

ROXBURY, MAINE

COMPREHENSIVE PLAN

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**Prepared by the Roxbury Comprehensive Plan Committee
with assistance from the
Androscoggin Valley Council of Governments**

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Section I
Inventory & Analysis
POPULATION CHARACTERISTICS

Introduction

The following is an overview of recent population trends in Roxbury and surrounding communities. An examination of population trends and characteristics is extremely important in understanding the anticipated growth that will occur in the next ten years. In addition, the characteristics of that population will lend insight into future demands for various community services.

Population Growth

Roxbury's population increased from 271 persons in 1970 to 437 in 1990, representing a 61 percent increase between 1980 and 1990, the Town's population increased by some 64 persons or 17.2 percent.

During the 1980's, Roxbury realized the greatest percent change in year-round population of the surrounding communities. Andover's population growth was similar with a 12.1 percent increase. With the exception of Carthage, with 4.6 percent increase and Andover, the remaining adjacent communities experienced population loss between 1980 and 1990. Although the population loss is attributable to several factors, the reduction in the labor force at the Boise Cascade Paper Mill in Rumford had a significant impact.

TABLE I-1
Population Change
1970 – 1990

Town	1970	1980	1990	# Change 1980-1990	% Change 1980-1990
Roxbury	271	373	437	+64	+17.2
Andover	791	850	953	+103	+12.1
Byron	132	114	111	-3	-2.6
Carthage	354	438	458	+20	+4.6
Mexico	4,309	3,698	3,344	-354	-9.6
Rumford	9,363	8,240	7,078	-1,162	-14.1
Oxford Cty.	43,457	48,968	52,602	+3,634	+7.4

Source: U.S. Census

The components of Roxbury's population growth between 1980 and 1990 were from natural increase (number of births minus deaths) and in-migration. Vital statistics presented in Table I-2 indicate 40 births and 42 deaths between 1989 and 1990. Based upon this information, in-migration accounted for all of Roxbury's population growth during the ten year period between 1980 and 1990. Factors contributing to the in-migration were proximity to employment, housing availability and town character.

TABLE 1-2
Natural Population Increase

Year	Births	Deaths	Natural Increase
1980	2	4	-2
1981	2	8	-6
1982	7	3	+5
1983	2	3	-1
1984	3	3	0
1985	6	3	+3
1986	5	5	0
1987	8	5	+3
1988	2	4	-2
1989	3	4	-1
TOTAL	40	42	-2

Source: Maine Department of Human Services

Seasonal Population

Seasonal population is a measure of the number of people in town who are not year-round residents. This includes people staying for extended periods of time in camps and other seasonal homes. The Public Affairs Research Center (Bowdoin College, 1972) estimated that the total seasonal population for Roxbury (that is, non-year-round persons) was 1,172 in 1970. To estimate 1990's total seasonal population (total seasonal population assumes that all seasonal dwellings, camp sites, bed and breakfast, lodging facilities are at capacity), the following equation was employed.

$$P^s = P^c + P^l + P^{sh}$$

P^s	=	total seasonal population
P^c	=	campsite population
P^l	=	lodging population
P^{sh}	=	seasonal home population

It should be noted that the numbers of seasonal units (estimated) may be incomplete and produce a somewhat low estimate. However, this underestimation may be balanced by the assumption that all facilities in Town would be used to capacity on the peak day (i.e. no vacancies), a situation which is certainly possible. Also, in computing the seasonal population, the following reasonable occupancy standards were applied.

- 4 persons per campsite
- 2 persons per lodging room
- 4 persons per seasonal home

Therefore, from the preceding assumptions,

$$P^s = (25 \times 4) + (0 \times 2) + (257 \times 4) = 1,128$$

That is, in 1990, it is estimated that Roxbury's seasonal population increased by 1,128 persons. However, it would be a rare occurrence that all seasonal dwellings would be at maximum capacity on any given day. A more realistic seasonal population increase is expected to be approximately 600 people. Seasonal population is some 160 percent greater than year-round population and is centered around Roxbury (Ellis) Pond in seasonal summer camps.

Age Distribution

A comparison of age groups reported by the 1980 and 1990 Census indicates some significant shifts in age distribution. A major increase in the Town's population under five years in age occurred. This may be attributed to the in-migration of young families. A major decline in the number and percentage in the 5-17 age group occurred. The 25--44 age group increased significantly, one factor in the growth in the under five age group.

TABLE I-3
Age Distribution
1980 – 1990

Age Group	1980		1990	
	Number	Percent	Number	Percent
Under 5	9	2.4	28	6.4
5-17	93	24.9	70	16.0
18-20	21	5.6	18	4.1
21-24	22	5.9	18	4.1
25-44	97	26.0	146	33.4
46-54	51	13.7	53	12.1
55-59	14	3.8	19	4.4
<u>60-64</u>	26	7.0	29	6.6
65+	40	10.7	56	12.8
TOTALS	373		437	

Source: U.S. Census

When Roxbury's age distribution is compared to Oxford County and the State, several characteristics are noteworthy. First, the population under 18 years of age is below the county and State. Secondly, the population between 25-44 is greater than both the county and State. Lastly, population 65 years of age and older lags behind Oxford County and the State.

TABLE 1-4
Percent of Total Population
1990

Age Group	Roxbury		Oxford County		Maine	
	1980	1990	<u>1980</u>	1990	1980	1990
Under 5	2.4	6.4	6.8	7.2	7.0	7.0
5-17	24.9	16.0	22.3	20.6	21.6	18.4
18-20	5.6	4.1	4.5	3.3	5.7	4.6
21 -24	5.9	4.1	5.6	4.3	6.9	5.5
25-44	26.0	33.4	25.4	30.9	26.8	32.3
45-54	13.7	12.1	10.7	10.4	10.0	10.2
55-59	3.8	4.4	5.6	4.8	5.0	4.4
60-64	7.0	6.6	5.0	4.8	4.5	4.4
65+	10.7	12.8	14.0	15.1	12.5	13.3

Source: 1990 Census

The median age of Roxbury's population in 1990 was 37.2 (median age is the age where there are equal number of above and below 31.6). Of the 34 organized townships in Oxford County, Roxbury's median age was ninth highest.

TABLE 1-5
Median Age
1990

Roxbury	37.2
Oxford County	35.0
Maine	33.0

Source: 1990 Census

Household and Household Size

The total number of households in Roxbury increased from 129 in 1980 to 172 in 1990. This increase in households compares to a 15 percent increase in households in Oxford County over the same period. The increase in the number of households is the result of a growth in population and decreasing average household size.

Roxbury's average household size decreased from 2.89 to 2.54 persons between 1980 and 1990. This decrease was greater than that of both the county and State. It has been estimated by the Androscoggin Valley Council of Governments that by the year 2003, the average household size in Roxbury will have dropped to 2.42 persons.

TABLE I-6
Number of Households and Average Household Size

Town	1980 # of Households	Average Size	1990 # of Households	1990 Average Size
Roxbury	129	2.89	172	2.54
Oxford County	17,451	2.77	20,064	2.58
Maine	395,184	2.75	665,312	2.56

Source: 1980 and 1990 Census

Income

Roxbury's 1989 median household income was somewhat greater than Oxford County but below the State. The median household income of \$25,871 was the highest of all surrounding communities except Byron and Carthage. This can be attributed to employment at Boise Cascade and a large percentage of two worker households.

TABLE I-7
Median Household Income
1989

Roxbury	\$25,871
Andover	\$23,693
Byron	\$32,708
Carthage	\$26,389
Mexico	\$21,671
Rumford	\$21,608
Oxford County	\$24,535
Maine	\$27,854

Source: 1990 Census

Roxbury's 1989 per capita income was above that of the county by approximately \$500. However, growth in per capita income between 1979 and 1989 lagged behind that of all adjacent towns, the County and State.

TABLE I-8
Per Capita Income
1979-1987

Town	1979	1989	% Change 79-89
Roxbury	\$7,022	\$11,885	+69.3
Andover	5,528	11,140	+101.5
Byron	6,425	16,267	+153.3
Carthage	3,956	9,725	+145.8
Mexico	5,762	10,557	+83.2
Rumford	6,394	11,448	+79.0
Oxford County	5,562	11,373	+104.5
Maine	5,766	12,957	+124.7

Source: 1980 and 1990 Census

Population Projections

Year-Round Population

Anticipating population change is a necessary element of the comprehensive planning process. Based on future population characteristics, various community needs and facilities can be identified and planned.

