

## **Chapter 1**

### **INTRODUCTION**

#### **What is the Comprehensive Plan?**

The Comprehensive Plan identifies what has happened to make the town what it is today and what is happening that will change the town in the future. And, more importantly, the plan is a public statement of what we like about Fryeburg, and what we would like our town to become in the future. The Comprehensive Plan should be thought of as a blue print or a road map. It is a guide that, if used properly, will help us to achieve our community goals.

The Comprehensive Plan does not attempt to understand and plan for the ultimate development or “build-out” of the town, rather it recognizes the planning process as a continuing process and that various parts of the plan are subject to refinement, periodic review, and updating so as to be of constant value.

#### **Why should we have a Comprehensive Plan?**

As the town grows, changes in land use - housing developments, commercial developments, and so forth - tend to change Fryeburg.

Some of these changes are making Fryeburg a more enjoyable place in which to live - some are reducing our quality of life. And, as development occurs, the public costs (the costs to all of us as tax payers) continue to go up. More people demand and need more services, there are more roads to plow and maintain, more children to educate, and public facilities wear out faster from increased use.

Local government has become “big business.” The town raises over a million dollars in property taxes each year and spends over two million dollars. As the town grows, the cost of running the town goes up. How efficient the town operates, and how and where growth takes place have an effect on the cost of town government to all of us as taxpayers.

Very few smart business people would ever consider starting and running a multi-million dollar business without a business plan. Shouldn't a multi-million dollar local government also have a business plan? That is what the comprehensive plan is - a community business plan.

#### **Who has developed this Comprehensive Plan?**

The Board of Selectmen charged the Fryeburg Comprehensive Planning Committee with the responsibility of developing the Comprehensive Plan which would be sent to the voters for adoption. This Committee and other volunteers began the process during the Winter of 1989

During the Autumn of 1991 the Committee began meeting almost every other week. The Committee spent long hours researching past and present trends, and analyzing these trends to determine what is likely to happen in the future if only outside forces determine what happens in town.

The Committee sought input from the public throughout the process. Committee meetings were open to the public. At appropriate stages during the process, public forums and public hearings were held. A public opinion survey was delivered to all residents in order to solicit the community's input on issues and needs. The Planning Committee made every effort to see that the plan is the public's plan, not the plan of a small group.

Many people - town staff, citizens of the community, and others helped with the gathering of information, discussing of policies, reviewing drafts of the plan, and so forth. The Planning Committee thanks all of these people for their assistance.

### **How will the plan affect the average citizen or landowner?**

The Comprehensive Plan is a statement of the community's vision of the future. As with all public decisions the plan has to be a series of compromises - private interests have to be balanced with public interests. However, sharing, give-and-take, and compromise have to take place when we live in a community.

When market forces do not mitigate the negative impacts of development - when the public's health, safety, and general welfare are potentially at risk - then the public has the responsibility and obligation to guide the use of private property. The plan does recommend that the town guide the use of private property in some instances, However, the plan only recommends that this be done to meet the goals and policies which the community has articulated, while at the same time protecting the public health, safety, and general welfare.

The concerns of private property rights versus public health and safety, well-being and efficiency, and visual character are very real concerns. We on the Comprehensive Planning Committee are also property owners in Fryeburg. We expressed these private versus community concerns at almost every meeting and we debated them amongst ourselves, and probably with our neighbors. We realize that this Plan has to be a compromise and has to "walk a fine line" between the rights of the community and the rights of individuals. We feel that we have accomplished this.

### **PRELIMINARY ASSESSMENT OF ASSETS AND LIABILITIES**

The town experienced growth rates of 17.8%, 23.0%, and 9.3% during the 1960s, 1970s, and 1980s, respectively. Fryeburg is changing, and towns around Fryeburg are changing. The citizens of Fryeburg see the need to be actively involved in guiding this change within their town - not just reacting to it.

The community planning process will allow the town the opportunity to take a look at what has happened and what is happening to the town. It will allow us as a community to look at the forces that are at work changing the town. While some of these changes may be for the better, some are undoubtedly not ones which we all want.

And, what is it that the public wants? The Comprehensive Planning process has tried to determine this. The public opinion survey plus the Planning Committee members' individual knowledge of Fryeburg has given the committee an idea of public issues - a starting point for determining public values and goals.

The issues that are identifiable are:

- \* maintaining the rural character of the town.
- \* preserving the natural environment.
- \* balancing economic opportunities with the attractive "ruralness" and the natural environment of the town.

- \* making sure that the town is as attractive in the future as it is today.
- \* maintaining or improving the quality of education.
- \* traffic.

The town has been provided with certain resources which show upon either the positive or negative side of the town's "assets and liabilities" balance sheet, depending on the way we look at the resource. For example, the town's geographic location, the Saco River and river valley, the mountains near by and the ease of access to employment, commercial, recreational, and cultural opportunities all make Fryeburg an attractive place in which to live. These things certainly are assets. However, things that make Fryeburg an attractive place in which to live, also attract more residential growth.

So, are they assets or liabilities? They may be either, depending on how we manage them and how they are allowed to affect the town.

This really gets at the heart of one of our most difficult jobs in developing the town's Comprehensive Plan. How do we as a community continue to enjoy the town, and enjoy our individual freedoms and property rights, while at the same time manage the assets, making sure they always are assets, and manage liabilities, trying to make them less of a negative?

### **What is the Goal of the Comprehensive Plan?**

This Comprehensive Plan attempts to inventory what has happened and what is happening to Fryeburg, and what is here today.

It tries to determine what we as a community like about our town, and what we would like to change.

And, it tries to provide a strategy for capitalizing on the assets and improving the liabilities in order to achieve the kind of a town we as a community want in the future.

There were a lot of Fryeburg citizens who devoted a lot of their time to help develop this community comprehensive plan. We would like to thank all of them for their assistance.

We have listed below those who worked on this community project. We hope that we haven't left someone out.

Marilyn Andrews	Roy Andrews
Maurice Baillargeon	Don Baker, Jr.
John Barry	Alfred Barton
Joe Brenchick	Linwood Buck
Lynn Card	Clarence Coombs
Dick Cote	Conrad Eastman
Peter Fletcher	Richard Fox
Sue Fox	Scott Gamwell
Bob Gerry	Alan Goldenhar
Heidi Gould	David Haley

Craig Holden

Ed Jones, Selectmen

Jim MacFarlane

John Majeski

Tommie McKenzie

Edward Mills

Paul Mutrie

A. Kingman Pratt

Michael Riley

William Robbing

David Smith

Craig Stewart

Irving Thurston, Jr.

Clyde Watson

Laurie Weston

Ted Raymond

Dianne Jones

Thomas Klinepeter, Selectman

Sandra Mair

Jay McClosky

David Miles

Paul Mulherin

Nathan Poor

Judy Raymond

Virginia Riley

Theresa Shaw

Joseph Solari

Brenda Thibodeau

Harry True

George Weston, Selectman

Roland Wiley

Larry Kiesman

## CHAPTER 2

### HISTORIC AND GEOGRAPHIC SETTING, AND OVERVIEW

Fryeburg, a rural community of about 3,000 residents is located about 55 miles northwest of Portland. Fryeburg is on the border of New Hampshire with the towns of Conway and Chatham as neighboring New Hampshire towns. It's Maine bordering towns are Brownfield, Denmark, Bridgton, Sweden, Lovell, and Stow. It is at the junction of two major routes from Portland, one east and one west of Sebago Lake, which merge to continue west to New Hampshire and northwest through the White Mountains to Vermont and Canada. The roads follow original trails used by Indian tribes. Later the roads were improved for settlers' stage coaches, railroads, and now highway routes 302, 5, and 113 used by motor vehicles.

Fryeburg lies in the broad intervals of the Saco River and adjacent upland areas covering about 60 square miles with additional land granted after the original 36 square miles. The Saco River made a great bend north, winding about 70 miles through the township. Now the river was shortened to 34 miles by the building of a canal in 1817. The Saco River is a benevolent source of fertile farm lands and recreational pleasures. It is also the cause of great damages during the spring floods which can damage crop lands, roads, bridges, and homes. The floods of the last 70 years in 1923, 1936, and 1953 caused extensive damages as did the most recent flood in 1987. The lower areas of Fryeburg are about 400-430 feet above sea level with some of its hills rising another 600-740 feet higher.

Spectacular views abound from many vantage points, including views of the Ossipee Mountains, Mt. Chacorua, and most of the eastern White Mountains. Evans Notch lies to the north, Pleasant Mountain to the east. Within the town are Mount Tom, Starks Hill, Pine Hill with Bradley Park, and in Peary Park are Admiral Peary's True North Meridians. Also there is the well known glacial granite outcropping "Jockey Cap" with its Peary Memorial view-finding bronze director which shows the outline and old Indian names of the mountains and lakes visible from atop Jockey Cap. There is one covered bridge. It is Hemlock Bridge which is over a section of the Old Saco River in East Fryeburg.

The Pequawket Indian Tribe of the Abanaki Nation occupied the village and Lovewell's Pond areas for generations before settlers arrived.

The Pond is famous for a battle on May 8, 1725, between 34 rangers from Dunstable, Massachusetts, against Indians who had attacked various settlements. The rangers were led by Captain John Lovewell, the Indians by Chief Paugus. It was a day-long fight at the north end of Lovewell's Pond with disastrous results. Both leaders and many of their men were killed or wounded in the battle. A monument to commemorate this battle is located at the north end of Lovewell's Pond on Island Road, near Battleground Road.

Fryeburg was the first town settled in Oxford County. It was given to Colonel Joseph Frye of Andover, Massachusetts, as a British Royal Grant by the General Court of Massachusetts. The town was given in recognition of Colonel Frye's services in the French and Indian Wars.

The original grant of 1762 was for 6 miles square in a general area chosen by Colonel Frye. Colonel Frye chose the best of the Saco River and the fertile intervalle land.

Frye laid out seven, forty-acre house lots on the plains and in the part of the township nearest the Province Line which became the general boundaries at the present Fryeburg Village. Some of these old granite markers can still be found. Other less densely populated localities became

known as Fryeburg Center, West Fryeburg, North Fryeburg, Fryeburg Harbor, East Fryeburg, and the Haley Neighborhood.

The town was incorporated on January 11, 1777, with a government of a “Board of Selectmen and official” elected by town meeting voting.

The early settlers came from Northern Massachusetts towns as did Colonel Frye, and from the Concord, New Hampshire, area. Many of the settlers were of British descent and college educated.

Fryeburg Academy was incorporated in 1792 and has provided a secondary education for students from Fryeburg and surrounding towns as well as boarding students ever since. Daniel Webster was the Preceptor of the Academy in 1802. The elementary schools and Academy provide numerous social, cultural, and recreational activities for the community,

From the beginning, a good percentage of the young people have been college educated and have pursued vocations in various areas.

The town’s population grew slowly and the town retained its rural character. In the first 100 years, transportation was difficult so the social life revolved around the homes, churches, schools, and fraternal orders.

The Congregational Church was organized on October 11, 1775. As the church split, other churches were organized. Now, there are Congregational, Methodist, Universalist, Swedeborgian, Christian Science, Assembly of God, and Roman Catholic churches. Each church has groups which develop social activities.

Fraternal and service organizations add to the social and cultural life of Fryeburg. Today, some of the organizations that the town is fortunate to have are the Free Masons, Eastern Star, American Legion, Odd Fellows, Knight of Pythias, Red Man, Lions, Kiwanis, Fryeburg Historical Society, DAR, Fryeburg Rescue, Fryeburg Fish and Game Club, Fryeburg Recreation, Lovell and Fryeburg VFW, Interstate Snogoes, Grange, West Oxford Agricultural Society, A.A., Weight Watchers, Boy and Girl Scouts, Women’s Club to name a few.

The Fryeburg Fair and fall foliage draw thousands of people to the town. The Fryeburg Fair was organized in 1851 and is sponsored by the West Oxford Agricultural Society. The Fryeburg Fair is the largest and most popular agricultural fair in Maine.

For recreation, there is the popular canoeing on the Saco River with its overnight camping and swimming areas, and lake boating. Fishing and hunting are excellent.

Nearby camping areas, Inns, Motels are good bases for exploration of the many joys of the outdoor, all-season recreations of the Fryeburg area.

Economically, there is the agricultural community which supports the growth, storage, and marketing of potatoes, corn, beans, grass turf, and tree production.

A large proportion of its upland acreage is in timberland for cutting as logs, bolt work, pulp, and chips. Once transported by river drives, then the railroads, and now by trucks.

Industrially, Fryeburg boasts four mills related to wood products, one forest nursery, and 13 light industrial plants, primarily machine shops and one cabinet manufacturer and one ceramics manufacturer. Small businesses include: vehicle repair shops, service stations, grocery, drug, hardware, auto parts, convenience stores, restaurants, hair care shops, real estate and insurance

firms, propane gas, gasoline and oil distributors, carpenters, excavation contractors, electricians, masons, painters, plumbers, landscaping services, septic services, used car dealerships, recreational vehicles sales, rubbish removal, several bed and breakfasts, agricultural and industrial equipment sales, flower shops, farm stands, flea markets, health and body improvement centers, canoe rentals, camping facilities, newspaper, carpet cleaning services, snow removal, paving, pool installation and service, water company, agricultural produce growers, turf growers, power generating facility, and transportation services.

Professional services include attorneys, accountants, doctors, dentists, bankers, teachers, veterinarians, a health care center, nursing homes, clinics, summer camps, and nearby hospitals in Bridgton and North Conway.

The Eastern Slope Airport in Fryeburg is the regional air link. It has a 3,698 foot long by 75 foot long, lighted runway with approach lights, but no instrument landing system. This airport is becoming increasingly important to the area.

Agricultural directions have changed over the decades according to the market demands and profits. Chicken farms, dairy herds, and crop canning factories have come and gone, now replaced by potato, corn, turf, tree, and market vegetable crops.

Over the years, the community has seen several housing developments which have single family homes. There are two developments for elderly and low incomes families. Fryeburg has several apartment complexes and multi-family dwellings. There are many people who have chosen Fryeburg as a second home community.

Retirees find living in Fryeburg good with its social, cultural, and recreational attractions.

The village has a historic district of fine old homes. Many are on the National Register of Historic Places. These include the Library and the Historical Society Museum. Many of these buildings are up to 200 years old. The intervale and upland areas also have equally fine old homes.

The coming of the Mountain Division of the Portland and Ogdenburg Railroad (the predecessor of the Maine Central Railroad) in 1873 reduced stage coach travel. This made transportation to Fryeburg and on to the White Mountains much faster and opened up a thriving resort business, and the growth of church camp meeting grounds in Fryeburg, of which some still exist.

There had been Public Houses for meals and sleep as a service to travelers from about 1800. The first Oxford House was built in 1800. It burned in 1887, opening the way for a new four-story 67 room hotel also named the Oxford House. This Inn burned on August 31, 1906, along with 13 other important buildings and homes.

The town's summer travel businesses never fully recovered from that disastrous fire. With the coming of automobiles, Vacationers became increasingly mobile and no longer settled into one town or hotel for the summer.

Today Fryeburg's summer tourist business is mostly derived from thousands of people visiting the pristine waters of the Saco River for day and overnight canoe trips. Other business is derived from people vacationing in camps and vacation homes primarily around the lakes and ponds.

