

# PROSPERITY WITH PRIDE



## OUR GATEWAY TO THE FUTURE TOWN PLAN 2003

Adopted by the Fair Haven Select Board September 24, 2003  
Approved and Confirmed by Rutland Regional Planning Commission

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## Introduction

### **Introduction**

The Town Plan is the principal policy statement for the Town of Fair Haven. It presents a snapshot of existing conditions, a vision for the future of the Town and the means to achieve this vision. The Plan attempts to address areas of concern for the future of Fair Haven and ways to deal with, study or monitor these areas.

The Plan is organized into nine major planning topics. Each topic is then divided into four subsections: Inventory and Trends, Conclusions, Objectives and Implementation. Within each subsection items are not prioritized but merely listed in random order. Prioritization will be left to the implementing bodies and public review.

The enforcement or regulatory power of this Plan is found in the Fair Haven Zoning Regulations and other town bylaws. These documents also undergo a process of extensive citizen review and public hearings prior to adoption and will be updated after each Plan amendment. The Planning Commission will strive to involve all residents, especially directly affected landowners, in the process of reviewing zoning ordinances and other bylaws.

It is the purpose of this plan to look at the town's past heritage, to identify present resources and values, and to assess this information and carefully plan for future growth, preservation, and development in order to maintain the quality of life enjoyed by the people of Fair Haven.

### **Purpose**

Recognition of the importance of economy, environment and sense of place, in addition to a respect for the rights and property of individual citizens, builds the quality of life that characterizes strong communities. The nature of these core values requires careful assessment and planning on a continuing basis. Without a strong plan, control over our lives, livelihoods and landscape is surrendered. Local control by working together within the framework of a strong plan is the best way to assure Fair Haven will remain a place in which we all wish to live.

The authority to prepare and implement this Plan is granted through Vermont Statutes, 24 VSA Chapter 117, Municipal and Regional Planning and Development. The purpose of the chapter is "to...encourage the appropriate development of all lands.... in a manner which will promote the public health, safety, morals, prosperity, comfort, convenience, efficiency, economy and general welfare; and to provide a means and method for the municipalities and regions of this state to plan... and to implement those plans...".

### **Process**

Citizen involvement was actively encouraged and attained during the development of the Fair Haven Town Plan. Early in the process, a "vision" meeting was convened. Town residents were invited to this meeting, during which most of the issues that are addressed in this Plan were raised and discussed. As a result of that meeting, citizen groups were formed to review and update the major sections of the current Town Plan. These groups, comprised of some Fair Haven citizens, studied economic development, land use, natural resources, housing, schools,

facilities and utilities and historic resources.

The Town of Fair Haven Planning Commission completed warranted revisions to this draft prior to consideration for adoption. The Selectboard then held a series of public hearings, and in response to public comment, worked with the planning commission on final revisions.

This Plan is based on current conditions in the Town and the region. As specific local conditions change, public attitudes evolve and more data become available, the Plan will be updated and revised. At a minimum, the Plan will be updated every five years, as is required under state statute.

### **Vision Statement**

**The Town of Fair Haven is a community that has many resources available to it. We have many natural and cultural resources, an incredible location, and the basic structures to have a true inter-modal transportation system. Our position at the “Gateway to Vermont” is our greatest asset and we need to capitalize on it. We need to intelligently structure our town for the 21st century as a business friendly as well as an environmentally friendly town, while maintaining a sensible balance between those two opposing entities.**

It is our vision to create a town plan that encourages sensible business opportunities, to would be residents as well as our current residents, that increases our tax base, provides local jobs, and fits with the general character that our town has adopted over the years, while realizing that changing with the times is inevitable and that if we do not want to become a bedroom town for Rutland, we need to encourage sensible and sustained growth within our present and future power as a town.

## **Community Profile**

### **Physical Characteristics**

Fair Haven is a town of approximately three thousand people. The latest arrivals enjoy the family values long established in Fair Haven. Many families boast several generations of Fair Haven and Vermont ancestors. Fair Haven consists of 17.6 square miles of land located in the western section of Rutland County. The town is bounded on the north by Benson, the south by Hampton, New York, the east by Castleton and Poultney, and on the west by West Haven and Hampton, New York. Fair Haven is positioned at the “Gateway to Vermont” from New York and is one of four major entry points into the state. Fair Haven not only has diverse natural resources, it is also strategically located for commercial and industrial purposes, as well as being a quaint residential community.

The following description comes from the Adams history of the Town of Fair Haven and is a lovely geographical description of the town we call home.

*The general surface of the town is hilly, the hills rising in two instances only, to the dignity of mountains: “Bald Mountain,” covering the whole southern extremity of West Haven, along the east shore of the Lake, and “Mount Hamilton,” the eminence just northward of Messrs. Wood’s and Sheldon’s, in Fair Haven, so named from Joel Hamilton, Esq., who resided in the old*

*orchard on its southern slope at an early day.*

*The town northward of Mt. Hamilton, as far as the Benson line, is taken up with the Great Ledge coming down on the west, covered with its evergreen forests, and seemingly to equal in distant beauty the forests of ancient Lebanon, as you look northward from the summit of Mt. Hamilton, while just below you, in front and at your feet, on the east side of the Great Ledge, and embossed in the green hills on every side, lies the charming little lake in its secluded and native beauty, which has been known among us by no better name than its earliest accidental designation, "Inman Pond."*

*As viewed at the still dawn of a summer evening, there are few scenes, which God has elsewhere made, surpassing in exquisite loveliness, the silent, quiet grandeur of this, our own home scenery. From Mr. Hamilton's eastward, Scotch Hill, fringed with its opening quarries of slate, and the wide fertile interval between, are seen below you, sweeping off to the southward, where the village greets your eye in the distance. Altogether, there is no spot for many miles around so well worth the visit as Mt. Hamilton.*

*A little to the west of Oliver Proctor's former residence is a range of hills, called, in olden times, "Porcupine Ledge." South and east of this, along the east border of the town, and traversed by the road to West Castleton, is Scotch Hill, so named from the Scotch people who settled it.*

*"Glen Lake," formerly called "Screw Driver Pond," from a supposed formal resemblance to a screw-driver, and which has its outlet in Lake Bomoseen, in Castleton, furnishing at that point an abundant water fall and power for manufacturing purposes, lies partly in the northeast corner of the town.*

*To the west of Porcupine Ledge, and east of Mt. Hamilton, is a large marsh fed from Inman Pond, which has long been known as "Beaver Meadow." This meadow furnished, for many years, a supply of cranberries to the residents of the town and village, who were permitted, by the generosity of the proprietor, to go on an appointed day each autumn and glean of the annual harvest, and this cranberry meadow was at that time a mill-pond in the spring of the year, from which water was taken by Joseph Sheldon, Sen., to run his saw mills, at the outlet, where he carried on an extensive lumbering business for many years.*

*As seen from Scotch Hill, the sawmill, now owned by Daniel Orms, and ensconced among the trees at the head of the valley, through which the small but perpetual stream, called Mud Brook, flows to Poultney River, on the west, presents a beautiful and picturesque appearance.*

*The view of Fair Haven Village, as seen from some points on Scotch Hill, overlooking at the same time Hampton hills and the mountains to the south and west, is one on which the lover of the beautiful in landscape scenery will delight to gaze and linger. There is one other view, that from the road or hill north of Otis Hamilton's looking westward on Bald Mountain, with the Poultney River, Carver's Falls, and the powder mills in the deep gorge of the foreground, which for wildness and grandeur in a warm, hazy summer afternoon, is worthy the attention of*

*a painter and artist. Just south of this point, and below Mr. Hamilton's house, are the Dry Falls, as they are called, and the old river bed on the flat, where not the river only, but ancient ocean currents once flowed.*

*The Castleton River, receiving the waters of Lake Bomoseen just outside the borders of the town, comes in on the east and winds circuitously into the Poultney River on the west side, furnishing several good manufacturing privileges in the village. On Hubbarton River, also, flowing through West Haven, from the ponds in Benson, into East Bay, are several good mill powers. Following down the Poultney River, besides the Falls at the powder mills, where there are also a saw mill and a grist mill, and was once a fulling mill and factory, below that point we find Carvers Falls, a deep narrow opening in the limestone rocks, through which the combined waters of the Castleton and Poultney Rivers fall down at first about twenty feet, and then about sixty feet, perpendicularly, into East Bay. At this point there were, at one time, on the New York side, a sawmill, forge and store.*

### **Current Physical Description**

Fair Haven is situated at the southern end of the Champlain Valley in western Rutland County. The junctions of the Poultney River, Castleton River, and Mud Brook converge here to begin their northern journey into Lake Champlain. The geographic formation of Fair Haven was created when the glaciers ended and as they melted deposited the soils and carved rock formations.

West Haven, Benson, Castleton, Poultney and Hampton, New York border the Town. The major traffic routes are US Route 4, Vermont Route 22A, and Vermont Route 4A, which intersect Fair Haven creating an east-west and north-south traveler's landmark. The Vermont Welcome Center in Fair Haven greets tourists entering and leaving Vermont and provides maps and information about the state.

The Vermont railroad also bisects the town. The railroad played a major role in Fair Haven's commercial/industrial formation, expansion, and success. The railroad will continue in that role with the addition of daily Amtrak passenger service at the Fair Haven depot. Loading spurs and commercial access still provide user opportunities.

Fair Haven municipal airport, which in 1989 was placed on the Vermont Historic Register, was established in 1934 with a sand and gravel runway. Several local pilots were trained to fly here and later used their talent in the armed forces to defend our country. This airport is one of only a few in Vermont, which has remained open in its original character.

The center of town has several attractive community features including the town green which is our most treasured focal point. This area is very spacious with towering sugar maples that shade the slate fountain, benches, and a white rail fence. Several unique homes and churches along with our town library, grade school, and municipal building surround the park. On the eastern edge stands the commercial downtown with banks, stores, offices, and apartments, all with historical architectural interest and value. This area is on the National Register of Historic Places and is known as the "Fair Haven Green Historic District".

Streets to the residential areas radiate from the historic green and are pleasant with neat, attractive homes, many of historical value. Several streets and avenues have slate sidewalks unique to Fair Haven. The layout of the lots, streets and houses create several

neighborhoods with spacious backyards. The design of the residential area is conducive to walking to downtown, to church, and to school, and provides an excellent network for people who walk for exercise.

Farmland and forests form the outer most circle from Fair Haven's center. The dairy farms are complimented by additional agricultural land and farms, which produce abundant crops. The forest land contains several natural areas such as Cedar Swamp, Old Marsh Pond, Beaver Meadow, and other wetlands. The "North Woods" as it is locally referred to, is excellent habitat for all flora and fauna indigenous to Vermont. This area is a source of recreational activities for all ages. There is special attention attributed to Rattle Snake Ridge where dens of Vermont's endangered timber rattler are found. The natural areas of the Poultney River, Castleton River, and Mud Brook plus Glen Lake are significant waterways of Fair Haven.

Inman Pond and Inman Pond watershed is the protected surface water used as the Town's drinking water reservoir. The additional property owned by the town in these areas restricts activity to preserve and maintain a safe and healthy environment for this forest, watershed, and reservoir. All the farms, rivers, ponds, lake, wetlands, and forest create the outer edge of Fair Haven, which is the border to our neighboring towns.

Slate is the one most significant natural resource in Fair Haven. This geological formation of fractured bedrock is the subsurface of nearly the entire town. Slate quarries were and are active in Fair Haven. The slate enterprises of the late 1800's continue to be of economic importance. The slate products, primarily roofing tiles, floor tiles and windowsills have been used in the construction of nationally and internationally significant buildings. Not only are the roofs of nearly every older church, house, shed, and barn in Fair Haven made of slate, slate is now a popular choice in new construction. The slate roofers are able to produce dates and patterns in slate roof designs. The colors of green, gray and purple create a natural effect to the architectural appeal to any structure.

### **Historical Perspective**

The area, a forested unsettled land in the Revolutionary War, that eventually became Fair Haven included both West Haven and Fair Haven. Hessian soldiers crossed the Poultney River passing through this area as they headed toward Castleton, and a detachment of Burgoyne's army passed through here headed toward Skenesville (Whitehall, New York).

Because of its proximity to New York State, Fair Haven was not incorporated under the Hampshire grants as other towns in the area were. Instead, on October 27, 1779 Capt. Ebenezer Allen and 76 of his associates were granted "...a Tract of unappropriated Lands within this State in order for settling a New plantation to be erected into a Township."<sup>1</sup>

On April 26, 1763 Thomas Chittenden, granted civil government to the town. Elections were held for the following offices: a town clerk, 3 selectmen, a grand jurymen, 2 listers, a constable, a treasurer, 3 surveyors and 3 trustees to take care of schools and ministry.

On October 20, 1792, by an act of the Vermont General Assembly the Town of Fair Haven was

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<sup>1</sup> THE CHARTER OF FAIRHAVEN

divided into West Haven and Fair Haven along the present boundary line. At the time of the division Fair Haven had 545 residents. By 1820 Fair Haven's population had reached 714 and West Haven 684. In 1823 each town was granted its own representative.<sup>2</sup>

One of the first inhabitants, Matthew Lyon, continued to buy tracts of land in the village and became the so-called "founder of the town". As a boy of 15 he left Ireland coming to America as an indentured servant. He lived and worked in Connecticut before joining Ethan Allen in the Revolutionary War and came to Fair Haven in 1782. Lyon built a sawmill, gristmill, paper mill, store, iron works, nail factory and ran a tavern on the Main Street. He donated land to the town for a park, which today is our town Green. Active politically he was elected to the U.S. Congress and re-elected while in prison in Vergennes for publishing writings against President John Adams, illegal under the Alien and Sedition Act. Business interests eventually slowed and he moved to Kentucky in 1800.

Early businesses were typical of small town commercial interests, providing the necessities of local life. Fair Haven was blessed with good water power, with falls in the Castleton River on either side of Main Street. Wood-constructed stores lined Main and Liberty Streets in the late 1700's. Fires were the primary cause of changes in the buildings with many of the present brick buildings being built in the last quarter of the 1800's. Fire protection began to be discussed in 1865 and a hand engine was purchased. The first engine company was formed in 1874.

Alonson Allen and Caleb Ranney began the first slate quarry in 1839 and development of the slate industry followed, making it the most prominent business in town. A marbleizing process, introduced by Ryland Hanger in 1859 expanded the slate industry. The depression hurt the slate business but it has since revived.

At one time there were over 30 industries such as the manufacture of brick, oil safes, wagons, carriages, and the cutting of marble along the Castleton River. Two well known businesses were Clock Company started in 1896, and the United Shirt and Collar Company started in the early 1900s.

Fair Haven had many hotels in the earliest days. Matthew Lyon ran Lyon's Tavern House and the Dennis Tavern across the street. After Matthew Lyon left Fair Haven, his house on the corner of Liberty and Main Street became the Vermont Hotel, running successfully until it burned in 1878. The Adams House was on the site of the Park View Hotel that was built in 1882, at a cost of \$22,000 by a group of Fair Haven businessmen. It burned in 1899 and was followed by the Hotel Allen, built in 1904. This eventually became Castle Inn and was finally taken down to make room for the Mobil Station. The Rutledge House was on Main Street in the middle of the hill above the bridge and the Homelike Hotel was on Benson Lane. The Fair Haven Inn on Adams Street, originally a private home, burnt in 1993 and only the restaurant portion was rebuilt.

In early days there was a library association, then in 1886 a library was located over the First National Bank. In 1905, Andrew Carnegie provided \$8000 for a new building.

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<sup>2</sup> Population-Rutland Region Towns 1791-2000

Many churches formed around the Green in the center of town. The Congregational Church was formed in 1803 and erected a building in 1812, the Baptist Church formed in 1807, the Methodist Church in 1878, the Welsh Churches around 1849 and the Catholic Church in 1873. A French Church was built on Caernarvon Street in 1870 and St. Luke's Episcopal Church in 1886.

Fair Haven had three school districts in 1785 and additional schools were built through-out the years to accommodate the growing numbers of students. Some of the schools were the Village school a wooden structure built in 1805; a small brick school in 1842, new brick building in 1861 and enlarged in 1893; South school built in 1870, the present Grade School in 1916, the present day high school in 1957 when the old high school became the Municipal Building.

The two banks in Fair Haven were the First National Bank founded in 1864, and the Allen National Bank in 1879.

The Fair Haven Journal and Fair Haven Era were two prominent newspapers in town, followed by the Promoter, which has recently become extinct.

In 1848 The D & H Railroad began coming through town. A Depot was built to accommodate train traffic but it burnt and was replaced by the present depot building around 1894.

A trolley ran from Rutland through Fair Haven to Poultney from 1903 to 1924.

The Fairmont Trotting Park, constructed in 1874 south of the village, hosted a fair from 1883-1916. As many as 17,000 people attended in a single day. This area became the Fairmont Speedway in later years but currently sits idle waiting for an occupant.

Present day industries include U.S. Quarried Slate, Camara Slate, Vermont Diamond Slate, Catamount Slate, Vermont Structural Slate, and Skyline Mobile Homes. As in many towns, business interests have expanded into outlying areas. In Fair Haven's case, this is to the north of the village center on VT RT 22A. Commercial business including a pharmacy, restaurants, grocery store, bank and two truck stops have located there, while we still maintaining an active business district in the center of town.

\*Betty Allen Barnouw, Secretary of the Fair Haven Historical Society, contributed this section

### **Landscape**

The landscape is dominated by foothills and is bisected by the Poultney River, which carves out the town's lowest point where it flows into New York State. With the exception of the extreme southwest corner of the town, the Fair Haven landscape is contained within the Poultney River Watershed. The foothills are given their shape by the underlying metamorphic bedrock, which has slowly been eroding since its formation.

Although the bedrock can be seen outcropping in numerous locations throughout the town, sediments left behind as the Lauren Tide Ice Sheet retreated from the landscape largely mantle it. Glacial till, an unsorted mix of particles ranging in size from clay to boulders, is the

dominant surgical material whereas gravels, sands and silts are common in the valleys where ancient river terraces and deltas are exposed. Clay deposits can also be found in the lowlands, evidence that Lake Vermont (a precursor to Lake Champlain) once inundated the major river valleys with glacial melt water for a period.

The different types of soil found in Fair Haven are a manifestation of the underlying geological diversity. The youngest (and most fertile) soils are found in the Poultney River floodplain, where frequent high-water events deposit fresh alluvial material on a regular basis. The soils in the higher elevations that formed in glacial till are rocky and of moderate fertility and most were abandoned agriculturally over 100 years ago.

The Fair Haven landscape, which is approximately 35% forested today, supports a diversity of natural communities. Northern hardwoods, with major components of red oak, white pine, and hemlock, dominate the uplands. The lowland areas that are not developed or in active agriculture are composed primarily of silver maple-dominated floodplain forests.

### **Culture**

The first inhabitants of Fair Haven were indigenous people, who utilized the natural resources and topographic features important for travel, hunting, and food. Pale-Indians are believed to be the first Vermonters and undoubtedly traveled through and hunted in Fair Haven. They were hunters and gatherers and lived in the Champlain Lowlands.

Vermont served as a passageway for French and Indian raiding parties harassing English settlers to the south and east, and served as a slave corridor where captured whites were marched north to Canada.

Two forms of commerce were visible in early Fair Haven: agriculture and trading. The latter was secondary to farming, dependent primarily upon the produce raised by local farmers. Wool and grain, the chief commodities in the early years, gave way to milk and dairy products. Cheese and butter were made in local factories and shipped to market.

Farmers, needing cash to pay for products and services offered in town, found wood lands could provide revenue. Lumber was in demand, and ships sailed daily from Burlington carrying away much of the wealth of Vermont's forests. Hardwood not sold as lumber was burned to make potash. Smoke spiraling upward behind many farm homes told of the stripping of forest land.

Within 100 years after the first settlers arrived, the valleys and hillsides were denuded of their ancient cover. The loss of this resource paved the way for the devastating floods of the twentieth century. As the community grew in population, transportation and communication became important.

Fair Haven's business district began north of the river. Telegraph service linked Fair Haven with the rest of the country.

With new and expanded markets available, it became profitable to operate factories and

businesses in Fair Haven. Other industries in this thriving community were: a carriage manufacturing steam sawmill, furniture factory, paper mill, spool factory, woolen mill, spoke factory, cider mill, several grist mills, and a steam mechanics shop. Businesses dealing in pharmaceuticals, furniture, dry goods, groceries, hardware, tin ware, harness making, jewelry, millinery, blacksmithing, confections, boots and shoes, marble and woodenware were available to Fair Haven residents

At the turn of the century Fair Haven began to acquire some of the hallmarks of twentieth century living. Late in the 1800's the first electric light plant opened, Western Telephone and Telegraph offered service from an office in the old Allen Hotel. Later, a movie theater, located at the old shirt factory on Main Street, advertised "good clean pictures for young and old" on Wednesday and Saturday evenings. Several companies in the early 1900's provided jobs for those seeking employment in Fair Haven.

Currently Fair Haven boasts a number of fine traditions as evidence of its community spirit. Examples include the annual Memorial Day Parade and Spring Fling. Additional community activities are centered around a very active Little League, a growing youth soccer program, a summer concert series, carnival and AppleFest.

### **Present Day Pressures and Vision of Fair Haven**

Local and regional trends over the past ten years have presented challenges for Fair Haven as they have for many communities in Rutland County. Although population growth in Fair Haven has not been as rapid as elsewhere in the county, regional growth is expected to continue.

This increase in population will require significant efforts in transportation planning to address capacity, levels of service, and parking related issues. Indeed, throughout the county vehicle miles traveled increased four-fold faster than population. A paradox that must be confronted is that well over half of the county population wants to be able to walk to their neighbors, yet well over half the population also wants to live on parcels ten acres or greater in size. A threat of the latter is that suburban communities are three times more expensive than traditional centers in terms of infrastructure costs.

Similarly, the last eight years has seen an increase in the amount of land devoted to housing. The percentage of land in Fair Haven devoted to housing has increased. It will be essential to understand the consequence of growth patterns in order to maintain our quality of life while at the same time preserving the rights and values of individual property owners. Growth pattern development also involves effectively locating industrial and commercial businesses that are an integral part of a healthy community.

Essential infrastructure of today's businesses includes education, electricity, fuel, telecommunications, technology, transportation, water, wastewater treatment, and a skilled workforce. Fair Haven has limited land areas, which contain all facets of infrastructure important to many of today's businesses. Many business sectors can, however, flourish in an environment without some of these investments. The challenge will be to identify those sectors and target necessary improvements to assist with their needs.

In the same way, Fair Haven must identify the needs of existing businesses to enhance their ability to continue to compete in local, national and world markets. In order to develop its economy, protect its environment, and preserve its sense of place, Fair Haven will continue to develop as a dynamic village center, with an additional village center at Exit 2, and several outlying areas that have been designated commercial and / or industrial through the planning process, surrounded by a rural landscape.