Population change is a result of two primary factors, natural increase and migration. Natural increase is derived from the number of births minus the number of deaths for a specific period. Migration is the number of persons moving into or out of a community. Birth and death data is readily obtainable. Although migration information is less readily obtainable, it is an important factor. Between 1980 and 1990, in-migration accounted for all of Roxbury's population growth.

Table I-9 lists population projections through 2003 which were developed by the Department of Human Services. These projections were derived from a statewide population projection using the State Planning Office's econometric model. Roxbury's projections were produced using a multiple-regression model based on the 1980 Census of population, birth and death records, migration estimates and other variables. These projections indicate that Roxbury's population will increase to 510 by the year 2003.

TABLE I-9
Department of Human Services Population projections
1991 – 2003

Year	Roxbury	Oxford County	Maine
1991	440	52,400	1,234,150
1995	470	53,650	1,268,750
1999	500	54,900	1,302,400
2003..	510	56,050	1,325,650

Source: Maine Department of Human Services, 1989

TABLE I-10
Projected Age Distribution
Year 2003

Age	Number	Percent of Population
Under 5	23	4.5
5-17	64	12.7
18-44	188	36.8
45-64	169	33.1
65+	66	12.9
TOTAL	510	

Source: Maine Department Or Human Services

Seasonal Population

In order to adequately plan for future population levels, It is necessary to predict future seasonal population. To do this, additional assumptions must be made. Therefore, it is assumed that in the year 2003, the number of campsites in Town will remain the same, and the number of seasonal homes will increase by 10 percent. Unforeseen land sales or major new seasonal home development could increase the assumed 10 percent growth rate to be- exceeded.

Therefore, using the same methodology employed for 1990 seasonal population. It is expected that in 2003, the peak seasonal population will be approximately 1,230, more than twice the year-round population.

ECONOMY

Historic Economic Overview

Township Number 7, as Roxbury was known prior to its incorporation in 1835, was founded on an agriculture and lumbering economy. Roxbury's early economy was dependent on small family farms and water powered mills along the Swift River. The Rumford Falls and Rangeley Lakes Railroad which paralleled the Swift River spurred limited commercial and Industrial growth through 1936 when flood waters destroyed the line.

The Town's local economy and to that matter recent year-round population growth to a great extent has been tied to the pulp and paper industry in Rumford.

Regional Economic Perspective

Roxbury is located In the Rumford Labor Market Area (LMA). A LMA consists of a central community, or communities, and the surrounding territory within commuting distance. It is an economically integrated geographical unit within which workers may readily change jobs without change of residence. The Rumford LMA Includes Roxbury and the following organized towns: Andover, Bethel, Byron, Canton, Dixfield, Gilead, Hanover, Hartford. Mexico, Newry, Peru, Rumford and Upton, in addition 20 unorganized townships are included in the LMA.

Table I-11 summarizes nonfarm wage and salary employment in the Rumford LMA In 1984 and 1989. This table indicates that almost three quarters (71.5%) of the jobs In the LMA were in non-manufacturing sectors In 1989. This represented a 12 percent increase over the dependence upon non-manufacturing jobs in 1984.

Employment in the manufacturing sector decreased by 10 percent between 1984 and 1989 due primarily to significant losses in miscellaneous wood products. Employment in the other manufacturing category, which includes employment at the Rumford Boise Cascade Paper Mill declined slightly over the period.

Employment in the non-manufacturing sectors realized significant gains. Construction employment Increased greatly but such gains were temporary due to major projects. Employment in retail trade and services increased by 34 percent and 60 percent, respectively, as the result of the economic boom of the late 1980's.

More recently, the employment gains in the mid-1980's in the non-manufacturing sector are expected to have fallen.

In a somewhat more limited regional economic perspective, the Boise Cascade Paper Mill is the controlling factor in the region and Roxbury's economy. Through both direct employment at the mill or indirect employment including logging, trucking, and other mill services, the region's economy is based.

TABLE I-11
Nonfarm Wage and Salary Employment
Rumford LMA, 1984-1989

Employment Category	1984	1989	Percent Change 1984-89
TOTAL	7,360	8,100	+10.1
Total Manufacturing	2,900	2,300	-23.1
Durable	1,160	690	-40.4
Lumber	1,140	670	-70.2
Logging	180	140	-22.2
Sawmills	240	230	-4.2
Misc. Wood Products	600	160	-73.3
Other Manufacturing	1,680	1,630	-2.9
Total Non-manufacturing	4,370	5,790	+32.5
Construction	240	680	+183.3
Residential Building	20	70	+250.0
Special Trades	140	160	+14.3
Transportation & Utilities	340	300	-11.8
Wholesale Trade	40	110	+175.0
Retail Trade	970	1,300	+34.0
Finance, Ins. & Banking	180	180	0.0
Services and Mining	1,310	1,850	+41.2
Hotel & Lodging	150	240	+60.0
Health	640	620	-3.1
Government	1,290	1,370	+6.28

Source: Maine Dept. of Labor, Employment and Earnings Statistical Handbook, 1984,1989

Local Economic Characteristics

Roxbury's local economy is limited to small service related businesses primarily serving local residents and those of adjacent towns. The business center of Rumford and Mexico only several miles south provides many of the necessary services for the Town's residents. While Roxbury has a sizable seasonal population, primarily at Roxbury (Ellis) Pond, direct economic gain from that seasonal population is not significant. What is significant is its tax base in the form of seasonal property.

In 1991, the Roxbury Comprehensive Planning Committee identified 17 businesses, not including logging contractors.

TABLE I-12
Roxbury Businesses

Name	Type	# of Employees
Glovers Machine Shop	machine shop	1
D & A Auto	used cars & body shop	2
C & R Auto	used cars	1
Yankee Gem Corp.	antiques	1
LoBlancs General Store	general store	1
Cogley's Salvage	used car salvages & body shop	2
Notch Auto Sale	used heavy equipment	2
Rumex Fence Co.	fencing	2
Hodgkins Excavating	excavating	1
Gallants Discount Furniture	furniture	5
Mike Breau	carpentry	1
Kennedy Electrical	residential & commercial electrical	1
Cornlere Corner Store	convenience store	3
RCA	satellite communications	?
Knotty Toys	wood crafts	1
LIL Red Wagon	canteen truck	2
Silver Lake Campground	camping	3

Taxable Sales

One source of Information which can be considered when attempting to gain insight into a small community's economic conditions is to examine sales tax information. The Maine State Planning Office publishes taxable sales information by municipality. Table I-13 presents information for total taxable sales to consumers for Roxbury and surrounding communities. As the table indicates, taxable sales peaked in 1987 and declined through 1990. Of the communities examined, Roxbury's taxable sales began to decline a year before that in Andover and two years before Rumford and Mexico.

TABLE 1-13
Total Consumer Sales
1985 - 1990
000's of Dollars

	1985	1986	1987	1988	1989	1990
Roxbury	1,490	1,890	2,600	2,400	1,850	1,830
Andover	1,070	1,120	1,200	1,360	1,150	1,150
Mexico	6,490	7,290	8,520	9,840	10,160	9,710
Rumford	29,986	31,690	36,050	39,780	41,240	38,630

Labor Force/unemployment

Roxbury's labor force grew by 19 percent between 1986 and 1990 which was significantly more than Oxford County's 8.9 percent increase. The growth in labor force can be attributed to overall population increase.

Unemployment rates in Roxbury since 1986 have been consistently greater than those of the county as shown in Table I-15. While available information does not allow for an exact determination for this, it is expected that forestry and construction employment is a major factor.

TABLE I-14
Annual Average Labor Force

Year	Roxbury		Oxford County	
	Labor Force	Unemployment Rate	Labor Force	Unemployment Rate
1986	135	11.1	21,850	6.7
1987	137	6.6	22,520	5.1
1988	139	9.4	22,710	4.6
1989	146	7.5	23,490	5.7
1990	154	9.7	23,800	7.6

Source: Maine Department of Labor

Location of Employment

An indication of the importance of local employment to the local economy can be obtained from where people live and where they work. Although 1990 Census information is not available, 1980 Information does lend insight. The Importance of Rumford and to a less degree Mexico to the Town's employment patterns is evident in the fact that in 1980, 58 percent of the Town's workers were employed in these two communities. Over the past ten years, it is believed that this trend has continued with a slight decline In the percentage working In Rumford and Mexico.