Fryeburg is still an important link in the northern New England transportation network. Through Fryeburg is a major trucking route from Portland via Routes 302 and 5/113 and from Auburn and Lewiston via Route 302 to all points northwest of town. These destinations include Berlin, New

Hampshire; St. Johnsbury, Vermont; and Montreal and Quebec City. The various cargoes include oil, gasoline, portland cement, and chemicals for manufacturing. Much of this trucking is done at night due to seasonal daily traffic congestion in North Conway which severely restricts efficient movement of truck traffic.

### Chapter 3

## SUMMARY OF THE PUBLIC OPINION SURVEY

### *THE SURVEY*

The survey was delivered as an insert in the Town Reports which were mailed in March, 1990.

There were 322 questionnaires returned and tabulated. Of these, 255 (79%) came from year-round residents, 29 (9%) from seasonal residents, and 38 (12%) from non - resident land owners.

The following is a discussion of the responses given by the 255 year-round residents and percentages are relative these respondents.

### *THE SUMMARY*

The respondents are made up of small land owners, 51% owning less than 2 acres of land. However, it is interesting that a fairly large percentage of the respondents - 16% - own over 25 acres.

The respondents are long time residents of Fryeburg. Over half - 53% - have lived in Fryeburg more than 20 years, and a full 73% have lived in town more than 10 years.

Most of the respondents work in town. Of those who work, 60% work in Fryeburg, 25% work in Conway/North Conway. A large percentage - 16% - are retired.

Questions 6 through 12 asked to what uses the respondents put their land. Residential use is obviously the use of the vast majority - 99%. However, a large percentage - 22% - said that they use their land for business. Also, 9% said they use their land for open land, 8% said for timberland, and 8% for agriculture.

The results show a strong desire to maintain environmental quality and to preserve undeveloped land.

On question 16, which asked if the respondents agree that the preservation of open space in Fryeburg is desirable, 91% said "yes."

Over 80% of the respondents feel that the preservation or protection of the natural environment is either "important" or "very important." The following shows the percentages of "yes" responses when asked if the preservation or protection of certain items is either important or very important:

	<u>yes</u>
preservation of drinking water supplies	99%
preservation of river and lake water quality	98%
protection of wildlife habitats	93%
preservation of open space	90%
preservation of rural character	88%
protection of wetlands	85%
preservation of land for recreational use	83%
protection of scenic vistas and views	83%

As to methods that would accomplish this, the respondents feel that cluster/open space subdivisions should be allowed as optional - 60% (yes) to 40% (no), but 91% said that it should not be mandatory. Increasing the minimum lot size in the rural parts of town did not get strong support. In fact, the respondents were quite evenly split on this issue - 49% saying that the lot size should be increased, 51% saying that it should not. Of those who said the lot size should be increased, 74% said that it should be 2 acres, 17% said 3 acres, 8% said 5 acres, and fewer than 1% said it should be more than 5 acres

The respondents do show a willingness to expend public money for the protection of the environment and for the preservation of open space and undeveloped land. On questions 117 through 123, when asked if local tax dollars should be used to protect certain environmental features the following percentages said ‘yes’:

	<u>yes</u>
protect ground water	87%
protect river and lake water quality	87%
protect land for recreational use	69%
protect wet lands	67%
protect open space	66%
protect wildlife habitats	65%

On question 54, 73% of the respondents indicated a willingness to acquire land along lakes and rivers for public access. And, on question 55, 79% said they favored setting aside money in a capital reserve fund to purchase land or the development rights to land so that it could remain open.

When asked if there are particular natural or cultural features that should be protected or preserved, 60% said there are, and 21% indicated historic homes and Main Street as one such feature. Sixteen percent indicated the Saco River, and 14% indicated the Jockey Cap.

In the other historic preservation and cultural resource questions public support is shown to be strong, but not as strong as in the natural resource issues. Sixty-nine of the respondents said that the preservation of historic buildings and districts is either important or very important. Eighty-three percent said that they rate the protection of antiquities and old town records as either important or very important. And, even 57% said that the protection of stone walls along rural roads is either important or very important.

The survey asked a number of land use related questions. Questions 19 through 50 asked if various land uses should be “allowed “anywhere, “confined to specific locations,” or “not allowed.”

The following is a list of the land uses that the majority of the respondents want to allow anywhere - and the percentage.

single family homes	88%
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conversion of seasonal homes to year-round	71%
manufactured homes	70%
seasonal homes	58%
affordable homes	52%
bed & breakfasts	51%

And, this is the list of the land uses that the respondents want to confine to specific locations also showing percentages of allow anywhere and not allow “votes”:

	<u>confine</u>	<u>allow</u>	<u>not allow</u>
elderly care facilities	57%	43%	<1%
professional offices	69%	30%	<1%
service stores	78%	21%	<1%
child care facilities	53%	45%	1%
housing for the elderly	57%	42%	1%
sit down type restaurants -	75%	24%	1%
light manufacturing	85%	14%	1%
banks	9%	19%	2%
campgrounds	80%	18%	2%
individual retail stores	80%	18%	2%
recreational centers	79%	18%	2%
duplexes	55%	42%	3%
gym - fitness studios	80%	16%	4%
apartments	70%	24%	7%
hotels-motels-inns	77%	16%	7%
gravel pits	84%	9%	7%
gas stations	83%	9%	7%
mobile homes	71%	20%	9%
theaters-movies	82%	9%	9%
industrial parks	81%	4%	15%
large grocery stores	74%	9%	17%
mobile home parks	73%	9%	18%
heavy manufacturing	77%	5%	19%
condominiums	53%	10%	37%
shopping malls	53%	7%	40%

(The above list could be considered to be in order by most acceptable land use to least acceptable.)

There were no land uses on the list contained in the questionnaire that the majority or even plurality of the respondents said should not be allowed.

Questions 56 through 82 dealt with the respondents’ rating of public services and whether tax support should be increased for the service. Respondents were asked to rate service on a scale of 1 to 4, with 1 being poor, 2 being fair, 3 being good, and 4 being excellent. The following shows the mean rating each of the services received.

rescue service	3.6
fire protection	3.2

town recreational programs	3.2
library	3.1
town office services	2.9
recreational facilities	2.8
summer road maintenance	2.8
law enforcement	2.8
board of selectmen	2.8
educational system	2.7
winter road maintenance	2.7
solid waste disposal	2.6
code enforcement	2.5
sidewalks	2.4

When asked if the respondent thought taxes should be increased to improve any of the public services, no service received a plurality “yes” vote for increasing tax support. The service that did receive the largest percentage of respondents wanting increased tax support was the one with the lowest rating - sidewalks. Thirty-five percent said that tax support should be increased to improve sidewalks.

The service receiving the largest percentage of respondents that wanted tax support decreased was educational services. The second largest percent of votes for decreasing was for code enforcement. These services had 15% and 11% of the respondents, respectively, saying that tax support should be decreased.

There were a number of other town service, management, or regulatory oriented questions in the survey. One asked how important it is to have improved town government and decision-making. Eighty-five percent it was either important or very important.

When asked what should be done with the town hall in Fryeburg , 59% said that the town should keep it.

Sixty-eight percent said that the town should regulate the aerial spraying of crops.

It was close - 55% = yes, and 45% = no - when asked if the town should pay for a gypsy moth eradication program.

Only 39% said that the town should develop a public sewage collection system, 61% said the town should not.

It was a “toss up” as to whether the majority of the respondents thought there was a lack of parking in town - 51% saying “yes,” 49% saying “no.” It was the same result when asked if parking spaces should be added - 51% = “yes”, 49% = “no”. When asked about solutions to the parking problem (or perceived problem), 58% said that long term parking on Main Street should be prohibited, but only 44% said that there should be a public parking lot.

When asked if there were too many tractor trailers on Main Street, the opinions were quite close - 53% saying “yes,” and 47% saying “no,” There was a wider difference of opinion when asked if the respondent would support a state or federally funded by-pass along the former railroad bed. Here 61% supported the idea. Support for a traffic light at the intersection of Portland and Main Streets had less support - 58% supporting, 42% not supporting.

Although as mentioned above, the quality of sidewalks were rated at the bottom of all listed public facilities, 52% said that the town need not undertake a program to increase pedestrian safety. Perhaps in that same area of concern, 80% said that they felt additional street lighting was needed.

In a final transportation question, 58% indicated that the services of the Western Maine Transportation System should not be expanded, 42% saying it should.

There were a number of recreation related questions. Questions 130 through 144 asked if certain programs or facilities were poor, fair, good or excellent. Sixty percent or more of the respondents said that all of the recreational programs and facilities were either good or excellent, with the exception of restrooms at recreation sites. Here only 41% said that they were good or excellent.

Fifty-three percent of the respondents said that in the future it was important or very important that community and neighborhood centers be available.

Sixty percent said that they support the spending of town funds to improve Bradley Street Little League field.

Fifty-seven percent said they would like to see a system of walking, jogging, or bicycling trails in Fryeburg. The same percentage - 57% - said that recreational facilities should be extended to the rural parts of town.

To help fund recreation, 84% said that they support a user fee for non-Fryeburg residents.

There were a few educational service related questions.

When asked if SAD 72 is preparing our children to compete for employment in the sciences and other "high-tech" fields, 76% indicated that they thought the children were not being prepared. However, 84% said that the town should not have its own high school.

When it comes to adult education, 65% are satisfied with the courses being offered; but when asked about the importance of expanded adult education or job training facilities, 61% said that this was either important or very important.

Only 28% of the respondents have children in SAD 72 schools.

There are some questions which relate to economic and community development.

On the issue of available affordable housing, 59% said that there is a lack of such housing to purchase and 41% said that there is not.

Seventy-four percent said they are satisfied with the level of health care offered in Fryeburg.

When asked if the town can compete in any type of business with North Conway, 63% said that the town can not compete.

In fact, 71% of the respondents feel that during economic down turns there is a likelihood of layoff.

Eighty-two percent feel that the town can attract business and jobs without harming its people and natural environment; 77% feel that the town should attempt to attract 'high-tech' industries; but only 40% feel that there should be more commercially zoned land. When asked where this commercially zoned land should be, 30% said on Route 113/5, 27% said on Route 302, and 10% said anywhere.

After this discussion it is interesting to look back at the questions that asked what the respondents' like and dislike most about living in Fryeburg.

The biggest "like" is the small town atmosphere. Eighty-six percent said that this is one thing they like most. The other things that the majority indicated they like most are: rural surroundings and character - 84%, geographic location - 64%, and type of people -56%.

There was no strong majority "vote" for any of the dislikes listed on the questionnaire. This in itself seems to be significant. It seems to be an indication that the respondents generally like their town. Rapid population growth did receive a majority "vote" as being something the respondents dislike, but only by a 52% (yes) to 48% (no) margin. Fifty percent said that the loss of farms, open spaces, and forests is a dislike; and 41% said that the loss of the small town character is a dislike.

## Chapter 4

### NATURAL RESOURCES

#### *INTRODUCTION*

This chapter inventories the land-based and water-based resources of Fryeburg, as well as its important wildlife habitat. Much of this information has also been mapped to show general locations of these resources. It is important to note that the locations of items shown on the natural resource maps show general locations of certain characteristics and their relationship to one another. These maps should not be used to make definitive decisions about specific parcels of land. On-site investigation still needs to be done in many cases. The maps do, however, have great value in town-wide comprehensive planning.

The inventory and mapping of the natural resources of a town provide knowledge for public and private decision making. They show which resources could potentially be harmed by development and which resources could harm development. The natural environment provides certain opportunities for, and constraints to, development. This chapter will provide some understanding of the opportunities and constraints associated with various natural resource conditions and land uses.

#### *LAND BASED RESOURCES*

##### *Fryeburg's Geology and Topography*

The geologic characteristics of an area determine its topography. Topography, in turn, influences land cover and the land's suitability for the human activities of building and road construction, waste disposal, the installation of utilities, and so forth. The slope of the land is one of the major characteristics that can limit development potential. Depth to bedrock is another important characteristic that can limit development potential. For example, roads, cellars and septic systems can be difficult and expensive to build when the depth to bedrock is less than twenty inches

The bedrock in the town consists primarily of a granite-type of rock formation called the Sebago Pluton. There is also a small section of a granodiorite pluton in the southern portion of town. (A pluton is a body of igneous rock formed beneath the earth's surface.)

Topographically, the town is characterized by the broad flood plain of the Saco River and the Old Course of the Saco River, three large lakes, gently rolling low lands (which are glacial out wash plains) and several small hills and ridges with exposed bedrock. The hills in the western portion of town north of the Saco River, along the New Hampshire border are called Birch Hill; in the western portion south of the Saco River are Starks Mountain, Long Hill, and Bald Peak; in the central part of town are Oak Hill near the Airport and running from the Jockey Cap ridge through Highland Park to Mt. Tom and the series of three hills north of Fryeburg Center; and three individual hills in the eastern part of town are Stanley Hill, Carter Hill, and Smarts Hill. Elevations range from about 355 feet above sea level (along the Saco River where it flows into Brownfield), to 1,073 feet on the top of Mt. Tom - the highest point in Fryeburg.

##### *Soils*

Soil is the layer of the earth's surface which has been modified by weathering processes. The upper surface of the soil is the surface of the land and its lower boundary is the parent material

from which it was formed, or the bedrock upon which it was formed. The properties of soil are the combined effects of climate, plant and animal life, topography, time, and the parent material itself. In Fryeburg the parent material is primarily granite and quartz with some considerably large pockets of sand and gravel formed during glacial ice contact and glaciofluvial (melt water running off the glacier) deposits.

The various types of soils formed from these various parent materials have different properties and different suitabilities for uses such as agriculture, forestry, road building, septic tank absorption fields, buildings, and so forth.

Fryeburg was surveyed as part of the work done by the U.S. Soil Conservation Service (SCS) between 1979 and 1983. From this work SCS produced the Oxford County Soil Survey which is a mapping of the soil types, a description of the soils and their properties, and a rating as to the soils' suitability for numerous land uses.

In 1990 the Oxford County Soil & Water Conservation District prepared a report entitled *Soil Potential Ratings for Low Density Development in Oxford County*. In preparing this report they used information about the soils' characteristics such as texture, permeability, depth to seasonal high water, depth to restricting layer, depth to bedrock, stone cover, and natural drainage. Low density development was considered to be single family homes with basements and comparable buildings and septic tank absorption fields, with or without on-site water supplies, the soil potential rating compared all of the soils of the county to one another and the soils were given ratings of Very High, High, Medium, Low, and Very Low. (From best to worst.)

The soil suitability map shows the general location of soils in Fryeburg which are least suitable for low density development based upon this rating system. (The soils shown as least suitable for development are those which received a Very Low rating.) These soils along with their limitations are listed in Table 4-1.