Development will be encouraged in existing village areas to maximize the efficiency of town services, promote accessibility to existing services and resources, and minimize the fragmentation of our rural areas. The Fair Haven village center will serve as the social and economic hub of our community and efforts will be made to maintain the historical integrity of our growth center.

### **General Goals**

**The following goal statements are the result of extensive public input and work by the Planning Commission, Selectboard and the various committees of volunteers. They are derived from previously adopted town plans; state mandates; forecasts of population and economic change; research related to urban form, land use management and governmental process; and public concerns and aspirations. The remainder of the Plan elaborates upon these goals further.**

We shall preserve Fair Haven's character. Fair Haven's unique character centers on its vibrant, multi-use village. Surrounding the village are working rural landscapes, forests, water resources and natural areas that are essential to Fair Haven's character. We should remain a village and rural area. We should not become a suburban or urban area. Future growth shall be managed to occur at a rate that will not overburden the towns' ability to provide needed public facilities and services in a fiscally responsible manner.

Smooth and efficient transportation and a range of transportation options are essential to improving the quality of life in Fair Haven and the region. Transportation improvements shall be made after a thorough consideration of all options. Alternate modes of transportation shall be encouraged including provisions for biking, walking, car-pooling and public transportation.

Economic development shall be directed to areas that are designated as appropriate through the planning process and public review of zoning ordinances. Locally owned and operated stores, farms, restaurants and other businesses are important to the Town maintaining a vibrant village and contribute financially by broadening our tax base and providing employment opportunities for Town residents. Business growth shall be encouraged both centrally and in identified outlying areas.

Fair Haven shall encourage a mix of housing types in a pattern compatible with its character. Housing will allow persons of diverse economic backgrounds to reside in Fair Haven.

Preservation of Fair Haven's identity shall be accomplished by managing and promoting development consistent with its historic structures and settlement patterns.

High quality schools are essential to the well being of Fair Haven's citizens. Fair Haven shall provide opportunities for a quality education to each of its citizens. Quality educational facilities are cornerstones for a healthy community and should be supported by all citizens including those without school-aged children.

## **LAND USE**

Fair Haven is a friendly typical small town with some remarkable assets, not the least of which is the "town green". A spacious park in the center of our village, one of the few remaining "wheel" or "spoked" parks, was donated to the town shortly after the Revolutionary War by Matthew Lyon, the most famous and prosperous of Fair Haven's early settlers.

Fair Haven has balanced the needs of its residents by encouraging a variety of activities which include commercial, industrial, residential, agriculture and recreational uses. We begin the twenty-first century with the intent and hope to preserve that same balance. Our motto might be "Prosperity with Pride".

The purpose of the Land Use Section is to document present land uses and establish a guide to future land use for residential, agricultural, commercial, industrial, recreation, conservation, open-space or other public uses.

### **Inventory and Trends**

Fair Haven is located approximately 20 miles west of Rutland City in the western corner of Rutland County and borders Washington County, New York. A major east-west transportation corridor including the divided limited access US Route 4 and the Central Vermont Railway bisect the town which serves as a major crossroads for federal and state highways.

While the east-west US Route 4 is the primary gateway for visitors to Vermont from the New York State Thruway, the north-south Vermont Route 22A has become a major highway carrying goods and visitors not only to Vergennes, and Burlington but is also used as a connector to Canada. Fair Haven is slightly more than 11,000 acres (17.2 square miles) in size. The residential and commercial "village" is about 900 acres or 8% of total area. The rural and open lands account for approximately 4,770 acres or 43% of total, with the remaining 49% consisting of forests, rocky hilly wetland, waterways, town watershed and lands of the State of Vermont.

Much of the remaining productive agricultural land is located in the flood-plain of our two most significant natural features, the Castleton and Poultney Rivers. A National Wetlands Inventory map, on file in the Town Clerks office shows many small patches of wetlands, some even in the residential portion of town.

Topographically, the town runs from a high point of 947 feet above sea level at the summit of "Coon's Den" in the "North Woods" to a low of about 285 feet above sea level at the point the

Poultney River exist town above Carver Falls at our common boundary with West Haven and New York State. The primary residential and commercial districts are generally flat and sandy and lie roughly 385 feet above sea level.

The general historical settlement pattern of Fair Haven has been one of commerce near the falls of the Castleton River. In more recent times the main commercial area moved slightly north to the top of the hill overlooking the falls surrounded by residences. Open landscape consisting mainly of family farms and slate quarries remain outside the residential center. Over the last century, secondary commercial and industrial areas have sprung up. Some were of temporary importance such as the rail depot during the first half of the twentieth century. More recently the outlying areas along the town's main roads and junctions have continued to grow and may prove to be more lasting and have a greater impact on the community.

With the completion of US Route 4 in 1970, Fair Haven became more accessible from points east and it became more convenient for people from the Rutland area to work in Fair Haven and vice versa.

The village has typical small town housing density interspersed with business and commercial enterprises. Approximately 72% of the town's dwelling units are located in this central village area. In the recent past, renovations to Adams House and Carriage House, and the Green Block have encouraged revival of the town's commercial core. However, we need to continue to encourage the rehabilitation of Main Street properties to accommodate new retail establishments at street level, while providing room for office or other commercial space on the upper floors.

There has been fairly steady residential development over the last century, yet the population has increased only slightly. The last quarter century has seen low income housing projects constructed. While this type of housing forms a more compact pattern of development, they generally consist of one or two person units for the elderly, handicapped, unemployed/underemployed and appear to have minimal impact on transportation and commercial infrastructures. Fair Haven's largest mobile home community has 20 lots.

The immediate "Exit 2" area in recent years has become a major commercial area providing restaurants, deli's, gas and other services to local residents as well as traffic passing through. Without major road construction the possibilities for future residential development are limited to a few areas. However, several sites lend themselves more readily to industrial uses than residential.

Large parcels of undeveloped land still exist in Fair Haven. Upland parcels are generally managed for timber production and are not well suited for development. An example is the large "North Woods" area. One parcel was subdivided into lots, other than family parcels, while several other pieces were consolidated by individuals or the State of Vermont. Lowland pieces are used for agriculture and recreation.

Excellent river valley soils and relatively moderate climate have traditionally made agriculture, particularly dairy farming, an important land use in Fair Haven. While there are a small number of dairy farms operating within the town, their future, as elsewhere in Vermont, is

uncertain. Another important traditional agricultural use was apple orchards, however, apples are no longer commercial grown in town. While there are other agricultural endeavors under way, such as forage crops, horse farms, sheep farms and maple sugar operations, it will be hard to equal, either in practical importance or monetarily, the impact which dairy farms and apple orchards had on this community during the first three quarters of the last century.

### **Zoning**

Fair Haven presently has eight zoning districts. (see Map 1)

The Lake Shore District consists of our shoreline on Glen Lake. (formerly Screwdriver pond)

The Watershed District is determined by topography and includes all lands which drain into Inman Pond, Sheldon Dam and Howard Dam. (our water supply)

The Flood Hazard District consists of those areas, particularly around the Poultney and Castleton Rivers that are subject to flooding. The limits of the flood plain are shown on the town flood plain map located in the Town Clerks office.

The Residential District does not permit buildings for commercial or industrial purposes, however, home occupations, whether professional or general business are permitted.

The Commercial District is broken into five areas.

- The Downtown area
- Route 22A area North
- Route 22A area South
- Route 4A area West
- Route 4A area East

Recreational areas are scattered through out town and include the "Green" or park, the playground and ball fields behind Fair Haven Grade School known as the Louis Faryniarz Playground, the airport recreation area, and the former "South School" playground.

The Rural District includes all lands not included in any other district.

Following the adoption of this town plan, there are tentative plans to add another zone (a "Downtown Commercial Zone") to the regulations and to adjust and improve both the regulations and the boundaries of the zoning districts.

### **Future Land Use Map**

The Land Use District map shows proposed future land uses. The areas shown on the map reflect some, but not all, of the characteristics of proposed future land uses. The zoning ordinance, not this Plan, defines zoning district boundaries. Changes in the zoning ordinance districts must be consistent with this Plan, and have the purpose of implementing the plan.

### **Village Areas**

The village areas encompass the historic municipal boundaries of the Urban Compact of Fair Haven.(See Map 5) These areas will continue to serve as the focal point for Town commercial

and civic activities as well as provide a variety of housing opportunities.

These uses reinforce a compact development pattern consistent with Vermont's village centers. The character of existing residential neighborhoods will be protected as new development occurs throughout the village areas. Priorities for this district include restoration and reuse of existing structures, maximizing the use of public facilities and services, creating a pedestrian-friendly atmosphere, and fostering a vibrant commercial/residential center.

### **Gateway**

The purpose of the Gateway Area at Exit 1 is to protect an area that has importance as a scenic entrance to the Town of Fair Haven and the entire State of Vermont, while providing for carefully planned commercial development.

The size and shape of commercial buildings to be constructed in this area shall reflect those found in the village. Access to this area will be controlled by limiting curb cuts to VT Route 4A and an internal circulation road for new commercial development.

Green space, landscaping to help screen parking from VT Route 4A and US Route 4, and other characteristics of the neighborhood criteria must be met in order to retain the flavor of an entranceway to a rural and historic small town. As elsewhere in the Town, restoration and reuse of existing historic structures in this district are encouraged, if existing or possible and reasonable.

### **Commercial/Industrial**

The Commercial/Industrial areas provide for commercial and Industrial uses in selected areas outside of the Gateway, Village compact and Exit 2 Areas. The four locales, which make up this area, are located:

On the southwest side of Town at the old Race track.

On the north side of Town at Exit 2 near its intersection with US RT 4 and VT RT 22A

On both sides of VT RT 4A at Exit 1; and

In the area on the north side of US RT 4 at the Airport.

Allowed uses in these areas will accommodate the future industrial/commercial growth of the Town and allow a sufficient mixture of parcel sizes, ownership patterns, and locations to service a variety of commercial and industrial needs.

Development must occur in a manner that minimizes environmental and aesthetic impact. Planning standards will include provision for buffer areas to lessen any impact on adjacent areas. Any new development must not overburden the road network or utility capacity and should use the existing rail network that runs through town.

Development will maintain the small town character of Fair Haven. These four commercial/industrial areas should be carefully examined through the planning process (within the next year planning window) to determine their ability to attract and retain businesses, with discussion of such issues as the restrictions to development in the zoning districts standards,

the need for further infrastructure, the potential for municipal marketing and the demand for such parcels.

### **Resource Protection**

The purpose of this area is to protect property and people from flooding associated with two major rivers, the Poultney and Castleton Rivers, and to protect and manage valuable natural resources and environmental processes.

This area consists of the 100-year flood plain and a buffer area adjacent to other significant surface waters including Inman Pond, Glen Lake, Mud Brook, Castleton River and Poultney River.

The natural use of a flood plain is to retain flood waters safely until such time as high water recedes back into its normal channel. This temporary water storage area also functions to protect life and lower water levels downstream. Flood plains also provide for riparian habitat that supports a variety of plant and animal life not found in upland habitats. Buffers maintain the integrity of stream channels and shorelines; reduce the impact of upland sources of pollution by trapping, filtering, and converting sediments, nutrients, and other chemicals; and supply food, cover, and thermal protection to fish and other wildlife.

The resource protection area will accommodate the natural uses and benefits of the flood plain and other riparian corridors while restricting development, filling, and other incompatible uses. Regulation of riparian buffers will apply to future development only. Certain resources, such as aquifers, ridge lines, steep slopes, natural areas, significant wildlife habitat, prime agricultural soils and overlay districts may protect wetlands.

### **Medium Density Rural**

**The Medium Density Rural Area accommodates moderate density residential development in areas accessible to village centers where municipal services are available. Development within this area should be carefully sited and clustered in a manner that will allow preservation of significant open space parcels including neighborhood recreational areas, smaller farms, and important natural amenities.**

### **Low Density Rural**

The Low Density Rural Area encompasses the majority of the land area of the Town and includes all areas not covered by the other land use areas. Uses in this area will include agriculture, forestry, recreation, and open space protection, as well as low density rural residential housing and home occupations that are compatible with the preservation of the rural character of the Town. New residential housing will be primarily single family, detached dwellings, and planned residential development (PRD) provisions will be considered for all subdivisions. PRDs will allow for a greater number of smaller, clustered lots in exchange for permanent protection of open space elsewhere on the site. Community wastewater disposal systems may be appropriate in order to achieve this goal.

## **CONCLUSIONS AND OBJECTIVES**

Land use can be defined as the framework for integrating the uses and values mentioned in

earlier sections of this plan. As such, the problems, implications and objectives specific to land use can be considered as a summary of the problems, implications and objectives described with each of the previous sections therefore, they will not be repeated here.

## **IMPLEMENTATION**

The Town will promote the preservation of its character by maintaining the historic settlement pattern of compact village centers and designated outlying commercial and industrial areas, separated by rural countryside.

The Town will provide for residential and commercial growth consistent with this historic settlement pattern.

The Town of Fair Haven should create a Recreation Path Committee. This committee should develop the recreation paths along the Poultney River, Poultney bike trail, and upland parcels. These trails could be used year round and would become an important recreational asset for the Town. Even though the Town has made significant gains as noted above, there is still a shortage in the amount of land available for more developed facilities and programs such as those needed for non-school sports, adult and youth league sports and non-sport activities.

The Town will provide for the continued availability of agricultural and forest land by supporting and encouraging sustainable farming and forestry as viable economic enterprises.

The Town will cooperate with farm and forest landowners who are pursuing the permanent protection of their working land through local, state, and national programs that do not degrade the tax base but continues to participate in the existing tax structure.

Fair Haven Village will continue to serve as the commercial and municipal center of the Town.

The Village will be the highest priority location for future economic development opportunities.

Similarly, the Town will pursue development opportunities within the village, which are consistent with maintaining the character of Fair Haven neighborhoods and within the constraints imposed by topography.

Future growth shall be managed to occur at a pace that will not overburden the school system, police and fire departments, water and sewer facilities, transportation network, and available recreation land, as determined by the Planning Commission in conjunction with the facilities providing such services.

The Planning Commission will facilitate a community-wide discussion of Fair Haven's growth trends and vision for future growth so as not to over burden the capability of the land. In preparation for such discussion, the Commission and staff will conduct a future build out analysis based on existing regulations and proposed scenarios.

The Town recognizes that conservation, outdoor recreation, and open space lands are increasingly important to the well being of Town residents. In order to ensure that these lands

are available for future generations, the Town will develop an Open Space Plan. This Plan will include information on the location of significant agricultural and natural resources, high priority scenic areas, potential greenways and outdoor recreational areas, environmentally sensitive lands including flood plains, and water resources.

The purpose of this Plan will not be to exclude all development from these lands but to serve as a framework for prioritizing and developing a network of interconnected open space. A program for the protection of significant features identified in the Open Space Plan by public and private means will be developed.

Existing infrastructure will not be extended if the extension will utilize resources that may be needed for the future development of the village. Regulations shall protect the property values of private landowners by maintaining Fair Haven's small town character and the safety and welfare of its residents.

The water power available because of the sharp drop in the Castleton River between River Street and the West Street bridge was one of the main reasons for the original location of the village in 1779, and now again, Fair Haven could utilize this resource with the potential to use it for the electrical needs of the community.

Balance the needs of residential, commercial and industrial development with the needs of agriculture and the need of the citizens for a comfortable, pleasing environment.

Amend and improve Zoning Regulations, possibly adding a "Downtown Commercial Zone".

Find creative ways to further the goals and the quality of life in Fair Haven.

The Selectboard, in cooperation with the Planning Commission should encourage the development of office space on the upper floors of the downtown buildings. This will utilize existing structures and plan for the future growth of existing home occupations that are in need of expansion, allow for the residents of Fair Haven to maintain their places of employment within Fair Haven as they continue to add additional employees without additional open space use.

The Selectboard, at the recommendation of the Planning Commission shall, if presented, create a Historic District.

The Selectboard, at the recommendation of the Planning Commission shall, if presented, create a Down Town Program and District.

The Planning Commission shall establish a Capital Budget Plan that supports the economical and appropriate use of the lands within the town borders.

## Transportation Plan

Fair Haven has two historic settlement patterns that have developed over the years. There is a classic down town center located in the center of town in the area of the park. The second is located at the northern part of town along VT Route 22A. The existing development pattern should continue to be in the areas designated above in such a way as to encourage efficient use of the existing transportation infrastructure.

### Inventory and Trends

For a town of its size in population and area, Fair Haven is rich in transportation advantages, both in already established systems and in potential future improvements. Some of the major advantages for the proposed growth of residential, commercial, and industrial facilities in Fair Haven are:

1. The town's location at the "Gateway" to Vermont (from New York, New Jersey, Pennsylvania, etc.) The majority of long-distance traffic entering or leaving Vermont from or to any place westerly of New England travels through Fair Haven.
2. US Route 4, a four-lane, limited-access, divided highway runs through Fair Haven from the New York State border easterly to Castleton and then to Rutland. Three exits (and entries) of that highway provide access to the town (at "Exit One" to VT Route 4A just easterly of the New York border, at "Exit Two" to VT Route 22A, and at "Exit Three" to Dutton Avenue and Scotch Hill Road). While "Exit Three" is primarily used by local traffic, "Exit Two" already brings much transient business to the area and "Exit One" is, with the State of Vermont Welcome Center and the "R.V. Center", gradually becoming a more commercially viable area.
3. VT Route 22A, which also connects us to Poultney and New York Route 22 to the south, is an especially important long-distance road as it travels north to Vergennes and Burlington. The northerly portion gets much of its

traffic from US Route 4, as people from out of state travel to northern Vermont.

4. The active, with freight and passenger service, and recently upgraded tracks of Vermont Railway run through the center of town. Fair Haven has an Amtrak stop for the "Ethan Allen" which runs between New York City and Rutland, Vermont.

5. Fair Haven has a municipal airport (only one of two municipally owned airports in the state) with a master plan approved by the FAA.

Each of these transportation elements is equally important.

The first advantage listed above is simply a fortunate fact. The second and third advantages already help to sustain business (trucking firms, two major truck stops, McDonald's, etc.) and could help our town in more ways in the future. The fourth and fifth major advantages are, largely because of our small population and limited resources, in need of development to get any real advantage for the town. There are currently plans to develop the rail service in the adjoining town of Hampton in New York State that should be supported by Fair Haven with the objective of extending this in to our town.

### **Planes**

The Town of Fair Haven owns the Air Park located at the north end of town. There has been a master plan study undertaken and completed for this facility. The results were that a longer runway would be able to improve safety significantly. This plan is on file at the Town Office.

### **Trains**

Central Vermont Railroad owns a right-of-way that cuts across the town and leases the track from the Delaware and Hudson Railroad for the track bed. There has been an effort in town to improve the Rail depot building. Currently there exists just the historic Depot. This facility has not been improved, and currently is used as a storage building by the railroad. The town does have real estate interests in the parcel next to and surrounding the depot. The town is currently allowing and maintaining this area for parking of cars for train passengers. For passengers disembarking there are no amenities such as shelter or phone services. Directions to the center of town are not provided and during harsher weather it can be remote.

### **Automotive Form of Public Transportation.**

Our town lacks public taxi service.

### **Bus Service**

Marble Valley Regional Transit District provides bus service from Fair Haven to Rutland via "The Bus". The schedule and pick up points are not well publicized and consequently this service is under utilized. This service has, at best, been at others convenience.

There is further bus service with a "will call" stop of Vermont Transit lines at the intersection of US RT 4 and VT Route 22 A in the northern commercial developed area.

### **Parking**

The Fair Haven Selectboard should adopt a traffic Control Ordinance that will delineate traffic control features within the town. In addition to setting speed limits and stop sign locations on town roads, this ordinance should establish parking regulations for town highways and municipal parking areas. The Traffic Control Ordinance should limit parking to two hours in the Downtown Business District. In addition, it should create two 15 minute parking spaces in front of the Cleaning Center and Video One. Handicapped parking spaces on the easterly side of Main Street should be clearly marked with symbol painting and signs.

### Roads and Bridges

Generally, arterial roads serve primarily to move traffic between principal traffic generators, collectors serve internal traffic movements within a town and connect it with the arterial system, and local roads provide access to adjacent land as their primary function.

The Utilities and Educational Facilities map (Map 2) depicts the transportation routes and facilities existing in Fair Haven today. Of Fair Haven's approximately 40 miles of roadway, 65% are town maintained, 30% are state maintained and the remaining 5% are maintained privately. Each town highway is classified as a major collector identified as a Class 2 town highway (8.15 miles) or a minor collector/local road identified as Class 3 town highways. (14.32 miles) The functional classifications of Fair Haven roads include a principal arterial, US RT 4; a minor arterial, Vermont Route 22A; one major collector including US Route 4; with the remainder classified as local roads.

<u>Aggregate Travel Time To Work (In Minutes, 2000</u>	<u>19.8 Minutes</u>
<u>Vehicle Miles traveled for (Non-Interstate) State Highways, 2000</u>	<u>63758.0</u>
<u>Total Number of Accidents, 1997</u>	<u>7</u>
<u>Total Property Damage caused by Automobile Accidents, 1997</u>	<u>\$18,500</u>
<u>Number of Injuries caused by Automobile Accidents, 1997</u>	<u>9</u>
<u>Number of Accidents involving fatalities, 1997</u>	<u>0</u>
<u>Lane Highway Mileage, 2001</u>	<u>0.048</u>
<u>Class 1 Highway Mileage, 2001</u>	<u>2.785</u>
<u>Class 2 Highway Mileage, 2001</u>	<u>8.16</u>
<u>Class 3 Highway Mileage, 2001</u>	<u>14.25</u>
<u>Class 4 highway Mileage, 2001</u>	<u>1.19</u>
<u>State Highway Mileage, 2001</u>	<u>10.636</u>
<u>Scenic Highway Mileage, 2001</u>	<u>0.0</u>
<u>Percent Population, which Drove Alone to Work, 2000</u>	<u>80.37%</u>
<u>Percent Population, which Carpooled to Work, 2000</u>	<u>13.56%</u>
<u>Percent Population, using Public Transportation to Work, 2000</u>	<u>0.0</u>
<u>Percent Population, which Motorcycle to Work, 2000</u>	<u>0.0</u>
<u>Percent Population, which Bike to Work, 2000</u>	<u>0.67%</u>
<u>Percent Population, Walking to Work, 2000</u>	<u>2.4%</u>
<u>Percent Population, using Other means to Work, 2000</u>	<u>1.05%</u>
<u>Percent Population, Worked at Home, 2000</u>	<u>1.95%</u>

Source: Census 2000 File 3 (SF-3)

Due to its location within commuting distance of Rutland the Town has experienced significant increases in traffic along key commuting routes. In addition to Fair Haven's growing number of residents, commuters from surrounding communities travel through Fair Haven en route to and from US RT 4. As a result, levels of service, which are used to measure the effect on capacity of current roadway conditions, are likely to decline at

major intersections within the town. A study should be commissioned to inventory existing conditions.

