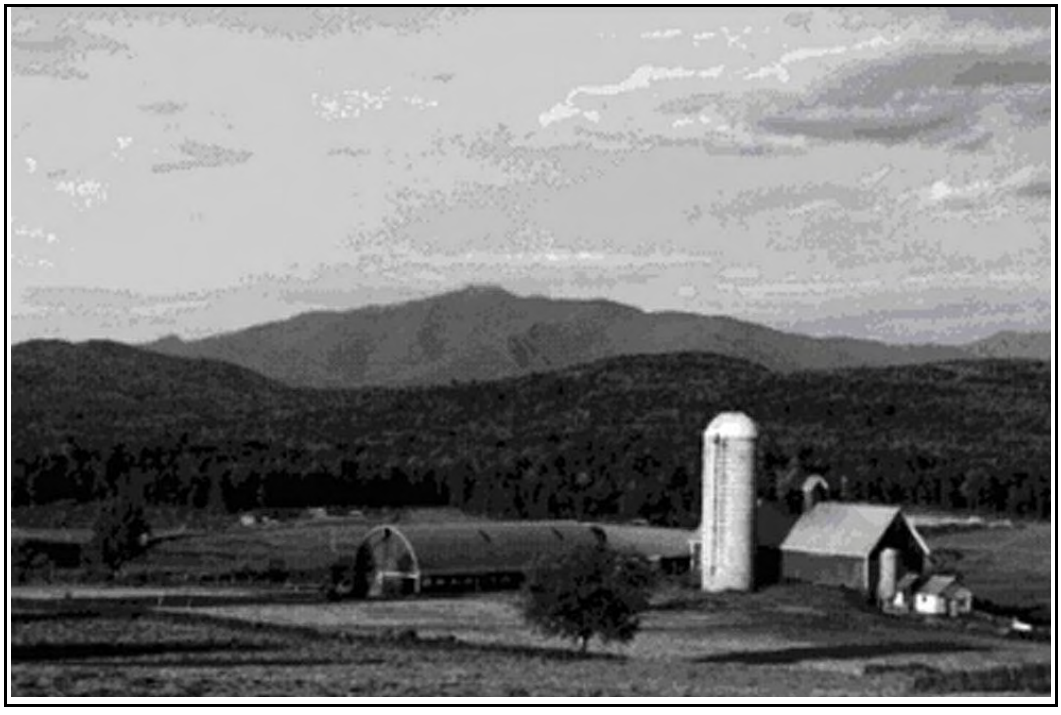
FLETCHER TOWN PLAN
~ 2005 through 2010 ~



Adopted by the Fletcher Select Board

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Cover Photo:
Tinker Farm, Fletcher Center

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Section 1
PLANNING PROCESS

Why Plan?

First and foremost, the intent of the planning process is to encourage the appropriate development of land, facilities and services located within the Town of Fletcher, in a manner which will promote the health, safety and general welfare of its residents. A comprehensive plan for the Town provides a framework for the achievement of recognized community goals and objectives. The planning process serves to coordinate public and private actions with these goals and objectives, and the Town plan provides the guide upon which decisions logically and intelligently may be based.

Vermont municipalities are not required to plan, but most do — to protect community interests, to retain a measure of local control, to promote desired forms of growth and development, to target public investment, to protect scarce public resources, and to help build and sustain a sense of community, and a sense of place.

The Plan: Purpose and Design

The Fletcher Town Plan, prepared under the Vermont Municipal and Regional Planning and Development Act or "the Act" (24 VSA, Chapter 117), presents a description of the town and a vision for its future — a comprehensive look at how the town may grow and prosper in the coming years.

Fletcher planning, zoning and subdivision regulations started with the town charter in 1781. The original subdivision divided Fletcher into three divisions, with as many as 70 draughts (104 acres) each; being oddly shaped, many triangles (gores) were also laid out. Each original proprietor received a right (three draughts). Failure to clear five acres meant loss of the property right. 1800 acres were designated for support of the schools, universities, churches and ministers. This glebe land was leased, 100 acres for 8 to 12 cents per acre annually. If unpaid, the land was immediately reassigned to whoever could pay the lease. Homes had to be 18 feet on the floor. Four acres were reserved out of each 104 for roads.

The original survey was in what Ed Ellsworth calls big Ira Allen acres. The town was laid out as if it were level. Deeds read to the original rights or to stake and stones.

By 1850, many deeds were by reference to prior deeds only; the 1870's saw acres "more or less" on many deeds; the acres were smaller (land was simply measured over ground); a 104 acre right became 115, 125 or even 140 acres. Deeds referred to stone walls, 3 inch apple trees or spotted maples. Today some land is recorded by deed and map. Descriptions include drifting fence, stone walls, 40 inch beech tree, present or former neighbors, and acres, "more or less." ...

-- **H. Carlton Ferguson**
excerpted from "Fletcher a Planned Community,"
***A History of Fletcher Vermont,* 1976.**

Planning is not new to Fletcher. This plan is the most recent product of an ongoing process, which, as noted in the accompanying narrative, had its start when Fletcher was first laid out and chartered as a town in 1781. Fletcher was one of the first towns in Franklin County to formally adopt a local plan and related regulations. Zoning was initially instituted by the select board in August of 1967 prior to a statutory requirement that planning precede zoning. The first town plan, and a new zoning bylaw based on the plan, were adopted 1972. Subdivision regulations were then adopted in 1974. Since that time local plans and bylaws have been updated and revised periodically to reflect changing conditions and needs. This plan supersedes the plan that was last updated and adopted in 1997.

- ***to ensure that the rural character of the town — including its resource-based economy, natural environment, cultural landscape, and the rural lifestyle enjoyed by its residents — is maintained;***
- ***to provide for orderly development in suitable locations in order to enhance the quality of life of all Fletcher residents, and***
- ***to ensure that local taxpayers are not overburdened by the costs of unanticipated, inefficient and unmanaged growth and development; and***
- ***to require that all development be pursued with strict regard to the capability of the land to support it.***

The plan is laid out topically by section. Each section is followed by goals, objectives and recommendations. The final section outlines proposed implementation measures, including a proposed plan of action. Supporting information is provided in the appendices.

The Planning Process

The plan is a living document — because change is inevitable and ongoing, the plan by law must be updated and readopted every five years to remain in effect. It also may be amended at any time to deal with unanticipated or dramatic changes that may be affecting the community.

The select board has the option of submitting the plan to the regional planning commission for regional review and approval. Regional approval would ensure that Fletcher retains all the benefits

under the law that are afforded municipalities with approved plans — including the ability to receive state funds for local planning, to assess impact fees, and the requirement that other local, regional and state plans conform with the approved municipal plan.

Consistency with State Planning Laws

The Fletcher Town Plan has been prepared with careful attention to the requirements of Vermont enabling legislation. This plan for the town represents a first attempt to meet new state planning requirements and goals as outlined in the Act.

State planning goals (under Section 4302) and plan elements (under Section 4382) have been incorporated into the goals and elements of the town's comprehensive plan.

Public participation has been actively sought throughout the planning process — through public meetings, and hearings. Representatives from neighboring communities also were contacted to encourage inter-municipal coordination and cooperation.

Plan Compatibility

It has been recognized throughout this process that Fletcher does not exist apart from its neighbors. As a small, relatively isolated rural community, Fletcher is much more likely to be affected by outside development pressure than to generate growth or impacts that will affect neighboring communities. As a growing bedroom community, Fletcher residents need to be aware of development trends in Northwest Vermont (e.g., Chittenden, Franklin and Lamoille Counties), which create secondary demands for housing and related public services in outlying rural communities.

The plans of adjoining communities, were reviewed as part of the planning process; this plan is harmonious with neighboring municipal plans.

Fletcher has representation on the governing board of the Northwest Regional Planning Commission. The regional plan is currently being updated. Fletcher representatives should provide local input into this process; it is anticipated that the local plan will be in conformance with the regional plan as adopted.

Proposed Work Program

As noted elsewhere, the planning commission's role does not end with plan development, update and adoption, but continues through all stages of implementation. This may include any or all of the following activities:

- conducting regular reviews of the plan
- updating bylaws and ordinances
- preparing a capital budget and program
- drafting an impact fee ordinance
- assisting with funding efforts
- preparing policy and design manuals
- conducting related planning inventories, surveys and studies
- monitoring growth trends and patterns
- sponsoring community forums
- working with local officials, related groups and organizations, and
- participating in regional and state planning and permitting efforts.

The "Recommendations or Actions" included at the end of each section of the plan represent specific work tasks to be completed in order to implement related goals. It is recommended — given the very real limits of volunteer time and available resources — that the planning commission, in consultation with the select board, prioritize tasks to be accomplished at the start of each year.

Also, because the planning commission has a variety of ongoing responsibilities, it is recommended that the commission enlist the services of interested citizens and related organizations to the extent feasible to assist in their planning efforts. This may involve the creation of ad hoc committees with representation from a variety of groups, and/or the creation by

the town of more formal boards and commissions, for example a conservation commission or design review board to assist with project reviews.

The planning commission will need and should actively seek the ongoing support of the select board, local officials, and town residents to ensure effective plan implementation.

GOAL: **To provide a coordinated, comprehensive planning process and policy framework that which guide decisions made by public officials and private interests, and will promote that which is in the best interests of the residents of the Town of Fletcher.**

Objectives:

1.1 The planning commission, development review board and zoning administrator will continue to be provided with the administrative, program, and technical support necessary to sustain an effective, comprehensive local planning process, and to carry out their duties as assigned or otherwise mandated by statute.

1.2 The planning commission, development review board and zoning administrator will adhere to the highest standards of openness, fairness and honesty in their planning and review efforts, particularly when acting in a quasi-judicial capacity on behalf of the public and the town.

1.3 The planning commission will coordinate its efforts with those of town officials, town boards, and other local, regional and state interests as appropriate.

1.4 All decisions or actions by public officials or private interests which may affect the Town of Fletcher will be made with due consideration of the goals, policies, and objectives of the Fletcher Town Plan.

1.5 Due consideration will be given to the rights of individuals in exercising the legitimate authority of town government, as enabled under state law, to provide for the public good — including the health and welfare of all Fletcher residents.

Recommendations or Actions:

- Submit a yearly planning program budget request to the town select board for inclusion in the town budget and consideration by voters.
- Seek, in association with the select board, administrative fees, planning funds, grants, and other sources of funding as appropriate to carry out the planning program, including plan implementation efforts.
- Review and update organizational bylaws and rules of procedure as necessary to ensure openness, fairness and accountability.
- Establish regular contact and communication between Fletcher's local officials, boards, and the planning commissions of adjoining municipalities.

- Recommend that one town representative appointed to the Northwest Regional Planning Commission be a local planning commission member.

- Maintain and update the Fletcher Town Plan as the town's official policy document with regard to growth, development and the preservation of Fletcher's rural character. At minimum the plan shall be updated for readoption every five years in accordance with statute.

- Refer to and be aware of the limits of municipal authority when drafting, administering and enforcing local bylaws and ordinances to ensure that the rights of individuals are not unduly or unnecessarily infringed.

GOAL: **To encourage citizen involvement at all levels of the planning process.**

Objectives:

1.6 The planning commission recognizes the rights of all citizens to participate in the planning process, and has a responsibility to actively seek input from those most affected by programs or policies under consideration by the planning commission.

1.7 All planning commission and zoning board meetings and hearings, except for deliberative sessions when acting a quasi-judicial capacity, shall be open to the public.

1.8 The planning commission will make every effort, given available resources, to regularly inform town residents of its activities, and to provide opportunities for public input in its planning process.

1.9 Reports, information and other records will be maintained for public inspection and review in advance of any decision to be made in accordance with state law.

Recommendations or Actions:

- Provide legal notice of all public meetings and decisions in accordance with state law.

- Solicit input from those most likely to be affected by proposals or policies under consideration.

- Conduct public forums, surveys and/or other opportunities for public participation in planning efforts as time and available resources permit.

- Provide annual reports of planning and permit activities for inclusion in the town report.

- Provide regular updates of planning commission activities in the town newsletter.

- Provide copies of draft plans, bylaws, amendments, policies, proposals, studies and reports at the town office for public review and comment sufficiently in advance of any final recommendation or adoption.

- Establish and maintain a complete set of planning records, including the minutes of all meetings, for public review at the town office.

- Establish and maintain a small library of planning resource and reference materials for use by the planning commission, local officials, and the public as available resources permit.

GOAL: To ensure that decisions having local impact are made at the most local level possible and with substantial local input.

Objectives:

1.10 Advocate local control through continued support for and promotion of sound, reasonable, locally-based planning, development and review activities.

1.11 Represent and advocate local interests, as time and available resources permit, through participation in regional, state, and federal planning, legislative efforts, and/or regulatory proceedings that may affect the Town of Fletcher and the interests of its residents.

Recommendations or Actions:

- Retain the personnel, resources, and/or expertise needed to adequately and fairly represent, administer and enforce locally adopted bylaws and ordinances.
- Develop, review and update as appropriate municipal programs, bylaws, and ordinances in accordance with plan goals, policies and objectives and relevant state and federal laws.
- Seek regional approval of the Fletcher Town Plan in order to retain related benefits under state law, including the requirement that other local, regional and state plans be compatible with regionally approved municipal plans.
- Participate as a statutory party in state Act 250 and Public Service Board (Section 248) proceedings as appropriate.
- Contact state and federal officials and legislators with regard to proposed policies, programs and legislation of importance to the Fletcher community.
- Maintain municipal representation on regional boards, including but not limited to the Northwest Regional Planning Commission, the regional Transportation Advisory Committee, and the Northwest Vermont Solid Waste Management District.

Section 2
COMMUNITY PROFILE

Overview

The town of Fletcher, located in the southeast corner of Franklin County among the western foothills of the Green Mountains, is true Vermont hill country. The Lamoille River, which once separated the southern tip of Fletcher from the rest of town, now forms its southern boundary. Fletcher shares its western border with the town of Fairfax; the towns of Fairfield and Bakersfield lie to the north. The Franklin County line separates the town from Cambridge and Waterville, its Lamoille County neighbors to the south and east.

Fletcher is one of Franklin County's more uniquely configured towns, incorporating 38 square miles of rolling hills and valleys, bottomlands, and areas of steep and rugged terrain. The town's topography lends much to its natural beauty, rural character and the quality of life enjoyed by its residents. Historically, however, Fletcher's hills and hollows also served to isolate local residents from their neighbors. Topography limited available transportation routes and defined early settlement patterns. Even today, because of the lay of the land, few roads lead directly to or through town.

Historic Development

Original inhabitants of the area, including the Abenaki and their predecessors, traveled the Lamoille and Missisquoi Rivers, and followed tributaries inland in seasonal subsistence cycles. Known sites of prehistoric settlement and use are generally located in the vicinity of major waterways in the region, including the Lamoille River drainage.

Fletcher's town charter was granted by Thomas Chittenden in 1781 while Vermont was still an

independent republic. Sixty-five original proprietors were responsible for bringing new residents to the area. The first recorded settlement was made by the family of John Fullington, a New Hampshire man who built a log home here in 1787. The following year Fullington embarked with his family to settle in town, but died in transit following a meal of bad turnips. Mrs. Fullington continued on to make her home in Fletcher with her four children, and lived to the ripe old age of ninety-five.

Others soon followed. The town was officially organized in 1790, and the first town meeting was held on March 16th of that year. By 1791, when the first census count was taken, 47 people lived in town. Early families in Fletcher depended on the land for their livelihood. Most either worked farms and related enterprises, including logging, cider and syrup operations; or relied on farmers for their earnings. Farmsteads grew up along a developing network of roads. Large tracts of land were cleared, first for subsistence, then for commercial sheep and dairy farming. By the end of the nineteenth century, only the town's steepest and rockiest slopes remained forested.

Since Fletcher was located a considerable distance from existing markets, small industries and businesses were established to serve the needs of a growing community. These included potash and lye manufacturers, sawmills, tanneries, bucket and blacksmith shops, a wheel-wright shop, a brickyard, starch factories, cider presses, skimming stations and creameries, and a number of stores. Ice harvesting for refrigeration was a lucrative business prior to electrification - up to 27,000 blocks of ice were cut from Halfmoon Pond in one year. Small hamlets, including Fletcher Center, Binghamville, and East Fletcher, grew up in strategic locations. Fletcher Center was the center of local government and commerce for much of the town's history. The first store opened here in 1820. Another store built in the Center in 1839 (which burned in 1979) also served for many years as the post office, town clerk's office, and town library. Binghamville developed from 1830 on as a traditional mill town, with Stone's Brook pro-viding a source of power for sawmills that remained in operation until 1927.

By the mid-1800s, Fletcher's settlement pattern and road network were well established [Figure 2.1]. Fletcher was served by several stage coach routes until these were replaced by a rail line completed through the east side of town in 1877. East Fletcher grew as a station stop on the Montpelier and St. Johnsbury line (now the Lamoille Valley Railroad), and during the height of the rail-road years had a weigh station, stockyard, and general store which sold grain and goods carried in by rail.

By 1880, Fletcher had been divided into ten school districts to serve the needs of local children. Schools were located in convenient locations around town. Telephones arrived in Fletcher in 1908 through the Farmers Mutual Tele-phone Company. New England Telephone expanded into the area in the 1930s. Electricity first reached Fletcher in 1923 when the Fairfax Falls generating station was constructed. East Fletcher was hooked up in 1939 through the Vermont Electric Cooperative; Binghamville and surrounding areas were not electrified for another year or so.

The same improvements which served to spur and support community growth also exposed Fletcher residents to the wider world, and to inevitable change. Fletcher's population reached an historic peak around 1850, when it numbered 1,084. The Civil War years marked the beginning of a steady population decline, which continued well into the twentieth century. Fletcher's hill farmers, finding it increasingly difficult to make a living from rocky slopes, went west for cheaper, more productive land, or to urban areas for more gainful employment.

As the twentieth century progressed, the coming of the automobile and changing farming technologies and balance sheets encouraged more people to move on. Farms, fields and isolated stretches of road were abandoned. Today 24 farms (9 dairy farms) remain in town; many former fields have reverted to forest, and others have given way to houses.

As the number of farms decreased, so too did the number of businesses supported by the farming community. Fletcher Center, Binghamville and East Fletcher lost their importance as local commercial, manufacturing and rail centers in relation to growing regional centers in St. Albans and Burlington. One room schools and post offices were closed and consolidated - today Fletcher has one elementary school and one store, both located in Binghamville, and no local post office.

Residents who chose to remain in Fletcher adapted and persevered for many reasons, including strong ties to the land, family, community, and a way of life particular to this area. Beginning in the 1960s, they were joined by newcomers migrating north in search of affordable land and a more rural lifestyle. The town's long standing population decline finally reversed, and the repopulation of the town has continued unabated for the last thirty-five years.

Fletcher remains a relatively isolated, rural, resource-based community. The farms still in operation have grown to absorb neighboring lands, and stand out as the principal land-based industry in town. The town's woodlands continue to support maple syrup production and a commercial logging industry. Sand, gravel and rock quarrying operations are scattered throughout. Small, home-based businesses also contribute to the local economy.

Fletcher, however, also increasingly serves as bedroom community for people who choose to make their home in town, but work elsewhere. Located within easy commuting distance of St. Albans, Milton and the greater Burlington area, much of Fletcher's recent growth may be attributed to its proximity to these employment centers. Many town residents no longer depend directly on the land for their livelihood, but their ties to the community are no less strongly held – most residents appreciate Fletcher's rural setting, and have learned to adapt to the realities of rural life. The town's natural amenities also attract a seasonal community at Metcalf Pond.

Fletcher continues to grow and develop at a significant pace. The impacts of growth on the

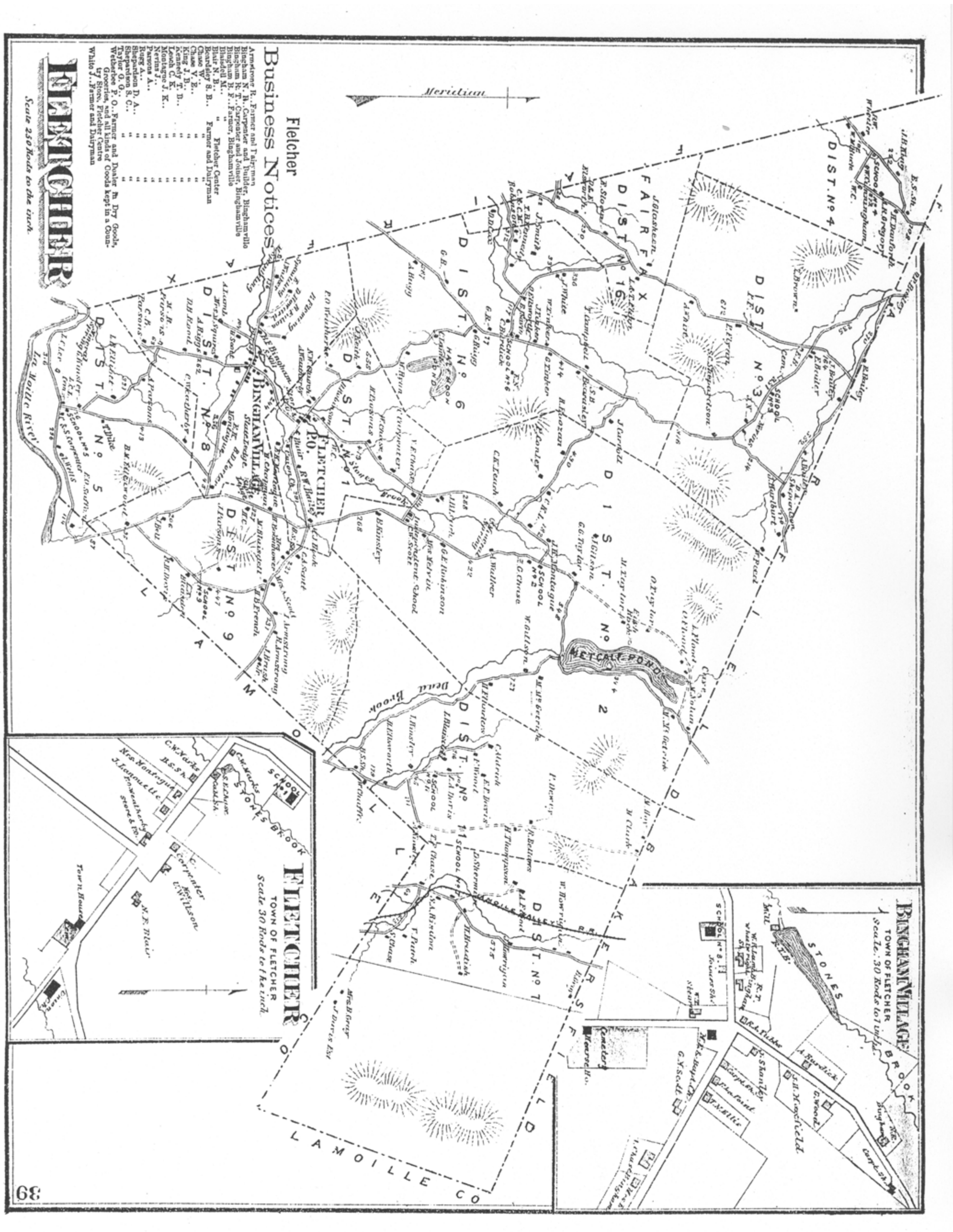
town's rural character, community services and facilities have been a concern locally since the 1960s. Due to the keen foresight of town officials and residents, Fletcher was one of the first communities in Franklin County to begin an ongoing process of planning for its future. This process continues today through periodic updates to the municipal plan and zoning and subdivision bylaws (2002).