**Table 4—1**  
**SOILS LEAST SUITABLE FOR DEVELOPMENT**  
**OXFORD COUNTY**

<b>Soil</b>	<b>Limitation</b>
Abram-Rock Outcrop, 15-80% slopes shallow to bedrock	
Abram-Rock Outcrop-Lyman, 0-60% slope	shallow to bedrock
Adams Loamy Sand, 15-50% slope	steepness
Adams-Hermon, 15-35% slope	steepness
Becket Very Stony Fine Sandy Loam, 15—45% slope	steepness
Brayton-Peacham, very stony, 0—4% slope	wetness
Charles Silt	flooding, wetness
Colonel Fine Sandy Loam, 8—15% slope	wetness
Colonel Very Stony Fine Sandy Loam, 8-15% slope	wetness
Colton Gravelly Loamy Sand, 15—60% slope	steepness
Colton—Adams, 15-35% slope	steepness
Cornish Very Fine Sandy Loam	flooding, wetness
Dixfield Very Stony Fine Sandy Loam, 15—25% slope	wetness

Dixfield—Marlow, very stony, 15—35% slope	wetness, steepness
Dixfield-Colonel, very stony, 15-35% slope	wetness, steepness
Fryeburg Very Fine Sandy Loam	flooding
Hermon Extremely Stony Fine Sandy Loam 15—60% slope	steepness
Hermon Very Stony Sandy Loam, 15—35%	steepness
Hermon—Monadnock, very stony, 15—50%	steepness
Lovewell Very Fine Sandy Loam	flooding
Lyman-Tunbridge, very stony, 15—45%	shallow to bedrock
Lyman-Tunbridge—Becket, very stony, 15—60%	shallow to bedrock
Lyman Tunbridge—Monadnock, very stony, 15—60% slope	shallow to bedrock
Marlow Very Stony Fine Sandy Loam, 15-35%	restrictive layer
<i>Medomak Silt flooding, wetness</i>	
Monadnock Fine Sandy Loam, very stony, 15—45% slope	steepness
Naumburg Loamy Sand	wetness
Naumburg-Croghan, 0-8% slope	wetness
Ondawa Fine Sandy Loam	flooding
Podunk Fine Sandy Loam	flooding, wetness
Ricker-Saddle—Rock outcrop, 15-80%	shallow to bedrock
Riverwash	flooding
Roundabout Silt	wetness
Rock outcrop— 15—80%	steepness, bedrock
Rumney Fine Sandy Loam	flooding, wetness
Rumney—Podunk, frequently flooded	flooding
Saddleback—Ricker, 8-35% slope	shallow to bedrock
Searsport Muck	wetness
Skerry Very Stony Fine Sandy Loam, 15—25%	wetness
Skerry—Becket, 15—35% slope	wetness, steepness
Skerry—Becket, very stony, 15—45%	wetness
<i>Skerry—Colonel, very stony, 15-25% wetness</i>	
Sunday Loamy Fine Sand	flooding
:Tunbridge-Lyman, 15-35%	shallow to bedrock
Vassalboro Peat	organic, wetness

Source: *Soil Potential Ratings for Low Density Development in Oxford County* - Oxford County Soil & Water Conservation District

It should be noted that a County Soil Survey is a “medium intensity” soil survey showing the predominant soil type and the approximate soil boundary locations. Within mapped soil locations there may well be pockets of other more suitable or less suitable soils, and the boundaries are actually transition areas where one soil “phases” into another over a distance of 50 feet to as much as 200 feet. This mapped information should be used only as a guide for private public land use decision makers.

The Maine State Law allows single family homes with on-site waste disposal systems (septic tanks) to be located on lots as small as 20,000 square feet. The Maine State Plumbing Code uses soil factors to determine the required size of septic absorption fields so that the septic tank discharge will stay below the surface of the ground. The Plumbing Code, however, does not consider the filtering ability of soil types to protect ground water. Soils formed from different materials have varying abilities to filter and, or dilute discharge from septic tank absorption fields.

The Ground Water Special Features Map (prepared by Robert G. Gerber, Inc.) shows the generalized locations of soils classified by their recharge capability. These generalized areas have been interpreted from the Maine Geological Survey's surficial geology map.

The soil indicated with map code 1 include sands and gravels that are glacial ice - contact deposits or eskers. (Eskers are long narrow ridges of sand and gravel deposited by melt water flowing in glacial ice tunnels. Eskers are often called "horsebacks.")

Soils with map code 2 are areas of glacial outwash or post-glacial eolian deposits. (Eolian deposits are wind blown deposits of fine-grained sand.)

Map code 3 shows the locations of soils that were formed by lake bottom deposits. These fine-grained sediments were deposited in lakes that existed during the late to post glacial period.

Soils of map code 4 are areas of thick glacial till. (Till is unsorted glacial deposits of clay, sand, gravel, boulders, and rock debris. The British call till "boulder-clay.")

Soils of map code 5 are areas of thin, sandy glacial till, including areas of exposed bedrock.

All of these soils recharge precipitation to the ground water at different rates, thus have different recharge capabilities. These recharge capabilities have been translated into recommended maximum residential densities as limited by water quality impacts from septic systems. Table 4-2 shows these recommended densities.

**Table 4-2**  
**FRYEBURG SOIL TYPES AND MAXIMUM RESIDENTIAL DENSITIES**  
**AS LIMITED BY WATER QUALITY IMPACTS FROM SEPTIC SYSTEMS**

<u>Soil Type</u>	<u>Map Code</u>	<u>Rain Fall</u>	<u>Drought</u>
sand and gravel	1&2	0.4* or 1.0**	0.6* or 1.6**
clay and silt	3	3.7* or 10.1**	6.0* or 16.6**
thick silty till	4	1.4* or 3.9**	2.3* or 6.3**
sandy till and rock	5	1.0* or 2.8**	1.7* or 4.6**

\*The smaller number assumes the goal is a nitrate level of 10mg/l (the state's maximum allowed in drinking water) and that the concentration of nitrate-nitrogen reaching the ground water from the septic systems is 30 mg/l.

\*\*The larger number assumes the goal is a nitrate level of 5 mg/l and that the concentration of nitrate - nitrogen reaching the ground water is 40 mg/l, **these are safer assumptions.**

Source: Robert G. Gerber, Inc.

#### *Natural Land Cover*

Most of the natural land cover of Fryeburg is forest. According to a Threshold to Maine RC&D report done in 1970 the forest is predominately a maple-beech-birch forest.

According to the Maine Bureau of Property Taxation's 1990 State Valuation Analysis, 12,449 acres in Fryeburg were in tree growth, and another 16,200 acres were considered undeveloped. This is about 75% of the town's total 38,233 acres. Woodland makes up the majority of the undeveloped acreage.

#### *WATER BASED RESOURCES*

The surface water of the town should be viewed as a connected system. Streams, rivers, and wetlands are interconnected parts of the town's water resources. The health of any one part of this system affects the other parts.

#### *Surface Waters*

Within Fryeburg are twelve "great ponds," almost 70 miles of the new and old courses of the Saco River, Kezar River, Kezar Outlet, Charles River, and Cold River, and other smaller streams. (A "great pond" is a lake or pond with a surface area of 10 acres or more.)

Lakes provide unsurpassed aesthetic experiences and recreational opportunities. They provide habitat for water birds, birds of prey, fur bearers, and game animals. Lakes are critical to the survival of town and regional fish and wildlife resources. Lake shore properties are often a significant portion of the tax base.

The following is a list of the great ponds in Fryeburg:

<u>Name</u>	<u>Acreage</u>
Kezar Pond	1,299
Lovewell's Pond	1,120
Lower Kimball Pond	486
Pleasant Pond	239
Charles Pond	90
Dead Lake	55
Bog Pond	45
Cat Pond	26
Hunt Pond	25
Clays Pond	25
Black Pond	20
Horseshoe Pond #1	18
Horseshoe Pond #3	14

## Horseshoe Pond #2

The following descriptions of most of the great ponds come primarily from the Maine Department of Inland Fisheries and Wildlife (IF&W) Lake Inventory.

### **Kezar Pond**

The pond is in the northeast corner of Fryeburg. Maximum depth is 12 feet, with an average depth of 7 feet. There is no public boat landing and no public right-of-way to the pond. Most of the shore land is low and swampy, and there it is developed for seasonal residential use in only a few places.

Kezar Pond is considered a warm water fishery with largemouth and small mouth bass, white perch, and pickerel the principal species.

### *Lovewell's Pond*

The pond is moderately developed with dwellings on its northeast, north, and west shores. Transparency of the water is slightly below average for Maine lakes, but water quality is reported as good. The maximum depth is 45 feet, with an average depth of 17 feet.

The pond is closely connected to the Saco River and each spring during high water the river floods the pond. Septic systems that are flooded carry nutrients and bacteria into the pond. The pond has a slow flushing rate (flushing only once every other year) which makes it very sensitive to water quality degradation. Residents of Fryeburg reported a 'muck' problem associated with the pond in the Summer of 1991. Many feel that it has been caused by the outlet channel being blocked by siltation. They have also reported perch with what appears to be fungus on their sides.

There is a right-of-way to, and a boat landing on, the pond. They are part of the State owned Brownfield Bog Wildlife Management Area.

The pond is considered both a warm and cold water fishery with small mouth and large mouth bass, white perch, and pickerel being the principal species. It is stocked with brown trout by IF&W.

### *Lower Kimball Pond*

This pond is on the New Hampshire border, in the northwest part of town. It is heavily developed with residences on the southeast, west, and north shores.

Lower Kimble has a maximum depth of 65 feet, with an average depth of 12 feet. There is no public right-of-way or boat landing in Maine, but there is in New Hampshire.

The pond is considered both a cold and warm water fishery with brown trout, small mouth bass, white perch, and pickerel the principal species. It is stocked by IF&W with brown trout.

#### *Pleasant Pond*

Fryeburg shares Pleasant Pond with the towns of Brownfield and Denmark. It is a shallow pond with a maximum depth of 15 feet and an average depth of 7 feet. The shoreline is undeveloped and very swampy.

There are no public rights-of-way to the pond nor boat landings. Access is possible from the Saco River.

It is considered a warm water fishery with largemouth and small mouth bass, white perch, and pickerel the principal species.

#### *Charles Pond*

Charles Pond is in the northern tip of Fryeburg. It is another shallow pond having a maximum depth of only 13 feet and an average depth of 8 feet.

The shoreline is undeveloped and there are no public rights-of-way nor boat landings.

It is considered excellent fishing for warm water species, with the principal one being largemouth and small mouth bass, white perch, and pickerel.

#### *Bog Pond*

Bog Pond a small pond in the central part Fryeburg. It is another shallow pond with a maximum depth of only 7 feet and an average depth of 4 feet,

The shoreline is undeveloped and there is a town owned, public right-of-way.

The principal fish species in the pond are largemouth and small mouth bass, and pickerel.

#### *Hunt Pond*

Most of the land around Hunt Pond is owned by the Diamond Occidental Company. Diamond also owns a dam on the outlet. The pond is periodically drained completely. It has a maximum depth of 10 feet. The average depth is not known.

There is no public right-of-way or boat landing. The principal fish species is pickerel.

#### *Clays Pond*

Clays Pond is in the southern portion of town and is part of the . It has a maximum depth of 21 feet and an average depth of 13 feet. The shoreline of Clays Pond is undeveloped and it is part of the Brownfield Bog Wildlife Management Area. There is a public right-of-way and boat landing

The pond is a cold water fishery and IF&W stocks it with brown brook trout. These are also the principal species in the pond.

#### *Black Pond*

Black Pond is very shallow - maximum depth of 5 feet and an average depth of 4 feet - and has poor water quality due to the presence of sawdust deposits from an old sawmill.

There is no public right-of-way nor boat landing. The principal specie of fish is brown bullhead.

The Maine Department Environmental Protection coordinates a volunteer lake monitoring program and publishes the results of the monitoring each year. The only lake in Fryeburg to have been monitored is Lovewell's Pond, and this monitoring program has not collected enough data to adequately determine trends.

The quality of water in Fryeburg’s lakes seems to run from fair to good. This water quality is affected by all of the activities that occur in their watersheds. Intense residential development, agricultural practices, and other activities have an impact on the water quality.

A lake watershed (or drainage basin) has many diffuse sources of pollution including: construction sites, farms, roads and parking lots, lawn fertilizers, and household detergents and chemicals. When it rains, the run-off may contain nutrients (especially phosphorus), toxics, sediments, and microorganisms.

Run-off carrying sediment and pollutants eventually ends up in the lakes and disturbs the natural balance of organisms in the water. For example, Maine is losing at least one lake per year to “algae blooms” and related water quality problems associated with phosphorus loading. The increased phosphorus in the lake acts as a fertilizer to the existing algae and increases their abundance dramatically, and may turn them into green, smelly, murky lakes

The following table shows the “per acre allocation of phosphorus” acceptable for Fryeburg’s lakes’ watersheds, It is based on a program developed by the Lakes Division of the Maine Department of Environmental Protection. The methodology used is adapted from the manual “Phosphorus Control in Lake Watersheds: A Technical Guide to Evaluating New Development.” The key element of this program is the “per acre allocation of phosphorus” for the town’s watersheds. The Planning Board can use this phosphorus allocation review process to review future development and prevent a loss of water quality in the lakes for the next fifty years. This table should be reviewed every five years to determine if projections of growth are accurate.

**Table 4-3  
DETERMINING THE PER ACRE ALLOCATION OF PHOSPHORUS  
FOR FRYEBURG’S LAKE WATERSHEDS**

1<sup>st</sup> Establish an acceptable phosphorus (P) increase for each lake .

Lake	Direct D.A. in town <sup>1</sup>	lbs. of P = change of 1ppb <sup>2</sup>	Water qual. categ <sup>3</sup>	Level of protect <sup>4</sup>	Accept- able P increase
Black Pond	74	0.83	mod/sens	medium	0.83
Bog Pond	378	3.90	mod/sens	medium	3.90
Cat Pond	442	6.85	mod/sens	medium	6.85
Charles Pond	1,828	13.16	mod/sens	medium	13.16
Clays Pond	323	4.43	mod/sens	medium	4.43
Dead Lake	452	4.76	mod/sens	medium	4.76
Horseshoe Pond	24	0.50	mod/sens	medium	0.50
Horseshoe Pond 1	138	1.41	mod/sens	medium	1.41
Hunt Pond	126	1.34	mod/sens	medium	1.34
Kezar Pond	3,367	44.60	mod/sens	medium	44.60
Lower Kimball Pd.	766	8	mod/sens	medium	8.99

Little Pond	14	0.15	mod/sens	medium	0.15
Lovewell's Pd.	3,101	52.56	mod/sens	medium	52.56
Peat Pond	222	1.74	mod/sens	medium	1.74
Pleasant Pond	2,661	23.28	mod/sens	medium	23.28
Round Pond	59	0.55	mod/sens	medium	0.55
unnamed pond	24	0.35	mod/sens	medium	0.35
unnamed (Davis?)	74	0.66	mod/sens	medium	0.66
Wards Pond	1,186	8.40	mod/sens	medium	8.40

<sup>1</sup> Drainage area or watershed of the lake, in acres.

<sup>2</sup> Pounds of phosphorus that, if added to the lake, would increase the level of dissolved phosphorus by only one part per billion.

<sup>3</sup> Water quality category - moderate/sensitive - These lakes have an average secchi disk reading between 10 and 20 feet. Algae levels are moderate as are phosphorus concentrations - 10 to 20 ppb. They have a high potential for developing algae blooms because of significant summertime depletion of dissolved oxygen levels in the lower part of the lake and/or large seasonal fluctuations in algae land nutrient levels.

<sup>4</sup> high, medium or low level of protection - A high level is recommended for lakes and ponds with important cold water fisheries or that are drinking water supplies. A medium level of protection should provide good long-term protection for most lakes and ponds. Low level should be used for lakes and ponds that have low value.

2<sup>nd</sup> Find out what the per acre allocation of phosphorus is for each watershed.

