town Plan and the Development Regulations. A full description of the Planning Commission's responsibilities is located in Section 1 of the Town Plan.

Development Review Board

The Development Review Board meets to rule on requests for development proposals, including conditional uses, subdivisions, right of ways, and site plans. In addition, the DRB hears requests for any variance from the Development Regulations and appeals of the decisions of the Zoning Administrator. It suggests changes to zoning regulations where advisable. The Board has five full time members and two alternates appointed by the Selectboard, for staggered four-year terms of service.

Cemetery Commission

The Cemetery Commission is in charge of maintaining several cemeteries in the town and is elected at March Town meeting each year.

Northwest Regional Planning Commission

The Northwest Regional Planning Commission is an organization formed by and serving the municipalities of Franklin and Grand Isle Counties. All communities, including Fairfax, are entitled to equal voting representation by two locally appointed members of the governing Board of Commissioners. As a member of the Commission, the Town typically receives assistance with planning and zoning issues including mapping, plan and bylaw revisions, and grant applications, with special projects such as the Safe Routes to School program, and with emergency and transportation planning. In addition, the Town is able to participate in regional planning programs, such as hazard mitigation planning and emergency planning/exercises, the development of a regional plan, Act 250 project review for conformance with the regional plan, and other issues of a regional scale.

Development Regulations and Town Ordinances

Development regulations

Fairfax first adopted a zoning bylaw in the late 1960's. After a state planning law amendment, the bylaw was rewritten in 1980.nd The current Fairfax Development Regulations, which incorporate and supersede the previous Zoning Bylaws and Subdivision Regulations, were approved by the Selectboard on February 14, 2011, amended on August 15, 2011, September 29, 2014 and September 19, 2016. A copy of the Development Regulations is available in the Town Office.

Pursuant to 24 V.S.A. 4411 a municipality may regulate land development in conformance with its adopted municipal plan and for the purposes set forth in Section 4302 of the same title to govern the use of land and the placement, spacing, and size of structures and other factors specified in the bylaws related to public health, safety, or welfare. Development Regulations may permit, prohibit, restrict, regulate and determine land development including the following:

- specific uses of land and shoreland facilities;
- dimensions, location, erection, construction, repair, maintenance, alteration, razing, removal, and use of structures;
- areas and dimensions of land to be occupied by uses and structures, as well as areas, courts, yards, and other open spaces and distances to be left unoccupied by uses and structures;
- timing and sequence of growth, density of population, and intensity of use.

The following are examples of Town ordinances and are not a complete list. Additional ordinances and links can be found on the Town website at *http://www.fairfax-vt.gov/documents*.

Sewage Allocation and Connection Ordinance

A village sewer use ordinance is in effect, which provides rules for the control and regulation of the use of, and connection to, the public sewer system.

Water Use Ordinance

A Village water use ordinance is in effect, which provides rules for the control and regulation of the use of, and connection to, the public water system.

Highway Ordinance

Fairfax first adopted a highway ordinance in 1972. It has been amended many times, most recently in 2011 to consolidate three previous documents [Town Road and Bridge Standards; Town of Fairfax Highway Ordinance; Town of Fairfax Statement of Procedures and Standards Regarding Town Highways] to better address and regulate the construction of new roads and driveways throughout the town.

Flood Hazard Area Regulation Ordinance

For areas of special floods hazards in the Town of Fairfax.

Local Tax Base

Grand List Trends

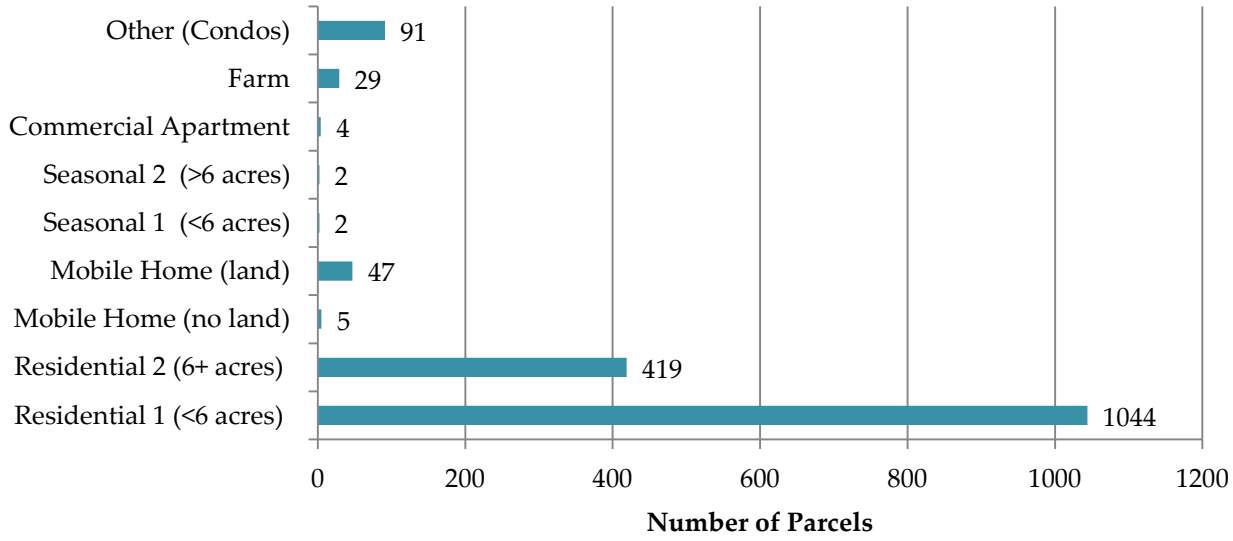
The majority of Fairfax's Grand List is made up of residential properties, both in terms of number of properties and value.

Table 3.1 Grand List Data 2015

Grand List Category	# of Parcels	Municipal Listed Value
Residential 1 (<6 acres)	1,044	$ 227,104,100
Residential 2 (6+ acres)	419	$ 120,718,300
Mobile Home (no land)	5	$ 148,400
Mobile Home (land)	47	$ 5,339,800
Seasonal 1 (<6 acres)	2	$ 44,100
Seasonal 2 (>6 acres)	2	$ 289,600
Commercial	24	$ 7,892,300
Commercial Apartment	4	$ 1,582,900
Industrial	1	$ 1,096,600
Utilities Electric	5	$ 21,492,500
Utilities Other	2	$ 746,800
Farm	29	$ 17,786,200
Other (Condos)	91	$ 16,510,500
Woodlands	0	$ -
Miscellaneous	139	$ 13,683,100
Total	**1,814**	**$ 434,435,200**

Source: Northwest Regional Planning Commission

Figure 3.1. 2015 Grand List Residential Parcels



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Public Facilities and Municipal Properties

Town Property

The Town is currently listed as the owner or part-owner of several pieces of property in town. These are listed in Table 3.2.

Table 3.2. Town of Fairfax: Municipal Properties

Location	Type	Acres
Maple Street (joint ownership with School)	Land, Recreation	23.5
Anderson Rd	Old Route 104	7.1
Beeman Rd	Road	0.9
Broadstreet Rd	First settlers cellar	0.1
Buck Hollow Rd	Town Office	1.5
Fletcher Rd	Land & water system	55.5
Fletcher Rd	Town Garage	3.85
Goodall St	Fire Station	1.6
Hunt St	Pollution control plant	7.1
Hunt St	Pollution control	6.7
Main Street, 104	Community Center	0.75
Main Street, 104	vacant land	0.25
Route 104	Land - Historic	0.2
Route 104	Land	105.0
Wheezy Way	Land & well	4.0
Total Acres		**218.05**

Fairfax Community Library

A combined school and public library, the Fairfax Community Library is located in the BFA-Fairfax school complex. The Library is overseen by an elected Board of Trustees (5 members) as well as a Joint Committee made up of representatives from the Library Trustees, School Board and Town Select Board. It is funded by both Town and School budgets. There is professional library staff for both public and school patrons. The Library is open to the public 6 days a week, approximately 52 hours (49 in the summer).

The combined nature of the Library offers benefits and also presents certain challenges. Advantages include a significantly larger collection of print materials and other shared resources than would otherwise be possible, cost savings to the taxpayer for facilities and overhead expenses, and an enriching, safe environment for students to easily access after school. The main challenges are accommodating multiple and sometimes competing needs within the limited physical space, and a lack of separate areas for classes, programs, computers, and meetings.

The Library serves as a community hub, and many patrons enjoy the multigenerational mix of library users. Fairfax Community Library's broader goals encompass the support of literacy in many forms, open access to reliable information, and providing a community gathering place that encourages connections and dialogue, and lifelong learning.

Collections Available	Community Services to Support Literacy & Lifelong Learning	Technology Support
📖 Books, e-books, downloadable audiobooks, large-print books	📖 Home delivery for those in need	• One-on-one and group help with technology
📖 Magazines, newspapers, and journals	📖 Summer Reading Program for ages 0-18	• Kindles and laptops for loan
📖 *Library of Things* including board games, snowshoes, a telescope, headphones, and more	📖 Events, programs, and classes for all ages including Story Hour, after school programs, book groups, and lectures	• Public-access computers, printers, and photocopy machine
📖 DVDs and books on CD	📖 Online adult education classes through Universal Class	• Free WiFi
📖 Online subscription-only collections	📖 Access to Interlibrary Loan with the Homecard System	
📖 Language learning programs	📖 Meeting space for tutoring, meetings, classes, etc.	

Cemeteries

Fairfax has thirteen cemeteries that vary by ownership and maintenance. In 1996, volunteers created a complete listing of all stones and, the information on them as able. A map of each cemetery is in the Town office. Table 3.3 below lists all the cemeteries in Town of Fairfax with their location and party responsible for maintenance provided by the Fairfax Cemetery Commission.

Table 3.3 Fairfax Cemeteries

Name	Location	# of Stones	Plots Available	Public Use	Maintained By
Kingsbury-Hibbard	Off Route 104 and Oakland Station Road leading to Georgia in North Fairfax	62	No		Towns of Georgia/ Fairfax splits cost
North Fairfax or	On Route 104 near St.	235	No		Town of Fairfax

Table 3.3 Fairfax Cemeteries					
Name	**Location**	**# of Stones**	**Plots Available**	**Public Use**	**Maintained By**
Beeman Cemetery	Albans reservoir				
Central or Beaver Cemetery	Off Route 104 in North Fairfax just north of the McNall farm	132	Yes	Yes	Town of Fairfax
Carroll Hill Cemetery	On Carroll Hill Road north of the Webb farm	257	Yes	Yes	Town of Fairfax
Safford Cemetery	On Buck Hollow Road north of the Albert Ledoux residence	142	No		Town of Fairfax
St. Luke's Catholic Cemetery	Off 104 across from the Fairfax Commons	301	Yes	Yes	St. Luke's Catholic Church
Fairfax Plains Cemetery	Off the McNall Road across from the Raymond McNall residence	588	Yes	Yes	Fairfax Plains Association; annual Town appropriation
Sanderson Cemetery	On Fletcher Road near the town highway garage	1667	Yes	Yes	Fairfax Cemetery Association; annual Town appropriation
Mudgett Cemetery	Off Fletcher and Wilkins Road	50	No		Town of Fairfax
Spafford Cemetery	Off Goose Pond and Spafford Road near the McGough residence	19	No		Town of Fairfax
Bowditch Cemetery	In Fairfax Village; no evidence of the cemetery remains	-	-		Not maintained
Kezer Cemetery	Off the Spooner Road on Gilles Rainville farm	4	No		Town of Fairfax
Learned Cemetery	Off the Huntville Road on the Heyer farm	10	No		Town of Fairfax

1

It is known that there are a number of people buried in the Town's cemeteries with no markers and a number of people have been buried in private grave sites outside of the known cemeteries.

Public Utilities

Fairfax Utility Department–Village Water District

The Fairfax Utility Department distributes water to the Village population. The water system was last updated in 1999 and currently serves approximately 299 connections, including the school. The total possible yield of the well is 60,000 gallons per day.

The number of total connections for water and sewer vary depending on the variable being reported.

- *A Living Unit considers each individual residence, such as a single-family or multi-family home, as a separate count. You could also refer to this as 'user accounts'*
- *A Metered Unit considers just the number of physical connections. For example, if a single-family house was converted into two apartments it may only have one meter for*

As of 2018, the water system has allocated all available capacity to residential and non-residential development based on distributions set by the Vermont Water Supply Rule (i.e. 150 gallons/day per bedroom for residential). Based solely on the reported average demand, one could conclude there may be available water capacity. However actual water usage can be lower depending on factors such as housing occupancy and water conservation using high efficiency fixtures. Given that the well is at capacity it does not meet the future water supply needs for the Town of Fairfax Water District. An additional water source is needed to expand capacity and as a backup source of water in the case of contamination or other emergency.

Table 3.4 Average demand of water per day

Year	Average Daily Demand (Gallons/Day)
2012	45,762
2013	34,293
2014	34,532
2015	37,178
2016	37,737
2017	32,144

The water source is a well located on the Wheezy Way Road, which produces 60 gallons per minute; the maximum daily capacity of water available is 60,000 gal/day based on sixteen and a half hours of pumping per day. Water is pumped from the source on demand to two 176,000 gallon storage reservoirs, which are controlled by a computer and cellular frequency communications, and then distributed to the Village by gravity flow. Two pump stations, located within the system, provide water to above gravity fed elevations. The system is chlorinated and controls levels of manganese in the water.

In 2002, the Town hired Green Mountain Engineering to explore locations for additional water supply wells. The completed hydrology study located four potential sites, none of which were located on the preferred location – a 56 acre parcel by the water control building owned by the Town. The Selectboard pursued other options for determining water source potential on the Town owned 56 acres which were unsuccessful as well as one of the recommended sites which abuts the Town's existing supply well and is assumed to be in the same aquifer. In 2012-2014 the Town pursued a potential site for a back-up water supply and ultimately drilled some test wells on the same parcel as the current well; both attempts produced low volumes flows. The Town continues to investigate other sites for a new water source; the goal is to find a source able to produce a minimum of 50 gallons per minute.

Current user fees are sufficient to maintain the existing water system; however, they are not adequate to reserve capital to put towards future expansion. Funding is needed to increase the capacity of the water system to allow for additional users; this will require drilling and constructing infrastructure for a new supply well.

The State of Vermont has delineated a Source Protection Area (SPA) around the Village's drinking water supply well of just under 120 acres. SPA's are defined by the Department of Environmental Conservation as "surface or subsurface areas from or through which contaminants are reasonably likely to reach a public water system source." Fairfax is required to have a Source Protection Area Plan that delineates the boundaries of the protection area, inventories the potential contaminants of concern to the area, assesses the susceptibility of the drinking water source to contamination, a management plan for potential risks, and a contingency plan in case of an emergency. The plan was first adopted in November of 2001 and last updated in March of 2006. There were nineteen residences and one commercial property located within the Source Protection Area in 2017.

Fairfax Utility Department-Wastewater Treatment Facility

A village sewer system and treatment plant were installed in Fairfax in 1980. The present system is capable of discharging 78,000 gallons of treated waste per day. The system continues to discharge an average of 26,653 gallons of treated waste a day or 47% of capacity. The Town reserves ten percent of capacity for municipal use. The system is near capacity (as of 2017) and able to serve limited future wastewater management needs within the Village based on current use, committed future allocations, and available water supply.

Table 3.5 Average amount of treated wastewater discharged per day

Year	Average Discharge (Gallons/Day)
2012	39,000
2013	38,000
2014	38,584
2015	36,333
2016	32,000
2017	36,000

Significant improvements have been made to the system since August 1996. A new system was installed to deliver oxygen to the three sewage treatment lagoons. Previously, bacteria in the treatment lagoon were dying as a result of a lack of oxygen. This resulted in decreased efficiency in waste treatment, as well as an increase in odors from the plant. The new oxygen delivery system has improved the treatment efficiency (and therefore capacity) of the facility, and has alleviated the previous problem of excessive odor. In addition, two main pumps have been replaced since the system was built. The system is entirely paid for and the fees being charged are currently covering the yearly maintenance costs, however they are not sufficient to cover the needed expansion in treatment capacity. Since 1996 additional improvements have been limited to minimum measures based on available funding.

The system is monitored by the State when monthly samples and reports are submitted. Sludge is cleared from the facility and spread every five to seven years according to sludge accumulation. The available spreading area is sufficient for the capacity of the plant for the next 75 years; however, if the system is expanded, sludge would need to be spread every two to three years and the area would only serve for the next 35 years. The Fairfax Wastewater Department is currently investigating innovations which would eliminate the need for the cleaning and subsequent spreading of sludge; however, it is the cheapest method. Sludge-eating bacteria are currently being used in other localities that eliminate the need for frequent cleaning of treatment lagoons. Alternative approaches such as this could significantly improve the efficiency of the current treatment system.

In 2007 a Wastewater Feasibility Study explored doubling the discharge capacity and completing required upgrades to the existing Wastewater Treatment Plant; these improvements were estimated to cost $2.5 million. Following the study the Selectboard discussed potential financing and action plans for securing additional sewer treatment capacity and additional drinking water supply; however, no decisions were made as a result of the meeting.

In 2016 the EPA established new limits of phosphorus loading to Lake Champlain referred to as the Total Maximum Daily Load (TMDL). The Fairfax WWTF was not identified in the Phase 1 Plan with a required discharge reduction but this could be a future requirement for the Town. If upgrades are necessary to comply with the TMDL, it would facilitate the expansion of the system and add sewer capacity.

Solid Waste Management

The Town currently has a contract with Casella Waste Management, which collects household solid waste through curbside pickup weekly. The solid waste is then trucked to the Coventry,

Vermont landfill. Recyclable items are picked up once a week. There are three hazardous waste collection days a year at the Town Garage.

The Town left the Northwest Solid Waste District in 1993 in an effort to provide more local flexibility regarding solid waste management strategies. Since that time, the Town has operated under its own Solid Waste Implementation Plan (SWIP). The Town's current SWIP was approved by the Agency of Natural Resources and adopted by the Town in 2015. The Plan prescribes a program of education, collection, recycling, processing and disposal for wastes generated in the Town.

Public Safety Services (Police, Fire, & Rescue)

Fire Department

The Fairfax Fire Department is made up of one full-time staff member and the rest of the members are "paid on call" for a response. The department operates out of one station located on Goodall Street providing services to the citizens of Fairfax as well as contract fire protection to the Town of Fletcher. The Department is also entered into a formal mutual-aid agreement with the other Franklin County Fire Departments, where we both give and receive aid to/from neighboring communities per request. The current fire station was built in 1990 and supports the administrative and apparatus-housing needs of the department in its current state. The station includes: 4 apparatus bays, 2 administrative offices, a training room, and a kitchen.

Table 3.6 Fire Department - Calls for Service

Month	Year	
	2016	2017
January	15	10
February	9	17
March	14	4
April	13	7
May	18	15
June	14	11
July	10	16
August	15	17
September	16	11
October	13	35
November	13	20
December	14	21
Year Total	164	184

Source: Town of Fairfax

The Fairfax Fire Department responds to an average of 176 calls per year based on the last 4 years. Calls range from auto crashes, carbon monoxide alarms, hazardous materials, hazardous conditions, automatic fire alarms, public event standbys, and fires of all types. The responsibilities of a "Fire Department" have changed greatly over the years, transitioning from its primary focus on fires only to dealing with a variety of issues deemed important enough for the requester to dial 911. As a direct result of this, the number of emergency responses has increased, as well as the State and Federal training requirements. This has a significant impact on the family lives of the firefighters, keeping in mind that all these functions and responses are outside of their normal 40+ hour work week. The Fairfax firefighters have less and less time available to commit to the fire department activities, yet demand for their time continues to increase. This rationale prompted the department to hire its first full-time employee in 2012.

Prior to 2014, the Town of Fairfax had an ISO Public Protection Classification (PPC) rating of 6/9. Properties within five road miles of the Fire Station and 1,000 feet of a creditable water source had PPC rating of 6, properties more than 1,000 feet from a creditable water source had a PPC rating of 9. In 2014, the Fairfax Fire Department was reviewed by ISO, and received an improved PPC of 3/3Y. Properties within five road miles of the Fire Station and 1,000 feet of a credible water source, fall within the PPC 3 area. Properties within 5 road miles of the Fire Station, but in excess of 1,000 feet of a credible water source, are in the 3Y PPC area. Water supply for fire protection is provided by hydrants within the municipal water system and a combination of dry hydrants, ponds, and rivers throughout the rest of Town.

The current equipment inventory and capabilities of the fire department include:

- **Engine 1** – 2004; 1250-gal/min pump, 5-person cab set up for Structural Firefighting
- **Engine 2** – 1995; 1250-gal/min pump, 2-person cab set up for Water Supply, and Structural Firefighting
- **Ladder 1** – 1991; 75-ft rear-mount aerial, 1250-gpm pump, 8-person cab set up for all nature of calls
- **Tanker 1** – 2003; 2000-gal tanker with a 1,000-gpm PTO pump, 3-person cab set up for Automotive Extrication, Structural Firefighting, Rural Water Supply Delivery and for Urban/Wildland Interface
- **Tanker 2** – 2010; 2000-gal tanker, 3-person cab set up for Rural Water Supply Delivery and for Urban/Wildland Interface
- **Rescue 1** – 2004 Chevy 2500; 2-person cab with utility body set up for daily use and is equipped with a 750-gpm Portable Pump and 30' of Suction Hose for Rural Water Supply, a 60-gal Skid Tank is installed during the summer for fighting Brush Fires, and carries a variety of other equipment to support numerous Firefighting and Rescue activities
- **Rescue Trailer** – Equipped with a 2005 Yamaha Grizzly 660 4-wheeler and rescue sled/wagon for all off-road and trail rescues, as well as serving needs for wildfires

Equipment is replaced based on a formal equipment replacement plan which includes detailed specifications and dates that factor service and technological lives of the apparatus.

There are 33 fire hydrants in Fairfax which are for immediate response to fires and not for extended use due to capacity limitations. The Fire Department has a map of other water sources available in the case of a fire, including numerous fire ponds.

Fairfax Rescue

Ambulance and emergency rescue service in town is currently provided by Fairfax EMS Inc. (dba Fairfax Rescue), a 503(c)3 charitable corporation. Fairfax EMS Inc. is licensed by the State of Vermont to provide emergency medical care and transport at the Paramedic level. Fairfax

Rescue serves as primary provider for the towns of Fairfax, Fletcher, and northern Westford, Vermont. They also have mutual aid agreements for coverage to southern Westford, Milton, Georgia, St. Albans, Cambridge, and Essex.

Fairfax Rescue is funded primarily through billing for ambulance service. Additional funding is through the use of a subscription plan, fundraising, donations, and from the voters of Fairfax, Fletcher, and Westford. Requests for ambulance service have risen steadily by about 3 to 5% per year over the past 5 years. It is expected that this trend will continue as more people move into the area, and as the population ages.

Currently Fairfax Rescue operates a 2009 ambulance as well as a 2015 ambulance. Fairfax Rescue staffs ambulances primarily though volunteers and employs one full-time Director and several per diem staff to provide coverage 24 hours a day, 7 days a week. Fairfax Rescue has members who are certified as drivers (CPR certified), as EMRs (Emergency Medical Responders), as EMTs (Emergency Medical Technician), and AEMT (Advanced Emergency Medical Technicians), and Paramedics' at the National Level. All members are trained and certified in CPR and the use of a defibrillator.

In the spring of 2013 the squad moved into new quarters next door to the current fire station on Goodall Road; this facility meets the needs of the service.

Law Enforcement

Law enforcement is primarily provided by the Franklin County Sheriff's Office through a contract with a deputy sheriff for 56 hours a week. The Sheriff's Office responds to complaints, makes arrests, and issues traffic tickets. In addition to coverage provided by the Sheriff's Office, the Vermont State Police provide law enforcement to Fairfax. The Town does not have a Constable at this time.

Recreation Programs and Facilities

Recreation Department

The Parks and Recreation Department offers recreation and fitness programs for the community. The fitness programs include Yoga, Zumba, Boot Camp, Wellness classes, Couch to 5K, and stroller strolling. The classes meet one or two times a week and many have attendance of over 20 people per class.

Parks and Recreation annual events are expanding yearly. Currently, the Parks and Recreation Department sponsors or co-sponsors the following annual events:

- The Run To Chocolate, in February
- The Community Egg Hunt, in April

- The 511 Rescue Run, in May
- The Fairfax Fourth of July celebration, including parade
- Fairfax Community Day, in July
- The Ducky Race (20th year)
- The Egg Run, in August
- The Fall Festival, with Halloween parade
- Haunted House
- Hunters' and Community Breakfast
- Annual Tree Lighting

The Department aims to offer a variety of recreation opportunities, such as Club Sports, to meet the needs of all the residents of the town.

Recreation Facilities

Community Park & Recreation Path – Since its inception in the early 1990's the community park has seen several improvements to meet the growing needs of the residents. Aside from the designated uses below, the athletic fields are also used for youth soccer, Fairfax Community Day, men's adult soccer, and BFA-Fairfax soccer games. The park itself is used for picnics, fundraisers, Success By Six stroller strolling, and many other events.