There are many highway bridges in the Town of Fair Haven. The Vermont Agency of Transportation (Vtrans) routinely inspects the bridges and rates them according to their condition. A Sufficiency Bridge Rating of 100 is given to a bridge in perfect condition. Bridges with ratings below 50 are considered marginal and in need of repair. VTrans is currently working to replace or rehabilitate all bridges that have a rating below 50 as State and Federal money is available.

The three Castleton River bridges are steel bridges that were built to replace those destroyed in the 1927 flood and to serve the divided highway US RT 4. All three serve as reminders of Fair Haven's past and provide important traffic calming functions along our roadways. The bridge which crosses the Poultney River on West Street into New York is scheduled for replacement in 2003. A conceptual design for the US4 / VT RT 4A intersection at Exit 1 is currently under development. All projects are contingent on funding opportunities and approval by the community.

### **Pedestrian Mobility**

**Fair Haven's sidewalk system currently serves the village area and provides access to various popular destinations including the post office, the Fair Haven Free Library, the Green, and the village commercial district. In addition to sidewalks, Fair Haven has been working on creating a trail network to provide alternative means of transportation between and among its neighborhoods and popular destinations. This issue needs to be revisited with a possible next step in this process being the Town applying for a Transportation for Livable Communities Grant to inventory existing designated pedestrian routes and to identify important linkages to enhance this system.**

The Recreation Path Committee should complete a study of potential routes for Fair Haven's section of the Vermont Trail. This trail is envisioned as being an east to west corridor that will traverse the state. Poultney is currently working on selecting a location for their section adjoining Fair Haven as is West Rutland.

## **CONCLUSIONS**

The most obvious function of Fair Haven's roadways is vehicular traffic movement. With the exception of US RT 4, however, these roadways also serve pedestrian, recreational, and agricultural machinery uses. It is a challenge to assure the compatibility of our roads for different uses that sometimes conflict.

Fair Haven's bridges add to the aesthetic and historic character of the town. They also serve as important traffic calming devices particularly at the West Street location. These bridges are nonetheless expensive to maintain and have raised concerns relating to safety. Maintenance of town roads is the second most expensive item in the annual Fair Haven budget. Substandard design and development of roads can create ongoing maintenance issues. The construction or improvement of roads, however, can adversely affect development patterns and the quality of life.

The private automobile is and will continue to be the preferred mode of transportation for most. Many would consider alternative modes of transportation if they could be safe, convenient and cost effective. Currently there is limited opportunity for Fair Haven residents to use mass transportation and limited opportunity for safe bicycle and pedestrian travel. However, planning which allows for a substantial number of potential employees and customers to live within safe and easy walking/biking distance of industry and services can alleviate their need for daily automobile transportation.

The commercial success of the village center is vital to the economic and cultural health of the Town. A key to the viability of the downtown center is the easy access to parking for patrons. Our businesses will lose customers if they cannot find convenient parking.

Making vehicular traffic flow faster, whether through modifications to existing roads or construction of new roads, can sometimes cause adverse consequences. These include increased development pressure and impacts on other road uses from speeding cars and more traffic.

There has long been talk of developing one of potentially the best landing strips in the state. However, little has been done, due to lack of funds and resources. A Fair Haven Airport Master Plan was written and is still on file in the Town Office. The airport and landing strip are gradually being improved and maintained, spending relatively small amounts each year, but constantly upgrading the facilities.

Improvement is required at the Amtrak "stop".

Continue to investigate the possibility of an inter-modal transportation facility encompassing freight and passenger traffic.

The continued development of the downtown district into a designated downtown with a centralized transportation system.

## **OBJECTIVES**

1. Alleviate traffic congestion and its impacts in the village center, while maintaining the dynamic commercial, civic and residential character of the center.
2. Make dangerous roads and intersections safer while retaining the rural and unique character of the community.
3. Minimize the traffic impact generated by new development originating either in Fair Haven or in neighboring towns.
4. Create a safe and inviting environment for pedestrian and bicycle traffic, and expand the network of pedestrian sidewalks and trails. In accomplishing this goal, we will encourage linking together neighborhoods and connecting our pedestrian system with the regional system.
5. Provide adequate parking in the Village to support the commercial center by regulating the use of existing spaces
6. Maintain the existing transportation infrastructure in a cost-effective manner and in a way which preserves the quality of life in our village and rural areas, while enabling

economic vitality in the community's commercial centers.

7. Encourage the courteous sharing of transportation infrastructure by motor vehicles, bicyclists, pedestrians and other users.
8. Cooperate with regional entities in developing regional mass transportation systems that support the character of our community, decrease traffic congestion and improve transportation opportunities for all sectors of the community.
9. Maintain gradual improvement of the airport and landing strip by spending relatively small amounts each year, but constantly upgrade the facilities in conjunction with the National Guard. Improve our air facilities as part of either a community action project or a capital budget plan, or put all airport rental fees into a airport fund.

## **IMPLEMENTATION**

1. The Amtrak Stop should have a pay phone and some protection from the elements for waiting passengers. In the long term the depot should be leased, refurbished, and possibly partially occupied by local business.
2. Establishment of a The Fair Haven Economic Development Committee is to be considered by the Select Board.
3. The Fair Haven Economic Development Committee, Police Department and Road Foreman should study existing conditions and provide a plan for adequate, convenient and safe short-term (up to 2 hours) and long-term (all day) parking in the village area, for both patrons and employees through the following measures:
  - A. The most convenient spaces should be reserved for short-term parking. Otherwise, customers will take their business elsewhere. Thus, the Town should enforce a two-hour time limit for spaces on Main Street. Employees, residents and other long-term users in the village center shall be encouraged to park in other spaces, such as near the railroad tracks on Depot Street or in the free parking lot.
  - B. The Town should maintain striping for the spaces in all Town owned lots.
  - C. The Town shall install signs directing vehicles to available short-term and long-term parking.
  - D. The Town should work with local owners of private parking lots to arrange cooperative agreements for use of available parking when not needed by the private owner.
  - E. The Town shall oppose any effort to eliminate existing diagonal parking spaces around the town green and along Main Street.
  - F. The Town will consider a Yield to Backing Cars sign on the southeast corner of Main Street.

- G. The Economic Development Committee should review the effectiveness of these measures after implementation and recommend additional steps, if needed.
4. The Selectboard and Town Manager should work with the Vermont Agency of Transportation to insure optimal traffic flows during peak hours.
  5. The Selectboard and Police Department should create and enforce regulations so that commercial trucks dropping off products to village businesses have minimal impact on traffic and pedestrians. The Selectboard and village business owners will explore an ordinance regulating delivery trucks. There may be times when business needs should take precedence over pedestrian convenience.
  6. The Selectboard and the School Board should encourage parents of Fair Haven students to use the school bus system. The Town should coordinate with the School District to make the bus system as user friendly as possible.
  7. The Recreation Path Committee and Planning Commission should support and encourage walking in the village with a continued commitment to improving and increasing the number of streets served by the sidewalk system. Current laws for crosswalks and jaywalking should be enforced.
  8. The Road Foreman and Police Department shall collect data on accidents, safety concerns, and design options at identified dangerous intersections. The Road Foreman shall also collect data on traffic volumes of major roads.
  9. The Selectboard, Road Foreman and Police Department shall review posted speed limits and consider adjusting them (or requesting adjustments for state highways) to reduce confusion and promote safety.
  10. The Town shall continue to work closely with the state and multi-town entities such as the Rutland Regional Planning Commission to examine the effects of large-scale development in Fair Haven, and in other towns, and the effects of construction of regional roads on the traffic in Fair Haven.
  11. The Planning Commission and the Selectboard shall participate in Act 250 hearings for proposals that have a significant traffic impact on Fair Haven.
  12. The Planning Commission and Recreation Path Committee shall, in appropriate cases, continue to require provisions for sidewalks, trails and user amenities for new development in the village and higher density residential districts. This will encourage pedestrian links between and among neighborhoods, public spaces and commercial areas.

13. The Planning Commission shall develop and maintain a sidewalk plan. As part of this plan the following projects shall be considered:
  - A. Establish a sidewalk at the intersection between River Street and Depot Street in order to connect the sidewalks on Depot Street and River Street and make a safe and inviting crossing from the Amtrak center.
  - B. Explore the feasibility of establishing a sidewalk between Alfred (Wooden Indian) Court, Appletree and Shaws along Route 22A and development of pedestrian facilities within the development.
14. The Recreational Path Committee should continue to develop a trail plan. The Planning Commission shall work with the Committee on this plan and related issues. As part of this plan the following project shall be considered:
  - A. Fair Haven's portion of the Vermont Trail. Complete scoping study to be utilized and discussions will continue with involved landowners.
15. The Town should concentrate investments in transportation on maintaining existing roads and bridges, as opposed to building new roads, or paving existing dirt roads. The Town shall examine the development of new roads in a broader context to include impacts on traffic flow, non-automotive user safety, existing infrastructure, development patterns, the village center and rural areas.
16. The Planning Commission and the Selectboard should work with the Highway Department in developing a five-year plan for road reconstruction, rehabilitation, and routine maintenance. To the extent appropriate items will be included in the capital program.
17. The Town shall assess the feasibility of establishing non-automotive travel when reconstructing or resurfacing roads, giving consideration to the impact of widened and improved roads on driver speed.
18. The Town shall install signage, as appropriate, that promotes the safe, courteous sharing of the roads among all users including motor vehicles, bicycles and agricultural vehicles.
19. The Planning Commission, Selectboard and Economic Development Committee shall encourage securing additional countywide public transportation alternatives. Possibilities include an AM and PM peak hour commuter bus service from Fair Haven to Burlington and from Fair Haven to Rutland, ride sharing with guaranteed ride home, car sharing, and vanpooling.
20. The Planning Commission, Selectboard and Economic Development Committee should evaluate an intermodal transportation center to include a bus station, a park and ride, transportation to the existing train station and a freight transfer station. This site should be located by the limited highway access in the isolated

lands created by US RT 4

21. The Planning Commission, and Selectboard shall attempt to identify a Park and Ride site within Fair Haven. If possible, this site should be coordinated with the intermodal center mentioned above and/or Fair Haven's need for full day or longer parking.
22. The Economic Development Committee should encourage residents to shop locally so that residents drive less.
23. The Selectboard should consider passing an ordinance regulating the use of truck engine brakes.
24. Continue to have the Agency of Transportation improve the rail/automotive interaction sights to reduce the amount of noise that is generated by train whistles.
25. Bus service shall meet the Amtrak Train for departure and arrivals providing rides to Castleton, Castleton State College, Poultney, Green Mountain College and Fair Haven points of interest.
26. Publicize and encourage use of our position at the "Gateway to Vermont" to promote commercial and industrial advantages of the town.
27. Participate actively in the Lake Champlain Byways program and consider designation as a byways community.

## **Utilities and Facilities**

### **Local Government**

Fair Haven is a chartered community with a Selectboard form of government. It is classified (by Vermont Statute) as a municipality. The legislative body, the Selectboard, consists of five members elected for a term of one, two or three years and paid a token amount. Since the merger of the village and Town, the Selectboard has been the legislative body for the entire municipality. The Town has grown significantly with the 01-02 budget reaching approximately \$1,192,650.

## **INVENTORY AND TRENDS**

Some administrative positions are paid but most are filled by volunteers. There is a full time Town Manager and a part time Zoning Administrator.

Table of Fair Haven Town Officials and Officers

### **Administrative / Financial Officials- Term**

Listers (3) Elected for three years, part-time, paid

Town Clerk (1) Elected for three years, paid



Zoning Board of Adjustment (7 ) Four year Terms

**To be Considered for formation**

Conservation Commission (7 ) Four year terms  
Economic Development Committee (7 ) Three year terms  
Recreation Path Committee (7 ) Three year terms  
Historic Resources Committee (9) Three year terms

**To be Investigated**

Development Review Board (5 to 7 full members and 2 to 3 alternates) Three year terms

**Fire Department**

The Fair Haven Fire Department is a town department under the direction of a Chief and two Assistant Chiefs who are elected by the department for recommendation to the Fire Commissioner for a one year appointment. Training is done in house and through the Vermont Training Council, funded in part by the town fire budget. All members are encouraged to keep updating their skills through county and state fire schools. The department is housed in the Municipal building with three bays for equipment and an upstairs meeting room. Equipment includes two engines, a rescue/compressed air foam truck and a brush truck. The department provides mutual aid assistance to surrounding communities.

A hydrant system serves the village area. Regular ISO inspections (Insurance Service Organization) rate the towns' protection and thereby determine the fire insurance rates. The better ratings received should keep insurance premiums down.

**Enhanced (E 911)**

The Town renamed and renumbered some of the roads that were confusing. This process was undertaken following established guidelines. Fair Haven does not have functional system in place at this time.

**Highway Department**

A road foreman, three full-time equipment operators and two part-time operators staff the Highway Department with the garage located on River Street. The department maintains approximately 25 miles of streets and highways with its current staffing levels. Future increases in responsibilities will mandate additional staffing as the community grows. The highway crew presently maintains all town highways (summer and winter maintenance) all sidewalks and water and sewer lines.

**Police Department**

The Fair Haven Police Department is staffed by a full-time chief, appointed by the Selectboard, with authorization for four additional full-time officers and any number of part-time officers. Three part-time officers and a part-time administrative assistant are currently employed. The Police Department is housed in the Municipal Building. The department has three vehicles at its disposal.

In the fall of 2000, a study was completed by members of the Selectboard and the Fair Haven

Police Department to examine issues related to police officer retention. The following were identified as factors contributing to the lack of long-term officers in Fair Haven:

- below average salaries,
- insufficient staffing ( full-time, recommended based on national standards and current population),
- extended work hours,
- minimal benefits.

As a result of this study, the Town approved as part of the budget an increase in pay of the officers hourly rate and an increase in the starting wage for officers to better reflect county averages. The department received a grant from the Department of Justice in September 2000 for the hiring of a full-time officer. This grant covered all wages and benefits for three years , with the Town committed to paying for one additional year when the grant expires.

### **Fair Haven Rescue Inc.**

Fair Haven Rescue Squad, Inc. (FHRS) formed in 1970 is a non-profit, non-municipal, 501(c)(3) organization. Its mission is to provide high-quality, pre-hospital emergency care to the sick and injured and to prevent illness and injury through community education.

FHRS provides ambulance service to the Town of Fair Haven and the surrounding towns of Benson, Hubbardton, West Haven and Low Hampton (NY). The total coverage area is about 125 square miles with a total population of about 5100.

FHRS is licensed at the Paramedic Level by the Vermont Department of Health, Emergency Medical Services Division. The business office and ambulance garage are located at 17 Prospect Street in Fair Haven. This ambulance service currently has two ambulances with plans to purchase a third ambulance in 2004.

The FHRS Board of Directors hired a full-time administrator in November 1999 and the service changed from a mostly volunteer organization to a 24/7 paid service in July 2000 in order to meet the significant increase in call volume. Paid staff includes one full-time EMT-Intermediate Administrator, one full-time Paramedic Field Supervisor, two full-time EMT-intermediate staff members (with plans for adding a third full-time advanced level staff member in 2003, 23 part-time EMT-Basics, EMT Intermediates and paramedics and 3 EMT student volunteers.

The services relies heavily on financial support that comes primarily from medical and automobile insurance reimbursement, followed by tax support (around 7 percent of the total income), families that join the annual membership (subscription) drive, and a variety of fundraising efforts and private donation. Despite the fact the EMS crosses all age barriers and disease or injury systems, federal and state agencies still have not recognized the need to provide funding assistance to ambulance services. Expenses increase significantly yearly due to rising costs of workers compensation insurance, fuel (building and ambulances), medical supplies, vehicle/building repairs and maintenance.

Annual calls have doubled since 1997. Total call for the last license renewal period were 763. Types of calls the EMS staff of FHRS respond to include: allergic reactions, cardiac arrest, chest

paid, congestive heart failure, diabetic emergencies, domestic emergencies (depression and suicide), respiratory emergencies, seizures, unresponsive patients, and non-emergency transports for area nursing home patients, as well as patients returning to their home from the hospital.

FHRS is a member of Vermont Ambulance District #10 (Rutland County). Per county mutual aid agreement, FHRS provides coverage to towns served by Poultney, VT Rescue Squad, Inc, Skenesborough NY EMS, Granville NY Rescue Squad, Inc. and Regional Ambulance Service (VT). These services also provide mutual aid coverage to Fair Haven Rescue when FHRS is on a call or there is a mass casualty incident. Air ambulances (helicopters) are also available from Dartmouth-Hitchcock Medical Center (DHART) and Albany Medical Center (Med Flight) for catastrophic events. Six landing zones have been earmarked throughout the FHRS coverage area.

The continued survival of Fair Haven Rescue Squad is vitally important to the Town of Fair Haven. The lack of an ambulance service would have a devastating effect on residents and non-residents of the community due to the extended response and transport time from other area ambulance services. Average response time out of the building is about three minutes; average on-scene time to most locations in Fair Haven is about 5 minutes; average transport time from most locations in Fair Haven to Rutland Regional Medical Center (RRMC) is about 25 minutes.

Regional Ambulance Service, located in Rutland VT covers the Town of Castleton and has about a 20 minute response time to Castleton from Rutland and then 20 minutes again to transport to RRMC. If the Towns of Castleton and Fair Haven were able to work together, the two towns would be able to vastly improve the response time for the residents and non-residents of Castleton, as well as continue a vital service for Fair Haven. The national trend for EMS ambulance services is to regionalize ambulance companies. Other surrounding towns may also want to participate in this arrangement for their mutual benefit. Better coordination of EMS personnel, ambulances, and equipment/supplies will assure that patient care comes above all.

## **Recreation**

Recreational activities and facilities within the Town of Fair Haven are organized and maintained by the nine-member Recreation Committee. This Committee coordinates recreational programs and oversees maintenance of the Town Green.

Several improvements have been made to the recreational facilities in the past five years including the addition of permanent dug outs, baseline fencing on two of the ball fields, construction of a restroom / concession building, and installation of new playground equipment. Each of these projects was funded largely through private donations and constructed with volunteer labor.

Current and future projects include construction of an ice rink on the Green, tennis court at the Louis Faryniarz Playground, a teen center and planning for suitable open spaces (ballfields, playgrounds) in higher density residential areas.

Other private facilities require fees for their usage or have established easements related to certain uses (i.e. VAST trails). Fair Haven also supports an active hunting and fishing

community that enjoys the quality of publicly accessible forests and streams, as well as the generosity of private landowners allowing the use of their lands. Hunting and fishing are traditions for many residents, and can serve as an integral part of wildlife management. These activities also attract a number of visitors to the town.

### **Currently Utilized Recreation Sites Publicly Owned Sites and Amenities offered**

Louis Faryniarz Playground (behind grade school):

Ballfields, playground equipment, basketball hoops, concession stand and bathrooms.

Fair Haven Union High: Note: These facilities are for use for high school sports only.

ballfields, track, amenities within the school building

Glen Lake:

Hiking, mountain biking, snow-shoeing, public beach, fishing, and bathing

Airport Picnic Area Facility

This area was rebuilt by the Vermont National Guard and includes a complete up to date kitchen, restrooms and picnic tables.

### **Privately owned sites - Activities**

Glen Lake: Canoeing, skating, picnicking, bird watching, fishing

Poultney and Castleton Rivers: Swimming, picnicking, hiking

VAST Trails Snowmobiling Trail under power lines

The North Woods: camping, picnicking, archery, snow-shoeing, hiking.

### **Library**

The Fair Haven Free Library was established in 1889 and is currently housed in a renovated building now owned by the Library. The staff includes a full-time librarian who is paid by the town, and many of volunteers.

The library has two computer terminals that provide public access to the Internet. In addition to the ongoing operational activities, the library's major project is renovation of the basement floor in the summer of 2004. Schematic drawings have been completed, and funding is progressing. During 1999, the Friends of the Library, a non-profit group was formed and works in partnership with the Library trustees to raise funds for renovations.

### **Municipal Water and Sewer Systems**

The village is currently served by a municipal water system. It is a treated, surface water feed from Inman Pond with a 1,000,000 gallon storage capacity and serves approximately 860 structures comprising individual units.

Approximately 290,000 gallons are processed daily, equaling 29% of the total (storage) capacity.

The village is also served by municipal sewage treatment. The plant serves the same area served by the water system. The system was expanded along Airport Road to cover the remainder of the homes in the service area.

Approximately 263,000 gallons are treated per day, equaling 53 % of the plant's capacity. Water and sewer system capital improvement funds are in place, historically funded, in part, by a \$16.99 surcharge on a users bills. A fund target amount has been established of \$218,664 for

water and \$268,455 for sewer.

**Fair Haven Water Supply**

	<u>01/02</u>	<u>02/03</u>
Average gallons used GPD	290,000	290,000
Reserve Capacity GPD	1,000,000	1,000,000
Number of metered customers	885	885

Source: Fair Haven Water & Sewer Department

**Fair Haven Sewer**

	<u>02/03</u>
Design GPD	500,000
12 Month Average GPD	256,783
% of Capacity	51.2%
Reserve GPD	243,217
Committed GPD	216,383
Uncommitted GPD	206,497
Number of sewer customers	810

Source: Fair Haven Water & Sewer Department

**Fair Haven Water System**

**Water System Service Area Water Source Protection Area, an ordinance governing the water/sewer district of the Town of Fair Haven was promulgated in and is on file in Town Clerk's office. It specifies required uses in the service area, the requirements for hookups, states that all expenses are the responsibility of the user and states the power and authority vested in the inspectors.**

In 2002 an ordinance was adopted for the allocation of future hookups depending on use, consumption and other criteria. Transfer of the ownership and management of the Fair Haven Village sewer/water system to the Town of Fair Haven accompanied the merger of the Town and Village in 1954. Transfer was subjected to all indebtedness and liabilities and placed the District under control of the Selectboard. The Selectboard has the authority to appoint three to five water and sewer commissioners or to constitute themselves as the Board of Commissioners. In either case, they have the responsibility of overseeing the operation of the system and establishing rates and charges. At present, the Selectboard has chosen to serve as Board of Commissioners.

Day to day operation is the responsibility of the full-time paid superintendent and two full-time assistants. The Selectboard has the authority to designate areas of town as special water and sewer system districts if approved by a majority of all voters residing in the proposed district at a special meeting. The Water and Sewer Commission has the authority to specify an annual service tax to cover all expenses related to the system. These moneys cannot be used for any other purpose. The municipal water and sewer systems are an asset to the town not available in many surrounding communities. At the same time they may become a financial burden to current users if the excess capacity is not reduced. In 1996 according to Rutland

Land Trust, Fair Haven was the only town in Rutland County to have all habitable structures equipped with indoor plumbing.

**REPORT OF UNCOMMITTED RESERVE HYDRAULIC CAPACITY**

Design/Permitted Flow: 0.5000 M.G.D. . . . . . 500,000 G.P.D.