	<b>Direct</b>	<b>Acreage</b>	<b>Future</b>	<b>Per Acre</b>
	<b>D.A.</b>	<b>suitable/Available</b>		<b>Area of</b>
<b>Lake</b>	<b>in town</b>	<b>for Development<sup>5</sup></b>		
	<b>Development<sup>6</sup></b>		<b>Phosphorus<sup>7</sup></b>	
Black Pond	74	59	21 (35%)	.0395
Bog Pond	378	358	125 (35%)	.0312
Cat Pond	442	413	62 (15%)	.1104
Charles Pond	1,828	1,347	202 (15%)	.0651
Clays Pond	323	296	44 (15%)	.1007
Dead Lake	452	346	52 (15%)	.0915
Horseshoe Pond	24	12	2 (15%)	.2500
Horseshoe Pond 1	138	138	21 (15%)	.0542
Hunt Pond	126	126	44 (35%)	.0305

Kezar Pond	3,367	2,867	717	(25%)	.0622
Lower Kimball Pd.	766	671	235	(35%)	.0383
Little Pond	14	14	2	(15%)	.0750
Lovewell's Pd	3,101	2,614	1,307	(50%)	.0402
Peat Pond	222	197	69	(35%)	.0252
Pleasant Pond	2,661	1,821	637	(35%)	.0365
Round Pond	59	46	7	(15%)	.0786
unnamed pond	24	0	0		-
unnamed (Davis?)	74	70	25	(35%)	.0264
Wards Pond	1,186	649	227	(35%)	.0370

<sup>5</sup> total acres of the direct drainage area minus steep slopes, wetlands, other undevelopable, and land already developed.

Source: SMRPC

<sup>6</sup> estimated acreage that will be developed in the watershed over the next fifty years. Source: Estimated by the Fryeburg Comprehensive Planning Committee using Table 3-3, "Phosphorus Control In Lake Watersheds," September, 1989, edition.

<sup>7</sup> Acceptable Phosphorus Increase divided by acres of Future Area of Development. This is the amount of phosphorus (in lbs. per year) that can be exported from each acre in the watershed without causing a significant change in the water quality over the next fifty years

Source: Maine DEP, SMRPC, and Fryeburg Planning Committee

According to DEP's publication (cited above) a medium level of protection will provide for good long-term protection for most lakes. This level is recommended by DEP unless the lake is a high value cold-water fishery or is a public drinking water supply. Even the medium level of protection will assure that the amount of phosphorus in the lake will not increase by more than one part per billion over the next fifty years.

## The Saco River

The Saco River is a vitally important natural resource. It provides both a recreational and agricultural economic base for the town. It is a great aesthetic resource, providing residents and visitors alike with a sense of much of Fryeburg's rural quality. The river and the river's old course are present in many parts of the town. The dam on the river at Swans Falls produces electricity.

The Saco River has its head waters in New Hampshire at Saco Lake in Crawford Notch. It flows for about 125 miles from its source to the Atlantic Ocean at Biddeford and Saco. Originally the river meandered for 70 miles through the town of Fryeburg as it made a huge loop to the north to the village of Fryeburg Harbor then south again. In 1817 much of this great bend was eliminated by the digging of a canal which cut off much of the loop. The length of river in Fryeburg is now about 34 miles. The canal was dug to divert the river and eliminate the flooding which occurred at West Fryeburg, North Fryeburg, and Fryeburg Harbor.

This constant flooding, however, deposited extremely rich soil along the river's flood plains. These soils have been described as some of the best agricultural soils in the State of Maine.

On the Saco River at Swans Falls is the Swans Falls Dam. This is a privately owned facility with a head of 13 feet.

From below the Swans Falls Dam to the Brownfield town line the river drops less than 20 feet. As a result, this flat water offers ideal conditions for recreational use. It is estimated by the State that over 44,000 canoe trips take place on various stretches of the Saco River each year. Some have estimated that number to be nearer 100,000. This large number of canoeists often reduces the recreational activity to something less than an enjoyable "wilderness experience."

Weston's Beach, about a mile above the Swan's Falls Dam, is a popular swimming and sun-bathing area. The beach is within walking distance of "down town" Fryeburg. This is an important and unique community, natural resource.

The Saco River is Class A from the New Hampshire border to a point 1,000 feet below the Swans Falls Dam, from this point to the Hiram Dam it is a Class AA. These classifications are summarized below.

- |          |  |
|----------|--|
| Class AA | <ol style="list-style-type: none"><li>1. Suitable for drinking water after disinfection, fishing, recreation, navigation, and fish and aquatic habitat.</li><li>2. Dissolved oxygen and bacteria as naturally occurs.</li><li>3. No direct discharge of pollutants allowed.</li></ol>  |
| Class A  | <ol style="list-style-type: none"><li>1. Suitable for drinking water after disinfection, fishing, recreation, industrial process and cooling water, hydroelectric, navigation, and fish and aquatic habitat.</li><li>2. Dissolved oxygen not less than 7 parts per million or 75% saturation, whichever is higher. Aquatic life and bacteria as naturally occurs.</li><li>3. Quality of discharge effluents to be equal or better than the quality of receiving water. No deposits are allowed on the banks if transfer of pollutants would be likely.</li></ol> |

Threats to the Saco River come from erosion of topsoil from agricultural and forestry activities; runoff of fertilizers, herbicides, and pesticides from agricultural fields; and the sewage treatment plant in Conway, New Hampshire.

#### *Wetlands*

It has been estimated that 25 percent of Maine (and possibly a third of Fryeburg) is covered by wetlands. A wetland is defined by both the State and Federal Government as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil condition. Wetlands generally include marshes, swamps, bogs and similar areas, but also include some areas which are seldom or never inundated."

Of these wetlands, forested and shrub swamps are the most abundant. Wetlands in their natural, dynamic states, maintain environmental quality. Some of every source of drinking water flows through, by or over wetlands on its way to wells and reservoirs. Wetlands act as a filter in protecting water quality. Plants in a wetland absorb various inorganic substances found in the

water and then transform these materials into organic substances which are stored in the water, allowing a settling of the silty materials transported by the water.

Wetlands also provide economic benefits to the town. Through flood and erosion control, by aiding in ground water recharge for drinking supplies, by providing natural resources such as lumber products, and as areas of recreation for hunting and boating, their worth to the town is enormous.

Wetlands also provide a number of other important functions in the water system of the town. They are natural valley flood storage areas, holding water during periods of heavy rain and slowly releasing it during drier times. They are sources of food and habitat for wildlife because they offer a stable and seldom-disturbed habitat.

On the Ground Water Special Features Map wetlands which are non-wooded and over 10 acres in size are delineated. This information is from mapping done for DEP. The wetland areas labeled as type 1 are in ground water discharge areas. Those wetlands listed as type 2 are ground water discharge areas over at least part of the wetland, but may have some local recharge areas as well. Type 2 wetlands could become more predominantly recharge areas if high yield wells located on their edges were pumped heavily.

The Maine Department of Environmental Protection also rates wetlands for their wildlife value. According to their rating there are 3 wetlands that are rated as high value. These are along Elkins Brook, Haley Brook, and Little Pond. One wetland is rated as having high value. This is associated with Peat Pond.

Wetlands can be destroyed in a number of ways. The most obvious is by filling to create "buildable land." Other threats to wetlands come from excessive siltation or nutrient loading from erosion or fertilizers. If runoff entering a wetland is overloaded with silt, often resulting from poor land use practices upstream, the wetland may become choked by that silt and no longer provides valuable functions.

The following is a list of the major causes of wetland loss and degradation:

<u>Human Impacts</u>	<u>Natural Threats</u>
Drainage	Erosion
Dredging and stream channelization	Subsidence
Deposition of fill material	Droughts
Diking and damming	Hurricanes & storms
Tilling for crop production	Overgrazing by wildlife
Grazing by domesticated animals	
Discharge of pollutants	
Mining	
Alteration of hydrology	

#### *Ground Water*

Ground water includes all precipitation that percolates into the ground. Depending on the local geology, 10 to 50 percent of annual precipitation in Maine infiltrates the ground's subsurface to become ground water. Tapped through wells, this water is used for drinking and other domestic uses, for commercial and industrial production, and for livestock and agricultural irrigation.

Ground water also helps keep lakes full and keeps rivers and streams flowing. The slow, steady discharge of ground water into surface water bodies helps keep them from going dry.

All of the drinking water in Fryeburg is supplied from ground water, including the area served by public water. There are several “community water supplies” within the town of Fryeburg registered with the Maine Department of Human Services. These include the supplies for the C.A. Snow School, Saco Bound Landing, S.F. Adams School, Indian Acres, Swan’s Falls Campground, Jockey Cap Store and Motel, and Canal Bridge Camping Area. (A community water supply is one that has 15 or more connections or serves 25 or more people.) The Fryeburg Water Company serves Fryeburg Village and part of East Conway, New Hampshire. Their water source is ground water. A more complete discussion of the Fryeburg Water Company is included in Chapter 10 - Community Facilities and Services.

#### *Aquifers*

Aquifers are geologic formations containing useful amounts of water. Aquifers may be saturated sands and gravel - called sand and gravel aquifers, or they may be cracks and fractures in bedrock - called bedrock aquifers. Both the sand and gravel aquifers and potential bed rock aquifers are shown on the Ground Water Special Features Map. (The data on this map were gathered by Robert C. Gerber, Inc. [RGG])

The sand and gravel aquifers that have a potential yield of greater than 50 gallons per minute (50 gpm) mainly lie within the flood plain of the Saco River. Some of these aquifers may be crevasse fillings lying next to major water bodies. (Crevasse fillings are large amounts of sand and gravel that washed out of the glaciers and into large cracks or crevasses in the ice.) These high yield sand and gravel aquifers may also be areas of ice contact deposits formed as kames or kame terraces next to a stagnant ice block about 13,000 years ago. (Kames are low, steep sided hills of stratified glacial material formed in openings in stagnant ice. A kame terrace is a deposit of stratified sand and gravel laid down between a wasting glacier and an adjacent valley wall.)

The sand and gravel aquifers having a potential yield of between 10 and 50 gpm. are located, in general, where the sand and gravel deposits, located in the river valley, thin near their edges.

The prime recharge areas of the sand and gravel aquifers are the surfaces of the watersheds themselves. The secondary recharge zones are the watersheds of the adjacent surface water bodies.

Although there is no surface evidence, the United States Geological Survey (USGS) believes that a deep buried pre-glacial valley may exist in what is now the Saco River Valley. The Ground Water Special Features Map also shows the axis of a possible pre-glacial valley.

The Prime Aquifers Map shows areas that have potential yields of greater than 50 gpm yield. The map also shows potential bedrock aquifers and their prime recharge areas. The Prime Aquifers Map is a result of interpretation of data by EGGI in terms of locating zones of potential sustained yields of over 50 GPM.

A portion of the Saco River aquifer in Fryeburg has been mapped in substantial detail by the U.S. Geological Survey (USGS) as part of a study entitled “Hydrogeology, Water Quality, and Effects of Increased Municipal Pumpage of the Saco River Valley Aquifer: Bartlett, New Hampshire, to Fryeburg, Maine” (Water Resources Investigations Report 88-4179, dated 1990.)

The area of the aquifer mapped in Fryeburg includes both the Old and New Courses of the Saco River from the New Hampshire state line to the Route 5 crossing near Lovell. There are maps that show the limits of the aquifer, the bedrock elevation in the Saco River Valley aquifer, the saturated thickness (depth) of the aquifer, and the altitude (depth elevation) of the ground water table and general direction of ground water flow.

The depth of the aquifer mapped in Fryeburg varies from ten feet or less at its outer boundaries to approximately 280 feet in the farm fields west of the river in West Fryeburg. The quality of both surface water and ground water was studied and inventoried but no specific conclusions were made except to show that both agricultural land use and development adversely affect water quality. They did note that agricultural land use along the Old Course of the Saco River has degraded surface water quality and that because of this the uses of the aquifer recharge by this surface water may be limited for drinking water purposes. However, development of an irrigation supply from this aquifer may be feasible. Another interesting conclusion was that the highest fecal coliform and fecal streptococcus bacteria counts (indicator organisms that indicate contamination by human sewage) in the surface waters were found immediately downstream from the Center Conway sewage treatment facility and in the stagnant waters of the Old Course of the Saco River in Fryeburg.

The study does conclude that the area east of the bend in the River (south of Swan's Falls Road and west of Route 5) has adequate soils and aquifer depth that may be favorable for drinking water development. The area of the Old Course of the River also has good soils and adequate depth, however, as mentioned above the surface water quality problems may limit the use of the aquifer to irrigation only.

#### *Threats to Ground Water*

Contamination is of primary concern with ground water supplies. Once pollutants enter an aquifer, they are not easily, cheaply, or quickly removed. Certain land uses are much more of a threat to ground water quality than others. The major sources of ground water contamination are activities where toxic materials were or are still used or generated as wastes, and activities where dumping may have occurred, or is still occurring, and contaminants have access to the ground water.

There are a number of potential ground water contamination sites in Fryeburg identified from DEP files, town records, and RGGI files. These are the town's solid waste disposal facility, the old town dump, the town's salt-sand storage area, the state DOT salt storage area, a seepage disposal area, and a number of known leaking underground storage tanks

DEP has investigated the town solid waste disposal area and has documented, by means of ground water monitoring, both inorganic and volatile organic contamination. The ground water flow in the area of the facility is likely toward the wetland south of Clay's Pond, where it would likely discharge to surface waters close to the waste facility.

DEP has also studied the State DOT salt storage area and has reported that results indicate a small salt contaminated plume migrating southeast toward Lovewell 's Pond.

The DEP lists a spill at the Jewett/Pete's garage on Route 113 as a very serious contamination risk. A site spill report indicates that the spill threatens five wells. DEP also lists a spill at Bob's Mobil at 94 Main Street as a ground water threat. The danger from this site is lower than from the Jewett/Pete's garage site because there are no reported wells at risk from this spill.

In addition to these known threats, there other potential threats to ground water which include:

agricultural chemical storage	auto repair
auto body shop	dry cleaners
fertilized fields	fuel oil storage & distrib.
gasoline stations	junk & auto salvage yards
landfills	laundromats
machine shops	manure piles
salt and sand piles	gravel mining operations
sod farms	underground oil storage tanks

#### *WILDLIFE HABITATS*

##### *Fisheries*

(Refer to the information in this chapter about Fryeburg's great ponds, pages 6 & 7.)

##### *Other Wildlife*

The Wildlife Habitat Map, prepared by IF&W, shows the significant waterfowl and wading bird habitats and indicates their value (high, moderate, low, or indeterminate). The map also shows deer wintering areas.

There are no waterfowl and wading bird habitats that have been rated by IF&W as being of "high value" and only one rated as having moderate value. This moderate value habitat is near the Saco River where it flows into Brownfield, south of Lovewell's Pond. All of the other waterfowl and wading bird habitats have an "indeterminate" rating which means that IF&W has not evaluated it.

All of the deer wintering areas are listed as having 'indeterminate value.'

The IF&W has identified as "areas of special concern" a potential Peregrine Falcon nesting habitat on Mt. Tom and the rare pitch pine/scrub oak invertebrate habitat at the Fryeburg Barrens.

##### *Unique Natural Areas*

The Maine Critical Areas Program was created by the Maine Legislature in 1973) to identify, catalog, and help assure the protection of sites that are of unique natural, scenic, or scientific value. "Critical Areas" are officially designated (registered) areas which contain natural features of state significance - either highly unusual natural features, or outstanding examples of more common features. Critical areas, on both public and private land, may include exceptional plant or animal habitat, areas of great geological or historical interest, and outstanding scenic areas. They may or may not be well known to the public.

There are two officially designated areas in Fryeburg, one which is qualified but not registered because of the landowner, eight areas which are candidates for Critical Area designation, and four Natural Areas that are of local significance but need to be field checked by the Critical Areas Program personnel to determine if they are of State significance. The following discussion (supplied by the Maine Critical Areas Program) is about the two sites that are on the Register of Critical Areas.