To better implement the plan and bylaws, in 2002 the town shifted from a Zoning Board of Adjustment (ZBA) to a Development Review Board (DRB). This change affords the town improved efficiency in planning and policy implementation; a more consolodated and comprehensive planning and review process.

Population Base

As illustrated in the accompanying graph, by 2000, Fletcher's population surpassed the historic peak population of 1,084 reached in the mid-1800's. As of the 2000 US Census, the town's total population totaled 1,179 (2.59% of the county total). The population density, according to Census figures, is calculated at 31 persons per square mile, up from 28.5 per square mile in 1990 and 16.4 in 1980.

The rate of local populations growth between 1990 and 2000 (25.3%) was nearly twice that of the county (13.6%), and three times that of the state (8.2%). This is due in part to Fletcher's relatively smaller base population, but it is also indicative of the effect of prevailing outside growth pressures on Fletcher and other adjoining communities such as Fairfax and Bakersfield – which result from their location within the greater Burlington "commutershed".


FLETCHER
Scale 250 Rods to the inch.
Fletcher
Business Notices
Meridian
METCALF POND
Lamoille River
FLETCHER
TOWN OF FLETCHER
Scale 30 Rods to the inch.
BINGHAMVILLE
TOWN OF FLETCHER
LAMOILLE CO
39

2.1 POPULATION COMPARISON					
	1980	1990	2000	% Change	
				1980-1990	1990-2000
Fletcher	626	941	1,179	50.32	25.29
Bakersfield	852	977	1,215	14.67	24.36
Fairfax	1,805	2,486	3,765	37.73	51.45
Fairfield	1,493	1,680	1,800	12.53	7.14
Cambridge	2,019	2,667	3,186	32.10	19.46
Waterville	470	532	697	13.19	31.02
Franklin County	34,788	39,980	45,417	14.92	13.6
Vermont	511,456	562,758	608,827	10.03	8.2
Source: U.S. Census Data, 1980, 1990 and 2000					

2.2 COMPONENTS OF POPULATION INCREASE, 1970 - 2000					
Year	Total Population	10-Year Change		% Increase Natural	% Increase Immigration
		#	%		
1970	456	57	14.3	89.1	10.9
1980	626	170	37.3	17.1	82.9
1990	941	315	50.3	33.3	66.6
2000	1,179	238	25.3	56.5	43.5
Source: US Census 1970-2000; VT Dept of Health, Vital Statistics 1970-2000.					

Historically, much of Fletcher's growth could be accounted for through a natural increase in the population- wherein the number of births exceeded the number of deaths. As indicated in table 2.2, between 1970 and 1990, however, a net influx of people into the community was largely responsible for the more substantial population increases experienced during these decades. This trend had reversed by 2000, with natural increase once again representing the majority (56.5%) of Fletcher's population growth.

If accurate, population projections can be invaluable to the planning process. Existing population projections are significantly out of date, because they are based on 1990 census data. Although the 1990 data illustrated the low, moderate and high projections, each figure significantly exceeded the realized population in 2000; the low projection exceeded the real population by 7 percent. This fact presents a basic level of skepticism regarding any subsequent projections, if they existed. For these reasons, the existing projected population data has not been fully applied to this plan.

2.3 POPULATION PROJECTIONS, 2000-2015.				
	2000	2005	2010	2015
High	1,391	1,698	1,990	2,346
Mid	1,325	1,572	1,809	2,076
Low	1,259	1,446	1,628	1,806
Realized	1,179	N/A	N/A	N/A
Source: VT Health Care Authority, June 1993.				

Population Characteristics

Age Distribution.

As Fletcher's population has increased, its age structure has remained fairly constant. The town's population is aging slightly, as noted by an increase in the median age from 31.5 in 1990 to 35 in 2000.

While the town's population as a whole has aged, the proportion of individuals 65 and over has actually declined slightly, from 6% in 1990 to 5.7% in 2000. This is due to relative increases in other age groups, rather than a decline in the total number of elderly in the community.

2.4 AGE GROUPS, 1980 - 2000

	1980	1990	2000
Under 18	30%	31%	29%
18 to 64	62%	63%	66%
65 and Over	8%	6%	6%
Median Age	28.6	31.5	35

Source: US Census, 1980, 1990 and 2000

The data in table 2.4 also indicates that, although the percentage of children under 18 years of age has slightly decreased, the percentage of those from 0-9 years of age has increased- reflecting the increased number of local births during this period, and foretelling an increase in school enrollments during the coming years. Given the anticipated overall growth in population, increases in all age groups can be expected. This suggests a growing need for community services and facilities, including day care and educational services; and elderly services, facilities and housing. The largest component of the population will continue to be those in their wage-earning years, who contribute to the community by generating income,.

Special Needs Populations. Census data also provide information on special needs populations in the community. In 2000 for those non-institutionalized persons between the ages of 21 and 64 (total 708), 17.2% (122) had a disability. Of these working-aged residents with a disability, 32% were unemployed.

For the non-institutionalized elderly (totaling 69), 29 (42%) reported a disability. This suggests that those with special needs for related services make up about 15% of Fletcher's total population.

Educational Levels. According to 2000 Census information, over 86% of Fletcher residents over the age of 25 were high school graduates, and over 26% held college degrees (bachelor's or higher). As shown in the accompanying table, Fletcher's population is fairly well-educated relative to Franklin County and Vermont residents, at least with regard to formal schooling.

2.5 EDUCATIONAL LEVELS
(Population 25+ years)

	% High School	% College Graduates
Fletcher	86.4	26.1
Franklin County	82.6	16.6
Vermont	86.4	29.4

Source: U.S. Census Data, 2000.

Income Levels. Comparative income information in 2000 dollars is provided in the table below. As of the last Census, Fletcher residents had higher per capita, household, and family incomes than those reported for the county, and a smaller percentage of Fletcher's population lived below the poverty line. While the state median per capita income was higher than Fletcher's, Fletcher residents' median household and family income values were higher than state averages. Fletcher also reported a lower percentage of its population below the poverty level than did the state of Vermont.

The 2000 Census indicates that 6.3% of Fletcher residents live below established poverty levels- including 9.3% of children under the age of 18, and 11.6% of persons aged 65 and over.

More dated information from the Department of Prevention, Assistance, Transition, and Health Access (formerly the Department of Social Welfare) indicates that Fletcher has a smaller percentage of residents who receive Aid

2.6 INCOME AND POVERTY LEVEL COMPARISONS, 1990-2000.

	Per Capita		Median Household		Median Family		% Below Poverty Level	
	1990	2000	1990	2000	1990	2000	1990	2000
Fletcher	$11,314	$20,498	$30,074	$46,146	$32,333	$49,375	8.5	6.3
Franklin County	$11,678	$17,816	$28,401	$41,659	$32,272	$46,733	10.2	9.0
Vermont	$13,527	$20,625	$34,780	$40,856	$34,780	$48,625	9.9	9.4

Source: US Census 2000.

to Needy Families with Children (ANFC) or food stamps than does Franklin County or the state of Vermont. Only 2.1% of Fletcher residents were involved with the ANFC program in 1999, and 3.0% received food stamps in 1998. 1998 statistics reveal that 4.3% of Franklin County residents participated in the ANFC program, and 9.9% received food stamps, while 1997 statistics indicate rates of 3.8% for ANFC and 8.6% for food stamps.

Tax Base. As all communities in Vermont, Fletcher relies heavily on its property tax base to fund needed community facilities and services. The local grand list thus provides information not only about properties in town, but also about tax burdens and trends that may change over time as the community grows and develops.

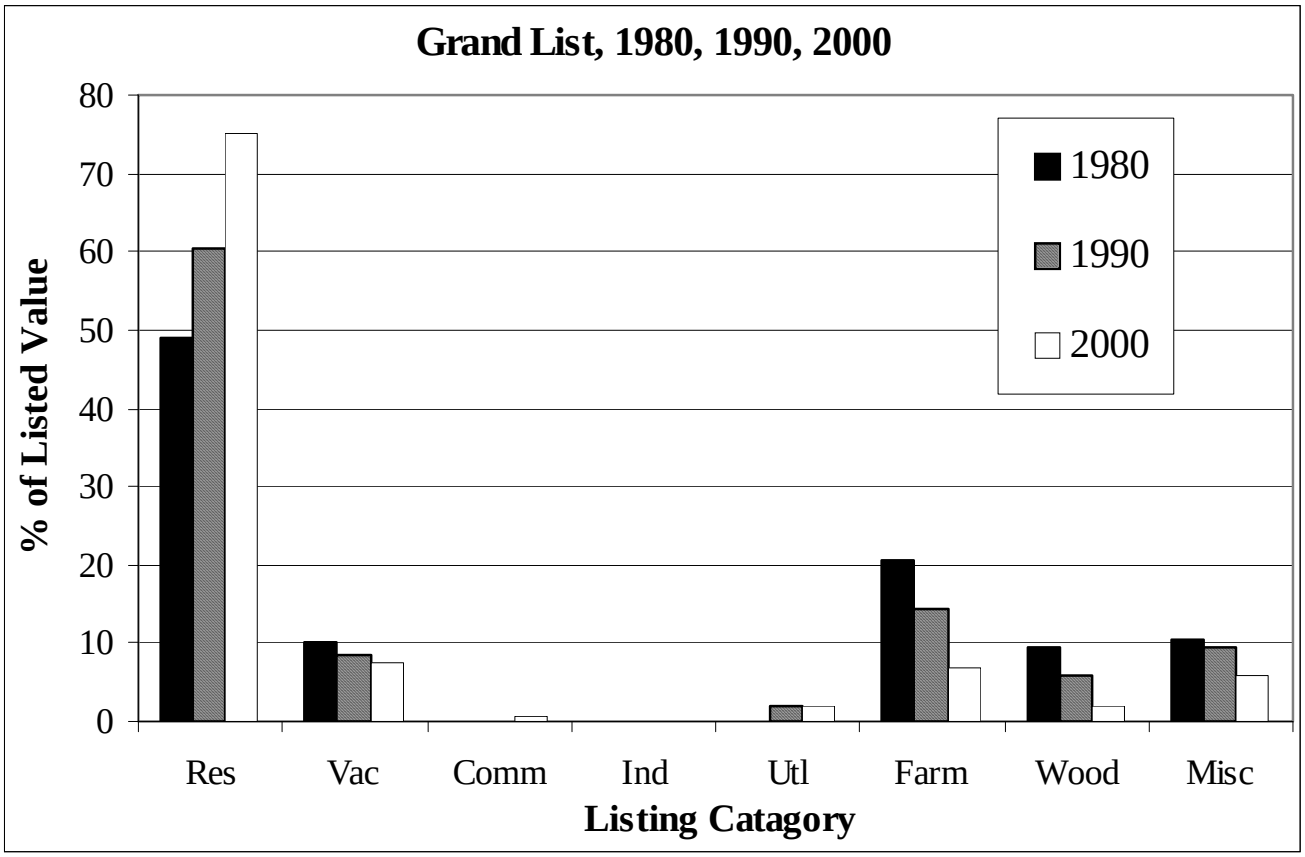
The total number of parcels listed increased by 19% between 1990 and 2000, suggesting that a significant amount of land subdivision and development occurred during this period. By far, the greatest increase in parcel numbers was due to residential development. The number of year-round residential homes on 6 acres or less increased by 57.7%, while residential properties of more than 6 acres increased by 21.8%. Over half of Fletcher's year-round homes are built on less than 6 acres - reflecting the pattern of very low density residential development characteristic of a rural community. Over the same period of time vacation properties regardless of acres, experienced a notable decline in number, in part due to conversion to year-round use.

Overall, the number of farm parcels experienced a decline, while woodland parcels have recuperated previous reductions, and the town has not gained industrial property.

The accompanying graphs illustrate recent changes in the relative value of properties included on the town's grand list. By 2000, residential properties (year-round, including mobile homes) accounted for 75% of the total listed value, up from 60% in 1990, and 49% in 1980. During the same period the relative value of vacation, forested and agricultural properties declined, and the value of commercial and industrial properties remained insignificant. As noted, there are no listed industrial properties in town, and the one commercial property accounts for less than 0.5% of the local tax base.

This confirms that the town is largely and increasingly dependent on its residential tax base to fund needed community services and facilities.

2.7 GRAND LIST COMPARISON					
Parcel Type	1980	1990	2000	% Change	
				1980-90	1990-00
Residence, ≤ 6 Acres	70	111	175	58.6%	57.7%
Residence, 6+ Acres	75	133	162	77.3%	21.8%
Mobile Home, w/o land	6	6	11	0.0%	83.3%
Mobile Home w/ land	24	36	43	50.0%	19.4%
Vacation, ≥ 6 Acres	56	54	48	-3.6%	-12.5%
Vacation, 6+ Acres	20	20	17	0.0%	-17.6%
Commercial	0	0	1	0.0%	100.0%
Industrial	0	0	0	0.0%	0.0%
Utilities	0	2	3	200.0%	50.0%
Farm	22	25	24	13.6%	-4.2%
Woodland	34	26	31	-23.5%	19.2%
Miscellaneous	105	107	104	1.7%	2.9%
Total # Parcels	**412**	**520**	**619**	**26.2%**	**19.0%**
Source: Fletcher Grand List, 2002.					



Source: Grand List Abstracts.

A comparison of Fletcher's tax base with those of surrounding communities is given in the table below. The aggregate fair market value (AFMV) of Fletcher's grand list is lower than that of most surrounding communities, due in part to the lack of commercial/industrial and large scale residential development in town. As a result, the average tax on R-1 properties (residential on less than 6 acres) is generally higher than most.

2.7 TAX BASE COMPARISON, 1999

	Effective Tax Rate ($/100)	Average R-1 Tax
Fletcher	2.15 ('99)	2,060 ('99)
Bakersfield	1.63	1,447
Fairfax	1.92	2,058
Fairfield	1.81	1,783
Cambridge	1.67	1,858
Waterville	1.82	1,500

Source: VT Dept. of Taxes, 1999 Annual Reports.

In 1995 Fletcher had the highest effective total tax rate ($2.24), and the highest school tax rate ($1.73) in the county, despite the fact that following a recent reappraisal, property is currently listed at 101.91% of fair market value (VT Dept. of Taxes, 1996).

As noted above, the majority (78%) of listed property in Fletcher is owned by town residents; 2.1% is in corporate ownership, and 5.3% is owned by non-state residents. Remaining properties are owned by Vermont residents who reside elsewhere in the state for all or part of the year. These include many of the seasonal camps around Metcalf Pond, some rental properties, and undeveloped land.

This suggests that local development to date has been locally driven, and not tied to corporate, out-of-state or other in-state landed interests, as is occurring elsewhere (for example in Cambridge, home of the Smuggler's Notch Ski Resort). Fletcher is not, however, immune to outside forces. Continued growth in the St. Albans and Burlington areas, may significantly increase the demand for new housing in surrounding communities such as Fletcher.

Recent Development Trends

The number and type of zoning permits issued each year, listed in the accompanying table, give an indication of the amount and type of development occurring in Fletcher. Not all permitted development may be constructed, and not all types of development require permits (for example farm structures were granted exemptions from local zoning by the state in 1994). However, permit information is useful in looking at local development trends.

Fletcher at present does not have parcel or tax maps, which makes it more difficult to identify and locate specific subdivision and development trends. Permitting activity further validates the fact that land use is largely residential. The pattern of development in Fletcher to date has been largely low density, single or multiple lot subdivisions of land along existing rights-of-way (including some Class 4 roads) for year-round residential use. If this pattern is maintained through the next decade, Fletcher's open land will continue to be subdivided for residential use, reinforcing its growth as a bedroom community. Based on recent permit activity, locally and in nearby communities such as Fairfax, Fletcher can also expect to receive an increasing number of applications for larger-scaled residential subdivisions, as market and local soil conditions (for septic systems) permit.

2.9 ZONING PERMITS, 1992-2002

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	TOTAL
Single Homes	17	11	9	16	8	8	13	8	8	15	12	125
Mobile Homes	3	3	4	3	4	1	1	1	2	1	1	24
Camps	0	1	0	0	1	1	0	1	0	0	0	4
Additions	11	6	4	4	4	3	10	6	9	6	6	69
Sheds/Garages	10	11	20	5	7	15	12	11	13	12	12	128
Other	12	17	13	6	12	10	7	17	9	7	11	121
TOTAL	53	49	50	34	29	38	43	44	41	41	42	471

Source: Fletcher Town Reports, 1996-2001

GOALS:

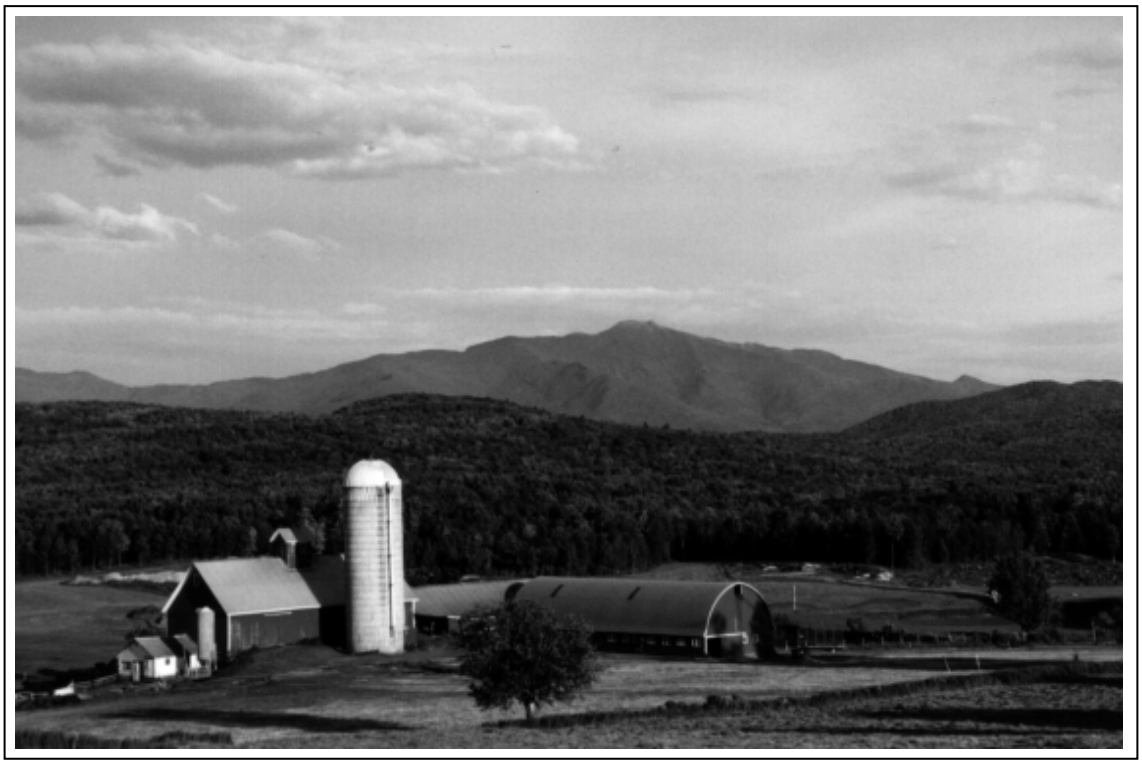
- **To pursue a course to best understand the community, resident population and existing conditions.**

Objectives:

- The most current data available will be pursued and applied, to best base planning activities.

Recommendations or Actions:

- Current and recent trends will be periodically reviewed by all necessary municipal officers and/or discussed with town residents.



Section 3
NATURAL AND CULTURAL RESOURCES

Overview

Fletcher is a rural community, with a particular "sense of place" that has developed over the time through the integration of the town's natural and cultural, or built, environment. This blending, unique to each community, gives rise to special qualities and a distinct character, which is recognized and valued by local residents, but not always easily defined or preserved. Increasingly, many towns are losing their sense of place – their uniqueness, their character and their identity – through nondescript patterns of development, including in rural areas exurban or lower density residential sprawl. On doing so, these communities lose many of the very qualities that make them attractive places in which to live and work. Further, what resource-based economy exists is continually being challenged as the town continues to shift into a bedroom community.

Giving due consideration to Fletcher's natural and cultural features, and the qualities of life these afford, is of major consequence for the continued growth and development of the town. Protecting that which is unique or special about the town promotes quality development, increases property values, has direct economic benefits, and may form the basis for a shared, positive local image and greater sense of community.

Fortunately, Fletcher retains much of what makes it an attractive place to live and work.

In this section important natural and cultural features found in Fletcher which contribute to its rural character and sense of place are noted, along with related goals, policies, and objectives concerning their protection, preservation and/or enhancement.

Natural Features

Fletcher's most prominent natural features and attributes are locally recognized. Others are less apparent, but nevertheless important to the health of the environment and the community.

According to the Vermont Land Use/Land Cover (LULC) Datum, 1997, and covers in Fletcher have been identified and summarized into the following categories:

- **Forest** – Deciduous, Coniferous and Mixed forests;
- **Agriculture –** Row Crop, Hay Pasture and Other Ag/Mixed Open;
- **Water** – Surface Water;
- **Developed** – Residential, commercial, Transportation/Utilities and Other Urban;
- **Wetland** – Forested and Non-Forested Wetland; and
- **Other** – Barren Lands and Brush Transitional.

Climate and Air Quality

Climate represents the normal or average weather conditions that are characteristic of an area over a long period of time. Typical weather conditions are an important part of the planning and design process because they affect such things as soil erosion, plant growth, air quality, storm water runoff and flooding, groundwater levels, road maintenance, water heating bills, and access to solar or wind energy.

Vermont's northern climate is dominated in winter months by cold dry air from Canada, and in the summer by warm moist air from the Gulf of Mexico. Occasionally the state also feels the effects of damp, cold air moving inland from the north Atlantic. Vermont experiences violent thunder and windstorms with shifting weather patterns; tornadoes and hurricanes are rare but episodes of heavy rainfall and flooding may occur during these periods.

Fletcher also tends to receive more precipitation in the form of rain and snow than towns in the Champlain Valley. Average annual precipitation is adequate for most needs, although short periods of drought and flooding and heavy snowfalls are not unusual.

Fletcher's climate is especially pleasant in the summer months when the average daily temperature fluctuates around 70° F. Winter months, when temperatures may fall well below 0° F, present a different set of circumstances. Buildings must be constructed with sufficient insulation and heating to fend off the cold, and with the structural integrity and roofing to withstand heavy snowfalls. Winter snows also contribute to expensive winter road maintenance costs.

The freeze-thaw cycles that bring spring sap runs also buckle poorly drained foundations, pavements, and roads; and "mud season" may result in nearly impassible dirt roads and driveways. The adversities and real costs associated with living in this northern climate can be lessened, however, with the proper planning, siting and construction of new development and infrastructure (for example, the siting of buildings to maximize solar and minimize wind exposure). And the benefits, including the variety that comes with the changing of the seasons, are many.

Given the lack of industrial development in town, local air quality concerns are limited mainly to pollutants generated by vehicles, heating systems (e.g., wood stoves), and some agricultural practices. The cumulative effect of these sources will increase with additional growth and development, and may have greater impact on local air quality in the future. These types of low-level emission sources are coming under increased scrutiny statewide.

Bedrock Geology

Geologic events of the distant past have directly affected Fletcher's topography, soils and drainage patterns, which in turn have influenced patterns of local development. Fletcher is underlain by bedrock formed from sediments and volcanic materials deposited some 600 million years ago, which were then altered and hardened from the heat and pressure of mountain building. Over the millennia, the weathering and erosion of less resistant rock resulted in the Fletcher's existing relief. Locally, bedrock consists mainly of highly metamorphosed greywacke, phyllite, gneiss and schist associated with Green Mountain formation.