12 Month Flows (M.G.D.)

Average Gallons Per Day	
7/02-----	298,100
8/02-----	284,029
9/02-----	260,737
10/02----	262,139
11/02----	295,620
12/02----	282,126
01/03----	279,974
02/03----	307,343
03/03----	285,413
04/03----	295,223
05/03----	292,558
06/03 ---	288,757

12 Month Average Flow (66% of Design). . . . . 292,524 G.P.D.

Reserve (Design Flow less 12 Month Average Flow) . 167,667 G.P.D.

Commitments Against Reserve (projects for which approval for connection has been given but connection to municipal sewer has not been completed)..... 17,545 G.P.D.

UNCOMMITTED RESERVE HYDRAULIC CAPACITY . . . . . 150,122 G.P.D.

M.G.D. - Million Gallons per Day

G.P.D. - Gallons per Day

NOTE: Uncommitted Reserve Hydraulic Capacity is one of several criteria for approval of new connections to a treatment facility. Please refer to the Agency Policy on Connections to Wastewater Treatment Facilities dated July 24, 1989 for additional information.

REFERENCE: Agency of Natural Resources - Wastewater Management Division. (9/10/96)

**Other Public Water Supplies**

In addition to the municipal water supply, public water systems are maintained privately by either a homeowners association or by individual owners of wells. The State of Vermont Water Supply Division requires routine inspection of existing community systems.

**Private Sewage Disposal**

All development outside of the municipal sewer system relies on sub-surface waste disposal systems: i.e. septic systems. Fair Haven updated its ordinance, which sets local standards for septic system design, construction and maintenance. Statewide wastewater regulations also apply. A failed septic system is a health hazard, as untreated sewage may flow onto the ground and pollute surface water or wells. Failures can be estimated by subtracting the total number of

new residential construction permits from the number of septic system permits. Using this formula, Fair Haven residents have replaced an average of 3 systems a year since 7/1/99, with a range one to three to per year.

Many replacements occur when properties are being sold, as buyers are made aware of potential problems or are advised by their realtors to have a septic system inspection prior to purchase. As a rule, a properly designed and installed disposal system generally lasts 10 to 20 years. However, a properly maintained system in well-drained soil could last decades. Failed systems are predominantly caused by deterioration of materials used in the original construction; improper construction techniques; expansion of the use beyond the capabilities of the original wastewater disposal system; and lack of maintenance.

Lack of understanding of the chemistry and mechanics of septic systems by owners and tenants is also a contributing factor to premature failure of systems. Prime candidates for failures are systems built on lots that do not meet the minimum standards for on-site wastewater disposal. These include lots created before January 18, 1986 and lots that did not require a wastewater permit (lots over 10 acres or built prior to permit requirement). A cursory analysis of the data suggest that more systems fail and are replaced during wet years than dry ones, implying that the potential number of failures could be significant and many marginal systems are still operating.

### **Solid Waste**

Fair Haven is a member of the Solid Waste Alliance Communities (SWAC). The town operates a transfer station on Fair Haven Avenue which affords Fair Haven and West Haven residents many recycling options, hazardous waste collection days, a computer recycling program and accepts tires and large appliances for a small fee. In addition to individual trash removal and recycling by residents, some employ private haulers to remove household refuse. However, the local haulers do not separate recyclable. With the escalating cost associated with the disposal of municipal solid waste, all residents and commercial haulers must be encouraged to recycle and reuse to reduce the waste stream.

### **Post Office**

The United States Postal Service occupies the Post Office building on Marble Street. In addition to the postmaster, the Fair Haven Post Office employs three clerks, three rural carriers, two substitute rural carrier associates and one highway contract carrier.

There are three rural carrier routes originating from the Fair Haven Post Office and one highway contract. The Post Office offers 296 post office boxes in the lobby, of which 244 are currently rented. The lobby and window service is available during normal business hours. The office accepts credit and debit cards for payment. The office serves a steady stream of customers from Fair Haven, West Haven and Benson.

### **Cemeteries**

There are three cemeteries in Fair Haven. Two are owned and managed by the town. One, located on West Street is inactive, the other located at the end of Cemetery Street recently expanded to handle future burials. The third cemetery is owned by the Catholic Church and is

located on Washington Street. The Selectboard serves as Cemetery Trustees and manage all town cemeteries.

## **CONCLUSIONS**

Fair Haven's municipal water and sewer systems are under utilized, which drives up the cost for users.

Attracting and retaining police officers is hampered by wages that are not competitive with those of neighboring communities. Because of limited funds the Fair Haven Police Department is staffed below national standards.

The Town has reached a size and complexity where the most appropriate form of Town governance needs to be reexamined. It is difficult to attract volunteers for town committees and emergency services. The people who currently volunteer give freely of their time and should be commended.

The Fair Haven Free Library does not have adequate space.

The town office building has empty space created by the departure of the Addison Rutland Supervisory Union Central Office. This space should be utilized to relieve cramped space of some of the existing town offices and for the creation of an adequate meeting room.

The Selectboard should adopted a re-treatment program, which addresses all town paved roads and places them on a schedule for reconstruction and overlays. A similar schedule for the upkeep of gravel roads should be adopted.

## **OBJECTIVES**

Ensure continued maintenance of public records securely and efficiently, and in a manner that assures convenient access.

Provide adequate police and fire services throughout the town and in cooperation with neighboring communities as appropriate.

Provide and maintain safe recreational facilities and programs. .

Provide an excellent library for Fair Haven residents.

Provide and maintain adequate sewer and water services at reasonable rates.

Provide adequate cemetery facilities.

Continue membership in Solid Waste Alliance Communities.

Assure that the Town has an up-to-date emergency management and rapid response plan.

Continued support of the Fair Haven Ambulance Service with expansion into

Castleton and the Medical Center to provide more expedient emergency medical care to the Community as a whole.

Ensure an effective and efficient Town government including assurances that voluntary town committee and service positions will be filled.

Ensure that the Town Plan, Zoning Regulations, and all other local ordinances are up-to-date and compatible.

Ensure that The Town of Fair Haven has a Confirmed Planning Process and Town Plan that establishes a living document that is updated at least every two years.

## **IMPLEMENTATION**

Members of town committees and staff will promote volunteerism and recruit to fill vacancies as appropriate.

The capital budget will be updated annually by the Planning Commission with input from each affected entity.

The Planning Commission shall produce a water rate and costs survey of the surrounding towns so that a reasonable rate for water and sewer may be established. Water and sewer rates are established as the operating budget dictates to cover the cost of actual operation.

The Fair Haven Free Library Trustees will oversee the completion of the capital campaign to fund library expansion.

An Economic Development Committee shall be created by the Select Board.

The Economic Development Committee and Planning Commission will develop and implement recruitment plans for commercial expansion within the village to best utilize sewer and water capacities.

The Selectboard shall appoint a committee to research and develop an overall water resources plan for the Town by fall 2005. This plan shall include evaluation of alternative models for allocation of public sewer and water costs.

The Cemetery Trustees will monitor projected space needs, new site requirements, and the policy for selling plots to non-residents.

The Town Manager will maintain an up-to-date emergency response plan.

The Selectboard will periodically review the roles and responsibilities of town departments, boards and committees and consider alternative models for town government.

## **Natural Resources**

### **Cultural Resources**

Fair Haven has a rich heritage of using its natural resources for the overall good of the community. The use of water power was one of the primary reasons for the location of the town in 1779. The forest, lands, and rivers have supported slate quarrying, agriculture and industry for two centuries and yet the town has maintained its rural atmosphere and way of life. Rock formations in the area are important to Vermont geologists.

Fair Haven is a town with many and varied natural resources, among them diverse wildlife habitats, working farms and forests, unique shoreline environments and outstanding natural beauty. Our town's location in the Western part of Rutland County places us in an area noted for some of the richest habitat diversity in all of Vermont. The Poultney River and its wide, fertile floodplain provide many ecological, economic and aesthetic benefits of their own. All told, the quality of life Fair Haven residents enjoy and have stated they want to protect is closely tied to the quality of the town's rural character and natural resources.

## Inventory and Trends

### Natural Resources

<a href="http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=LAND&amp;Call_Program=INDICATORS">http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=LAND&amp;Call_Program=INDICATORS</a>	17.64
<a href="http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=WATR&amp;Call_Program=INDICATORS">http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=WATR&amp;Call_Program=INDICATORS</a>	0.49
<a href="http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=PCON&amp;Call_Program=INDICATORS">http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=PCON&amp;Call_Program=INDICATORS</a>	13.8%
<a href="http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=CNAC&amp;Call_Program=INDICATORS">http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=CNAC&amp;Call_Program=INDICATORS</a>	1612
<a href="http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=CFAC&amp;Call_Program=INDICATORS">http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=CFAC&amp;Call_Program=INDICATORS</a>	0
<a href="http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=CSAC&amp;Call_Program=INDICATORS">http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=CSAC&amp;Call_Program=INDICATORS</a>	1102
<a href="http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=FD7090AC&amp;Call_Program=INDICATORS">http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=FD7090AC&amp;Call_Program=INDICATORS</a>	21.1
<a href="http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=FN7090AC&amp;Call_Program=INDICATORS">http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=FN7090AC&amp;Call_Program=INDICATORS</a>	13.6
<a href="http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=ND7090AC&amp;Call_Program=INDICATORS">http://maps.vcqi.org/indicators/cfhome/metadata.cfm?Geo=Town&amp;mp;itemName=ND7090AC&amp;Call_Program=INDICATORS</a>	5.3

Source: Vermont Center for Geographic Information-VT Indicators Online

### Water Resources

Fair Haven is located within three watersheds, or drainage basins, the Poultney River watershed, the Castleton River watershed and Inman Pond watershed. The first watershed encompasses roughly two thirds of the town and receives drainage from those areas of town. The Castleton River watershed collects water from uplands surrounding the Castleton River and Inman Pond watershed contains portions of Fair Haven in the vicinity of Glen Lake.

### Surface Waters

Fair Haven's major natural resources include Inman Pond Reservoir, the Inman Pond Watershed area, Town Forest, State Forest, the Castleton River, the Poultney River, Mud Brook, Old Marsh Pond, Cedar Swamp and the westerly side of Glen Lake. Water quantity and quality is one of Fair Haven's most valuable resources. The Poultney River was designated as an

Outstanding Resource Water on February 14, 1991 by the State of Vermont, Water Resources Board pursuant to 10 VSA 1424a.

There is an abundance of water in Fair Haven. The Poultney River runs along our westerly boundary, which is also the easterly line of New York State. The Castleton River flows over three falls near the middle of town and then in to the Poultney River. The falls were once a source of hydro-power and the main reason for the original location of the town. Some or all of these falls may yet be useful as a source of electricity for the town. Both the Poultney River and the Castleton River are trout waters, and since their banks are in many places somewhat inaccessible, several species of fish and other wildlife thrive there. "Mud Brook" is located wholly within the town of Fair Haven, and also flows into the Poultney River. Fair Haven has some shoreline on the southwestern portion of Glen Lake, which has few cottages accessing its shore. In 1974 the State of Vermont purchased about 2300 acres of land in Fair Haven southerly and westerly of Glen Lake.

### **Ground-water**

Ground-water is a critical resource for the health and well-being of Fair Haven residents. Statewide all residents obtain their water from public and private wells and springs. The most significant quantities of ground-water are found in aquifers, which are geologic formations that have the capability to store, transmit and yield useful quantities of water to a well or spring. Land through which water percolates to become ground-water is called a recharge area. Recharge areas and ultimately ground-water can become contaminated by many sources, including improper disposal of household and industrial waste, inappropriate use of pesticides and fertilizers, excessive road salting and failing septic systems.

Ground-water can also be contaminated by naturally occurring substances including radioactivity in deep layers of bedrock and decaying plant and animal matter in areas closer to or on the surface.

Similarly, over-development can deplete ground-water resources by increasing the amount of impervious cover and preventing infiltration of water underground. In Fair Haven, the importance of ground-water to the health of Town residents, present and future, makes protection of ground-water resources a top priority. Higher quality water is also less expensive to treat.

The State's Agency of Natural Resources, Water Supply Division has mapped all source protection areas in Fair Haven. These are areas surrounding public community water supplies. There is one public water system active in Fair Haven at this time. It is a surface water treatment plant comprising the Fair Haven Municipal System serving the village center and some of the surrounding town.

### **Riparian Areas**

Riparian areas are strips of land on either side of a stream, river, pond, lake or wetland. In Vermont the ideal riparian area should consist of a mixture of grasses, trees and shrubs, as occurs naturally. Riparian areas have special value due to the many important functions they provide and resources they protect. For example, trees, shrubs and grass growing in these areas

serve a vital function in maintaining water quality and protecting soils. Acting as buffers, riparian areas effectively treat silt, fertilizers, pesticides and livestock wastes before these pollutants reach surface waters. Roots in the banks bind the soil, reduce erosion and protect human property. Riparian areas also give floodwaters room to spread out, slowing down their flow and reducing erosion and property damage. Shade provided by a forested canopy keeps stream water temperatures cool during hot summer months.

Trees and branches, which enter the water, are important habitat components for fish and aquatic organisms, as are undercut banks maintained by root systems. Naturally vegetated riparian areas provide important habitat and travel corridors for a wide variety of birds, mammals, amphibians and other terrestrial flora and fauna.

To serve their many protective functions, riparian zones need to be vegetated to an adequate width, which varies depending on the physical and biological nature of the surface water and surrounding land.

### **Wetlands**

Fair Haven has multiple mapped wetlands such as "Cedar Swamp" southerly of the village and between VT Routes 4 and 22A, which have significant and special qualities.

Wetlands are areas that are inundated by surface or ground water with a frequency sufficient to support vegetation or aquatic life that depend on saturated or seasonally saturated soil conditions for growth and reproduction.

Wetlands contribute to protection of surface and ground water quality, recharge ground water aquifers, and control erosion by binding and stabilizing soil. In addition, wetlands provide necessary fish and wildlife habitat, may contain rare and endangered flora and/or fauna, may represent a rare or outstanding wetland community type and provide opportunities for recreation, education, research, and aesthetic enjoyment.

The Vermont Water Resources Board uses a three-tier system to classify wetlands for protection. Class One and Class Two wetlands are considered significant as determined by the degree to which they carry out the above-described functions and are protected by the Vermont Wetlands Rules.

Class Three wetlands are those wetlands that have not yet been evaluated or those not considered significant when last evaluated.

### **Floodplains**

A floodplain is a defined area, usually bordering a lake or river that is subject to flooding. The 100 or 50-year flood levels usually determine floodplain borders. A 100-year flood is one that has a 1 in 100 chance of occurring in any given year. Floodplain boundaries are determined by the Federal Emergency Management Agency (FEMA) The Floodplain Map is on file at the town office.

In all cases the width and shape of floodplains are defined by the topography surrounding the

specific area in question. Floodplains not only reduce the severity of flooding but also provide wildlife habitat and serve as corridors for animal movement. They also represent some of the richest and most viable agricultural land in Fair Haven because of a concentration of alluvial deposits left by past floods.

### **Soils**

Fair Haven is comprised of two types of Soil:

- those formed from water deposited material in the Champlain valley
- those formed in the Green Mountains and the foothills

For more detailed information, the reader is referred to The Soil Survey of Rutland County, Vermont prepared by the United States Department of Agriculture, Soil Conservation Service (now Natural Resources Conservation Service). The report can be found at their office in Rutland, Vermont. This publication contains maps that show the extent and location of the different soil types.

### **Sand and Gravel Deposits**

Sand and gravel deposits are important natural resources. Utilization of these resources is often hindered by land use regulations and by public attitudes toward sand and gravel extraction. Identification of the highest quality sand and gravel deposits as part of the town planning process should help to avoid conflicts in the utilization of these resources in the future.

### **Natural Areas**

Natural areas are areas of land or water, which are or contain unique resources. These areas are irreplaceable sites with their own special character, permanence, vulnerability and management considerations. They include wetlands, ponds, critical wildlife habitat, rare or vanishing flora and fauna, outstanding natural communities, and geological formations.

### **Geological Features**

Fair Haven's geological features, including hills and ridgelines, are an important part of the town's heritage and provide recreational and aesthetic enjoyment, educational and research opportunities, and protection of immediate and surrounding natural resources. Some of these hills and ridgelines are characterized by steep slopes, which are generally defined as slopes in excess of 45 percent. Disturbance of steep slopes can result in soil instability, slumping and erosion, conditions that can degrade surface waters and threaten human life and property.

### **Wildlife Habitat**

Fair Haven offers a diverse array of wildlife habitats. Many parts of Fair Haven still see relatively little human use, allowing flora and fauna to exist and interact in naturally functioning, complex communities. In particular, the town is home to otter, fisher, mink, and moose. Animals high on the food chain and who require large and varied areas to survive and who therefore are indicators of the overall health of the local ecosystem.

Deer wintering habitat consists of areas with pure softwood or mixed softwood and hardwood cover at low or middle elevations with south or west facing slopes and lacking human disturbance. These areas are critical to deer during the winter months because they provide

relief from harsh winter conditions.

Certain Fair Haven streams support populations of native trout, which are excellent indicators of a healthy aquatic environment. Native trout are extremely sensitive to increases in sedimentation and temperature that may result from incompatible land use activities. Some local streams are also home to stocked fish.

### **Flora, Fauna and Natural Communities**

Fair Haven is also known to be home to certain rare species and natural communities -- species or communities that are restricted in occurrence relative to other species or communities, or that may have declined significantly due to natural or human-induced causes.

The largest unbroken wooded area in town is in what is known as the "North Woods", and involves roughly the northeasterly quarter of the town. Again there is much water there, including Inman Pond (our local water supply), the Howard Dam, the Sheldon Dam, and Old Marsh Pond ("The Marsh" locally). Also located in the "North Woods" is a very fragile "den", one of the only two presently viable habitats known to exist in the state, of timber rattlesnakes. Relatively few are ever sighted (and then never near the village), and their natural camouflage and ability to avoid people, even while gathering the sunlight so much needed for their survival, is probably the reason for their survival thus far. Until the early 1970s towns people hunted them for state bounties, and there seems to be much local prejudice, largely based on unfounded fears and ignorance of the snakes biology and habitat, against them. Local people, and for that matter everyone else, should be encouraged not to kill the remaining snakes, but to try to preserve this denning area near the very northern extreme of the snakes habitat. While the unusual coloring of the local snakes does not make them a subspecies, they do seem to be an endangered species in Vermont.

### **Scenic Views**

Two major features dominate Fair Haven's landscape: the foothills of the Green Mountains and the Poultney River Valley. Much of Fair Haven's rural character and appeal results from the scenic vistas that can be observed in many parts of the town and include an interplay of villages, mountains, forested hills, unbroken ridge lines, farms, fields, rivers, streams, ponds and wood lands. Fair Haven is also fortunate to have many tree-lined streets in its village and along its outlying roads. Trees provide shade, beauty and habitat; can serve as food sources, and reduce air and noise pollution. They also can increase property values as much as 10%. Species in Fair Haven include the stately sugar maple.

### **Air Quality**

There are a number of significant sources of air pollution in Vermont. The biggest source is the automobile. Several steps have been taken over the last years to improve the emissions from automobiles nation wide. However, while the controls have reduced the amount of pollution from each vehicle, the number of vehicles on Vermont roads and the number of miles they travel have increased dramatically. Although fuel-efficient vehicles are in popular use it is hoped that alternative energy sources will become available in the future. The increase in vehicles and road miles is a trend that is expected to continue into the foreseeable future.

Another source of air pollution still common is trash burning. Although illegal, people continue to burn trash as an alternative to paying for it to be put in a landfill. As air pollution is better understood, it has become clear that the uncontrolled open burning of trash and debris is an environmentally unsound disposal method posing both immediate and long-term health risks.

The United States Environmental Protection Agency has required each state to measure its ambient air for six criteria. Ambient air refers to air that is not directly at the source of pollution, but the air we breathe in neighborhoods, on farms, and in the market place. These six pollutants are; particulate matter, sulfur dioxide, carbon monoxide, nitrogen dioxide, ozone and lead. These pollutants are by no means the only harmful one. In fact, the Vermont Air Pollution Control Division monitors the ambient air for several hundred pollutants, but the six pollutants listed are considered the most common.

Smoke from wood stoves and fireplaces contain high levels of several pollutants, including toxics and carcinogens. Woodstoves in general, annually produce twice as much Nitrogen Oxide as any other residential heating sources, four times as much volatile organic compounds, one hundred twenty times as much Carbon Monoxide, and one hundred fifty times as much particulate matter. In fact, woodstoves may account for more air pollution in Vermont than manufacturing industries.

The newer generation woodstoves now available and equipped with catalytic converters or other technologies, together with the use of dry wood, can significantly reduce these pollutants.

## **CONCLUSIONS**

According to the Vermont Forum on Sprawl, land is now being consumed in Rutland County three times faster than the population is growing. A key natural resource issue confronting Fair Haven is the pace at which open land is being converted into large, widely distributed, multi-acre lots.

New technologies and changing regulations for septic systems could open more parcels for development and lead to a greater loss of open land.

Greater affluence enables more people to consider clearing land and building houses on hillsides, ridgelines and other remote parcels once assumed to be safe from development. Economic pressures threaten sustainable farm and forest industries. We cannot assume that farmers, other large landowners or their heirs will continue to keep their properties intact, despite the many natural, aesthetic, economic and other benefits those properties give to our town. With little economic prospect for residents to keep up with inflation, out of area purchaser will continue to acquire land and real estate in this area at what is considered bargain basement prices.

Development and fragmentation of open lands is likely to increase pollutants, decrease water quality, and impact wildlife habitat.

Threats to the quality of Fair Haven's groundwater include: disposal of household and industrial waste, inappropriate use of pesticides and fertilizers, excessive road salting, and

runoff from hard surfaces such as roads and parking areas. In addition, groundwater resources may be depleted where over-development increases impervious cover and decreases filtration.

Development of open land may reduce outdoor recreation alternatives.

It's becoming more expensive to purchase and maintain open land.

Fair Haven does not have a plan to protect its ridgelines from development.

Scenic views are extremely important to town residents, but they are increasingly threatened by factors ranging from increasing residential development pressures to the potential construction of wireless communications towers. The next generation of wireless communications maybe satellite and the need for sun-setting of existing tower sights is something that Fair Haven may need to consider.

Fair Haven contributes to air pollution through car emissions, wood and trash burning and other activities.

## **OBJECTIVES**

Encourage the conservation of land for forestry, farming, natural resource functions, and recreation.

Promote a viable agricultural sector as a way to maintain open spaces and natural resources on private lands.

Educate residents as to the effect of human activities on Fair Haven's natural environment and human health.

Focus development in suitable areas and promote rates of development and methods that minimize impacts on Fair Haven's natural resources.

Research current and evolving strategies for the protection of natural resources. Maintain high air quality standards for current and future residential, commercial and industrial development.

Ensure that air quality standards are fairly and equitably applied to existing residential, commercial and industrial development, and not just to new residential, commercial and industrial development.

Wetlands and waterways should be protected against unreasonable incursions, in hopes that they may be enjoyed by future generations in much the same state.