Lovewell Pond Rare Plant Station (1) (number refers to the number and location shown on the Unique Natural Areas Map.)

This critical area is a stretch of sand and dunes along the northern shore of Lovewell Pond. It is about 1.4 acres in size. Because the water level of the pond has never been altered by damming it supports a noteworthy natural plant community along its shore. The most outstanding species is the tiny-flowered hemicarpha, a member of the sedge family. This is one of only two sites where this species has been found in Maine.

Lower Kimball Pond Rare Plant Station (2)

This site (about 8 acres) encompasses many rare and unusual plant species which are found along the north shore of this undammed lake. Among the plant species found here is the large-tubercled spike-rush a member of the sedge family. This location is the only one where this plant is found in the State of Maine.

Boundary expansions at both the Lovewell Pond and the Lower Kimball Pond Rare Plant Stations are candidates for Critical Area designation.

The site that is qualified for the Register of Critical Areas but not included is discussed below (again from information supplied by the Critical Areas Program)

Highland Park White Oak/Tupelo Stand (3)

This area includes two plant species rare in Maine occupying two completely different habitats. Besides the fact that each of these plants is rare in Maine, it is also significant that the two are found together. The site is 7.2 acres in size.

On the higher, well-drained portion of this site is a deciduous forest dominated by red and white oak. The white oak is rare north of York County.

Along a stream bed, in the low flat portion of this area are large black gum or tupelo trees. They are most frequent in the wet, peaty area from which the stream drains. These subtropical trees are thought to be over 200 years old and are an indicator of Maine's formerly warmer climate. The trees here may be a remnant of a formerly more extensive population.

Sites that are candidates for Critical Area designation include:

Clays Pond Barrens (4)

This area covers about 610 acres. It includes vast areas of pine barrens and scrub oak. In many areas the scrub oak forms an almost continuous thicket. Much of area was burned, although to varying degrees, during the 1947 fire. This site is part of the Maine Inland Fisheries and Wildlife owned and managed Brownfield Wildlife Management Area. It is a popular recreation area.

Jockey Cap Pine Barrens (5)

This 10-acre ridge top barren occurs on the south facing, exposed, 600 foot high summit of Jockey Cap. Most of the pines are of similar size, indicating that the site was affected by the 1947 fire. Some, however, are larger and probably predate the fire. There is a marked trail to the top of Jockey Cap and a radio tower on the north slope. The summit also offers a spectacular 270-degree view – south (over-looking Lovewell's Pond) to the northwest with a view of the

Presidential Range. It is a very popular hiking destination for its views and its ledge face which is used by rock climbers.

#### Oak Hill/Round Pond Barrens (6)

This is a 60 acre which includes both Oak Hill and Round Pond. Oak Hill rises as a bedrock nubble out of otherwise flat, sandy plains. There is pitch pine and scrub oak along the west and southwest slopes and a pitch pine and scrub oak community on the ridge top.

The southern slopes from the ridge top down to Round Pond are dominated by oak trees, both white and red. These give way to pitch pine in the lowlands. Although the forest appears young, it is not certain if the slope burned in the 1947 fire.

The shoreline of Round Pond has been affected by ATV use and scattered about on the south shore of the Pond is trash and broken bottles.

#### Sand Prairie Barrens (7)

Located along the east bank of the Saco River east of West Fryeburg. This is the site of an unusual natural habitat.

#### Fryeburg Fossil Dunes (8)

This 50 acre site is the remnants of large postglacial sand dunes which are today up to 30 feet high.

#### Swans Falls Floodplain Plant Station (9)

This site, on the east bank of the Saco River, very close to, and up stream from, the Swans Falls dam, is an unusual natural habitat.

There are four natural areas that have been cited by the Maine Critical Areas Program as being areas that may be of local significance. These are:

#### Silver Maple (10)

This tree, along the Kezar Outlet in Fryeburg Harbor, is the second largest of its species in the U.S.

#### The Old Course of the Saco River (11)

This is thought to be the largest and best example of a meandering river with great oxbows in the U.S. The surrounding land is among the best agricultural land in the state.

#### The Saco River - Swans Falls to Hiram (12)

This part of the river (Swan's Falls to the Brownfield town line in Fryeburg) is a 33-mile stretch of very popular and attractive wilderness canoeing. There are no portages and numerous sand beaches along the way.

#### Mountain Laurel (13)

Only a few living shoots remain from a former stand of Mountain Laurel. This shrub is rare in Maine. The site is located near Fryeburg Center,

According to Dr. Sue Gawler of the Maine Natural Areas Program:

Many of the rare or exemplary biological features in Fryeburg are related to the large flat deposits of sandy outwash left by the glacier thousands of years ago. Most of these rare plants, invertebrates, and natural communities fall into two groups: (1) those associated with pitch-pine-dominated sandy outwash and (2) those associated with the Saco River and its nearby wetlands.

Extensive sandy flat areas dominated by pitch pine are the substrate for two rare natural communities (Pitch Pine – Scrub Oak Barrens and Outwash Plain Pondshores), and several rare plants and animals that inhabit them. Not only are these species and communities naturally rare (due to a natural scarcity of suitable habitat in the region), but they have been further threatened because the substrates on which they depend are economically valuable for housing developments, sand and gravel extraction, etc. Pitch Pine barrens occur in various forms from New Jersey north to Maine, and in most places have been reduced to a few remnants of the former extensive ecosystem. Compared to other barrens and outwash plain pondshores in New England, the barrens and outwash plain pondshores in Fryeburg are considered to be of very good to excellent quality and are clearly ecologically important as representatives of our natural diversity.

The Saco River shores and nearby wetlands support excellent examples of hardwood floodplain forest, acidic fen communities (a type of wetland), and *Hudsonia* river beach communities. The hardwood floodplain forest along the Saco is the largest intact forest of its type in the state, and is therefore of considerable conservation importance. Along the immediate shores of the Saco are scattered sandy beach communities dominated by beach-heather (*Hudsonia*), certain grasses, with occasional occurrences of the rare silverling (*Paronychia argyrocoma*). This type of plant community does not occur elsewhere in Maine, and may occur nowhere else in the northeast. While they are subject to degradation from recreational over-use, the *Hudsonia* river beach communities here appear to be in relatively good shape at this point.

Some of the fens (peatlands dominated by grass-like plants) adjacent to or near the Saco support populations of the extremely rare Long's Bulrush (*Scirpus longli*). This sedge is currently found nowhere else in Maine, and is in fact considered rare throughout its range, which extends south to New Jersey. How water level fluctuations or changes affect Long's Bulrush is still unclear

## **Chapter 5**

### **POPULATION**

#### *INTRODUCTION*

Population projections and analyses are basic elements of any comprehensive plan. Knowledge of the present and future population size and its characteristics is key to an understanding of the demands which will be placed upon public facilities, public services, roads and the transportation network, and even the natural resource base.

This chapter will highlight what has happened to Fryeburg's population in the past and what may happen to it in the future. Data have been taken from the U.S. Census, and from projections done by the Southern Maine Regional Planning Commission (SMRPC) and the Maine Department of Human Services (DHS). Fryeburg's population is also compared to that of the neighboring towns, some of which are in Cumberland County and some in New Hampshire. Data on the Cumberland County towns have been supplied by the Greater Portland Council of Governments (GPCOG) and data on the New Hampshire towns have been supplied by the New Hampshire Office of State Planning (NHOSP) and the North Country Council (NCC),

The U.S. Census figures are actual counts of the population. The population figures for years between actual census counts are called estimates. Population figures for years in the future are called projections. These are determined after making assumptions about what may occur in the future, based upon knowledge of trends that occurred in the past and knowledge of what is presently occurring.

#### *HISTORIC POPULATION CHANGES*

In 1860 the numerous neighborhoods and settlements which today make up the town of Fryeburg contained 1,625 people. By 1910 the population had dropped to only 1,282 residents.

This loss of population was caused by many factors - increased competition for workers from towns and cities such as Conway, Sanford, Biddeford, and Greater Portland that were increasing their manufacturing base during this time period; the loss of population, mostly males, during the Civil War; and the move of farmers and their families to rich farming regions of the American Mid West.

#### *RECENT POPULATION CHANGES*

Beginning between 1910 and 1920 Fryeburg's population began to increase. From 1920 to 1930 the population increased 23%. From 1930 to 1940 this increase slowed to 9%. Between 1940 and 1950 this increase was up to 12%. The period of the 1950s (1950-1960) saw a net decrease in the population of -3%. In the 1960s and 1970s Fryeburg experienced a very rapid population increase. During the 1960s it was 17% and during the 1970s it was 23%. Between 1980 and 1990 the population increased by a less dramatic 0.9%.

This overall increase has been caused by a number of factors - housing construction following World War I, the increased ease of commuting to job centers combined with the desire on the part of workers to not live in urbanized areas, the rural housing program of the Farmer's Home Administration, and the nation-wide population increase of the age-group referred to as the 'baby boomers.'" (The so-called baby boomers are that nationally large segment of the population born between 1946 and 1964. This group of people reached the age for starting new families from the mid 1960s to the mid 1980s.)

**Table 5-1  
FRYEBURG  
POPULATION CHANGES**

**1850-1990**

<b>Year</b>	<b>Population</b>	<b>Number Change</b>	<b>Percent Change</b>	<b>Annual % Growth Rate</b>
1850	1,523	—	—	—
1860	1,625	102	6.7%	.7%
1870	1,507	-118	-7.3%	-.8%
1880	1,633	126	8.4%	.8%
1890	1,418	-215	-13.3%	-1.4%
1900	1,376	-42	-3.0%	-.3%
1910	1,282	-94	-6.8%	-.7%
1920	1,283	1	.1%	<.1%
1930	1,582	299	23.3%	2.1%
1940	1,726	144	9.1%	.9%
1950	1,926	200	11.6%	1.1%
1960	1,874	-52	-2.7%	-.3%
1970	2,208	334	17.8%	1.7%
1980	2,715	507	23.0%	2.1%
1990	2,968	253	9.3%	.9%

Source: U.S. Census

The following figure shows these population changes in graph form.

**Figure 5-1**

The population increase which Fryeburg is experiencing is, as we all recognize, a result of in-migration (people moving into town), not natural increase (births minus deaths). In fact, during the 1980s there were fewer births than deaths in Fryeburg. As the following table illustrates, the net population increase for the 1980s was exclusively the result of in-migration.

**Table 5—2  
NATURAL INCREASE & IN-MIGRATION  
FRYEBURG**

**1980—1989**

Total Births	Total Deaths	Natural Increase	In-migration
316	350	-34	287

Source: SMRPC & DHS

*REGIONAL POPULATION GROWTH*

The growth rates of the municipalities in the Fryeburg region have shown a great deal of change when we compare the growth of the 1970s to that of the 1980s. There is a wide variation when rates for one period are compared to the other period, and when towns are compared to one another.

All of the municipalities in the Fryeburg region showed a slowing in annual percent growth rate between the 1970s and 1980s. Oxford County had a slight increase in annual percent growth rate from a rate of 2.3% for the 1970s to 2.7% for the 1980s.

**Table 5-3  
COMPARATIVE POPULATION GROWTH  
FRYEBURG REGION  
1970-1990**

Town	Population		Change 1970-1980		Population	Change 1980-1990	
	1970	1980	No	APGR	1990	No.	APGR
<i>FRYEBURG</i>	2,208	2,175	507	2.1%	2,968	243	.9%
Stow	109	186	77	5.5%	283	97	4.3%
Lovell	607	767	160	2.4%	888	121	1.5%
Sweden	110	163	53	4.0%	222	59	3.1%
Denmark	397	672	275	504%	855	<b>183</b>	2.4%
Brownfield	478	767	289	4.8%	1,034	267	3.0%
Bridgton	2,967	3,528	561	1.7%	4,307	779	2.0%
Chatham, NH	134	189	55	3.5%	264	79	3.6%
Conway, NH	4,865	7,158	2,293	3.9%	7,940	782	1.0%

APOR = Annual % Growth Rate

Source: U.S. Census & SMRPC

**Table 5-4  
POPULATION GROWTH RATES**

**FRYEBUG & NEIGHBORING TOWNS**

<b>Annual % Growth Rate 1970—1980</b>		<b>Annual % Growth Rate 1980—1990</b>	
Stow	5.5%	Stow	4.3%
Denmark	5.4%	Chatham, NH	3.6%
Brownfield	4.8%	Sweden	3.1%
Sweden	4.0%	Brownfield	3.0%
Conway, NH	3.9%	Denmark	2.4%
Chatham, NH	3.5%	Bridgton	2.0%
Lovell	2.4%	Lovell	1.5%
	2.1%	Conway, NH	1.0%
<i>FRYEBUG</i>			
Bridgton	1.7%	<i>FRYEBUG</i>	0.9%

Source: U.S. Census, SMRPC

*AGE GROUP POPULATION CHANGES*

When examining the 1970 and 1980 age group breakdowns several age groups stand out. (See Table 5-5.) There were two age categories which had a much greater increase than the others. These were the 25 to 34 age group, the 35 to 44 group, the 55 to 64 group, and the over 65 age group. This suggests that the people who were moving into Fryeburg were young families, as well as retired people.

**Table 5—5  
POPULATION BREAKDOWN BY AGE GROUPS  
FRYEBUG  
1970-1980**

<b>Age Group</b>	<b>1970</b>	<b>1980</b>	<b>No. Change</b>	<b>% Change</b>
<5	178	167	-11	-6.2%
5—14	453	450	- 3	- 0.7%
15—19	202	267	65	32.2%
20—24	145	168	23	15.9%
25—34	267	401	134	50.2%
35—44	230	329	99	43.0%
45—54	265	254	-11	- 4.2%
55—64	182	260	78	42.9%
>65	286	419	133	46.5%
Total	2,208	2,715	507	23.0%

Source: U.S. Census, SMRPC

**Table 5-6  
POPULATION BREAKDOWN BY AGE GROUPS  
FRYEBUG  
1990**

Age Group	1990 Population	% of total
< 5	186	6.3%
5—17	533	18.0%
18	1,142	38.5%
45—64	614	20.7%
>64	493	16.6%

Source: U.S. Census, SMRPC

Table 5-7 and Figure 5-2 show the Maine Department of Human Services (DUS) projections for the population of age groups. Although, these projections were done by DHS prior to the availability of the 1990 age group population figures, they do give us an idea of how the age groups might grow in the future.

**Table 5-7  
PERCENTAGE OF POPULATION BY AGE GROUPS  
FRYEBOURG  
PROJECTIONS\* FOR THE YEARS 1995 & 2005**

Age Group	1995	2005
< 5	4.6%	4.0%
5—17	15.4%	13.5%
18—44	40.0%	35.8%
45—64	23.4%	30.1%
>65	16.6%	16.6%

*\*These Projections were done prior to the 1990 census*

Source: Maine Dept. of Human Services

The following figure illustrates these projections.

**Figure 5-2**

*MEDIAN AGE*

The median age of the Fryeburg population is increasing as it is generally state-wide and nationally. Table 5-7 shows the median age of the Fryeburg population and that of the neighboring towns for the years 1970, 1980, and 1990.