Geologically speaking, northwestern Vermont has been relatively inactive in recent decades. Over the long term this region is susceptible to earthquake activity centered mainly to the north and west. Seismic events, such as the April 20, 2002 magnitude 5.1 earthquake centered 15 miles southwest of Plattsburgh, NY show that the region is susceptible to quake activity. On a more local level, occasional shifts in underlying bedrock have resulted in minor tremors that have been felt locally, but have caused no damage.

Surficial Geology

Periods of glaciation, the most recent ending approximately 11,000 years ago, also dramatically affected the look and lay of the land. Glacial materials deposited during periods of advance and melt – including glacial tills, outwash sands and gravels, and lake bottom sediments – cover underlying bedrock to varying depths. These are the parent materials from which most of Fletcher's soils have developed. Also found on the surface in isolated locations are organic peat and mucks that have accumulated in low-lying areas (e.g., along Black Creek south of Metcalf Pond), and more recent flood deposits along local rivers and steams.

Glacial tills consist largely of unsorted, poorly drained materials. Exposed bedrock, bouldery surfaces, and shallow soils are common, particularly in the hilly and mountainous upland areas of town. The suitability of tills for forestry, farming, and development varies widely depending on depth to bedrock, slope and drainage. Till soils often have fragi-pan layers which impedes drainage. Where tills are thin, water is allowed to infiltrate into underlying bedrock and recharge local ground-water supplies.

Level terraces of well-sorted, well-drained sands and gravels deposited during glacial melt are found mainly along the Lamoille River valley, including an extensive area south of Binghamville. Smaller kame terrace deposits are scattered throughout town. These deposits are often good sources of sand, gravel and groundwater, are fairly good farmland, and re well suited for development. As such, they

represent an important resource to the town that may be subject to competing but not always compatible uses.

Lake bottom silts and clays, located in the vicinity of Fletcher Center and at greater depths in the Binghamville area, are poorly drained and generally unsuited for most types of development. Well log data suggest, however, that when left intact, these clays may cap and provide some protection to underlying bedrock aquifers.

Earth Resources

No commercial mineral deposits have been located in Fletcher; however outcrops near West Fletcher and Binghamville have been quarried for crushed stone. Sand and gravel deposits scattered throughout town also have been worked over the years.

There is a growing demand throughout the county for sand and gravel for use in construction and road maintenance. As larger deposits are depleted, smaller deposits may become more economically viable, and more important to the town. These deposits are a valuable resource.

The environmental and social impacts of quarrying and extraction operations also need to be considered prior to development.

Many adverse impacts can be minimized through appropriate site planning, development and reclamation.

Geologic Features

Also of note are two geologic features located in Fletcher that were identified as part of

a statewide natural resource inventory conducted in the 1970s. The **West Fletcher Esker**, a 400-acre glacial feature of statewide significance, extends 1.5 miles along a tributary of Wilkins Brook. Sections of this sand deposit have been subject to extraction, but it retains its integrity as a significant glacial feature.

The second feature is a naturally occurring **Rock Cave** located on 5 acres in the vicinity of Metcalf Pond. This cave, surrounded by forestland and historically renown as a fugitive hideout, was reported as also having statewide significance.

Topography

As noted, Fletcher's topography and drainage patterns reflect the differential erosion of underlying bedrock, and the effects of more recent glaciation. The result is a mature (geologically speaking), hilly, sometimes mountainous landscape cut by small stream valleys. Because topography provides natural barriers to movement and often influences the accessibility and use of land, topographic information is important in planning for different types of land use, transportation routes, and the location of public facilities and infrastructure.

Elevations in Fletcher range form lows of 430 to 440 feet above mean sea level (msl) along Black Creek and the Lamoille River, to 2,140+ feet atop Fletcher Mountain, east of Route 108. Most development in Fletcher, including Binghamville and Fletcher Center, is located between 500 and 700 feet, along the valleys and hollows that cut through surrounding uplands. Scattered, low-density development is found above 1,000 feet.

One of the most important factors controlling the potential use of land is slope or steepness. Slope is an important consideration not only because of associated constraints including drainage, erosion, and bearing capacity, but also because of the damage that may result from slope destabilization. Major causes of slope destabilization include vegetation removal and undercutting of slope faces. Slope destabilization may result in accelerated runoff and soil loss, septic system failure, foundation shifts, and in the extreme, landslides and building collapse.

Land which is nearly level is generally suitable for most types of uses, including farming, industrial, commercial, and large-scale residential development. For this reason, agriculture often comes into conflict with other competing uses for available land. Steeply sloping land is generally best suited for low density, nonstructural uses, including timber production, wildlife habitat, and outdoor recreational activities. Any use of steep terrain requires careful land management. According to state soils data, 32% (7,761 acres) of the town consist of topography greater than or equal to 25% slope. This means that a significant amount of land area is unsuitable for structural development.

Slope Recommended Management

0-3%	Suitable for development, may require drainage improvements;
3-8%	most desirable for development, having the least restrictions;
8-15%	suitable for low density development with consideration given to erosion control, runoff and septic design;
15-25%	unsuitable for most development and septic systems, construction costly and erosion and runoff problems likely;
25%+	all construction should be avoided, careful land management required.
Source:	US Soil Conservation Service

Upland Areas

Areas of higher elevation (here defined as 1,000' or more) include most of the town's mountains, ridgelines and hilltops, many of which are highly visible from public vantage points and contribute significantly to the scenic beauty of the town. Gilson Mountain in particular has been identified as a prominent scenic feature.

Drainage divides, steep slopes, shallow soils and exposed, fractured bedrock are also common in upland areas, which allow for upland drainage groundwater recharge, wild-life habitat,

forestry and outdoor recreational activities, but make these areas highly sensitive to most forms of development. As such, upland areas deserve adequate protection from improperly sited and potentially harmful development.

Fletcher's **drainage** includes a complex network of streams, rivers overland, and subsurface flow. Locally, Fletcher lies within two drainage basins: the Missisquoi River basin, including Black Creek and the headwaters of the Fairfield River which drain northward; and the Lamoille River basin, including Wilkins Brook, Stones Brook and local tributaries which flow south into the Lamoille River. The major drainage divide runs roughly northwest to southeast through the middle of town. Both basins lie within the Lake Champlain watershed. Fletcher is unusual in that most of the town's drainage, apart from the Lamoille River, originates locally – many local headwaters are located in upland areas above 1,000 ft. This affords Fletcher the unique opportunity to protect local water quality, since most local streams originate within its jurisdiction.

Local drainage patterns are related to slope conditions and are therefore also an important consideration in planning and environmental impact assessments. If slopes are altered, so to is drainage, which can affect the amount and direction of water runoff, soil erosion, and water quality. If drainage patterns area changed through channelization, pond, or dam construction, slope conditions also may be altered, again affecting patterns of runoff, erosion, and sedimentation.

Soils

Soil is perhaps the most important physical factor governing the use of land in rural areas. Most soils in Fletcher, having developed from materials deposited during glaciation, represent a 10,000-year investment that has resulted in a very valuable and limited resource. Soils are classified on the basis of their structure, form, composition, and suitability for various types of development.

The most widely used classification system is that of the US Natural Resource Conservation Service (formerly the Soil Conservation Service). The NRCS has produced detailed soil survey maps for Fletcher, which are included in their publication *Soil Survey of Franklin County, Vermont,* issued in 1979. Components of the survey – including suitability ratings for agricultural, forestry, and on-site sewage disposal systems – have since been updated. A map depicting soils particularly suited for agriculture and on-site septic systems is included for planning purposes (see appendices). Detailed soil survey information and/or site tests should be referred to when determining the capability of a particular soil for a proposed use.

In the context of land use planning, four soil characteristics are of primary concern: bearing capacity, erodability and stability, drainage, and resource value. These characteristics generally depend on particle size (sand, silt, and clay) and water content. Poorly drained, fine-grained (clayey) soils have the greatest limitations for most types of development, especially for anything that requires on-site sewage disposal. In contrast, coarse grained, well-drained sandy soils, though somewhat dry for agriculture, are best suited for residential, commercial, industrial, and other related types of uses.

"Primary agricultural soils" as defined under Act 250, Vermont's Land Use and Development Law, include soils which, based on their chemical and physical properties, are considered especially suited for agricultural use. These are subdivided into "prime" soils having very high potential for and few limitations for agricultural use, and "good" or secondary soils of statewide significance that have good potential but may have one or more limitations that restrict crop selection or require more management.

In the rolling hills and mountains of northwestern Vermont, Primary agricultural soils, and "prime" soils in particular, are a very limited and valuable resource. Agriculture depends on the availability of high quality soils, in large enough acreage (a critical mass), to make crop production economical. However, many of the best agricultural soils are also well suited for other types of development, including

the subdivision of land for the construction of houses and related infrastructure. Fletcher is no exception; new homes in town have been built on some of Fletcher's best farmland.

The conversion of good farmland effectively takes it out of production over the long term, and reduces an already limited resource base. In Fletcher much of the best farmland, located in valleys along local roads and drainage, remains in production. Historically, more agricultural land has been abandoned to shrub and forest than has been lost to development; however given the importance of agriculture to the community, now and in the future, farmland conversion and fragmentation remain a local as well as regional and statewide concern. Retaining sufficient acreage of primary agricultural soils for sustainable production is necessary for the continuation of farming in Fletcher. The proper care and management of agricultural soils (e.g., through the use of accepted or best management practices as defined by the state), is also important to ensure long-term, sustainable use.

"Primary forestry soils" also have been identified by NRCS and the state according to their productivity for commercial forestry. Similar concerns exist regarding the development and fragmentation of commercial forestry soils; though these soils are more widespread, and are often found in the more remote up-land locations in town. Primary forestry soils include many soils, which, because of slope and drainage, are not suitable for intensive development. This reduces development pressures on this resource base, but even low-density development, including seasonal camps, may result in fragmentation and limited access to good forestland.

In all, few soils in Fletcher are suitable for high-density development, especially given the lack of a centralized sewage disposal system. Limited areas of good development soil (e.g., Windsor-Missisquoi soils) are located on sandy terrace deposits in the vicinity of and to the south of Binghamville. Traditionally these soils have been used for farming and logging. More recently they have been sub-divided for residential development. They also are a potential source of sand and potable groundwater. Given these soils' suitability for different, often competing uses, and the amount of development pressure in this area of town, careful planning is needed to resolve existing and potential land use conflicts.

Other types of low-density development in Fletcher are dependent on the ability of soils to accommodate on-site septic systems. Soils also have been classified by the NRCS with regard to their suitability for handling conventional and mound systems under current state regulations. Site analyses, including percolation tests, are necessary to ensure that septic systems will function properly.

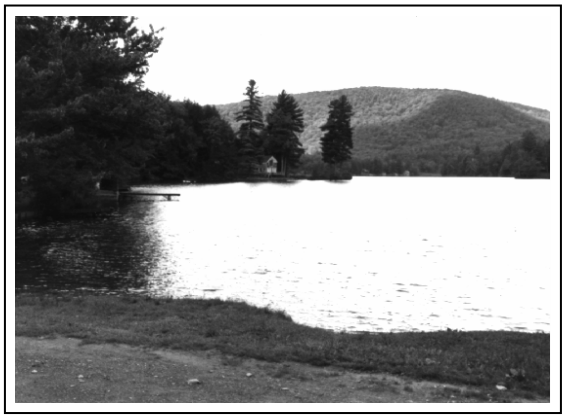
Surface Waters

Fletcher's principal surface waters include Metcalf and Half-moon Ponds, the Lamoille River, Black Creek, Wilkins Brook, Stones Brook, and the upper reaches of the Fairfield River. These waters, as well as other local streams and brooks, provide drainage for surrounding lands, important wildlife habitat, recreational opportunities, scenic views and individual water supplies. Any of these functions may be impaired by land uses within local watersheds, particularly in the vicinity of stream banks and shorelines.

Given that most drainage in Fletcher originates locally from upland areas of town, Fletcher is in as especially unique position to protect and enhance the quality of its surface and ground water resources for multiple use, and in particular for public water supplies and recreational uses. Pristine headwaters, located in the upper reaches of watersheds, have low assimilative capacities and are thus extremely sensitive to sedimentation and pollution.

Inappropriate development within riparian zones and shore land areas may also significantly impair water quality, habitat for fish and other aquatic life, and public use of local waters.

Metcalf Pond is the town's most notable surface water feature. Located between steep, forested slopes in the north central part of town, Metcalf Pond is a naturally occurring pond roughly 71 acres in size, and has a maximum depth of 25 feet. The pond drains through a southern outlet, which serves as the source for Black Creek.



The pond's watershed has been mapped at 801 acres, 96% of which is undeveloped. Forested land extends over 84% of the basin. There is a significant amount of shore land development – seasonal camps served by private, dirt roads and individual septic systems line the southern and parts of the western shores, and some year-round homes are located nearby. Steep slopes and wetlands have limited development along much of the remaining shoreline – associated wetlands are found along the north shore and at the southern outlet.

Metcalf Pond is public water regulated by the state. Public access is limited to a small, undeveloped parcel of town land located along the road at the south end of the pond. The pond has been identified by the state as a warm water fish habitat. Fishing, boating, and swimming are popular activities locally. Metcalf Pond and the surrounding hillsides, including "the Gore" to the north, are also visually appealing, and comprise a prominent, widely recognized scenic feature.

Water quality is generally good, and supports existing uses. There are problems with Eurasian Milfoil, an introduced aquatic weed first documented locally in 1984. Infestations are currently being controlled by manual harvesting. Local residents also have complained of reduced water clarity due to algae and siltation, resulting primarily from localized non-point sources of pollution. Increase development around the pond, including new or expanded seasonal structures or the conversion of seasonal homes to year-round uses, could impair water quality further if shore lands are not properly managed and protected. Given steep slopes and poor soil conditions around the pond, on-site sewage disposal and runoff have been of particular concern. For these reasons, the town has included shore land provisions in its local zoning bylaw.

Halfmoon Pond is a smaller (21 acre), naturally occurring water body located south of West Fletcher. The pond's outlet feeds into Stones Brook. Halfmoon Pond is also public water regulated by the state, and a designated warm water fish habitat, but at present there is no access that permits public use. The pond's watershed area is 194 acres, of which 80% remains undeveloped. Most of the watershed (70%) is forested; roughly 20% is in agricultural use. One farmstead and a small number of homes are located in the vicinity. The shore land remains largely undeveloped and wetlands are located around the southwest end.

There has been no monitoring of the pond's water quality by the state; it is, however, considered "threatened" for Eurasian Milfoil infestation. The pond, as designated Class B water, falls under the state's management goal to support a variety of public uses, however it is not known whether existing water quality will

support these uses. Halfmoon Pond played an important role in Fletcher's history, supporting a local ice-harvesting industry, and it remains an important aesthetic resource to the town today. It would serve the public interest for the town to negotiate limited public access to these waters, while taking into consideration legitimate landowner concerns regarding liability, trespassing, and vandalism.

Fletcher is one of three Franklin County towns that border the **Lamoille River** – as noted, much of the southern half of the town drains into this river through Stones and Wilkins Brooks, and other local drainages. The Lamoille River is a river of statewide significance for municipal and individual water supplies, power generation, fisheries and wildlife habitat. It is also a culturally significant historic, recreational and scenic corridor. Currently the river in Fletcher is bordered by farmland; there is no direct public access.

Black Creek, Wilkins and Stones Brook also are important locally. The headwaters of all three are within the town. Black Creek flows south from Metcalf Pond, feeding a significant wetland area that supports a variety of wildlife. Though this land is in private ownership, much of it is currently managed for timber. In Cambridge the creek turns northward and reenters East Fletcher along Route 108, then flows northward through wetlands, deeryards and farmland into Bakersfield and Fairfield. The creek's water quality deteriorates significantly, mainly from agricultural runoff and erosion, before reaching the Missisquoi River in Sheldon.

The headwaters of Stones Brook, located along the drainage divide south of Metcalf Pond. Also feed wetland areas to the west of North Road. One of the region's larger deer wintering areas is located along this brook in the southwest corner of town. Historically Stones Brook provided power for local mill operations in Fletcher Center and Binghamville before winding its way south of the Lamoille. Old dams sites and millponds are still evident. Evidence of glacial outwash, including the West Fletcher Esker, is located along the upper reaches of Wilkins Brook, which also eventually drains into the Lamoille.

Other local streams and brooks, including the headwaters of the Fairfield River in the northwest corner of town, and headwaters on the northern slopes of Gilson Mountain, which feed the East Fairfield water system, serve important functions beyond local drainage. Pristine headwaters flowing into larger streams and rivers contribute significantly to their improved water quality and the variety of functions they support. Many local waters are ephemeral and very sensitive to disturbances resulting from forestry, agriculture and other forms of development.

As previously observed, most of the town's drainage originates locally, therefore Fletcher is in a unique position to protect and enhance the quality of its surface waters. The headwaters that contribute to East Fairfield's pubic water supply and already included in a Source Protection Area (SPA) designated by the state and shown on the accompanying maps (see appendices). These areas in particular should receive protection through local regulation.

Groundwater

A large majority of Fletcher residents depend on groundwater for their individual water supplies. At present, there are no public water supply systems in town. Fletcher's aquifer recharge areas include many upland areas where bedrock is exposed (as evidenced by the number of springs that flow seasonally), and sand and gravel deposits, which allow for a significant amount of infiltration. Groundwater is generally abundant though depth and quality vary from place to place depending on local geology and sources of contamination.

Contaminants of particular concern include road salt, agricultural chemicals, leaking fuel tanks and failing septic systems. Once groundwater is contaminated, it is very difficult and expensive to clean up. Because of the low density of settlement in Fletcher, groundwater contamination, when it occurs, is limited and isolated.

There is, however, growing concern regarding reports of existing and potential

groundwater contamination in the Binghamville area – including potential contamination of the school's water supply – given the higher density of settlement in this area, continued reliance on on-site septic systems, sandy soils, and increased development activity. Any future community water supply to serve this growing area will require an abundant source of potable groundwater. It therefore makes sense for the town to identify, designate, and protect such a source before it is developed for other purposes.

Ecologically Sensitive Areas

Ecologically sensitive areas include those areas of town that serve important environmental or ecological functions, and are especially sensitive to development activity. Given their nature and significance, these areas should receive special consideration for local protections.

Wetlands are not typically suited for development, but serve a variety of other important functions, including flood regulation, water purification and wildlife habitat. They also add to the scenic quality of the rural landscape. The National Wetlands Inventory (NWI), conducted by the U.S. Fish and Wildlife Service in the 1970's, identified 782 acres of palustrine (upland) wetlands in the Town of Fletcher. This information is dated and by no means definitive, since wetland boundaries fluctuate from season to season. It does, however, give some indication that wetlands are an important part of Fletcher's landscape.

Major wetland complexes are located along Black Creek, Stones Brook, and along the shorelines of Metcalf and Halfmoon Ponds (see appendices). Wetlands are also scattered through upland areas where drainage is poor, or beavers have been at work. For development and permitting purposes, wetland boundaries need to be delineated through field surveys.

Many wetlands in Fletcher (those designated as Class II wetlands) are now protected by the state, and the town is required to report when development activity is proposed within or adjacent to them. Wetlands are also important locally, and may receive additional protection under local regulations, for example through buffering requirements, as appropriate.

Flood plains include areas along streams and rivers that experience frequent flooding and for obvious reasons are poorly suited for most types of development. "Open space" uses – including agriculture, forestry, and outdoor recreation – are most suited to these areas. The Town of Fletcher has adopted floodplain regulations as part of its zoning bylaw, which conforms to federal requirements for participation in the National Flood Insurance Program (NFIP). Restrictions are intended to protect life and property, and to allow property owners to obtain flood insurance, and mortgages, at affordable rates. These regulations restrict development in 100-year flood zones, as mapped on federal Flood Hazard Boundary Maps (FHBMs) available for review at the town clerk's office.

Shore land and riparian areas, including the shores of Metcalf and Halfmoon Ponds, and the banks of the Lamoille River, are also particularly sensitive to development for a variety of reasons, including the potential for flooding, runoff, erosion and related impacts to water quality. These areas receive some protection under Fletcher's current bylaws. Special management zones, to include setbacks and vegetated buffers of sufficient width are recommended.

Fletcher's environment supports many types of **wildlife habitat**, including upland areas, wetlands, forests, steams and ponds, which in turn support a variety of wildlife. Protecting habitat resources, often accomplished through the protection of other features and values, is critical to sustain local wildlife populations and to maintain and enhance local biodiversity. The protection of wildlife habitat – in support of traditional hunting and fishing activities, other forms of outdoor recreation, and to maintain biodiversity - has been identified as a local concern. The primary threats identified include habitat encroachment, fragmentation and water pollution and over hunting.

Certain **critical habitat areas** have been identified for protection by the state. These include winter deeryards, critical bear habitat,

and habitats of rare or endangered species or natural communities.

To date, five **deeryards** have been identified in Fletcher (see appendices). The largest is located in the southwest corner of town in a forested area between Fairfax and River Roads, which extends westward into Fairfax. Development south of Binghamville, and in parts of Fairfax, has begun to encroach on this area. The second largest deeryard is located on the western slopes of Fletcher Mountain along the valley of Black Creek, east of Route 108. Other smaller deeryards are found in eastern sections of town, mainly along Black Creek. These areas provide winter shelter and browse for deer, and are critical to the long-term survival of the local deer population.

The state has established the **Gilson Mountain Wildlife Management Area** on the north slopes of Gilson Mountain through the purchase of rights on 380 acres of private land. Public access is permitted, but to date no wildlife management plan has been developed for this area.

The upland areas of Fletcher east of Route 108 are considered important bear production habitat. This region, which consists mainly of contiguous and remote forestland, is part of a larger area that supports relatively high densities of cub-producing females. Other upland areas in the eastern half of town are considered important seasonal bear habitat, which include feeding areas and travel corridors. The black bear is a sensitive indicator of the health of Vermont's forest; these areas are considered critical to the black bear's long-term survival in Vermont.

To date, no rare, threatened or endangered plant or animal communities have been identified in Fletcher. This is in part due to the fact that no extensive field inventories have ever been conducted in town. If such communities are located in the future, appropriate measures should be taken for their protections.

A cursory survey of the area around Metcalf Pond, conducted as part of a 1992 biological study for the Vermont Non-game and Natural Heritage Program, found no additional species of statewide significance, but did uncover sizable populations of several uncommon ferns and a small population of the rare parasitic plant, squawroot. Aquatic flora at the north end of Metcalf Pond include carnivorous plant species particular to boggy area, including based on old reports, uncommon mixed bladderwort.

In recent years there have been an increasing number of moose sightings in town, particularly in the wetland areas south of Metcalf Pond – which is indicative of the expansion of the moose population statewide. There also have been occasional, insufficiently documented reports of the return of the catamount to our hills.

Maintaining adequate habitat for the protection of local wildlife requires not only the protection of core habitat areas from fragmentation and encroachment, but also the protection of travel corridors, which connect these core areas and allow form seasonal and local movement of wildlife populations.

As suggested previously, habitat conservation provides multiple benefits to the community by reinforcing other local objectives – such as protecting soils and water quality, flood control, retaining farmland, forests and other types of open space, and providing local educational and recreational opportunities.