Table 3.7 Improvements over time to the Community Park	
1990s	The Fairfax Recreation Path Steering Committee began to pursue development of a community recreation park; the Committee raised $7,000 for a path. In 1992 the Bellows Free Academy–Fairfax identified a need for athletic space due to school population growth and began looking for land.
1995-2000	In 1995, a recreation park was designated along the Lamoille River. In 2000, after extensive archeological studies, the development of the park began. This was to include a large multi-use playing field, a mowed recreational path, a ½-mile paved path, a picnic area, and restroom facilities.
2004	A mowed path was created
2005	A half mile park recreation path was paved
2007	The large multi-use field was used for Varsity, JV, and Adult soccer games
2009	The large lower field was put into use for Patriots Youth Football and Varsity and JV football teams
2010	A softball field was built; the first field in Fairfax designed specifically for softball. The Little League of Fairfax, Fletcher, and Westford use the field for practices and games as well as the Middle School softball team. The creation of three regulation-sized horseshoe pits
2011	Added an additional Little League field and women's soccer field, and Ultimate Frisbee began to use the main multipurpose field for their practices
2012-2016	A restroom facility and pavilion, with concession area, was built

Recreational Facilities in Collaboration with BFA Fairfax - Traditionally Bellows Free Academy has served as the social, recreational, and educational center of the community. The single complex houses grades K-12, as well as the Community Library. The school board and the recreation committee have worked together to provide public access to the building; access is generally available each evening when school is in session, but at times can be limited. Athletic fields and tennis courts are in continual use by the school. Available space at the school is so completely utilized that there is not available time for intramural programs for the middle or high school, and no programs for elementary students.

Community Center - One outcome of the community meetings for the 2008 Fairfax Town Plan was the identified interest and need for a Community Center. A committee of volunteers was formed to consider how to address this identified need. The Committee, known as Citizens for Fairfax Community (CFC), formed a non-profit, Friends of the Fairfax Community Center, Inc. (FFCC), and has been working with the Department of Parks and Recreation since its inception to make the Fairfax Community Center a reality.

Some of the accomplishments of the Committee and the Department include:

- identified groups interested in having a community center
- met with various state officials to discuss grants and other possible sources of funding
- surveyed possible sites suitable for a community center
- facilitated the gifting of the Baptist Building on Main Street to the Town in 2016
- developed plan and cost estimates for renovation of the Baptist Building
- held several fund raising events designed to raise community awareness
- held monthly and annual meetings to communicate progress and continue work

In 2017, Phase 1 renovations to the Community Center were completed that are essential to create a year-round useable facility such as addressing drainage, heating upgrades, and restoring windows. In 2018 FFCC will be kicking off a capital campaign to raise funds for completing the renovation.

The 100-Acre Woods

In 1967 the Catholic Diocese gave the Town two parcels of land in North Fairfax totaling 100 acres. The Diocese intended that Fairfax should use this land for recreation. The land is heavily wooded with a network of trails and was accessed over the years by different users including boy scouts, sugaring, and ATVs. The Town worked with the Franklin County Forester to create a Forest Management Plan starting in 2008; the plan outlies how the forest should be managed to reestablish a healthy forest and also prevent destruction by motorized vehicles and unauthorized use of the land. Since 2011, the Recreation Department has been

exploring the development of a trail system; 1-mile of trails current exists. Future improvements for the Town Forest include: improve the access road from VT 104, install a marked parking area, design and construct a trailhead, conduct a trail assessment, and install trial markings on existing trails. The Town has applied for a grant Recreational Trails Program grant through the VT Dept. of Forest, Parks and Recreation to complete these needed improvements.

Education

Bellows Free Academy Fairfax (BFA-Fairfax) is a PreK-12 public educational facility serving residents of Fairfax in grades PreK-12. BFA also accepts tuition students from Fletcher in grades 7-12, as well as grade 9-12 students from Georgia, and fewer students from other communities. The facility includes two gymnasiums, one combination gym and cafeteria, one combination cafeteria and multi-purpose room, eighty classrooms, and multiple fields that accommodate a rapidly growing co-curricular program. BFA employs 87 FTE (full time equivalent) teachers, three full-time administrators, and approximately 70 support staff including office administrative support, paraprofessionals, custodial staff, and bus drivers. BFA Fairfax provides a high-quality educational program with access to vocational training at the Northwest Technical Center, Center for Technology at Essex, and Burlington Technical Center as well as access to courses through the Community College of Vermont.

Total school enrollment in Bellows Free Academy has declined by 23% in the past 10 years (Figure 3.2). The drop is largely coming from the high school enrollments (Figure 3.3). The number of students that tuition into the BFA program from neighboring communities has held steady in recent years but has decreased by a third in the past 10 years (Figure 3.4); these students are primarily coming from the Towns of Fletcher and Georgia. BFA also received students from Westford prior to their redistricting in 2015-16.

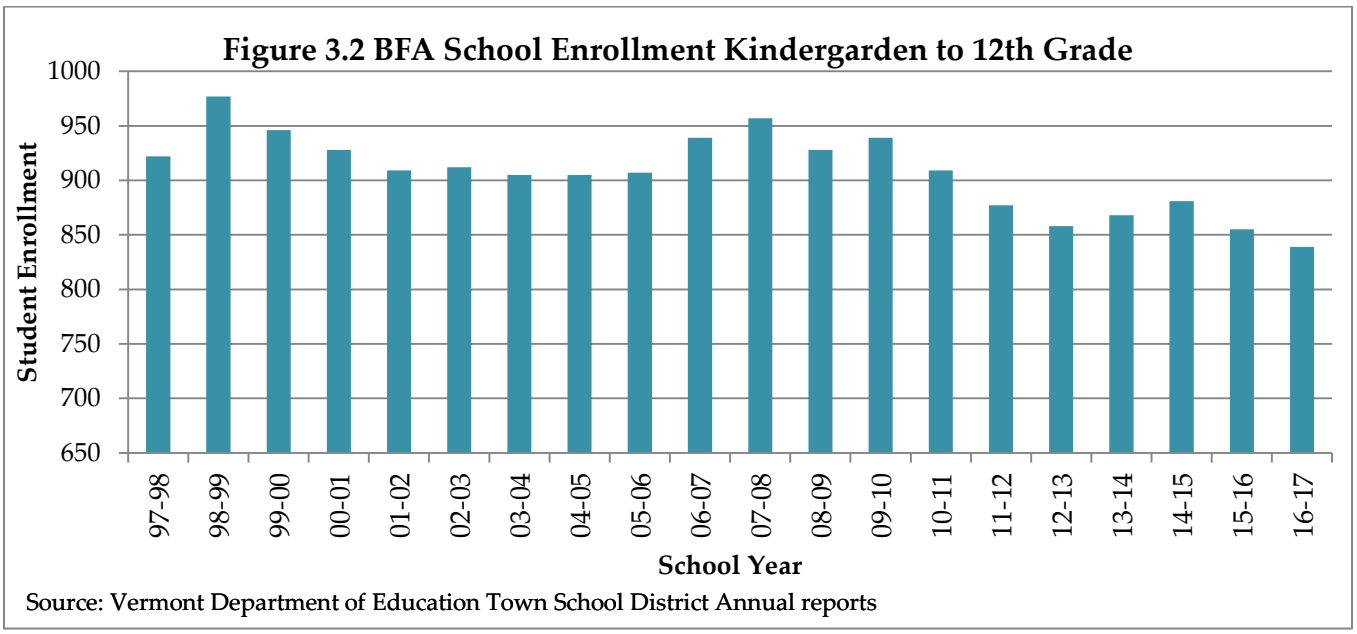


Figure 3.2 BFA School Enrollment Kindergarden to 12th Grade
Student Enrollment
1000
950
900
850
800
750
700
650
97-98
98-99
99-00
00-01
01-02
02-03
03-04
04-05
05-06
06-07
07-08
08-09
09-10
10-11
11-12
12-13
13-14
14-15
15-16
16-17
School Year
Source: Vermont Department of Education Town School District Annual reports

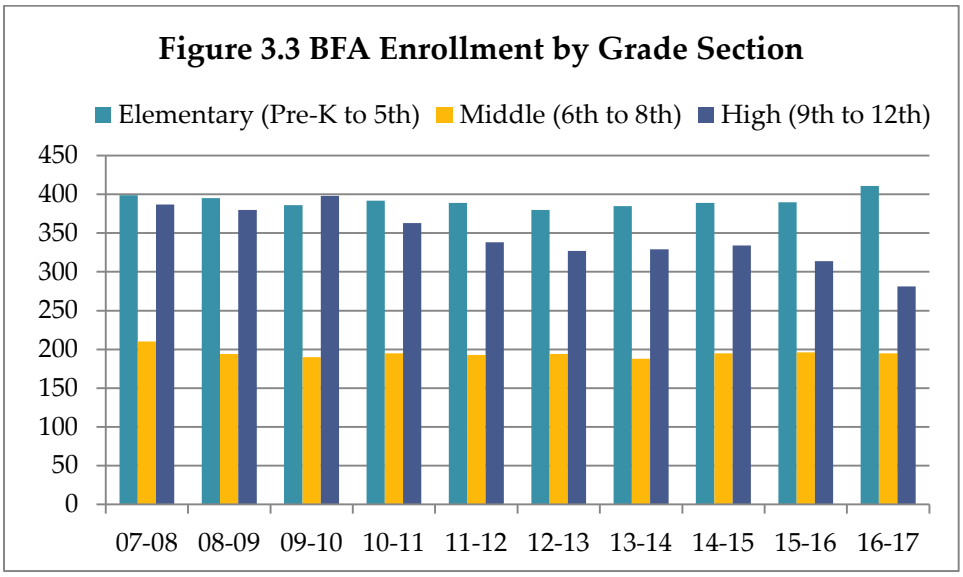
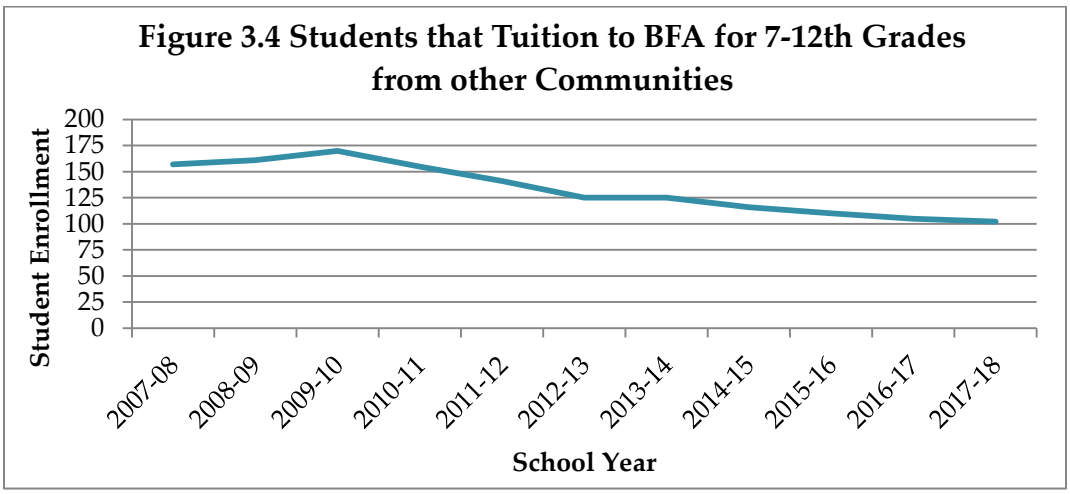
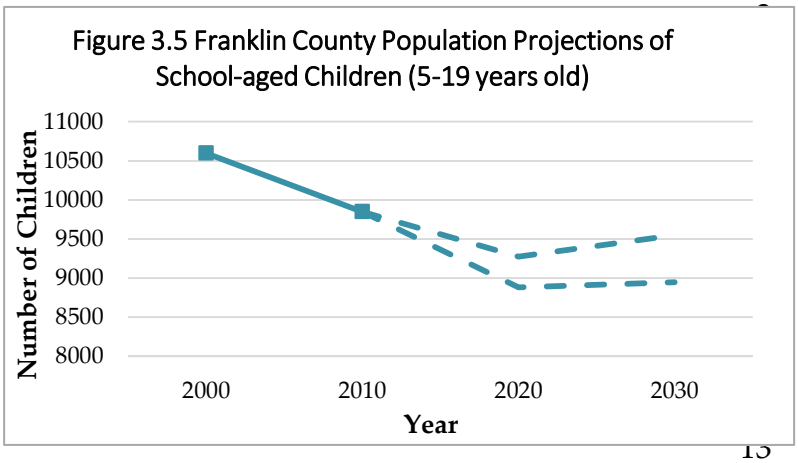


Figure 3.3 BFA Enrollment by Grade Section
Elementary (Pre-K to 5th)
Middle (6th to 8th)
High (9th to 12th)
450
400
350
300
250
200
150
100
50
0
07-08
08-09
09-10
10-11
11-12
12-13
13-14
14-15
15-16
16-17



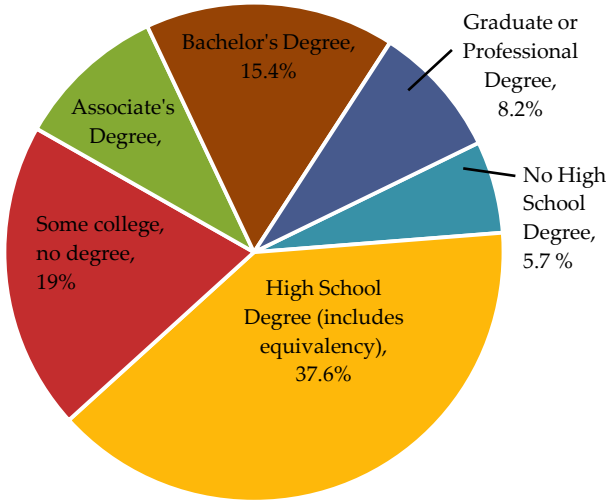


The Vermont Agency of Commerce and Community Development 2013 population projections provide county level age demographic projections for 2020 and 2030. It is anticipated that the number of school-aged children in Franklin County will continue to decline to levels lower than 2010 (Figure 3.5).

Adults in Fairfax are generally well-educated and have opportunities for continuing education in nearby St. Albans, Johnson, and Chittenden County.

- Multiple public and private educational institutions are located nearby, including the University of Vermont, Community Colleges of Vermont, Vermont Technical College, Champlain College, Saint Michael's College, and Northern Vermont University. Cost of the institutions varies and Fairfax residents may find the cost of tuition prohibitively expensive.
- Numerous options for online and other

Figure 3.6 Educational Attainment of Population 25 Years and Over



Source: American Community Survey 2011-2015

forms of distance learning are also available to Fairfax residents.

Childcare

In 2015, there were 254 children under the age of 5 in Fairfax. Out of Fairfax's 1,205 family households, 612 have two working parents.[1]

- In 2015, it was estimated that there were 226 single parent households in Fairfax.[2]
- In Franklin County, families pay an average of more than $19,000 a year for child care.[2]
- In 2017, it was estimated that there were about 1.75 children under the age of 5 in Fairfax for every childcare spot.[2]

Table 3.8 Childcare Availability in Fairfax	
Children under 5 years	254
Children ages 5 to 14 years	566
Childcare facilities (in-home & centers)	19
Capacity for all ages	262 children
Capacity for under 5 years	54% of spots
Vacancies	25 spots (10 are for school age only)

Fairfax has a lower percentage of households with the householder's own children under 18 living with them than all of the surrounding towns except Cambridge.

Table 3.9 Households with Own Children Under 18	
Georgia	46.4%
Fairfield	33.4%
Fletcher	31.9%
Westford	31.8%
Milton	28.5%
St. Albans Town	24.9%
Fairfax	23.7%
Cambridge	15.1%
Source: American Community Survey 2011-2015	

[1] American Community Survey 2011-2015
[2] Building Bright Futures Data; current as of September 2017

Community Health

The Vermont Youth Risk Behavior Survey, available from the VT Health Department, presents statewide statistics and local trends in youth behavior.

A Vermont reference to support the implementation of community health measures is the VT Department of Health, "Vermont Healthy Community Design Resource." This resource provides examples municipalities can take to address physical activity, healthy eating, and prevention of tobacco, alcohol and drug abuse.

Medical Needs

- The Northwest Medical Center, University of Vermont Medical Center, and the Cambridge Medical Center are all located within 25 miles of Fairfax.
- A variety of medical and dental offices are located in neighboring towns.
- Nursing homes are available in St. Albans, Swanton, Richford, and Chittenden County.
- Family support services are available from Franklin-Grand Isle Mental Health and Social and Rehabilitative Services based in St. Albans.
- Two physicians, a pharmacy, and a physical therapy office are based in Fairfax.
- The school has a referral agreement and provides some preventative and rehabilitative counseling through Champlain Valley Drug and Alcohol.
- The Town supports additional services by contributing financially to the following: Franklin County Home Health Agency, Franklin-Grand Isle Mental Health Services, Inc., Franklin County Citizen Advocacy and Age Well (formerly Champlain Valley Agency on Aging).

Food Security

- In 2017, Bellows Free Academy had 213 out of its 883 students (24%) enrolled in the Free & Reduced-Price Lunch program (source Vermont Agency of Education). In 2015, 84 households (4.8%) were receiving Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps) benefits from 3 Squares VT (source American Community Survey 2011-2015).
- There is an all-volunteer Meals on Wheels program for Fairfax seniors provided by Age Well (formerly Champlain Valley Agency on Aging).

Part 4: Infrastructure – Housing & Transportation

Housing and Affordability

Current Housing Stock, as of 2015

According to the 2015 American Community Survey there are 1,745 housing units in Fairfax and 1,745 households. The vacancy rate has been consistently low in Fairfax since 2000 and no vacancy was reported for renters or buyers as of 2015.

Table 4.1 Housing Availability in Fairfax

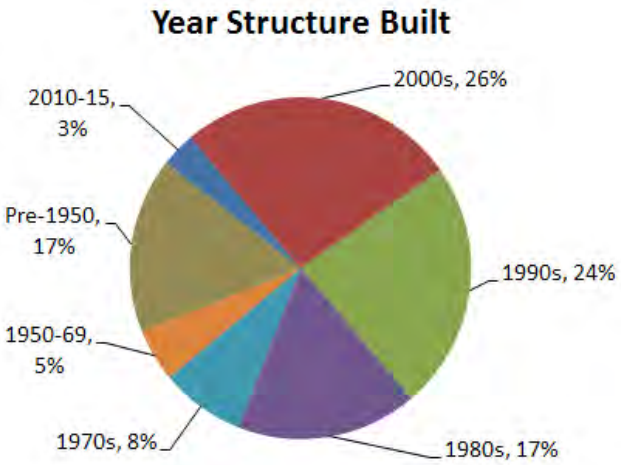
	2000	2010	2015
Population	3,765	4,285	4,455
Households	1,222	1,591	1,745
Average Household Size	2.89	2.69	2.55
Average Family Size	3.20	3.00	3.03
Total Housing Units	1,249	1,683	1,745
Occupied housing Units	1,222	1,591	1,745
Actual Vacant Units	27	92	0

Data Source: U.S. Census (2000, 2010), ACS 2015

Fairfax has a fairly new housing stock; the majority (67%) of residential structures has been built since 1980. This reduces the potential for lead exposure to residents given the likelihood of lead used in paint and plumbing in homes built prior to 1980. No data are available on the energy efficiency of the existing housing stock.

Single-family structures are the main option in Town (80%); more recent development has added to the multi-unit inventory.

Homeownership accounts for 76.4% of the units leaving less than a quarter for renters (23.6%).



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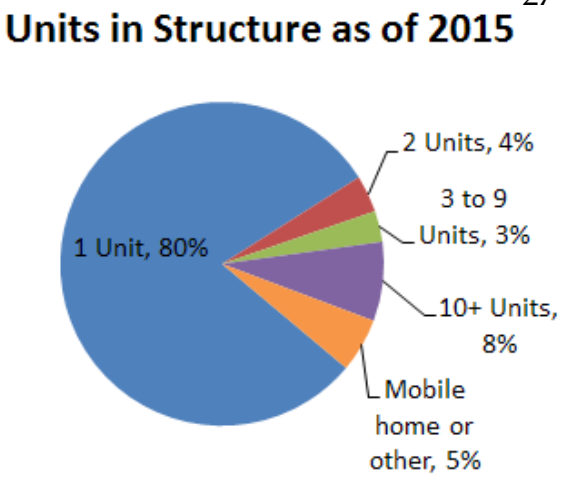

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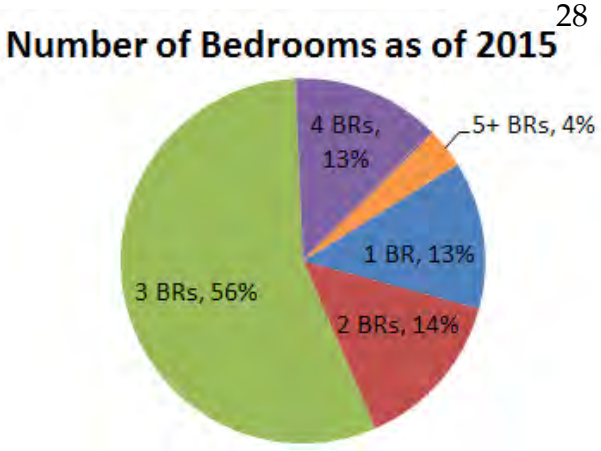
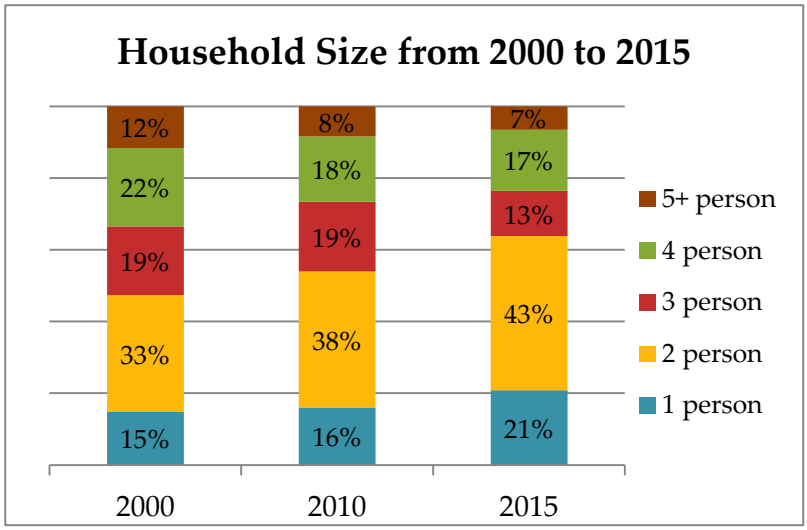


Combined "residential" parcels account for 11,695 acres of land. Residential parcels of less than 6 acres account for 71% of the total parcels but only 18% of the total land. Eighty-two percent of residential parcels are made-up of parcels larger than 6 acres.

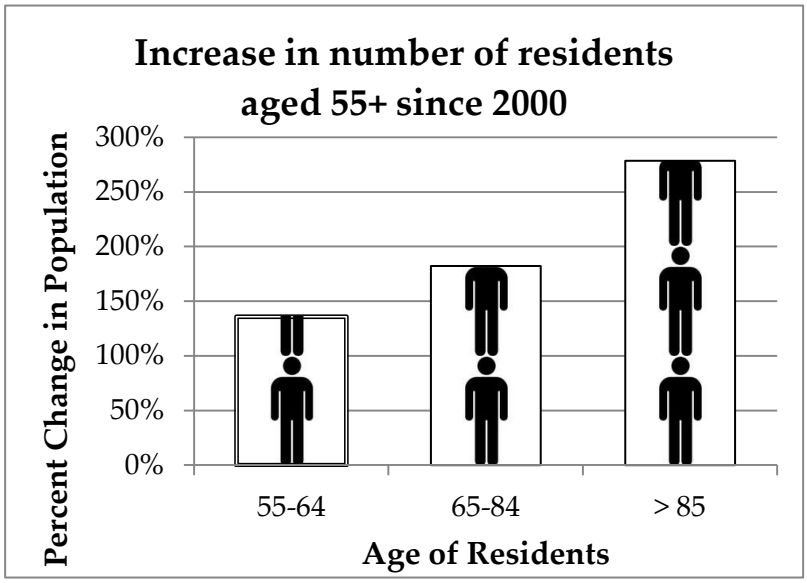
Snapshot of Current Households

The total number of single-person and two-person households has been steadily increasing since 2000.

- Single-person households doubled from 181 in 2000 to 363 in 2015.
- Two-person households came close to doubling their numbers from 398 in 2000 to 752 in 2015.



While the majority of residents are between the ages of 25 and 54, the number of residents 55+ has been steadily increasing from 2000 to 2015.



The median household income of residents is $70,795 and 43% of all households earn between $50,000 and $99,999.

The percent of Fairfax residents living in poverty has decreased since 2000 and is considerably lower than that of Franklin County.

Table 4.2. Income and Poverty Profile, 2000-2015

	Median Household Income			% Pop. Below Poverty Level		
	2000	2010	2015	2000	2010	2015
Fairfax	$51,769	$70,348	$70,795	4.8%	4.1%	1.7%
Franklin County	$41,659	$53,623	$58,199	9.0%	10.5%	8.7%
Vermont	$40,856	$49,406	$55,176	9.4%	12.7%	11.5%

Table 4.6. Household Income Distribution

Income	# Households
Less than $50,000	449
$50,000 to $99,999	743
$100,000 to $199,999	478
$200,000 or more	75
Source: American Community Survey 2011-2015	

Affordability of Housing

When homeowners pay more than 30% of their income towards housing costs, housing costs are considered unaffordable. Almost one-third of renters in Fairfax are in this position.

Table 4.3. Percentage of Fairfax Homeowners that Pay More than 30% of Income for Housing Costs

Owner	23%
Renter	32%

Source: American Community Survey 2011-2015

Table 4.4. Fairfax Affordability Gap for Home Ownership

Percent of Burlington-SoBurlington MSA Median Household Income	30% of Income		Taxes and Insurance	Income Available for Housing/Month	Maximum Affordable Mortgage	Median Sale Price for Primary Single-Family Residences (2015)	Affordability Gap
	Per Year	Per Month					
Moderate-Income HH 120% $75,906	$22,772	$1,898	$365	$1,533	$323,673	$252,750	$70,923
MSA Median Income 100% $63,255	$18,977	$1,581	$365	$1,216	$256,884	$252,750	$4,134
Low-Income HH 80% $50,604	$15,181	$1,265	$365	$900	$190,096	$252,750	-$62,654

Data Source: Median income based ACS 2011-2015 estimates; taxes and insurance are an estimate; median sale price for primary residences in Fairfax was obtained from the Vermont Department of Taxes; all other figures computed by the NRPC. Maximum affordable mortgage rates include a 4% mortgage rate.