**Table 5-8  
MEDIAN AGE  
FRYEBOURG REGION  
1970, 1980, 1990**

Town	1970	1980	1990	Change in Years	Change in Years
------	------	------	------	-----------------	-----------------

				<b>1970-1980</b>	<b>1980-1990</b>
<b>FRYEBURG</b>	29.8	32.4	36.5	+2.6	+4.1
Stow	35	31.5	36	-3.5	+4.6
Lovell	34.4	32	37.3	-1.6	+4.5
Sweden	35.5	36.6	40.4	+0.6	+3.8
Denmark	41.4	35.1	34.5	-6.3	-0.6
Brownfield	40.7	33.0	35.0	-7.7	+2.0
Bridgton	33.3	33.9	35.7	+0.6	+1.8

Source: U.S. Census

*SEASONAL POPULATION CHANGES*

Fryeburg experiences a dramatic population change in the summer months. It is estimated by SMRPC that Fryeburg’s population in the Summer may be as large as 8,900. These additional people are drawn to Fryeburg’s lakes and ponds, and the Saco River. They make use of the 273 seasonal dwellings, 13 seasonal rooms, 1,096 campground spaces, and 235 summer camp openings that are available during the summer months.

In addition to this population that stays overnight in Fryeburg in the Summer, there are many people in Fryeburg as “day-trippers.” These people are in Fryeburg mainly to take advantage of the canoe “put-in” and/or “take-out” facilities along the Saco River. It is estimated that over 44,000 canoes use the Saco River each Summer.

*POPULATION PROJECTIONS*

In making population projections, it must be made clear that all are based on certain assumptions. Projections are based on the continuation of a trend between some point in the past and the present. SMRPC has developed projections to the year 2010 by three very different methods, which give low, medium, and high projected populations figures. Each of these methods assumes the continuation of a trend that occurred from 1980 to 1990. Some factors which are taken into account are the number of building permits issued annually, household size, and the vacancy rate.

**Table 5-9  
POPULATION PROJECTIONS  
1990—2010**

<b>Type of Projection</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>
Numerical	2,968	3,093	3,218	3,343	3,463
Percent	2,968	3,110	3,240	3,380	3,520
Rate	2,968	3,104	3,246	3,395	3,550

Source: SMRPC

Using the knowledge that Fryeburg’s population grew by 253 people from 1980 to 1990, this calculates to be an average of 25 people per year. The Numerical Projection assumes that Fryeburg will continue to grow by 25 people annually until the year 2010. This method represents the lowest of the projections.

The Percent Projection represents a growth of 9.3% for the 1980-1990 time period. The Percent Projection assumes that this percent will continue through the year 2010. This represents the middle range of the projections.

The Rate Projection assumes that the annual percent growth rate of 0.9% will continue, and compounds on itself each year. In this methodology the population is projected to increase 0.9% above the previous year's population each year. This method results in the highest projection.

The following figure shows these three projections graphically.

**Figure 5-3**

**HOUSEHOLD SIZE**

While the population is increasing in Fryeburg, the average household size is decreasing.

**Table 5-10  
MEAN HOUSEHOLD SIZE  
FRYEBURG REGION**

<b>Town</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>
<i>FRYEBURG</i>	3.27	2.77	2.60
Stow	2.79	3.00	2.80
Lovell	2.73	2.72	2.64
Sweden	2.97	2.30	2.31
Denmark	2.79	2.56	2.70
Brownfield	2.80	2.48	2.82
Bridgton	2.94	2.62	2.59

Source: U.S. Census & SMRPC

With fewer people living in each household, as the population increases, the number of dwelling units in town increases faster than the population. Thus, the rate at which land is developed will increase faster than the population.

## **Chapter 6 LAND USE AND HOUSING**

### **LAND USE**

#### *INTRODUCTION*

How the land is used in a municipality has an impact on the social, cultural, fiscal, and environmental well being of both the town as a whole, and also that of its residents.

How the land is used affects environmental quality and degradation. The location of various land uses affects how convenient our town is, and how safe it is. Costs to both individuals and the municipal government are influenced by how the land is used. These could be costs for transportation, energy, construction, operation and maintenance of facilities, to mention only a few. Land use influences how we look at our surroundings and our town, and whether they are pleasing and attractive.

#### *HISTORICAL LAND USE*

What is today the town of Fryeburg was historically made up of Fryeburg Village and a number of smaller agricultural settlements, these being Fryeburg Center, West Fryeburg, North Fryeburg, Fryeburg Harbor, and East Fryeburg. In the days when these villages were first settled, people lived near where they worked. Shops and stores were established to meet their needs, and most of the land was used for agricultural or timber harvesting activities.

Fryeburg Village, as it was pointed out in Chapter 2, is located at the junction of important travel corridors - one going north and south, and one going east and west. Near Fryeburg Village was the historical settlement of the Pequawket Indians.

The small outlying, compact settlements grew up to serve the surrounding farming community. Fryeburg Village grew up serving all of the smaller settlements in town. Today the Village serves some of the economic and social needs of the whole town as well as some of the small towns around Fryeburg, and is itself served by other larger towns.

How villages grow and how land is used has been the subject of many studies and many theories. One theory (from William Alonso, 1960 and 1964) says that a household makes land use decisions based upon competing financial interests in (1) land costs, (2) costs to travel to work and to get needed goods and services, and (3) the costs of each of all the other needs and wants of the household. Land costs were historically higher near the village center and became lower with increasing distance from the center. The travel costs have always been greater with increased distance from work or the location of needed goods and services. The unit price of all the other needs and wants of the household are assumed not to vary with location.

In this theory we can see that historically a household's preferred location will become a tradeoff between the cost of land, the distance to employment and shopping, and all of the other needs and wants. Non-farming households lived near where they worked (generally in the Village) because travel costs were less and they did not need large acreages of land. Farming households were established outside of the village where they could afford to purchase large tracts of land.

Today there have been other issues introduced - the desire on the part of many non-farming households to live in the rural setting. The "market" is no longer creating compact, "New England" villages with the sharp distinction between village and rural settlement patterns and land uses, but is tending to create rural residential sprawl.

As we will see from the commuting figures in Chapter 8, Fryeburg currently lies outside the radius of communities whose growth during the 1970s and 1980s was fueled in large part by households willing to trade rural living and lower land costs for an increased commute to urban employment centers. This fact, and the fact that the farming activities in Fryeburg are still very viable, has helped to keep the rural, residential sprawl under control.

#### *RESIDENTIAL LAND USE*

The growth of residential land uses in the last ten to twenty years has been to the north of the Village (off from Route 5), in East Fryeburg, south of the Village on Maple Street, and east of the Village along Lovewell's Pond Road.

A look at the Existing Land Use Map shows that residential land uses are now located in Fryeburg Village, in subdivision neighborhoods developed in the 1970s and 1980s (located north of Fryeburg Village to the east of Route 5, in East Fryeburg off Hemlock Bridge Road and Route 302, and north of Lower Kimball Pond), and along some of the existing collector highways.

Other types of residential development make up a much smaller percentage of the land area in Fryeburg than does single-family development. Multi-family residential land uses are generally located in the Village area and along Lovewell's Pond Road. There are mobile homes scattered throughout the town.

(A more in depth discussion of the residential land use is contained in the Housing portion of this chapter.)

#### *COMMERCIAL AND INDUSTRIAL LAND USES*

Commercial land uses are primarily located in the Village, with some commercial development along Route 302 near the Village. There is also some commercial land use in North Fryeburg, and Fryeburg Center.

Industrial uses are located on the northern end of Porter Road and along Portland Road (Route 5/113), east of the Village.

The Existing Land Use Map shows the locations of these uses.

#### *AGRICULTURAL AND FORESTRY LAND USES*

Agriculture is a very important activity in Fryeburg. It adds to both the economy of the town and its residents, and also, to the attractiveness of the rural part of town.

Agricultural uses are located primarily in the flood plain of the Old Saco River. There are other parcels that are in agriculture, but it is the Old Saco River flood plain that is the main farming area. There are, however, very few parcels classified as "farm land" under the Farm Land Taxation provision. (This tax provision allows farmers to have their land assessed for property tax purposes based upon its value as farm land, not its "fair market" value.)

The main products grown in Fryeburg are corn, beans, potatoes, hay, and sod. There are also large truck gardens that grow produce that is sold to the public at farm stands.

Forestry is also very important in Fryeburg. There are people employed cutting timber, hauling logs, selling firewood, at saw mills and in the manufacture of other wood products. It is estimated by the Comprehensive Planning Committee that about 500 people are employed in forestry related jobs in Fryeburg,

There are 192 parcels in the Tree Growth Tax classification. These total to 12,246 acres or about 32% of the town. (The Tree Growth Tax law, a current use tax provision similar to the Farm Land Tax law, allows the owner of 10 or more acres of managed forest land be taxed on the value of the wood grown each year, not on the “fair market” value of the land. Under these “current use” tax provisions, if the land owner takes the land out of its current use and develops it, there is a large financial penalty that has to be paid to the town.)

Both farming and forestry add greatly to the town’s economy and to the rural character of the town. The location of the major agricultural activities and the parcels in the Tree Growth Tax Classification are shown on the Existing Land Use Map.

#### *SEASONAL AND RECREATIONAL LAND USE*

Most of the residential shore front property is used only seasonally. However, there are conversions from seasonal to year round use that do happen, and there will be continued pressure to do so. It is estimated that many septic systems that are now being used by the seasonal residential uses are not adequate for year round use.

There are two large camping areas in Fryeburg. The Swans Falls camping area is owned by the State of Maine and leased to the Appalachian Mountain Club for management. This area contains 46.5 acres and 21 tenting sites. There is also Saco River access.

Canal Bridge camping area, located where Route 5 crosses the Saco River, is owned by the town of Fryeburg and leased to an operator. There are 18 tenting sites and 18 RV sites.

#### *“GATEWAYS”*

In the context of the Comprehensive Plan the term “gateway” refers to the entrance to the Village - the roadways that lead to town. Whether or not a village is an attractive one, has much to do with its gateway. And, whether or not the gateway is attractive has much to do with the relationship of the various land uses along that roadway.

These gateways are: Route 302 from Menotomy Road and Battleground Road east to the Bridgton Town Line; Route 302 east from the New Hampshire Line to the Commercial Zone; Route 5 from Brownfield Town Line north to the Industrial Zone; Route 113 from the New Hampshire Line to Weston’s; Route 5 from Fairgrounds north to Lovell Town Line; excluding the Outlying Residential-Commercial District.

Fryeburg has very attractive gateways which add greatly to the “New England Village” character of the town. Driving into town from the east, along Route 302, the gateway consists of scarcely settled residential uses, the flood plain of the Saco River, the River crossing, and forested areas. It is a very attractive highway leading to town because of the sharp distinction and quick transition from the rural land uses to the village land uses. This is the highway that is in the most danger of changing, thus blurring the distinction between rural and village. And as a result, reducing the attractiveness of the gateway and the Village itself. It is easy to think about gateways like this that have been “ruined” by strip development sprawling out from the downtown - Western Avenue in Augusta, Center Street in Auburn, and, closer to home, Route 302 leading into Bridgton from the east.

The gateway from the south - Portland Street (Route5/113) - offers very similar attractiveness. From the Brownfield town line to the industrial zone, the highway is through a wooded area and the transition from rural to built-up “urban” uses is sharp and distinct. No scattered, residential or commercial sprawl.

Heading into town from the northwest along Route 113, the transition from rural to village is very quick and very distinct. This is a beautiful gateway. There are few villages that have rural and recreational land uses within walking distance of its center as does Fryeburg.

The gateway from the north along Route 5 is being threatened, but still provides an attractive entrance. This part of town has experienced much residential growth in the last ten to twenty years but because much of it has been back off from the highway, it has not affected the gateway's attractiveness.

The gateway leading to town from New Hampshire (along Route 302) provides less of a sharp distinction. This is due primarily to the fact that it lies in the town of Conway and is outside of the land use controls of Fryeburg. The 2,000 feet of roadside that is zoned Rural Residential does assure that village uses won't sprawl up to the state line and totally blur the distinction between Fryeburg and Conway.

## HOUSING

### INTRODUCTION

Housing makes up one of the major land uses in the town of Fryeburg. It is shelter for the residents of the town, it is the major portion of the tax base, it is the single largest investment for most of the residents, and it is a major element of the visual quality of our community.

The types and location of the housing units that are built in Fryeburg in the future will have an impact on the cost of residential growth - the cost to the taxpayers and the cost to the rural qualities of the town

This section will inventory the housing stock of the town and region, will look at trends which are taking place, and will try to determine future needs and demands.

#### *EXISTING HOUSING STOCK*

The number of occupied dwelling units in Fryeburg has increased by 161 between 1980 and 1990. These were mostly single family, site-built homes. The following three tables show the growth in the total number of occupied dwelling units in Fryeburg since 1970, the percentage of the different housing types, and the percentage of owner and renter housing.

**Table 6-1  
NUMBER OF OCCUPIED DWELLING UNITS  
FRYEBURG  
1970, 1980, & 1990**

<b>1970</b>	<b>1980</b>	<u>Change 1970-1980</u>		<b>1990</b>	<u>Change 1980—1990</u>	
		<b>Number</b>	<b>Percent</b>		<b>Number</b>	<b>Percent</b>
667	942	275	41.2%	1,103	161	17

Source: U.S. Census & SMRPC

If the population increases during the 1990s as projected and if the household size stays as it is, there will be between 92 and 107 new dwelling units built in Fryeburg between 1990 and the year 2000.

The percentage of single family, site-built homes in Fryeburg as stayed about the same since 1970. The percentage of multi-family dwelling units has fluctuated, while the proportion of mobile homes has gone up. The following table shows this.

**Table 6-2**  
**PERCENT DISTRIBUTION OF DWELLING UNITS BY TYPE**  
**FRYEBURG**  
**1970, 1980, & 1990**

Type	1970 <sup>(1)</sup>	1980 <sup>(1)</sup>	1990 <sup>(2)</sup>
Single family*	78%	77%	77%
Multi—family	14%	16%	12%
Mobile home	7%	7%	11%

(1)% of year—round dwelling units

(2)% of total dwelling units

\* site-built

Source: U.S. Census

The proportion of owner versus renter occupied housing is the same in 1990 as it was in 1970.

**Table 6—3**  
**PERCENT DISTRIBUTION OF DWELLING UNITS BY TENURE**  
**OWNER / RENTER**  
**FRYEBURG**  
**1970, 1980, & 1990**

Type	1970	1980	1990
<b>Owner occupied</b>	<b>79%</b>	<b>75%</b>	<b>79%</b>
Renter occupied	2	25%	21%

Source: U.S. Census

The growth in the number of housing units built in the 1980s paralleled that for the 1970s, and together the housing units that were built in the last twenty years - the 1980s and 1970s - make up almost the same percentage as the units that are over 50 years old. The following table shows this.

**Table 6-4**  
**AGE OF HOUSING**  
**FRYEBURG**

	Number	% of 1990 total
Built prior to 1940	520	41%
Built in the 1940s	51	4%
Built in the 1950s	80	6%
Built in the 1960s	128	10%
Built in the 1970s	247	20%
Built in the 1980s	232	18%

Source: U.S. Census & SMRPC

*REGIONAL HOUSING GROWTH*

The following three tables compare Fryeburg to its neighboring Maine towns. (These towns are referred to here as the Fryeburg region.)