TABLE 1-15
Distribution of Labor Force
Place of Employment
1980

Place of Employment	#of Persons	% of Total
Roxbury	13	8.3
Andover	16	10.3
Mexico	12	7.7
Rumford	79	50.6
Dixfield	5	3.2
Other or Not Reported	31	19.9

Source: 1980 Census

In 1990, the occupation of Roxbury's residents as reported by the Census were unique when compared to those of Oxford County. Table I-16, Employment by industry, indicates a high percentage, when compared to the county, in the manufacturing of nondurable goods (25 percent). This reflects the reliance upon Boise Cascade in 1990 for employment.

TABLE I-16
Employment of Industry, 1990
(persons 16 years of older)

	Roxbury		Oxford County	
	#	%	#	%
Agriculture, Forestry, Mining	0	0	734	3
Constructlon	29	16	2,200	10
Manufacturing: Durable Goods	17	10	3,116	14
Nondurable Goods	44	25	2,727	12
Transportation	6	3	756	3
Communications, Public	6	3	358	2
Wholesale Trade	4	2	524	2
Retail Trade	30	17	3,855	17
Finance, Insurance, Real Estate	2	1	852	4
Business and Repair Services	5	3	619	3
Personal Entertainment,	7	4	1,207	5
Professional: Health Services	5	3	2,025	9
Educational Services	11	6	2,021	9
Other Professional	8	5	963	4
Public Administration	4	2	636	3
TOTALS	178		22,593	

Source: 1990 Census

Economic Expectations

A realistic expectation of the future local and regional economy is important to the comprehensive planning program. Economic, conditions will significantly impact population growth or loss, residential development and business growth. However, even the most experienced economists have difficulty in providing economic projections for areas as small as Roxbury. Therefore, the following assumptions have been made to reflect anticipated local and regional trends.

- Roxbury's economy will reflect that of the pulp and paper Industry. Downturns in that industry will be felt through losses in direct employment opportunities and indirect employment (retail trade, logging and other services)
- Roxbury's local economy will continue to be based on small service businesses servicing local residents and seasonal population. Self-employed individuals and independent contractors will continue as an important employment form.

HOUSING

Housing Trends

The 1990 Census reported 177 year-round housing units in Roxbury. This number represents a 20 percent increase over the 148 units reported by the 1980 Census. Table I-17 Indicates that Roxbury's percent increase In year-round housing growth surpassed all adjacent towns. The growth in year-round dwellings is attributed to land availability, tax rates, the Town's character, and the conversion of seasonal dwellings to year-round residences.

TABLE I-17
Number of Year-Round Housing Units
1980-1990

Town	1980	1990	# Change	% Change
Roxbury	148	177	+29	+20.0
Andover	327	389	+62	+19.0
Byron	41	48	+7	+17.1
Carthage	159	171	+12	+7.6
Mexico	1,410	1,447	+37	+2.6
Rumford	3,139	3,275	+136	+4.3
Oxford County	18,775	21,947	+3,172	+16.9

Source: 1990 Census

Type of Dwelling

In 1990, 91.7 percent of the total housing stock (seasonal and year--round) was single-family. This represents a similar distribution that existed in 1980. The mobile/manufactured home realized a small gain over the ten year period.

TABLE I-18
Distribution of Housing Units by Type
All Units (including seasonal)

Type	1980		1990	
	#	%	#	%
Single-family	346	91.1	388	91.7
Multi-family	5	1.3	2	0.5
Mobile home	29	7.6	33	7.8
Seasonal	232	61.1	246	58.2
TOTALS	380		423	

Source: U.S. Census

When compared to Oxford County's housing stock, Roxbury contains a significant greater percentage of single-family homes and fewer mobile homes. The percentage of multi-family units is considerably less (0.5 percent in Roxbury vs. 16.9 percent in the county). This can be attributed to the lack of demand and need for multi-family dwellings in Roxbury.

Seasonal dwellings/camps comprise the majority of Roxbury's housing stock (58.2%). These are concentrated adjacent to Roxbury (Ellis) Pond with lesser numbers scattered in the accessible parts of town. Roxbury In 1990 had the seventh highest percentage of seasonal dwellings behind Newry (86.2%), Upton (77.0%), Byron (73.5%), Stoneham (71.3%), Denmark (65.0%), Greenwood (61.8%) and Lovell (60.0%) of organized towns In Oxford County.

TABLE 1-19
Distribution of Housing Unit by Type
Roxbury and Oxford County 1990

	Roxbury		Oxford County	
	#	% of Total	#	% of total
Single-family	388	91.7	20,444	68.9
Mufti-family	2	0.5	5,020	16.9
Mobile home	33	7.8	4,225	14.2
Seasonal	246	58.2	7,922	26.7
TOTALS	423		29,689	

Source: 1990 Census

Owner/Renter Patterns

Rural communities, such as Roxbury, typically have a much larger percentage of owner occupied dwelling units than renter occupied dwelling units. This is due to the large percentage of the overall housing stock comprised of the single-family dwelling. In 1990, 89.4 percent of all occupied dwellings were owner occupied. This was for all practical purposes the same rate that existed in 1980.

TABLE I-20
Distribution of Occupied Units by Tenure
1980- 1990

	1980		1990	
	Number	Percent	Number	Percent
Owner	116	89.9	154	89.4
Renter	13	10.1	18	10.6
TOTALS	129		172	

Source: U.S. Census

NOTE: Does not include vacant year-round dwellings

Housing Conditions

One indication of housing conditions is the age of the structure. Although age should not be the sole determination of housing condition, it may be assumed that in many cases older structures may have structural or utility faults. Compared to Oxford County, Roxbury's housing stock is relatively young. Approximately 49 percent of all dwelling units were constructed between 1960 and 1990. Roxbury does not have a significant problem with substandard housing.

TABLE I-21
Age of Year-Round, Housing Stock

Year Structure Built	Roxbury		Oxford County	
	Number	Percent	Number	Percent
1980-1990	29	16.4	3,114	14.2
1970-1979	36	20.3	4,046	18.4
1960 - 1969	21	11.9	1,961	8.9
1950 -1959	23	13.0	1,699	7.7
1940 -1949	22	12.4	1,421	6.5
Pre - 1940	46	26.0	9,706	44.3
TOTALS	177		21,947	

Source: 1980 and 1990 Census

Vacancy Rates

While vacancy rates fluctuate, based upon housing demand and economic conditions, vacant housing is needed to provide housing opportunities with a community. Based upon the 1990 Census on April 1, 1990, Roxbury had five vacant year-round, single-family homes and no vacant rental units.

Future Housing Demand

Population growth and the characteristics of the existing housing stock are major factors in identifying future housing demands. Adequate housing is important for the support of economic growth. This element of the comprehensive plan identifies the need for additional housing through the year 2003. As with any projection or estimation, unforeseen Influences can greatly Impact the validity of the projection.

Roxbury's year-round population is expected to reach approximately 510 by the year 2003. Based upon an median household size of 2.42 persons in 2003, 33 additional year-round dwellings will be required between 1990 and 2003. These new dwellings are expected to be comprised of new structures and the conversion of seasonal to year-round when environmental factors allow. Single-family dwellings rather than multi-family will comprise the new year-round dwelling units.

Seasonal population growth has been projected to increase over the ten year planning period. Based upon seasonal population estimates, a 10 percent Increase or 26 new seasonal dwellings are expected.

Housing Costs

The 1990 Census provides Information relating to rental rates and the value of specified owner occupied housing units. Specified owner occupied housing units exclude mobile homes, homes with a business or medical office, homes on ten acres or more, and housing units In multi-family buildings.

The median (one half of renters. pay less and one halt of renters pay more) monthly contract rent in Roxbury in 1990 was \$163. This was less than the median contract rent for Oxford County (\$281) and well below the State median of \$358.

TABLE I-22
Contract Rent
1990 Percent of Total

Contract Rent	Roxbury	Oxford County
Less than \$250	50.0	40.8
250-499	42.9	54.07
500-749	7.1	4.3
750 " 990	0	0.1
1,000+	0	0.1
Median Rent	\$250	\$281

Source: 1990 Census

Information provided by the 1990 Census indicates that the median value of specified owner occupied housing units was \$52,000. Again, this value was below that of Oxford County (\$69,900) and well below the State's median of \$87,400.

TABLE I-23
Value Specified Owner Occupied Housing Unit
Percent of Total – 1990

Value	Roxbury	Oxford County
Less than \$50,000	47.2	26.6
50,000 - 99,000	45.4	54.3
100,000 - 149,000	5.5	12.6
150,000 - 199,999	1.9	4.0
200,000+	0.0	2.5
Median Value	\$52,000	\$69,900

Source: 1990 Census

The real estate transfer tax declaration forms provide sale prices of all homes including mobile homes sold: new or old. As Table I-24 Indicates, the average sale price of dwellings including seasonal in 1986 was \$35,833 and \$27,043 in 1988. These sale prices were significantly less than Oxford County and can be attributed to sales of lower priced "camps".