Table 4.5 Affordability Gap for Rental Costs in Fairfax

Burlington-SoBurlington MSA Median Household Income	Income Available for Housing per Month	Median Gross Rent	Rental Affordability Gap
MSA Median Income HH (100%)	$1,581	$1,193	$388
Low Income HH (80%)	$1,265	$1,193	$72

Data Source: 2011-2015 American Community Survey, NRPC calculations

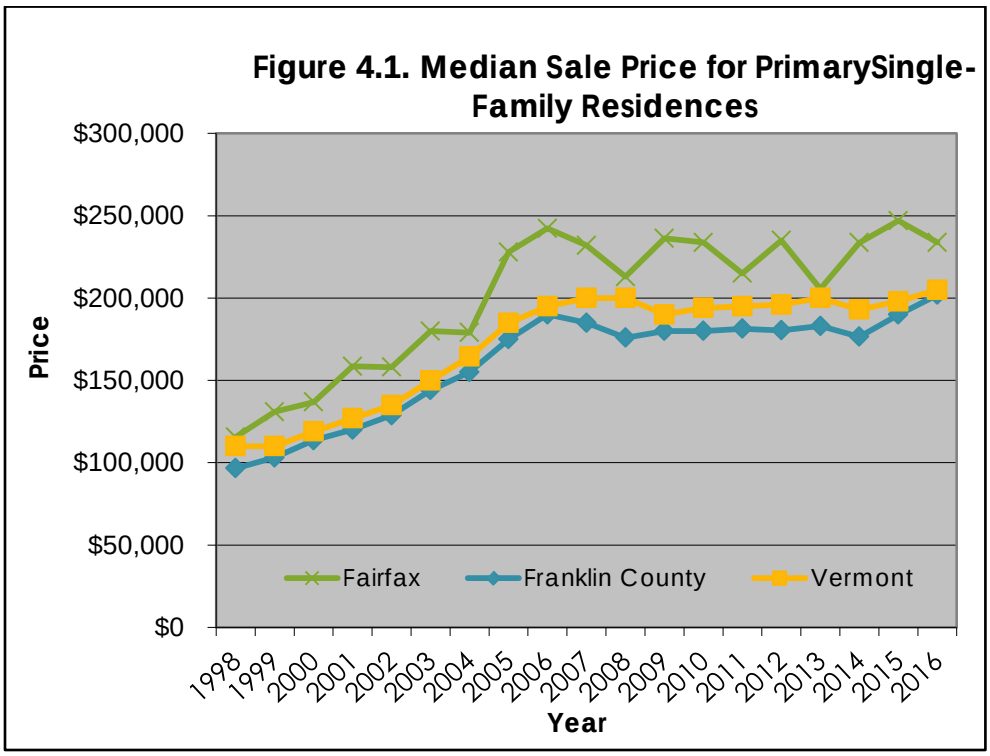


Figure 4.1. Median Sale Price for PrimarySingle-Family Residences
$300,000
$250,000
$200,000
$150,000
$100,000
$50,000
$0
Price
Fairfax
Franklin County
Vermont
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
Year

Transportation and Travel

Highways

Fairfax has a total of 79 miles of paved, gravel, and dirt roads and highways (excluding Class 4 and private roads) Table 4.7. The State's classification system separates Town Highways into four categories:

Class 1: Form extensions of State Highways and are numbered as such.

Class 2: Form connections from town to town, and/or carry a more significant volume of traffic than other roads in town.

Class 3: All other traveled roads receiving State Aid funds.

Class 4: All other Town roads.

Note: Class 4 roads do not receive any state aid, and do not have to be maintained by the town except for culverts and bridges.

Table 4.7. Fairfax Road Inventory by Class

Town Highways	
Class 1 -	0.00 miles
Class 2 -	11.32 miles
Class 3 -	50.18 miles
Class 4 -	5.20 miles
Total Town Highways – 66.70 miles	

Federal and State Highways	
I-89 -	1.24 miles

All roads having more than one dwelling have been measured, renamed, and marked in conjunction with the state-wide E911 emergency system, and 24 VSA, Chapter 61.

Road and Bridge Maintenance and Improvement

Local roads, bridges, and Town-owned culverts and storm drains are maintained on an as needed basis by the Fairfax Road Crew. The Town receives aid annually from the state for the maintenance of Class 1, Class 2, and Class 3 highways. The total amount received can vary based on the total appropriate from the general assembly; aid is distributed based upon class and mileage of highway. Six percent of the amount appropriated goes to the Class 1 highways, forty-four percent goes to Class 2 highways, fifty percent goes to Class 3 highways, and no funds are available for Class 4 highway mileage. Tax dollars and impact fees heavily supplement these funds to cover the full cost of road maintenance.

The Town has several tools available through state and regional partners to inventory, evaluate, budget, and monitor road surfaces and infrastructure such as culverts, signs, and erosion. Tools the Town has utilized include: a Road Surface Management System (RSMS), a Bridge and Culvert Inventory, and a Road Erosion Inventory. Implementing these systems help greatly in capital budgeting for future road improvements.

Bike & Pedestrian

The Village has just under 5,000 linear feet of sidewalk on the northwest side of Hunt Street and southeast side of School Street, both sides of Route 104 between Hunt and School Street, on the west side of Route 104 north of Hunt Street to Tuttle Street, and on the west side of Route 104 to just before the Lamoille River Bridge.

Route 104

Heavy traffic, access management, and dangerous intersections have been issues along Route 104 for many years. The intersections with Route 104A, Fletcher Road/River Road, and Route 128 have been particularly problematic. Past planning efforts provide valuable information that the Town should continue to reference in future planning and project development efforts in the Village and along the entire corridor:

- *2005 Route 104 Corridor Study* focused on Route 104 and 104A and the multi-modal needs of the community. The text box lists the key issues identified that affect the corridor within Fairfax at the time. The Study includes recommendations for how to address the issues identified such as installing signage and traffic calming measures. To address congestion, it recommended improving traffic flow through access management for new development, expanding the internal road network, and installing a traffic light or roundabout at the Fletcher Road/River Road/Route 104 intersection; and increasing non-motorized mobility by expanding the sidewalk network and widening the roadway to include bike lanes. The study prioritizes each of these solutions and notes responsibilities and funding sources.
- *2007 Route 104/128 Intersection Study* took a finer grain analysis of improvements to this intersection. This study was instigated at the request of the Town "due to growing

Key Issues Along Route 104
(Based on the 2005 Route 104 Corridor Study)

From St. Albans to Fairfax Village:

- Poor pavement conditions,
- Sight distance at intersections,
- Unsafe conditions on the "curves",
- Excess speeds,
- Shoulder widths/multi-modal potential, and
- Increasing congestion.

Within Fairfax Village:

- Access management,
- Signage,
- Unsafe intersections,
- Sight distance at intersections,
- Excessive speeds,
- Multi-modal potential (pedestrian environment, bike lanes & amenities), and
- Congestion and peak period traffic (increasing development and growth).

Between Fairfax Village and Route 15:

- Poor pavement conditions,
- Sight distance at intersections,
- Shoulder widths/multi-modal potential.

development pressures around the intersection and the current geometry of the dual intersections, which creates confusing traffic movements for motorists on both Route 104 and Route 128". The study prepared an analysis of six alternatives to improve the intersection, three of which were determined by the Town to be most appropriate. The recommended alternative was to eliminate the northern intersection and re-align the easterly intersection in front of Erica's American Diner. This would require minimal acreage of new right-of-way, with the potential for needing even more if the location of the intersection if moved even further to the north.

- *2016 Fairfax Gateway Study* to explore ways to better define the arrival gateways into Fairfax Village and evaluate measures to enhance their appearance, improve safety, and promote a more unified community identity. This study identified 5 gateways that serve as messaging for arrivals into both village areas as well as locations within the village to reinforce the messaging.

Travel to Work

Table 4.8 lists where residents who live in Fairfax travel to work. Almost 60% of residents work at Chittenden County employers. Table 4.9 shows where people who travel to work in Fairfax reside. These data do not reflect all home-based businesses.

Table 4.8. Top 15 Communities Where Fairfax Residents Work	
Total All Jobs	2515
Burlington city (Chittenden, VT)	14%
South Burlington city (Chittenden, VT)	10%
Essex town (Chittenden, VT)	10%
Williston town (Chittenden, VT)	9%
Fairfax town (Franklin, VT)	7%
Colchester town (Chittenden, VT)	6%
St. Albans city (Franklin, VT)	6%
St. Albans town (Franklin, VT)	5%
Milton town (Chittenden, VT)	4%
Cambridge town (Lamoille, VT)	3%
Winooski city (Chittenden, VT)	2%
Swanton town (Franklin, VT)	2%
Georgia town (Franklin, VT)	2%
Hartford town (Windsor, VT)	2%
Fletcher town (Franklin, VT)	2%
All Other Locations	17%
Source: LEHD On The Map 2015	

Table 4.9 Top 15 Communities Where Workers Employed in Fairfax Live	
Total All Jobs	531
Fairfax town (Franklin, VT)	35%
Fletcher town (Franklin, VT)	9%
Essex town (Chittenden, VT)	8%
Georgia town (Franklin, VT)	5%
St. Albans town (Franklin, VT)	4%
Cambridge town (Lamoille, VT)	4%
South Burlington city (Chittenden, VT)	3%
Milton town (Chittenden, VT)	2%
Fairfield town (Franklin, VT)	2%
Underhill town (Chittenden, VT)	2%
Burlington city (Chittenden, VT)	2%
Colchester town (Chittenden, VT)	2%
St. Albans city (Franklin, VT)	2%
Winooski city (Chittenden, VT)	1%
Franklin town (Franklin, VT)	1%
All Other Locations	19%
Source: LEHD On The Map 2015	

Table 4.10 Travel Time to Work	
Less than 10 minutes	10.2%
10 to 14 minutes	5.7%
15 to 19 minutes	12.1%
20 to 24 minutes	9.0%
25 to 29 minutes	3.4%
30 to 34 minutes	25.6%
35 to 44 minutes	14.9%
45 to 59 minutes	15.5%
60 or more minutes	3.7%
Mean travel time to work (minutes)	28.2
Source: American Community Survey 2011-2015	

Part 5: Land Resources

Historic Sites

In addition to individual properties listed in the register, the Fairfax Village Historic District is defined as having approximately the same boundary as the Village of Fairfax when it was first laid out in 1820. Today, the district encompasses all of Maple, School, and Hunt Streets, as well as a portion of Fletcher Road, and all of Main Street from near the Lamoille River to just north of Buck Hollow Road. Table 5.1 provides the list of structures included in the Vermont State Register Historic sites in Fairfax as of 1993. *Note: Table 5.1 is not an official list of all Historic Properties, and some omissions may occur. The full list is available for review from the Vermont Division of Historic Preservation and the Town Clerk's office; the site numbers below correspond to this list.*

Unfortunately several of these structures have been lost, including Rood House, McClure House and the Howell House; the Fairfax Bridge and the Browns River Bridge were replaced for safety reasons.

Table 5.1. Registered Historic Properties in the Town of Fairfax					
#	**Site Name**	**Location**	**#**	**Site Name**	**Location**
1	Drinkwine-Roig House	Carroll Hill	32	Fairfax Falls Bridge	Fairfax Falls
2	Gillan-Kuhn House		33	Bernard Bessette House	Goose Pond
3	Hawley-Bailey Barn		34	Bishop-Goldsmith House	
4	Webb Farm-Maplewood Dairy	Buck Hollow	35	Maxfield House	
5	Rugg-Austin-Webb House		36	Prindle-Maxfield House	
6	Coddings House		37	Giddings-Wimble Farm	
7	Parsonage-Collins House		38	Dezotelle House-Old Stone	
8	Ovitt House		39	Gerald Minor House	
9	Rugg-Gaudette House		40	Foss-McNall House	McNall Road
10	Rugg-Meigs House		41	Billado Farm	Richards Road
11	Buck-Ovitt Place		42	Fairfax Bridge	
12	Hunt-Dufford-Meade House	Mead Road	43	Methodist Parsonage	
13	Bludgeon Farm		44	Fairfax Historic District[1]	
14	Wycoff-Irwin House	Huntville	45	Parsonage-Ballard-Langelier House	Route 104
15	Wheeler-Heyer Farm		46	James Bellows Farm	
16	Learnerd-Martin-Wold House		48	Blenerhaset Farm – Holmes House	
17	McClure House		49	Napoli House	
18	Woodward Farm-Echo Valley		50	Bouthilette Farm	
19	Howard-Blum House		51	Bailey House	
20	Tabor House	Tabor Hill	52	Bessette House	
21	Wilkins Farm	Wilkins Road	53	Orton-McNall House	
22	Megars-Tanner House	Fletcher Road	54	Parah House	
23	Clokey Farm		55	Ayers-Bessette House	
24	Wilson-Tracey Farm		56	Boucher House	
25	Maxfield-Faymond House		57	Duval House	
26	Old Minor House		58	Magnan House	
27	Chaffee House	River Road	59	Pease-Ladoux House	Nichols Road
28	Lovegrove-Zeno House		60	Nichols House	
29	Cameron House		61	Hilbard House	
30	Howell House		62	Brown's River Bridge	

31	Howell Place		63	Brown's Creek Warren Pony Truss Bridge	

Source: Books/Maps in Town Office
[1]99 identified individual structures, including the Baptist Building, are encompassed within the Fairfax Historic District (site #44). See the full VT Division of Historic Preservation Historic Sites and Structures Survey.

Natural Resources

Steep Slopes

The Soil Conservation Service provides general guidelines for development limitations on steep slopes, listed in Table 5.2.

Table 5.2 Soil Slope Classifications	
0-3%	generally suitable for most types of development but may require drainage
3-8%	most desirable for development because these areas generally have the least restrictions
8-15%	suitable for low-density development with particular attention given to erosion control, runoff, and septic design
15-25%	unsuitable for most types of development and septic systems, construction costly, erosion and runoff problems likely
>25%	all types of construction should be avoided, careful land management for other

Soils

The current patterns of development and land use are directly related to the underlying geology and soils. Listed in Table 5.3 are the major soil types in Fairfax.

Table 5.3 Major Soils Types in Fairfax
The Lyman-Peru-Marlow
Occupies the largest proportion of Fairfax's acreage. These soils were formed in glacial tills on uplands and are characteristically loamy, low in lime, and have hardpan layer or bedrock near the surface. The deeper and better-drained soils of this group have good agricultural potential. Due to steep slopes, and shallow depth to bedrock, construction restrictions are severe.
Munson-Buxton-Belgrade-Scantic
Formed in water-deposited material on old lake plains. These are generally deep,

moderately well-drained to poorly-drained silty and clay soils which are medium in lime. Where slope and drainage are also favorable, these are classified as prime agricultural soils, but restrictions for construction are severe.
Limerick-Hadley-Winooski
Deep, silty floodplain soils medium in lime. Assuming adequate drainage, these have prime agricultural standing.
Windsor-Eldridge (Missisquoi)
Covers a substantial portion of the town. Deep, sandy, and sandy-over-silty soils on terraces and old lake plains. The low lime and excessive leaching characteristics, however, limit their agricultural capability, but present only moderate restrictions for construction.
The Carlisle-Terric Medisaprists
Very poorly drained black decomposed material with slopes of less than 1% characterized by bog. The depth to bedrock is more than five feet in places placing severe restrictions on construction.
Woodstock-Tunbridge-Rock outcrop
Shallow to moderately deep soils and is excessively drained. It is shallow to bedrock with slopes of 25 - 60%. It is severe for construction due to slope and depth to bedrock.
Cabot-Westbury
Deep and nearly level to sloping. It is somewhat poorly drained loamy soils, and stony to extremely stony. It presents severe constraints for construction due to large stones and wetness.

Agricultural Soils

Agricultural soils are those that have characteristics suitable for producing food, feed fiber, forage, and oilseed crops; the present use of the land may be cropland, pasture, forestland, or other land uses but not built-up. The following definitions are from the 2006, Farmland Classification System for Vermont Soils report by NRCS.

Prime Farmland has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed according to acceptable farming methods.

Farmland of Statewide Importance have similar characteristics but have one or more limitations that restrict the choice of crops and require more intensive management than prime soils.

Farmland of Local Importance in Franklin County are defined as Missisquoi Loamy Sand, 8 To 15 Percent Slopes.

Deer Wintering Areas

Deer wintering areas provide critical habitat for white tail deer and other species of vertebrates. These areas of hemlock, spruce, fir, cedar, and pine species provide shelter from deep snows, and permit easier winter travel for deer, compared to deciduous forests where the leafless tree branches do not prevent snow from reaching the ground. Occasionally, deer wintering areas will be found where softwood species are not dominant. These areas are usually found where south-facing slopes provide adequate solar radiation to limit snow depth.

Water Resources

Groundwater

The availability of ground water suitable for drinking water supply varies considerably throughout the town. According to the Groundwater Favorability Map of the Lamoille River Basin (Vermont Department of Water Resources, 1967), Fairfax has low-groundwater potential likely suitable for domestic purposes only, while the Lamoille River Floodplains may have potential for higher yields.

An investigation of a well or spring, including an analysis of available flow, water quality data, and surrounding geology can determine the land surface area where the drinking water is drawn, which is called the recharge area or Source Protection Areas (SPA). Public water supplies should be carefully guarded from contamination and are required to have Source Protection Plans (SPP's) approved by the state. Public water supplies include community water systems (municipal water systems or development water systems that serve at least 25 residents or 15 service connections), non-transient, non-community water systems (i.e. a school, daycare, or business), and transient, non-community water systems (i.e. motels, gas stations, and restaurants with their own source of water). SPP's are required to include delineation of a source water assessment or protection area; inventory of the potential contaminants of concern to that area; assessment of the susceptibility of the drinking water source to contamination; a management plan for the potential risks; and a contingency plan in case of an emergency.

Potential sources of groundwater contamination include stormwater runoff, underground storage tanks, aboveground storage tanks, gas stations, septic systems/leach fields, auto body and repair facilities, businesses, such as dry cleaning, photo finishers, printers, furniture strippers, health clinics, beauty solons, and dental offices, agricultural activities includes areas of pesticide and fertilizer application and storage, road salt storage and use, industrial facilities, waste disposal sites, salvage yards, hazardous storage or disposal sites, private wells, high traffic areas, forestry operations, mining operations or drainage, and radioactive waste storage facilities or disposal sites.

Seasonal High Water Table

Low elevation areas with high water tables contribute to ground water recharge. Often these are identified with significant wetlands or bogs, which when near development should be buffered. These areas have unconfined groundwater at or near the ground surface for part of the year and may be polluted easily by application of nutrients from septic tanks or other sources. Once contaminated, these waters may present health hazards locally and pollution of surface waters should the groundwater contribute to stream flow or wetlands.

Surface Water

Headwaters

Stream headwaters, located in the upper reaches of a watershed are usually cool, have high oxygen content, and low nutrient content. For this reason, upland streams tend to be highly productive per unit area and are extremely sensitive to sedimentation and pollution discharges.

Many streams only flow during periods of high runoff when the water table rises and intersects the stream channel. All of these factors make headwaters and pristine streams extremely sensitive to disturbances resulting from forestry and urbanization.

Wetlands

The Vermont Wetlands Rules, revised and adopted in 2017, protect areas identified by the Vermont Water Resources Board as significant. A number of activities are allowed inside significant wetlands, including silvicultural and agricultural activities, providing no dredging, filling, or alterations to water flow occur. Significant wetlands fall under three separate classifications:

- Class I wetlands are those which are considered exceptional or irreplaceable, and merit a high degree of protection under the Vermont Wetlands Rules. There are no class 1 wetlands in the Town of Fairfax.

- Class II wetlands are those that appear on NWI maps and any contiguous unmapped wetlands, and are protected by a minimum 50 foot buffer. There are 1,326 acres of class II wetlands in the Town of Fairfax (5.2% of total land area) (Figure 4.4). The largest wetland in town is Fairfax Swamp at approximately 357 acres.
- Class III wetlands are those that do not appear on National Wetlands Inventory maps, and are not considered significant. Total acreage and their locations are therefore not known. As a result, Class III wetlands are not protected under the Vermont Wetlands Rules, but may be regulated under the Clean Water Act, Sec 404.

Natural Hazards and Resilience

Promoting Hazard Resilient Measures

There are several steps a community can take to reduce the risk of damages and increase the safety of the community. Measures can be taken that consider directing new development and capital improvements outside these sensitive areas. Additional measures should be utilized to reduce the potential for future damages and increase preparedness for disaster response.

In October 2014, the state outlined minimum measures communities should take to reduce flood related risks and prepare for emergencies. Communities that adopt these measures will receive a reduced local match to public assistance funds from Vermont's Emergency Relief and Assistance Fund (ERAF). The four minimum mitigation measures include:

1. Adopt the most current Town Road and Bridge Standards (see VTrans Orange Book: Handbook for Local Officials).
2. Adopt flood regulations that meet the minimum standards for enrollment in the National Flood Insurance Program.
3. Annually adopt and maintain a Local Emergency Operations Plan (LEOP).
4. Adopt a FEMA-approved Local Hazard Mitigation Plan.

Fairfax has adopted all four of the minimum mitigation measures.

<u>Emergency Operations Plan</u>

The Fairfax Emergency Operations Plan is updated annually and identifies the emergency responsibilities of all appropriate municipal officials and officers; identifies local shelters and emergency operation centers; and outlines necessary communication and command protocols. Copies of the emergency operations plan are available for review at the Town Office.

Land Use

Working Lands

The *Use Value Appraisal of Agricultural, Forest, Conservation and Farm Buildings Property* program, known as "Current Use" is administered by the Division of Property Valuation and Review within the Vermont Department of Taxes. According to the department's website, the

purpose of the law was to allow the valuation and taxation of farm and forest land based on it remaining in agricultural or forest use instead of its value in the market place. Through this program, the state reimburses municipalities for the balance in tax revenue, removing any fiscal municipal impacts for preserving the Town's undeveloped natural resource lands. To enroll, landowners must have 25 contiguous acres of forestland or agricultural land in active use. Small agricultural properties could be considered if they generate at least $2,000 annually from the sale of farm crops, or actively used agricultural land owned by or leased to a farmer.

Table 5.4. Amount of land in Current Use Program based on Grand List records in Fairfax

Year	Number of Parcels	Total Acreage	Homestead Acres	Non-residential Acres
2015	99	12,151	8,716	3,435
2010	100	12,267	8,770	3,497
2006	90	11,591	8,938	2,653

Appendix 2: the Town of Fairfax Historical Record

The Settlement and Evolution of the Fairfax Community

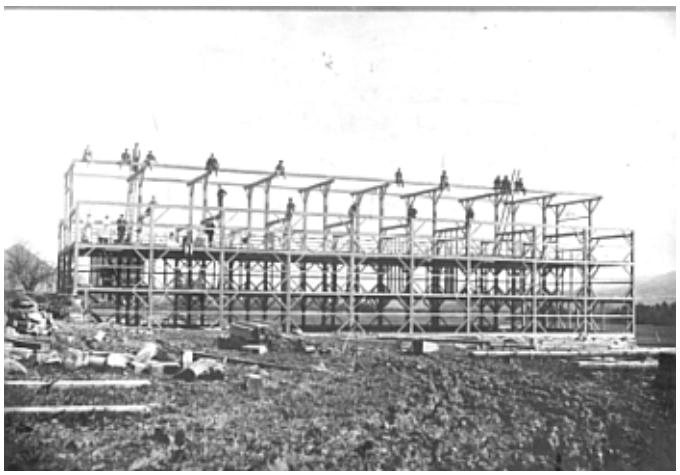


Photo 1 - Bellows Barn Construction, 1908

The written historical record of northwestern Vermont begins in 1609 with the exploration of Lake Champlain by Samuel de Champlain. At that time, he took note of the lands intermediate between the lake and the Green Mountains, and named the Lamoille River. In the eighteenth century, these and other lands claimed by Champlain for France were assigned as land grants (seigneuries) to noblemen for the purpose of promoting their settlement. The Fairfax area was included in a tract assigned to the Raimbault Family. It appears, however, that any French settlement in this tract that did occur was restricted to the shores of Lake Champlain and its immediate environs. Actual settlement in Fairfax did not begin until after the establishment of British control of Vermont.

In August of 1763, Governor Wentworth of New Hampshire granted a land parcel of 23,000 acres for the purpose of establishing a new plantation to be named Fairfax. In August of 1786, a town meeting voted to survey out these parcels, most parcels being square lots of 100 acres each, with 64 people drawing for the lots. It's doubtful that many of these people ever saw or settled in Fairfax, it being determined that a tax would be imposed to pay surveyors for laying out the highways. Being unable to pay the tax, most of the original landowners lost their parcels to either the tax collector or the surveyor. The first settlers then bought their land from them.

"Voted: That the proprietor will lay out as soon as may be, one Hundred acres as each might for the first Division in such a manner that the length of the lots shall not more than twice exceed the Breadth of the same."
- From meeting of the Proprietors of the Town of Fairfax 1786

When the early settlers arrived in Fairfax, Western Abenaki Native American groups inhabited western Vermont. Subsistence strategies for the Abenaki people entailed alternating between living in a village setting where crops were grown and surplus foodstuffs stored, and periodic dispersion into smaller groups that traveled to other locations, primarily for hunting purposes.