The Town should keep apprised of the State's plans for lands and should request the right of first refusal if the State ever decides to sell land within the Town of Fair Haven.

Every effort should be made to preserve the Timber Rattler denning area, as the snakes have

never been known to do much damage, even though they are the source of much local legend.

Fair Haven should pursue all available avenues, both public and private, to preserve the Timber Rattle Snakes.

Relate development to potential pollution of off-site public and private water supplies. Investigate a mechanism and funding source for possible municipal acquisition of land either for public use or for species protection.

Encourage the use of the falls on the Castleton River for hydro power.

Residential, commercial, and industrial expansion should be compatible with the above long range goal that will enhance our quality of life, encourage local employment and improve our tax base.

## **IMPLEMENTATION**

A Conservation Committee should be considered by the Planning Commission to help in determining the current and potential status of land use, identify threats to Fair Haven's natural resources, and develop plans for the preservation of these resources. This process must seek extensive public involvement in the creation of inventory maps to identify natural resources and potential sites of development and the development of an open space plan.

The Conservation Committee, Selectboard, Town Manager and Zoning Administrator will collaborate with local conservation and state agencies, and Fair Haven property owners on the promotion, enforcement and adherence to environmental regulations that protect water quality, wildlife and other natural resources and to conserve agricultural and natural areas. Efforts should be made to obtain funding and support for these purposes, including a Conservation Fund, if approved by voters, to provide seed money for conservation efforts.

The Fair Haven Economic Development Committee, Planning Commission and Conservation Committee should work with farmers, conservation groups, state agencies, legislators, and local businesses to develop marketing strategies and support sustainable agriculture, green industries and enterprises

The Planning Commission will design zoning and subdivision regulations in accordance with state and federal laws to protect croplands, water resources, scenic sites, wildlife habitat and other natural resources. The process of reviewing and modifying these regulations will include extensive public input. The Recreation Path Committee and Conservation Committee will sponsor educational programs to foster appreciation of Fair Haven's natural resources.

The Selectboard shall support regional, state and national policies that promote the goals of the town plan.

The Planning Commission will develop specific regulations to require appropriate riparian buffers of natural vegetation to minimize the environmental impacts of future development. The Conservation Committee, Town Manager and Road Foreman will demonstrate best

practices for town owned and controlled property by developing and applying conservation measures, such as using native species for landscaping, controlling roadside erosion, and assuring that the use of town owned land will not damage natural resources.

The Planning Commission shall recommend an overlay district to protect ridgelines. The Planning Commission will monitor the status of state septic regulations, analyze (through build outs, mapping, and consultation with owners of potentially affected property) the effects of changes on potential development patterns, and recommend changes in zoning or subdivision regulations where appropriate to retain the character of the Town.

Ensure that new development and land use activities do not create undue adverse impacts, directly or indirectly, on air quality, as measured by applicable air quality regulations.

Provide to the degree practical and appropriate, attractive alternatives to the use of the automobile, including sidewalks in the business district, bike paths and bus transportation.

Minimize pollution from automobile traffic by providing an efficient and convenient system of roads.

Encourage proper installation and maintenance, of heating, processing, manufacturing systems, and other potential generators of air contaminants

The Town should request, and obtain, the right of first refusal from the State of Vermont for the woodland near Glen Lake.

Relate growth rate to the capacity of the following resources and encourage development that will protect them.

1. protect wildlife habitats
2. woodlands
3. conservation areas
4. water resources
5. mineral resources
6. solar energy resources
7. agricultural resources
8. aquifers
9. natural areas through private and/or public property actions

Encourage development of hydro-electric power for use within the Town.

## Policies on Preservation of Resources

This is a statement on the preservation of rare and irreplaceable natural areas, scenic and historic features and resources for the town of Fair Haven. Most of these policies have been stated in other section of the plan and will therefore not be repeated here but rather referenced. The Referenced section is not meant to be restrictive, definitive or exclusive of other parts of the entire plan for the Town of Fair Haven. The policies put forth in this section are to be part of the policies as stated in the plan's entirety.

Furthermore the policies stated in this section are not the complete and final statement of the policies of the Planning Commission. The Commission reserves that right for itself and may make or promulgate such policies as it sees fit at any time. The planning process is a continuous process that will change and be redefined in a manor that is faster then the governmental process allows for in the written form of this plan and as such the sitting planning commission has the final authority as to it's policies and procedures. These policies should be clearly defined in the minutes of the Planning Commission as retained on file by the town clerk

1. Policies to identify, protect and preserve important natural and historic features of the Vermont landscape, Including significant natural and fragile areas; outstanding water resources, including lakes, rivers, aquifers, shorelines; wetland; outstanding land resources including significant scenic roads, views; and the quality of air, and encourage and strengthen agriculture and forest industries would be contained in the section on Natural Resources.

2. Land resources, such as mineral resources should be planned for use and development according to the principles set forth in 10 VSA section 6086(a) and the land use section as well as economic development section.

3. Policies to identify, protect and preserve important historic structures, sites, or district, archaeological sites and/or archaeological sensitive areas would be contained in the Historical Resources Section

4. Policies to encourage the efficient use of energy and the development of renewable energy resources would be contained in Energy Section.

5. Policies and Strategies to protect long term viability of agriculture and forest lands should be encouraged and should include maintaining low overall density and would be listed in the economic development and natural resources section and having the following objectives:

1. The manufacture and marketing of value added agriculture and forest products along with the use of locally grown food products should be encouraged by forming a Farmers Market to be held

during summer

months in the park.

- 2. Sound forest and agricultural management practices should be encouraged by continued evaluation of conserved lands so residents do not bear a tax burden for conserved lands that is excessive when the overall tax rate is compared to all other municipalities in Vermont.

bear a tax  
overall tax rate is  
Vermont.

- 3. Fair Haven has in the past maximized public investment to minimize development pressure on agriculture and forest lands. A balance must be achieved so that Fair Haven does not bear unrealistic burdens compared to other towns.

balance must be  
unrealistic burdens compared to

- 6. Provide for wise and efficient use of and appropriate extraction of earth resources with proper restoration and preservation of the aesthetic qualities of the area would be found in the Economic Development Section as well as the Natural Resources

aesthetical  
Economic Development  
Section.

- 7. Recommended Implementation Program is specifically addressed in each section under implementation.

## **EDUCATION**

Fair Haven sends its school-age children to two separate facilities. Kindergarten through eighth grade attend Fair Haven Grade School; older children attend Fair Haven Union High School.

### **Inventory and Trends**

#### **PRIMARY EDUCATION:**

Fair Haven Grade School, Grades K- 8

The public school building is located on the easterly side of North Main Street (VT. Route 22A) near the northeast corner of the town green. The school building is 1600 square feet and meets with the Vermont Public School Approval Reports with conditions. Fair Haven Grade School's grounds total 2.4 acres and include a town owned playground, two athletic fields, tennis courts and a walking trail that are used year round by town residents as well as students. Wetlands surround the grounds providing an excellent opportunity to expand the lessons of the classroom into the real world. Students study wildlife, nature conservation and a multitude of other scientific pursuits relevant to Vermont daily life.

Spending to educate our grade school age students has increased steadily over the last five years. In FY 2000 the per pupil cost was \$6,111 (\$1,059 above the block grant amount), in FY 2001 per pupil cost rose slightly to \$6,739 (\$1,611 above block grant), FY 2002 saw the per pupil cost rise again to \$7,274 (\$1,911 above block grant), the FY 2003 cost reached \$7,834 (\$2,352 above block grant) and the proposed FY 2004 proposed per pupil cost rose again to \$8,611 (\$3,047 above block grant).

West Haven sends all its grade school age children (23 students in FY 03) to Fair Haven Grade School paying tuition of \$ 7,200 per pupil in grades K through 6, and \$6,500 for students in grade 7 and 8.

As of October 1, 1996, there was an average of 50 students per grade. By 2000 the per grade average dropped to 48, rose slightly in 2001 to 49 and remained at 49 during FY 02. A relatively small number of Fair Haven Students are in Home Study Programs. As of December 1, 2002, 12.64% of the student population in grades K-6 are eligible for Special Education

Services, in grades 7-8 6.72% are eligible.

School Participation Information	1998-1999	1999-2000	2000-2001	2001-2002	Vermont (most recent)
<a href="#">neral.htm - 2</a>	447	431	427	406	100,867
<a href="#">neral.htm - 3</a>	95.3%	95.7%	94.7%	94.8%	94.7%
<a href="#">neral.htm - 4</a>	1.1%	.9%	2.7%	.7%	2.3%
<a href="#">neral.htm - 5</a>					
Average Class Size	15.2	13.6	14.1	13.7	16.6
<a href="#">neral.htm - 6</a>		12.2	11.7	12.2	11.4
<a href="#">neral.htm - 7</a>	11.4%	10.7%	10.5%	11.6%	13.5%
<a href="#">neral.htm - 9</a>	N/A	N/A	N/A	N/A	4.7%
<a href="#">neral.htm - 10</a>	3	4	3	3	1,819

With the advent of Vermont's "Act 230", effective July, 1991, the school added Instructional Support Teams and Essential Early Education (EEE), which serves children ages 3-5 with special needs. Triple E adds 18 to 20 students to the total enrollment.

**Source: Vermont Department of Education** (<http://crs.uvm.edu/cdfusion/schlrpt01/complete.cfm?psid=PS103>)

The last addition to the facility was completed in 1989 bring total space to approximately 16,000 sq feet. Building capacity is 425 with 410 students enrolled for the school year 03/04 indicating the facility is operating slightly below capacity and allows an average classroom size of about 14 student.

Town revenue to support its schools is procured through property taxes with 62% of total revenue from those taxes spent on education. 2.6% of the Grade School budget is allocated to Administrative expenses, 31% to direct instruction, 14% for Special Education with the remaining 51.4% used for teacher salaries and facility maintenance.

### **Fair Haven Grade School: Financial Resources**

As a community we have made programs available to encourage reading, the social interactions of young children, and the love of learning. The "Welcome Baby" bag program is offered to Fair Haven families with newborns and provides a baby book and literature on the value of reading in the lives of young children.

A weekly morning play group meets at a local church to provide a meeting place for families with young children and through the library, Mother Goose reading programs are offered to introduce families with young children to books and reading.

### School Recreation Facilities

Both the indoor and outdoor recreation facilities continue to be heavily used and have provided an invaluable resource to the Town. The need for such facilities is identified as a need for the Town. The amount and quality of the outdoor facilities could be a growing problem that must be addressed in the future. This includes review of present policies regarding the availability of these facilities and additional capital budgeting requirements for the future.

### Services Provided to Fair Haven

The School provides a number of non-educational services to the Town. These include a location for Town meetings, rooms in which various local government and non-government groups meet, both indoor and outdoor recreation facilities, and emergency evacuation sites.

Fair Haven Grade School is typical of many school buildings within the State in terms of resources available during times of emergency. The facility has an auditorium, parking, bathroom and shower facilities, kitchen, and smaller areas such as classrooms, which can be used for overnight accommodations.

## SECONDARY EDUCATION

Fair Haven Union High School #16, Grades 9-12

	Calendar Year 1999	Calendar Year 2000	Calendar Year 2001	State of Vermont 2001
<a href="#">nres.htm - 17</a>	\$14,847	\$15,710	\$16,209	\$20,582
Rank in the State (of 315)	268	223	255	N/A
<a href="#">nres.htm - 18</a>	\$35,315	\$35,639	\$36,394	\$47,296
Rank in the State (of 315)	251	230	262	N/A
% of Joint & Head of Household returns less than \$75,000	91%	90%	88%	77%

Fair Haven Union High school is located on Mechanic Street and serves the Towns of Orwell, Benson, West Haven, Fair Haven and Castleton. The building is set on 13.3 acres and includes three older wings, built in 1957, 1964 and 1975 and a new northeast wing extension built in

1997. In 1988 the district purchased an additional four acres of land, anticipating the need for future expansion. In 1997 the Union High School district budgeted \$2,185,700.00 for the northeast wing project with an actual cost of \$2,401,900.00. This money was raised through additional taxes in the member towns. The building and renovation project has adequately taken care of anticipated increases in future student enrollment.

Besides the main facility on Mechanic Street, FHUHS operates the Washington Street Project for students who have a difficult time adjusting to the typical classroom setting. About 20 student use this facility on a yearly basis.

School Participation Information	1998-1999	1999-2000	2000-2001	2001-2002	Vermont (most recent)
<u>neral.htm - 2</u>	638	650	592	580	100,867
<u>neral.htm - 3</u>	91.9%	92.9%	92.7%	93.7%	94.7%
<u>neral.htm - 4</u>	0.5%	.6%	1.3%	6.0%	2.3%
<u>neral.htm - 5</u>					
Average Class Size	N/A	N/A	N/A	N/A	16.6
<u>neral.htm - 6</u>	14.4	15.5	12.2	12.6	11.4
<u>neral.htm - 7</u>	10.2%	10.0%	11.1%	11.9%	13.5%
<u>neral.htm - 9</u>	3.8%	2.5%	3.4%	3.2%	4.7%
<u>neral.htm - 10</u>	2	7	8	11	1,819

## REGIONAL VOCATIONAL EDUCATION

Fair Haven Union High School transports students to the Stafford Technical Center in Rutland, Vermont. In 2001-2002, an average of 12 students attended this program at a cost of \$38, 600. For 2002-2003, an average of 11 students attended at a cost of \$41, 000.

As of October 15, 2002, total enrollment was 573 students with a building capacity 640 student. This would indicate that the school is operating at about 89% of capacity. 37% of the students are from Fair Haven.

### Fair Haven UHSD #16: General School Information

**Source: Vermont Department of Education** (<http://crs.uvm.edu/cdfusion/schlrpt01/complete.cfm?psid=PS103>)

On June 26, 2001, the construction of a new track and relocation of softball fields was approved. Furthermore, in 2002, an additional 1.39 acres of land located between Airport Road and the school's westerly boundary were purchased for future use. The current grounds also include three ball fields and parking for 182 cars.

Fair Haven shares high school expenses with the towns of Benson, Castleton, Orwell and West Haven. The 2001-2002 assessment per student was \$8,350 and for the 2002-2003 year the cost per student will be \$9, 895. Students from Hubbardton are accepted on a tuition basis.

### School Recreation Facilities

Both the indoor and outdoor sports facilities are heavily used by students.

In addition to academics, FHUHS encourages athletics, music, art, drama, nature and a variety of other opportunities for students to develop into well-rounded adults. It should be noted, that the outstanding athletic programs bring many team and individual state championships to the school in both boys and girls sports.

### **Technology**

In the past five years, Fair Haven Union High School has made great strides with regard to Information Technology. Fundamental improvements have included a full scale building wiring project in 2000, implementation of high speed T1 internet access protected by a firewall, school wide virus protection and CIPA-compliant content filtering. In addition FHUHS uses a modern school management database and a network grading and attendance package. Each teacher has a computer which is used for preparing and researching lessons, entering grades, attendance information and generating progress reports. Computers are available for student use in classrooms, labs and the library. Students master Word, Excel, Access and Powerpoint giving them an edge when they enter college or the workplace.

Through a special licensing agreement with the State of Vermont, FHUHS is able to make a very large, full text periodicals database available to students both in school and at remote locations. The school is actively involved in the Vermont Automated Library System which facilitates rapid Interlibrary Loan from other libraries.

FHUHS is also an Interactive Learning Network site equipped with cutting edge video conferencing technology. This equipment has been used to bring diverse resources into the classroom, including interactive museum tours, live open-heart surgery and Advanced Placement and Distance Learning classes from the University of Vermont. This technology has also allowed FHUHS to provide professional development opportunities such as Copyright in the Electronic Age, VT Online Library Gale Group Training and Character Education and to conduct live interactive meetings with members of professional organizations from throughout the state.<sup>3</sup>

### **Community Involvement**

Community volunteerism continues to be a vital part of our school system. This involves the extensive activities of Fair Haven residents individually and through the PTO at the Grade School, Booster Clubs, and active community involvement in annual fund-raisers

### **CONCLUSIONS**

Although the day to day operation of our schools is the responsibility of their respective administrations and Boards of Directors, it is imperative for all residents, whether parents of students or not, to be well informed and participate in setting the direction our schools are headed in.

The grade school has keep pace with the purchase of up-to-date computer equipment in sufficient number to allow teachers and students convenient access.

The grade school has established a good rapport with the community.

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<sup>3</sup> Technology section information provided by Mr. Dana Cole-Levesque, Principle, FHUHS.

The grade school shares recreational facilities with the community.

## **OBJECTIVES**

Coordinate and develop a management plan for all school recreation facilities.

Establish a population growth rate such that the quality of our schools is continued and the tax burden for doing so does not become excessive.

Support applications for external funding in support of school initiatives that compliment current activities.

The residents of Fair Haven have a vested interest in the unfolding future of our town's students. As the Planning Commission, our goals include developing the highest quality education system and experience for all students and reestablishing our schools as town social centers to address wider cultural interests.

Appoint an education task force to collaborate with teachers and school board to improve school's performance on National and State Achievement Tests and to address key education issues such as curriculum and student support services.

Plan with School Directors community-mentoring programs involving senior citizens and students. Provide incentives to area businesses/ organizations to sponsor work-study programs to emphasize the importance of attitude, motivation and basic language skills in the student's future.

Encourage the development of cooperative efforts with school directors and local colleges by participating in programs such as C.A.R.P. (Castleton Area River Project) where students are involved with research that directly improves their community.

Increase community awareness of education by implementing life-long education programs including parenting and adult learning classes.

Organize community wide cultural events to take place at the Fair Haven Grade School and Fair Haven Union High School.

## **IMPLEMENTATION**

The Selectboard in concert with the Recreation Committee will sponsor development of a long-range recreation facilities committee including members from the Selectboard, Planning Commission, Fair Haven Grade School Board of Directors and interested citizens. This committee over a defined time frame will:

- Develop a management plan for recreation facilities.

- Determine if additional facilities are needed and the types of facilities.

Assess and inform the Town and Schools regarding opportunities for external funding for

equipment and services that do not lead to undue financial burdens to the town.

## **Energy Plan**

### **Current Energy Sources**

The Energy resources that are available to the town of Fair Haven are just about what other towns have available with some slight differences.

## **INVENTORY AND TRENDS**

### **Electricity**

Electricity is provided by CVPS. At this time, we do not know whether Vermont will deregulate its power market to allow consumer choice among different power vendors. There is a central grid power line that runs east and west thru town. There are two legs that connect into New York State to the New York State Power Authority. This might present opportunity for independent power suppliers to operate in Fair Haven using very little of CVPS Service Lines.

Further development of the CVPS distribution network may be required. The substation has just been increased in size. The Center of Town has very little exposure to power failures as there are two feeders to the substation as well as CVPS feeders from Rutland. VELCO has maintained these transmission lines in town for 20 years.

### **Fuel Oil and Liquid Propane/Natural Gas**

There are multiple fuel oil and liquid propane dealers serving Fair Haven.

There is no natural gas line serving the Town and no service is expected in the near future.

### **Automotive Fuels**

Gasoline is by far the dominant energy source for transportation needs. The town has a plethora of gas stations due to the immediacy of US RT 4 and VT RT 22A to Burlington at Exit 2. In the downtown area there is another Mobil Shortstop. On VT RT 4A there is a Stewarts and Sam's U Save Gas station fuel oil distributors. There are currently no propane or electric powered vehicles or services facilities in Fair Haven as of this writing.

### **Hydro Electric Power**

To further the towns independence from conventional fossil fuels the Castleton River has been studied for a hydro electric dam. There still exists the remnants of such a mill at the depot street dam. The Hydraulic Head required to supplement the current grid power should be available to run a moderately sized turbine. This would require significant capital investment

and partnering with environmental groups to achieve, but in view of recent events this might be an idea that needs to be explored. Please see Hydro Electric Power, Energy Conservation and Energy Efficiency later in this section.

### **Energy Conservation and Energy Efficiency**

Energy conservation and energy efficiency should play important roles in energy planning. Conservation improvements should attempt to maximize energy efficiency through existing systems, rather than looking to the purchase of new systems unless a cost benefit can be established to show that replacement is a better option.

### **Conservation**

Such conservation measures can include everything from the tune-up of the household automobile to improving home insulation, weather-stripping and caulking measures. Such measures can lead to an immediate reduction in costs. Weather-stripping and caulking, for example, have been estimated as reducing energy consumption at least 10% in the average home, and insulating at cost-effective levels can reduce consumption another 10%.

An excellent example of this idea is the conservation of electricity during peak load periods (those times when electricity use is highest). Electric utilities as well as individual consumers can practice this method, called load management. By shifting those activities that require large amounts of electricity to periods of less demand, one can save money by lowering the total capacity of electricity that must be paid for to be available to meet demand. Conservation means more efficient use of existing resources. This should be applied to all forms of Energy that is consumed be it renewable or not.

### **Recycling**

Reuse and recycling are two more important methods of conservation. Reuse consists of the development of second, third, or more uses of primary (first-time) products. Recycling requires the collection and reproduction of products from the initial resources. Fair Haven Concerned, and other local businesses and churches, may be good resources for recycling clothing and house wares. Fair Haven is a member of the Solid Waste Alliance Communities (SWAC). The Town Transfer Station offers a wide variety of recycling opportunities. The Town allows residents to choose private waste haulers.

Both methods, reuse and recycling, can serve two end uses as they help reduce a substantial portion of Fair Haven's solid waste flow and eliminate the need for the consumption of more natural resources and energy in the primary (first-time) production process. Reuse is very cost-effective, and requires only a creative mind. As product prices rise with energy and natural resource prices, reuse will become more prevalent.

The main constraining factor to current recycling efforts is the low economical value for the recycled goods. Should the market value of recycled goods improve in the future, a coordinated, efficient recycling program would be in demand. Fair Haven has the potential for a transportation system and processing facility that could facilitate state wide collection at an economical rate due to the economies of scale. The reprocessed regrind from such a facility could ship worldwide.

## **Land Use Planning**

Land use planning can have the greatest effect in reducing long-term energy costs. Through land use planning, energy can be saved that would otherwise be lost through inefficient development patterns and site design. Possibly the greatest energy planning value comes from directing development patterns.

Concentrating development in central areas can serve a variety of purposes. It allows Fair Haven to preserve its character (and remaining agricultural lands), provide smoother and more efficient transportation, and minimizes energy usage. Fair Haven is currently zoned primarily for one-acre residential growth. The town has been examining ways of concentrating growth in central areas, to maintain rural character of the outlying areas. Concentrating development can significantly reduce automobile travel by providing walking access to a variety of mixed uses, such as work and shopping, thereby significantly reducing the energy spent on transportation. In addition to development patterns, site design can play a large role in bringing down energy costs. Southern exposure for home sites provides immediate energy contributions as well as the promise of potential future benefits. Designing building construction to provide large window areas on the southern side allows passive solar heating in the winter months. Properly designed, these windows can admit substantial sunlight, which if captured correctly, can bring down fuel bills.