TABLE 1-24

Year	H of Sales Roxbury	Average Sale Price Roxbury	Average Sale Price Oxford County
1986	9	35,833	42,423
1987	4	38,475	49,804
1988	15	27,043	63,710

Source: Real Estate Transfer Tax Residential Income Maine State Housing Authority

Affordability of Housing

The market pressures of the 1980s caused housing prices to increase dramatically throughout much of Maine. The result of this was that many lower to moderate income residents were unable to afford safe and decent housing.

Based upon income and residential property sale prices, housing affordability does not appear as a major problem in Roxbury. It is expected, however, that many of the sales were seasonal dwellings which in Roxbury may be a factor in the lower average sale prices compared to Oxford County.

TRANSPORTATION

Roxbury's public transportation system is limited to State and local highways or roads. Although the Town was once served by rail, the line was abandoned in 1936.

State Routes 17 and 120 are the Town's major highways. These two routes comprise 50 percent (1.4 miles) of the total public roads in Roxbury. Local public road mileage is appropriately 13 miles and is primarily comprised of the Horseshoe Valley, Swain Farm, Roxbury Pond and South Shore Roads.

Route, 17 which runs in a north-south direction paralleling the Swift River is the major transportation corridor through town. Connecting Rumford/Mexico and points south to the Rangeley Lakes Region. Route 17 also serves as a secondary route to deliver pulp to the Boise Cascade Mill.

Route 120 connects Rumford/Mexico with the Town of Andover and to area recreation resources including the Richardson Lakes.

Traffic volumes on Route 17 and 120 are well below their capacities although during peak recreation periods traffic appears heavy. The poor condition of Route 17 from south of Roxbury Village to Rangeley Plantation discourages traffic even though It is designated a scenic highway.

The condition of public roads have been rated very good, good, fair and poor in order to identify areas that need attention in the future.

The State maintained Route 17 has undergone reconstruction south of Roxbury Village in two places in recent years and thus is In generally good condition. The remainder of Route 17 is considered in fair condition and in need of Improvement. For the most part, the State Route 120 is in need of upgrading except for a one mile segment reconstructed within the past 15 years.

The remainder of roads are totally maintained by Roxbury through a contractual agreement and are in poor or fair condition. Table I-25 presents condition ratings for the Town's public roads.

TABLE 1-25
Condition of Public Roads
1991

Road	Condition
Route 17 Mexico/Roxbury line to Frye Frye to 1.5 miles south of Roxbury Village 1.5 miles south of Roxbury Village to Roxbury/Byron Line	Good Very Good Fair
Route 120 Mexico/Roxbury line north for 0.7 miles 0.7 miles north of Mexico/Roxbury line extending 1 mile From 1.7 miles north of Mexico/Roxbury line extending 1.2 miles Remainder of Route 120	Fair Good Poor Fair
Crossover Road	Good
Number 1, 2, 3, and 4 roads Roxbury Village	Fair
Horseshoe Valley/Road Route 120 southwest 1.0 mile Remainder of Horseshoe Valley Road Swain Farm Pond Roxbury Pond Road South Shore Road East Shore Road Rainbow Lane Byron Road	Fair Poor Poor Fair Fair Poor Fair Fair

Source: Roxbury Comprehensive Plan Committee

In addition to public roads in Roxbury, there is approximately two miles of privately owned roads with public easements. These roads serve the many seasonal dwellings located along Roxbury (Ellis) Pond. They are privately maintained and considered in poor condition. Due to the number of dwellings served by these private roads and their condition, concerns relating to fire safety and upgrading are significant.

Commercial woodland owners maintain a series of roads on a permanent or temporary basis to access timber harvesting-operations. These roads often are well constructed to withstand the rigors of heavy truck traffic. In some cases, the public may enjoy access and others are gated to restrict vehicular access.

PUBLIC FACILITIES AND SERVICES

Introduction

Roxbury's small year-round population demands minimal public facilities and services when compared to the more populated communities such as Rumford and Mexico. Seasonal population, primarily in the summer months, minimally increases the demand upon municipally supplied services.

The Town or any quasi-municipal body do not provide public water or sewage disposal systems. No need is foreseen to serve current or future year-round development.

Town affairs are overseen by a three member Board of Selectmen elected for three year terms. The annual town meeting is held on the first Monday of March. The Town Clerk and Treasurer are elected annually for a one year term. Appointed officials and boards include: health officer, animal control officer, civil emergency preparedness director, code enforcement officer, local plumbing inspector, and planning board. The Board of Selectmen serve as the road commissioner and board of assessors. The Town has had difficulties in finding interested individuals to serve as code enforcement officer and as members of the Board of Appeals.

Public Safety

Roxbury is served by a volunteer fire department financed by local taxes. The department has a roster of 16 firefighters with the chief appointed by the selectmen. The Town's 1974 International pumper is located at the fire station in Roxbury Village. The pumper is considered in good condition. The Town has mutual aid agreements with Rumford and Byron and a contract with Andover. The most densely developed area at Roxbury Pond is some 10 miles from the Roxbury Fire Station requiring travel through Roxbury Notch. The Andover Fire Station is approximately 4 miles from Roxbury Pond.

The Town is served by Med-Care Ambulance service which is a quasi-municipal system located in Mexico.

Law enforcement is provided by the Oxford County Sheriff's Department and the Maine State Police. In addition there is a town constable appointed by selectmen and dispatched through the County Sheriff's Department.

Public Works

Roxbury contracts for summer and winter road maintenance. Thus, there are no public works employees or town-owned equipment. Salt and sand for winter roads is put out to bid. Plans for a town-owned salt/sand shed are to purchase land and construct a structure.

Solid Waste Disposal

Solid waste is disposed of by door-to-door collection by a private company on a weekly basis. The contractor disposes of the collected waste at the transfer facility located in Mexico. Roxbury residents also participate in a voluntary recycling program. Recyclables are collected door-to-door by the Town's solid waste contractor.

Municipal Buildings and Land

The Town's major public building is the fire station located on Route 17 in Roxbury Village. The 38 foot by 56 foot, one story structure is of cinder block construction and also houses the Town Office, civil defense and contains a kitchen and meeting room. Considered In fair condition; it is adequate for current and future needs. The Town also owns the "Old Fire House" at Roxbury Pond which is currently used for storage.

Municipal beaches are located at Roxbury Pond on three different parcels. An outhouse and parking is found at a single site. 1 (Note: Need to name beaches).

Education

Roxbury is a member of School Administration District #43 with the communities of Byron, Mexico and Rumford. There are no public schools In Roxbury and all students are transported to schools in Mexico and Rumford.

TABLE 1-36
Students Educated at Public Expense

	1988	1989
K - 8	32	45
9-12	22	18
TOTAL	54	63

Source: Department of Education and Cultural Services

RECREATION RESOURCES

Recreation opportunities within Roxbury are natural resource orientated. The vast commercial forests, to which the public generally enjoys access, provides fishing, hunting and hiking opportunities. The Town owns three parcels, totally approximately two acres, adjacent to Roxbury (Ellis) Pond. These serve as town beaches with 2,276 feet of water frontage. In addition to the town beaches, there are several “pools” along the Swift River used for swimming. These are all located on private property. Boise Cascade maintains a picnic area at Bunker Pond which the public enjoys access. The Slippery Sliders Snowmobile Club maintains a trail network throughout town including a portion of the Interstate Trail 82.

Organized recreation opportunities include swimming lessons sponsored by the Greater Rumford Community Center which the Town financially supports. In Rumford and Mexico, Roxbury's residents have available the Mexico Recreation Center, Black Mountain Ski Area and Rumford Public Library. Recreation needs are sufficiently met at this time. However, the loss of public access would significantly hinder traditional recreation.

NATURAL RESOURCES

Introduction

The natural resources base of a community plays an important role in overall community development. Natural resources can enhance or limit the growth potential of a community and are significant factors in the planning of a community's future.

Topography

There are two factors that are important when topography is considered -- relief and slope.: Relief reflects the height of land above sea level and surrounding areas. It identifies significant or dominant physical features that form natural barriers that hinder development or valley corridors that permit easy access. Slope on the other hand measures the amount of rise or fall in feet for a given horizontal distance. It is a significant aspect of land form which presents various limitations to development and other land use activities. As slopes become steeper, construction is more expensive, roads and services are more difficult and expensive to construct and maintain, and the potential for environmental degradation increases.