The Western Abenaki were organized into several major bands or organizations, each occupying its own village site. No doubt, the first European settlers to the area encountered the Abenaki on their hunting expeditions.

The first settler, Captain Broadstreet Spafford, found the land which today is the Town of Fairfax in virgin forests which were the Abenaki hunting grounds. Captain Spafford, and his two sons Asa and Nathan, arrived in 1783 from Piermont, New Hampshire and built a cabin on the north bank of the river, on what is now called the Goose Pond Road. Gradually, other settlers arrived, coming by way of the lake and the river.

Joseph Beeman and his son were the first to settle in North Fairfax. The first actual settlement in the village area was by Thomas Belcher, a hunter, in 1787. Stephen England, who arrived a year later, purchased the land and later built the first hotel in the village at the corner of Main Street and Hunt Street, where the St. Luke's rectory was formerly located. Hampton Lovegrove purchased the hotel from England and it remained in operation for over 100 years. In 1791, Gould Buck and his wife, Abigail Hawley, from Arlington, settled Buck Hollow. The first Town Meeting was held at Captain Spafford's house on March 22, 1787, and before the century was out, such issues as roads, schools, and the regulation of swine were being addressed.

The initial growth of Fairfax was fueled in part by access to waterpower. Throughout the history of this area, the Lamoille River and several of its tributaries in the immediate vicinity were utilized to drive mills. With its 88 foot descent, Fairfax Falls has been the most heavily utilized hydropower location in the Lamoille drainage. The first mill at Fairfax Falls was constructed in 1791 by Judge Amos Fassett. This was undoubtedly a major economic development, as prior to this time, residents had been forced to rely on facilities in Burlington and Vergennes for milling. Tributaries of the Lamoille in and around the Town of Fairfax itself were also quickly utilized for power. In 1792, a fulling mill was constructed on Mill Brook, which flows through Fairfax before emptying in the Lamoille. By 1800, Fairfax had a substantial population of 778.

Fairfax village was actually first settled in the Plains, south of its present location across the Lamoille River. In addition to a tavern, shops, schools and potteries, the Plains had a parade ground where the men bivouacked before leaving to go off to war.

The war of 1812-1814 was in one sense a war of convenience; the men planted their crops, then left for Plattsburgh, leaving their wives and children to tend the farms. They returned in the fall to harvest, wait out the winter, and repeat the cycle the next year. The convenience; however, was far outweighed by the death and disease suffered.

In 1826, a man by the name of Woodward established a saddle and harness business for the Town in return for a free house and the position of toll collector at the Lamoille River bridge. In

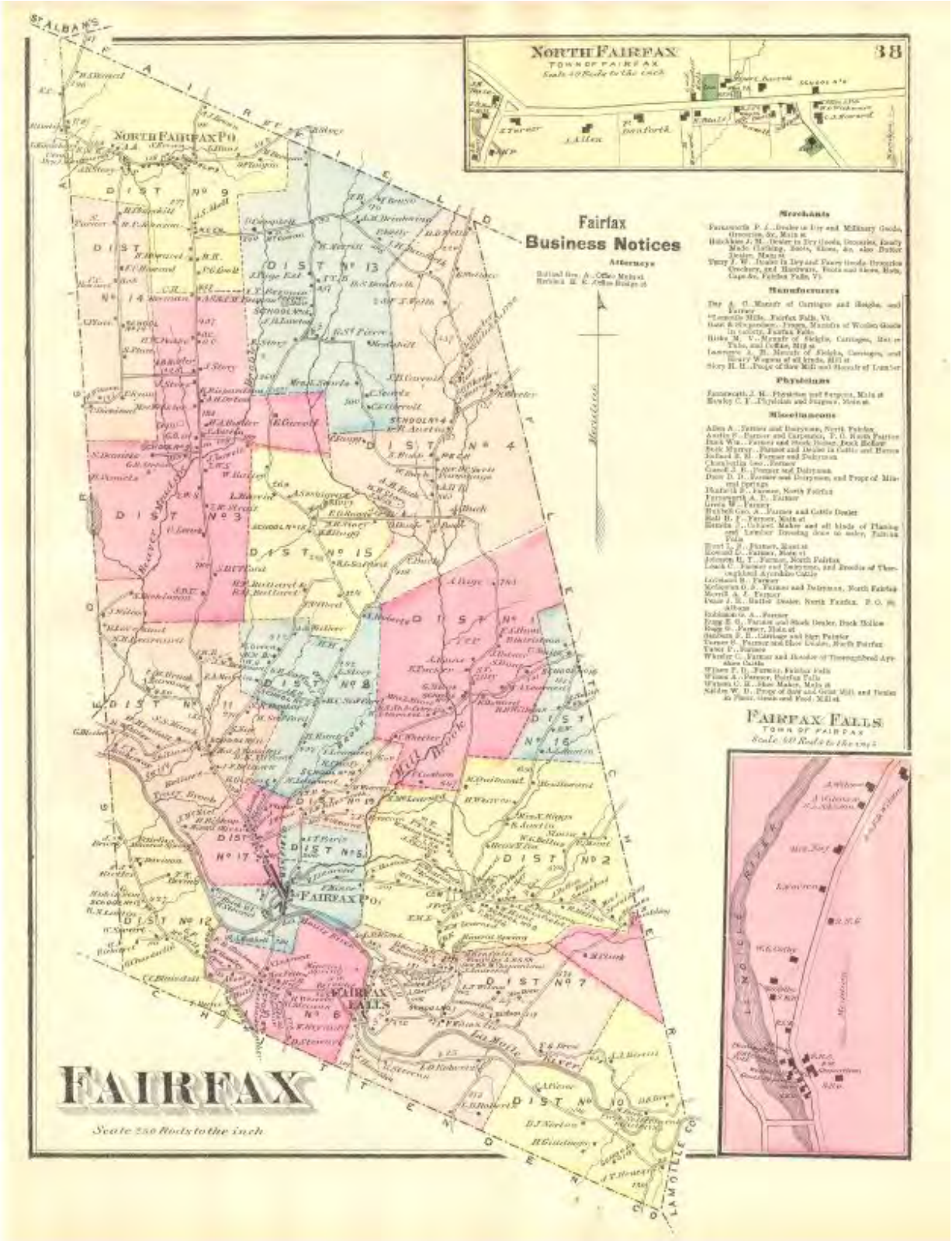
the spring of 1832, a flood called the Great Freshet carried off the first clothing mill at the Falls, and Fairfax's pride and joy, the Toll Bridge. A ferry boat joined the Town of Fairfax until 1833 when citizens voted $1,500 to build a new arched bridge a few rods upstream. As businesses grew in the town center, taverns sprouted to serve the entertainment and resort needs of weary travelers. One of these, the Valley Hotel, still stands at its original location in the center of town after several renovations.

In 1853, the New Hampton Institute moved to Fairfax from New Hampshire. Rev. Eli B. Smith was the first President, and the school enrollment totaled nearly 300 men and women. The Institute provided an excellent education, graduating lawyers, teachers, and ministers for over 50 years before being destroyed by fire. However, the Institute was not the only school in town; Fairfax had grown from having only one school on the Plains to seventeen district schools with 475 students by 1861. In fact, the school enrollment in the 1800's equaled that of the early 1970's.

The Civil War took a much greater toll than the War of 1812. Five commissioned officers and 139 enlisted men left; 26 native sons were lost in battles such as Bull Run, Brandy Station and at Andersonville. Some who returned again brought disease, and epidemics swept the town.
The end of the war also brought prosperity. By 1870, there were ten general merchandise stores, a drug store, two hotels, four shoe shops, two butter dealers, a tannery, a harness shop, three wagon and sleigh shops, nine blacksmiths, a wagon, tub and coffin manufacturer, four saw mills, two grist mills, a planing mill, a woolen mill, two carpenters, a brickyard, a saloon and shortly thereafter there were three potteries. In addition, there were two lawyers, three doctors, and several professors. The next 20 years saw tree nurseries, new stage routes, and post offices in the Village, North Fairfax, Beaver Meadow, Buck Hollow, and Huntville, as well as carrier deliveries provided.

Fairfax was most prosperous in the early to mid-nineteenth century. Wool, lumber, and cattle were the most important industries at the time. In 1871, the Town of Fairfax contained 84 dwellings and 31 commercial establishments. The Lamoille River at Fairfax Falls was heavily used for a range of hydropower facilities throughout the nineteenth century. The Beers Atlas of Fairfax Falls (1871) depicts four mills at this location. Three of these, a woolen mill, a planing mill, and a grist mill, were situated along the east bank of the falls. Because of the shallowness of the soil over the steep ledges along the east bank, an excavated headrace to power this last facility would not have been feasible. Instead, this saw mill was probably powered by an above ground flume or penstock construction drawing water from the Falls above. In addition to the three mills, Beers Atlas (1871) also depicts a store, a blacksmith shop and five residences along the east bank of the Falls at this time.

118



119 **Figure 1. 1871 Map of Fairfax – F.W. Beers Atlas**

The reason for such a diversity of enterprises was that the emphasis on lumber and mill manufacturing which had grown enormously was beginning to shift to the dairy industry. By the 1880's, there were four cattle breeders and four cattle dealers listed and many farms. However, the dairy industry at this time was oriented to the production of butter rather than milk, due to the capability of the railroads. Yet the Village continued to thrive, in the next years adding dress shops, millinery shops, and jewelry stores, and around the turn of the century further boasting a skating rink, dance hall, theater, cheese factory, candy factory, and ice cream parlor.

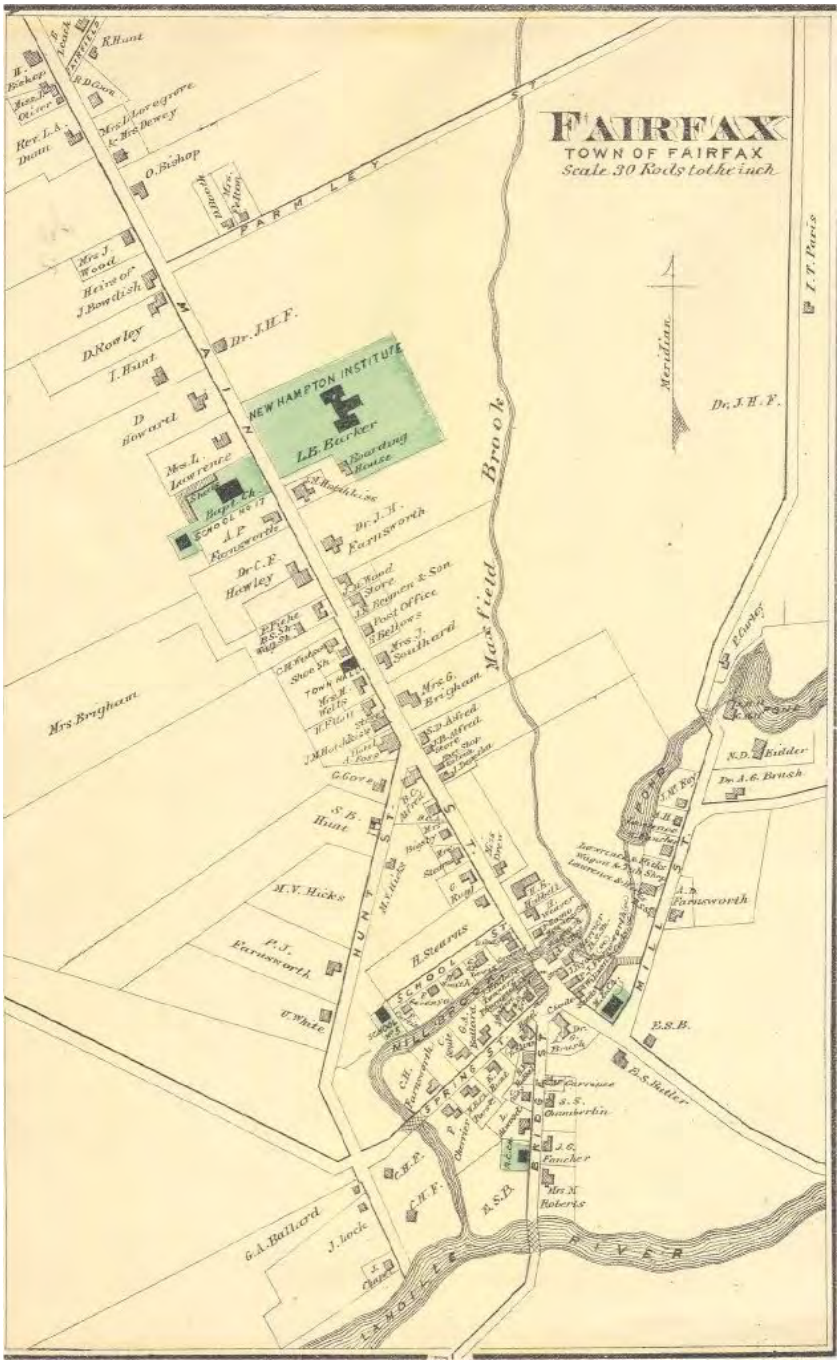


Figure 2. 1871 Map of Fairfax Village – F.W. Beers Atlas

The gold rush and the availability of homesteads attracted many residents westward to California, Oregon, Michigan, Iowa, and Kansas. The population began to decrease and soon after, the area fell into economic decline. During this time, there was a shift from heavy reliance on the wool industry to dairy farming in the area. In large measure this was due to the increasing dependence of economies of the Champlain Valley on manufactured goods, with the larger settlements of Burlington and St. Albans becoming the centers for such production. Although railroad connections in the Lamoille Valley did exist at the time, they extended no further than East Georgia, four miles west of Fairfax, requiring transport along the 104A corridor of any goods produced for export. In 1897

and 1898, major fires accelerated the population decline of Fairfax and destroyed several important buildings in the town.

Photo 2 - #59 Birds Eye View of Fairfax Post Card (Courtesy: Mike McNall)

In the early twentieth century, electricity came to Fairfax, with the construction of the Lamoille River dam at the Falls. Vermont Power and Manufacturing Company completed construction of the Northside underground hydroelectric plant in 1904. In 1916, VPMC and its Northside Station was purchased by Public Electric Light Company. PELCo subsequently constructed the west bank hydroelectric plant, completing the existing building with one generating unit in 1919. A second unit was added to the works in 1921. A severe flood in the Fall of 1927, precipitated by four days of heavy rain on the frozen ground, heavily damaged the Northside Station facility on the east bank, resulting in its abandonment at that time.

It was also about this time that Hiram Bellows, a St. Albans businessman, provided the money for schools in Fairfax and St. Albans, both to be named Bellows Free Academy (B.F.A.). Thus, by 1906 (after the fire at New Hampton Institute) Fairfax once again had a beautiful school, but it too was destined to burn 40 years later. A portion of the present B.F.A. was built following that fire, with later additions.

The fact that Fairfax has a water system in the village was also due to the generosity of Mr. Bellows. The system was built in 1911 chiefly to serve the school, with the reservoir (in the woods off the Fletcher Road) replacing the wind-driven pump (which stood behind the school) as the new supply. The annual fee charged the first customers was $2.00.

The 1927 flood miraculously took no lives in Fairfax. It did, however, destroy many roads and buildings. Most of the wooden mill buildings were destroyed, as well as all but one bridge. The covered bridge on Maple Street, built in 1865, was turned end for end in the flood, but was saved. A steel bridge was erected two years later to replace the two lane bridge.

Perhaps more damaging was the stock market Crash of 1929. With the closing of banks, Fairfax returned for a period to a barter economy; many people were forced to exchange work for goods and goods for food. Many also were unable to hold onto their homes and farms, and structures which burned were rarely replaced. Soon afterwards, the Second World War saw an exodus of young people leaving for military service, and for better paying jobs in other states. The population in 1940 was 1,229 residents. At the same time, there were 80 farms with a total of 2,400 milking cows.

It was not until 1947 that town officials embarked on capital improvements for better fire protection. The Town received a trailer-mounted pump from civil defense, and voted to purchase a used truck and firefighting equipment. A new truck was put into service in 1948, and a Volunteer Fire Department was founded.

For several years more, family farms continued to dominate Fairfax's economy and land use. While a few shops remained, most of the others such as the potteries, mills, and the blacksmiths had vanished. The 1950's saw an out-migration of young people in Fairfax due to the lack of employment opportunities. Fairfax's employment base began to diminish and the Fairfax Branch of the Cooperative Creamery shut down.

With the 1970's approaching, roads improved, I-89 was being built, cars went faster, and the cities of St. Albans and Burlington seemed much closer than they had before. Nearby production facilities such as IBM attracted a growing workforce to the area, and Fairfax's convenient access contributed to a reverse in previously declining population trends.

Development prompted town officials to study the feasibility of a public sewage treatment system in 1965. A year later, the first zoning bylaws were adopted, after a series of previous defeats at the polls.

The 1970's continued to witness a steady growth rate. Among major projects were new residential developments in North Fairfax, and in Fairfax Plains. A new high school was

completed in 1975 while preservation of the old continued with the renovation of the Maple Street covered bridge. In 1977, the passage of a village pollution control bond was finally set in motion.

The 1980's marked a time when the population level of the town rose to that of the late 1800's. The 1990 census showed Fairfax's population to be 2,486, the highest since 1850. More people meant more homes being built, especially on back roads. This led to a need for an increase in services provided by the town, (i.e. road repair, town water system, fire department and rescue squad, and especially BFA Fairfax). Most services are housed in new buildings: (1982) - The new Town Garage was built on the Fletcher Road, (1984) - The Town Clerk's office moved from BFA to the old principal's house, (1987) - The old iron bridge across the Lamoille River on Main Street was replaced by a modern concrete bridge, (1990) - The Fairfax Fire Department and Fairfax Rescue moved to a new, larger building, (1989-90) - BFA Fairfax added its second major addition in 20 years to house grades 5-8, and (1998) the new Elementary Wing was constructed and the old middle school was rehabilitated.

A few more essential services were added in the 1990's, such as a local doctor's office, pharmacy, hardware store, and restaurant along with a small grocery, convenience stores, and auto repair shops. In addition, a community recreation park was completed in 2007 that includes athletic fields and a recreation path.

Well into the Information Age, Fairfax continues to change. The wires that first carried electricity to Fairfax in 1904 now carry high speed internet to the computers of home offices and cable television to home entertainment centers. Although a strong focus on agriculture is still present, the number of family farms continues to decline. Industry is expanding in neighboring towns and Chittenden County, further increasing development pressures. Population increase is bound to continue, as a growing number of families discover Fairfax's unique combination of convenient access to major cities and towns, its small town atmosphere, and peaceful environment.

APPENDIX 3:
FAIRFAX 2017 TOWN SURVEY RESULTS

Total Responses: 258

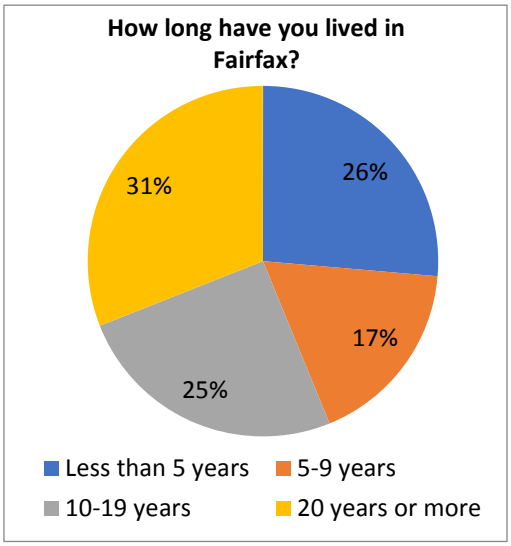
Survey period - 1 month

Survey questions - 18

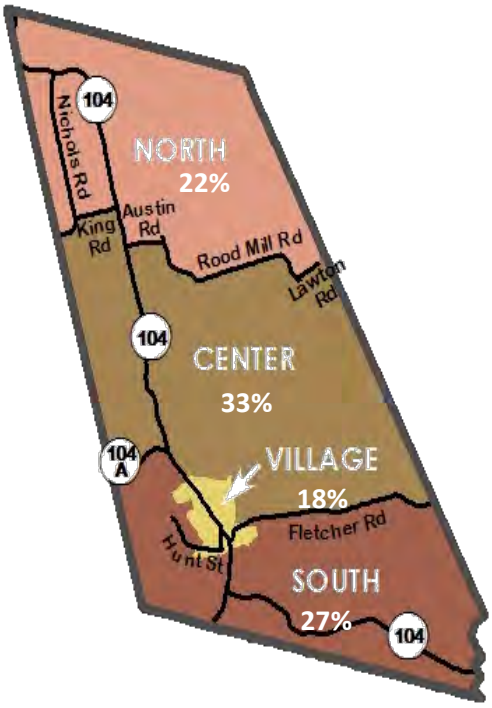
Town of Fairfax, Vermont

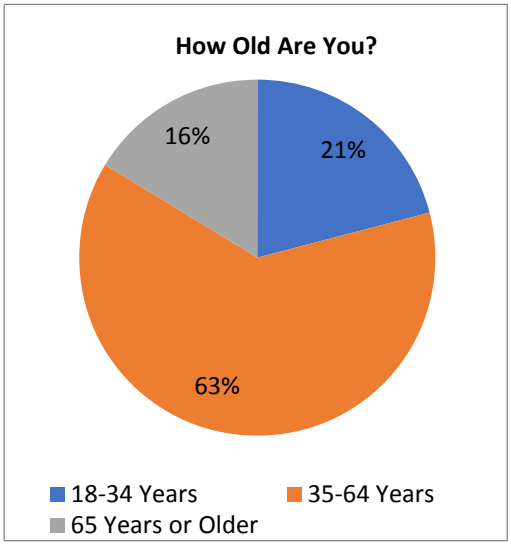
Prepared by the Northwest Regional Planning Commission

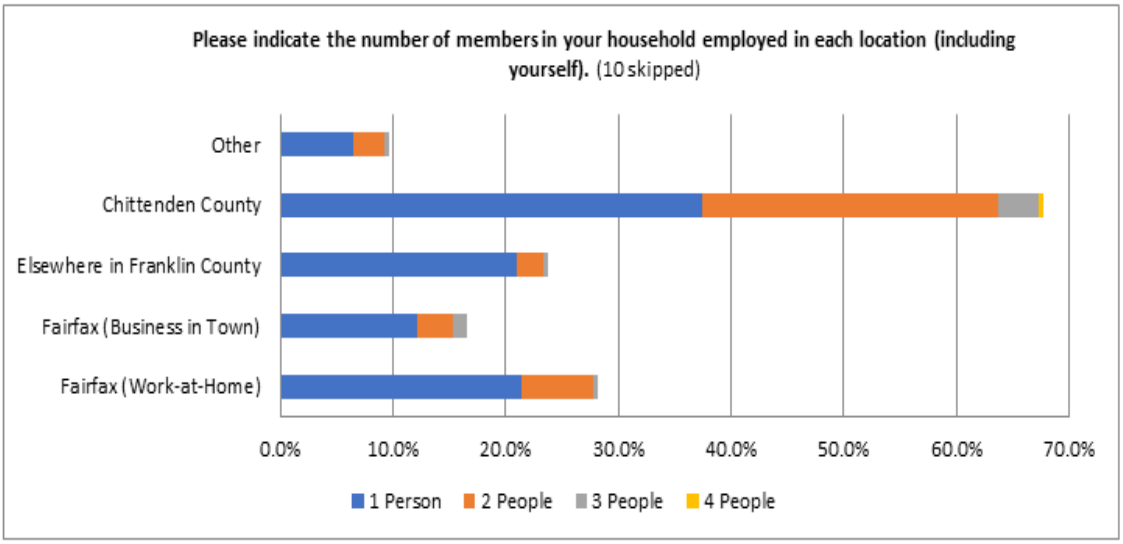
Demographics of Survey Respondents

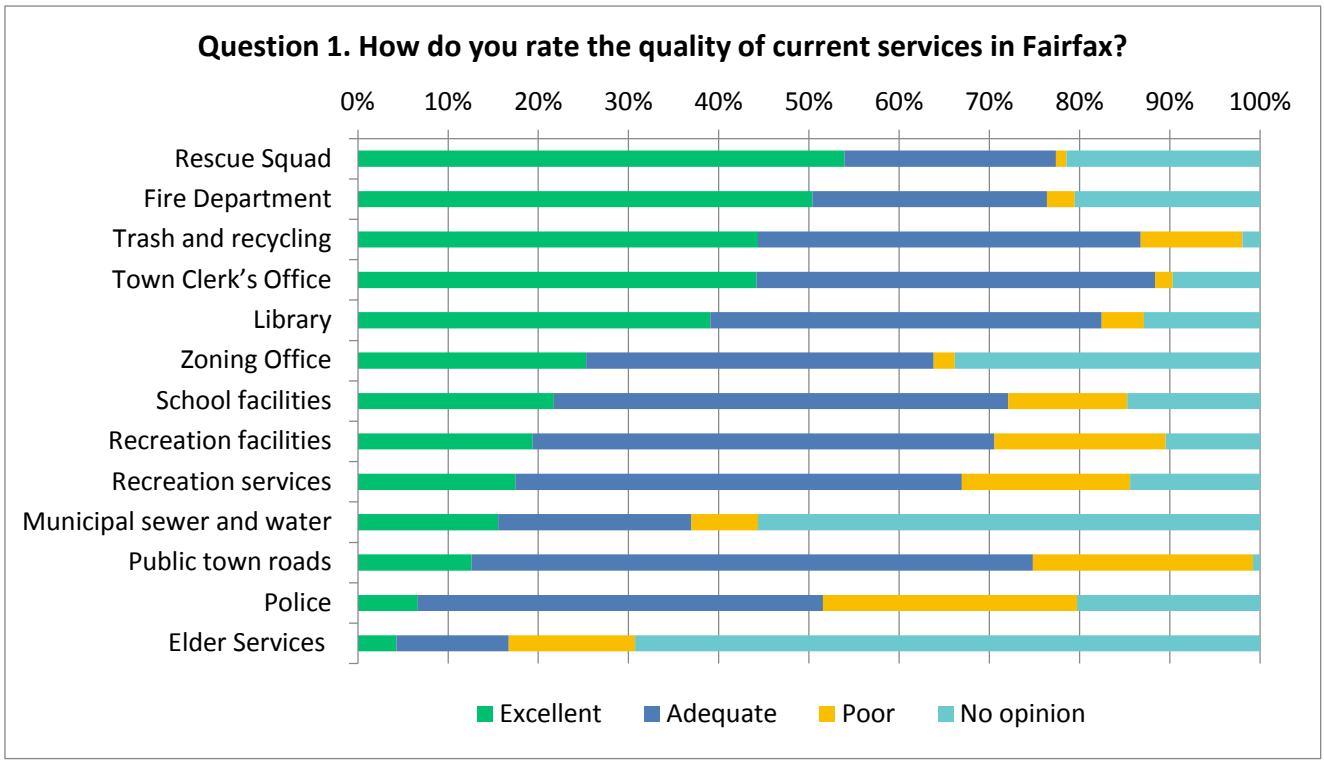


Where in Fairfax do you reside? (3 skipped)