Cultural Features

Cultural features are community resources that help us understand our shared past. These include archaeological sites, historic sites, structures and settlements, and larger cultural landscapes that reflect the character of a particular place, time, or lifestyle. Fletcher's cultural resources offer a link to the past, help define the town's present character, and provide a context for future growth and development. As such, the town's cultural features lend much to its identity, character, and sense of place deserve consideration for preservation. The following includes a brief description of the town's cultural resource base; it is not intended to represent a complete inventory.

Archaeological Resources

Archaeological resources include both prehistoric and historic sites, which often are no longer visible on the land. These include prehistoric settlements, hunting and fishing camps, trails, and quarries, and burial grounds, as well as remnants of historic use – such as old foundations and cellar holes, dams, kilns and forges, unmarked cemeteries, and roads.

Archaeological sites, when found intact, provide a wealth of information about past ways of life; but because they are not readily apparent, these sites may be easily disturbed or destroyed. It is often not the artifacts themselves (arrowheads, pots, etc.) that are important-though these may attract interest for their historic or commercial value – but rather the context in which they are found.

The Vermont Division for Historic Preservation maintains information of known sites, which is provided on a need to know basis (to avoid scavenging). For planning purposes they have described more broadly defined "sensitive areas" in which archaeological sites are known or expected to occur. In Fletcher, sensitive areas have been delineated along the Lamoille River and its tributaries, and along the upper reaches of the Fairfield River in the northwest part of town. Delineations following two hundred foot setbacks along existing drainage ways are common; however, given the movement of streams and rivers over time, many early sites may be located farther away. Development proposals in these areas should be reviewed with particular attention given to the possibility of buried sites. Assistance with the identification, protection and/or excavation of sites is available from Division staff

Historic Resources

Historic resources, including historic sites, structures and districts, are more easily identified and surveyed. An initial survey of the town conducted in 1981 by the Division for Historic Preservation identified many structures, which have historic significance (listed in the accompanying table), as well as the two historic districts of Binghamville and Fletcher Center. More detailed survey information is available at the town office.

The **Binghamville Historic District** is listed as "an outstanding example of a typical mill town" that has undergone relatively little change in the 20th century. Architecturally the village contains mid-29th century to early 20th century 1-story frame houses with clapboard siding and gabled roofs. The Binghamville Church located at the intersection of two roads, stands as a focal point that defines the village center. Older houses are located on small village lots and are oriented in relation to each other and the road, with minimal setbacks. Stone's Brook, which provided the source of power for the sawmills located along its banks, is identified as the outstanding natural feature in this district. In 1981 the Binghamville Historic District contained no nonconforming buildings. Since that time a store and a few more modern homes have been located here, but the district retains much of its original character.

The **Fletcher Center Historic District**, once Fletcher's primary commercial center, includes the Fletcher Union Meeting House (Grange or Community House) and a number of historic structures near the intersection of the Fairfax and Cambridge roads. This too reflects a traditional settlement pattern of structures on small lots, oriented to each other and the road.

The **Fletcher Union Meeting House**, originally constructed in 1871, is listed on the National Register of Historic Places, and is now maintained by the Fletcher Union Meeting House Association. The Association has been making much needed improvement to the building through volunteer efforts, and as funds, including historic preservation grants, have

become available. In recent years, the Meeting House has been used for town meetings and community events, but the building's use is limited due to a failing septic system. Poor septic conditions also have limited amount of new development in Fletcher Center.

Not identified on the state's survey, but nevertheless of historic as well as local importance, are Fletcher's four cemeteries – the **Pioneer Cemetery** (Fletcher Center), the **Fletcher Cemetery** (in Binghamville), the **Bailey Cemetery** (on the Will George Road), and **River Road Cemetery**. The Fletcher Cemetery is the only remaining active cemetery. The Pioneer Cemetery is actively maintained; the other two historic cemeteries are showing signs of long-term neglect.

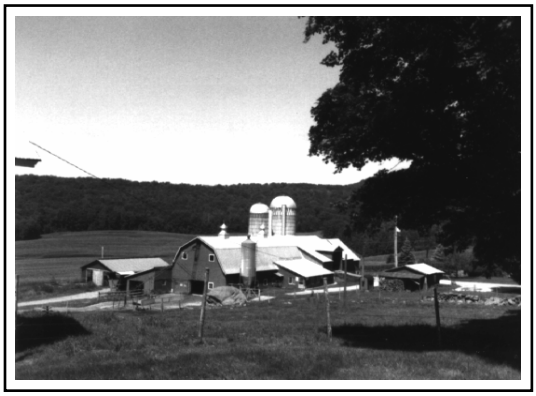
Farms and farm buildings were identified by local residents in the municipal survey has having historic significance. Also not inventoried, but increasingly considered of historic importance, are landscape features associated with past or abandoned uses,

3.1 HISTORIC SITES AND STRUCTURES
Fletcher, VT

NAME OF SITE	SITE NO.	FILE NO.	NAT'L REGISTER
Bailey-Howrigan House	0606-01	81-A-175	
Bailey-Sheeby Hollow Farm	0606-02	81-A-174, 175	
Former West Fletcher School House	0606-03	81-A-174	
Ellsworth-Squires House	0606-04	81-A-151	
Bailey-Gillilan-Minor House	0606-05	81-A-122	
Scott-Fox House	0606-06	81-A-122, 175	
Boomhower-Nilsson-Wilcox House	0606-07	81-A-122	
Former Parsons School House #9	0606-08	81-A-175	
Former Fletcher Center School #1	0606-09	81-A-122	
Binghamville Historic District	0606-10	81-A-122,123,174	
Church-Tinker Brother's Farm	0606-11	81-A-123,124,151	
Church-Tinker's Tenement House	0606-12	81-A-174	
Fletcher Center Historic District	0606-13	81-A-122,123,124,151,174	Church - 5/20/82
Bingham-Tinker House	0606-14	81-A-174	
Cross-Minor House	0606-15	81-A-122	
Chase-Ferguson Farmhouse	0606-16	81-A-124	
Leach-Miller House	0606-17	81-A-124	
Chase-Wells-Sweet House	0606-18	81-A-124	
Corse House	0606-20	81-A-175	
Corse-Sawabini Sugarhouse	0606-21	81-A-175	
Boozan-Riggs House	0606-22	81-A-174	
Flanders-Gaynor/Hilborn House	0606-23	81-A-174	
Former Hooper School #11	0606-24	81-A-124	
Armstrong-Dapkiewicz House	0606-25	81-A-124	
Kinsley-Drennan Farm	0606-26	81-A-124	
Carpenter-Tinker House	0606-27	81-A-124	
Parsons-Thomas-Sizen House	0606-28	81-A-174,175	
Parsons-Ballerd-Hancock House	0606-29		
Strait-Carpenter-Cross House	0606-30	81-A-174	
Old Ellsworth Farm House	0606-31	81-A-175	
Ellsworth-Minor House	0606-32	81-A-175	

Source: Historic Sties and Structures Survey, Fletcher, VT, VT Division for Historic Preservation, 1981

including old foundations and cellar holes; dams, quarry and mill sites; stone walls and wire fences marking old field and property boundaries; stone posts, "witness trees" and other boundary markers; and old orchards, sugar-bushes, woodlots, and logging sites. Often these features are not viewed as having any value and are readily disturbed, removed or demolished.



The Working landscape

As a rural community, Fletcher's rural character is most visually defined, and its history most evident, in its working landscape – represented by small, compact settlements such as Fletcher Center and Binghamville surrounded by open countryside. It was noted in the previously 1981 Department of Historic Preservation Survey that the incremental changes, which are affecting Fletcher's historic buildings, are overshadowed because as individual structures they are dominated by their agricultural setting. Greater concern expressed by local residents in prior surveys, including the 1981 historic preservation survey and in the municipal survey was not the condition of existing buildings, but rather the development of open space – in particular, a concern that the rapid rate of new construction, rising tax rates, and the lack of adequate zoning regulations would encourage the further subdivision of farm and forest land. It is clearly evident that Fletcher's working landscape, as identified by its residents, has economic, fiscal and cultural significance, and contributes significantly to the rural and scenic character of the town.

To date there have been few multiple lot subdivisions in Fletcher, though subdivision activity is on the rise. More specifically, single lot subdivision is the most widely applied form of subdivision in Fletcher. New construction has been located mainly on large lots, carved from larger farm holdings. Until recently most new homes were located away from roads, mainly in wooded areas – this altered traditional set back patterns, but also served to conceal new development from the casual observer. Recently, however, subdivision along main routes south of Fletcher Center and Binghamville has had noticeable visual impact. This suggests that certain landscape elements are more adversely affected by new development than others, and that the impacts of new development can be minimized through appropriate siting and design.

Efforts to counteract the challenges that face the working landscape can only be achieved through of multiple aspects, whether provided on a state, federal or local level. Currently there exist only a few mechanisms, which may enable property owners to work their land for viable economic returns. Land trusts and the Current Use Program are the two most widely applied programs.

Table 3.2

	Parcels	Forest Acres	Ag Acres	Enrolled Acres	Total Acres	Percent Enrolled	Owner Reduction	% Savings
Bakersfield	66	8,922	2,976	13,931	28,800	48%	$5,974,505	46%
Berkshire	44	1,361	5,338	6,828	26,880	25%	$4,373,624	37%
Enosburgh	69	6,356	5,467	11,950	31,360	38%	$5,057,193	41%
Fairfax	87	3,982	7,095	11,360	25,600	44%	$8,061,900	44%
Fairfield	151	9,489	16,681	26,649	43,520	61%	$8,038,997	33%
Fletcher	95	10,623	3,206	14,133	24,320	58%	$6,823,737	44%
Franklin	45	1,708	5,486	7,239	24,960	29%	$4,264,134	42%
Georgia	64	2,691	5,813	8,715	24,960	35%	$6,411,100	41%
Highgate	59	2,103	7,447	9,911	32,640	30%	$7,407,037	47%
Montgomery	47	12,061	1,440	14,613	36,480	40%	$2,479,941	36%
Richford	46	6,313	6,308	10,475	27,520	38%	$3,400,777	48%
St. Albans Town	58	794	8,100	9,026	23,680	38%	$8,829,714	51%
Sheldon	55	1,839	7,313	9,343	24,320	38%	$7,708,060	49%
Swanton Town	69	1,403	9,389	10,980	30,720	36%	$7,717,185	47%
Franklin Cnty	**955**	**69,645**	**92,059**	**165,153**	**407,680**	**41%**	**$86,547,904**	**43%**

Source: Vermont Department of Taxes, Current Use Program. February 26, 2003.

Land trusts, usually private organizations or occasionally municipal entities develop agreements with property owners to purchase particular rights of ownership, such as air, mineral or development rights. This tool is intended as a more permanent approach to maintaining the working landscape. Currently, there are no known conservation easements on any land owned in Fletcher.

Conversely, the Current Use Program provides a flexible option for property owners. The state, in an effort to encourage conservation and sound management of farm and forest lands, instituted the current use program in which enrolled parcels are taxed according to the use rather than fair market value. Through this program, the state reimburses municipalities for the balance in tax revenue, negating any fiscal municipal impacts for conserving developed natural resource lands.

Table 3.2 denotes countywide program enrollment data. Interestingly, Fletcher is the second highest in enrollment, in Franklin County. Enrolled Fletcher property owners are afforded a 44% savings on their grand list value as a whole on the 58% of total land that is currently enrolled.

Scenic Features.

A design issues committee put together by the Vermont Agency on Natural Resources identified six types of "sensitive" landscapes that deserve special consideration in planning, design and project review, along with associated guidelines (*Vermont's Scenic Landscapes: A Guide for Growth and Protection*, VANR, 1991). These landscape types, as viewed from public vantage points, include the following:

- **Foregrounds of distant views**
- **Steep slopes**
- **Shorelines**
- **Ridgelines and hilltops**
- **Open fields and meadows**
- **Historic settlements and gateways**

Examples of each type are readily apparent in Fletcher, as noted in the accompanying photographs taken around town.

FLETCHER'S MOST PROMINENT SCENIC FEATURES

Specific scenic features identified by Fletcher residents included views of Mount Mansfield from a variety of vantage points; views of other mountains, hilltops and ridge-lines throughout town; views of wooded hill-sides, farmland and open space (including the Tinker and Mayotte Farms); the two ponds; and scenic views from the major roads in town, including the Fairfield and the Fairfax/Cambridge roads (TH 1 and 2). With appropriate siting and design, even the most

sensitive landscape types may be developed and still retain much of their intrinsic character. Landowners and developers should be encouraged to use creative development techniques, including open space and community design that respect traditional development patterns and enhance the rural character of the community. Even small subdivisions of four or five lots (the size of many local hamlets) may incorporate traditional patterns.

Most importantly, the town should develop guidelines and amend its bylaws and ordinances as needed to allow for and promote innovative, yet traditional, patterns of development, siting and design. Given the real fiscal benefits of protecting Fletcher's rural landscape – including its historic features and open spaces - it may also benefit the town to consider other types of conservation and tax incentive programs which would provide information and assistance to interested property owners, while at the same time achieving a number of community goals.

GOALS:

- **To require that all development within the town be pursued with strict regard to the capacity of the land to support it; and**
- **Discourage development in areas which are hazardous to human health and safety, or which are otherwise unsuited for this purpose.**
- **To protect and enhance resource lands in the Town of Fletcher, including productive farm and forest lands and available earth resources, in order to maintain an adequate land base to sustain farming and forestry operations and to secure needed supplies of sand and gravel for the benefit of existing and future generations; and**
- **To ensure and encourage continued, careful stewardship and responsible use of Fletcher's land resource base in a manner which sustains its traditional, productive use.**
- **To protect, conserve and maintain access to Fletcher's significant natural areas and unique or irreplaceable natural features for environmental, ecological, educational and/or recreational purposes.**
- **To protect the Town's rural setting and unique sense of place, including its cultural heritage, scenic resources and traditional working landscape of small hamlets and villages surrounded by open countryside.**

Objectives:

3.1 Site disturbance for the construction of buildings, roads, basins and other improvements will be kept at a minimum. Natural vegetation will be maintained to the extent feasible. Stormwater and erosion control plans may be required as appropriate.

3.2 Development on slopes greater than 15% will be carefully performed in order to minimize site disturbance and the potential for erosion and runoff. Conventional on-site sewage disposal will not be allowed on slopes greater than 15%. Slopes in excess of 25% will be protected from development.

3.3 Development should be sited so as to avoid significant, adverse impacts to and be buffered from important natural or manmade features, including but not limited to shallow or highly permeable soils, steep slopes, ground and surface waters, wetlands and/or floodplains.

3.4 No development will be permitted in designated wellhead and/or source protection areas, which will contaminate an existing or potential source of public water supply.

3.5 The use of Accepted Agricultural Practices (AAPs) or Best Management Practices (BMPs) for land and Accepted Management Practices (AMPs) for silviculture and associated management plans, as defined, administered and enforced by the Vermont Commissioners of Agriculture and Forests, Parks and Recreation, are encouraged locally to ensure sustainable use of the town's resource lands.

3.6 Use valuation of farm and forest land and fiscally sound tax stabilization programs to maintain resource lands in active production will be supported.

3.7 Earth resources (sand, gravel, quarried bedrock) will be encouraged to be identified and reasonably developed in the public interest.

3.8 Extraction and related processing operations will be permitted only when it has been demonstrated that there will be no undue adverse impacts on the town or its residents. Potential conflicts between current land use and proposed extraction operations will be minimized. Strict standards for the operation, maintenance and restoration of extraction sites may be established as appropriate based on the unique conditions of the area affected. The full restoration of extraction sites will be ensured through the submission of local approval of site restoration plans and the provision of adequate

surety to guarantee the completion of the restoration plan at the operator's expense.

3.9 New development will recognize, reflect and be compatible with traditional patterns and forms of development, be designed to complement its context and setting, and to maintain and enhance the town's historic, scenic and rural character.

3.10 Adaptive reuse of historic structures, including barns and other agricultural outbuildings, is encouraged and will be supported as feasible through provisions in local bylaws and available incentive programs.

3.11 Structures, including telecommunication towers, shall not be placed on ridgelines or hilltops. With the exception of telecommunication towers, structures shall not extend above the elevation of the crown line of mature trees. Telecommunication towers may be permitted to extend above the crown line only to the minimum extent required for functional operation.

3.12 Utility lines and associated rights-of-way, are to be developed and/or extended in a manner which minimizes adverse impacts on to the town's scenic and land based resources.

3.13 Town Highways and public rights-of-way are to be maintained in a manner which, to the extent feasible, preserves and enhances their scenic and historic features. The impact of development on scenic roads will be minimized through appropriate siting, landscaping and screening.

3.14 Outdoor lighting, if demonstrated to be necessary for security and/or visual interest, will be designed and installed in relation to the local setting and surrounding uses, and will not project glare upward or onto adjoining properties.

3.15 The introduction of pollutants, permanent encroachments and exotic and/or nuisance species to the public waters of the town will be prevented. The water quality of public waters used for drinking and/or recreational use should be monitored on a regular basis to protect public health

3.16 Encourage and protect naturally vegetated buffers around waterbodies.

3.17 Prevent water resource degradation or pollution by protecting groundwater resources, public water supplies and wellhead protection areas.

3.18 Access to public waters for recreational use should be provided in a manner which avoids environmental impact and enables use of public waters.

Recommendations or Actions:

a) Exclude steep slopes, shallow soils, high water tables, public water supplies, wetlands and floodplain areas from development consideration as appropriate.

b) Amend Fletcher's Zoning Bylaws and/or Subdivision Regulations, when necessary, to:
   i) Protect East Fairfield's designated source protection area;
   ii) Specifically protect agricultural and forestry resource lands for long-term, sustainable use;
   iii) Incorporate basic erosion control and storm water management standards;
   iv) Require management plans, to include a goal of wildlife enhancement, for all publicly owned and/or supported conservation lands within the town;
   v) Incorporate appropriate protections for scenic resources;
   vi) Encourage the adaptive reuse of historic structures, including barns and other agricultural outbuildings;
   vii) Consider minimal historic and/or design guidelines for new development within and adjacent to the historic districts of Fletcher Center and Binghamville;
   viii) Incorporate minimum performance, lighting, landscaping and screening standards.

c) Investigate the feasibility of a public water supply source to serve the Binghamville area.

d) In association with landowners, develop a local land evaluation and site assessment system (LESA) to identify and prioritize important farm and forest resource lands for protection.

e) Continue to support town/state tax stabilization programs and consider town programs, including the use value appraisal of enrolled and sustainably managed farm and forest land.

f) Support landowner preservation of local farm and forest lands through available state and federal programs.

g) Review land trust and similar applications for conformance with the goals and policies of the town plan.

h) Support the formation of a local conservation commission and/or land trust to assist with the identification, inventory, management and protection of important resource lands within the community.

i) Inventory and map potential sand and gravel resources in GIS format to help guide and review future land use and resource extraction decisions in these areas.

j) Develop watershed management plans and monitoring programs for Metcalf and Halfmoon Ponds.

k) Investigate the possibility of public access to Halfmoon Pond and the Lamoille River; participate in the development the Lamoille River as a scenic and recreation corridor.

l) Conduct a mapped inventory of critical wildlife habitat areas in town.

m) Request completion of and participate in the development of a state wildlife management plan for the Gilson Mountain Wildlife Management Area.

n) Continue to support the efforts of FUMHA to preserve and maintain the Fletcher Union Meeting House for public use.

o) Develop a maintenance program for town cemeteries that are currently in a state of disrepair.

p) Support the creation of a town historic society to preserve and promote the town's history.

q) Conduct a scenic road inventory of major town roads (SA1, SA2); consider local designation of scenic roads.

r) Develop, in association with community groups, a local beautification for public lands and rights-of-way, including a tree planting program to maintain shade and canopy trees.

s) Recognition of local, state or federal historic significance of various buildings could be a key tool to retaining the town’s historic identity.

Section 4
HOUSING

Overview

Shelter, a roof over ones head, is a basic need of everyone in the community. For this reason, one of the main goals of planning is to ensure sound, healthy and affordable housing for all residents, now and in the future. In rural communities such as Fletcher, housing contributes significantly to the town's appearance, its ability to attract other forms of growth, and the local property tax base. Insufficient housing stock often results in increased housing demand and cost, which in turn limits the availability of affordable housing and shifts the burden of providing shelter to adjoining towns.

On the other hand, housing that is poorly planned, sited, designed and constructed can overburden public services, destroy natural resources and cultural amenities, and require significant maintenance over time. Planning to meet community housing needs requires a look at the characteristics of local households and housing needs, the condition and availability of housing stock, housing affordability and anticipated need.

Household Characteristics

The way the local population is organized into households affects the demand for housing, community services and employment opportunities. Locally and nationwide the size of households has declined dramatically since the 1970s — in part due to families having fewer children, the breakup of extended family households, an increase in the number of single-parent households, and also the number of elderly who wish to remain in their homes.

According to US Census data, Fletcher's household size decreased from an average of 3.59 persons per occupied housing unit in 1970,

to 3.01 persons in 1980, to 2.85 persons in 1990, to 2.75 persons in 2000. The 2000 average is slightly higher than that for Franklin County as a whole, at 2.67 persons per household. As shown in the accompanying table, a decrease in the average household size generally corresponds with an increase in the number of households. The number of households in Fletcher, and statewide, is increasing more rapidly than the population, which contributes to the demand for additional housing.

The types of households found in Fletcher have remained fairly stable since 1980. There have been relative increases in the number of single parent, non-family, and one-person households — reflecting an ongoing transition away from traditional, married, family households.

The household size has continued to decrease through the year 2000, and the shift toward more nontraditional households, will continue. New household arrangements often require new housing arrangements. A growing number of smaller households will increase the demand for smaller housing units. At present there is no housing locally which is designed specifically to meet the needs of aging or other special needs population. Housing options in the community for those on fixed incomes and/or in need of assistance are limited.

Housing Stock

In 2000, Fletcher had the second smallest housing stock (510 units) of the Franklin County towns. The relatively few number of units, however, belies the dramatic growth in housing that the town has been undergoing since the 1970s. Between 1970 and 1980, Fletcher's housing stock increased by 46.1%; it grew another 41.3% between 1980 and 1990; it grew another 20.2% between 1990 and 2000.

Local zoning permits for new residential development over the past five years have averaged 11 per year; down from the 15 per year average between 1990 and 1995.

As noted in preceding sections, because Fletcher is located within expanding Burlington and St. Albans "commutersheds," the town has become an attractive bedroom community for those who work elsewhere. Also as noted elsewhere, many towns people are concerned that a high rate of housing growth may negatively impacted municipal and educational facilities and services.

Fletcher's housing stock consists mostly of detached, single family dwellings; only 9 structures include 2 or more dwelling units. Housing units in 2000 had an average of 6 rooms. Mobile homes make up 10% of the local housing stock, and provide an affordable alternative to other types of new construction. At present there are no mobile home parks, condominiums, group quarters (e.g., retirement homes), town houses, apartment buildings, or subsidized housing units in town.

4.1 COMPARATIVE GROWTH RATES, 1980 - 2000

	Population		Households		Housing Units	
	1980-1990	1990-2000	1980-1990	1990-2000	1980-1990	1990-2000
Fletcher	50%	25%	59%	30%	41%	25%
Franklin County	15%	14%	24%	17%	19%	11%
Vermont	10%	8.2%	18%	14%	22%	9%

Source: US Census.