**Table 6-5  
TOTAL NUMBER OF DWELLING UNITS  
FRYEBURG REGION  
1980 & 1990**

Town	1980	1990	Number Increase	Percent Increase
<b>FRYEBURG</b>	<b>1,317</b>	<b>1,549</b>	<b>232</b>	<b>17.6%</b>
Stow	117	167	50	42.7%
Lovell	646	905	259	40.1%
Sweden	215	238	23	10.7%
Denmark	695	945	250	36.0%
Brownfield	500	681	181	36.2%
Bridgton	2,061	2,921	860	41.7%

Source: U.S. Census & SMRPC

During the 1980s Bridgton increased its percentage of rental housing slightly, while in Fryeburg the percentage of rental units decreased. The smaller towns in the region have a smaller proportion of dwelling units that are rental units than do Fryeburg and Bridgton.

**Table 6-6  
PERCENT DISTRIBUTION OF DWELLING UNITS BY TENURE  
OWNER / RENTER  
FRYEBURG REGION  
1980 & 1990**

	1980		1990	
	Owner	Renter	Owner	Renter
<i>FRYEBURG</i>	75%	25%	79%	21%
Stow	88%	12%	85%	15%
Lovell	86%	14%	85%	15%
Sweden	88%	12%	89%	11%
Denmark	87%	13%	86%	14%
Brownfield	86%	13%	88%	12%
Bridgton	75%	25%	74%	26%

Source: U.S. Census

In all towns, with the exception of Stow and Lovell, the percentage of mobile homes increased during the 1980s.

**Table 6-7**  
**PERCENT DISTRIBUTION OF DWELLING UNITS BY TYPE**  
**FRYEBURG REGION**  
**1980 & 1990**

	1980 <sup>(1)</sup>			1990 <sup>(2)</sup>		
	Single Family	Multi-Family	Mobile Home	Single	Multi-	Mobile Home
<i>FRYEBURG</i>	77%	16%	7%	77%	12%	11%
Stow	75%	0	25%	86%	0	14%
Lovell	86%	9%	5%	94%	2%	4%
Sweden	83%	15%	2%	63%	2%	34%
Denmark	86%	11%	2%	94%	2%	5%
Brownfield	81%	8%	11%	79%	4%	17%
Bridgton	%	%	%	80%	13%	7%

(1) % of year-round dwelling units

(2) <sup>(2)</sup> % of total dwelling units

\* site-built

### Source: U.S. Census

#### *HOUSING DEVELOPMENTS AND THE LOCATION OF GROWTH*

The following table shows a summary of subdivision activity during the 1980s, giving the number of units, the number of acres subdivided, and the amount of new roads constructed. According to this table 1.4% of the area of the town was divided into lots (totaling 194) in the 1980s,

The Subdivision Activity Map shows the location of the subdivisions approved during the 1980s. This subdivision activity has not had a major, detrimental impact on the “ruralness” of Fryeburg.

The important reason for this is that, in most cases, these subdivisions have not occurred along (with homes fronting on) the major highways. Also, these subdivisions were built out slowly.

In the last twenty years much of the residential growth in Fryeburg has occurred off from Route 5 north of the Village, from Woodland Street to Highland Park Road; in East Fryeburg; along Maple Street; between Route 302 and Lovewell's Pond Road and Island Road; and along Fish Street.

**Table 6-8  
FRYEBURG  
SUBDIVISION ACTIVITY  
1980—1990**

:

Subdivision	Year	Total Acres	No. of Lots	Road Length	
1. Great Northern	1980	17	5	0	
2. R&M Eastman	1981	1.4	2	0	
3. Webster Jones	1985	17	2	0	
4. Highland Acres	1986	45	7	0	
5. Ted Raymond	1986	1.2	3	0	
6. Hugh Hastings	1986	3	2	0	
7. Eli Cohen	1986	1.2	3	0	
8 Chataqua Hills I	1986	15.6	3	0	:
9. William Mann	1986	10	4	697	
10. Silver Pines Elder	1986	16	25	653	
11. William Bolton	1986	4	4	0	
12. Chataqua Hills II	1987	80	11	2,395	
13. Oak Ridge	1987	44	8	1,045	
14. Arrowhead Cottage	1987	70	58	4,965	
15. Pleasant	1987	13.5	6	697	

View					
16. Highland Acres II	1988	62.6	10	2,961	
17. Eli Cohen	1988	1.2	3	0	
18. William Bolton	1988	23.1	4	0	
19. Mt. Tom Townhouses	1988	3	4	436	
20. Katelyn Drive	1988	19.7	9	897	:
21. Federal Acres	1989	8.3	6	697	
22. Pine Meadow	1989	7	9	1,132	
23. Long Hill	1989	76.8	6	1,306	
<b>Totals</b>		<b>541.1</b>	<b>194</b>	<b>17,881</b>	

Source: Oxford County Registry of Deeds

Many of the new homes built in the last ten years have been built in the Rural Residential Zone and many of the subdivisions approved in the same period have been in the Rural Residential Zone, as well. While one might say this indicates that a great amount of “rural sprawl” is occurring, when we analyze the amount of growth in various zoning districts and the relative size of the districts, we find that in fact the present zoning is doing much to guide the location of growth in Fryeburg.

From 1980 to 1990, 194 lots (or units) have been created by subdivision activity. Fifty-five (or 28%) were in the Village or Outlying Village Residential Zones. These two zones account for only 2% of the area of the town. Two percent of the town accommodated 28% of the growth. This shows that these two zones received 14 times the amount of growth one could expect to occur if nothing were guiding growth in Fryeburg.

When we also look at the location of new dwelling units permitted over this ten-year period we see the same thing. Table 6 indicates that 26% of the dwelling units permitted the 1980s were in the Village or Outlying Village Residential Zone. Twenty-six percent of the growth took place in 2% of the land area. Our present growth guidance system seems to be working quite well.

**Table 6-9**  
**DISTRIBUTION OF**  
**PERMITTED DWELLING UNITS**  
**BY ZONING DISTRICT**  
**FRYEBURG**  
**1980 through 1990**

	Outlying					
	Village Residential	Village Residential	Rural Residential	Village Commercial	General Commercial	Shore Land
No.	42	32	192	1	1	12
	15%	11%	68%	<1%	<1%	4%

Source: Fryeburg town records, and SMRPC.

*HOUSING AFFORDABILITY*

When the Maine State Legislature passed the Comprehensive Planning Law in 1988 they identified the affordability of housing as one of the major problems in the state. This does not necessarily mean “low income housing projects.” What it means is the ability of people working in Maine towns and cities being able to find housing that they can afford. As the cost of housing goes up in all of the municipalities of southwestern Maine, people who have grown up in our town - our daughters and sons - are pushed out of the housing market.

In order to attempt to solve this problem the State Legislature has set as a goal “to encourage and promote affordable, decent housing opportunities for all Maine citizens.” Affordable housing is defined by the rule which has been adopted to implement the Comprehensive Planning Law as “decent, safe, and sanitary living accommodations that are affordable to lower income and moderate income households....”

Lower income households are those with a gross income less than or equal to 80% of the county median household income. Lower income households include very low income households who are those earning less than or equal to 50% of the county median. Moderate income households are those with a gross income over 80% but less than 150% of the county median. The Oxford County median family income for 1989 through 1991 has been:

\$27,600 in 1989,  
\$28,300 in 1990, and  
\$30,200 in 1991.

A housing unit is considered to be affordable if the family does not have to pay more than 28% of its income for housing (including mortgage, insurance, utilities and real estate taxes), or 30% in the case of renter-occupied housing (including rent and utilities).

The following table shows the housing affordability ranges (for renting or purchasing) for very low, low, and moderate income households in Oxford County.

**Table 6-10**

**INCOMES AND AFFORDABLE HOUSING PAYMENTS  
OXFORD COUNTY  
1990**

Income	Income Range	Affordable	Affordable
--------	--------------	------------	------------

<b>Group</b>		<b>Monthly Rent</b>	<b>Purchase Price</b>
Very low	Up to \$14,150	up to \$270	Up to \$25,000
Low	\$14,150 to \$22,640	up to \$490	Up to \$45,600
Moderate	\$22,640 to \$42,450	up to \$960	Up to \$89,300

Source: Maine Office of Comprehensive Planning, 1990

The expectation of the State’s Comprehensive Planning Law is that each municipality . . . “seek to achieve a level of 10% of the new residential development, based on a 5-year historical average of residential development in the municipality, meeting the definition of affordable housing.” (This is from the Title 30A, Section 4326.) The data necessary to determine the cost of the newly constructed housing units in Fryeburg is difficult to obtain and in some cases is not reliable. Therefore, the plan does not contain an analysis of the affordability of the newly constructed units. The table below does, however, show the affordability of the units sold between July 1, 1988, and June 30, 1989.

**Table 6-11**  
**HOUSING AFFORDABILITY**  
**FRYEBURG**  
**1989—1990**

<b>Income Group</b>	<b>Can afford a house<sup>costing 1</sup></b>	<b>Sales<sup>(2)</sup> under threshold</b>	
		<b>number</b>	<b>percent</b>
Very Low Income	\$25,000	11	20%
Low Income	\$45,600	14	25%
Moderate Income	\$89,300	31	55%

<sup>1</sup> assuming 5% down, 10.625% mortgage for 30 years, includes payments for taxes, utilities, and insurance.

<sup>2</sup> sales in the period 7/1/88 - 6/30/89.

Source: Maine Bureau of Taxation, OCP, SMRPC

*(The above table is read “a very low income household (one earning 50% or less of the mean household income) in Oxford County can afford a house costing \$25,000 and there were 11 homes that were sold in Fryeburg for that price or less during the study period.*

*The 11 homes represent 20% of all of the homes that sold in Fryeburg during that period.”)*

The above table shows that 11% of the units which sold during the study period were affordable to very low income households, 14% were affordable to low income households, and 31% were affordable to moderate income households. Since the study period the cost to buy homes and rent

homes and apartments has gone down. As of May, 1992, the mortgage interest rate is has dropped. Also, when we look at the selling price of homes in Fryeburg we see that in the fourth quarter of 1992 the averaging selling price was \$79,437 and this dropped to \$64,225 in the first quarter 1993. These factors lead us to believe that an even higher percentage of housing meets the definition of affordable.

There are two federally assisted housing developments in Fryeburg that provide rent assistance to low and moderate income elder people. These are the 24 units at the Pequawket Village and the 24 units at the Silver Pines Apartments. These are both Farmers Home Administration (FmHA) assisted housing developments. While the above table does show that houses sold during the July, 1988, to June 31, 1989, study period were affordable to the various household income groups, without more family, rental housing being built it is primarily the new mobile homes that are offering new affordable housing to low and moderate income families.

If the population grows in the 1990s as projected, and if the household size stays as it is today, then there will be between 93 and 103 dwelling units constructed in Fryeburg in the years 1990 to 2000. For 10% of the new units each year to be affordable this would mean only 1 affordable unit needs to be constructed each year over the next five years to meet the Comprehensive Plan Review Criteria Rule expectations.

*PUBLIC OPINION REGARDING LAND USE AND HOUSING*

The public opinion survey conducted in 1990 gives us some insight into the public’s opinion regarding both land use in Fryeburg and housing in Fryeburg.

When asked their opinion regarding the supply of various housing types the majority of the respondents - 59% - said there was a lack of affordable housing for purchase and the same majority - 59% - said that there was also a lack of affordable rental housing.

When asked if the town should “Not Allow,” “Confine to Specific Areas,” or “Allow Anywhere” various housing types the following answers were received:

	<b>Not Allow</b>	<b>Confine to Specific Areas</b>	<b>Allow Anywhere</b>
Single family homes	0%	12%	88%
Seasonal conversions	0%	28%	71%
Manufactured homes	1%	29%	70%
Seasonal home	3%	39%	58%
Affordable housing	2%	46%	52%
Elderly housing	1%	57%	42%
Duplexes	3%	55%	42%
Apartments	7%	70%	24%
Mobile home	9%	71%	20%
Condominiums	37%	53%	10%
Mobile home parks	18%	73%	9%

When asked if respondents agreed that open space preservation is desirable, 91% of the respondents said they agree, only 9% did not agree. Cluster developments – one technique to preserve open space - should be allowed in Fryeburg according to 60% of the respondents. When asked if cluster development should be mandatory, 91% said “no.”

Question number 158 asked if the respondent thought that there should be more commercial land zoned. Sixty percent said that there should not. Of the 40% who thought that there should be, when asked where commercial growth should occur, 27% said that Route 302 was appropriate and 30% said that Brownfield Road - Route 113/5 - was appropriate. Also, 10% said anywhere was appropriate and 33% said “other.”

The survey asked the respondents to rate the importance of preserving certain characteristics of the town. The choice of answers were “Not Important,” “Slightly Important,” “Important,” and “Very Important.” The following shows the percentages of the various responses:

	<b>Very Important</b>	<b>Important</b>	<b>Slightly Important</b>	<b>Not Important</b>
drinking water supplies	89%	10%	<1%	<1%
river and lake water quality	82%	16%	1%	<1%
wildlife habitats	60%	33%	7%	<1%
open space	53%	37%	8%	2%
rural character	53%	35%	10%	2%
wetlands	51%	34%	12%	3%
scenic vistas and views	51%	32%	12%	4%
land for recreational use	43%	40%	13%	3%
historic build. & districts	34%	35%	25%	7%
stone walls along rural roads	31%	26%	33%	10%

When asked if taxpayers’ dollars should be used to protect certain characteristics of the town, the favorable - “yes” - answers were as follows:

<b>Use Tax Dollars to Protect</b>	<b>% Yes Responses</b>
ground water	87%
river and lake water quality	87%
land for recreational use	69%
wetlands	67%
open space	66%
wildlife habitats	65%
historic buildings & district	38%

*EXISTING REGULATIONS THAT AFFECT LAND USE AND HOUSING*

It can be seen from Table 6-9 that most of the residential development that has taken place in the last 10 years has taken place in the Rural Residential Zone. There are a number of reasons for this. Perhaps the most basic reason is that there is more land in the Rural Residential Zone than in all the other zones put together. And there is more vacant land in this zone than in any other residential zone. Another reason for this was discussed at the beginning of this chapter - the fact that people who move to Fryeburg do so to live in a rural setting, not in a village.

The State Legislature, in the State’s Comprehensive Planning and Land Use Regulation Act, has established as a statewide goal the prevention of development sprawl. There are density standards in the Fryeburg land use ordinance that work to achieve this goal. The following table shows the density standards in the three residential zones,

**Table 6-12**  
**DENSITY STANDARDS BY ZONE**  
**FRYEBURG**  
**1992**

	<b>Village Residential</b>	<b>Outlying Village Residential</b>	<b>Rural Residential</b>
Minimum lot size	20,000 sq.ft.	30,000 sq.ft., <sup>ww</sup> 40,000 sq.ft., <sup>wow</sup>	40,000 sq.ft.
Minimum frontage	100 ft.	100 ft.	125 ft.
Front set—back	35 ft.	50 ft.	60 ft.
Other set-backs	20 ft.	20 ft.	20 ft.

<sup>ww</sup>With a community water system

<sup>wow</sup>without a community water system

Source: “Town of Fryeburg Planning Ordinance”

The incentive in the Outlying Village Residential Zone of allowing a higher density if development is connected to public water encourages development near the presently serviced areas.

The description and purpose of the various residential zones (as written in the Ordinance) is as follows:

Village Residential - A zone including much of the older village residential neighborhoods and located within convenient reach of central business facilities.

Outlying Village Residential - A zone intended for village residences in a less intensive pattern of land development.

Rural Residential — A zone for forestry, farming, farm residence, vacation homes, and a scattering of varied uses not inconsistent with a generally open, non-intensive pattern of land use.