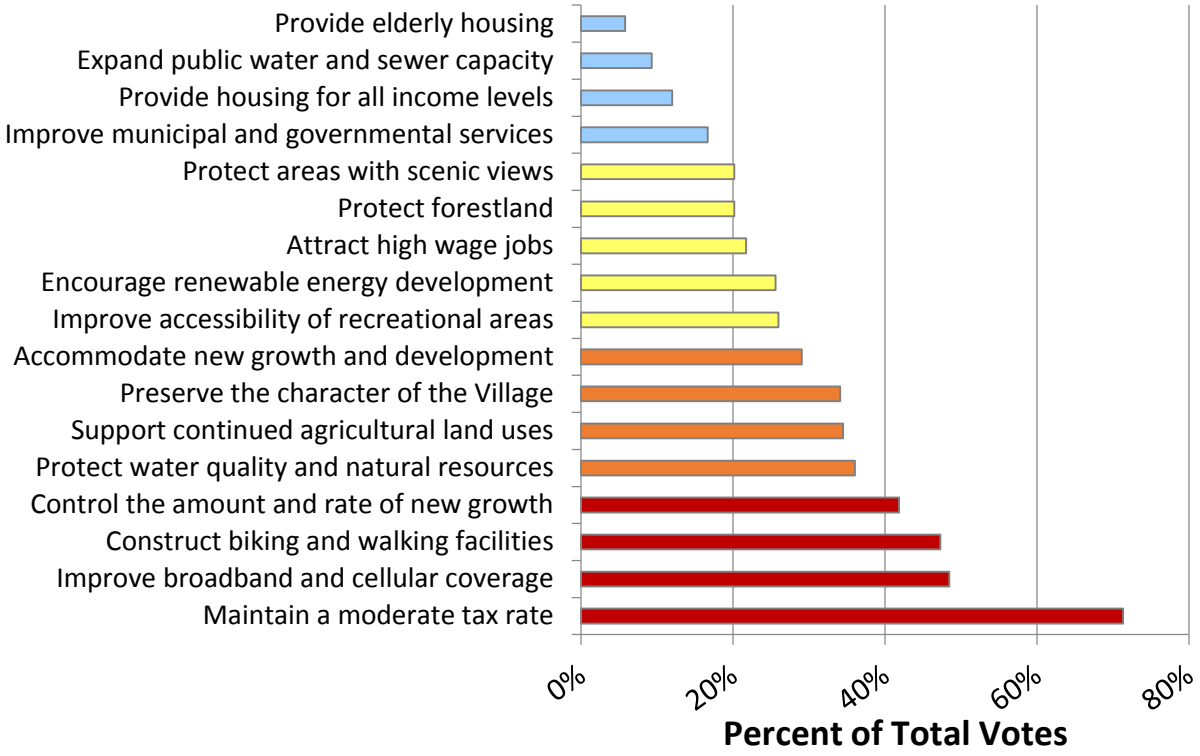




Most services were rated as adequate and the majority had no opinion on elder services or municipal sewer and water. An excellent rating was given to the Rescue Squad, Fire Department, Trash and Recycling, and Town Clerks Office. *The following are themes from 62 comments provided related to Question 1:*

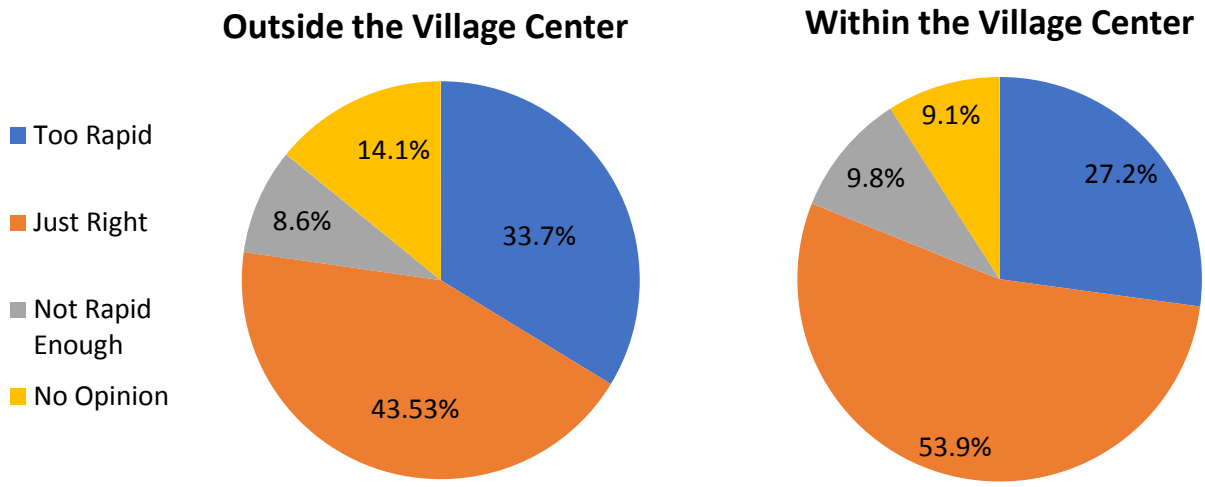
- Emergency Services (Fire/Rescue/Police) – Expansion of police coverage beyond speed limit enforcement
- Trash and recycling – Concern over cost increased in contract; would like tier based system to link cost to amount used as well as option to pay more for service directly to house
- Town Roads – Would like transparency on paving schedule (commented currently done in small patches) and additional efforts on maintenance of dirt roads (potholes, ditches filled in, dead trees a hazard)
- School Facilities – Facilities need to be updated; Improve drop-off and pick-up flow and provide crossing guard for those walking to school
- Recreation Facilities – Would like to see more walking/nature trails, community center, park bench by playground, dog park.
- Recreation Services – More opportunities for all ages; free and more varied options
- Municipal Sewer and Water – Need to expand
- Elder Services – Potential to develop a senior volunteer ride service like Hinesburg (Hinesburg Rides – a community transportation program run by local volunteers under the Hinesburg Community Resource Center; partnering with GMT)
- Sidewalks/Crosswalks – Need pedestrian facilities along Buck Hollow Road, Huntsville Road, Route 104, School Street. Crosswalks need to be repainted by school
- Commercial Development – Needed to provide jobs and local marketplace.
- Internet – Faster, more reliable service offerings

Question 2. If Fairfax could address only five of the following planning objectives during the next eight (8) years, which five would you choose?

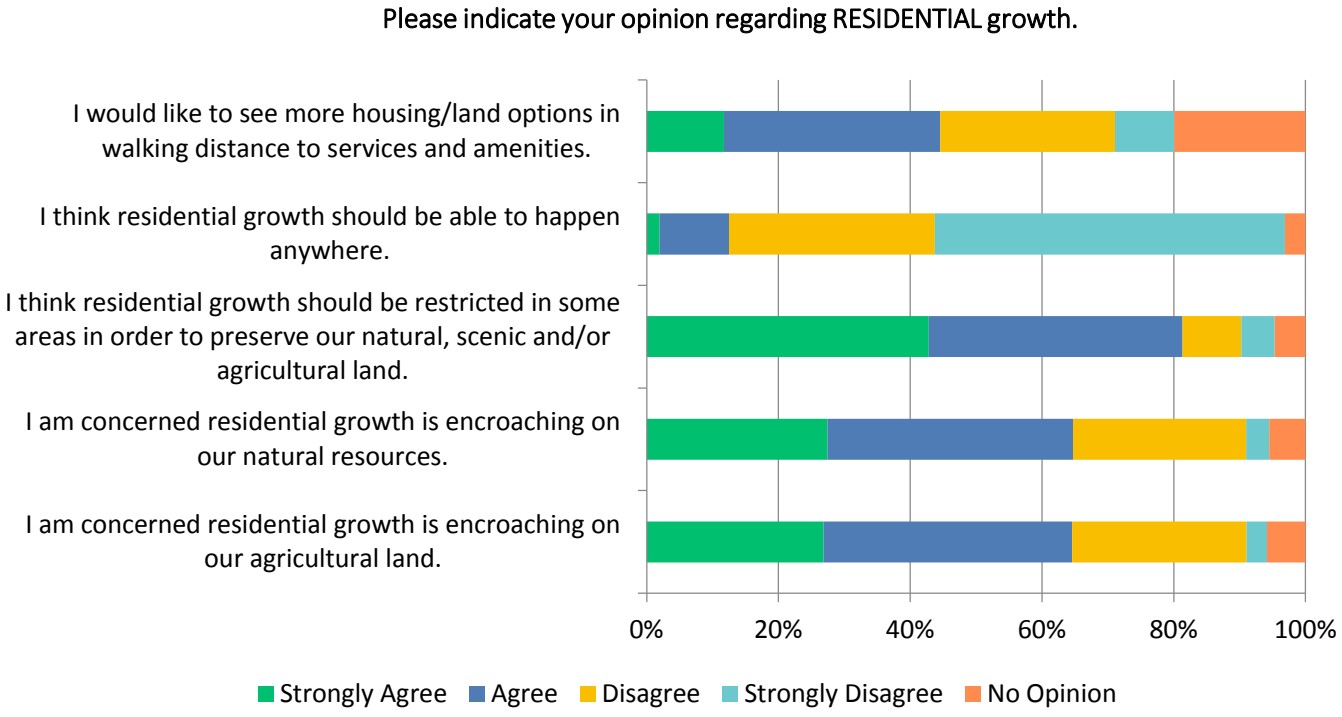


Top 7 Planning Objectives that had the most votes regardless of position ranked (1st-5th)
1. Maintain a moderate tax rate (184)
2. Improve broadband and cellular coverage (125)
3. Construct biking and walking facilities (paths or trails) (122)
4. Control the amount and rate of new growth (108)
5. Protect water quality and natural resources (93)
6. Support continued agricultural land uses (89)
7. Preserve the character of the Village (88)

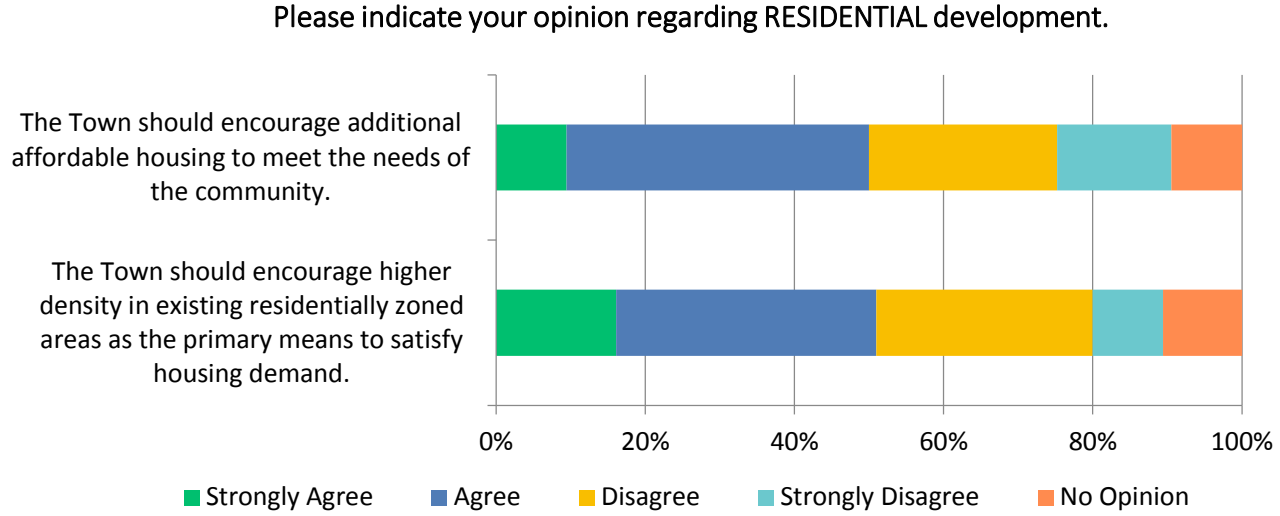
Question 3. For this question, the Village Center is defined as Minor's Country Store to Nan's Mobile. How do you feel the rate of RESIDENTIAL development in Fairfax has been? (255 Respondents)



Question 4. In many places in Vermont and elsewhere, the 'rural landscape' has become a suburban one. Residential development is happening at the same density across the majority of a municipality, regardless of other historic, cultural or natural features in the landscape. Please indicate your opinion regarding RESIDENTIAL growth. (257 Respondents)



Question 5. Please indicate your opinion regarding RESIDENTIAL growth. (257 Respondents)

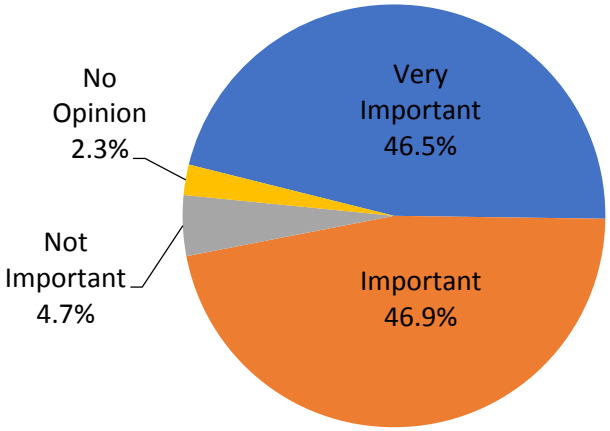


**Residentially zoned areas are defined as the Growth Center, Mixed Use, and Residential Zoning Districts*

The following are themes from 58 comments related to residential development (Questions 4 and 5):

- Plan and control growth
- Strong interest in maintaining rural character by preserving open space (scenic views and agricultural land)
- Importance of sidewalk/paths within village and connections to outside village
- Strong interest regarding the aesthetics of housing developments; desire for new development to visually meld with the form of historic structures in the community. Specific mention was made to that of multifamily dwellings.
- Concentrate multi-family housing options in and near village districts
- Balance new growth with the ability to make improvements to existing infrastructure; additional growth in rural districts impacting traffic on roadways.
- Ensure existing housing stock is maintained
- Do not want Fairfax to turn into Chittenden County (referring to higher density housing)
- Perception that affordable housing equates to clustered multiunit homes and this is not a fit for a rural community

Question 6. How important is local agriculture to you? (258 Respondents)

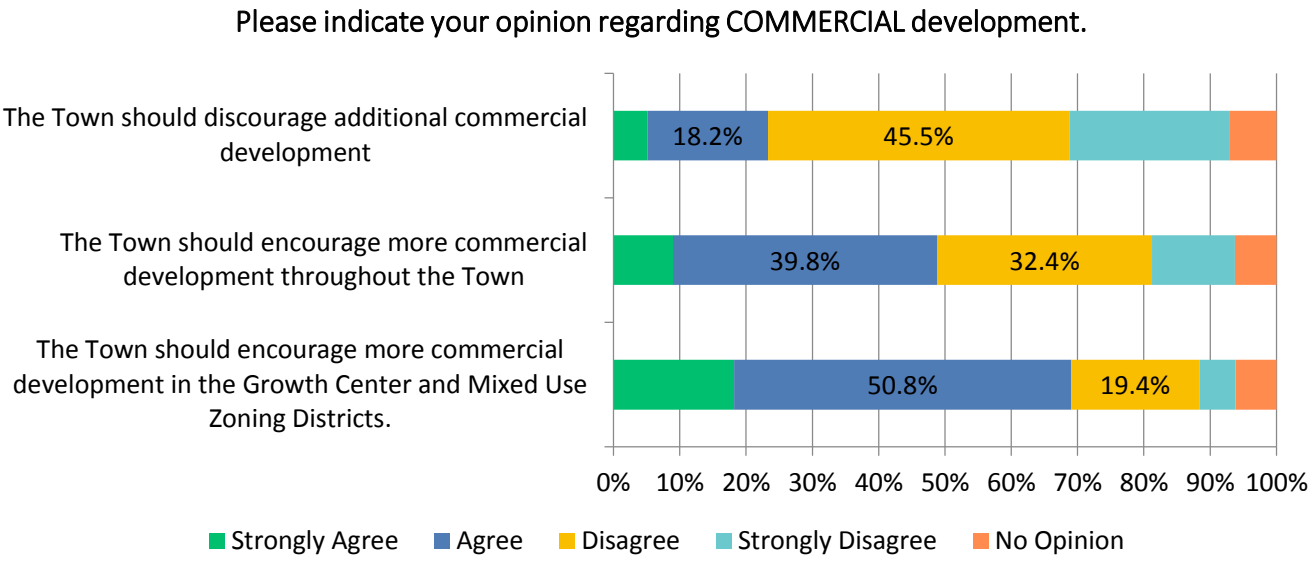


Question 7. If you responded that local agriculture is very important or important to you, why? (Check all that apply) (240 Respondents)

The following are themes from 17 comments regarding local agriculture (Question 6):

- Many noted that the number of farms and amount of farmland has decreased
- Opinions range from the presence of farmland defines the feel of the Town to those saying ample farmland is available in VT and they would like to see residential and commercial growth
- Conditions of agriculture have changed and the Plan needs to reflect that
- Interest in maintaining small farm operations to provide locally grown produce

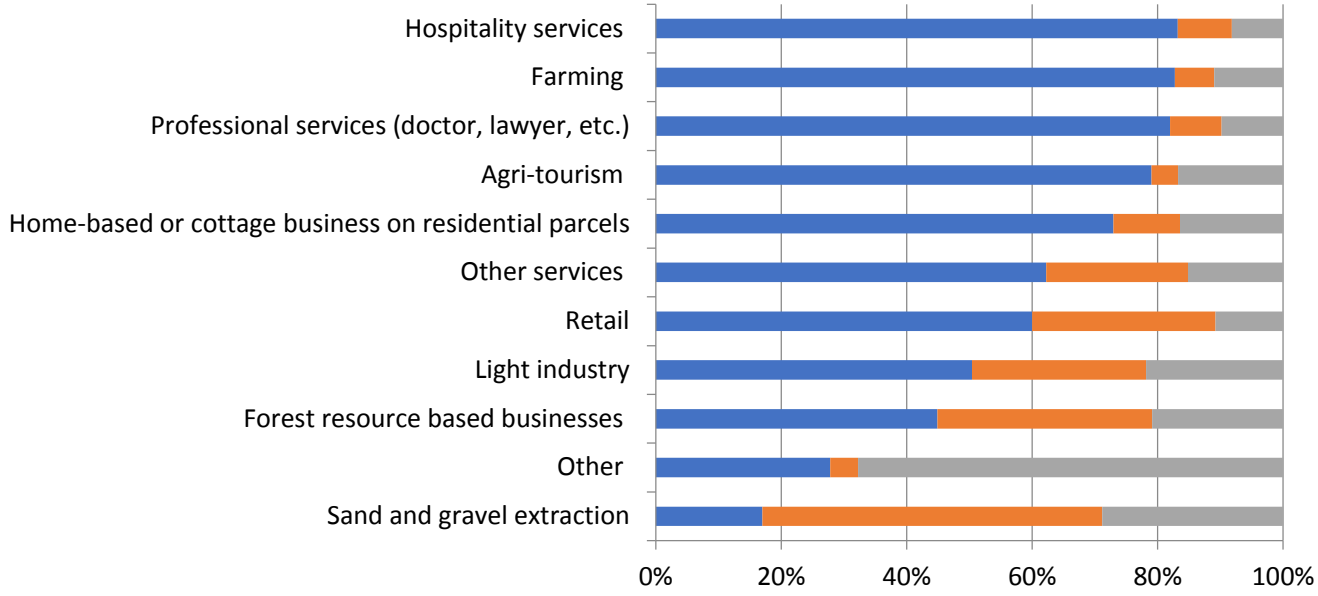
Question 8. Please indicate your opinion regarding COMMERCIAL development. (258 Respondents)



The following are themes from 41 comments regarding commercial development (Question 8):

- Helps tax base but ensure keep small town feel
- Encourage small family owned business, not large corporations
- Interest in more services but acknowledge proximity to communities like St. Albans fills this need with the population and infrastructure to support it
- Need infrastructure improvements in growth center
- Potential for a focused center in North Fairfax

Question 9. Which types of economic development would you like to see Fairfax encourage? (257 Respondents)

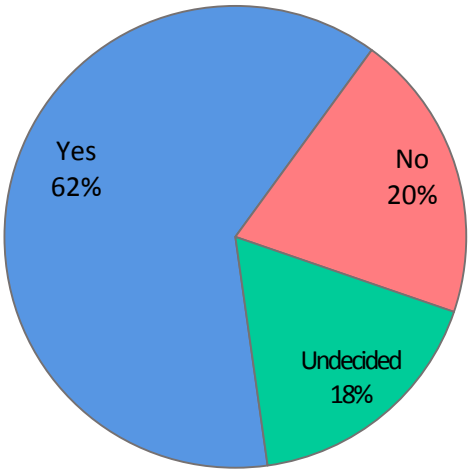


Hospitality services (restaurant, bed & breakfast, etc.)
Farming (dairy, crop, diversification for value-added products, etc.)
Agri-tourism (agriculturally based operation or activity that brings visitors to a farm)
Other services (gas station, dry cleaner, florist, repair shop, etc.)
Forest resource based businesses (wood products manufacturing, mills, etc.)