Roxbury's general topography is rolling with relatively high, steep slopes in the eastern three-quarters of the town. The western quarter slopes more gradually to the west towards the wetlands which are associated with the Ellis River. These two areas are separated by a ridge which runs north-south to divide the river valleys of the Swift River and the Ellis River to the east.

The highest point above sea level in Roxbury is located atop Walker Mountain (2,532 feet). Other locations of significant elevations include Brush Mountain (2,430 feet), Flathead Mountain (2,155 feet), North Twin Mountain (2,150 feet), Partridge Peak (1,985 feet), Roxbury Mountain (1,972 feet), Bunker Mountain (1,631 feet), and several other nameless peaks of up to 2,200 feet elevation. The lowest elevation above sea level, approximately 560 feet, is located where the Swift River flows out of Roxbury and into Mexico. Local relief or the difference in elevation between the highest and lowest points is nearly 2,000 feet.

Slopes of greater than 15% cover a significant portion of land area in Roxbury (approximately 70%). Significant areas of slopes of greater than 15% are located from the Swift River, east to the boundary with Weld, and from the Swift River west to approximately the east shore of Roxbury (Ellis) Pond.

Soils

Soils are a basic resource of extreme importance to the use and development of a community's land. They are the underlying materials upon which roads, buildings, sewer and waste disposal, and agriculture and other industries occur. Development which occurs upon or in soils which are unsuitable for the proposed use will face increased costs

associated with development, construction, and annual maintenance and cause environmental degradation.

The majority of soil in Roxbury are upland soils which are deep to very deep, poorly drained to excessively drained formed in glacial till. Slopes, wetlands, seepage, and stones are major limitations to development. Significant amounts of acreage is covered by the following soils: Skerry-Colonel complex, Hermon and Monadnock, Lyman-Tunbridge Association, Adams-Hermon Association, and Dixfield-Marlow Association.

Wetlands

Wetlands are important natural resources because they store large amounts of water helping to reduce flooding. In addition, wetlands provide habitat for many species of game and non-game wildlife. Filling of wetlands can significantly, increase flood levels and add to the loss of wildlife habitat.

The Maine Geological Survey has identified 11 non-forested freshwater wetland areas greater than 10 acres within Roxbury. The largest of these wetlands are associated with Meadow Brook. Of the 11 mapped wetlands, the Department of Inland Fisheries and Wildlife has rated one as being of high value as waterfowl habitat, and the other ten received no rating. All 11 wetlands and the area within 250 feet of their upland edge are required by state law to be regulated by the Town's Shoreland Zoning Regulations.

Ground Water

Ground water is water that is derived from precipitation that infiltrates the soil, percolates downward and fills the tiny, numerous spaces in the soil and rock below the water table. In Maine, from an average of 42 inches of precipitation each year, only 10 to 20 percent stays in the ground as ground water; the remainder runs off into streams or is returned to the atmosphere. Wells draw water from permeable layers or zones in the saturated soil and rock that are called aquifers. Two major types of aquifers occur in Maine sand and gravel aquifers and bedrock aquifers. Wells in sand and gravel aquifers can yield up to 2,000 gallons per minute (gpm) while wells in fractured bedrock generally yield less.

The slow rate of ground water movement causes the resource to be particularly sensitive to contamination. Once contaminants enter the ground water, they do not flush out of the system readily and residual contaminants are often left on the particles of sand or gravel to leach slowly into the surrounding ground water. Often hundreds of years are necessary for an aquifer to clean itself through natural means.

The Maine Geological Survey has mapped the location of significant sand and gravel aquifers in Roxbury. Several low yield aquifers (capability of producing wells with a yield of 10 to 50 gallons per minute) are associated with the Swift River. Two of the aquifers encompass the village of Roxbury and Frye along the Swift River. The other aquifer is located near the northern boundary where the river enters the town from Byron.

Surface Water Resources

There are two major drainage systems in Roxbury separated by the north-south running ridge, which divides the Town approximately in half. The western portion of Town is drained by the Ellis River. Within this drainage system is the watershed for Ellis Pond shared with the Town of Byron to the north. The central, and most of the eastern part of the town is drained by the Swift River. Within this system are the watersheds for Bunker Pond, Birch Pond and Muskrat Pond. The very northeastern edge of the town is drained by West Brook In Weld and the southeastern corner flows to the Webb River in Carthage.

The Ellis River originates from Ellis Pond and flows generally south for approximately 20 miles to its confluence with the Androscoggin River at Rumford Point. The Ellis River from its headwaters to the Androscoggin River was recognized in the Maine Rivers Study as having unique or significant resource values for canoe touring and historic landmarks. The Swift River originates from Swift River Pond in Township E north of Roxbury and flows generally south for approximately 20 miles to its confluence with the Androscoggin River near the Rumford-Mexico town line. The Swift River, from the Androscoggin River to its headwaters was recognized by the Maine Rivers Study for having significant scenic and whitewater boating values.

Under the State of Maine surface water classification system, both the Ellis and Swift Rivers have a B Classification. The quality of these waters allow for drinking water supply after treatment, fish and recreation on and in the water.

Birch and Bunker are small remote ponds of 11 and 24 acres, respectively. These ponds are surrounded by woodland and have no structural development along their shores. There are also a number of streams and brooks which drain Roxbury. They include the following:

Birch Brook Meadow
Brook Mitchell Brook
Noisy Brook Philbrick
Brook Walker Brook

Roxbury has three great ponds, Ellis (Roxbury) Pond, Birch Pond and Bunker Pond and pond watersheds within its boundaries. A fourth pond, Muskrat is not considered a great pond because it has a surface area of less than 10 acres.

Ellis is the largest pond in Roxbury, approximately 916 acres. Three quarters of the pond lays in Roxbury with the remainder located in the Town of Byron. Ellis Pond is shallow with an average depth of approximately 12 feet. The exception is a "deep hole" of 43 feet south of French Island. This pond does not separate into layers of warm and cold water during the summer as do most deeper ponds and thus there is little difference between the surface temperature and the bottom temperature. The water quality of Ellis Pond has deteriorated over the last ten years. Tests indicate that the lake had a phosphorus level of around 13.0 parts per billion (ppb) in 1990. Algae blooms generally occur at levels between 15.0 and 20.0 ppb. Additional tests have shown a dramatic

increase in Chlorophyll and a decrease in water clarity since the early 80', both of which are indications of water quality deterioration.

Of the myriad of substances that can be carried to the lake from its watershed, phosphorus is of primary concern. Phosphorus is a natural element that clings to soil particles and organic matter. It is necessary for plant growth and is transported by water. When water carrying phosphorus is allowed to seep into the ground, as in an undisturbed watershed, soils and organic matter bind with the phosphorus and hold it for use by plants. However, when surface runoff increases, the phosphorus can be transported, along with eroded soils, and deposited in surface waters.

All lakes and ponds have the ability to absorb some phosphorus before there is an adverse. Impact on water quality. However, when the phosphorus load becomes too great, it acts as a fertilizer and causes algae to flourish. an abundance of algae turns the lake green and blocks sunlight to deeper levels. As the algae crowding the upper part of the lake die and drop to the bottom, they are decomposed by bacteria. The oxygen supply in the bottom waters is exhausted by this bacterial decomposition of the algae. Under the depressed oxygen conditions, phosphorus, which usually is bound in the sediments, may be released. trout and salmon, which live In the colder bottom waters of many lakes, can suffocate. The decay of algae generates obnoxious odor and taste. Fish, plants and wildlife of the lake ecosystem are endangered in this process.

A lake rich in dissolved nutrients such as phosphorus, and often deficient in oxygen, is termed eutrophic. Once a lake becomes eutrophic, it is extremely slow to recover and, in fact, requires Intensive action to immobilize phosphorus in the sediments. Thus it is well advised to plan for and manage the amount and sources of phosphorus entering a lake in order to prevent eutrophication.

The Maine Department of Environmental Protection (DEP) has developed a phosphorus control method which uses a phosphorus loading model to determine an allowable Increase in phosphorus export from the watershed. The method arrives at the allowable increase in phosphorus by considering the lake's sensitivity to phosphorus, current water quality and the level of. protection the town selects for the lake. The review of developments within a watershed has two parts: (1) determination of the Town's lake water quality goals, and (2) review of proposed development plans. The first part was done as part of the comprehensive planning process.