In the same way, designing construction to allow large southern roof areas allows the homeowner to retain the opportunity for future solar development. The installation of solar systems can be much more effective and less costly if southern access is already available. This too should be considered in initial site design.

As for existing housing stock, without further development of efficiencies the retro-fitting of existing housing stock to be solely dependant upon renewable energy sources, such as geothermal and solar would be impractical. The implementation of a single source dependant upon renewable energy resources for any use should be carefully examined prior to implementation for issues of reliability and available resources.

Consideration of the natural surroundings is also important in site design. The use of existing or designed shelterbelts, or tree rows, can effectively further reduce energy costs. Designed properly, shelterbelts can act as buffers to the cold winter winds (if located on the north side) or provide cooling shade in the summer (if on the south).

## **Renewable Energy Resources**

Renewable resources, if developed, can provide a range of energy opportunities. For years many renewable energy systems have been dismissed as unfeasible or as ideas whose time had not yet come. Yet as technologies advance and fuel costs rise, many of these systems are rapidly becoming feasible options. All of these systems require large capital investments with associated maintenance costs that may or may not lead to cost savings over the long-term. Each particular instance should be evaluated by qualified individual prior to implementation.

## **Wood Resources**

Fair Haven was determined in 2000 to have approximately 6.8 square miles of forest lands. With such a large natural resource base, wood can serve as a key source of heat. Many private homes use locally produced wood for heating as evidenced by the existence of Wood One. This is a renewable resource, avoids the burning of fossil fuels, and contributes to the local economy.

There are significant environmental issues with the use of wood as a heat source. The production of greenhouse gases is increased by the incomplete burning associated with running a wood stove at less than the excess air burn rate. This means that the fuel is not being completely burned and is being starved of air and the byproducts of greenhouse gases and particulate matter are greatly increased. The control of heat output is also an issue with wood stoves. When it is 35 below zero and the stove is running wide open the renewable energy resource is being used at maximum efficiency. In any other situation the house may be overheated and resources wasted because of open windows. Further inherent risks are associated with the use of wood stoves as the primary sources of heat in that the stove has to be continually stoked and can not be left alone for much longer than an eight hour period. There are other risks associated with maintenance and operation that are minimized in conventional fuel sources.

As can be seen from the energy source cost survey on page 66, heating with wood only, can and is a very inexpensive capital investment that appears many Vermonters can afford. If the time required to cut, split, stack and store the wood are considered negligible the cost of wood usage is further reduced and the use of wood is almost a free source of energy compared to conventional sources.

The difficulty with this is that the required time is never free or negligible and could be more efficiently spent participating in society. This in some instances relegates the use of wood to socio-economic disadvantaged individuals in Vermont who do not have a choice as to the use of wood as a fuel source. The other end of the spectrum is the individual who chooses to use wood for individual reasons or beliefs and would usually be at the other end of the socio-economic spectrum. The economic opportunity and education level must be made available so that there are other alternatives and choices available. Empowering socio-economically disadvantaged residents with educated choice options in their lives will further enhance the lives of all society in terms not only of energy source but in general terms as well.

### **Solar**

Solar energy technologies also present a renewable energy alternative. When economically viable, both active and passive solar systems capture energy in a clean and inexpensive (after initial costs) manner. As mentioned above, land use site design is an important precursor to solar development, so development of this energy source is best planned out.

### **Geothermal Supplemental**

Geo-Thermal energy sources produce energy by using the pumps to remove energy from the earth through drilled wells. There has been a reputation in the past with soil contamination with some systems but the new systems are much more environmentally friendly.

### **Geothermal Heat Pump Overview**

The geothermal heat pump, also known as the ground source heat pump, is a highly efficient renewable energy technology that is gaining wide acceptance for both residential and commercial buildings. Geothermal heat pumps are used for space heating and cooling, as well as water heating. Its great advantage is that it works by concentrating naturally existing heat, rather than by producing heat through combustion of fossil fuels.

The technology relies on the fact that the Earth (beneath the surface) remains at a relatively constant temperature throughout the year, warmer than the air above it during the winter and cooler in the summer, very much like a cave. The geothermal heat pump takes advantage of this by transferring heat stored in the Earth or in ground water into a building during the winter, and transferring it out of the building and back into the ground during the summer. The ground, in other words, acts as a heat source in winter and a heat sink in summer.



Geothermal heat pumps, such as this commercial-size system on the Georgia Tech campus, use the relatively constant temperature of the Earth at shallow depths to warm buildings in the winter and cool them in the summer. Craig Miller, U.S. Department of Energy. (PIX 02211)

The system includes three principal components:

- Geothermal earth connection subsystem
- Geothermal heat pump subsystem
- Geothermal heat distribution subsystem.

### **Earth Connection**

Using the Earth as a heat source/sink, a series of pipes, commonly called a "loop," is buried in the ground near the building to be conditioned. The loop can be buried either vertically or horizontally. It circulates a fluid (water, or a mixture of water and antifreeze) that absorbs heat from, or relinquishes heat to, the surrounding soil, depending on whether the ambient air is colder or warmer than the soil.

### **Heat Pump**

For heating, a geothermal heat pump removes the heat from the fluid in the Earth connection,

### **Heat Distribution**

Conventional ductwork is generally used to distribute heated or cooled air from the geothermal

heat pump throughout the building.

### **Residential Hot Water**

In addition to space conditioning, geothermal heat pumps can be used to provide domestic hot water when the system is operating. Many residential systems are now equipped with desuperheaters that transfer excess heat from the geothermal heat pump's compressor to the house's hot water tank. A desuperheater provides no hot water during the spring and fall when the geothermal heat pump system is not operating; however, because the geothermal heat pump is so much more efficient than other means of water heating, manufacturers are beginning to offer "full demand" systems that use a separate heat exchanger to meet all of a household's hot water needs. These units cost-effectively provide hot water as quickly as any competing system.

### **Why a Geothermal Heat Pump?**

The installation of a heating or cooling system is a decision that will affect a homeowner's comfort-and pocketbook-for years to come. One option to think about is a geothermal heat pump (GHP), which is one of the most cost-effective and longest-lasting heating and cooling systems on the market. Plus, GHPs provide free hot water as a byproduct of air conditioning for the household in the summer.

### **Cost Effective**

Geothermal heat pumps save money in operating and maintenance costs. While the initial purchase price of a residential GHP system is often higher than that of a comparable gas-fired furnace and central air-conditioning system, it is more efficient, thereby saving money every month.

On average, a geothermal heat pump system costs about \$2,500 per ton of capacity, or roughly \$7,500 for a 3-ton unit (typical residential size). In comparison, other systems would cost about \$4,000 with air conditioning. When included in the mortgage, the homeowner has a positive cash flow from the beginning. For example, say that the extra \$3,500 will add \$30 per month to each mortgage payment. But the energy cost savings will easily exceed that added mortgage amount over the course of each year. On a retrofit, the GHP's high efficiency typically means much lower utility bills, allowing the investment to be recouped in two to ten years.

### **Durability**

Because they use fewer mechanical components, and because those components are sheltered from the elements, leaves, dirt, and possible vandalism, geothermal heat pumps are durable and highly reliable. The underground piping used in the system often has 25- to 50-year warranties, and the GHPs themselves typically last 20 years or more.

### **Low Maintenance**

Geothermal heat pump systems have fewer maintenance requirements than most other systems. When properly installed, the underground components are virtually worry free. The components in the living space are easily accessible, which increases the convenience factor and helps ensure that the upkeep is done on a timely basis.

### **Year-Round Comfort**

Like the typical forced-air furnace or central air-conditioning system, a GHP system uses

ductwork. A two-speed GHP system is so quiet inside a house that users do not know it is operating because there are no tell-tale blasts of cold or hot air, depending on whether it's the heating or cooling season.

### **Quiet Operation**

With GHPs, there are no outside condensing units like air conditioners, so there's no concern about A/C noise near patio areas or decks, or bothering the neighbors with the constant hum of a conventional air conditioner.

### **Geothermal Heat Pumps Are Highly Efficient**

A study by the Environmental Protection Agency (source: "Space Conditioning: The Next Frontier," EPA 430-R-93-004, April 1993) analyzed six locations representing major climate zones in the U.S. These cities (Burlington, VT; Chicago, IL; upper New York City; Portland, OR; Atlanta, GA; and Phoenix, AZ) were chosen to compare the performance and costs of emerging high-efficiency space-conditioning equipment with equipment already on the market. For all locations, the findings named geothermal heat pumps as the most efficient heating and cooling systems over other types of space-conditioning equipment including high-efficiency gas furnaces and air conditioners. Geothermal heat pump installations in both new and existing homes can reduce energy consumption 25% to 75% compared to older or conventional replacement systems. Annual operating costs were also lowest with geothermal heat pumps. Add in the benefits of the desuperheater for hot water savings, and it's easy to see how a GHP system is the most efficient available.

### **DOE Spreads the Word about GHPs**

In 1994, the U. S. Department of Energy (DOE), working closely with the EPA, Edison Electric Institute, Electric Power Research Institute, International Ground Source Heat Pump Association (IGSHPA), National Rural Electric Cooperative Association, and industry, helped to create the Geothermal Heat Pump Consortium (GHPC). The GHPC launched the National Earth Comfort Program, designed to foster the development of a fast-growing, self-sustaining, national GHP industry infrastructure. DOE has also supported research and development activities, especially through IGSHPA; the American Society of Heating, Refrigeration, and Air-Conditioning Engineers; the National Ground Water Association; and DOE's national laboratories. The work has targeted several areas of GHP technology, lowering the cost of ground heat exchangers, and developing advanced design software.

In partnership with the GHPC, DOE's Office of Geothermal Technologies seeks to increase annual installations of GHP systems to about 400,000 by 2005 and reaching about 2 million installed (cumulative) that same year. Achieving the goal of 400,000 annual installations by 2005 will save consumers over \$400 million per year in energy bills and reduce U.S. greenhouse gas emissions by over 1 million metric tons of carbon each year.

### **Case Study-Minnesota**

Located in the middle of Minnesota-where temperatures can range from 90°F (32.2°C) with 95% humidity in the summer to -18°F (-27.8°C) in the winter-Dennis Eichinger's 3,400-square-foot home averages a little over \$44 per month in electricity bills.

The five-ton ground source heat exchanger connects to five horizontal Slinky™ loops, totaling

3,000 feet of pipe, buried next to the home at a depth of eight feet (2.4 meters).

### **Design and Installation**

Installing a geothermal heat pump system is not a project for the do-it-yourselfer. Because the pipes are underground, they need to be designed and installed correctly, and properly pressure tested.

The consumer should insist that a qualified and experienced contractor, who has received training at a recognized institution, install the system. For a list of installers and training locations, contact the International Ground Source Heat Pump Association and Geothermal Heat Pump Consortium.

### **Energy Under Foot**

#### **Resource Conservation**

Over two-thirds of the nation's electrical energy and over 40% of natural gas consumption is used in buildings. Space heating and cooling and water heating account for over 40% of the electric power used in residential and commercial buildings. By decreasing or offsetting the amount of energy needed for space conditioning and water heating, the nation has a major energy-saving opportunity.

### **Environmental Benefits**

#### **Greenhouse Gas Mitigation and Emissions Reductions**

Nearly 40% of all U.S. emissions of carbon dioxide are the result of using energy to heat, cool, and provide hot water for buildings. This is about the same percentage that the transportation sector contributes. The EPA found that under most electricity generating scenarios, GHP systems have the lowest carbon dioxide emissions of all technologies analyzed, and the lowest overall environmental cost (source: "Space Conditioning: The Next Frontier").

Over an average 20-year lifespan, every 100,000 units of nominally sized residential GHPs will save more than 24 trillion BTUs of electrical energy, and save consumers approximately \$500 million in heating and cooling costs at current prices. And over the same period, these 100,000 units reduce greenhouse gas emissions by almost 1.1 million metric tons of carbon equivalents.

### **Ozone Layer Damage**

GHPs minimize ozone layer destruction by using factory-sealed refrigeration systems that will seldom or never have to be recharged. GHPs typically use less refrigerant than conventional air-conditioning systems. And using factory-sealed refrigeration systems also reduces leak potential from field connections and increases reliability.

### **Human Health and Comfort**

GHPs are safe and clean because there are no combustion flames, no flues, and no odors; just safe, reliable operation year after year. And compared to most conventional HVAC systems, GHPs deliver constant comfort and improved humidity benefits, especially with 2-speed fan GHP systems. GHPs are quiet too; there's no noisy outdoor compressor.

GHP systems themselves are environmentally friendly-when properly installed, there is no danger of GHPs polluting ground water sources. The fluid in the ground-loop heat exchangers is typically an environmentally safe, water-based antifreeze solution. A recent EPA analysis ("Evaluation of Consequences of Anti-freeze Spills from Geothermal Heat Pumps," undated EPA report released in late 1998, GPO#1998-615-003/60624) found that the human health risk from ingesting groundwater contaminated by a GHP antifreeze leak is low.

### **Case Study-Fort Polk Army Base**

A great example of a large-scale application of GHPs is the highly successful project at Fort Polk, Louisiana, where 4,003 U.S. Army housing units at Ft. Polk were converted to GHPs. Since the new systems were installed, service calls on hot summer days have dropped from 90 per day to almost zero, testifying to the reliability of GHP systems.

Data were collected on the utility feeders serving the housing area, and on a sample of apartments before, during, and after the retrofits. The GHPs and other efficiency measures reduced electrical consumption by 26 million kWh (average of 6,445 kWh per housing unit) or 32% of the pre-retrofit consumption, as well as 100% of natural gas consumption. It also reduced summer peak demand by 7.5 megawatts, which is 43% of the pre-retrofit electrical consumption in family housing, and improved the load factor from 0.52 to 0.62. These energy savings correspond to an estimated reduction in carbon dioxide emissions of 22,400 tons per year, which gives project participants "green" bragging rights immediately.

As demonstrated by this Fort Polk project, GHPs shave peak loads and improve load factors. At Fort Polk, the whole-house load factor for a house with gas heating and water heating was 0.32 versus 0.60 for the GHP house.

### **Power Plants Generate Electricity from Geothermal Reservoirs**

Mile-or-more-deep wells can be drilled into underground reservoirs to tap steam and very hot water that drive turbines that drive electricity generators. Three types of power plants are operating today:

- Dry steam plants, which directly use geothermal steam to turn turbines;
- Flash steam plants, which pull deep, high-pressure hot water into lower-pressure tanks and use the resulting flashed steam to drive turbines; and
- Binary-cycle plants, which pass moderately hot geothermal water by a secondary fluid with a much lower boiling point than water. This causes the secondary fluid to flash to steam, which then drives the turbines.



Gretz, Warren

Power Plant Generator in California



Kenner, Joel - INEEL

Power Plant in Nevada

### **The Future of Geothermal Energy**

**The three technologies discussed above use only a tiny fraction of the total geothermal resource. Several miles everywhere beneath Earth's surface is hot, dry rock being heated by the molten magma directly below it. Technology is being developed to drill into this rock, inject cold water down one well, circulate it through the hot, fractured rock, and draw off the heated water from another well. One day, we might also be able to recover heat directly from the magma. We're standing on a resource that could easily supply the energy needs of the entire world for centuries.**



Diamond-studded drill bit developed at Sandia National Laboratories

### **What exactly is "green power"?**

Green power is a term applied to electricity that is generated from wind and other renewable energy sources, such as solar, geothermal, biomass, and small hydro-power. Typically, the environmental impacts of these sources are quite modest compared to those of coal and other conventional sources.

Green power programs vary, but one common approach, called "green pricing," is for a utility to offer its customers the option of buying electricity generated from wind at a premium price. For example, a customer might be able to sign up to receive a certain number of 100-kilowatt-hour "blocks" of electricity from wind each month for an extra \$2 each (that is, for 2 cents per kilowatt-hour). A customer signing up for 2 blocks at \$2 would pay \$4 more for electricity each month and "receive" 200 kilowatt-hours of wind-generated electricity. The utility would then add enough wind capacity to its generating mix to provide the additional electricity required. (The utility cannot deliver specific electrons from any of its plants to a specific customer. Instead, its generating mix should be thought of as a pool. Power plants add electricity to the pool and customers take it out. With green power, the utility adds more wind energy to the pool based on the amount customers have said they desire to purchase.)

A second form of green power is used in states that have opened their electricity markets to competition (in much the same way as long-distance telephone service is now open to competition). In these states, electricity suppliers offer electricity "products" from renewable and other sources, and customers are free to sign up for the product and company they prefer. One company, for example, might offer a product that is called "Earth Saver" that is 50% wind generated electricity and 50% electricity from landfill gas, and charge 1.5 cents/kWh more than "system power" (regular commodity electricity from the regional generating mix).

A third form of green power is called "green tags" and can be used by consumers anywhere to "green" their electricity supply. With this approach, when a certain amount of electricity (e.g., 1,000 kWh) is generated from a renewable source, a certificate called a "green tag" is created. The generator sells the electricity into the commodity wholesale market, but keeps the certificate (which represents the beneficial environmental attributes of the electricity) and sells it to an interested buyer for an agreed-upon price (e.g., \$20, or 2 cents/kWh). By buying green

tags that represent the amount of renewable generation equal to your electricity use, you can, in effect, "green" your power supply in much the same way that you would through "green pricing" or "green power"-you are paying extra, and extra renewable energy is being delivered to the utility system based upon your payment.

No one knows yet how successful green programs and products will be in the electricity marketplace. If consumers learn more about the air pollution, strip mining, and other harmful environmental impacts of electricity generation and decide to "vote with their dollars" for clean energy, green power could become a large and growing business over the next decade and beyond.

Customers in many states have the option today to participate in green pricing or green power programs, while of course, customers anywhere can buy green tags.

## **HYDRO-ELECTRIC POWER**

Hydro power is currently the world's largest renewable source of electricity, accounting for 6% of worldwide energy supply or about 15% of the world's electricity. In Canada, hydroelectric power is abundant and supplies 60% of our electrical needs. Traditionally thought of as a cheap and clean source of electricity, most large hydro-electric schemes being planned today are coming up against a great deal of opposition from environmental groups and native people.

### **History of Hydro Power**

The first recorded use of water power was a clock, built around 250 BC. Since that time, humans have used falling water to provide power for grain and saw mills, as well as a host of other applications. The first use of moving water to produce electricity was a waterwheel on the Fox river in Wisconsin in 1882, two years after Thomas Edison unveiled the incandescent light bulb. The first of many hydro electric power plants at Niagara Falls was completed shortly thereafter. Hydro power continued to play a major role in the expansion of electrical service early in this century, both in North America and around the world. Contemporary Hydro-electric power plants generate anywhere from a few kW, enough for a single residence, to thousands of MW, power enough to supply a large city.

Early hydro-electric power plants were much more reliable and efficient than the fossil fuel fired plants of the day. This resulted in a proliferation of small to medium sized hydro-electric generating stations distributed wherever there was an adequate supply of moving water and a need for electricity. As electricity demand soared in the middle years of this century, and the efficiency of coal and oil fueled power plants increased, small hydro plants fell out of favor. Most new hydro-electric development was focused on huge "mega-projects".

The majority of these power plants involved large dams which flooded vast areas of land to provide water storage and therefore a constant supply of electricity. In recent years, the environmental impacts of such large hydro projects are being identified as a cause for concern. It is becoming increasingly difficult for developers to build new dams because of opposition from environmentalists and people living on the land to be flooded. This is shown by the opposition to projects such as Great Whale (James Bay II) in Quebec and the Gabickovo-Nagymaros project on the Danube River in Czechoslovakia.

## Hydro-electric Power Plants

Hydro-electric power plants capture the energy released by water falling through a vertical distance, and transform this energy into useful electricity. Hydro-electric power plants convert the kinetic energy contained in falling water into electricity. The energy in flowing water is ultimately derived from the sun, and is therefore constantly being renewed. Energy contained in sunlight evaporates water from the oceans and deposits it on land in the form of rain. Differences in land elevation result in rainfall runoff, and allow some of the original solar energy to be captured as hydro-electric power. In general, falling water is channeled through a turbine which converts the water's energy into mechanical power. The rotation of the water turbines is transferred to a generator which produces electricity. The amount of electricity which can be generated at a hydro-electric plant is dependant upon two factors. These factors are (1) the vertical distance through which the water falls, called the "head", and (2) the flow rate, measured as volume per unit time. The electricity produced is proportional to the product of the head and the rate of flow. The following is an equation which may be used to roughly determine the amount of electricity which can be generated by a potential hydro-electric power site:

$$\text{POWER (kW)} = 5.9 \times \text{FLOW} \times \text{HEAD}$$

In this equation, FLOW is measured in cubic meters per second and HEAD is measured in meters.

Based on the facts presented above, hydro-electric power plants can generally be divided into two categories. "High head" power plants utilize a dam to store water at an increased elevation. Heads for this type of power plant may be greater than 1000 m.

"Low head" hydro-electric plants are power plants which generally utilize heads of only a few meters or less. Power plants of this type may utilize a low dam or weir to channel water, or no dam and simply use the "run of the river". Run of the river generating stations cannot store water, thus their electric output varies with seasonal flows of water in a river. A large volume of water must pass through a low head hydro plant's turbines in order to produce a useful amount of power. Hydro-electric facilities with a capacity of less than about 25 MW (1 MW = 1,000,000 Watts) are generally referred to as "small hydro", although hydro-electric technology is basically the same regardless of generating capacity.

"Pumped Storage" is another form of hydro-electric power. Pumped storage facilities use excess electrical system capacity, generally available at night, to pump water from one reservoir to another reservoir at a higher elevation. During periods of peak electrical demand, water from the higher reservoir is released through turbines to the lower reservoir, and electricity is produced. Although pumped storage sites are not net producers of electricity - it actually takes more electricity to pump the water up than is recovered when it is released - they are a valuable addition to electricity supply systems. Their value is in their ability to store electricity for use at a later time when peak demands are occurring. Storage is even more valuable if intermittent sources of electricity such as solar or wind are hooked into a system.

## **Environmental Impacts**

Hydro-electric power plants have many environmental impacts, some of which are just beginning to be understood. These impacts, however, must be weighed against the environmental impacts of alternative sources of electricity. Until recently there was an almost universal belief that hydro power was a clean and environmentally safe method of producing electricity. Hydro-electric power plants do not emit any of the standard atmospheric pollutants such as carbon dioxide or sulfur dioxide given off by fossil fuel fired power plants. In this respect, hydro power is better than burning coal, oil or natural gas to produce electricity, as it does not contribute to <http://www.iclei.org/EFACTS/globwarm.htm> or <http://www.iclei.org/EFACTS/acidrain.htm>. Similarly, hydro-electric power plants do not result in the risks of radioactive contamination associated with <http://www.iclei.org/EFACTS/fission.htm>.

A few recent studies of large reservoirs created behind hydro dams have suggested that decaying vegetation, submerged by flooding, may give off quantities of greenhouse gases equivalent to those from other sources of electricity. If this turns out to be true, hydro-electric facilities such as the James Bay project in Quebec that flood large areas of land might be significant contributors to global warming. Run of the river hydro plants without dams and reservoirs would not be a source of these greenhouse gases.