The following are themes from 49 comments regarding economic development (Question 9):

- Would like to see new services such as coffee shop, music venue, grocery, etc
- Improvements to high speed internet to support telecommuting and small business

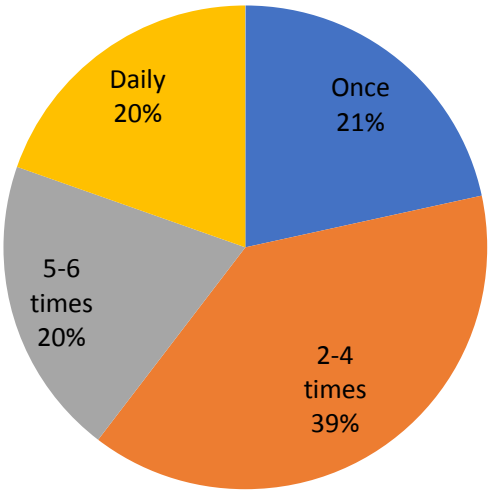
Question 10. Should the Town invest in additional or improved infrastructure (e.g., roads, sidewalks, water, sewer, etc.) to attract businesses? (257 Respondents)



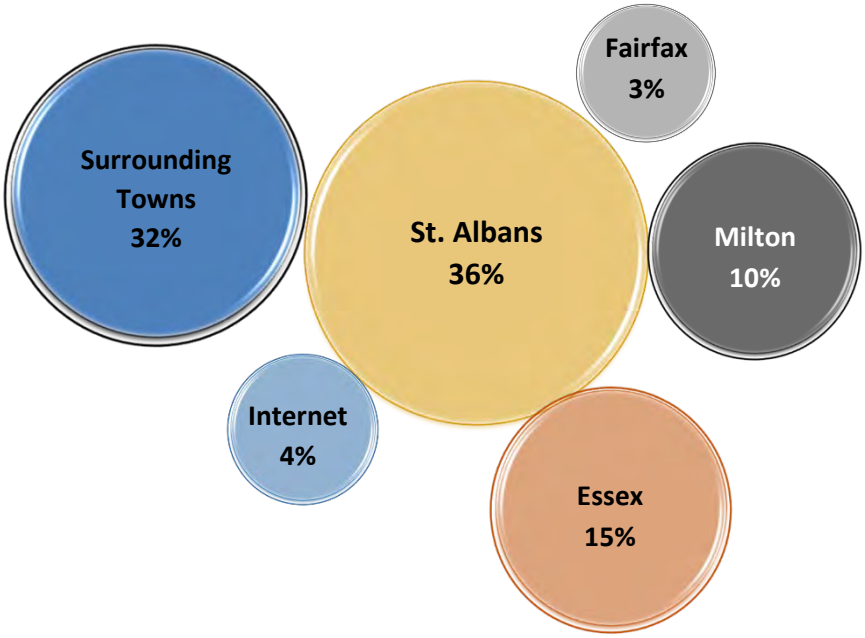
The following are themes from 91 comments regarding infrastructure improvements not already covered in prior question (Question 10):

- Priority areas for investment: Roads, sidewalks, crosswalks, & high-speed internet
- Mixed views on the expansion of water and sewer in the village

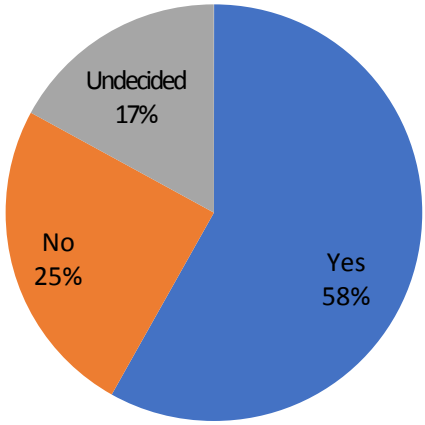
Question 11. How often are you a patron at a business in the Village per week? For this question, the Village Center is defined as Minor's Country Store to Nan's Mobile. (255 Respondents)



Question 12. Where do you conduct most of your retail shopping (grocery, clothes, toiletries, etc.)? (251 Respondents)



Question 13. Should the Town invest in traffic-calming infrastructure (e.g., wayfinding signage in Village, street trees, new crosswalks, etc.) to slow traffic and increase traveler safety in the village areas? (258 Respondents)



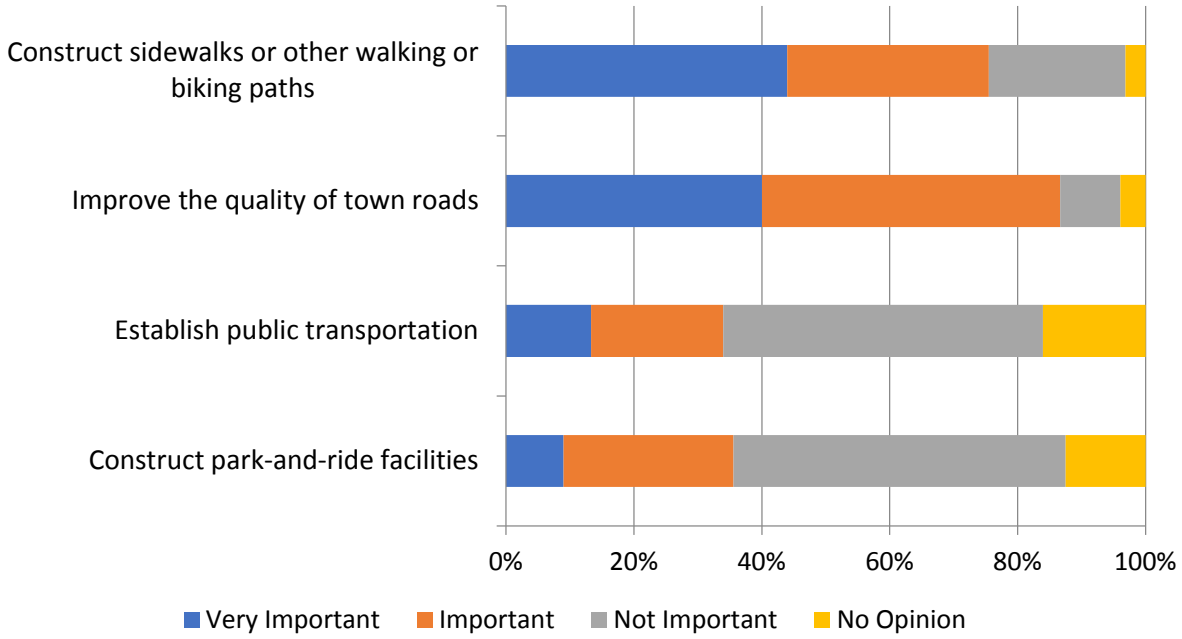
The following are themes from 46 comments regarding traffic-calming infrastructure improvements (Question 13):

- Promote street trees, crosswalks, and sidewalks
- Concern that proposals would create issues for snow removal/plowing
- Perceive speeding on rural roads in Town more of an issue
- Would want to see statistics that it is an issue (speeding in village areas); If not a high rate of incidence then spend efforts to expand paths and other infrastructure
- Important to be pedestrian friendly; support kids walking to school and residents using paths
- Support depends on affordability of solution
- Chicken and egg – first need to build desire to be in village, then work on improvements
- Would support these actions if village was expanding to allow for more development (residential and commercial)

Respondents identified the following areas of concern related to traveler safety:

- North Village along Route 104
  → Exiting Nan's Mobil parking and Foothills Bakery
  → South bound turns from Buck Hollow Road or Huntsville Road to Main Street
  → Fletcher Road and River Road
  It was noted a thoughtful solution is needed to address safety at the intersection with the blinking light and trying to add in a crossing in this areas; simply adding more signage could create issues.
- South Village section of 104
  →From Erica's to Post Office
  →Intersection with 128
- Intersection of 104 and 104A

Question 14. Please indicate the level of importance of each transportation-related action.
(258 Respondents)



The following are themes from 21 comments regarding traffic-calming infrastructure improvements (Question 14):

- Many felt town roads should be prioritized over sidewalks and paths
- Public transportation not a priority given the Town's population
- Perceive the park and ride facility in Georgia at the Interstate is sufficient; it was noted there was a local lot across from Union Bank that is no longer in existence

Question 15. Do you walk or bike in the Village? (256 Respondents)

Yes	**39.45%**
No	**60.55%**

Question 16. If you do not walk or bike in the Village, what keeps you from doing so? Check all that apply. (174 Respondents)

Lack of bike racks
4%

Topography
8%

Access to bike
9%

Vehicle Speed
36%

Safety
50%

Lack of facilities
(sidewalks or trails)
52%

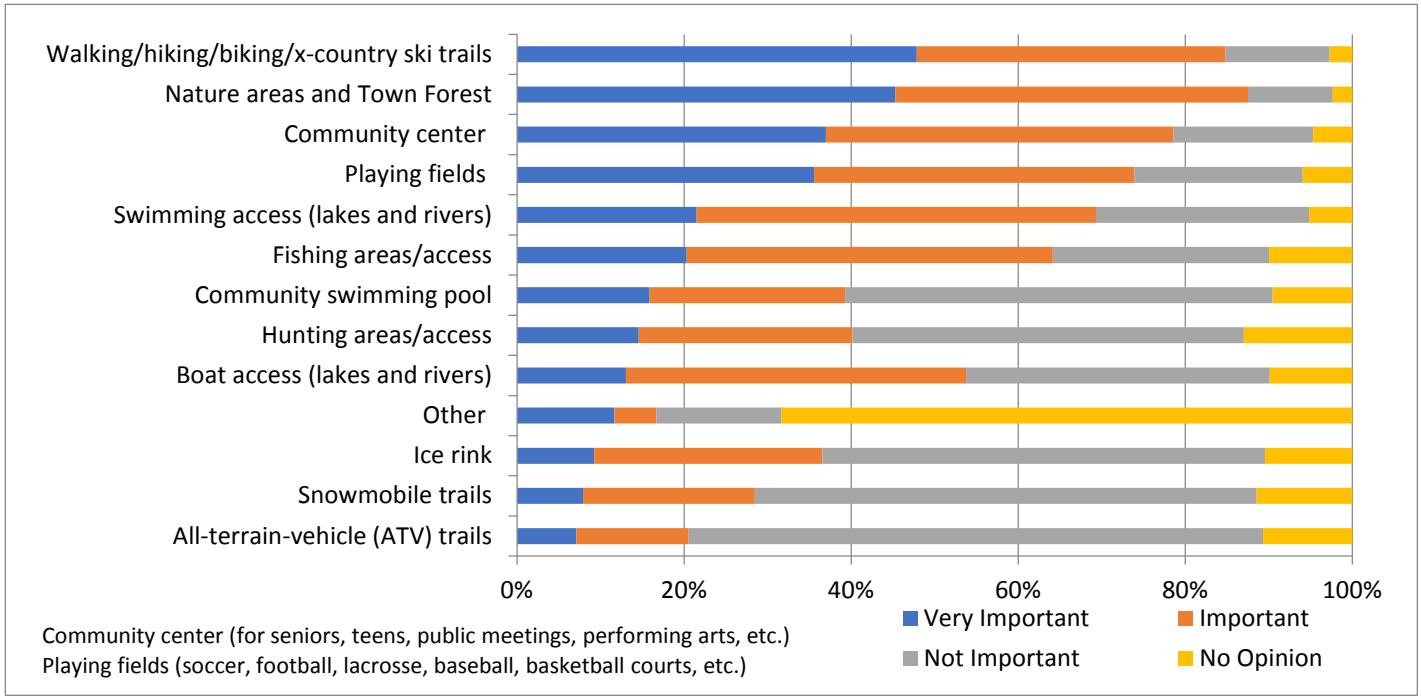
Distance from home
60%

Narrow shoulders on roads
outside Village
62%

The following are themes from 41 comments regarding walking and biking (Question 16):

- Noted preference for biking on country roads vs cost of infrastructure in Village
- One respondent noted that the use of a wheelchair in the village would be problematic
- Several respondents stated the lack of commercial destinations in the Village reduce their desire to bike there

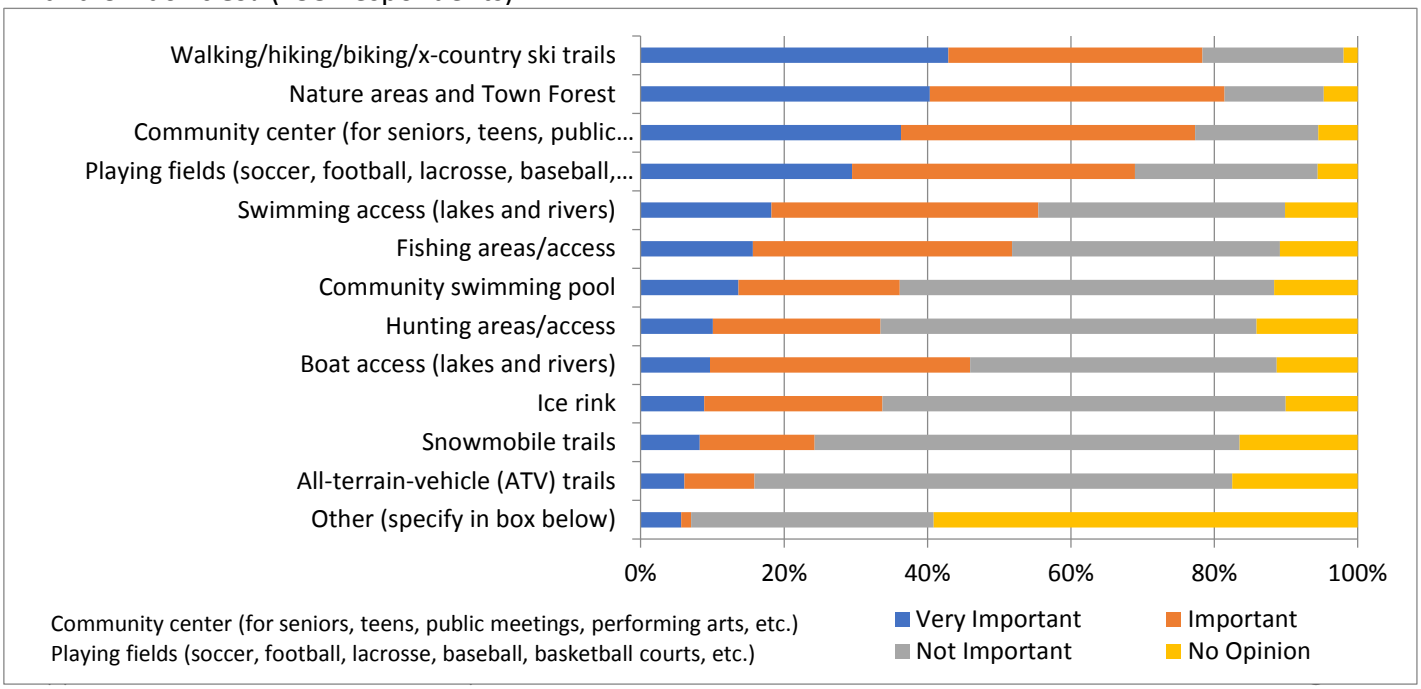
Question 17. Which types of recreational land or facilities are important to you and/or the community? (258 Respondents)



The following are themes from 39 comments regarding recreation land/facilities/improvements (Question 17 and 18):

- *Mountain biking*
- *Dog Park*
- *Noted Town Forest/100 Acre Woods as places where improvements could be made (parking and wet trails)*
- *Several respondents felt that many of these amenities should be funded by private investment or residents should utilize these facilities in the adjacent communities*

Question 18. Should the town support efforts to improve availability of the following recreational land or facilities? (258 Respondents)



The following are themes of additional comments provided by 81 respondents that are not addressed in earlier comments:

- Better broadband access for those that have options to telecommute but can't because of spotty service or slow bandwidth
- Enhance the village to encourage tourism
- Direct and control growth. A larger population means more services and in the end higher taxes. For example, at what population point will the Town need paid police or fire services?
- Request the Town be more active on Front Porch Forum to share news and information

A theme throughout the survey is the competing opinions for the vision of the Town. Should Fairfax grow and provide more services locally or remain more rural with limited services and future growth.

- Some feel concern that Fairfax is losing its rural character as a result of development. A respondent stated, “That's why we moved to the country, to be in the country. Not with city amenities”.
- Others feel that there are ways that additional development could create more of a community center and destination. Respondents likened Fairfax to being able to follow the likes of other Vermont communities such as Hinesburg.
- Many respondents noted that close proximity to adjacent towns provide services Fairfax does not and that improving the walkability of the village with sidewalks would be a fruitful enhancement for the existing village and sense of community.

Appendix 4: Fairfax Enhanced Energy Plan

Intent

The intent of this section is to meet the municipal determination standards for enhanced energy planning enabled in 24 V.S.A. 4352. The purpose of enhanced energy planning is to further regional and state energy goals, including the goal of having 90% of energy used in Vermont come from renewable sources by 2050 (the "90 x 50" goal), and the following:

A. Vermont's greenhouse gas reduction goals under 10 V.S.A. § 578(a);
B. Vermont's 25 by 25 goal for renewable energy under 10 V.S.A. § 580;
C. Vermont's building efficiency goals under 10 V.S.A. § 581;
D. State energy policy under 30 V.S.A. § 202a and the recommendations for regional and municipal energy planning pertaining to the efficient use of energy and the siting and development of renewable energy resources contained in the State energy plans adopted pursuant to 30 V.S.A. §§ 202 and 202b (State energy plans); and
E. The distributed renewable generation and energy transformation categories of resources to meet the requirements of the Renewable Energy Standard under 30 V.S.A. §§ 8004 and 8005.

A positive determination of compliance with the requirements of enhanced energy planning, as provided by the Regional Planning Commission, will enable Fairfax to achieve "substantial deference" instead of "due consideration" in Section 248 applications for energy generation facilities (e.g. wind facilities, solar facilities, hydro facilities, etc.) under Criteria (b)(1)-Orderly Development. This means that Fairfax will have a greater "say" in Certificate of Public Good proceedings before the Vermont Public Service Board about where these facilities should or should not be located in the community.

To receive a positive determination of energy compliance, an enhanced energy plan must be duly adopted, regionally approved, and must contain the following information:

A. An analysis of current energy resources, needs, scarcities, costs, and problems.
B. Targets for future energy use and generation.
C. "Pathways," or implementation actions, to help the municipality achieve the established targets.
D. Mapping to help guide the conversation about the siting of renewables.

This chapter will include the required analysis, targets, and mapping. The "pathways," or actions, have been included in the implementation section of the municipal plan.

Energy Resources, Needs, Scarcities, Costs and Problems

The following subsection reviews each energy sector of energy use (thermal, transportation, electricity) and generation in Fairfax.

Thermal Energy

An estimate of current residential thermal energy demand in Fairfax, based on data from the American Community Survey (ACS 2011-2015), is shown in Table A4.1. This data represents homes' primary fuel source for home heating and does not account for backup or secondary home heating fuel sources. The data shows that 49.2% of households in Fairfax depend on fuel oil as their primary fuel source for home heating. Fuel oil and wood sources are estimated to heat almost 70.2% of homes in Fairfax. There is no access to natural gas in Fairfax, so the 75 households that are reported to heat their households via

natural gas is likely an error from ACS. These households are more likely to be heated through other sources like wood, fuel oil, or propane.

Table A4.1 - Current Fairfax Residential Thermal Energy Use

Fuel Source	Fairfax Households (ACS 2011-2015)	Fairfax % of Households	Fairfax - Households Square Footage Heated	BTU (in Billions)
Natural Gas	75	4.3%	103,376	6
Propane	414	23.7%	729,824	44
Electricity	19	1.1%	36,176	2
Fuel Oil	859	49.2%	1,451,792	87
Coal	0	0.0%	0	0
Wood	367	21.0%	691,024	41
Solar	0	0.0%	0	0
Other	11	0.6%	20,944	1
No Fuel	0	0.0%	0	0
Total	**1745**	**100.0%**	**3,033,136**	**182**

Estimates for commercial and industrial thermal energy use are more difficult to calculate. An estimate of total commercial energy use (thermal and electricity) is provided in Table A4.2. Based on data from the Vermont Department of Labor (VT DOL) and the Vermont Department of Public Service (VT DPS). According to NRPC, it is assumed that the majority of this energy use, 48 billion BTU per year, is likely to be for thermal energy needs.

Table A4.2 - Current Fairfax Commercial Energy Use

	Commercial Establishments in Fairfax (VT DOL)	**Estimated Thermal Energy BTUs per Commercial Establishment/year (in Billions) (VT DPS)**	**Estimated Thermal Energy BTUs by Commercial Establishments in Fairfax/year (in Billions)**
Municipal Commercial Energy Use	66	0.725	48

Fairfax does not have access to natural gas. The nearest natural gas distribution system is located in Georgia. It is not anticipated that this system will be extended to Fairfax.

Electricity Use

An estimate of current electricity use in Fairfax is shown in Table A4.3. This data is from 2016 and is available from Efficiency Vermont. Fairfax electricity use has decreased by about 400,000 kWh since 2014. The decreased use has come from commercial/industrial and residential sectors. Fairfax's average residential electricity usage in 2016 was 7,562 kWh per household which is a higher than the regional average of 7,038 kWh per household in the region. Green Mountain Power is the electric utility that serves the majority of customers in Fairfax. It's service area is centered around VT Route 104 and VT Route 104a. Vermont Electric Coop is the electricity utility that serves the more rural portions of town, including the northeast part of town.

Table A4.3 - Current Fairfax Electricity Use, 2016

Use Sector	Electricity Use in kWh (Efficiency Vermont)	Electricity Use in Billion (BTUs)
Residential	13,379,211	48
Commercial and Industrial	5,956,929	15
Total	**19,336,140**	**63**

Table A4.4 - Current Fairfax Transportation Energy Use

Transportation Data	Fairfax Data
Total # of Passenger Vehicles (ACS 2011-2015)	3,641
Average Miles per Vehicle (VTrans)	11,356
Total Miles Traveled	41,347,196
Realized MPG (2013 - VTrans 2015 Energy Profile)	18.6
Total Gallons Use per Year	2,222,968
Transportation BTUs (Billion)	268
Average Cost per Gallon of Gasoline in 2016 (NRPC)	2.31
Gasoline Cost per Year	5,135,055

Transportation

Table A4.4 contains an estimate of transportation energy use in Fairfax. It's estimated that Fairfax residents drive approximately 41.3 million miles per year and spend about $5.1 million on transportation fuel expenses a year. This calculation does not include expense for commercially owned and operated vehicles.

As of January 2016, data from the Vermont Department of Motor Vehicles notes that there are between 5 and 19 electric vehicles within the Fairfax zip code (which includes parts of Cambridge, Fletcher, and Georgia, VT).

Generation

There is currently 4.03 MW of electricity generation capacity from renewable generation facilities in Fairfax. This capacity results in approximately 13,150 MWh of electricity generation per year. This is roughly equal to the annual electricity use of about 1,963 households in Vermont based on information available from the U.S. Energy Information Administration (558 kWh per VT household per month).

Table A4.5 organizes information about existing generation in Fairfax by type of facility. The **Existing**

Generation Facilities Map shows the location of all electricity generators in Fairfax with a capacity greater than 15 kW.

The Town generally has good access to electricity transmission lines and three-phase distribution lines. These types of lines are used to transmit large quantities of electricity and are needed to serve large industrial users and commercial centers. Access to this type of infrastructure may make development of renewable energy facilities easier and more cost-effective in than in other surrounding communities with less existing grid infrastructure. The **Transmission & 3 Phase Power Infrastructure Map** shows the electricity transmission and three-phase distribution infrastructure in Fairfax. Access to renewable generation resources, such as solar and wind, will be addressed below in the mapping section.

Table A4.5 – Existing Renewable Generation

Generation Type	MW	MWh
Solar	0.43	527.35
Wind	0.003	9.20
Hydro	3.60	12,614.40
Biomass	0.00	0.00
Other	0.00	0.00
Total Existing Generation	**4.03**	**13,150.95**

Targets for Energy Use

Northwest Regional Planning Commission worked with the Vermont Energy Investment Corporation (VEIC) and the Vermont Department of Public Service in 2016 to develop regional targets for future energy use and generation to meet the State of Vermont's 90 x 50 goal. The targets represent only one scenario that would meet this goal. There may be many different ways that would also enable Vermont to achieve the 90 x 50 goal. For more information about the regional targets, please see the Northwest Regional Energy Plan (www.nrpcvt.com).

Tables A4.6, A4.7 and A4.8 show the targets for future energy use for Fairfax by sector (totals are cumulative). These municipal targets are based on regional targets that have been disaggregated.

The thermal targets for Fairfax in 2050 is to have 87.1% of structures be heated by renewable sources. Much of this transition is likely to come in the form of electric heat pumps as the primary heating source for single family homes as the technology becomes more readily available and affordable. The target also relies on wood heating being a continued source of residential heating. There are also high targets for the weatherization of residential households and commercial structures (78% and 73% respectively in 2050).

Table A4.6 - Thermal Targets

Thermal Targets	2025	2035	2050
Percent of Total Heating Energy From Renewable Sources - Heating (BTUs)	45.7%	59.2%	87.1%
New Efficient Wood Heat Systems (in units)	0	0	4
New Heat Pumps (in units)	208	477	891
Percentage of municipal households to be weatherized	5%	16%	78%

Percentage of commercial establishments to be weatherized	25%	49%	73%

The transportation energy targets for Fairfax are similarly ambitious. By 2050, almost 90% of transportation energy will need to come from renewable sources. This will primarily be done through conversion to electric vehicles from fossil fuel vehicles for light-duty, passenger vehicles. However, it will also mean conversion of heavy-duty vehicles from diesel to biodiesel sources. The biodiesel technology and infrastructure will certainly need to advance and evolve in order to meet this target.

To meet the goals set by the Vermont Comprehensive Energy Plan, other changes will also be required in the transportation sector. This includes maintaining or decreasing the current level of vehicles miles traveled per person per year. This can be done through more compact development in Fairfax, most notably in the village. More compact development allows for greater numbers of people to walk instead of use vehicles. Compact development also more easily supports public transportation routes, another strategy that can result in decreased vehicles miles traveled.

Table A4.7 - Transportation Targets

Transportation Targets	2025	2035	2050
Percent of Total Transportation Energy from Renewable Sources - Transportation (BTUs)	8.2%	28.9%	89.4%
Electric Vehicles	319	2386	5675
Biodiesel Vehicles	437	867	1665

Targets for electricity use are more complex to interpret. Electricity use is targeted to double by 2050 (Table A4.8). At the same time, total energy use is expected to become more efficient due to the increased use of electricity as an energy source. The increase in total electricity use will likely be driven by conversions to electric heat pumps and electric vehicles. At the same time, total energy use (energy, not electricity) will become more efficient and therefore decrease. This is because electric cars and electric heating sources are more efficient (i.e. use less BTUs) than using other energy sources, such as fossil fuels. So while the doubling of electricity use is the target, then intent is to continue to work towards electricity conservation while becoming more reliant on electricity for transportation and heating. To truly assess whether or not Fairfax has achieved this target, it will need to assess both parts of the targets, conservation and conversion, in the future.

Table A4.8 - Electricity Targets

Electricity Targets	2025	2035	2050
Increased Electricity Use (Efficiency and Conservation in BTUs)	25.2%	48.3%	100.7%

Targets for Energy Generation

Table A4.9 shows the electricity generation targets for Fairfax in 2025, 2035, and 2050. All new wind, solar, hydro, and biomass electricity generation sites will further progress towards achieving the

generation targets (in MWh). Given the difficulty of developing additional hydro generation, and the constraints upon wind development, it is likely that solar generation will need to be a substantial component of meeting these generation targets. Meeting the generation targets will take considerable effort over the next 30 to 35 years. The 2050 generation target (24,034.77 MWh) is about 1.5 times the current generation capacity (13,150.94 MWh) within the Town of Fairfax.

Table A4.9 – Generation Targets

Renewable Generation Targets	2025	2035	2050
Total Renewable Generation Target (in MWh)	7,931.47	15,862.95	24,034.77

Fairfax has sufficient land to meet the above generation targets based on mapping completed by NRPC. Based on mapping and calculations completed by NRPC, Fairfax has access to the generation capacity outlined in Table A4.10. This generation capacity was calculated using the "base" layers for solar and wind. For an explanation of what constitutes a "base" layer, please see the mapping subsection below.

Table A4.10 - Renewable Generation Potential

Resource	MW	MWh
Rooftop Solar	2	1,841
Ground-mounted Solar	750	920,187
Wind	254	778,319
Hydro	0.012	42
Other	0	0
Total Renewable Generation Potential	1,006	1,700,389

Table A4.9 provides the generation targets for Fairfax but does not prescribe how the Town meets these targets. As a reference for what it would take to meet these targets, Figure A4.1 shows the total land area that would be needed to provide 17.19 MW of ground-mounted solar, or 88% of the 2050 target, in relation to the total land area of the Town.