The second part, the development review, consists of two subparts. First, using the acceptable increase in phosphorus (per acre) determined in the comprehensive plan, the maximum increase of phosphorus the development may export is calculated. Then, the specific elements of the project are evaluated to determine actual phosphorus export. Actual export is calculated by determining phosphorus export from roads and cleared areas, then applying a treatment export factor to areas where runoff is to be treated by one or more phosphorus control measures. The treatment factor represents the control measure's effectiveness at reducing phosphorus export. If actual phosphorus export exceeds allowed export, then the developer must incorporate additional phosphorus control measures Into the project to gain approval. Such control measures Include buffer strips, infiltration areas and wet ponds. Treatment factors vary depending on the relative effectiveness of different designs and soil and slope conditions.

Once the allowable increase in phosphorus export from the watershed has been determined, it can be allocated on a per acre basis to the future area likely to be developed in the lake's watershed as projected from past development trends and present development pressures.

The phosphorus control method is based on the lake maintaining its current water quality forever. However, the total acreage to be developed cannot be practically handled in this infinite scenario. Therefore, 50 years has been selected as the planning period. It is recommended that the development projections be updated every five years as the comprehensive plan is reviewed. In this way, new growth pressures can be assessed and the per acre phosphorus allocation adjusted.

A lake's vulnerability is proportional to the phosphorus load which will cause a one part per billion change in the lake's phosphorus concentration; lakes which can accept higher phosphorus amounts without a significant rise in phosphorus concentration are less vulnerable than those which cannot. Table I-27 is a listing of Roxbury's lakes and their 1987 Phosphorus Coefficient data, as estimated by the Maine Department of Environmental Protection. The list includes the name of the lake or pond, its surface area, direct drainage area, and percentage of that area within Roxbury. It also lists the allowable phosphorus load to produce an increase in phosphorus concentration of 1.0 parts per billion (which is considered the change in phosphorus concentration which will cause a noticeable change in water quality), and the phosphorus load which can be generated within Roxbury.

TABLE I-27
Lake and Pond Vulnerability ,Roxbury, 1987

Waterbody	Lake Area (acres)	Drainage Area In Roxbury (acres)	% of Watershed in Roxbury	Phosphorus Load (lbs/ppb)	Load from Roxbury (lbs/ppb)
Birch Pond	11.1	526	100	3.96	4.11
Bunker Pond	24.7	326	100	3.08	3.23
Ellis Pond	916.4	3548	21	132.88	26.99
Muskrat Pond	7.4	37	23	1.32	.33

Source: Maine Department of Environmental Protection, 1987

The next step in the process is to determine the amount of land in each watershed which is likely to be developed over the next 50 years. The Department of Environmental Protection has developed guidelines which segregate lakes into various categories and regions of the state and recommend a development factor for each. Most of the ponds whose watersheds fall in Roxbury are not subject to development pressure and would receive a development factor of 10%.

TABLE I-28
Phosphorus Load Projections for Watersheds
Roxbury, 1990

Watershed	Total Watershed Area	Developable Area	50 Year Estimate (%)	50 Year Estimate (Acres)
Birch Pond -	526	526	10	62.8
Bunker Pond	328	326	10	32.6
Ellis Pond	3548	3548	10	354.8
<u>Muskrat Pond</u>	37	37	10	3.7

Sources: Roxbury Town Records AVCOG, 1990

The last column of Table I-28 provides the Information necessary to determine a per-acre phosphorus allocation when combined with a lake protection level selected from Table I-29, which is based on each lake's water quality status.

TABLE I-29
Acceptable Increase in Lake
Phosphorus Concentration (ppb)

Water Quality	High	Lake Protection Level Medium	Low
Outstanding	0.5	1.0	1.0
Good	1.0	1.5	2.0
Moderate/Stable	1.0	1.25	1.5
Moderate/Sensitive	0.75	1.0	1.25
Poor/Restorable	0.1	0.5	n/a
Poor/Low Priority	2.0	4.0,	6.0

Source: Maine Department of Environmental Protection, 1989

Ellis Pond is one of the more developed lakes in the area and has experienced some water quality problems in recent years. While it is unlikely that future development will equal the density of that of the previous 50 years, new development and seasonal conversions are expected. While the other ponds have not experienced development pressure, it is assumed their watersheds will experience development In the future.

All of the ponds in Roxbury have moderate/sensitive water quality. The moderate/sensitive rating generally means that the water quality is about average for Maine lakes but that the lakes are sensitive to increased phosphorus loading and possible recycling of phosphorus from bottom sediments. The smaller of these ponds have routinely been assigned the moderate/sensitive status due to insufficient monitoring data, as is the practice of D.E.P.

It is recommended that a high level of protection is selected for Ellis Pond since it has regional significance. Birch, Bunker and Muskrat Ponds should receive a medium level of protection. A medium level should provide good long-term protection for these ponds. Table I-30 establishes the suggested protection levels and the allowable per-acre phosphorus load for each watershed in Roxbury.

TABLE I-30
Lake Protection Levels and
Allowable Per-Acre Phosphorus Loads for Watersheds
Roxbury, 1990

Watershed	Lake Protection Level	lbs/ppb	Allowable Per-Acre Phosphorus Load (lbs/acre/year)
Birch Pond	Medium	4.11	.078
Bunker Pond	Medium	3.23	.099
Ellis Pond	High	26.99	.057
Muskrat Pond	Medium	0.33	.089

Source: Androscoggin Valley Council of Governments, 1990

Floodplains

A floodplain is the flat expanse of land along a river or shoreline that is covered by water during a flood. Under the Federal Insurance Program, the 100 year floodplain is called the flood hazard area. During a flood, water depths in the floodplain may range from less than a foot in some areas to over 10 feet in others. However, regardless of the depth of flooding, all areas of the floodplain are subject to the requirements of the Flood Insurance Program. Floodplains along rivers usually consist of floodway, where water flows, and a flood fringe, where stationary water backs up. The floodway will usually include the channel of a river or stream, as well as some of the land area adjacent to its banks.

The Federal Emergency Management Agency has identified Roxbury as a minimally flood prone community. In September 1985 Flood Insurance Rate Maps were published for the town, showing the areas within the 100 year floodplain. The floodplains

generally follow along the shores of the Swift River, Mitchell Brook, Ellis Pond, the Ellis River and the lower reaches of Meadow Brook.

The Swift River, has an extensive floodplain which extends out from the normal high water mark from less than 100 feet to over 2000 feet in some areas. A number of the, residences in Frye and in Roxbury Village are located within the 100 year floodplain. The floodplain around Ellis Pond, although not as extensive, has been heavily developed, mainly with seasonal structures. The floodplains along the Ellis River, Meadow Brook, and Mitchell Brook have remained undeveloped.

Wildlife Habitat

Wildlife should be considered a natural resource similar to surface waters or forest land. Our wildlife species are a product of the land and, thus, are directly dependent on the land base for habitat. Therefore, if a habitat does not exist or an existing habitat is lost, various types of species will not be present. Although there are many types of habitat important to our numerous species, there are four which are considered critical. They include wetlands, riparian areas (shorelands of lands, ponds, rivers and streams), major watercourses and deer wintering areas as well as other unique and/or critical habitats.

Every wetland has wildlife value. Small wetlands can be as important as larger ones. They provide habitat for most species of waterfowl, aquatic fur bearers and deer. Wetland areas have been identified by the Department of Inland Fisheries and Wildlife as important waterfowl breeding and nesting areas in Roxbury.

The areas along watercourses support high levels of wildlife population. These areas provide travel lanes for wildlife and are a transition zone between various habitat types.

Deer wintering areas may represent only 10% of the total deer range, but, without such areas, deer will not survive in any but the smallest numbers. These wintering areas are comprised mostly of spruce or fir, but other softwoods such as cedar, pine or hemlock may be present. Although many types of human activity are not compatible with deer yards, good timber management can be beneficial.

****Wind Resources**

Wind resources are significant natural assets that are found primarily on high elevation ridges. On its mountain ridges, Roxbury has the potential to allow appropriate development of wind energy farms to contribute to the energy self-sufficiency and economic development of the area. Capturing this potential will require careful development of road access to ridges using methods that prevent erosion, minimize scenic impacts, and protect special habitats for wildlife. Appropriate development will require implementation of appropriate environmental protection strategies in accordance with Maine Department of Environmental Protection statutes and regulations as well as applicable local ordinances.