4.2 HOUSEHOLD TYPES: 1980 - 2000			
	1980	**1990**	**2000**
Total Households	207	330	428
Family	78.7 %	76.7 %	75.9 %
Married, with children	42.5 %	39.7 %	35.3 %
Married, without children	33.3 %	26.4 %	31.1%
Single householder, with children	1.0 %	7.3 %	4.2 %
Non-family	21.3 %	23.3 %	24.1 %
One person	11.1 %	14.5 %	18.5 %
One person, 65+ years	NA	5.4 %	4.7 %
Source: US Census.			

4.3 CHANGES IN LOCAL HOUSING STOCK, 1980-2000			
	1980	**1990**	**2000**
Total Units	288	407	510
Total Occupied	208	330	428
Owner Occupied	174	287	378
Renter Occupied	34	43	50
Total Vacant	80	77	82
Seasonal	61	62	77
Single, detached	182	338	443
2 Units	4	6	2
3,4 Units	4	3	4
5+ Units	2	0	0
Mobile Home/Trailer	34	55	53
Avg.# Rooms/Unit	5.9	5.8	6.0
Source: US Census.			

Given that the housing stock consists predominantly of owner-occupied single-family homes, rental opportunities for smaller units, are limited. In 2000, rental units comprised only 10% of housing.

Seasonal homes account for the majority of vacant housing in town; at any given time, very few units are available on the market for sale or rent. A vacancy rate of 5% is considered sufficient to take care of short-term housing demands; at the time the last census was taken, only two units were available for rent. According to local realtors, generally fewer than 5 to 10 units are listed for sale in Fletcher at any given time. This lack of available housing locally has likely contributed to the increased amount of new construction experienced in recent years.

Recent amendments to Vermont's enabling legislation require towns to allow as a conditional use the development of small apartments or mother-in-law apartments as accessories to single family dwellings. This reflects the growing interest and need statewide to provide for alternative housing arrangements.

Fletcher does not have a local housing or building code, and no detailed inventory of housing conditions has been made to date. Given that the majority (62.6%) of Fletcher's housing stock has been built since 1970, and is

therefore 30 years old or less, it is assumed that the majority of housing is generally in good repair.

Like most Vermont communities, however, Fletcher also has a significant number of dwellings (144) that were constructed prior to 1940. This is indicative of both the historic value of the housing stock, as previously noted, and also the potential need for repair and rehabilitation. Apart form structural concerns, older homes often have problems with heating and ventilation, wiring, lead paint, asbestos and inadequate water supplies and septic systems.

Census indicators identifying the number of homes lacking complete plumbing facilities (8 or 1.9%), complete kitchen facilities (7 or 1.6%), or housing more than one person per room (2 or 0.5% of occupied units), suggest that at least a small portion of Fletcher's housing stock is currently sub-standard.

Housing Affordability

The affordability of housing is in part determined by household income. Between 1979 and 1989, 1989 and 1999, Fletcher's median household income increased by 112% and 153%; while the median value of housing during the same periods increased by 124% and 34.3% respectively (US Census). This suggests that locally, household incomes have not kept pace with the costs of housing. Affordability, however, is a relative measure. Under state and federal guidelines, housing is considered affordable when households at or below the median income level pay no more than 30% of their gross income on housing costs.

Data from the 2000 Census indicates that the median housing costs for home owners was $1,012 per month, while the median for renters was $582 per month. Typically, homeowners spend less of their income on direct housing costs than do renters; but they spend more on indirect costs, including repair, maintenance and taxes.

In 1989, 9.6% of Fletcher homeowners and 34.4% of renters were spending 30% or more of their household income on mortgages and rent, excluding other housing costs. Also, 9% of Fletcher households reported incomes below the poverty level.

In 2000, 27.2% of Fletcher homeowners and 31.4% of renters were spending 30% or more of their household income on mortgages and rent, excluding other housing costs. Also, 4% of Fletcher families reported incomes below the poverty level. This suggests that, for a segment of Fletcher's population, and for renters in particular, housing is becoming less affordable as the value and costs of housing increase in relation to household income. And as noted, no subsidized units for low income or elderly residents currently exist in Fletcher.

The amount of land attached to a house affects affordability. Over half of Fletcher's residential properties are on six or more acres. Large lots in part reflect prevailing soil and site conditions, local residents' desire for privacy and a general pattern of low density residential development that is characteristic throughout town. Large lots, however, often needlessly fragment land, taking it out of use for other purposes such as farming and forestry, and serve to increase the overall cost of housing.

The property tax burden to homeowners also makes local housing less affordable, especially for those on fixed incomes. Given that Fletcher is a small community, without a viable commercial or industrial tax base, residential properties bear most of the burden of paying for municipal facilities and services. In 2002, year-round residential properties made up 75.2% of the total value of Fletcher's grand list. According to 2002 information from the Vermont Department of Taxes, Fletcher had the third fewest number of R-1 parcels (residences on less than 6 acres), and the second highest average R-1 tax in the county.

Fletcher's residential properties also contribute significantly to the demand for expanded facilities and services — the taxes from a single family dwelling generally do not cover the costs of providing educational services

4.4 2002 AVERAGE RESIDENTIAL TAXES: LESS THAN SIX ACRES				
Town Name	**Property Count**	**Listed Value**	**Total Tax Rate**	**Average Taxes**
Bakersfield	183	18,788,700	1.7818	1,829
Berkshire	178	13,264,500	1.8900	1,408
Enosburgh	499	36,913,200	2.4070	1,781
Fairfax	790	86,424,703	2.3830	2,607
Fairfield	218	25,732,239	1.8200	2,148
Fletcher	**185**	**22,715,300**	**2.0600**	**2,529**
Franklin	224	18,567,100	2.0900	1,732
Georgia	1,009	115,877,400	2.3348	2,681
Highgate	705	65,211,100	1.7900	1,656
Montgomery	182	14,362,900	2.1300	1,681
Richford	543	25,306,300	2.8350	1,321
St. Albans City	1,836	134,273,865	3.3670	2,462
St. Albans Town	1,364	153,556,299	2.0682	2,328
Sheldon	351	35,880,477	1.9168	1,959
Swanton	1,620	152,100,600	1.9791	1,858
Source: http://www.state.vt.us/tax/ (Based on Actual Tax Rate)				

to the children that live there. State aid to education assists, but does not completely offset these costs.

Given Fletcher's current fiscal situation, the lack of centralized facilities and services, and the distance from major employment centers, the town can be expected only to provide for affordable housing to meet local, rather than regional, needs.

Any long-term growth management program considered by the town to remedy the fiscal impacts of recent residential development should also make provisions for the development of new types of housing which may require fewer services — including accessory apartments, additional rental units, and possibly elderly housing — in order to help meet local needs.

Any local strategy to provide affordable housing, particular for special needs populations (elderly, handicapped, low/moderate income, etc.), should include the elements outlined below.

Programs and organizations are available locally, such as the Lake Champlain Housing Development Corporation (LCHDC) and the Burlington Land Trust (BLT), which can assist municipalities and/or landowners in developing, funding or managing affordable housing units.

ELEMENTS OF AN AFFORDABLE HOUSING STRATEGY …

- Survey local housing conditions and costs, including a more detailed analysis of the local housing market and affordable housing needs.

- Emphasize the rehabilitation and preservation of existing housing stock as a local priority.

- Review and amend existing bylaws to allow for the development of affordable housing which:
    - Can support, and be supported by, available services;
    - Will meet identified local housing needs;
    - Is in keeping with the rural character of the community; and
    - Is sited on land physically suited for this type of development.

  (with the intent of eliminating exclusionary practices, providing regulatory incentive, reducing development costs, promoting infill development, and within specified districts and/or under certain, specified conditions allowing for the development of mobile home parks, accessory apartments, and multi-unit dwellings)

- Consider adoption of minimum housing and/or building standards

- Seek local support, including the fostering of public/private partnerships and the ongoing involvement of special needs populations.

- Participate in regional housing programs, including available government and non-profit housing programs, as appropriate to meet community needs.

GOALS:

- **To ensure the availability of safe, attractive and affordable housing for all Fletcher residents; and**

- **To promote the development of new housing which avoids environmentally sensitive areas and resource lands, maintains traditional land use patterns, reinforces existing or creates new, integrated residential neighborhoods, and provides a diversity of housing types.**

Objectives:

4.1 Housing should be safe and sanitary, energy efficient, visually attractive, and satisfy the day-to-day living requirements of its inhabitants.

4.2 Fletcher will plan to accommodate a diversity of housing types, including its fair share of affordable housing, based on identified local need and the town's ability to support it; and strive to maintain existing affordable housing stock where feasible.

4.3 Programs which assist low-income residents to weatherize, retrofit and rehabilitate existing residential units are encouraged.

4.4 The rate of housing development shall not exceed the ability of the town to provide and maintain associated infrastructure and services.

4.5 All new housing sites will be encouraged to minimize impacts to resource and conservation lands, and designated natural, cultural, scenic features and productive agricultural land.

4.6 Clustered forms of residential development, including planned residential units (PRDs) and/or open space subdivision techniques, will be encouraged and may be required as appropriate to maintain the town's agricultural and forest resource base, to protect rural and scenic character, to avoid impacts to natural resources and conservation lands, to allow for traditional "hamlet" forms of residential development, and related infrastructure and services.

4.7 The acceptable density of residential development will be determined based on topography and other physical constraints, access, proximity to village centers, land use priorities within the designated district and the ability to efficiently and economically provide and maintain related infrastructure and services. High density, multifamily residential development should be located within existing and/or expanded village areas and reinforce traditional patterns of residential development.

4.8 Housing developed as "affordable housing," should include long-term affordable units and serve a mix of moderately low to very low-income groups based on identified community needs. Housing developed as "elderly housing," should be designed specifically to accommodate the needs of elderly residents. The development of affordable and/or elderly housing may be considered for density bonuses and/or waivers as appropriate and authorized under local bylaws and ordinances.

4.9 Accessory apartments within existing single family dwellings or accessory structures to such dwelling which are intended for use by family members, elderly and/or disabled persons will be permitted if it is shown that basic supporting infrastructure is of sufficient capacity.

4.10 No distinction will be made between mobile or manufactured homes and other types of single family dwellings for purposes of planning and zoning, except within designated historic and/or design control districts in accordance with state law.

Recommendations or Actions:

- Continue to monitor Fletcher's current bylaws and ordinances to eliminate any provisions and or practices that are intended primarily to (or in effect) exclude affordable housing.

- Regulate the siting and conversion of seasonal homes to ensure adequate access and on-site septic disposal, and to ensure that undue burdens are not placed on the municipality for the provision of associated services and facilities.

- Continue to allow for the development of a small mobile home parks in appropriate locations under subdivision and conditional use review.

- Support and participate as appropriate in regional housing programs, including those administered by the state, the Lake Champlain Housing Development Corporation and other housing non-profits which provide for housing development and rehabilitation for special needs populations.

Section 5
ECONOMIC DEVELOPMENT

Overview

The term "economy" for purposes of municipal planning refers to resources, production, jobs, income and activities in the town and region that contribute to the economic well being of local residents, businesses and industries. Economic planning can assist in providing jobs commensurate with the skills and aims of local residents, a more balanced tax base to meet community needs, the protection of important economic resources, and the provision of services and products to support the local community. Poorly planned economic development can adversely affect the local environment, strain municipal services, cause dislocations of businesses and labor, and adversely impact community character.

Fletcher's local economy remains predominantly rural, agrarian, and resource based. Planning for other forms of economic development in small, relatively isolated communities such as Fletcher, which have limited infrastructure to support business, retail and industrial growth, is a challenge; but such planning can help highlight local needs, strengths and opportunities.

Economic Base

Labor Force

Fletcher's labor force in 2000 (including persons 16 years and over in the work force) numbered 690, of which 670 (97.1%) were employed. This represents a ten-year increase in the employed population of 36.5%, due in large part to the influx of working-aged residents. The town's labor force in 2000 was nearly evenly divided along gender lines (51.9% male, 48.1% female), however women experienced lower rates of unemployment (1.6%, as opposed to 3.9% for men). Fletcher's overall unemployment rate at that time (2.1%) was slightly lower than that for the county (2.6%) or state (2.9%); all improvements from 1990.

Nearly 76% of families with children under six years of age had both parents, or in the case of single parent families, one parent, in the work force. This suggests a real need for day care services for young children, locally or near places of employment. The vast majority of Fletcher's employed residents (83.5% in 2000) worked outside of the community. This, by state standards, qualifies Fletcher as a bedroom community. Fletcher residents are highly dependent on the regional economy for employment opportunities.

Fletcher's labor force is relatively well educated and well trained. As noted in the accompanying tables, the top three occupational categories in 2000, representing 74.7% of the local labor force, where Management and professional; Sales and office; and Production, transportation and material moving occupations. The primary industries in which local residents worked in 2000 included the Educational, health and social services; Manufacturing; and Agriculture, forestry, fisheries and hunting and mining.

Local Employment

According to US Census data, in 2000 15.5% of Fletcher's labor force and 10% of Franklin County's labor force was self-employed.

Fletcher's economy remains predominantly agrarian, which contributes significantly to its rural character. As noted in the accompanying tables, a relatively greater percentage (third highest at 9%) of Fletcher's local employment continues to be in resource-based industries, including farming and, to a lesser extent, commercial forestry. Despite shrinking numbers, farming and related activities remain the mainstay of the local economy. Dairy, horse and other livestock farming, the production of lumber, firewood, maple syrup, honey and wool, and related farm service and equipment sales contribute significantly to local wages, incomes and to the larger cash economy of the town.

5.1 OCCUPATIONAL COMPARISON, 2000 (% Labor Force)

Occupational Category	Fletcher	Franklin Co	Vermont
Management, professional and related occupations	37.8	30.6	36.3
Service occupations	10.9	12.7	14.6
Sales and office occupations	19.9	24.1	24.5
Farming, fishing and forestry occupations	0.9	2.2	1.3
Construction, extraction and maintenance occupations	13.6	10.7	9.3
Production, transportation and material moving	17.0	19.6	14.0

5.2 INDUSTRY COMPARISON, 2000 (% Labor Force)

Industry Category	Fletcher	Franklin Co	Vermont
Agriculture, forestry, fisheries and hunting and mining	9.1	5.9	3.0
Construction	8.2	7.0	6.7
Manufacturing	19.0	23.2	15.1
Wholesale trade	2.7	3.2	3.1
Retail Trade	8.7	11.4	12.0
Transportation and warehousing and utilities	3.7	4.4	3.7
Information	3.6	2.2	2.7
Finance, insurance, real estate and rental and leasing	3.3	3.3	4.7
Professional, scientific, management, administrative and waste management services	6.1	4.9	7.1
Educational, health and social services	20.1	19.4	24.1
Arts, entertainment, recreation, accommodation and food service	8.5	4.8	8.6
Other services (except public administration)	3.3	3.7	4.7
Public administration	3.7	6.7	4.6

Home-based and other small businesses also make up a substantial portion of the local economic base. Nearly 30 Fletcher-based businesses are listed in the local directory, including farm and wood related enterprises, construction, welding, furniture and automotive repair, computer and bookkeeping services, day care, and other professional and personal services. A general store, bed and breakfast and antique store, sawmill, garage, salvage yard and other types of small wholesale or retail businesses also contribute to the local economy.

Economic Outlook

The national and state economies are now recovering from the recession of the early 2000s that affected local residents both directly and indirectly.

Of particular concern for Fletcher's resource-based economy are national and regional trends affecting the farming and forestry industries. The former Northeast Dairy Compact helped support New England milk prices and farm incomes, but other economic forces, largely beyond local control, will continue to affect the long-term economic viability of local farming and timber operations.

As noted elsewhere, Fletcher does not have the population base or infrastructure (municipal water and sewer, three phase power, transportation infrastructure) to support large-scale commercial and industrial development. Increasingly, however, the focus statewide is on the promotion, development and expansion of small businesses (20 employees or less) to generate jobs.

As a small, rural bedroom community, the town will remain tied to the regional economy for high quality, high paying jobs, and for many needed goods and services. Fletcher nevertheless can support its existing economic base and promote increased diversification through:

- The protection of the towns natural resources in support of sustainable, resource-based industries, including commercial farming and forestry, and also related tourism and outdoor recreational opportunities;

- Provisions for the diversification of resource-based industries into other related or complementary forms of production, including value-added enterprises;
- Support for home occupations and home-based businesses;
- Support for compatible cottage or light industries in appropriate locations which require minimal services and facilities; and
- Promotion of locally produced goods and services that will benefit area residents and contribute to the larger cash economy.

These forms of economic development can be supported locally through provisions for their appropriate development in local bylaws (farming activities are currently exempt from local regulation); through tax incentives, particularly in support of the resource-based economy; and through the promotion of local businesses, products and services — for example through business guides, directories, community fairs, bulletin boards, farmer's markets and on-line services.

In decades to come (beyond the scope of this planning period) — if the town's population base has grown sufficiently to support a viable local market area and labor force — the town may consider investing in additional, more costly improvements to local infrastructure (e.g., community water and sewer systems, phone and utility line upgrades, road improvements) that are necessary to attract and support higher density and higher impact forms of development. At present, however this is fiscally unrealistic.

GOALS:

- **To promote and sustain the local agricultural and forestry economies;**
- **To encourage a diverse and stable local economy through promotion of business activities, including home based businesses, of a type and scale which:**
  - **Contribute to the local economy and tax base;**
  - **Are compatible with the town's rural character and quality of life;**
  - **Promote value added production; and**
  - **Provide employment opportunities and needed goods and services to the benefit of all Fletcher residents.**

Objectives:

5.1 Positive incentives and other available means to keep farm and forest lands in sustainable production will be implemented as feasible.

5.2 The development of support businesses, cooperatives and value added manufacturing will be encouraged as a means to stimulate the agricultural and forestry economy.

5.3 Right to farm provisions will be respected; the town will not act upon nuisance complaints having to do with normal farming operations using accepted or best management practices unless a specific health risk is demonstrated.

5.4 The development and expansion of home occupations, home-based businesses and cottage industries will be encouraged and accommodated as appropriate under local bylaws.

5.5 The development of rural recreation, tourist and communication/information-based businesses that will take advantage of and have minimal impact on Fletcher's rural character and environment will be encouraged.

5.6 Any commercial and industrial development proposed for Fletcher must be of a type and scale that is in keeping with the rural character of the town.

5.7 The development of compatible commercial businesses will be encouraged in suitable locations, in particular to provide for locally needed goods and services and to protect the vitality and importance of the village of Binghamville as the community's commercial center. The clustering of related and compatible commercial uses is encouraged; strip commercial development along public highways is to be avoided.

5.8 Compatible light industry, which requires no centralized services or facilities, will be accommodated as appropriate under local zoning bylaws.

Recommendations or Actions:

- Support tax stabilization and other programs that provide incentives to landowners to maintain large tracts of agricultural land in sustainable use.
- Incorporate right to farm policies in the local permitting process.
- Inventory and survey home-based occupations and businesses within the community to identify needs and resources.
- Continue to encourage the development of small business in Binghamville area, with emphasis on businesses that are compatible with the village setting.
- Review local taxing policies to identify opportunities for making the town a more desirable location for small business.

Section 6
TRANSPORTATION

Overview

Transportation planning is vital to any community — even a rural, relatively isolated community such as Fletcher. The local transportation network provides for the movement of people and goods within the town to places beyond its borders. Patterns of growth, development and land use are strongly tied to the network, which is maintained at considerable public expense.

Traditionally, in our automobile oriented culture, transportation planning has been concerned mainly with roads — specifically their design, construction, maintenance, and sufficiency. In recent years, planning in this area also includes consideration of other aspects of the road network:

- including its scenic, recreational, environmental and cultural components;

- its relationship to adjoining land uses; and

- other types of transportation and infrastructure, including recreation paths and ridesharing opportunities.

It is unlikely that in the foreseeable future that Fletcher residents will be any less dependent on the automobile to get among. There is, however, growing interest among residents of rural communities in road and bridge design, maintenance and access issues, programs to reduce commuting expenses, and in the development of transportation-related recreational opportunities located close to home.

Recent federal and state initiatives have decentralized the transportation planning process, giving more responsibility to local government working in close association with regional planning commissions, to determine transportation priorities for available state and federal funding. Good local planning — and the active participation of town officials — is essential to this effort.

Travel Patterns

A majority of Fletcher residents work, shop and obtain needed services outside of the community. US Census data from 2000 indicate that for workers 16 years and older (numbering 659), only 13% worked at home or walked to work. Sample commuter flow data indicate that of 659 total work trips to places of employment, only 17% were within Fletcher's borders, and only 38% were within Franklin county (mostly to St. Albans, Fairfax and Bakersfield). The largest share of work trips (50%) had Chittenden County destinations; another 10% ended in Lamoille County.

Although census data does not track travel patterns related to retail commerce, Burlington, St. Albans, Essex and Morrisville have been identified by citizens as primary shopping destinations.

Public transit is not presently an option for Fletcher commuters. It is notable, however, that despite the large number of commuters traveling from Fletcher each day, especially to points south, few share rides. According to 2000 Census data, while 75% of Fletcher commuters drove to work alone — only 12% carpooled.

Fletcher residents will continue to be highly dependent on their vehicles and the local and regional road network to meet their needs for employment, goods and services. For this reason attention needs to be given to both the local and regional road network in planning for the needs of the community.

Road Network

Existing Conditions

Given local topography the phrase "you can't get there from here" generally sums up the road network in Fletcher, though the recent addition of road signs as part of the E-911 program has made navigating around town somewhat easier. For residents of East Fletcher or the Buck Hollow Road to get to Binghamville or Fletcher Center, they have to go around mountains and through neighboring towns.

East Fletcher residents have easy access to other parts of the county via Route 108, the only state highway in town. This route, however, is located away from more populated areas of town, and is not used much by most Fletcher residents. Regional roads of more importance locally include Routes 104, 104A, and 128, reached through Fairfax, which provide the easiest access to I-89 and points north and south.

As shown in the accompanying table and transportation map (see appendices), there are approximately 44 miles of traveled, public roads in Fletcher which are maintained year-round, and approximately another 8.7 miles of road that are maintained seasonally or not at all. For planning and funding purposes, the road network is described using statutory and functional classifications.

The road network also incorporates intersections, access points (curb cuts) and related infrastructure, including but not limited to bridges and culverts, swales and guardrails.

6.1 FLETCHER ROAD CLASSIFICATIONS					
Roads	**Mileage**	**Class**	**Function**	**Aid**	**Surface**
Route 108	3.05	State Highway	Major Arterial	Federal, Primary	Paved, state
TH 1, 2 & 3	12.5	Class 2	Major Collector	Federal, Secondary	Paved, other
TH 15/4 & TH32	9.12	Class 3	Minor Collector	State	Gravel
TH* & Yr-Round	19.98	Class 3	Local	State	Gravel Soil
TH* & Other	8.7	Class 4	Access	None	Unmaintained Soil
Source: VT Agency of Transportation					

State Routes

As shown, Fletcher's road network includes approximately 3 miles of state highway — Route 108. As part of the state's road network, this road is designed to state specifications, and is eligible for state and federal funding. Route 108 is considered a major artery, intended mainly to move traffic through the region. Average annual daily traffic along Route 108 through Fletcher, is estimated around 1,200 trips per day.

Route 108 through Fletcher is scheduled for resurfacing within the near future. Though this road is the responsibility of the state, local officials have input with regard to needed improvements through the regional transportation planning process. Other needed improvements identified in the 2004 Regional Transportation Plan include general preservation of the character of the road, access management along the corridor, limited lane widening and shoulders on sections having poor visibility or alignment, and "share the road" sings which designate Route 108 as a regional bicycle route.