Fairfax supports NRPC's position regarding "commercial" and "industrial" wind facilities. The NRPC Regional Plan finds that the construction of new "industrial" or "commercial" wind facilities within the region does not conform to the Regional Plan (NRPC considers any wind facility with a tower height (excluding blades) in excess of 100 feet tall to be considered an "industrial" or "commercial" wind facility).

Energy potential from biomass and methane sources is not estimated. This is due to a variety of factors including insufficient information on which to create estimates. Fairfax encourages the use of these sources for electricity and thermal generation, especially on farms.

Figure A4.1 – Ground Mounted Solar Potential

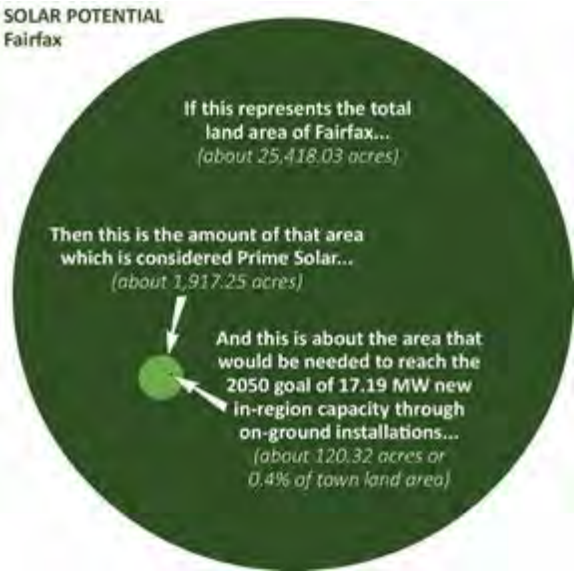


Figure A4.2 – Rooftop Solar Potential

Rooftop solar was estimated by using methods suggested by the Vermont Department of Public Service. The methodology estimates that 25% of residential and commercial structures in Fairfax could be suitable for rooftop solar generation. This results in 436 residential structures and 17 commercial structures in Fairfax. It is then estimated that the average residential rooftop system is 4 kW in size and the average commercial rooftop system is 20 kW in size. The resulting estimated generation capacity is 2.08 MW of solar generation.

Mapping Energy Resources and Constraints

Fairfax has incorporated maps provided by NRPC. These maps show data as required by the Department of Public Service Determination Standards, including access to energy resources and constraints to renewable development, and are a required element of enhanced energy planning. All maps may be found at the end of Appendix 4.

The intent of the maps is to generally show those areas that may be good locations, or may be inappropriate locations, for future renewable generation facilities. However, it is important to note that the maps are a planning tool and do not precisely indicate locations where siting a facility is necessarily acceptable. When a generation facility is proposed, it is the applicant's responsibility to verity the presence of all constraints on site as a part of the application.

Mapping Methodology

Spatial data showing the location of energy resources formed the basis of the maps developed by NRPC. This is the data that shows where there is solar, wind, hydro, and biomass "potential."

"Known" and "possible" constraints were subsequently identified on the maps. Known constraints are conservation resources that shall be protected from all future development of renewable generation facilities. Possible constraints are conservation resources that shall be protected, to some extent, from the development of renewable generation facilities. The presence of possible constraints on land does not necessarily impede the siting of renewable generation facilities on a site. Siting in these locations could occur if impacts to the affected possible constraints are mitigated, preferably on-site.

A full list of known and possible constraints included on the maps is located in Table A4.11. The known constraints and possible constraints used to create the maps include constraints that are required per the State Determination Standards from the Department of Public Service and regional constraints that were selected by NRPC.

Solar and Wind

The solar and wind maps show both "base" and "prime" areas. Base areas are areas with generation potential, which may contain possible constraints. Prime areas are areas that have generation potential that do not contain known or possible constraints. Areas that do not contain generation potential, and areas that contain a known constraint, are shown as white space on the map.

The solar map indicates a general concentration of base and prime solar areas around the northern portion of VT Route 104, near the southern portion of Buck Hollow Road, and in the vicinity of Commette Road. Fairfax has identified the following preferred locations for solar generation facilities: rooftops, parking lots, landfills and net-metering facilities located on farms (as defined by the Vermont Required Agricultural Practices). Brownfield sites located outside of the village are also considered preferred locations.

It is Fairfax's preference that solar facilities located in town be no larger than 5 MW in size. Facilities this large should not be colocated with facilities of a similar size. The intent is to limit the aesthetic impact of solar facilities on the rural areas of Fairfax. This limit has the same intent of Fairfax Solar Screening Ordinance.

Wind resources are concentrated in the vicinity of Brick Church Road in the northern part of Fairfax.

Hydro and Biomass

The biomass map is somewhat similar to the solar and wind maps. The biomass map also displays "base" and "prime" areas. However, these categories are not necessarily indicative of generation. They instead indicate areas of contiguous forest that may be used for the harvesting of woody biomass for use in either thermal or electric generation.

The hydro map is unique from the other types of generation maps. It shows existing dam sites used for electricity generation. It also shows existing dam sites that are not used for electricity generation, but could be retrofitted to provide generation capacity. Data about these dams comes from a study commissioned by the Vermont Agency of Natural Resources. The hydro map also shows some known and possible constraints that could impact the redevelopment of some dam sites.

Fairfax has three existing dam sites. One dam, owned by Green Mountain Power, is located on the Lamoille River and currently generates electricity. The two other dams are located in the northwest part of Fairfax and create the St. Albans Reservoir. These dams do not generate electricity, but could potentially be retrofitted to produce electricity.

Conclusion

Achieving the 90 x 50 goal, and the other energy goals in state statute, will be difficult. Fairfax is committed to playing its part in working towards accomplishing these goals and in creating a more sustainable, less costly, and more secure energy future.

Enhanced Energy Plan Goals, Policies, and Implementation Actions

Goal: Plan for increased electric demand with the support of Green Mountain Power, Vermont Electric Coop, and Efficiency Vermont.

Policy: Fairfax supports the development and siting of renewable energy resources in the Town that are in conformance with the goals, strategies, and mapping outlined in the Fairfax Enhanced Energy Plan. Development of generation in identified preferred locations shall be favored over the development of other sites.

Action: Investigate the installation of a municipal net-metering facility to off-set municipal electric use.

Action: Investigate installation of a community-based renewable energy project.

Action: Ensure firefighters receive proper training to handle structures that have roof-mounted solar.

Action: Review and maintain the Building Inspection, Code Enforcement, and Fire Safety Ordinance to incorporate any changes to national rooftop solar installation methods and standards.

Goal: Reduce annual fuel needs and fuel costs for heating structures, to foster the transition from non-renewable fuel sources to renewable fuel sources, and to maximize the weatherization of residential households and commercial establishments.

Policy: Fairfax supports energy conservation efforts and the efficient use of energy across all sectors.

Action: Coordinate with Efficiency Vermont and state low-income weatherization programs to encourage residents to participate in weatherization programs available to Fairfax residents.

Action: Promote the use of the residential and commercial building energy standards by distributing code information to permit applicants.

Action: Create an Energy Committee and/or appoint an Energy Coordinator to coordinate energy-related planning and projects in Fairfax.

Action: Evaluate the remaining improvements identified in the 2012 energy audit of Fairfax Fire Station and incorporate the recommendations into the municipal capital budget.

Action: Implement recommendations from the 2012 NRPC evaluation of street lighting in Town.

Policy: Fairfax supports patterns and densities of concentrated development that result in the conservation of energy.

Policy: To support public transit connections from Fairfax to other parts of the region if economically feasible in the future.

Action: Review local policies and ordinances to limit water and sewer services to those areas of town where additional development will not contribute to sprawl.

Policy: Fairfax supports the conversion of fossil fuel heating to advanced wood heating systems or electric heat pumps.

Goal: Hold vehicle miles traveled per capita to 2011 levels through reducing the amount of single occupancy vehicle (SOV) commute trips, increasing the amount of pedestrian and bicycle commute trips, and increasing public transit ridership.

Policy: Fairfax supports the reduction of transportation energy demand, reduction of single-occupancy vehicle use, and the transition to renewable and lower-emission energy sources for transportation.

Action: Study potential need for a park and ride in Fairfax with a particular focus south of the village.

Action: Promote and provide information about the GoVermont website which provides information to citizens about ride share, vanpool, and park-and-ride options.

Action: Plan for and install electric vehicle charging infrastructure on municipal property.

Action: Aid in locating an EV charging infrastructure on public or private property.

Table A4.11 – Mapping Constraints

Solar, Wind and Biomass Maps - Known Constraints

Constraint	Description	Source
Confirmed and unconfirmed vernal pools	There is a 600-foot buffer around confirmed or unconfirmed vernal pools.	ANR
State Significant Natural Communities and Rare, Threatened, and Endangered Species	Rankings S1 through S3 were used as constraints. These include all of the rare and uncommon rankings within the file. For more information on the specific rankings, explore the methodology for the shapefile.	VCGI
River corridors	Only mapped River Corridors were mapped. Does not include 50 foot buffer for streams with a drainage area less than 2 square miles.	VCGI
National wilderness areas		VCGI
FEMA Floodways		VCGI/NRPC
Class 1 and Class 2 Wetlands		VCGI
Designated Downtowns, Designated Growth Centers, and Designated Village Centers	These areas are the center of dense, traditional development in the region. This constraint does not apply to roof-mounted solar within such designated areas. The inclusion of this resource as a regional constraint is consistent with goals and policies of the Northwest Regional Plan.	NRPC
FEMA Flood Insurance Rate Map (FIRM) special flood hazard areas	Special flood hazard areas as digitized by the NRPC were used (just the 100-year flood plain -500-year floodplain not mapped). The inclusion of this resource as a regional constraint is consistent with goals and policies of the Northwest Regional Plan.	NRPC
Ground and surface waters drinking protection areas	Buffered Source Protection Areas (SPAs) are designated by the Vermont Department of Environmental Conservation (DEC). SPA boundaries are approximate but are conservative enough to capture the areas most susceptible to contamination. The inclusion of this resource as a regional constraint is consistent with goals and policies of the Northwest Regional Plan.	ANR

Vermont Conservation Design Highest Priority Forest Blocks	The lands and waters identified here are the areas of the state that are of highest priority for maintaining ecological integrity. Together, these lands comprise a connected landscape of large and intact forested habitat, healthy aquatic and riparian systems, and a full range of physical features (bedrock, soils, elevation, slope, and aspect) on which plant and animal natural communities depend. The inclusion of this resource as a regional constraint is consistent with goals and policies of the Northwest Regional Plan. (Source: ANR)	ANR
Public water sources	A 200-foot buffer is used around public drinking water wellheads. The inclusion of this resource as a regional constraint is consistent with goals and policies of the Northwest Regional Plan.	ANR
National Natural Landmark – e.g. Chazy Fossil Reef	The Chazy Fossil Reef in Isle La Motte has been designated a National Natural Landmark by the US Department of Interior.	NRPC
Municipal Conservation Land Use Areas	Conservation Land Use Districts, as designated in municipal plans, that include strict language that strongly deters or prohibits development have been included as a regional known constraint. The inclusion of this resource as a regional constraint is consistent with the goals and policies of the Northwest Regional Plan. Specific municipal land use districts included are outlined in Section D. No land use districts in Fairfax are included in this category.	NRPC
Solar, Wind and Biomass Maps - Possible Constraints		
Constraint	**Description**	**Source**
Protected lands	This constraint includes public lands held by agencies with conservation or natural resource oriented missions, municipal natural resource holdings (ex. Town forests), public boating and fishing access areas, public and private educational institution holdings with natural resource uses and protections, publicly owned rights on private lands, parcels owned in fee by non-profit organizations dedicated to conserving land or resources, and private parcels with conservation easements held by non-profit organizations.	VCGI

Deer wintering areas	Deer wintering habitat as identified by the Vermont Agency of Natural Resources.	ANR
Hydric soils	Hydric soils as identified by the US Department of Agriculture.	VCGI
Agricultural soils	Local, statewide, and prime agricultural soils are considered.	VCGI
Act 250 Agricultural Soil Mitigation Areas	Sites conserved as a condition of an Act 250 permit.	VCGI
Class 3 wetlands	Class 3 wetlands in the region have been identified have been included as a Regional Possible Constraint. The inclusion of this resource as a regional constraint is consistent with goals and policies of the Northwest Regional Plan.	ANR
Municipal Conservation Land Use Areas	Conservation Land Use Districts, as designated in municipal plans, that include strict language that deters, but does not prohibit development, have been included as a regional possible constraint. Specific municipal land use districts included are outlined in Section D. The Fairfax Conservation District was included in this category.	NRPC
Hydro Map - Known Constraints		
Constraint	**Description**	**Source**
National scenic and recreational rivers	The Upper Missisquoi and Trout Rivers are designated as a National Wide and Scenic River System.	BCRC/NRPC
Hydro Map - Possible Constraints		
Constraint	**Description**	**Source**
"303d" list of stressed waters		ANR
Impaired waters		ANR
State Significant Natural Communities and Rare, Threatened, and Endangered Species	Rankings S1 through S3 were used as constraints. These include all of the rare and uncommon rankings within the file. For more information on the specific rankings, explore the methodology for the shapefile.	VCGI

The date in Table A4.12 displays the 103 facilities that have a Certificate of Public Good from the Vermont Utilities Commission to generate electricity. The Town of Fairfax recognizes that some of the data in the table may be out of date or incorrect. The Town of Fairfax also recognizes that some identified facilities may no longer generate electricity.

Table A4.12 - Fairfax Electricity Generators, As of 3/27/18

Sub Category: GM- Ground-mounted, RM – Roof-mounted, PV – Photovoltaic
Utility: GMP – Green Mountain Power, VEC – Vermont Electric Coop
Electricity Type: NM – Net metered
All facilities are residential unless denoted with a (1) for Business or (2) for Municipality

Category	Sub Category	Name	Address	CPG Number	Electricity Type	Utility	Capacity kW
Hydro	Hydro	Fairfax Falls (1)			Grid	GMP	4200
Solar	GM PV	Harold Vance III	1139 Main St	3406	NM	GMP	3.3
Solar	GM PV	Jeffery & Linda Corey	86 Sam Webb Rd	3798	NM	GMP	6.4
Solar	GM PV	John Quinn	5 Benny Rd	4043	NM	GMP	7
Solar	GM PV	Karen Slowinski & Debra Warner	83 Ledge Rd	2801	NM	VEC	7.5
Solar	GM PV	Madeline Mann	399 Buck Hollow Rd	3111	NM	GMP	9.8
Solar	GM PV	Marti Sterin	73 SAM WEBB RD	1560	NM	GMP	4.4
Solar	GM PV	Paul Gamm	89 Evergreen Road	772	NM	VEC	3.2
Solar	GM PV	Joseph Ducharme	6 Bailey Road	16-0489	NM	GMP	5
Solar	GM PV	Donald Fleming	77 Fletcher Rd		NM	GMP	5
Solar	GM PV	Fairfax Fire Department (2)	15 Goodall St		NM	GMP	15
Solar	GM PV	Tom Snyder	16 Bellows St		NM	GMP	15
Solar	GM PV: Tracker	Keith & Sally Billado	86 W Street Rd	2997	NM	GMP	6
Solar	GM PV: Tracker	Fairfax Family Physical Therapy PC (1)	1282 Main Street	7001	NM	GMP	7
Solar	RM PV	Barbara & William Duval	758 Fletcher Rd	3497	NM	GMP	5.6
Solar	RM PV	Carol Roberts	6 Alexzis Rd	3804	NM	VEC	5
Solar	RM PV	Christen & Thomas Bessette	2371 Main St	2792	NM	GMP	8.9
Solar	RM PV	David Vallett	287 Buck Hollow Rd	5749	NM	GMP	5
Solar	RM PV	Dayon And Heather Brown	68 Upper Meadow Rd	3815	NM	GMP	5
Solar	RM PV	Douglas &	82 WINDTOP RD	2661	NM	GMP	5.6

		Evangeline Lantagne					
Solar	RM PV	Douglas Reaves	2227 Main St	2653	NM	GMP	3.7
Solar	RM PV	Elaine Barkyoumb	102 Huntville Rd	3512	NM	GMP	7.5
Solar	RM PV	Scott Picucci	15 Cherrierville Rd	3748	NM	VEC	5
Solar	RM PV	Elizabeth Wagner	13 Snowcrest Rd	2622	NM	GMP	2.3
Solar	RM PV	Eric Foreman	1789 Main St	5311	NM	GMP	10
Solar	RM PV	Eric Torraca	1235 Main St	2638	NM	GMP	4.7
Solar	RM PV	Genevieve & Joseph Gallagher	9 Fletcher Rd	6061	NM	GMP	6
Solar	RM PV	Glen Twilley	137 West Street Rd	2716	NM	VEC	3.7
Solar	RM PV	Gregory Martin	41 Maple Hill Rd	3538	NM	GMP	9.9
Solar	RM PV	Hannah Mason Hauser	184 Mead Rd	3698	NM	VEC	4.6
Solar	RM PV	Harald and Rebecca Aksdal	296 Woodward Road		NM	VEC	5
Solar	RM PV	James Naylor	178 Wilkins Rd	4002	NM	VEC	8
Solar	RM PV	Jason Elledge	14 Hawley Rd	3939	NM	GMP	7.7
Solar	RM PV	Jennifer Osgood	17 Michelle Rd	3671	NM	GMP	4.6
Solar	RM PV	John & Kathryn Connell	20 Delorme Road	5954	NM	GMP	3.8
Solar	RM PV	Joseph Jacobson	20 Summit View St	2863	NM	GMP	5.6
Solar	RM PV	Kevin Jarvis	16 King Road	3272	NM	GMP	5.3
Solar	RM PV	Kris Hoyt	2855 Main Street	3496	NM	GMP	4.3
Solar	RM PV	Lisa Atherton	32 Audelin Woods Rd	3605	NM	GMP	4.6
Solar	RM PV	Matthew Roth	281 River Rd	6065	NM	GMP	3
Solar	RM PV	Michael Cain	2757 Main St	4156	NM	GMP	5
Solar	RM PV	Pauline Paquin and Steve Marsh	34 Windtop Rd	5294	NM	GMP	7.6
Solar	RM PV	Peter Lynch	78 Rood Mill Road	4244	NM	VEC	6
Solar	RM PV	Richard Jarmusz	26 Richards Rd	2804	NM	GMP	3.7
Solar	RM PV	Sarah Hodgson	34 Dewey Rd	5614	NM	VEC	3.8
Solar	RM PV	Sarah Jones and Jesse Jones	26 Summit View St	3508	NM	GMP	8
Solar	RM PV	Steve Rainville	272 Wilkins Rd	3771	NM	VEC	5
Solar	RM PV	Steven Dumas	23 Summit View St	3645	NM	GMP	6.8
Solar	RM PV	Wayne Thompson	47 Browns River Rd	4217	NM	GMP	5.7
Solar	RM PV	Winfred & Aleta	67 White Pine Rd	43	NM	VEC	3.8

		Decker					
Solar	RM PV	Bethany Dukette	36 Craftsfield Rd	16-0261	NM	GMP	5
Solar	RM PV	Bethany Hayden	769 Goose Pond Rd	6446	NM	GMP	6
Solar	RM PV	Bob Bessette	1979 Main Street	6834	NM	GMP	4
Solar	RM PV	Brendan Conray	42 Crystal Dr		NM	GMP	3.6
Solar	RM PV	Bruce Alvarez	147 Nichols Rd	7031	Group NM	GMP	8
Solar	RM PV	Candace Johnson	37 Lochmoor Rd	5253	NM	GMP	6
Solar	RM PV	David Gardell	51 Richards Road	7069	NM	GMP	5
Solar	RM PV	Gennette Carr	416 Carroll Hill Rd	6708	NM	VEC	4
Solar	RM PV	Ian Duckett	45 Lochmoor Rd	16-0333	NM	GMP	5
Solar	RM PV	John Young	351 Buck Hollow Road	16-0129	NM	GMP	7.6
Solar	RM PV	Joshua Silman	161 Bessette Road	6396	NM	GMP	11
Solar	RM PV	Karen Carlin	1209 Main St	16-0389	NM	GMP	5
Solar	RM PV	Kevin Tobey	352 Sam Webb Road	7266	NM		7.6
Solar	RM PV	Lara Scott	28 Old Academy Street	16-0674	NM	GMP	3.8
Solar	RM PV	Mary Lewis	6 School St		NM	GMP	3.6
Solar	RM PV	Matthew Garrett	58 Upper Meadow Road		NM	GMP	3.8
Solar	RM PV	Raquel Urbina	11 Michelle Rd	16-0686	NM	GMP	4.2
Solar	RM PV	Shannon Arnzen	183 Tabor Hill Road	7265			5
Solar	RM PV	Thom & Brenda Smith	464 Nichols Road	7216	NM	VEC	11.4
Solar	RM PV	Timothy Hathaway	10 Nichols Rd		NM	GMP	12
Solar	RM PV	Tom Bochanski	244 Sam Webb Road	7209	NM	VEC	7
Solar	RM PV	Vincent Redding	28 Rowland Rd	16-0321	NM	GMP	5
Solar	RM PV	Zachary Sprague	3 Hillcrest Road		NM	GMP	11.4
Solar	RM PV	Brannon Soter		6800	NM	GMP	4.2
Solar	RM PV	Curtis Lantagne	74 Windtop Rd	16-1104	NM	GMP	4.95
Solar	RM PV	Jennifer Prim	33 Windtop Rd	16-1447	NM	GMP	8.4
Solar	RM PV	Amy Gray	15 Andbron Rd	16-1178	NM	GMP	6
Solar	RM PV	Brenda Turner	110 Buck Hollow Rd	16-1549	NM	GMP	3.6
Solar	RM PV	Elizabeth Brunell	31 Hardwood Hill Rd	16-1506	NM	GMP	5
Solar	RM PV	Jeff Iszak	60 Village View Road	16-1495	NM	GMP	3

Solar	RM PV	Josh Rollet	48 Leach Rd	16-1273	NM	GMP	6
Solar	RM PV	Kevin Quinlan	12 Meadows Road	16-1409	NM	GMP	4.2
Solar	RM PV	Robert Goboury	402 Buck Hollow Road		NM	GMP	3
Solar	RM PV	San Kong	12 Bentley Rd	16-0852	NM	GMP	3.6
Solar	RM PV	Terri Cote	6 King Road	16-1661	NM	GMP	3.6
Solar	RM PV	Tyler Burns	33 Bovat Road	16-1667	NM	GMP	8.2
Solar	RM PV	Stanley Moody	20 Craftsfield Rd		NM	GMP	3.6
Solar	RM PV	Roger Fisher	57 Allen Irish Road		NM	GMP	5
Solar	RM PV	Donald Tedford	375 Swamp Road		NM	GMP	16
Solar	RM PV	Aaron and Rebecca Wilson	4 Quincy Road		NM	GMP	3.8
Solar	RM PV	Kelly Lyford and Amy Larow	219 Sam Webb Rd		NM	VEC	11.4
Solar	RM PV	Joyce A Hunt	233 Nichols Rd		NM	VEC	6.6
Solar	RM PV	Erin Cain	43 Outback Rd		NM	VEC	3.6
Solar	RM PV	Bertrand Bolduc	27 Wiggins Rd		NM	-	5.2
Solar	RM PV	Deanna Farnham	28 Rock View Rd		NM	GMP	3.8
Solar	RM PV	Beverly Pascavage	4 Meadow Rd		NM	GMP	6.6
Solar	RM PV	Heidi Meunier	183 Brick Church Rd		NM	VEC	10
Solar	RM PV	Brian Duprat	52 Snowcrest Rd		NM	GMP	7.6
Solar	RM PV	John Kjos	20 Rock View Rd		NM	GMP	3
Solar	RM PV	Rob Green	216 Huntville Rd	16-2534	NM	GMP	5.2
Solar	Solar Canopy	Ricky Wood	272 Carroll Hill Rd		NM	VEC	7.6
Wind	Small Wind	Sam Nelson	108 Bessette Road	119	NM	GMP	3

Utility Service Areas

Fairfax, Vermont
Act 174
The Energy Development Improvement Act of 2016

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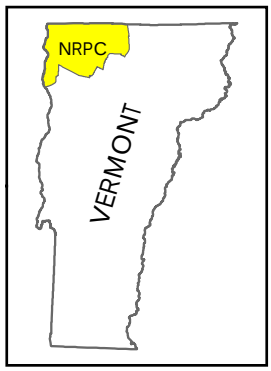

Legend

Utility Service Area Features

- Green Mountain Power
- Swanton Village Electric
- Vermont Electric Co-op
- Enosburg Falls Electric
- Substation
- 3 Phase Power Line
- Transmission Line

Sources: VCGI

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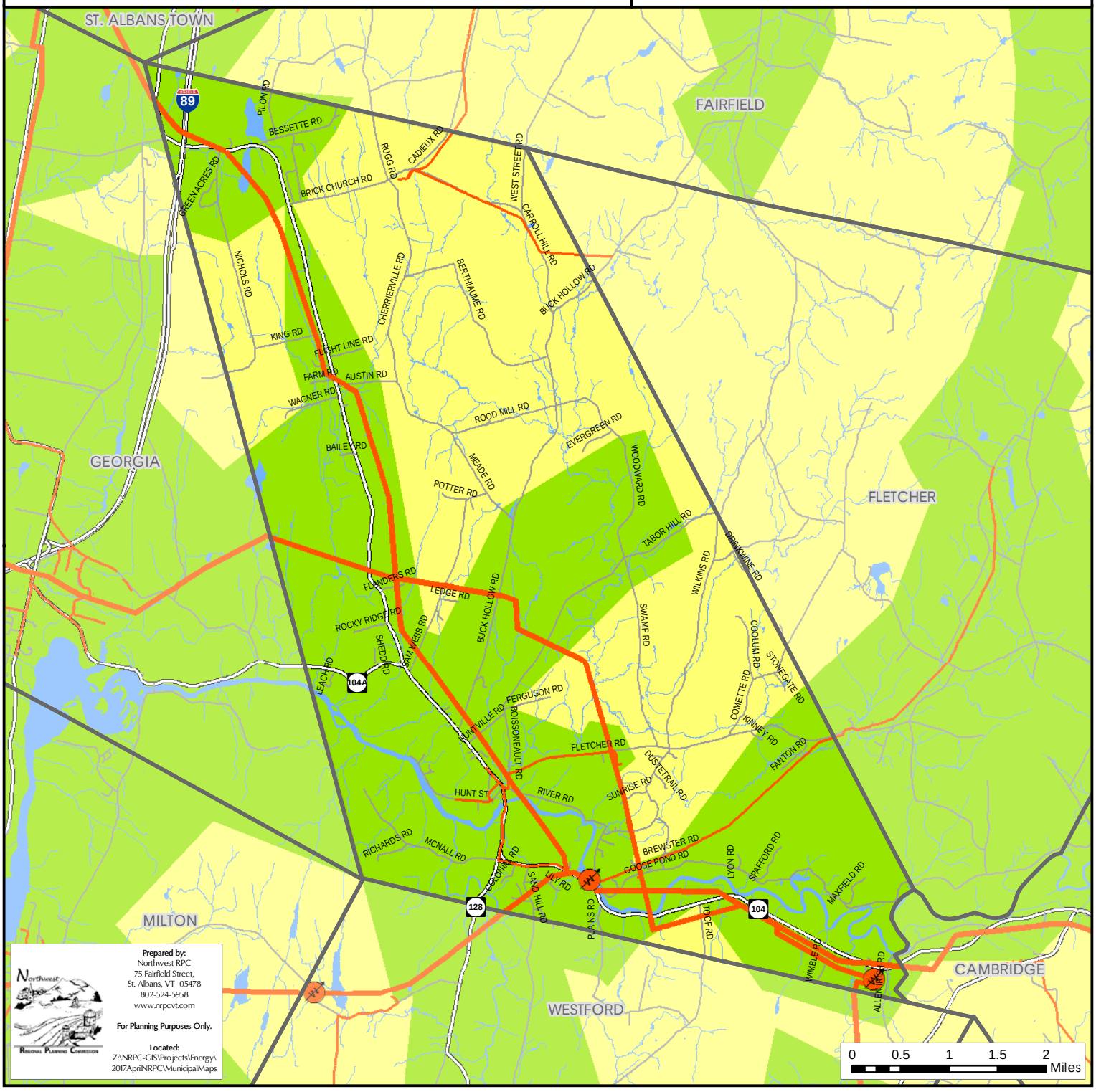

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Existing Generation Facilities

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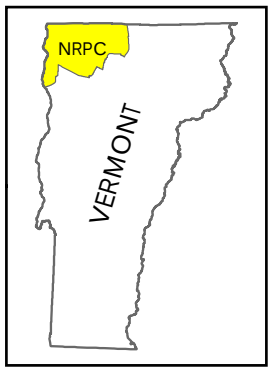

Legend

- Biomass Facility
- Hydro Facility
- Solar Facility
- Wind Facility

Note: Only generators 15kW are shown on the map. A full list of all generators is available.