SCENIC RESOURCES

Scenic areas and views are Important to Roxbury's character. A scenic view analysts conducted as an element of the comprehensive plan identified six locations of significant scenic areas. It is likely that others exist. The analysis employed three valuables and assigned a value of one to three to each valuable. The three variables are defined as follows:

1. Distance of Vista or View Shed: This valuable considers how long a distance a vista can be viewed. It assumes that a view or vista which is blocked only a few feet from the observer has relatively lesser value than a view that can be seen for miles.
2. Uniqueness: Although not always Impressive, the features in the landscape which are rare contribute "something special" to that landscape.
3. Accessibility: A given scenery has lesser importance if there is no public access to it or access is difficult.

A scale of one to three was used to score each variable with one being the lowest and three the highest. The criteria was as follows:

Distance of vista:	1 point -Immediate foreground 2 points - up to one mile 3 points - more than one mile
Uniqueness:	1 point - contains no unique qualities 2 points - contains some characteristics 3 points - contains impressive/unique qualities such as White Mountains, views of water, etc.
Accessibility:	1 point -- access difficult such as along "path" or trail 2 points - access via public road 3 points - access via scenic turnout or similar area

The following table identifies the view, location/name (1); a description of the view (2); access (public or private) (3); the type of view (4); and whether the view is within Roxbury itself or extends beyond Roxbury (5); and additional comments (6). The points assigned to distance (01st), Uniqueness (Uni) and Accessibility (Ac) from the criteria above are shown on the left.

TABLE I-31

Dist	Uni	Ac	
3	2	2	1) Mexico/Roxbury Town Line – Rte. 17 – Frye Flats 2) scenic highway 3) public access 4) open view of surrounding mountains/farmland 5) within town limits 6) mountains
2	2	1	1) Bunker Rock - Rte. 17 2) river view/ledges - favorite swimming spot 3) access public within ROW 4) river view 5) within town limits
2	3	3	1) three pools - Rte. 17 – Swift River 2) river view – falls – favorite swimming spot 3) private access can see from highway, Bunker Pond Road 4) river view 5) within town limit 6) critical area
2	3	3	1) Bunker Pond 2) view of pond – surrounding ledges 3) private/open to public, via woods road 4) mountains/pond 5) within town limits
3	2	3	1) Roxbury Pond beaches – 3 public 2) view of pond, beach surrounding mountains 3) public from public road 4) view of pond/mountains 5) within/outside town limits – Andover North Surplus/Byron
3	2	3	1) Meadow Brook, Rte. 120 2) bog/wetland/mountains 3) public 4) view of wetland, mountains – Andover North Surplus/Byron Rumford 5) within/outside town limits 6) wildlife/moose feeding

ARCHEOLOGICAL RESOURCES

Archeological resources are physical remains of the past, most commonly buried in the ground or very difficult to see on the surface. Archeological sites are defined as prehistoric or historic. Prehistoric sites are those areas where remains are found that were deposited thousands of years before written records began in the United States. These sites are the only source of information about prehistory. More recent archeological sites are those sites which occurred after written records began.

In Maine, archeological sites are most commonly found within 25 yards of an existing or former shoreline. These areas provided good locations for boat access and camp locations. Although some 4,500 archeological sites have been identified in Maine, there may be an additional 12,000 sites to be discovered.

The Maine Historic Preservation Commission reports no known prehistoric or historic archeological sites in Roxbury.

HISTORIC STRUCTURES

The National Register of Historic Places is an official list of those historic resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register includes those districts, sites, buildings, structures and objects that are significant to American history, architecture, archaeology, engineering and culture. In addition to the recognition that listing provides, registered properties are afforded a measure of protection from development projects that are funded, licensed or executed by the federal government. Registered properties are provided no protection by such registration from activities undertaken by their owners with private financing.

Roxbury does not contain any structures which are contained on the National Register of Historic Places. However, in Randall H. Bennetts book Oxford County, Maine, A wide To Its Historical Architecture, the following is contained relating to Important local architecture.

John Reed House ca. 1845 and later. Route 17

This wide-gabled house built in the 1840s and added to later In the nineteenth century was the home of John Reed, Roxbury's first postmaster In 1849. A former Freeport, Maine, resident, Reed chose an elevated site above the Swift River at the southern edge of Roxbury Village to construct his residence, one of the least altered structures of its period In the town. Like the Green-Nutting House at Otisfield and the George W. Grover House at Bethel, the Reed House Is a local Interpretation of popular Greek Revival forms. Its exterior decoration Is limited to paneled corner pilasters which support a modest entablature; the main block retains many of its original six-over-six paned sash. The interior features exposed corner posts and Greek Revival door and window moldings. Adjacent to the house are several outbuildings, including massive New England barn and hip-roofed storage building with cupola.

Off Route 17, north of the Reed House, is a mansard-roofed house dating to around 1900.

RARE AND ENDANGERED NATURAL FEATURES

The Natural Heritage Program has compiled data on Maine's rare, endangered or otherwise significant plant and animal species, plant communities and geological features. While this information is available for preparation and review of environmental assessments, it is not a substitute for on-site surveys. The quantity and quality of data collected by the Natural Heritage Program are dependent on the research and observations of many Individuals and organizations. In most cases, Information on natural features is not the result of comprehensive field surveys. For this reason, the Maine Natural Heritage Program cannot provide a definitive statement on the presence or absence of unusual natural features In any part of Maine.

Known rare and endangered plants located In Roxbury Include the following:

Scientific Name

Galearis Spectabilis

Showy Orchis

In addition to Showy Orchis, the Maine Natural Heritage Program lists two registered critical areas in Roxbury. They are the Swift River Rest Area Falls (Three Pools) and the Swift River itself for its whitewater--rapids.

CURRENT LAND USE PATTERNS

Introduction

A major element of the comprehensive plan is the analysis of the use of land and existing development patterns. Through such an analysis, Insights Into community functions, spatial relationships, past and current priorities and future directions are possible. Current land use patterns and expected future development trends are cornerstones In the development of policies and strategies which will shape Roxbury's future land utilization characteristics.

Roxbury has a total land area of 45.8 square miles (29,324 acres). For the most part, Roxbury is sparsely developed with a year-round population density of 10.2 persons per square mile. Roxbury has the sixth least population density per square mile of organized communities in Oxford County. Commercial forest land is the most prevalent land use, however, concentrations of development are found.

Forested Land

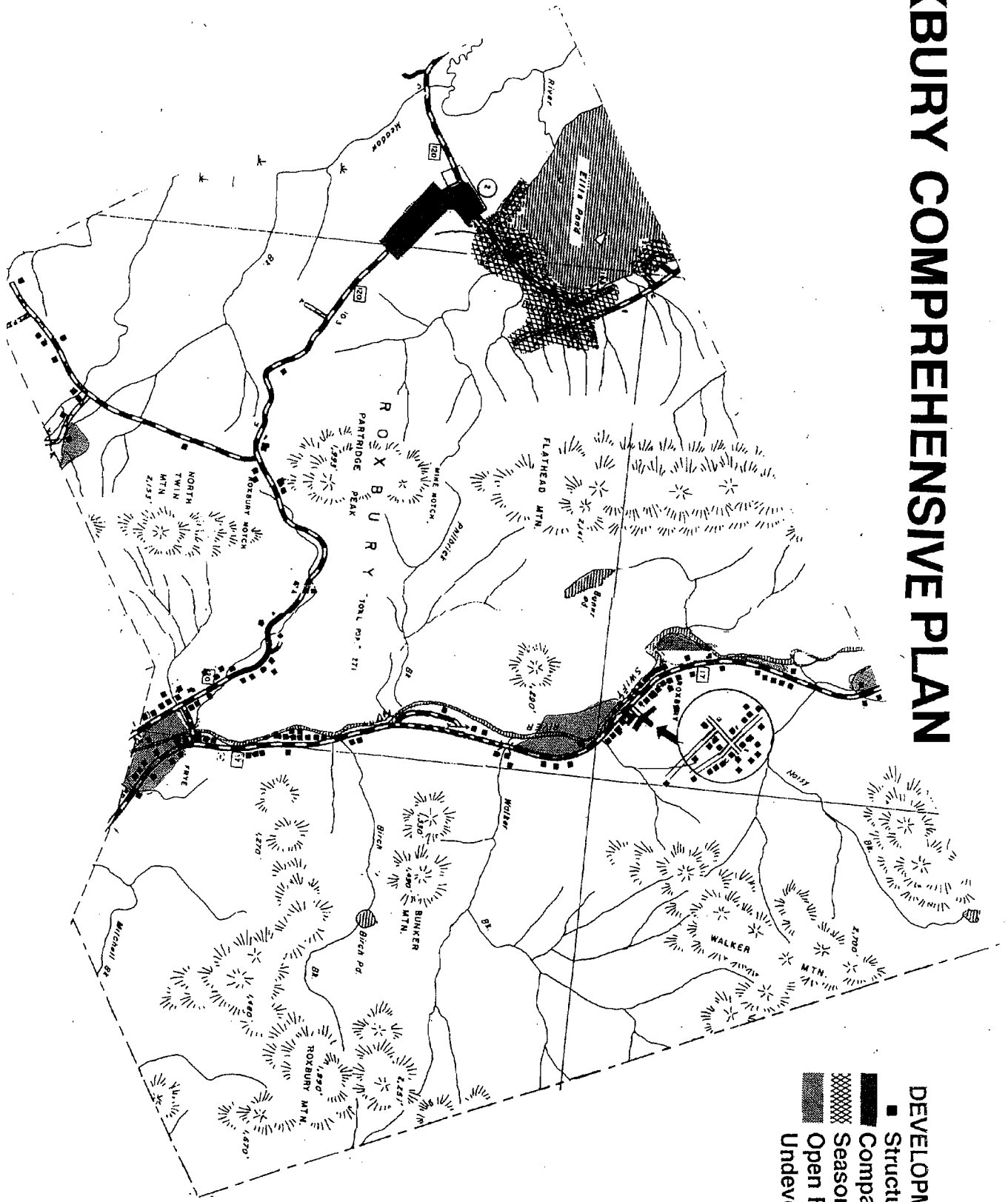
Roxbury is primarily a commercial forest. In 1990, 22,636 acres (77.2%) of the Town's total land area was registered under the Tree Growth Tax program. It is estimated that some 28,500 acres is forested. Boise Cascade is the major forest landowner with 18,728 acres. This represents 64 percent of the total land area. Commercial forests are primarily comprised of hardwood and mixed hardwood species and managed for pulp and saw logs.