Town Roads

Fletcher's town road network includes three major collectors, TH 1, TH 2, and TH3, which carry the largest volume of internal traffic and also provide links to state roads in neighboring communities. These Class 2 town roads are included in the regional road network; TH 1 and TH 2 also are included in the state's secondary system.

Town Class 3 roads, TH 15 (and a portion of TH 4), and TH 32 serve as minor collectors, which also provide connections to neighboring communities.

The majority of roads in town are gravel roads, which are maintained by the town for year-round use and serve mainly to provide access to adjacent collector roads. Class 3 roads make up the bulk of the local road network, for which the municipality has primary responsibility. Some state assistance for repair and maintenance is available, based upon an annual road plan; however, the maintenance and upkeep Class 3 roads accounts for the largest share of the town's road budget. Class 3 roads require significant local public investment.

Fletcher also has jurisdiction over a number of Class 4 roads. The primary responsibility for the upkeep of Class 4 roads under Fletcher's current road policy lies with adjoining landowners. Some Class

4 roads are un-traveled, impassable, and/or unmaintained. To date, no legal trails, in which the town retains rights-of-way but has no legal maintenance requirements, have been designated within the community.

Needed Improvements

Less data are available for the local road network, but through the Road Surface Management System (RSMS), road and culvert inventories were completed in 2003.

The intersection in Binghamville is awkward in part due to its geometry which results in a false sense of right-of-way going south. The geometry and signage are planned to be improved in the near future.

- The need for updated road policies and ordinances to include road reclassification policies, particularly with regard to Class 4 roads; and access management policies, especially for collector roads within the municipality.

[ADDRESS TOPIC ELSEWHERE IN TEXT]

A number of specific road improvements also were identified, as noted in the accompanying table.

In light of recent court decisions regarding municipal responsibilities for maintaining class 4 roads, the town also should consider upgrading a very limited number of Class 4 roads now serving year-round residences to Class 3 roads. The initial costs of upgrading these roads to Class 3 standards may be borne by adjoining landowners; however, the long-term costs for maintenance are the responsibility of the town.

These considerations pertain as well to the municipal acceptance of development roads. Specific policies regarding road acceptance should be developed; any road acceptance or reclassification must also be done in accordance with the legal process for the laying out of public highways.

A more comprehensive list of needed improvements should be identified through an update of the 2003 road inventory. These may then be prioritized in an overall road management plan, and associated costs included in a capital budget and program. In this way scarce resources may be used most effectively. Assistance with the development of a Road Surface Management System (RSMS) that is adapted for local needs is available through the Vermont Local Roads Program and the Northwest Regional Planning Commission.

Other Considerations

Road improvements, and the laying out and development of new public and private roads, should be done so that they are in keeping with Fletcher's rural and scenic character. Fletcher's back roads contribute much to its rural character and scenic beauty, as evidenced by the increasing number of motorists and bicyclists touring through town.

To date there have been no scenic inventories or designations of local roads in town. Given the importance to the community of maintaining Fletcher's rural character, a scenic road survey may be in order — particularly along major routes (TH 1, TH 2). Additional standards relating to the design and layout of new roads, and the repair and maintenance of existing roads for better incorporation in the landscape also should be developed. It is recommended that all new roads and driveways:

- Follow existing topography and linear features (e.g., tree lines, rights-of-way, stone walls) wherever feasible;
- Avoid cutting through open areas or scenic vistas;

- Be designed to minimize access points (e.g., through shared driveways and/or development roads) particularly on collector roads; and
- Not be overly designed for their intended use and volume of traffic.

The repair and maintenance of existing roads and related infrastructure should also accommodate natural and cultural features within and /or adjacent to the right-of-way (e.g., historic structures, tree lines and stonewalls) and should incorporate natural materials where feasible.

Access and Parking

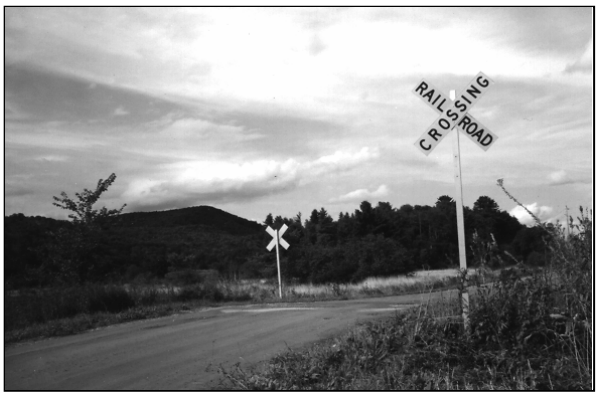
Access onto Fletcher roads from adjoining properties is typically a single driveway and curb cut per parcel for residential lots, and poorly defined access areas/curb cuts for public and commercial uses. Private, minimally maintained dirt roads provide access to camps along Metcalf Pond, and may be contributing to runoff and sedimentation.

A few subdivision roads have been developed in town in accordance with common standards (e.g., 50 foot rights-of-way), which are probably excessive for the volume of traffic generated from these developments. The over-design of access roads in rural areas is common, and often required in anticipation of eventual acceptance by the town, but the over-design of roads may also adversely affect both rural and village character, increase speeding, and result in unnecessary expense.

The town should review its access policies in local bylaws and ordinances to ensure that the number of curb cuts, particularly along major collector roads (TH 1, TH 2, and TH 3) are minimized, and clearly defined. Access roads, driveways, and points should be shared by neighboring parcels; off-road connections linking adjoining parcels for pedestrian and vehicular traffic should be required where feasible (e.g., through designated easements and rights-of-way), in order to maintain the functional integrity of the local road network.

Farm and logging roads, maintained by private landowners, provide access to interior, landlocked holdings. Temporary access across adjoining private land for logging operations, which may be granted by the select board under state law, has been an issue in upland areas of Fletcher. Because of the environmentally sensitive and often highly visible nature of these areas, landowners should be encouraged to use or share existing access routes and rights-of-way wherever feasible. Provisions also should be made for the reclamation of temporary roads into these areas once operations are completed.

Public parking areas in town, like their associated curb cuts, are generally poorly defined and maintained. It was noted in recent surveys that additional parking space and improvements are needed at the town office; improvements also are needed at the Grange and the parking area at Metcalf Pond. Given the intent to eventually relocate and build a new town office, adequate pedestrian and vehicular access and parking space should be incorporated in the site design. It is strongly recommended that all parking areas intended to serve the public be shared where feasible, be located to the rear of or adjacent to buildings, and be adequately screened and buffered from adjoining land uses.



Rail, Air and Bus Service

The Lamoille Valley Railroad Line (LVRL) no longer runs through East Fletcher, though it was rail banked by the state in 2004. The federal rail banking program reserves the right-of-way for future rail use, if it again becomes feasible, while providing for interim uses such as recreation paths or roads. If this takes place Fletcher will be linked to a network of regional, state and international trails currently under development.

Fletcher residents now have access to passenger and freight rail service through the New England Central Railroad, located in St. Albans. At present the "Vermonter," the state subsidized Amtrak line from St. Albans, to Washington D.C., runs once a day, leaving St. Albans in the morning. There are efforts underway to re-establish passenger rail service to Montreal, and to examine the feasibility of a commuter rail service from St. Albans, to Burlington and Montpelier. It is not clear, however, if and when these services may be available to local residents.

Most air services required by Fletcher residents are available at the Burlington International Airport. This facility is conveniently reached via I-89. Fletcher residents also may schedule international flights through Mirabel and Dorval airports outside of Montreal. Nonscheduled passenger and freight service is also available at the Franklin County Airport in Highgate and at the Morrisville-Stowe State Airport, in Morrisville.

Limited long distance commercial bus service is available through Vermont Transit in St. Albans, and the greater Burlington area.

Public Transportation

At this time there is no bus or van service that serves the needs of the general public. Past regional transit studies have indicated that there is not enough demand or ridership within Franklin county to support a fixed-route system; however, the Northwest Vermont Public Transit Network, based out of St. Albans, prepared the short-range transit plan, in 2003, which includes an updated estimate of the feasibility of such a system. Currently, people with special needs may qualify for transportation assistance through social service providers and volunteer organizations. The town also contracts school bus services for the transport of local students.

Ridesharing

Ridesharing, including car and vanpooling, helps to significantly reduce the expense and negative aspects automobile oriented transportation for both the rider and society as a whole. Given the number of Fletcher residents that commute to work, local participation in existing ride sharing programs should be encouraged through local advertising and the designation or development of a small, centrally located park-and-ride lot. Often a church or store is willing to donate some of its parking space for use by commuters. State maintained park-and-ride lots are available for use by Fletcher residents in Cambridge, Georgia and St. Albans.

Recreation and Pedestrian Paths

At present there are no municipally developed and maintained recreation, bike or pedestrian paths in town. As noted, a number of local roads are used for recreational use, including Class 4 roads, which provide access to Fletcher's countryside for hunting, mountain biking, hiking and cross-country skiing. These, however, are not linked together in any formal trail network. Paved roads in town increasingly are being used by bicyclists, including organized touring groups. A network of snowmobile trails in town is privately maintained by local clubs and the Vermont Association of Snowmobile Travelers (VAST) through agreements with local landowners. This may serve as a useful model for other forms of recreation path development in the community.

Given the costs of maintaining the local road network, sidewalks and trail development have received little consideration. Paved roads, popular with tour groups, also could be designated as bike routes under share-the-road policies. This may require minor improvements, such as the widening of shoulders along segments having poor visibility, in order to ensure road safety. Funds for this type of activity are limited and competitive; however, as noted, the Lamoille Valley rail line, if converted to a regional recreation trail, will provide Fletcher residents with local access to a much larger trail network.

There are no sidewalks in Fletcher at present, however given the increasing amount of development in and around Binghamville, sidewalks may be warranted in this area at sometime in the future. A study of existing and projected need could aid local officials in identifying feasibility and determining approximate costs and available sources of funding.

GOALS:

- **To ensure reasonable, functional and orderly development of local transportation systems for multi-modal use as feasible and appropriate;**
- **To maintain and improve the town highway system for safe use in an efficient and cost-effective manner, while preserving as feasible associated cultural and scenic character of the road system; and**
- **To improve and expand alternative, non-automobile transportation and transit modes as feasible, including the promotion of ridesharing programs.**

Objectives:

6.1 The primary objective of the town highway program will be the provision of a safe, efficient, and convenient road network for use by local residents and the traveling public.

6.2 The function and safety of the town highway system will be maintained through appropriate access management techniques, including limitations on the number of access or curb cuts permitted. Shared access is encouraged and may be required as appropriate.

6.3 No attempt will be made by the town to prevent reasonable requests for simple access to property; however, access for the purpose of land development may be controlled as per above.

6.4 New road construction and major improvements to existing roads is to balance capacity and safety needs with the need to minimize cultural, scenic, resource and environmental impacts and to ensure that rural roads and infrastructure are not overbuilt to urban or otherwise inappropriate standards.

6.5 Carpooling or vanpooling by local commuters to reduce transportation costs and impacts is encouraged.

6.6 Land use and development activities should not adversely impact traffic safety and the condition of town roads and rights-of-way.

6.7 Parking areas for commercial and public buildings where feasible will be sited adjacent or to the rear of structures, and be buffered and screened as appropriate. Shared off-street parking is to be encouraged and may be required as appropriate.

6.8 State proposed and initiated transportation improvements in Fletcher should be considered in accordance with the goals, policies and objectives of the town plan.

6.9 The town will not accept any private rights-of-way into the town highway system unless it is demonstrated that there is clear public benefit, and the costs to upgrade the road to standard are not borne by the town.

6.10 Access roads, to the extent feasible, shall share rights-of-way with other utilities and infrastructure, follow contour lines, and in scenic areas (e.g., open lands, slopes, ridgelines, hilltops), be sited, constructed, and screened so as to minimize their visibility from public vantage points.

6.11 Year-round dwellings are to be sited on land which has access and/or frontage on Class 3 highways or better, unless otherwise permitted by the development review board.

6.12 The Town of Fletcher will provide no services on Class 4 town roads beyond those required by statute.

6.13 Class 4 roads may be maintained by landowners, with select board approval, only to the degree necessary to provide simple access to property. If future conditions warrant, Class 4 roads may be considered for upgrade to Class 3 roads in accordance with state law. Costs associated with upgrade are to be borne by adjoining landowners as appropriate.

6.14 No permanent access roads shall be permitted in the forest district except as needed to access essential public services, including utility rights-of-way.

6.15 All private roads and rights-of-way shall be constructed to standards set forth in the road policy. All expenses, legal and otherwise, shall be borne by the applicant in the process of laying out and constructing proposed development roads and related infrastructure.

6.16 The shared use of town roads for bicyclists will be encouraged to the extent that it does not create a safety hazard.

6.17 The town will support the development of the LVR right-of-way for recreational use in the event that it is abandoned for rail use and rail banked by the state.

Recommendations or Actions:

- Schedule necessary road improvements as identified in the plan.
- Maintain and apply a basic road surface management system (RSMS) for use in scheduling and budgeting needed road repairs, and major improvements.
- Develop minimal access management and circulation guidelines for vehicular and pedestrian traffic, to be incorporated in local ordinances and bylaws for use in access, curb-cut, site plan and subdivision review.
- Continue to require that all new roads, driveways and intersections meet minimum safety and design standards through access, curb-cut, site plan and/or subdivision review; update existing standards as appropriate.
- Update policies and procedures in accordance with state law for the public maintenance and/or acceptance of private roads, to be applied only in cases where there is substantial public benefit.
- Actively review and participate in any state efforts to improve Route 108, including related rights-of-way and infrastructure, within the town of Fletcher.
- Secure a reliable, cost effective long-term source of sand and gravel for use on town roads.
- Make needed improvements to municipal parking areas at the town office and Metcalf Pond.
- Incorporate provisions to accommodate pedestrian and bike traffic as appropriate in subdivisions and site plan review.
- Continue to study the feasibility of a sidewalk in the Binghamville area.
- Improve pedestrian and bicycle access to the elementary school.

- Conduct a scenic inventory of major town roads and consider for scenic road designation as appropriate.
- Consider the designation of on-road bike routes in town (e.g., SA 1, SA 2), including the adoption of “share the road” policies and signing.
- Encourage VAOT to support the development of a widened shoulder for bicycles along Route 108/
- Support the rail banking and conversion of the LVR right-of-way to a rail trail.
- Encourage municipal representation to the Regional Transportation Advisory committee (RTAC) to coordinate transportation planning, road maintenance and improvements with adjoining towns, and to ensure that the interests of the town are adequately addressed by the region and state.

SECTION 7
ENERGY

Overview

Energy in the form of electricity (from many sources), fossil fuels, and other renewable sources, is essential to most every aspect of daily life. Historically, human and animal power, wood and waterpower served Fletcher's earliest homes, farms and industries. With the introduction of electricity in the 1920s generated by the newly constructed dam at Fairfax Falls, and the extension of utility lines throughout town into the 1940s, Fletcher was hooked into an expanding power grid. And, with the advent of the automobile and other petroleum-based machinery, fossil fuels became ever more important.

Over the years the use of outside sources of energy — primarily electricity and fossil fuels — increased to the point where today dependence on these energy sources is taken for granted. In the future, however, the costs and the vulnerability of these sources are expected to increase significantly, particularly if associated environmental costs are factored into the equation. Energy costs are already a major expense in government, business and personal budgets. Successfully reducing costs and dependencies on nonrenewable resources is, in the long term, to everyone's benefit.

Following the 1970s oil crisis many Vermont communities appointed local energy coordinators and energy committees to develop municipal energy plans. Fletcher still has a [municipal energy coordinator??], but, as in most towns, energy planning has not been a priority for many years.

The Vermont Legislature in 1992 established a general energy policy to ensure, to the extent practicable, that the state can continue to meet its energy needs in a manner that:

- Is adequate, reliable, secure and sustainable;
- Assures affordability and encourages economic vitality;
- Assures the efficient use of energy resources and cost-effective demand side management; and
- Is environmentally sound.

In the VT Comprehensive Energy Plan, this general policy is reflected in proposed efforts to develop locally based renewable resources, increase efficiencies in energy use, and plan for alternate or multiple energy sources, including a long-term shift from high impact, nonrenewable to low impact, sustainable sources. Also emphasized is the importance of energy affordability — in support of economic growth, and to ensure the availability of energy supplies for those most at risk.

The importance and cost of energy to the local community — to town government, businesses, and residents — and associated impacts on transportation and community structure, suggests that renewed planning for energy efficiency, sustainability, and affordability may be of benefit at the local level as well.

Energy Supply

Electricity

Fletcher is served by two of Vermont's larger electric utility companies — Central Vermont Public Service (CVPS) which serves mainly the southern half of town, including Binghamville and Fletcher Center; and the Vermont Electric Cooperative (VEC) based out of Johnson, Which supplies electricity to the northern end of town, including Buck Hollow Road, East Fletcher and seasonal homes around Metcalf Pond.

The generating sources of electricity for these utilities vary since they are hooked into the national power grid (through the New England Power Pool or NEPOOL). Nuclear, hydro, and oil/gas plants generate most of the state's electricity. Wood-fired plants are supplying a small but increasing amount of in-state generating capacity.

At present, due to increased efficiencies, conservation efforts, and a sluggish economy, there is excess capacity — which because of long term investments and agreements is not necessarily reflected in current or anticipated rates. As noted, however, there is concern regarding Vermont utilities' heavy reliance on nonrenewable and/or outside energy sources and associated costs.

Electric power is transmitted statewide through the Vermont Electric Power company (VELCO), a private corporation owned by Vermont retail utilities, which maintains interconnections with NEPOOL, Hydro Quebec, and the New York Power Authority. CVPS and VEC own and maintain sub-transmission (34K) lines, connected to VELCO through substations and distribution lines to serve local customers.

There are no bulk transmission lines or substations located in Fletcher. Power in town is transmitted mainly through single-phase circuits. Three-phase power, which generally has been the most efficient way to supply large amounts of electric power for industrial uses, is available in Fletcher only along a small stretch of the Buck Hollow Road. The existing distribution system should serve Fletcher's needs into the near future. The expansion of transmission and distribution lines into un-served areas can be costly and disruptive. The health effects of electromagnetic fields (EMFs) generated by power lines, though ambiguous, are also of growing concern, and should be considered in the siting of any new lines, particularly transmission lines.

Perhaps of more significance to local users are issues of power reliability and quality. Reliability in rural areas is difficult, given the length of distribution lines, difficult terrain, and exposure to harsh weather conditions. Historically power outages have been common; however improved line and corridor maintenance in recent years has substantially increased the reliability of local service.

The quality of power (e.g., with regard to voltage drops, spikes, leakage, etc.) remains a concern, particularly given the effects on computers and other microprocessor-based devices, which are especially sensitive to voltage fluctuations. Voltage fluctuations and leaks also have been found to affect dairy farming operations — including farm equipment and animals — which may significantly reduce production.

Electric utilities, because they are now permitted to maintain geographic monopolies, are regulated by the Public Service Board. As such, they have imposed obligations to serve the public; meet certain standards with regard to the terms, conditions and quality of service; and most recently, to promote energy efficiency and conservation.

Recent federal regulations (the 1992 Energy Policy Act) allow for the development of a competitive market place for wholesale electricity. As a consequence, electric utilities are restructured and deregulated. Deregulation allows users to shop around for electricity from generators, including small, independent producers. This is expected to result in increased competition and lower rates; while in many areas only one distributor provides services.

Fossil Fuels

Fossil fuels used locally — mainly for transportation, equipment operation and heating — include gasoline and diesel fuel, heating oil, kerosene, and bottled or tank propane gas. These types of fuels are available through regional suppliers, including six area fuel distributors (as listed in the local phone directory) and also at the local general store. Pipelined natural gas, available in the western part of Franklin County, does not reach Fletcher.

Fuel suppliers are not regulated as are electric utilities with regard to distribution, costs or public benefit, but may be subject to other environmental or industry standards. Vermont is at the end of the line for the delivery of petroleum products, which in the past has resulted in slightly higher costs. There is longer-term concerns regarding a growing reliance on fossil fuels as primary energy sources, particularly given the environmental impacts and costs.

Renewable Sources

Renewable energy resources available locally, some on a limited basis, include biomass (e.g., wood), solar (passive and active), microhydro and wind power.

Given Fletcher's forest resource base, wood is the most plentiful and available of these locally. There are at least two commercial suppliers of firewood in town, and many landowners manage woodlots for personal use. The increased use of chunk wood for residential heating, and chip wood for the heating of public buildings and power generation, has been promoted by the state as a primary means of reducing dependency on fossil fuels, and keeping energy dollars within the local economy. New wood stoves and furnaces are now subject to EPA air quality standards, and as a result burn more cleanly and efficiently. They are also easier to operate and maintain. In order to promote increased reliance on these technologies, however, forest resources have to be carefully managed for sustainable, long-term production.

The availability and use of solar energy depends largely on the siting, orientation and construction of buildings. The use of passive solar techniques in design and construction can significantly reduce space and water heating costs, even in Vermont's cloudy and cold northern climate. Active solar technologies, including the use of photovoltaics to generate electricity, have been less widely accepted due to their relatively high costs. A number of Fletcher residents who now live off grid have found it more cost-effective, however, to install collection and storage systems (e.g., panels and batteries) than to extend lines needed to hook into the grid. It is anticipated that as technologies become more refined, available and accepted, and other forms of energy become more costly, solar power will become increasingly cost competitive.

Wood and solar resources offer the most potential for the development of local, sustainable energy supplies. Microhydro is available in certain locations in Fletcher (e.g., at former dam or mill sites), but if this is being used for power production, it is on a very limited, individual basis. This is also true of wind power.

Energy Demand

The total demand for energy is expected to increase statewide based on continued population growth and related growth in residential, commercial and industrial sectors of the economy.

Given Fletcher's limited amount of commercial development, it is reasonable to assume that the majority of energy demand in town is for residential purposes, including related transportation demands. Local "industrial" demand is generated mainly from farming operations. There is also a municipal demand for energy, which though relatively small, is important for planning purposes.

Transportation Use

There are no local supporting data per se, but fossil fuels for transportation are most in demand. As noted elsewhere, given Fletcher's rural nature, the fact that 73% of its residents work out of town, and most also shop in other local and regional centers, Fletcher residents rely heavily on motor vehicles to get around. According to 2000 Census data, 75% of Fletcher residents owned two or more cars (compared with 64% of Franklin County residents, and 60% of state residents). Of those employed, 87% drove cars to work, and 86% of these drove alone. Only 12% of Fletcher residents carpooled to work. The average drive time for commuters was 34.5 minutes — while the state average is only 21.6.

Energy demand for transportation is influenced by road type and location, proximity to services and facilities, the structuring of routes for school buses, and the siting of new residential development. Statewide there are proposals to shift to

other forms of transportation to reduce costs, including increased public transportation, the use of electric vehicles and bicycles, and alternative fuels. These have limited near-term application in Fletcher given its low population density, number of commuters, and the length of the average commute. Increased ridesharing options, and the encouragement of local businesses — including home-based business and telecommuting opportunities — and the regulation of development patterns through zoning and subdivision regulations may have greater potential for reducing local transportation needs, associated energy demands and costs.

Residential Uses

Keeping homes warm through long, cold Vermont winters creates a major demand for energy, resulting in significant heating costs to local residents. According to 2000 sample Census data, Fletcher residents are much more reliant on wood as their primary heating source (26% of occupied houses) than are county (9%) or state (9%) residents. This may be due in part to a ready, affordable local supply of firewood. At present, wood is the cheapest energy source given cost per heating unit (BTU). Another 52% of homes use fuel oil or kerosene for heating. More expensive, but more efficient and cleaner burning propane is the primary heating source in 21% of Fletcher homes. No homes use electric space heating, which is one of the most expensive and least efficient sources of heat.