In each of the zoning districts there are certain Permitted Uses (uses permitted by right), and a number of Special Exceptions (uses which may be allowed by the Board of Appeals). The Special Exception uses are allowed if the Board of Appeals finds that a number of factors are met by the proposed use. These factors are appropriateness, no adverse effect on property values, no valid objection to the use, no nuisance or unreasonable hazard involved, and adequate and appropriate facilities. We can see that some of these standards are quite ambiguous and leave much room for arbitrary decisions on the part of the Board of Appeals. Also, this procedure puts the Board of Appeals into a position of making numerous land use decisions when, perhaps, their most appropriate function is quasi-judicial. That is acting on administrative appeals - appeals of the Code Enforcement Officer’s decisions - and variance requests.

One other regulation (or in this case lack of a regulation) which has the potential to greatly affect housing and other development is the lack of a building code with appropriate structural, light and ventilation, egress, and fire safety standards.

## Chapter 7 LOCAL ECONOMY

### INTRODUCTION

The purpose of this chapter is to give both the public and private sector decision makers in Fryeburg an idea of the economic picture in town. It may help to show the strengths and weakness in the local economy. It will show where people earn a living, what industries have been growth industries and what ones were not, what the income picture is, and what the unemployment rate is and has been historically. The chapter will give the public decision makers background information when formulating strategies for achieving goals and implementing policies related to economic development.

### THE MAINE ECONOMY

Predicting the long-term economic picture of a state, region, or municipality is not easy. A 1987 publication of the Maine Labor Department entitled *Maine Occupational Needs to 1995* gives projected statewide growth rates of industries from 1984 to 1995. The construction industries were expected to show the largest percent increase in jobs. However, we know that the construction industry suffered very large job losses in the late 1980s and early 1990s. Trends that occur at any given time don't always continue

A February, 1992, report by the Maine Department of Labor entitled *Trends in the Maine Labor Market* gives some more recent predictions for job growth by industry, this for the period 1988 to 2000.

**Table 7-1  
INDUSTRIES WITH THE GREATEST NUMBER OF NEW JOBS EXPECTED  
STATE OF MAINE  
1988-2000**

	<b>New Jobs State Wide</b>	<b>Percent Increase</b>
Health Services	19,700	44.7%
Eating & Drinking Places	7,600	22.8%
Business Services	7,200	52.2%
Social Services	5,100	57.3%
Educational Services	4,900	10.2%
Food Stores	3,400	18.3%
Wholesale Trade-Durable Goods	3,100	23.8%
Wholesale Trade - Nondurable Goods	2,600	21.1%
Miscellaneous Retail Stores	2,600	15.4%
Hotels & Other Lodging Places	2,200	23.7%

Personal Services	1,500	33.3%
Electrical & Electrical Equipment	1,400	13.2%
	1,400	21.2%
<b>Insurance Carriers</b>		
Trucking & Warehousing	1,400	19.7%
General Merchandise Stores	1,300	11.6%

Source: Maine Labor Dept.

The Commission on Maine's Future, in a May, 1989, publication entitled *Maine's Economic Heritage*, cited a number of trends which will affect Maine's economic picture in the future:

- \* Maine businesses will become more active in world trade.
- \* Maine will continue to attract business because of low cost labor and low cost land.
- \* Manufacturing will continue to be a large employer, although this will show decline.
- \* The growth in the past few years is, in part, based on the State's quality of life, and as growth continues to change Maine and its quality of life, a source of the prosperity will be threatened.

This last point is very significant for us in Fryeburg.

*FRYEBURG'S ECONOMY - WHERE PEOPLE WORK*

About half of the Fryeburg labor force works in town. This is unusually high for small Maine towns. The following table shows the location of Fryeburg residents' jobs in 1980 and 1990.

**Table 7-2  
PERCENT DISTRIBUTION OF FRYEBURG RESIDENTS' JOBS  
1980 & 1990**

Location of Employment	1980	1990
Fryeburg	50.6%	59.9%
<b>Conway, NH</b>	<b>34.3%</b>	<b>25.3%</b>
Other Oxford County	3.7%	5.8%
Other Maine	2.3%	3.8%
Other New Hampshire	3.5%	2.7%
Other and not reported	5.6%	2.4%

Source: 1980 = U.S. Census

1990 = Fryeburg Public Opinion Survey - 1990

In 1980, according to the U.S. Census, the average travel time to work for the Fryeburg labor force was a little over 17 minutes - actually 17.5. By 1990 the average travel time had decreased slightly to a little less than 17 minutes - actually 16.8.

In 1980 there were 1,111 people in the Fryeburg labor force. Of these the largest number were employed in the manufacturing industries. In that year the manufacture of durable and non-durable goods accounted for 34% of the jobs of Fryeburg residents. By 1990 this had changed to 15.1%. As we can see from the following table the shift in jobs has been away from manufacturing to construction and retail sales.

**Table 7-3**  
**PERCENT DISTRIBUTION OF JOBS BY INDUSTRY**  
**FRYEBURG**  
**1980 & 1990**

	<u>1980</u>	<u>1990</u>
Agriculture, Forestry, Fishing, & Mining	4.9%	9.9%
Manufacturing		
non-durable goods	9.2%	4.7%
durable goods	24.8%	10.4%
Construction	5.3%	11.5%
Transportation	2.0%	1.4%
Communications & Other Public Utilities	0.6%	1.9%
Wholesale trade	2.7%	1.8%
Retail trade	17.5%	23.8%
Finance, Insurance, & Real Estate	3.1%	3.8%
Services		
business & repair	0.6%	2.6%
personal, entertainment, recreation	3.0%	6.3%
health	9.7%	6.6%
education	10.8%	8.1%
other	4.2%	3.2%
Public Administration	3.1%	3.2%

Source: U.S. Census

*BUSINESSES IN FRYEBURG*

According to the 1992 Maine Manufacturing Directory and research done by the Comprehensive Planning Committee there are nine manufacturing businesses in Fryeburg that employ five or more people. The following table shows these.

**Table 7-4**  
**MAJOR MANUFACTURING EMPLOYERS IN FRYEBURG**  
**1991**

No. of

<u>Name</u>	<u>Employees</u>	<u>Type/Product</u>
Bailey Manufacturing Precision Tubular Products	75	unfinished pine furniture Dearborn
Ela Sheet Metal	5	tubing, tubular parts sheet metal
Forest Industries	70	hardwood dowels, wood turning
Form-A-Top	9	post-formed counter tops
Mold-Flair	13	aluminum molds
New England Tool & Cutter Grinding	16	special cutting tools & specialty grinding
<b>Northland Shoe</b>	<b>190</b>	<b>men's and women's shoes</b>
<b>Teel Machine industry</b>	<b>6</b>	<b>replacement parts for shoe</b>

Source: *1992 Maine Manufacturing Directory*, Fryeburg Comprehensive Planning Committee

In the Fryeburg region - Fryeburg and the abutting towns - there are numerous other major manufacturing employers. Table 7-5 lists these.

**Table 7—5**

**MAJOR MANUFACTURING EMPLOYERS  
FRYEBURG REGION  
1991**

<b>Name</b>	<b>Employees</b>	<b>Type/Product</b>
Bridgton Knitting Mill	120	knitted fabrics
Bridgton News	9	newspaper publisher
Down East	20	metal fabrication, light assembly
Howell Laboratories	60	antenna systems, measurement instruments
J. R. Mains	40	sporting goods, wood product
Merrimack Manufacturing	8	screw machines
Pleasant Mt. Moc	250	women's shoes

Fred P. Saunders	25	dowels
Shively Labs	15	components coaxial
Lovell Lumber	23	lumber

Source: 1992 Maine Manufacturing Directory

*INCOMES AND UNEMPLOYMENT*

The incomes which the people of Fryeburg earn have increased since 1980. The following table shows the median family income for Fryeburg and the Fryeburg region towns for 1979 and 1989.

**Table 7-7  
MEDIAN FAMILY INCOME FRYEBURG REGION  
1979 & 1989**

	1979	1989	% Change	Annual % Growth Rate
<b>FRYEBURG</b>	\$ 13,817	\$ 31,406	127.3%	8.6%
	10,481	36,667	249.8	13.3
<b>Stow</b>				
Lovell	14,259	26,900	88.7	6.6
Sweden	13,875	27,500	98.2	7.1
Denmark	15,238	30,000	96.9	7.0
Brownfield	14,053	25,313	80.1	6.1
Bridgton	13,450	27,061	101.2	7.2

Source U.S. Census

The above table seems to indicate that the towns in the Fryeburg region had huge annual growth rates in family income. However, we also know that there were years in the 1980s when the inflation rate was very high. Table 7-8 shows the median family incomes adjusted to 1990 dollars.

The town of Stow did have a huge increase in median family income. Fryeburg had a large increase. Some of the other towns in the region, however, just barely kept ahead of the inflation rate.

**Table 7-8  
MEDIAN FAMILY INCOME  
ADJUSTED TO 1990 DOLLARS  
FRYEBURG REGION  
1979 & 1989**

	1979	1989	% Change	Annual % Growth Rate
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<i>FRYEBURG</i>	\$ 24,871	\$ 32,976	34.6%	2.9%
Stow	18,866	38,500	104.1	7.4
Lovell	25,666	28,245	10.0	1.0
Sweden	24,975	28,875	15.5	1.5
Denmark	27,428	31,500	14.9	1.4
Brownfield	25,295	26,575	5.1	0.5
Bridgton	24,210	28,414	17.4	1.6

Source U.S. Census

The changes in the rate of unemployment of Fryeburg residents show the same pattern as the rates of other towns in the region and for Oxford County as a whole. There have been a number of differences in the trends of specific towns in the region, but, generally, the unemployment rates were dropping in the early 1980s to a low between 1986 and 1988, and have since increased to an unemployment in 1991 that was higher than that of 1980.

**Table 7-9**  
**UNEMPLOYMENT RATES**  
**FRYEBURG REGION**  
**1980—1990**

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>FRYBRG</b>	5.4	3.0	5.0	5.9	4.8	5.0	2.0	2.1	2.4	3.2	4.6	7.5
<b>Stow</b>	3.1	0.0	1.4	1.4	1.4	1.2	0.0	0.0	0.0	0.0	1.1	1.1
Lovell	3.0	2.9	3.0	3.0	2.1	2.1	1.4	1.7	2.2	4.2	5.4	7.4
Sweden	1.4	0.0	1.6	3.0	1.6	4.9	0.0	0.0	0.0	0.0	1.5	1.5
Denmark	6.1	3.9	4.5	6.8	3.9	3.4	3.0	1.7	1.6	2.2	3.1	4.7
Brownfield	5.3	3.2	6.4	8.6	6.9	5.2	3.3	2.5	1.9	2.9	5.8	7.9
Bridgton	7.3	7.2	8.8	8.1	4.6	3.6	3.4	3.2	2.3	4.0	5.8	9.0
Oxford County	6.8	8.4	9.8	10.1	7.9	6.9	6.7	5.1	4.6	5.7	7.6	10.1

Source: Maine Labor Dept.

*CONSUMER SALES*

A look at consumer sales in Fryeburg and in the neighboring towns tells us a little about the local economy, whether residents are buying items locally or traveling to other towns to shop. As a comparison, Oxford County had a per capita consumer sales figure in 1990 of \$3,490.

**Table 7-10**  
**CONSUMER SALES**  
**FRYEBURG REGION**

	1986	1987	1988	1989	1990	1991	1991
	(in thousands of dollars)						Per Capita

<i>FRYEBURG</i>	\$3,600	\$4,500	\$4,420	\$4,190	\$4,630	\$4,430	\$1,482
Stow	na	na	na	na	na	na	na
Lovell	2,300	2,520	2,750	2,800	2,500	3,130	3,402
Sweden	550	830	1,280	1,700	1,450	1,410	6,130
Denmark	810	910	1,030	1,090	870	700	761
Brownfield	650	750	690	700	630	660	411
Bridgton	14,010	16, 120	18,000	17,050	15,950	16,230	3,652

Source: Sales Tax Div., Maine Bureau of Taxation

This table shows that the value of consumer sales have decreased since the 1980s. (These numbers are not adjusted for inflation.) And the table shows that Fryeburg is not capturing as high a share of sales as is Bridgton. (Because of their small size, it may not be appropriate to compare Fryeburg to Lovell in this economic measure and it is certainly not appropriate to compare Fryeburg to Sweden.) As we all know, a major reason for the lower per capita sales in Fryeburg is the proximity of North Conway.

## **EDUCATIONAL ATTAINMENT**

While not always included in a chapter on the local economy, the level of educational attainment in a community should be thought of as either an economic development opportunity or constraint.

The 1980 Census indicated that 66.4% of the population of Fryeburg over the age of 25 were high school college graduates, and 12.7% had four year college degrees. By 1990 these percentages had increased to 70.8% and 15.1%, respectively. While this shows an improvement in the level of educational attainment, these 1990 percentages are behind those of the County and the State. In 1990 the percent of the population over the age of 25 that were high school graduates was 76.9% in Oxford County and 78.8% in the State, and the percent of those with at least a four-year degree in 1990 was 12.7% in Oxford County and 18.8% for the State.

### *THE PUBLIC'S OPINION RELATIVE TO ECONOMIC DEVELOPMENT*

On the public opinion survey conducted in 1990, there were a number of questions which can give some understanding of the public's opinion toward certain job and economic development issues, (The percentages cited below indicate how the Fryeburg residents in the survey responded.)

It's not very surprising that the ability to earn a living in Fryeburg is important. Fifty-five percent of the respondents said that this is Very Important, 25% said it was Important, and 13% said it is Slightly Important. Only 7% said it is Not Important.

When asked if the town can compete for business with North Conway, only 37% said "yes." However, when asked if there should be more commercially and industrially zoned land in Fryeburg, only 40% said "yes," with 60% saying "no."

Additionally, an overwhelming majority of respondents - 88% - felt that Fryeburg can attract businesses without harming the town. And, when asked if the town should attempt to attract “high-tech” industry, 77% said “yes.” But, only 24% said that they thought the school district was preparing students for “high-tech” jobs.

When asked their opinion on the siting of businesses within town, retail stores, professional offices, and light manufacturing all received strong support. Only heavy manufacturing received a substantial “no” vote.

When offered a choice of whether the town should Allow Anywhere, Confine to Certain Areas, or Not Allow various types of businesses the respondents gave the following answers:

	<b>Allow Anywhere</b>	<b>Confine to Certain Areas</b>	<b>Do Not Allow</b>
Professional offices	30%	69%	0%
Sit-down restaurants	24%	75%	1%
Service stores	21%	78%	0%
Campgrounds	18%	80%	2%
Individual retail stores	18%	80%	2%
Light manufacturing	14%	85%	1%
Hotels/motels/inns	16%	77%	7%
Large grocery stores	9%	74%	17%
Heavy manufacturing	5%	77%	19%
Industrial parks	4%	81%	15%

(The listing above is shown in order of most unrestricted land use to most restricted land use; awarding 2 points for each percentage point for Allowing Anywhere, 1 point for each percentage point for Confine to Certain Areas, and awarding 0 points for Do Not Allow.)

*ECONOMIC DEVELOPMENT OPPORTUNITIES AND CONSTRAINTS*

The town needs to act upon the economic development opportunities which it has and try to improve the constraints. The opportunities are the airport, its setting on a major highway (Route 302), the public water supply, the attractive village setting, and the town’s overall quality of life,

The constraints which the town has any control over are the low educational attainment, the lack of an economic development contact person or committee, and the lack of vacant industrially zoned land which is suitable for development.