Sources: VCGI
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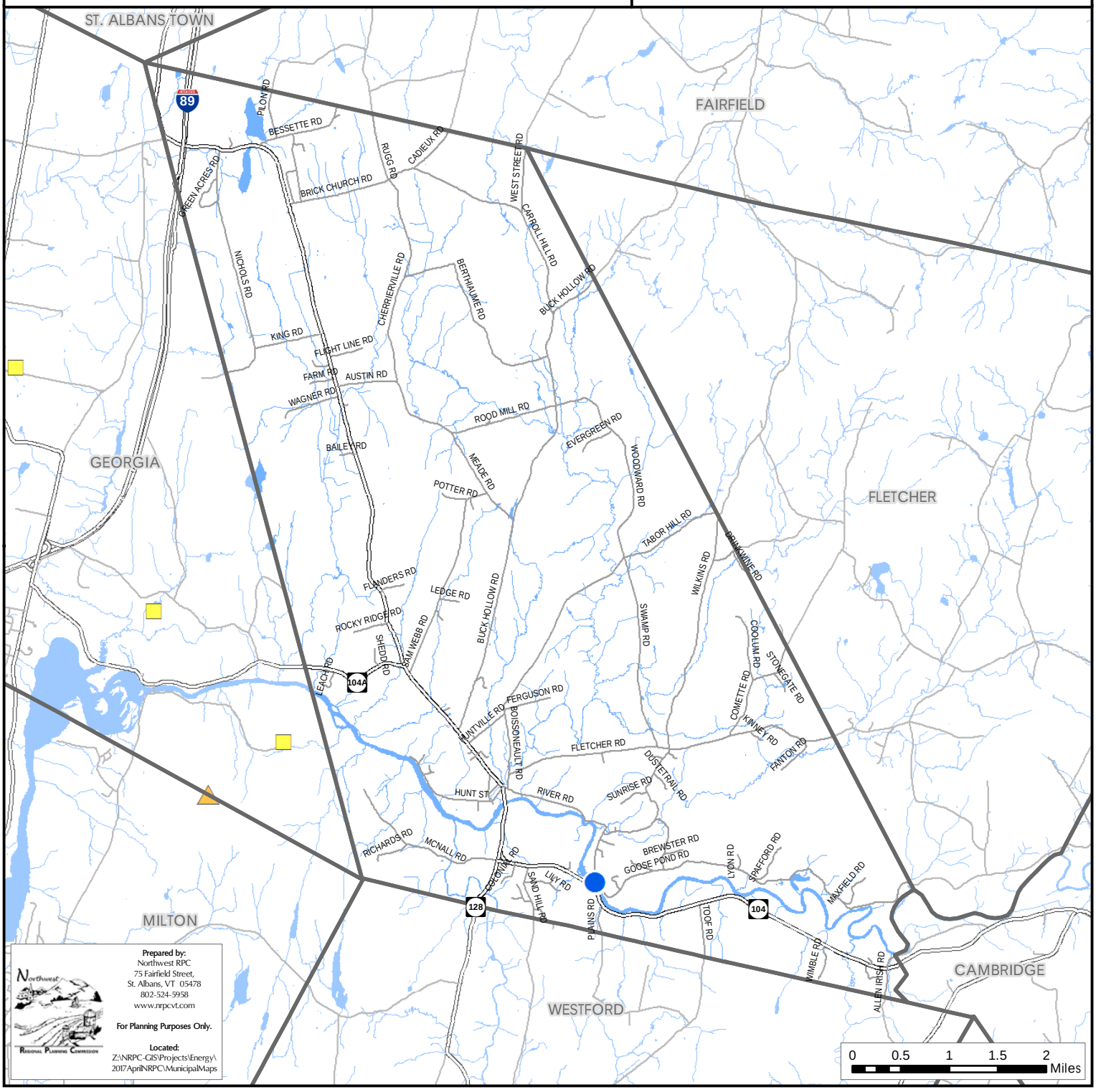

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Transmission & 3 Phase Power Infrastructure

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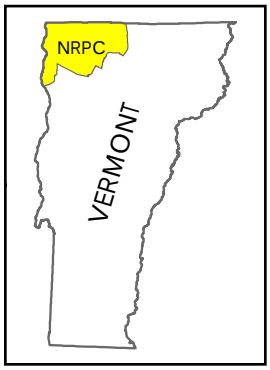

Legend

- Substation
- 3 Phase Power Line
- Transmission Line
- 1/2 Mile Buffer (3 Phase Power Line & Transmission Line)

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Solar

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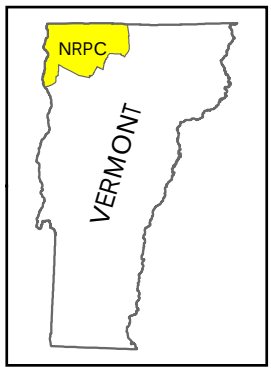

Legend

- Substation
- 3 Phase Power Line
- Transmission Line
- 1/2 Mile Buffer (3 Phase Power Line & Transmission Line)
- Prime Solar/No Known Constraints
- Base Solar/Possible Constraints

Sources: VCGI
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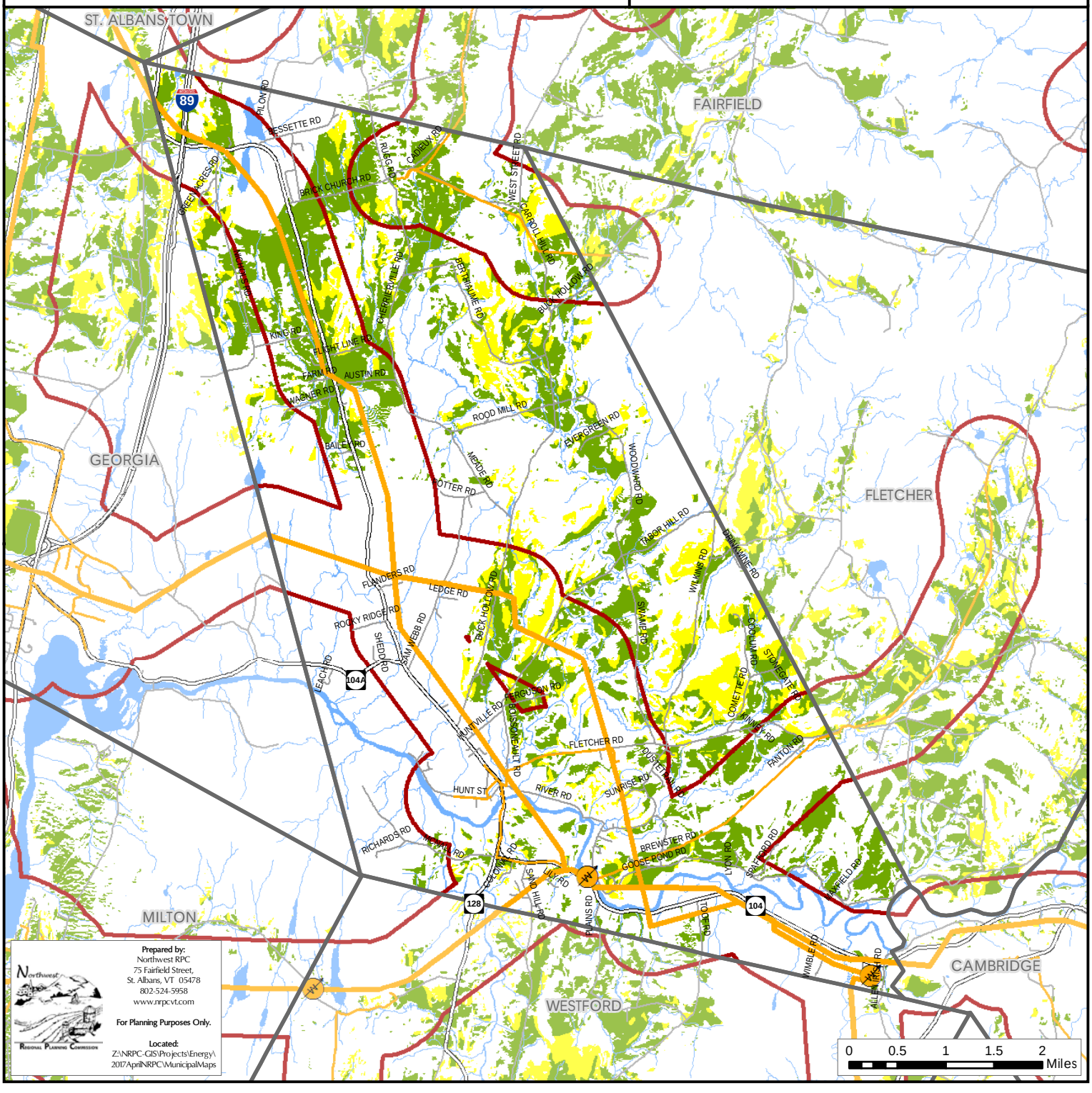

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Wind

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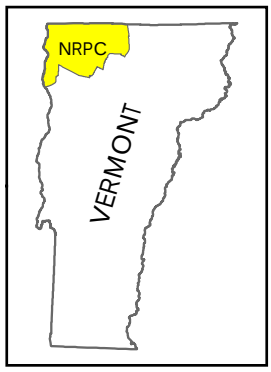

Legend

- Substation
- 3 Phase Power Line
- Transmission Line
- Prime Wind — Areas of high wind potential and no known constraints. Darker areas have higher wind speeds.
- Base Wind — Areas of high wind potential and a presence of possible constraints. Darker areas have higher wind speeds.

Sources: VCGI

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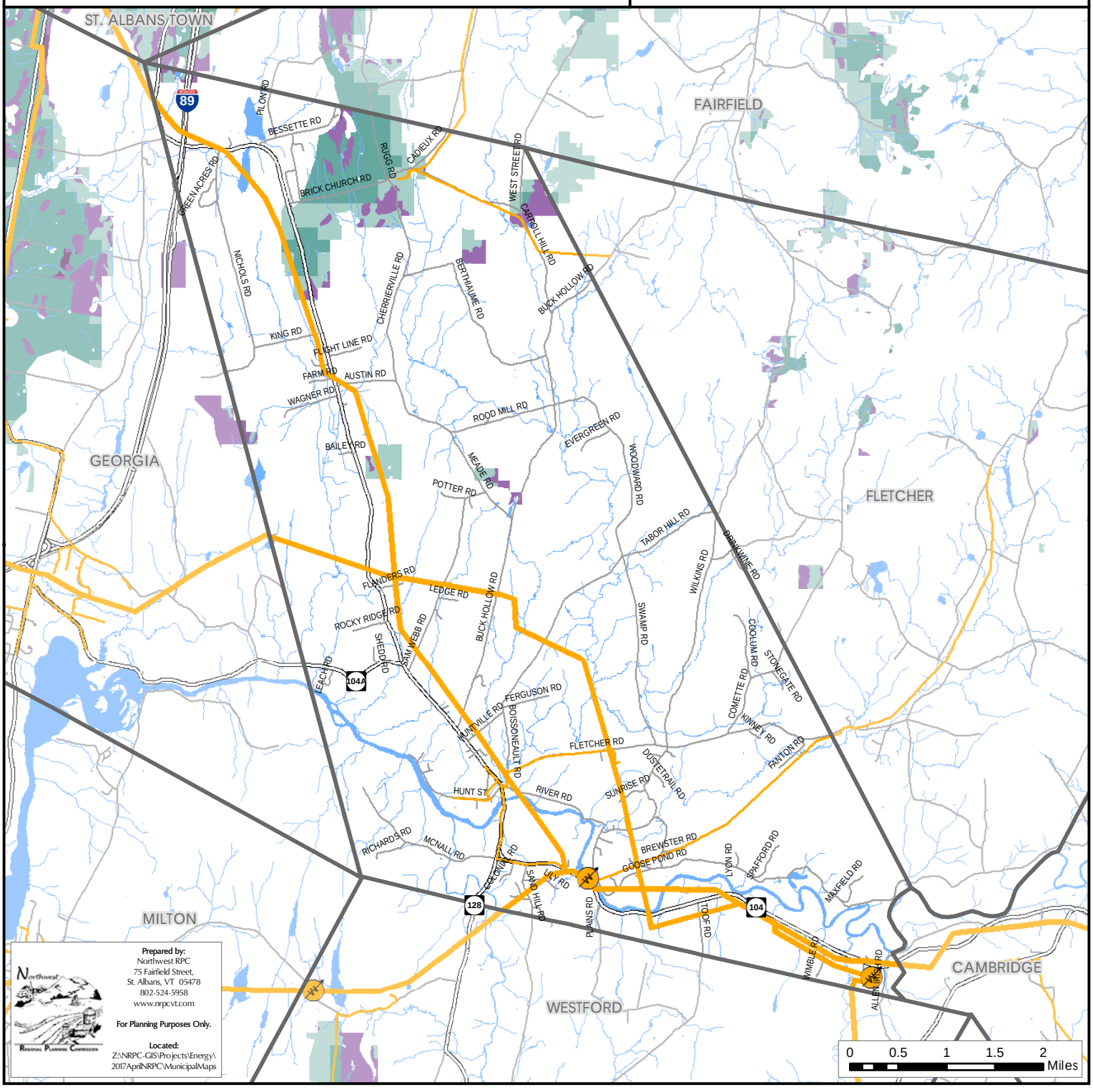

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Hydro

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N

Legend

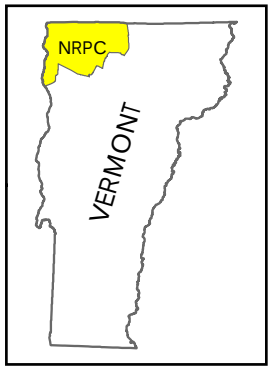
- Substation
- 3 Phase Power Line
- Transmission Line
- Designated Outstanding Resource Water
- Known Constraint - Designated National Wild & Scenic River
- Possible Constraint - Stressed or Impaired Water
- Possible Constraint - RINAs

Potential Hydroelectric Facility

- < 50 kW Capacity
- > 50 kW Capacity
- High Hazard with < 50 kW Capacity
- High Hazard with > 50 kW Capacity

Operating Hydroelectric Facility

- Dam not on National Wild and Scenic River
- Dam on National Wild and Scenic River



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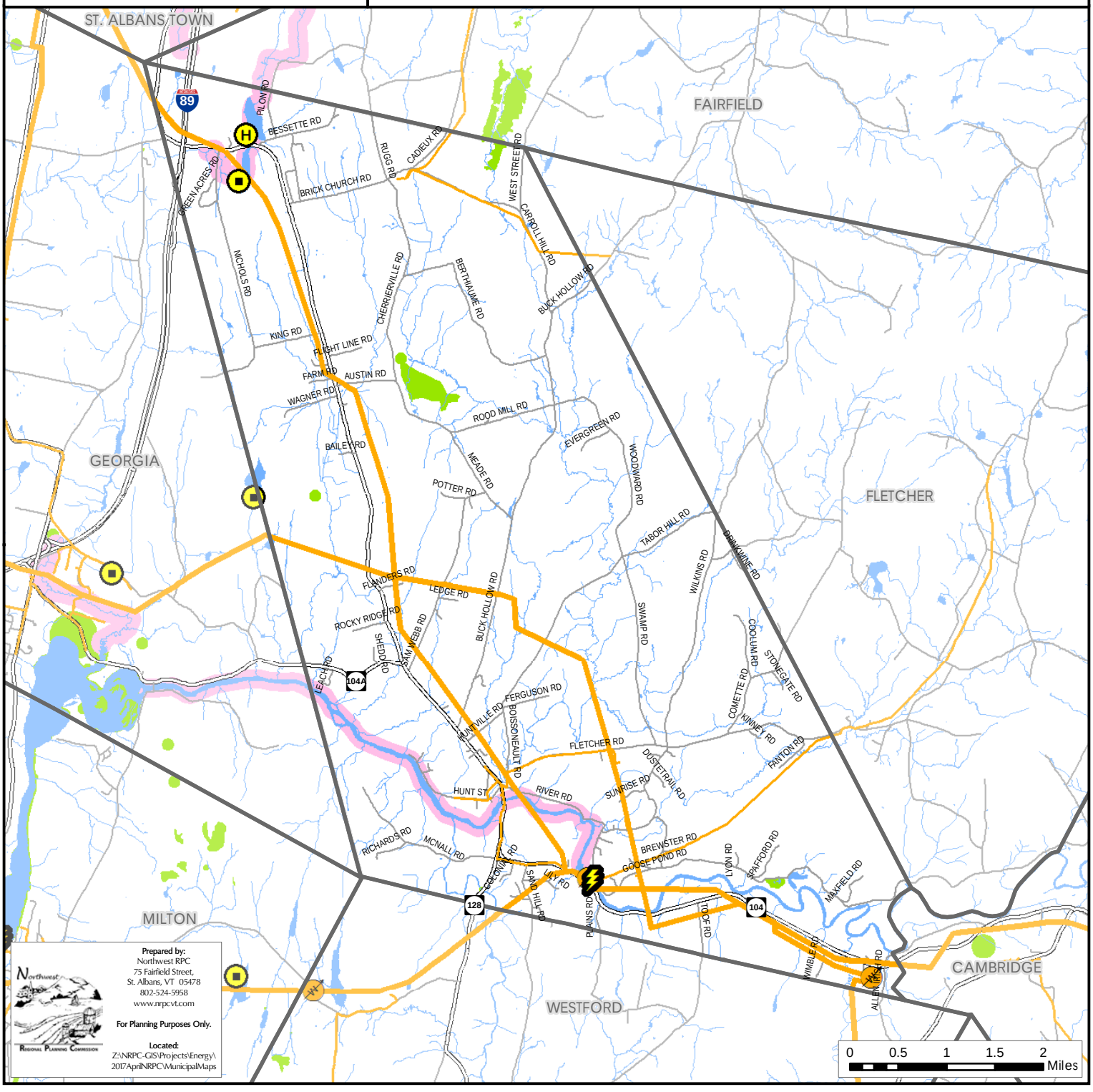

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Woody Biomass

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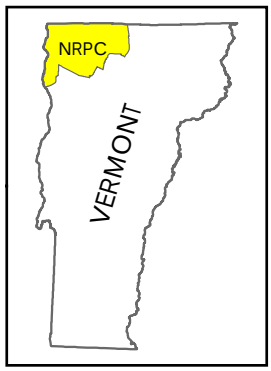

Legend

- Biomass System
- Cow Power
- Substation
- 3 Phase Power Line
- Transmission Line
- Prime Woody Biomass/No Known Constraints
- Base Woody Biomass/Possible Constraints

Sources: VCGI

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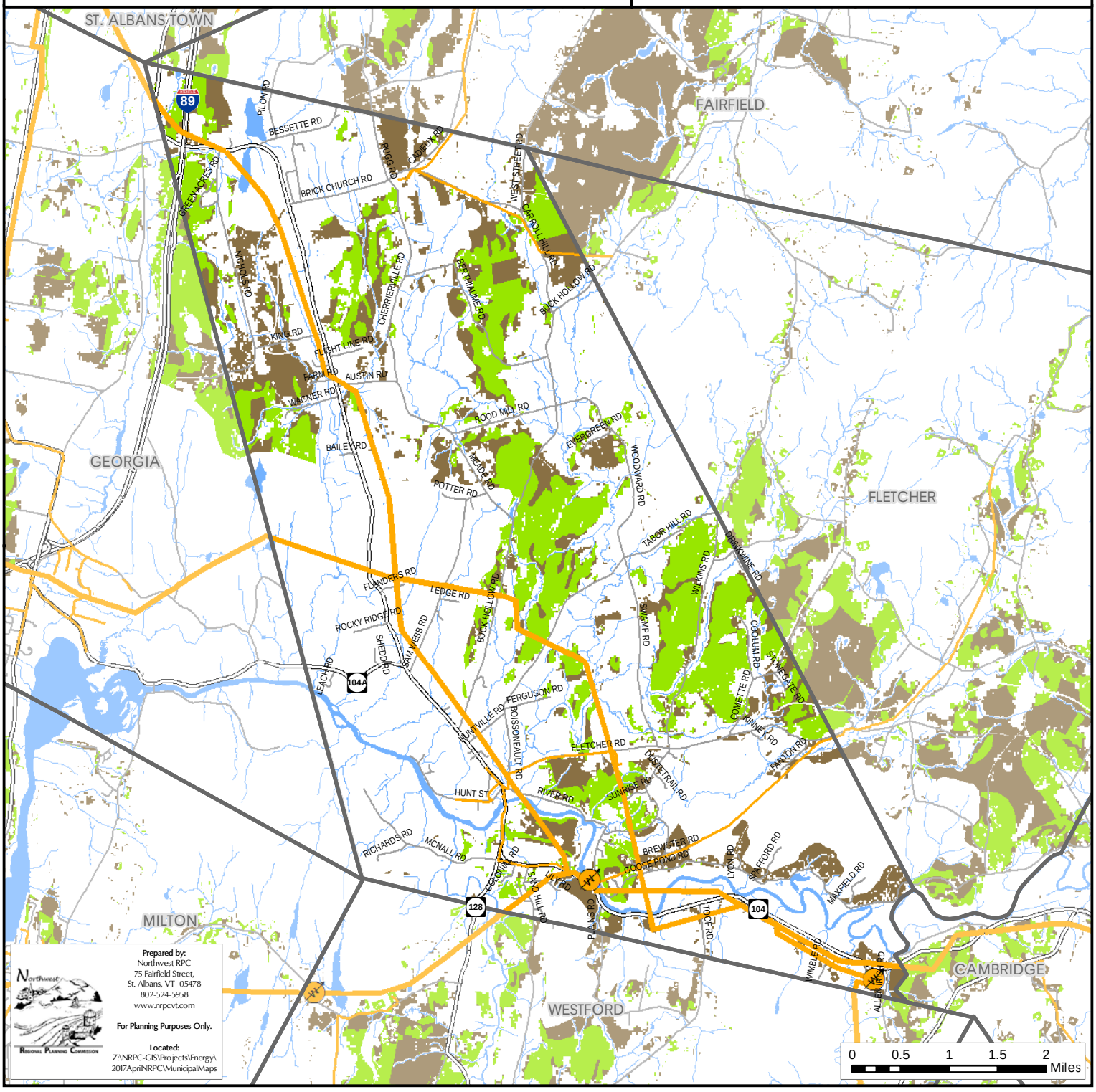

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