Also as noted, passive and active solar technologies, which greatly reduce heating costs, have been incorporated into a number of Fletcher homes, however no specific data are available. Also, no data are available to document other types of local residential energy demand — for water heating (a major energy use), lighting, cooking, drying, air conditioning and appliances.

Commercial/Industrial Uses

Locally agriculture accounts for the greatest energy demand in this sector. Electric costs, for lighting and processing equipment, are significant. Modern agriculture is also heavily reliant on fossil fuels for the cultivation of crops and the transport products, and indirectly for the manufacture of many of the fertilizers and chemicals used on the farm.

At the state level proposals have been made to promote more efficient energy use in farm buildings and operations — including less consumptive fertilizing and crop management techniques, and the use of digesters to capture methane as a renewable energy source. The comparative costs of new methods and technologies will in large part determine whether they have any practical application on the farm.

Municipal Use

Energy expenditures comprise an increasing portion of town and school budgets. In 2003 energy costs made up 1% of the town's administrative budget (for electricity and fuel oil), 62.3% of the garage/equipment budget (for diesel fuel, fuel oil and electricity), and 1.4% of the school's operation and maintenance budget (for electricity and fuel oil) (2003 Town Report). Transportation, in the form of road maintenance and repair, accounts for the greatest share of the town's energy costs; while school transportation costs, included in a busing contract, are not itemized separately.

Land Use

The way buildings are sited and constructed can greatly affect the amount of energy needed to access and operate them. The dispersed rural settlement pattern characteristic in Fletcher contributes to the need for well-maintained roads and the local dependence on cars. This will not change in

the near future, but promoting the concentration of development in areas of town that can support it, for example in Binghamville, may help optimize the efficient delivery of services and provide a basis for greater commercial and mixed use development to support the local population.

The planning commission and development review board have opportunities through subdivision and site plan review to encourage energy efficient siting and design as appropriate to:

- Concentrate development through clustering (PRDs, PUDs), particularly within a locally designated growth center;
- Minimize transmission and distribution lines, roads and access points, and
- Encourage greater use of renewable energy resources through siting, landscaping, and screening policies.

Currently programs exist within the state that aid with education, planning, construction and overall efficiency rating of existing homes or those underconstruction. Efficiency Vermont is the largest and most widely known organization; while Champlain Valley Office of Economic Opportunity provides a weatherization program for qualifying individuals and families. Although not required tactics, these programs and practices are encouraged and may provide incentives to consumers.

Energy Affordability

The affordability of energy is a real concern for many Vermonters. Given the basic need for heat, light, and transportation, it is essential to ensure that those most a risk — including the elderly on fixed incomes, the disabled, and low-income residents — have access to energy supplies. Several assistance programs are available through participating utilities (e.g., WARMTH, SHARE), the state, and private nonprofit programs, however, depend all or in part on federal funds which have been significantly reduced in the past year.

Of particular concern statewide are a federally funded weatherization assistance program, administered through the Vermont Office of Economic Opportunity, which offers home energy audits, energy conservation and efficiency products and installation and retrofit services without charge to qualified Vermonters; and also the Low Income Home Energy Assistance Program (LIHEAP), which provides emergency heating assistance to low income residents. Given the number and type of population served by these programs, there is no specific information available to determine the benefit of these programs to Fletcher residents.

The affordability of energy is also a consideration for continued economic sustainability and growth — in Fletcher particularly for the farming community.

Information regarding other programs to reduce energy costs through increased efficiencies, including programs targeted to homeowners, schools, and industry, is available through the Vermont Department of Public Service. Many of these programs are not widely advertised or known to area residents — the town could assist in publicizing available programs through modest educational and outreach efforts.

Goals:

- **To reduce the use of and dependence on expensive, outside, nonrenewable energy sources which entail significant societal and environmental costs;**
- **To promote energy efficiency, availability and affordability through conservation, cost effective investment, and the sustainable management of locally available renewable energy resources.**
- **To reduce energy costs as a proportion of municipal expenditures.**
- **To promote development in a manner, which increases energy efficiency and access to renewable energy resources, and reduces energy costs.**

Objectives:

7.1 Energy conservation and the use of renewable energy resources will be considered in town buildings and operations as appropriate.

7.2 Energy efficiency will be included as a factor in municipal construction, purchases and use. Life cycle costing will be used by the town in evaluating capital expenditures as appropriate.

7.3 The municipality will make use of available demand side management programs as appropriate to increase energy efficiency and reduce costs.

7.4 Educational opportunities that further energy awareness for school students, local officials, and townspeople are encouraged.

7.5 The sustainable use of local renewable energy resources will be encouraged to replace outside, nonrenewable energy resources.

7.6 Ridesharing, and/or the development of bike and pedestrian paths and park and ride lots to reduce transportation energy costs will be encouraged and may be required as appropriate.

7.7 Existing wood energy resources should be developed as appropriate through the protection and sustainable management of the forest resource base.

7.8 Home occupations and home-based businesses, which reduce transportation energy consumption and expense, will be encouraged as appropriate under local bylaws.

7.9 Programs to assist low-income residents with meeting or reducing energy costs, including weatherization, rehabilitation and affordable supply programs will be supported as appropriate.

Recommendations or Actions:

- Conduct regular energy audits of all municipal buildings.
- Review and update as needed existing policies, bylaws and ordinances to protect renewable energy resources and access for their sustainable use.
- Manage town forestlands for sawlogs and fuel-wood, particularly to provide for town residents most in need of affordable energy.

- Continue to appoint town energy coordinator to serve as a contact for community outreach and information. Support energy awareness curriculums in the school.
- Encourage energy rating for new and existing construction.
- Support and participate as appropriate in the development of a regional public transit system through the Northwest Vermont Public Transit Network.

Section 8
FACILITIES AND SERVICES

Overview

Facilities and services are provided by a municipality for the benefit of its residents, but at considerable cost to local taxpayers. Those facilities and services supported by the community as a shared responsibility — including local government, education, health, recreation, infrastructure, and public safety — are easily taken for granted. At the same time, the type and quality of services available depend in large part on the community's desire and ability to support them financially and through volunteer efforts

In small, rural communities such as Fletcher — which are dependent largely on the local property tax to finance the public realm — the ability of the community to support a broad range of municipal services is limited. Because Fletcher is a growing bedroom community with a large commuter population, the ability to provide services through volunteer efforts is also increasingly limited.

For these reasons, the focus in town has been to provide the basics: accessible local government, which relies largely on elected and appointed officials who volunteer their time; a quality education for local students, which also involves a significant amount of volunteer labor; maintaining the town's road network; and providing for public health and safety to the extent the town can afford. Other "amenities" provided by larger municipalities may not be available, needed or even desired; the facilities and services that are available in Fletcher reflect the rural character of the town, the community's fiscal abilities, and the dedicated efforts of its residents. These are described as follows.

Public Buildings

The town of Fletcher owns and maintains three public buildings: the Fletcher Elementary School, the town office, and the town garage, as noted in the accompanying table and map (appendices). These three facilities are funded primarily through property tax revenues. The Fletcher Union Meeting House (the Grange) and the Binghamville Church are the two other facilities in town, which, through privately owned, support public functions.

Fletcher Elementary School

The elementary school, located on the School Road just south of Binghamville proper, was originally constructed in 1962. In 1988 an addition was added to accommodate a growing elementary student population including the addition of a kindergarten class, and to meet state educational requirements. A modular building was added as a temporary classroom to accommodate growing enrollment. Because of the school's small population, the standard state education projection formula produces unrealistic results. This makes it inadequate for Fletcher Elementary projections.

There are presently 138 students enrolled at Fletcher Elementary. The school now houses grades K – 6, and has an overall capacity of approximately 200 students, though varying class sizes may affect classroom capacities (12-20 students) for particular grades. The school is near capacity. The school is sited on 9 acres; 10 or more acres will be required should the school need to expand. Capital improvements are done on an annual basis as needed. No major upgrades are needed at this time. A capital account is being considered for Fletcher Elementary. Minimizing facility cost is an ongoing concern.

The elementary school includes 6 regular classrooms and one special education classroom, a library, which is also open for small meetings, an AV room and conference room, office space for administrative and health personnel, and storage and maintenance rooms. The school building also includes a multipurpose

gymnasium/cafeteria which is used by the community for town meetings and social events, and is available, for a fee, in the evenings for nonpublic events to help cover utility costs. The school grounds include a playground, and recreational fields.

Fletcher Town Office

The town office is currently located on privately-owned land on the Fletcher-Cambridge Road in Fletcher Center. The town office, which includes office space, the town vault for record storage, and a meeting room, is used for town administration (clerk, listers, zoning, etc.), town ballot votes, and for meetings, and public hearings held by town boards, including but not limited to the select boards, planning commission, and development review board.

It appears as though the Town Office will outgrow its current location. Storage space is reaching its limit, meeting space is sometimes cramped, and the parking area does not have the capacity to handle parking on meeting and polling days. The Zoning Administrator, who holds regular office hours, works without a desk or designated work area. Structurally, the current facility will need improvements such as a new roof, and a workable water system. Due to these issues, the Planning Commission has recently been asked to examine different options for the Town Office. This examination will begin as this plan is going to print. An emphasis on creating a center of town, as well as efficiently meeting the Office's needs, will be a focus while exploring our options. Public input is strongly requested.

Town Garage

The Fletcher Town Main Garage is located at the end of Oustinoff Road approximately one-quarter mile from the Fletcher Elementary School on 6 acres, more or less. The site consists of a 6,000 square foot structure, one-half finished with concrete floor, lights, and insulation and one half unfinished with security lights only and used as cold storage. This building has septic and water. Another building, used for the storage of salt is 20 feet x 30 feet, and closed on three sides. The sand and salt mixture is stored outdoors.

The Town continues to use the old town garage, located in Fletcher Center on the Fletcher-Cambridge Road, for storage of town equipment as needed and as a site for recycling activities. This building is located on 0.25 acres and the parking lot in front of the building is owned by the Fletcher Union Meeting House located across the road. In 2005 a committee has been formed to research alternatives for this town facility.

At present, there is no garage fund. Instead yearly payments with a 5 $^{1}/_{2}$ years balloon will be made until the loan is paid. At that time the town will decide whether to reinstate the garage fund.

Fletcher Union Meeting House

The Fletcher Union Meeting House, also known as the Grange or Community House, is located in Fletcher Center and as discussed previously, is one of the town's most notable and readily recognized historic buildings. Originally constructed as a church, the Meeting House has been used for public gatherings, town meetings, and community events throughout the years. Long maintained by the Fletcher Grange, the building is now owned and managed by the Fletcher Union Meeting House Association, Inc. (FUMHA), a private nonprofit incorporated in 1990 to promote the building's restoration, maintenance and continued use. The Grange continues to meet here.

Fletcher residents recognize the historic value of the Meeting House, and its importance to the community. Each year since 1990 the town has contributed $1,500 from the general fund in support of restoration and maintenance. Through fundraising, grants, and volunteer efforts in recent years, several major restoration projects have been completed. These include a new roof, repairs to the foundation and chimneys, siding, painting, and insulation. In the next five years, FUMHA plans to continue plumbing and kitchen upgrades, as well as various cosmetic improvements.

Binghamville Methodist Church

The Binghamville Church, centrally located in Binghamville on 2 acres of land, also has considerable historic significance and value to the community at large. Many church sponsored events, including church suppers and ice cream socials, are open to and attended by Fletcher residents. A fund drive was held recently to help pay for a new roof. The new roof is now complete. The foundation will need repairs in the near future. At present the building is privately owned, operated, and maintained by the Regional Methodist Church Conference.

Public Lands

The Town owns several parcels of land as identified in the accompanying table (but not depicted on associated maps in the appendices due to the lack of mapped boundary information). Aside from the land associated with the Fletcher Elementary school, very little land within the town is publicly owned. A parcel of land bordering Metcalf pond, including a small undeveloped stretch of shoreline within the road right-of-way provides access to the pond. An additional 4 acres across the road is designated for public parking. Camping and

fires are not permitted. Another parcel of land bordering Metcalf Pond is privately owned, but subject to a conservation easement requiring public access.

The state owns rights to 380 acres on Gilson Mountain, accessed through Fairfield, which comprise the Gilson Mountain Wildlife Management Area. This land is under the management of Vermont Department of Fish and Wildlife, but to date no management plan has been prepared. The land is open to area residents for hunting and other recreational uses.

Many Fletcher residents perpetuate the traditional Vermont norm of allowing access to their lands for hunting, fishing, hiking, cross-country skiing and other recreational pursuits, as well as some farming and forestry. As also noted elsewhere, a network of snowmobile trails is maintained by local clubs in association with VAST. These forms of access to private land provide significant opportunities for recreation for area residents.

The town maintains two of the four cemeteries in town — the Bailey Cemetery and the River Road Cemetery — which are no longer in use but have historic value. Maintenance and upkeep is accomplished largely through volunteer efforts. The only active cemetery — the Fletcher or Binghamville Cemetery — and the Pioneer Cemetery near the Community House, are owned and maintained by cemetery associations.

The town could develop policies with regard to the purchase, management and sale of town owned land.

The Town would benefit from parcel maps, which would identify the location and extent of public and private lands in town for listing and planning purposes. The Select Board is currently looking into funding for parcel mapping.

A community land trust continues to be a future goal of the Planning Commission. It could help to protect and preserve important resource lands for the town.

Public Services

Educational Services

As noted, Fletcher elementary students (K-6) receive their education locally at the Fletcher Elementary School in Binghamville. Contrary to state trends, Fletcher Elementary's annual enrollment is increasing. This trend may continue due to the many housing starts and possible subdivision development.

The Fletcher School District is currently a member of the Franklin West Supervisory Union, which provides supervisory and administrative services. The school district is overseen locally by the Fletcher School Board, consisting of five elected school directors.

Fletcher Elementary School

MISSION STATEMENT

The Fletcher School and community mission is to provide a safe, accepting and simulating environment were all children are encouraged to develop the academic, social and teamwork skill necessary to become competent, caring and productive citizens of the 21st century

The school district currently employs a staff of thirty-three, including a full-time principal and an administrative assistant; with special education staff and teaching aids; a guidance counselor and librarian; and three support/maintenance staff. School programs include vocal and instrumental music, art, , and physical education. The school also offers a hot lunch program for its students. The school depends as well upon a high level of volunteerism and community involvement for many of its programs. In January of 1996 a local "Success by Six" program, a preschool playgroup for ages 2 through 4, was initiated at the school.

The busing of Fletcher elementary students is provided by the school district under an annually negotiated contract.

Since Fletcher has no high school and is not a member of a union school district, Fletcher's secondary students are tuitioned out to high schools of their choosing. Secondary enrollments have been on the rise, and are expected to continue to increase. The majority of students attend nearby BFA Fairfax, however students also attend the Lamoille Valley High School, and schools in the Burlington area.

Fletcher residents have more control over the costs of elementary education; however, the school system, must meet a number of state mandates in order to retain PSA approval. There is the possibility of full day kindergarden that may have to be addressed.

There are no adult or alternative educational opportunities available within the community, however Fletcher residents may attend classes at the Community College of Vermont (CCV) and the Northwest Technical Center, both located in St. Albans, the Johnson State College in Johnson, or a number of colleges in the Burlington area, including the University of Vermont. Other educational opportunities should evolve over time through the use of new technologies, including Vermont Interactive Television and on-line computer services.

Road Equipment Inventory

Year	Equipment	Replacement Schedule
1985	Mack Truck	2006
2003	Mack Truck	2018
1993	John Deere Backhoe	2013
1995	Mack Truck	2010
1998	Champion Road Grader	2018
2005	John Deere Loader	2025

Road Services

The second most costly service provided by the municipality is road management and maintenance. As discussed in more detail under the transportation section, Fletcher maintains over 44 miles of roads within its borders. The summer and winter maintenance of roads is the responsibility of on full-time road foreman, one full time crew member, and one part-time (as necessary) crew member.

An equipment replacement schedule has been in place now for several years. A listing of present road equipment and the anticipated replacement dates is included in the table which follows. The town also owns a culvert machine, and 2 chainsaws for use in roadwork. Estimated amounts of road material used per year include 3,500 yards of sand, 7,000 yards of gravel, and 80 tons of salt. People have asked that winter roads be clear, which has increased the amount of salt used in recent years. The amounts listed here may vary significantly in any given year depending upon the weather (e.g. heavy snows, flash flooding). The town currently gets sand and gravel from local sources (Waterville, Fairfield) depending upon availability and price. Although the State has ruled that salted sand does not need to be covered, Fletcher's salt storage shed is watertight due to an upgrade in 2004.

The town also purchases asphalt for the maintenance and upgrade of its paved roads. Recently the town has paved its section of Buck Hollow Road (Fairfax and Fairfield sections were already paved). This project was on the town's agenda for years, and with its completion, will eliminate the need to send the road crew to grade this remote section of road several times each year. It also makes the road more uniform from town to town.

Future plans for Fletcher's roads include rebuilding approximately two miles between the Cambridge town line to the Town Clerk's office. Due to State funds granted to the town of Fletcher, this will be started next year. Another project expected to be executed is the upgrading of Rugg Road to a full class 3. Many other projects will be addressed as funding becomes available.

Administrative Services

Fletcher is governed by a local select board consisting of five elected members. The select board meets on a regular basis, and members receive nominal payment for their services. The town employs a full-time, elected town clerk (and treasurer) to manage the town office, records and accounts. She is assisted by a part-time clerk. Financial records for the town are checked by three elected town auditors.

The town also employs a part-time zoning administrator, selected by the planning commission and approved by the select board, to administer and enforce its zoning and subdivision bylaws. Septic regulations (included in the zoning bylaw) and the town's health ordinances are administered separately by the town's health officer, who is appointed by the state.

The town has a seven member planning commission and a six member development review board, both of which are appointed by the select board. These boards meet monthly, or as needed, and receive some administrative support from the assistant clerk. Planning, zoning and subdivision records are maintained in the town office. The town's grand list is maintained by an elected board of three listers. The town most recently completed an in-house reappraisal of all listed property in 2001.

Town officers include a number of other elected and appointed officials (e.g., justices of the peace, animal control officer, pound keeper, inspector of lumber, weigher of coal, fence viewers, etc.), whose duties vary with their positions. Although some of these positions are now more titular than substantive, local officials provide much needed services to the community, often at their own expense.

Town government of Fletcher, as in many rural Vermont communities, depends largely on local residents who are willing to volunteer their time and talents. Though Fletcher is a growing bedroom community it continues to be fortunate in having residents who are willing to serve in

the town's and the public's interest. The Town of Fletcher's tradition of local volunteerism has in the past and will in the future continue to be a valuable resource in meeting the town's long-term needs.

Fees for other organizations, including assessments from the Northwest Solid Waste Management District, the Northwest Regional Planning Commission, fire and rescue services, and a number of other organizations which the town supports also come from the administrative budget. The town collects permit fees, and other nominal fees to help offset the costs of administration.

Public Health and Safety

Fletcher, as a small, rural, isolated community, has little ability on its own to support public health and safety services. The enhanced 911 program has been active for several years now, and the town is divided fairly evenly geographically for emergency services, which are provided by neighboring towns. An annual retainer is paid to both Cambridge and Fairfax, both for fire and emergency medical services. It also pays for back-up services from AmCare of St. Albans. A number of Fletcher residents actively serve on fire and rescue squads.

Fletcher has one elected constable, but law enforcement in town is generally the responsibility of the state police and the county sheriff. The town also has an elected safety officer and an elected animal control officer.

The town owns a large generator for emergencies, which is currently housed at the school.

Water and Sewer Services

At present there are no municipal, community or public water and sewer systems in Fletcher. All Fletcher residents, farms, and businesses are served by individual on systems, which are the responsibility of the owner to install and maintain.

The town and state do not currently regulate individual water supplies. Fletcher residents are responsible to comply with any regulations if implemented. Groundwater is the source of most local water supplies. Water is obtained from drilling and shallow wells and springs.

Given Fletcher's topography and surface geology, sufficient uncontaminated sources of groundwater are generally available. The depth to the permanent water table varies from place to place. Vary rarely do deep wells run dry. Shallow wells and springs are more subject to infrequent seasonal droughts.

The state regulates onsite sewer systems for all new development. State standards allow all systems existing prior to the new zoning law to be grandfathered. This would not include any system that has failed. System failures, when documented, may be dealt with to a certain extent under the local health ordinances.

Fletcher residents are expected to comply with any town, state, or federal water and sewer regulations that apply presently and that may apply in the future.

Solid Waste management

Under state regulations passed in recent years (Act 78), municipalities are now responsible for the waste generated within their borders. In response to the passage of these regulations, Fletcher was one of several Franklin County communities to form the Northwest Vermont Solid Waste Management District (NWVSWMD) in 1987. The town appoints a supervisor to serve as a voting member of the District's governing board, and pays an annual assessment to help offset administrative costs.

The District has taken a collective, regional approach to planning for the reuse, recycling and ultimate disposal of the solid waste generated by its member municipalities. It has a regional landfill in Sheldon. District municipalities in 1994 approved the purchase of the proposed site in Sheldon; this purchase was completed in September 1995. Studies and design work necessary for permitting also have been completed. State certification is anticipated in 1997, however landfill capacity will be

developed only as it becomes cost-effective to do so.

In recent years the District has actively pursued revenues more tied to waste generation, including surcharges on waste (added to tipping fees) to fund activities included in the District plan, and to reduce the burden on local property taxes. As a result the annual per capita assessment rate has dropped, from $2.81 in 1994 to $1.00 since 1996. The District serves as an information center, and provides waste collection and educational services. It also has a regulatory function — the District's ordinance was recently amended to include mandatory recycling, scheduled to become effective in 1997. Provisions regarding illegal dumping and burning are also scheduled.

Locally, trash pickup and curbside recycling services are available on an individual basis through a private hauler. The District offers a regional solid waste and recycling drop-off, located in Fletcher, and sponsored periodic household hazardous waste collections.

Communication Services

Fletcher is served by Verizon for its local phone service, and by a number of other long-distance providers. The phone services available to local residents have increased markedly in recent years, but at additional expense to the consumer. Fletcher has three local phone exchanges (849 and 827 in Franklin County, and 644 from Lamoille County) and a recently expanded local calling area that includes surrounding towns and much of the region, but excludes the Burlington area. Cellular phones are becoming increasingly common, but because of Fletcher's topography, do not work well in certain locations.

The town is also served by a number of post offices, none of which are located in Fletcher. Although Fletcher does not have "last line identity" from the U.S. Postal Service at this time, it would be beneficial to pursue it. Residents would be able to reference their own town in their address (e.g., "Fletcher" instead of East Fairfield or Cambridge) while keeping the same zip code for sorting purposes. The advantages of last line identity include less duplication in street names and addresses, greater ease in locating an address, and perhaps most importantly, community identity.

Town officials presently communicate with local residents through formal means (hearings, town meetings, etc.) and through a well-received monthly newsletter. Past newsletters, along with Zoning Bylaws and Subdivision Regulations (as of July 2002), are available for viewing online at http://bivio.com/fletchervt/files/Main.HTML. This website has been maintained by Jon Bondy.

At present very few commercial and national servers are available in the local dialing area. Given the potential importance of online services to local businesses and area residents, affordable local access is necessary. Rural high-speed internet access is currently being investigated as a possibility within the state, and may be available to Fletcher residents in coming years.