## **The Future of Hydro-Electric Power**

**In North-America and Europe, a large percentage of hydro power potential has already been developed. Public opposition to large hydro schemes will probably result in very little new development of big dams and reservoirs. Small scale and low head hydro capacity will probably increase in the future as research on low head turbines, and standardized turbine production, lowers the costs of hydro-electric power at sites with low heads. New computerized control systems and improved turbines may allow more electricity to be generated from existing facilities in the future. As well, many small hydro electric sites were abandoned in the 1950's and 60's when the price of oil and coal was very low, and their environmental impacts unrealized. Increased fuel prices in the future could result in these facilities being refurbished.**

## **Other Renewable Resources**

Several other renewable energy sources have become very real possibilities in recent years. The first of these, co-generation, has become increasingly more popular in Vermont. Faced with abundant wood supplies and the prospect of unstable future oil prices, small-scale wood fired co-generation may become a feasible alternative for Fair Haven. The smoke and environmental consideration of this would need to be examined. Similarly, biomass energy production from solid waste sources is rapidly gaining credibility and may be considered. Wind Power is a source that needs further consideration.

## **Analysis of Available Resources**

Cost surveys of existing energy resources is a bit difficult because of each mode of energy being labeled with an irrelevant measuring factor. A gallon of Gasoline does not have the same energy content as a cord of wood. The equivalence of particular heating units can be rather

sublime. The following is an attempt to compare the current costs of existing conventional energy resources. Please see the following costs survey for residential heating and water heating alternatives.

Cost survey for residential heating and water heating alternatives.

Energy Source Type	Heat Type	Sold Units	Heat Content	Cost/Sold Units	BTU/Unit	Cost per 100K BTU	Efficiency Rating	Cost per 100K BTU
Oil	Forced Hot Air	Gallon	BTU	\$1.60	138000	\$1.16	90%	\$1.29
Oil	Hot Water	Gallon	BTU	\$1.60	138000	\$1.16	85%	\$1.36
Kero		Gallon	BTU	\$2.10	125000	\$1.68	80%	\$2.10
LP/NG	Stand Alone	LBS/Gal	BTU	\$2.10	100000	\$2.10	90%	\$2.33
LP/NG	Forced Hot Air	LBS/Gal	BTU	\$2.10	100000	\$2.10	90%	\$2.33
LP/NG	Hot Water	LBS/Gal	BTU	\$2.10	100000	\$2.10	90%	\$2.33
Electricity		KWH	KW-Hr	\$0.14	3415.30	\$4.10	100%	\$4.10
Wood Hard		Cord	BTU	\$125.00	33600000	\$0.37	60%	\$0.32
Wood Soft		Cord	BTU	\$125.00	24000000	\$0.52	60%	\$0.87

Source: Lauritz Rasmussen

Energy Source Type	Capital Investment	Heated SqFt	Install Cost per SqFt	Life Expectancy	Total Cost 100k BTU/sq for 30 Yrs	Cost/Year for 2100 SqFt 100k BTU/SqFt	
Oil	\$6,950	2100	\$3.31	30	\$88,190.42	\$2,937	
Oil	\$9,450	2100	\$4.50	30	\$95,383.50	\$3,179	
Kero	\$175	350	\$0.50	5	\$138,600.00	\$27,720	Space Heater
LP/NG	\$1,850	400	\$4.63	10	\$176,137.50	\$30,824	Space Heater
LP/NG	\$5,000	2100	\$2.38	30	\$152,000.00	\$5,067	
LP/NG	\$7,500	2100	\$3.57	30	\$154,500.00	\$5,150	
Electricity	\$850	2100	\$0.40	20	\$259,524.60	\$8,651	
Wood Hard	\$3,350	1300	\$2.58	15	\$49,885.58	\$2,686	Not using Excess Air
Wood Soft	\$3,350	1300	\$2.58	15	\$65,510.58	\$3,527	Not Using Excess Ai

Source: Lauritz Rasmussen

The point is that electric heating is the most expensive method and does not currently produce any environmentally benefits when looked at in an overview. Electric heating should be discouraged at this time.

A further cost saving might be released by the efficient use of the rail system that cuts through the center of Fair Haven. This could eliminate the reliance upon trucks that drive to the port of Albany or Newark to transport liquid fuel products to this area. An inter-modal transport sight that offered storage facilities for liquid fuels might be able to serve a large area. This would required further capital investment on the part of fuel distributors and rail transporters. The local consumer would not see any saving until the market had been penetrated to a point of saturation by the rail delivery system.

### **Transportation Energy**

The oil embargoes of 1974 and 1980, and the price spike in 2000-02 gave U.S. citizens a clearer picture of the in-securities associated with reliance on this source. Yet we as a society, New England in particular, continue to rely on this energy supplied by foreign sources.

There is further reliance on transportation of liquid fuels to this area by motor transport from the Port of Albany and even Newark. This reliance could be alleviated thru rail transport of liquid fuels to a local inter-modal transport sight that would result in some saving in terms of the road miles traveled thereby reducing cost. These costs might not be seen by the consumer until such time as significant market share had been obtained by a rail shipping facility in term of distributorship and distributors.

Petroleum is the largest transportation energy source, and transportation is currently the largest demand of energy for most parts of the Region. Biking and walking provide energy-efficient means of transportation. Given good roads and safe conditions, biking can alleviate some of the traffic load. Given mixed land use and work facilities near shopping, walking can also eliminate some of the need for automobile travel, especially within the village. To this end the town's existing sidewalk network can be improved and expanded, pedestrian trails can be expanded, and a coordinated trail system is being examined to link sidewalks, trails and destination points.

## **CONCLUSIONS**

Inefficient energy consumption is costly and threatens Fair Haven's environment. The failure to conserve energy results in excessive use of energy resources.

Scattered development encourages excessive use of energy.

The failure to use renewable energy resources, some of which are in abundant supply locally, results in excessive use of non-renewable resources and exports dollars that otherwise could support local energy suppliers.

Excessive reliance on the automobile for transportation is costly and threatens Fair Haven's ability to maintain a village center surrounded by a working rural countryside.

The continued development pattern that currently exists in Fair Haven will lead to development patterns that will continue to be energy efficient and conscious. Further growth in other areas of town in an unrestricted manner would not lead to the continuation of such patterns in terms of energy consumption.

Fair Haven has the transportation facilities that could facilitate state wide collection at an economical rate due to the economy of scale. The reprocessed regrind could be shipped world wide.

## **OBJECTIVES**

Actively encourage efficient energy consumption.

Maximize energy conservation.

Utilize land use planning to influence development patterns and site design in an energy efficient manner.

Encourage the use of community renewable energy resources.

Actively consider energy efficiency in all future transportation planning.

Further development of the hydroelectric plant in Fair Haven is to be considered as a potential renewable energy profit center.

## **IMPLEMENTATION**

Encourage the use of energy efficient techniques for new residential construction by having the zoning administrator provide all applicants with any available information on energy efficiency from the State.

Encourage the use of energy efficient space and water heating techniques through Planning Commission proposed revisions to Town bylaws and ordinances.

Promote development patterns that concentrate growth in central areas and locate residential growth near work and shopping areas through Planning Commission proposed revisions to Town codes and ordinances.

Encourage building with southern solar access to utilize passive solar heating, and to retain the opportunity for future solar development, through sighting recommendations by the Zoning Administrator.

Encourage the use of shelterbelts (tree rows) to act as wind buffers in the winter, and for shading during the summer through sighting recommendations by the Zoning Administrator.

The Town should promote the use of locally produced wood as an energy source by maintaining a list of local wood suppliers.

The Town should support carpooling, vanpooling, and ride sharing by making available, through the Town Managers Office, brochures promoting these efforts.

The Recreation Committee and Recreation Path Committee should encourage walking and bicycling, instead of using the car, through education and outreach.

The Town shall prepare an inventory of energy usage by the town facilities. As part of its budgeting process, the Town shall propose cost effective energy efficiency measures, including capital investments that will offset expenses.

Examples of such measures may include items such as energy efficient light bulbs, fuel-efficient vehicles, better insulation, and similar efficiency investments.

## **Housing**

Fair Haven is a quiet and lovely place to live where family life is emphasized. The values that

our youth gain from such community support have helped them succeed in many areas.

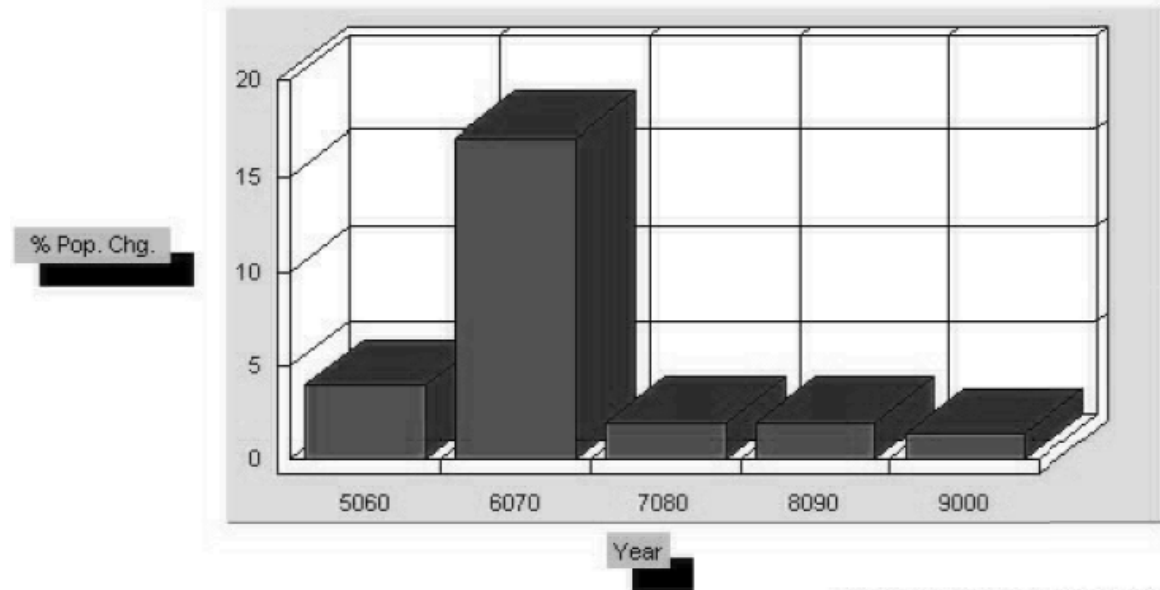
Fair Haven's rural character, enhanced by its location, places this community in a unique position in Rutland County. Boarding New York State with US Route 4 and Vermont Route 22A intersecting the community, with 4 colleges and a technical center located within 15 to 30 minutes commuting time, our community faces many challenges.

Diversity of housing is key to continued growth, however, providing opportunities for our young people and seniors to remain in the community should continue to be at the forefront of a community's housing needs.

## INVENTORY AND TRENDS

### Population: Age - Growth Projections

According to 2000 US Census Bureau data 29.2% of Fair Haven's population is age 19 and under; 11.5% are between age 25 to 34; 16.8% are between age 35 to 44 and 18.1% are over age 60 with 5.2% of that group over age 75. The median age is 37.3 years establishing that the town's current population is comparatively young. Census population projections available show a decrease in Fair Haven population by 11.6% between 1990 and 2015, while surrounding communities will see dramatic increases. Yet actual Vermont Indicators show Fair Haven's population peaked between 1960 and 1970 and over the past thirty years has remained relatively stable with slight increases as indicated by the chart below. Census counts of 2819 in 1980, 2887 in 1990 and 2928 in 2000 also indicate the population has remained fairly stable.



<http://www.cfxgraphicsserver.com> (build b2)

	1950-60	1960-70	1970-80	1980-90	1990-00
Fair Haven	4.0	17.0	2.0	2.0	1.42

### Housing Availability and Affordability

Fair Haven's housing stock is very diverse. A total of 1,248 traditional housing units exist. Of the occupied units, 741 are owner-occupied and 424 are renter-occupied. A total of 83 units are unoccupied. Mobile homes account for an additional 185 housing units. There are

149 owner-occupied units, 25 renter-occupied units and 11 units were vacant in this category, according to the 2000 Census.

Affordable rental units can be found in various sections of the community, all are within easy walking distance to schools and the central business district. These units include 30 elderly units and 10 family units at Appletree; 9 elderly units at Parkview Apartment, 13 elderly units at Adams House and 17 family units at Alfred Court. Haven Meadows offers 18 mobil homes. Many of these units receive some type of subsidy.

The median value of housing, as of 2000, was \$80,400 and the median contract rent was \$404.00. However, the median gross rent in 2000 was \$501.00. The median gross rent as a percentage of income was 26.2%. The average annual wage for Rutland County is \$27,858 while Fair Haven's is somewhat lower at \$21,847. Fair Haven's unemployment rate at 5.7% compares unfavorably to Rutland County at 4.1%. Based on Fair Haven's average annual wage, an affordable monthly housing payment of \$546, (30% of income) is needed to live in town and indicates that a large segment of the local population would find home-ownership and/or rental housing beyond their means.

The overall homeowner vacancy rate stands at 1.7% while the rental vacancy rate is 4.7%. The data also suggests there are 1165 families living in housing units leaving room for continued growth with 83 units currently available. It appears that the town, at the rate of growth it has seen over the last thirty years can support the housing needs of the present population and slow growth unless census projections are correct and the population begins to decline dramatically.

### **Condition and Age of Housing**

The median year of construction of owner-occupied units is 1942 with renter occupied units slightly older, the median year being 1939. Housing units that lack complete plumbing is 0.01% and lacking complete kitchen facilities affects 0.02% of the units. Available data does not indicate if these are seasonal or year-round units.

Fair Haven Zoning Administrator records for 2000 and 2001 indicate subdivisions created 4 new single family homes, 33 older homes were replaced (about 70% were older mobile homes replaced with modular homes), 4 new apartments were added and there were 16 additions to existing residential living space. As Fair Haven Zoning does not require a permit for interior renovation, those types of improvements to exiting homes is unknown.

However, looking at the overall number of permits issued in the last 2 years, ranging from roof replacement, garage construction/replacement, deck/porch additions/replacements to fence replacement/additions would indicate that resident's take pride in their homes and continue to improve them.

### **Future Housing Needs**

**Based on available data , if Fair Haven continues to experience growth as it has in the**

past, at the rate of 1 to 2% over the next decade our current available housing units would appear sufficient to meet the need. However, affordability for all age groups must be addressed. HUD indicates when determining the affordability of home-ownership the annual mortgage, mortgage insurance, property tax rate and property insurance should be taken into account. However, in rural communities such as Fair Haven with relatively little industry, and no public transportation, the cost of commuting to work must also become part of the affordability equation for both owners and renters. Water and sewer costs also affect affordability. As these costs escalate, landlords pass these increased operating expenses on to tenants, and home owners on fixed incomes may be forced to sell their home.

Fair Haven's Zoning Bylaws allow "mother-in-law apartments" which allows many seniors to stay in the community for an extended period of time. Yet as our population continues to age, 5.2% is over age 75, aging in place facilities to address their changing needs will become essential.

## **CONCLUSIONS**

Fair Haven is projected to experience rates of growth over the next years similar to those experienced in Rutland County. This net increase in population and the associated housing needs of individuals can have a significant impact on Fair Haven's rural character as well as its ability to provide facilities and services in a fiscally responsible manner.

Fair Haven's population is aging and affordable housing opportunities for these individuals are limited.

Trends in recent housing prices coupled with a low vacancy rate and an aging housing stock indicate that the demand for housing in Rutland County will continue into the near future. This will most likely lead to an increase in the fair market value of various housing types including those currently deemed affordable.

The Town Health Officer is currently a volunteer position. As such the time and expertise available to handle landlord/tenant disputes and / or health and safety compliance matters is limited.

## **OBJECTIVES**

Encourage adequate housing for the elderly, with alternatives, which enable them to remain in their homes as long as they wish.

To support and provide safe, affordable and decent housing opportunities for all residents.

Promote a mix of residential and commercial uses in the village area.

Plan residential development such that it coincides with planned infrastructure improvements and allows for the adequate provision of services.

Assure a rate and pattern of residential growth compatible with Fair Haven's rural character and

topography.

Protect the architectural integrity of village-area homes and other historic structures.

To preserve the rural nature of Fair Haven while offering all residents an attractive, affordable and desirable place to live.

To support creative residential development with minimal burden on municipal services.

Promote opportunities for individuals and families of diverse economic backgrounds to live in Fair Haven.

## **IMPLEMENTATION**

Encourage continued efforts by assisting agencies to help residents improve their homes.

Allow residential development which promotes efficient land use. Focusing attention on those areas that may be affected by some form of residential development in the future and use this plan to encourage desired and appropriate residential development.

The Town's growth rate should be related to its impact on the cost of municipal, government services and school costs. Expansion of water and sewer systems should be financed by the areas that receive the service.

Efforts must be made to reign in school costs to decrease the property tax burden.

Efforts must be made to ensure that as families down-size their living accommodations that larger homes are not converted to business use instead of remaining housing units.

The Planning Commission should encourage planned residential developments to conserve land and promote the most efficient use of space.

Focus attention on those area that may be affected by some form of residential development in the future and use this plan to encourage desired and appropriate residential development.

The Planning Commission and Selectboard will assess current zoning regulations for compatibility with traditional village patterns and/or alternative design standards. Zoning bylaws will be amended if necessary to promote village scale development.

Residential growth will coincide with the ability of the Town to provide necessary services without imposing an unfair tax burden on existing residents.

Encourage village Main Street property/business owners to rehabilitate upper floors over downtown business's into affordable housing units

<b>Table 1. Profile of demographic characteristics for Fair Haven, Vermont</b>	<b>Number</b>	<b>Percent</b>
Total Population	2,928	100
<b>SEX AND AGE</b>		
Male	1,405	48
Female	1,523	52
Under 5 years	187	6.4
5 to 9 years	192	6.6
10 to 14 years	249	8.5
15 to 19 years	225	7.7
20 to 24 years	165	5.6
25 to 34 years	336	11.5
35 to 44 years	491	16.8
45 to 54 years	413	14.1
55 to 59 years	139	4.7
60 to 64 years	114	3.9
65 to 74 years	211	7.2
75 to 84 years	152	5.2
85 years and over	54	1.8
Median age (years)	37.3	(x)
18 years and over	2,150	73.4
Male	994	33.9
Female	1,156	39.5
21 years and over	2,047	69.9
62 years and over	481	16.4
65 years and over	417	14.2
Male	164	5.6
Female	253	8.6

Source: US Census Bureau, Census 2000 Summary File 1

Table 2

<b>HOUSING OCCUPANCY</b>		
<b>Total housing units</b>	<b>1,248</b>	<b>100.0</b>
Occupied housing units	1,165	93.3
Vacant housing units	83	6.7
For seasonal, recreational, or occasional use	13	1.0
Homeowner vacancy rate (percent)	1.7	(X)
Rental vacancy rate (percent)	4.7	(X)
<b>HOUSING TENURE</b>		
<b>Occupied housing units</b>	<b>1,165</b>	<b>100.0</b>
Owner-occupied housing units	741	63.6
Renter-occupied housing units	424	36.4
Average household size of owner-occupied unit	2.59	(X)
Average household size of renter-occupied unit	2.27	(X)

Source: US Census Bureau, Census 2000 Summary File 1

## Economic Development

### INVENTORY AND TRENDS

#### **Existing Commercial and Industrial Districts**

There are areas designated as primarily for commercial or industrial uses in Fair Haven. This does not include areas devoted to resource based commercial activities such as farming and forestry. Presently much of the land proposed for commercial and/or industrial purposes is used for residential purposes. In addition, development of some of these parcels may be constrained by problems such as proximity to the flood plain, access, topography and soils.

See: Land Use Map (Map 1)

#### **Fair Haven's Workforce**

It is estimated that more than 20% of the persons residing in Fair Haven work in either managerial or professional specialty occupations or technical, sales, and administrative support occupations. The 2000 Census also indicated the mean travel time to work for Fair Haven residents was approximately 25 minutes indicating that many are employed in centers outside of Fair Haven most likely located in Rutland Town and Rutland City. Other individuals specified that they were employed in farming, forestry, or agricultural occupations. This reinforces the idea that Fair Haven has maintained a balance between traditional uses of the land and more recent trends toward the creation of a bedroom community for surrounding employment centers

#### **Fair Haven Businesses**

The trend in types of employment located within the Town of Fair Haven were not published for all industries throughout the year; however, most trends are typical of the region as a whole. Generally, Fair Haven employs greater numbers of persons than is average for the region in agricultural, forestry, and fishing; contract construction and government type jobs including educational services. Fair Haven employs lesser numbers in the manufacturing, wholesale & retail trade, and service industries when compared to the county as a whole.

Recent trends do, however, indicate that service industries, including personal automotive repair business, and legal services, are the fastest growing sector in the Fair Haven area mirroring the regional state and national trend.

A survey of permits issued revealed that 55% of the businesses in Fair Haven were home occupations. This survey also indicated that nearly 90% of businesses (excluding home occupations) were located within areas zoned for industrial/commercial at that time. Although more recent information is not available, it appears that recent conditions do not differ greatly from 2000 conditions in terms of business types and location. Between 2000 and 2002, 5 permits were issued for home occupations most of those being for service type activities.

Generally, Fair Haven residents are in favor of development that is similar in scale to current businesses. Moreover, residents expressed concerns over services that could benefit Fair

Haven's current business clientele including downtown parking and traffic on Main Street and at intersections.

## **COMMERCE**

**With its location at the junction of major highways, Fair Haven has always had great potential, probably never fully realized, for commercial development. Several nearby small towns (West Haven, Benson, and Hampton, New York) use Fair Haven as a commercial center; to a lesser extent we draw business from the larger nearby towns (Castleton, Poultney, Orwell, and Whitehall, New York).**

There is enough potential clientele to support small specialty businesses such as are prevalent in our "business district". "Carl Durfee's Store" (clothing), "Fair Haven Auto Supply", "Ben Franklin's" (sundries), "St. John's Sporting Goods", "Wood's Agency" (insurance and real estate), "J.C. Durick Insurance Agency" (insurance and real estate) and "Fair Haven Motors" (Chrysler products) are examples of well-run, long established businesses in the traditional center of town. Since these stores attract people into town and create potential customers for others, they should be valued, and other similar businesses should be encouraged to locate in our "business district".

Several younger businesses in the downtown area seem to have that potential, and they too should be urged to stay and thrive. While the stability of businesses in the "downtown" area is not as great as it was thirty years ago, it is greater than it was ten years ago, and everything possible should be done to continue the improvement.