Due to Fletcher's topography, relative isolation and low population density, there are limited television and radio services available to residents. Most households in Fletcher have antennas or satellite dishes. There is no local community cable access. The nearest Vermont Interactive Television site, which is often used for long distance training, educational services, and statewide public hearings is located in St. Alban. The nearest radio stations serving the local community are also located in St. Albans, and the reception varies around town.

The development of new or expanded telecommunications facilities, including radio, television and telephone towers are permitted based on Fletcher's zoning bylaws. Development is subject to conditional use review by the Development Review Board. Development guidelines include, but are not limited to: tower construction shall be set back from property lines and public rights-of-way, be located so that visibility is minimal, and be located at pre-existing sites where feasible. While the need for telecommunication facilities is obvious, the development must be done in a

manner that is aesthetically pleasing as well as functional.

Childcare Facilities

Although not a service provided by the community, childcare can be a community issue. Childcare ca be a growing concern for existing and prospective families, whether in regards to finding quality services or the costs securing these services.

According to State data, Fletcher currently has four registered childcare homes and one childcare center, with a total capacity of 39 full-time children and 24 part-time children. The 2000 U. S. Census indicates that there are 252 children from birth to age 12 in Fletcher. Data on other options such as stay at home parents, family care providers, un-registered homes, or other in home childcare options are not available. The question remains whether the needs of the remaining children are being met.

GOALS: To meet the needs of the community in a fiscally responsible manner with appropriate public facilities and services that supports residents' livelihood and lifestyles.

Objectives: General

8.1 The rate of growth shall not exceed the ability of the town to finance, provide and maintain associated facilities, services and infrastructure.

8.2 Growth and development in excess of planned rates of growth shall not overburden town services and facilities, nor adversely impact the town's environment and rural character.

8.3 Public and semi-public facilities will be located to reinforce traditional settlement patterns, and to avoid or otherwise minimize impacts on resource and conservation lands and natural, cultural and scenic features. New buildings intended for broad-based public access and use, including new governmental and educational facilities, will be centrally located within or immediately adjacent to existing village areas in order to concentrate public functions, reinforce village character, and strengthen community identity.

8.4 The siting of infrastructure, utilities and related access will minimize physical and visual impacts on resource, conservation and open space lands. The extension of utility lines (water, sewer, power, cable, phone), and related easements and/or rights-of-way will follow natural contours, and be shared where feasible. Stream and wetland crossings are to be avoided where possible. The burial of utility lines will be required as appropriate to minimize visual and environmental impacts and reduce long-term maintenance costs.

8.5 Ensure development or the regulation of development in Fletcher does not negatively impact the availability of safe and affordable childcare.

Objectives: Education

8.6 Opportunities for a quality education, including associated services and facilities, will be provided for all Fletcher students in relation to anticipated growth in school enrollments, associated costs, and available funding for education.

Objectives: Water & Sewer

8.7 The town will ensure the supply of safe drinking water and adequate wastewater disposal through the administration and enforcement of local health and on-site sewage regulations.

Objectives: Public Health & Safety

8.8 Emergency response and public safety services, including fire, ambulance and policing services will be provided through cooperative agreements with neighboring towns, agencies and/or private organizations as appropriate, based on available funding. Volunteer efforts, including volunteer service and community-based programs, will be supported as appropriate.

8.9 All new development will be located and sited to be accessible to emergency response vehicles.

8.10 Public recreational areas and facilities for the use and enjoyment of Fletcher residents will be provided in convenient and suitable locations to the extent available funding and resources permit. The maintenance and improvement of existing facilities will receive priority.

Objectives: Public Recreation

8.11 Important outdoor recreational resources, including conservation lands, public waters and rights-of-way, will be protected from incompatible land use; continued public access to recreational resources will be encouraged and may be required under site plan and subdivision review. Access to private lands for public recreation will be encouraged to the extent that landowner rights and interests are upheld.

8.12 Recreation lands and facilities will be incorporated into proposed residential and multiple use subdivisions as appropriate to meet the needs of the intended resident population.

Objectives: Solid Waste

8.13 A system for the reuse, recycling and proper disposal of solid wastes will be provided in association with the Northwest Vermont Solid Waste Management District, of which the town is a member, and the district's adopted solid waste management plan.

Objectives: Communications

8.14 The town will encourage affordable local access to telecommunication services, including on-line services, and support upgrades in telephone and electric services to meet telecommunication needs, to the extent feasible.

8.15 Telecommunication facilities shall be located only in areas specifically designated for these uses, and shall be co-located on existing sites unless such sites are demonstrated to be unsuitable or unavailable.

8.16 A regular newsletter to inform local residents will continue to be produced and distributed through the town via mail and on-line services as finances and volunteer efforts permit.

8.17 The use of "last line identity" by the US Postal Service, in which all Fletcher residents will be able to use the town's name in their mailing address, is strongly supported to reduce the potential for locatable address duplication within zip code areas under E-911, and to strengthen community identity.

Objectives: Road Maintenance, Personnel, Equipment & Supplies

8.18

Objectives: Public Lands

8.19 Establish a consistent method of selling lots that come into Town ownership.

8.20 Establish a conservation commission.

Recommendations / Actions: General

- Develop a capital budget and program for the financing of public facilities and infrastructure as part of an overall growth management strategy.
- Continue to maximize the use of state, federal and other funds, and to explore alternative funding mechanisms to finance needed facilities and services.
- Develop an overall "village plan" for the Binghamville area as the town's designated growth center for community and economic development.
- Identify and protect a public water supply source design to serve the Binghamville area.

Recommendations/Actions: Education

- Continue to monitor population and school enrollment fluctuations in order to address future facility and capital needs in an efficient and well-planned manner.
- Explore opportunities for acquiring additional land adjacent to the school to accommodate future expansion.
- Find opportunities to better use the Fletcher Elementary School as a community resource; develop and expand existing library holdings at the Fletcher school for community use.

Recommendations/Actions: Water & Sewer

- Update zoning regulations, specifically health-related and onsite sewage regulations, to reflect minimum state regulations.
- Provide financial support for educational opportunities for town health officer.
- Recommendations/Actions: Public Health & Safety
- Continue to investigate options for the cost effective provision of emergency services and police protection as appropriate; support the development of a local community watch program.
- Prepare a community emergency response plan for hazardous materials incidents as required by the state, as available funding and resources permit.
- Continue to negotiate with Fairfield for emergency response coverage in the northern sections of Fletcher.

Recommendations/Actions: Public Recreation

- Make needed improvements to the Metcalf Pond beach and parking areas; acquire additional public access to Metcalf; provide other amenities (e.g., picnic tables, trash cans) as appropriate.
- Continue to support the efforts of the Fletcher Union Meeting House Association to restore the Union Meeting House (Grange) for community use.

Recommendations/Actions: Solid Waste

- Continue to participate in regional solid waste planning, recycling and disposal efforts as a member of the Northwest Vermont Solid Waste Management District.

Recommendations/Actions: Communications

- Continue to implement E-911 locally
- Petition the US Postal Service for the use of "last line identity" (the use of "Fletcher" as the resident town) in local mailing addresses.
- Explore a community-wide on-line system
- Support and maintain the Fletcher Website.

Recommendations/Actions: Public Lands

- Inventory all public lands to assess most appropriate use (firewood, wildlife habitat, recreation, education, sale, etc.); develop management plans as appropriate.
- Support efforts to complete tax mapping of the entire town, to strengthen community services such as permit review, listing and tax services and general planning efforts.
- Develop and support a volunteer program to maintain Fletcher's historic cemeteries.
- Develop policies to govern the selection and timing of sale of town owned properties.

Recommendations/Actions: Road Maintenance, Personnel, Equipment & Supplies

- Continue development of a basic road surface management system (RSMS) tailored to Fletcher, to identify, prioritize and schedule needed road repairs and improvements. Plan for the development of a small town green or common and public bulleting board to be centrally located in the Binghamville area.
- Investigate Class 4 Road issues and develop an equitable management policy.

Section 9
LAND USE

Land use is more often than not the most difficult planning issue faced by most communities. Through effective planning, a reasonable balance can be maintained between the public interest and the interests of private landowners.

Land use planning integrates all other aspects of the planning process: defined goals, policies, and objectives; physical factors and limitations; historic patterns of development; projected and accepted rates of growth; existing and proposed facilities and infrastructure; and the ongoing need to provide housing, jobs, services and a quality environment for present and future generations.

The primary objectives of Fletcher's town plan are:

- To ensure that the rural character of the town – including its resource based economy, natural environment, cultural landscape, and the rural lifestyle enjoyed by its residents is maintained;
- To provide for orderly development in suitable locations to accommodate anticipated and desired forms of growth at rates which do not over burden the ability of local taxpayers to provide for needed facilities and services; and
- To require that all development be pursued with strict regard to the capability of the land to support it.

Land use is a critical component of each of these objectives. The following provides a description of existing land use in Fletcher, a description of the types of land uses appropriate for Fletcher, and recommendations for facilitating the appropriate use of land through planning in order to meet the Town's objectives.

LAND USE/LAND COVER		
Type	**Acreage**	**Percentage**
Brush/Transitional	22.52	0.09%
Barren Lands	124.53	0.51%
Residential	246.38	1.00%
Commercial	0.31	0.00%
Industrial	639.26	2.60%
Other Urban	0.56	0.00%
Deciduous Forest	10,108.09	41.08%
Coniferous Forest	2,727.32	11.08%
Mixed Forest	6,239.25	25.35%
Forested Wetland	487.14	1.98%
Non-Forested Wetland	262.61	1.07%
Row Crop	900.74	3.66%
Hay Pasture	1,700.10	6.91%
Other Agricultural/Mixed Open	2.71	0.01%
Water	1,147.23	4.66%
Fletcher Total	**24,608.75**	**100.00%**
FLOOD PLAINS		
100 Year Flood Zone	919.69	3.74%
500 Year Flood Zone	168.15	0.68%
Sources: LULC, 1993		

Existing Land Use

The Town of Fletcher covers approximately 24,608.75 acres. The various land uses/land covers that comprise this total acreage are listed in the table above and are illustrated in the Current Land Use Map in the Appendix. The most prevalent land cover by far is forest, comprising approximately 79% of Fletcher's total acreage. In contrast, the acreage devoted to agricultural uses comprises only about 10% of Fletcher's land base, and residential use comprises only about 1% of the land base. These percentages are consistent with those specified in the prior town plan, solely because new data is not available.

Current Land Use Regulations

Fletcher's current zoning bylaw has been in effect since October 25, 2002. The bylaw establishes six different land use districts. These are:

1. The Village District
2. The Rural District
3. The Conservation District
4. The Forest District
5. The Shoreland District
6. The Flood Hazard Overlay District

The Village District

The Village District includes all lands within and adjacent to the historic settlements of Binghamville and Fletcher Center, as depicted on the zoning map attached in the Appendix. This district is meant to encourage the development of village areas as the focus of social and economic activities in the community and to provide for residential, commercial and other compatible development that serves the needs of the Town. Development consistent with the purpose of this district should occur at densities and reflect uses which will maintain the traditional social, and physical character of the villages, including their historic and scenic resources, and which will not exceed the capability of the Town's lands, waters, services and facilities to absorb such densities.

Rural Residential/Agricultural District

The Rural Residential/Agricultural District includes lands within 1,500 feet of Class III, or better, roads. These lands are intended to be used primarily for residential, agricultural, and forestry uses. Compatible commercial and recreational activity is also supported. Development densities must be in keeping with the physical capabilities of the land and the

availability of planned community facilities and services. Development methods to preserve the rural character and protect the agricultural resources of these areas are encouraged.

Conservation District

The Conservation District includes most upland areas and other conservation lands not included in other zoning districts. The remote nature of these lands, extreme topography and/or significant physical limitations on any type of building make these areas of town poorly suited for future community growth and development. This district is also specifically intended to protect the scenic and important natural resource value of such lands for forestry, ground and surface water recharge, wildlife habitat, and outdoor recreation. Very limited, low-density development is anticipated in this district.

Forest District

The Forest District includes all lands eleven hundred feet or more in elevation on Wintergreen Mountains, and all lands on Gilson Mountain 1400 feet elevation and above. Included in this district are the upland roadless areas on Fletcher Mountain; all lands east of Route 108, but not including the area within 1500 feet of the road, which is in the Rural Residential / Agriculture District. This district serves to protect remote lands which are essentially undeveloped, lack direct access to public roads, are important wildlife habitat, are currently used for commercial forestry and/or have high potential for commercial forestry use, and have severe physical limitations for development. Conditional use review is required for all uses other than forestry or agriculture as a means of ensuring the integrity of the resources in this district and preventing undue burdens on public services.

Shoreland-Recreation District

The Shoreland District includes all lands within five hundred (500) feet of the shoreline of Metcalf and Halfmoon Ponds. This district protects areas which have present or potential capability for water-based recreation. Development in this district must be carefully controlled to protect water quality and scenic beauty.

Flood Hazard Area Overlay District

The Flood Hazard Area Overlay District includes identified areas subject to a one percent or greater chance of flooding in any given year (i.e., 100-year flood plains) as depicted on the Federal Insurance Administration's current set of Flood Insurance Rate Maps (FIRMs) for the Town of Fletcher. This district is meant to prevent increases in flooding caused by development in flood hazard areas, to minimize future public and private losses due to floods, and to promote the public health, safety and welfare. This district is also required for continued Town eligibility in the National Flood Insurance Program.[1]

Progress In Meeting Plan Objectives

The prior town plan called for the development of new zoning districts. Fletcher can be proud of its citizen volunteer boards and the progress these boards have made toward improving Fletcher's zoning regulations. Since the passage of the prior Fletcher Town Plan, a revised zoning bylaw incorporates the types of districts described above. These districts will serve the Town well as development pressures increase.

Further Recommendations

Monitor future implementation of the zoning bylaws that were passed in 2002, and modify the zoning bylaws when it appears necessary in order to maintain a reasonable balance between the interest of the private land owners and the public interest.

[1] Warning and Disclaimer of Liability: This designation does not imply that lands outside of depicted flood hazard areas or land uses permitted within designated areas will be free from flooding or flood damages. This description and the related zoning map shall not create liability on the part of any municipality or any official or employee thereof for any damages that result from reliance upon this plan or any decision lawfully made thereunder.

GOALS:

- **To maintain a reasonable balance between the limitations imposed on land use in the public interest, and the rights of individual landowners.**
- **To preserve Fletcher's rural character;**
- **To promote the efficient use of land, the continuation of productive forestry and farming through the development of land in a manner which protects the environment and preserves important natural, cultural and community resources, while at the same time providing sufficient space in appropriate locations for farming and forestry, residential, recreational, and commercial and industrial uses and supporting public services, facilities and infrastructure.**

Objectives:

9.1 Just compensation will be made in the event that all reasonable use of property is denied under local regulations; restrictions imposed on land use will be based on clearly defined community goals and objectives.

9.2 Infrastructure and site improvements associated with new development, will be reviewed as appropriate under local land use regulations. The costs of such infrastructure are to be borne by the developer; provision of adequate surety to guarantee proper installment and completion may be required.

9.3 The types and patterns of land use within the community should be tracked and mapped on a regular basis for purposes of planning, zoning, listing, and growth management.

9.4 Development is to be excluded from areas, which are particularly unsuited for it, including those areas, which have natural development limitations, and limited or no access.

9.5 Land use and development density will reflect topography, site conditions, proximity to town roads and commercial centers, and requirements for the economic and efficient provision of public services. Higher densities of development will be accommodated only where they can be properly served.

9.6 Land use districts have been designated for purposes of planning and zoning. Proposed land use and/or development activities within each district will be shown to be compatible with the stated purpose and intent of that district and all related plan goals, policies and objectives.

9.7 Land subdivision within all districts will be designed to ensure that the pattern of future land use and development does not adversely impact significant natural, cultural or scenic features, or result in the further fragmentation of resource and conservation lands.

9.8 Strip forms of development along town roads will be prevented. New development will maintain traditional, clustered forms of land use and development (e.g., farmsteads, hamlets, villages) with access to existing town roads.

9.9 The clustering and/or siting of development to replicate traditional, concentrated patterns of development, to protect rural and scenic character, and to maintain contiguous tracts of resource, conservation, and open land is encouraged in all districts, and may be required in association with

other conservation techniques as appropriate. Clustering may take the form of traditional planned residential or planned unit developments (PRDs, PUDs) and/or more innovative farmland protection and open space subdivision designs.

9.10 Designated village areas are intended for higher densities and mixed forms of development to be located within and/or immediately adjacent to existing villages of Fletcher Center and Binghamville, in a manner which reduces the costs and impacts of development, reinforces the traditional, integrated, compact village form, maintains a distinct built edge, and which strengthens community identity and character. Infill development is encouraged.

9.11 All structures intended for broad-based community access and use will be centrally located within or immediately adjacent to Fletcher's historic village centers to maintain and reinforce their traditional public function, identity and associated sense of community.

9.12 The Binghamville area in particular is designated as the town's growth center for higher density, mixed forms of community and economic development and supporting infrastructure — particularly for multi-family housing, municipal and other public buildings, and small businesses, services and facilities which cater to the public. Associated infrastructure will support and reinforce traditional patterns of development.

9.13 The rural district is intended to allow compatible forms of rural development, while protecting the town's rural character. An overall pattern of low to moderate density development, in appropriate locations based on site and access conditions, will be maintained in the rural district. Home based businesses, cottage industries and other small businesses typical of rural areas, which require minimal supporting infrastructure and limited public access will be subject to site plan and/or conditional use review as appropriate.

9.14 The forest district is intended specifically to protect the town's productive forest and agricultural resource lands and related industries. Incompatible forms of development, which hinder or interfere with resource uses, or result in the fragmentation of resource lands will not be permitted within these districts. All uses except forestry, undeveloped outdoor recreational activities, and specifically designated essential public services and facilities are excluded from the forest district. Within the agricultural overlay district, all uses in underlying districts, except for agriculture and forestry, will be subject to conditional use review to ensure that they are sited and/or developed in a manner, which maximizes the amount of land retained for productive agricultural use.

9.15 The conservation district includes land, which is generally inaccessible and/or marginal for development, and is intended to protect Fletcher's upland areas (1000+ ft. in elevation) as well as other significant natural and scenic resources as defined in the plan. Compatible forms of low-density development, including appropriately sited residential development, may be allowed in conservation districts under conditional use review.

9.16 The flood hazard overlay district is intended to protect life and property within federally designated flood hazard areas as depicted on Flood Hazard Boundary Maps. Uses are to be used limited to non-structural, open space uses including farming, forestry, education and out-door recreation.

9.17 The shoreland/recreation district is intended for the appropriate management of shoreland areas of Metcalf and Halfmoon Ponds to protect water quality, and to provide limited access to and recreational use of public waters. All structural development, including seasonal homes and their conversation to year-round homes and public recreational facilities, are to be subject to conditional use review. Setbacks and buffering will be required as appropriate.

Recommendations or Actions:

- Conduct land use inventories and update GIS-based land use maps at regular intervals - at minimum with the state release of new orthophotography.

- Develop GIS-based parcel maps to track changes in land use and subdivision patterns; to provide available parcel-based natural, cultural and land use information to individual landowners, and to identify and inform affected landowners of proposed changes in land use designations.

- Review and update bylaw provisions, including district land use designations, for conformance with the updated town plan. Also review for simplicity, clarity, ease of use, and effectiveness.

- Encourage creative clustering and siting of new development, particularly for application within rural, conservation and resource districts, to maintain contiguous tracts of agricultural and forest resource lands in sustainable production, and to protect the town's open space, rural and scenic character.

- Establish setbacks from surface waters to be applied within all zoning districts.

- Require municipal and other community buildings as appropriate to be located only within or immediately adjacent to traditional village areas in order to reinforce their roles as the community's physical, cultural and social centers.

- Specifically review and update as appropriate bylaw provisions for essential public services, public facilities, commercial uses, telecommunication facilities, home occupations, home-based businesses and cottage industries, accessory apartments, the conversion of seasonal to year-round housing, site plan review criteria and performance standards, and on-site sewage provisions.

Section 10
IMPLEMENTATION

The plan is most useful when viewed as a living document that offers a path to follow, a vision to be achieved over many years. It's a work in progress that serves as a reference and guide for use by local officials, area residents, and others with an interest in the community.

The plan frames a vision for the town: a vision of its future built on the past, a vision that sets forth goals to be achieved and ways to achieve them. The underlying intent is to bring some order to change, to coordinate independent decisions and actions into a cohesive whole, and to look to the long-term to the benefit of the entire community. Turning vision into reality is challenging at best; it requires strong leadership and the efforts of many dedicated individuals. The plan simply offers a beginning — its success lies in the journey ahead.

Plan Adoption and Review

The plan is adopted by the town select board following public hearings as outlined in the Act. With plan adoption, the town has a general blueprint for growth and development over the next five years and beyond.

Optional regional approval, however, ensures that the town retains all the benefits under state law afforded to municipalities having approved plans, including the ability to levy impact fees if so desired, and the requirement that other local, regional and state plans be in conformance with the local plan.

Once adopted, the plan is not cast in stone - it should be reviewed, updated and amended as needed to reflect changing times and circumstances. Plans must be updated and readopted every five years in order to retain legal standing for local use and implementation under state law.

It is the responsibility of the town's planning commission to maintain the plan, and to work with the select board, other town boards, and local citizens to ensure that key recommendations are translated into action.

Implementation Techniques

There exists a variety of tools and techniques available to implement the plan. The plan forms the legal basis for the adoption and amendment of local zoning and subdivision regulations. Specific tools enabled under state law include but are not limited to expanded site plan review, overlay districting, conditional use criteria and performance standards, planned unit and planned residential development provisions, buffering and setback requirements, impact fee ordinances, official maps, land acquisition, capital budgeting, impact fee ordinances, and special assessment districts.

Other innovative techniques, also may be useful, needed, and worthy of consideration, but because they are not expressly authorized by statute, may also be more susceptible to court challenge. As such, legal counsel should be sought to determine whether such techniques fall within the legitimate authority of the town, and to make sure they are clearly justified and defined, and fairly administered and enforced.

All available techniques should be considered for use by the town as appropriate to implement the goals and policies identified in the plan. Many, including zoning and subdivision, are already in effect, and should be reviewed and updated as needed to ensure consistency with the plan and recent changes in state statute. Some techniques, especially those requiring substantial administrative, organizational and/or technical capacity, may not be appropriate for use in Fletcher.

Participation in Regional and State Efforts

The plan also provides a basis for local participation in regional and state planning efforts and state regulatory proceedings, including Act 250.

As noted, if the plan receives regional approval, regional and state plans must be in conformance with it. This is a powerful tool that may assist in targeting state funding for locally needed infrastructure and improvements.

Documentation that a project conforms with the local plan is now required under many state grant and funding programs - including community development block grants, transportation improvement programs, and the use of Vermont Conservation and Housing Trust Fund monies for local agricultural land preservation, affordable housing and natural resource conservation programs.

The plan also offers a powerful tool for local involvement in Act 250 - criterion 10 specifically requires that development subject to Act 250 be in conformance with the local plan. The town planning commission and the town select board have separate party status under all ten criteria of Act 250. The town and the town plan also have status under Vermont Public Service Board (Section 248) proceedings.

Participation in other regional and state planning efforts - through representation on the boards of the Northwest Regional Planning Commission and Regional Transportation Advisory Committee, the Northwest Solid Waste Management District, and other planning-related advisory groups and organizations, and through regular contact with state officials and local legislators - is recommended as time and available resources permit to ensure that Fletcher's interests, as defined in the plan, are adequately represented.