The areas around US Route 4, "Exit One" (still largely undeveloped) and "Exit Two" (already well established as a commercial center) seem, for obvious reasons, to be most successful with businesses selling necessities (such as grocery stores, gas stations, drug store, and fast food outlets) which attract transients as well as local consumers. In fact, it seems to be a rule of thumb near "Exit Two" that new commercial enterprises of a necessity-oriented nature get substantially more business than their preliminary surveys would indicate. This is presumably because of the heavy traffic on US Routes 4 and VT 22A, and also because of a lack of general facilities for several miles along those roads in all directions.

Both exits would seem to have great commercial potential, and more businesses which will attract transients (especially a motel, which we now lack) should be encouraged to move into those locations.

The town has two bank branches, one in the traditional center of town and the other near "Exit Two".

Fair Haven has become well known for its many restaurants. In addition to the newly rebuilt Fair Haven Inn, which has for some time been famous for its superb Greek cuisine, one can get Chinese, Italian, or "Mediterranean" food in restaurants especially dedicated to the foods of those cultures. There are two family restaurants serving standard American fare, a fast food restaurant, a doughnut shop, a dairy bar, and assorted deli's.

Besides the areas near the US Route 4 exits, Fair Haven has other commercial zones in town, notably on VT Route 22A South, on VT Route 4A East, and on the westerly edge of the village on VT Route 4A West. While commerce should be supported in all locations where it is zoned, these areas are more compatible with small specialty businesses. Only partially developed in a commercial sense, these sections presently mingle some residential with the business applications.

Fair Haven is now without a physician actually practicing in town, and, with the recent retirement of Dr. Sayers, we now have only one practicing dentist, who is or was recently unable to take new patients. The town, therefore, should do all it can to encourage physicians and dentists to open facilities in town.

With the recent improvements to local railroad tracks, it is hoped that more commerce will surround the railway depot, which was, in the early years of this century, a major center of commercial activity. Similarly, improvements to the airport facilities in town would have a beneficial effect on general commercial activity in Fair Haven. The addition of the National Guard to the Airport has increased the possibility that future Commercial Development will locate in this area due to the forced main from the airport to the sewage treatment plant.

## **INDUSTRY**

For over a hundred years Fair Haven has been known as a "slate town", and even now the slate industry employs a large number of local people in its quarries and mills. Evidence of our slate heritage can be found in the many slate roofs, foundations, patios and sidewalks throughout the town.

In recent years the mobil home industry, in the form of Skyline Corporation, has become a major employer, but they hire primarily young men and do not offer many lifelong careers. Although Fair Haven benefits somewhat from the statewide tourist industry, we have no specific major resort attractions, such as recreational lakes, state parks, or ski areas. This area is not currently a destination for travelers but was at one time a great vacation destination during the 1930s.

Fair Haven is fast becoming a "bedroom community", but it offers many advantages to any industry interested in providing more and better jobs for the towns people, who are known generally to be well educated, diligent workers. Further encouragement of green industry such as telecommunication industry and internet services should be fostered to grow such that more jobs would be in the designated downtown district.

Situated on the New York State border, Fair Haven is truly at a major junction of routes. VT RT 22A and US RT 4 through Fair Haven, are the largest single access to the state from the populous west, making Fair Haven essentially the "Gateway to Vermont". VT. Route 22A runs north from Fair Haven to Burlington and Montreal and is heavily traveled by truck and commercial traffic.

The Fair Haven airport, while now only semi-developed, has as much potential in site and approach as any airport in the state. Further development has been made possible thru the

National Guard Pump Station.

The local railroad track has been recently upgraded, and an Amtrak train now stops in town. With the improved track, it is anticipated that freight hauling by rail may be more viable in the future. The continued Amtrak Passenger Service is of vital importance to the development of Fair Haven. There has been some talk about the development of a Manchester route to Rutland. If the Passenger Service that currently stops in Fair Haven were diminished in any way that would be detrimental to the direction of town growth as defined in this Plan. There are several possible sites for the location of new industry with rail road freight shipping in town.

## **CONCLUSIONS**

Fair Haven residents prefer commercial development that compliments existing business uses. Zoning, state regulations and physical constraints may affect Fair Haven's ability to attract compatible businesses.

Fair Haven residents are in favor of the continued operations of Fair Haven's working farms and forests and enjoy the rural atmosphere of the town. Land use classifications in the grand list indicate a continuing trend towards the loss of farm and forest land.

Fair Haven has many resources available for industrial and commercial users including municipal water and sewer service, access to a high-speed cable network and an established business association. The town lacks an inventory of existing commercial and industrial properties and their associated resources that could aid in marketing Fair Haven to specific business sectors.

Existing commercial and industrial zoning districts may lack specific features that would encourage businesses to locate within their boundaries.

## **OBJECTIVES**

Encourage businesses to provide goods and services that are valuable to the community and the region.

Encourage home occupations.

Encourage additional development of office space for home occupation to transition into as they continue to grow and prosper.

Encourage a diversity of economic opportunities in Fair Haven.

Establish land use regulations that accommodate commercial and industrial growth; promote multiple uses in the village; and preserve residential areas, farms and natural areas.

Improve communication by the Town with businesses and state and regional entities.

Improve the availability of parking in the village commercial area.

Utilize existing resources (interstate, rail, telecommunications, water & sewer, natural resources) when planning for future business development and expansion.  
Explore ways to promote the continued operation of Fair Haven's working farms and forest lands.

Attempt to attract new industry to town to provide employment for residents and to increase the tax base of the town.

Preserve the rural character of the town by encouraging environmentally sound and clean industry.

Encourage improvements, through both public and private sectors, to the Fair Haven Airport, ensuring that the airport is not put to any other permanent use than as an airport.

Encourage continuation of Fair Haven's designation as a rail stop for the new Amtrak route through town, but work to retain sidings for possible future use by local commerce and industry.

Maintain the downtown area as a focus for community commercial activity, balancing historical preservation with the perceived needs of the future.

Promote businesses of general services around the US Route 4 exits, and encourage a motel near "Exit Two".

Encourage physicians and dentists to locate in Fair Haven to serve the health needs of residents.

## **IMPLEMENTATION**

Encourage new industry in keeping with the character of the town.

Support the efforts of and work with the Fair Haven Chamber of Commerce in attempting to attract new industry to town

Identify the industrial districts which support our goals and attempt to make them marketable and acceptable from the point of view of potential new industry.

Support existing successful businesses as town assets.

Try to attract new businesses, especially those to be owned by local towns people, and especially those which would seem to adapt well to their proposed locations.

Study, and, if necessary, suggest changes to downtown free-parking areas.

Develop zoning regulations that address the historic downtown area.

Industry should be identified in the Zoning Regulations as a conditional use in both the Rural and Commercial zones.

Encourage the formation of The Fair Haven Economic Development Committee. Note this committee might already exist in the form of the Lakes Region Chamber of Commerce. The goals of such a committee would be:

Establish a relationship with business related agencies at the State and Regional levels to aid in the facilitation of the goals of this section.

Explore financial incentives to attract and retain industrial and commercial development.

Seek out sources for incentives to businesses for improvements to the village downtown area.

Analyze the parking needs of the village commercial area and will work to secure additional parking locations if necessary.

Develop promotional tools such as a web site and pamphlets.

Conduct an in depth inventory of existing commercial and industrial properties and their infrastructure resources and current and future needs. The Town will use this information in marketing Fair Haven to specific business sectors.

Work with existing businesses to develop an inventory of their municipal needs, and work with the Town to meet those needs.

The Fair Haven Historic Resources Committee in concert with the Chamber of Commerce should explore options for the preservation of historically and architecturally significant structures that are used for business purposes.

The Planning Commission will revise regulatory standards where necessary to foster economically sustainable forms of business development, which are compatible with this Plan.

Note: The tables that follow show the relationship of Fair Haven to other towns in Rutland County.

Table 1 compares average wages.

Table 2 compares Tax Rates.

Table 3 compares Residential Values

Table 4 compares Adjusted Income

Table 5 compares Fair Haven with Rutland County and the State as a whole

Table 1 Compares Average Wages

Sorted by Average Wage					Effective Property Tax Rate 2001	Average Residential Value 2001	Median Adjusted Income 2000
Town	Population 2000	% Share County	Employment 2000	Wage 2000			
Mount Tabor	203	0.30%	D	D	\$2.06	\$74,076	\$20,037
Tinmouth	567	0.90%	D	D	\$1.88	\$88,938	\$24,792
West Haven	278	0.40%	D	D	\$2.25	\$79,940	\$29,782
Proctor	1,877	2.60%	333	\$35,985	\$3.08	\$84,364	\$27,617
Rutland Town	4,038	6.30%	3,704	\$30,917	\$2.10	\$136,617	\$32,039
Pittsford	3,140	4.90%	956	\$29,246	\$2.22	\$105,143	\$26,049
Vermont	608,827	NA	296,349	\$28,920	NA	NA	\$26,993
Rutland City	17,292	26.90%	12,924	\$28,420	\$2.53	\$82,888	\$21,652
Clarendon	2,811	4.40%	1,012	\$26,982	\$2.28	\$99,705	\$25,935
Danby	1,292	2.00%	235	\$26,580	\$1.82	\$81,519	\$23,596
Rutland County	64,400	100%	28,942	\$26,570	NA	NA	NA
Pittsfield	427	0.70%	142	\$24,753	\$1.39	\$128,334	\$29,169
Sudbury	583	0.90%	42	\$24,357	\$1.97	\$101,184	\$30,791
Middletown Springs	823	1.30%	56	\$24,312	\$2.27	\$90,468	\$25,688
Poultney	3,633	5.60%	1,055	\$24,000	\$2.18	\$89,763	\$23,942
Mount Holly	1,241	1.60%	184	\$23,804	\$1.97	\$92,871	\$26,677
Brandon	3,917	6.10%	1,612	\$23,729	\$2.41	\$89,343	\$23,145
Castleton	4,367	6.80%	1,142	\$22,678	\$1.81	\$90,799	\$25,772
Pawlet	1,394	2.20%	337	\$22,568	\$1.86	\$79,340	\$23,426
Wallingford	2,274	3.50%	430	\$21,831	\$2.18	\$99,058	\$27,270
Shrewsbury	1,108	1.70%	182	\$21,395	\$2.09	\$111,964	\$31,855
West Rutland	2,535	3.90%	624	\$21,202	\$2.60	\$83,682	\$23,230
Fair Haven	2,928	4.50%	983	\$21,134	\$2.59	\$80,517	\$22,833
Mendon	1,028	1.60%	381	\$20,985	\$2.15	\$147,949	\$34,740
Benson	1,039	1.60%	101	\$20,872	\$1.94	\$73,179	\$22,958
Killington	1,095	1.70%	2,163	\$20,004	\$1.31	\$156,953	\$23,781
Wells	1,121	1.70%	112	\$18,825	\$2.03	\$99,165	\$24,498
Ira	455	0.70%	12	\$18,665	\$2.00	\$89,187	\$34,170
Chittenden	1,182	1.80%	153	\$15,724	\$2.02	\$112,953	\$29,615
Hubbardton	752	0.01	21	\$14,759	\$2.19	\$113,418	\$24,761

Source: Data Compiled from various sources including the US Census Bureau, Vermont Department of Taxes, Vermont Department of Employment and Training

Table 2 Compares Property Tax Rates

<b>Sorted by Property Tax Rates</b>					<b>Effective Property Tax Rate</b>	<b>Average Residential Value</b>	<b>Median Adjusted Income</b>
<b>Town</b>	<b>Population 2000</b>	<b>% Share County</b>	<b>Employment 2000</b>	<b>Wage 2000</b>	<b>2001</b>	<b>2001</b>	<b>2000</b>
Rutland County	64,400	100%	28,942	\$26,570	NA	NA	NA
Vermont	608,827	NA	296,349	\$28,920	NA	NA	\$26,993
Proctor	1,877	2.60%	333	\$35,985	\$3.08	\$84,364	\$27,617
West Rutland	2,535	3.90%	624	\$21,202	\$2.60	\$83,682	\$23,230
Fair Haven	2,928	4.50%	983	\$21,134	\$2.59	\$80,517	\$22,833
Rutland City	17,292	26.90%	12,924	\$28,420	\$2.53	\$82,888	\$21,652
Brandon	3,917	6.10%	1,612	\$23,729	\$2.41	\$89,343	\$23,145
Clarendon	2,811	4.40%	1,012	\$26,982	\$2.28	\$99,705	\$25,935
Middletown Springs	823	1.30%	56	\$24,312	\$2.27	\$90,468	\$25,688
West Haven	278	0.40%	D	D	\$2.25	\$79,940	\$29,782
Pittsford	3,140	4.90%	956	\$29,246	\$2.22	\$105,143	\$26,049
Hubbardton	752	0.01	21	\$14,759	\$2.19	\$113,418	\$24,761
Wallingford	2,274	3.50%	430	\$21,831	\$2.18	\$99,058	\$27,270
Poultney	3,633	5.60%	1,055	\$24,000	\$2.18	\$89,763	\$23,942
Mendon	1,028	1.60%	381	\$20,985	\$2.15	\$147,949	\$34,740
Rutland Town	4,038	6.30%	3,704	\$30,917	\$2.10	\$136,617	\$32,039
Shrewsbury	1,108	1.70%	182	\$21,395	\$2.09	\$111,964	\$31,855
Mount Tabor	203	0.30%	D	D	\$2.06	\$74,076	\$20,037
Wells	1,121	1.70%	112	\$18,825	\$2.03	\$99,165	\$24,498
Chittenden	1,182	1.80%	153	\$15,724	\$2.02	\$112,953	\$29,615
Ira	455	0.70%	12	\$18,665	\$2.00	\$89,187	\$34,170
Mount Holly	1,241	1.60%	184	\$23,804	\$1.97	\$92,871	\$26,677
Sudbury	583	0.90%	42	\$24,357	\$1.97	\$101,184	\$30,791
Benson	1,039	1.60%	101	\$20,872	\$1.94	\$73,179	\$22,958
Tinmouth	567	0.90%	D	D	\$1.88	\$88,938	\$24,792
Pawlet	1,394	2.20%	337	\$22,568	\$1.86	\$79,340	\$23,426
Danby	1,292	2.00%	235	\$26,580	\$1.82	\$81,519	\$23,596
Castleton	4,367	6.80%	1,142	\$22,678	\$1.81	\$90,799	\$25,772
Pittsfield	427	0.70%	142	\$24,753	\$1.39	\$128,334	\$29,169
Killington	1,095	1.70%	2,163	\$20,004	\$1.31	\$156,953	\$23,781

Source: Data Compiled from various sources including the US Census Bureau, Vermont Department of Taxes, Vermont Department of Employment and Training

Table 3 Compares Residential Value

Sorted by Residential Value					Effective	Average	Median
Town	Population	% Share	Employment	Wage	Property	Residential	Adjusted
	2000	County	2000	2000	Tax Rate	Value	Income
					2001	2001	2000
Rutland County	64,400	100%	28,942	\$26,570	NA	NA	NA
Vermont	608,827	NA	296,349	\$28,920	NA	NA	\$26,993
Killington	1,095	1.70%	2,163	\$20,004	\$1.31	\$156,953	\$23,781
Mendon	1,028	1.60%	381	\$20,985	\$2.15	\$147,949	\$34,740
Rutland Town	4,038	6.30%	3,704	\$30,917	\$2.10	\$136,617	\$32,039
Pittsfield	427	0.70%	142	\$24,753	\$1.39	\$128,334	\$29,169
Hubbardton	752	0.01	21	\$14,759	\$2.19	\$113,418	\$24,761
Chittenden	1,182	1.80%	153	\$15,724	\$2.02	\$112,953	\$29,615
Shrewsbury	1,108	1.70%	182	\$21,395	\$2.09	\$111,964	\$31,855
Pittsford	3,140	4.90%	956	\$29,246	\$2.22	\$105,143	\$26,049
Sudbury	583	0.90%	42	\$24,357	\$1.97	\$101,184	\$30,791
Clarendon	2,811	4.40%	1,012	\$26,982	\$2.28	\$99,705	\$25,935
Wells	1,121	1.70%	112	\$18,825	\$2.03	\$99,165	\$24,498
Wallingford	2,274	3.50%	430	\$21,831	\$2.18	\$99,058	\$27,270
Mount Holly	1,241	1.60%	184	\$23,804	\$1.97	\$92,871	\$26,677
Castleton	4,367	6.80%	1,142	\$22,678	\$1.81	\$90,799	\$25,772
Middletown Springs	823	1.30%	56	\$24,312	\$2.27	\$90,468	\$25,688
Poultney	3,633	5.60%	1,055	\$24,000	\$2.18	\$89,763	\$23,942
Brandon	3,917	6.10%	1,612	\$23,729	\$2.41	\$89,343	\$23,145
Ira	455	0.70%	12	\$18,665	\$2.00	\$89,187	\$34,170
Tinmouth	567	0.90%	D	D	\$1.88	\$88,938	\$24,792
Proctor	1,877	2.60%	333	\$35,985	\$3.08	\$84,364	\$27,617
West Haven	278	0.40%	D	D	\$2.25	\$79,940	\$29,782
Pawlet	1,394	2.20%	337	\$22,568	\$1.86	\$79,340	\$23,426
Mount Tabor	203	0.30%	D	D	\$2.06	\$74,076	\$20,037
Benson	1,039	1.60%	101	\$20,872	\$1.94	\$73,179	\$22,958

Source: Data Compiled from various sources including the US Census Bureau, Vermont Department of Taxes, Vermont Department of Employment and Training

Table 4 Compares Adjusted Income

<b>Sorted by Adjusted Income</b>					<b>Effective</b>	<b>Average</b>	<b>Median</b>
					<b>Property</b>	<b>Residential</b>	<b>Adjusted</b>
<b>Town</b>	<b>Population</b>	<b>% Share</b>	<b>Employment</b>	<b>Wage</b>	<b>Tax Rate</b>	<b>Value</b>	<b>Income</b>
	<b>2000</b>	<b>County</b>	<b>2000</b>	<b>2000</b>	<b>2001</b>	<b>2001</b>	<b>2000</b>
Rutland County	64,400	100%	28,942	\$26,570	NA	NA	NA
Mendon	1,028	1.60%	381	\$20,985	\$2.15	\$147,949	\$34,740
Ira	455	0.70%	12	\$18,665	\$2.00	\$89,187	\$34,170
Rutland Town	4,038	6.30%	3,704	\$30,917	\$2.10	\$136,617	\$32,039
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Wallingford	2,274	3.50%	430	\$21,831	\$2.18	\$99,058	\$27,270
Vermont	608,827	NA	296,349	\$28,920	NA	NA	\$26,993
Mount Holly	1,241	1.60%	184	\$23,804	\$1.97	\$92,871	\$26,677
Pittsford	3,140	4.90%	956	\$29,246	\$2.22	\$105,143	\$26,049
Clarendon	2,811	4.40%	1,012	\$26,982	\$2.28	\$99,705	\$25,935
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Hubbardton	752	0.01	21	\$14,759	\$2.19	\$113,418	\$24,761
Wells	1,121	1.70%	112	\$18,825	\$2.03	\$99,165	\$24,498
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Killington	1,095	1.70%	2,163	\$20,004	\$1.31	\$156,953	\$23,781
Danby	1,292	2.00%	235	\$26,580	\$1.82	\$81,519	\$23,596
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West Rutland	2,535	3.90%	624	\$21,202	\$2.60	\$83,682	\$23,230
Brandon	3,917	6.10%	1,612	\$23,729	\$2.41	\$89,343	\$23,145
Benson	1,039	1.60%	101	\$20,872	\$1.94	\$73,179	\$22,958
Fair Haven	2,928	4.50%	983	\$21,134	\$2.59	\$80,517	\$22,833
Rutland City	17,292	26.90%	12,924	\$28,420	\$2.53	\$82,888	\$21,652
Mount Tabor	203	0.30%	D	D	\$2.06	\$74,076	\$20,037

Source: Data Compiled from various sources including the US Census Bureau, Vermont Department of Taxes, Vermont Department of Employment and Training

Table 5 Compares Fair Haven To Rutland County, Other Towns in the County and the State.

<b>Rutland County Town</b>					<b>Effective Property Tax Rate</b>	<b>Average Residential Value</b>	<b>Median Adjusted Income</b>
<b>Town</b>	<b>Population 2000</b>	<b>% Share County</b>	<b>Employment 2000</b>	<b>Wage 2000</b>	<b>2001</b>	<b>2001</b>	<b>2000</b>
Vermont	608,827	NA	296,349	\$28,920	NA	NA	\$26,993
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Mendon	1,028	1.60%	381	\$20,985	\$2.15	\$147,949	\$34,740
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Brandon	3,917	6.10%	1,612	\$23,729	\$2.41	\$89,343	\$23,145
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Rutland Town	4,038	6.30%	3,704	\$30,917	\$2.10	\$136,617	\$32,039
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Mount tabor	203	0.30%	D	D	\$2.06	\$74,076	\$20,037
Tinmouth	567	0.90%	D	D	\$1.88	\$88,938	\$24,792
West Haven	278	0.40%	D	D	\$2.25	\$79,940	\$29,782

**Source: Data Compiled from various sources including the US Census Bureau, Vermont Department of Taxes, Vermont Department of Employment and Training**

**Statement of How Plan Relates to Neighbors and Region**

This Plan, as presented, has been compared and reviewed against surrounding area plans and regional plan. The following are found to be mutual conclusions relating to the plans and development trends.

Plan development to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside.

Intensive residential development should be encouraged primarily in areas related to community centers, and strip development along highways should be discouraged.

Economic growth should be encouraged in locally designated growth areas, or employed to revitalize existing village and urban centers or both.

Public investment, including the construction or expansion of infrastructure, should reinforce the general character and planned growth patterns of the area.

Provide a strong and diverse economy that provides satisfying and rewarding job opportunities, that maintain high environmental standards, and expand economic opportunities in areas with high unemployment or low per capita incomes.

Provide for safe, convenient, economic and energy efficient transportation systems that respects the integrity of the natural environment, including public transit options and paths for pedestrians and bicyclers.

Strategies to protect long term viability of agriculture and forest lands should be encouraged by using sound forest and agricultural management practices and should include maintaining low overall density.

- a. The manufacture and marketing of value added agriculture and forest products should be encouraged.
- b. The use of locally grown food products should be encouraged.
- c. Public investment should be planned so as to minimize development pressure on agriculture and forestlands.

To ensure the availability of safe and affordable housing for all Vermonters.

- a. Housing should be encouraged to meet the needs of a diversity of social and income groups in each Vermont community, particularly for those citizens of low and moderate income.
- b. New and rehabilitated housing should be safe, sanitary, located conveniently to employment and commercial centers, and coordinated with the provisions of necessary public facilities and utilities.
- c. Plan for, finance and provide an efficient system of public facilities and services to meet future needs. Public facilities and services should include fire and police protection, emergency medical services, schools, water supply and sewage and solid waste disposal.

The rate of growth of all parts should not exceed the ability of the community and the area to provide facilities and services.

The recommended program for the implementation of this plan is an existing integral part of our plan for the Town of Fair Haven and our surrounding neighbors.