The commercial forest land provides raw materials for the nearby pulp and paper industry and lumber industry which are both important to the region's economy. They are also an important recreation resource, providing wildlife habitats and protect the quality of surface waters.

Agricultural Land Use

Roxbury's early economy was based largely upon small family-operated farms. However, the majority of the Town's topography and its commercial forests limit agricultural land use. Photographic interpretation of 1977 aerial photography conducted by the Environmental Photographic Interpretation Complex of Warrenton, Virginia and the Androscoggin Valley Council of Governments found 261 acres of land devoted to agricultural use. The majority was utilized for pasture with smaller amounts for hayland and row crops. Current day acreage has not changed significantly. Open fields are found primarily adjacent to the Swift River where its flood waters cover adjacent flat land.

ROXBURY COMPREHENSIVE PLAN



- DEVELOPMENT PATTERNS**
- Structures
 - Compact Development
 - Seasonal/Residential
 - Open Fields
 - Undeveloped

1991

Residential Land Use

Year-Round Residential

Roxbury's estimated 180 year-round residences are found primarily in Roxbury Village, Route 120 adjacent to the Roxbury/Mexico line, Route 120 near the Intersection of Route 120 and the Roxbury Pond Road. Also year-round residents are scattered along Route 17 and 120, the Town's only major roads. The total number of acres utilized for year-round residential purposes is less than one percent of the Town's total land area. Over the past 20 years, new year-round residential development has been located on Routes 17 and 120. This is due to these being the only major public roads. Also, an undocumented number of once seasonal dwellings adjacent to Roxbury Pond have been converted to year-round.

Seasonal Residential

The number of seasonal residents and the land area they occupy exceed that of year-round. Some 250 seasonal residents occupying 120 acres are found in Roxbury. The vast major of these seasonal dwellings are found on the south and east side of Roxbury (Ellis) Pond. The majority of development occurred between 1925 and 1970. The seasonal development adjacent to Roxbury Pond is reflective of shoreland development prior to the enactment of State laws designed to protect Water quality and conserve shorelines.

By today's standards, the majority of the lots are extremely small ranging from 2,500 square feet to 40,000 square feet. However, the majority of the lots have from between 50 feet and 100 feet of frontage and 100 to 120 feet in depth. Thus, average lot sizes range from 5,000 to 15,000 square feet. Such lot sizes may have been adequate for low levels of use but as the period of time seasonal dwellings are occupied Increases, potential water quality problems Increase as well. Water quality concerns may be compounded when seasonal dwellings are converted to year-round use.

Commercial Land Use

Commercial development is limited to individual establishments. In Frye, three commercial buildings are located with two In Roxbury Village. The remainder of commercial land use are found on Routes 17 and 120.

TABLE 1-32
Estimated Acres of Land Use by Type
1977- 1991

Type of Land Use	# of Acres 1977	# of Acres 1991 (est)
Residential (year-round)	70	100
Residential/Seasonal	114	120
Commercial	15	20
Extractive Industries	26	30
Agriculture	261	261
Wetlands	248	248
Forest Land	28,568	28,523
Beaches	22	22
Water	775	775
TOTAL Land and Water	30,099	30,099

Source: Androscoggin County Land Use Assessment, Androscoggin Valley COG, 1981 and data collected during comprehensive plan

Future Land Use Trends

Land use patterns over the next 10 years are not expected to change significantly. A major exception could occur if the commercial woodland owners alter their historic management practices and decide to market noncommercial wood lots. While such actions would not be expected to significantly increase year-round population, due to available employment opportunities, seasonal development would increase.

Route 17 will continue to be the primary year-round residential and commercial area. An intermixing of residential uses and small service related commercial uses will develop. Such long-term development trends could adversely impact the scenic values of Route 17.

New seasonal development in the vicinity of Roxbury (Ellis) Pond will not be significant in numbers due to shoreland zoning requirements and the subsurface sewage disposal rules. Increased use of what were traditionally summer residents for winter recreation use will occur adjacent to Roxbury Pond. Demand for some traditional seasonal residences to be converted to year-round residence has occurred and will continue. Such conversions raise issues of water quality protection and public safety.

Because Roxbury is primarily a commercial forest, harvesting operations undertaken at various times will temporally alter the landscape and provide access to new locations. A primary concern should be that such cuts and silviculture is not detrimental to the water resources of Roxbury and those shared with adjacent communities.

See Future Land Use Map as separate document (11 x 17)

FISCAL CAPACITY

Introduction

As Roxbury has developed and grown, so too have the demands for municipal services and facilities. As the Town develops over the next five, ten, and more, years, these demands will undoubtedly continue to Increase--specifically, for new or Improved roads, public facilities, other capital improvements, public services, and operational/administrative costs.

During the ongoing comprehensive planning process--including any future capital improvement planning process--various recommendations requiring public investment will be made. These recommendations must take into consideration Roxbury's ability to pay for, or finance, them. This chapter analyzes the Town's fiscal capacity to meet future needs through public expenditures.

Revenues

Roxbury's largest source of revenues is from property taxes. Table I-33 indicates trends in the Town's assessed valuation, projected property tax revenue and mil rate from 1984-1989.

TABLE I-33
Property Tax Revenues
Roxbury, 1984-1989

Year	Assessed Valuation (\$)	Projected Property Tax Revenue (\$)	Mil Rate
1984	12,128,400	194,1172.80	.016
1985	12,343,050	210,003.38	.0175
1986	12,726,150	222,707.63	.0175
1987	12,756,700	229,836.60	.018
1988	12,783,134	262,054.27	.0205
1989	14,215,012	277,332.80	.019

Source: Roxbury Annual Town Reports

Table 1-33 shows that between 1984 and 1989 the Town's valuation increased by 17 percent and the annual average Increase was about 3.3 percent. It is likely that this trend will continue. For example, the 1990 valuation would be expected to be approximately 3 percent higher than the 1989 valuation, or around \$14,641,462.00.

Over the 5-year period shown in Table I-33, property tax revenue Increased by about \$83,160 (or 43 percent). This translates to an annual average Increase of 7.4 percent. However, the change in revenues from year to year has been sporadic; for example, revenues increased by about 8 percent from 1984 to 1985, then dropped to a 3 percent increase from 1986 to 1987, and finally increased from 1987 to 1988 by 14 percent.

Other significant sources of revenue for the Town included excise taxes, revenue sharing, and “other” revenue. Although Roxbury continues to receive reduced revenue sharing funds from the State, the federal revenue sharing program has been discontinued. “Other” revenues Includes essentially all other sources, of revenue to the Town, such as interest on loans, refunds, and other taxes. Table I-34 lists these revenues for the years 1984-1989.

TABLE I-34
Significant Sources of Revenue
Roxbury, 1984-1989

Year	Excise Taxes (\$)	Federal/State Revenue Sharing (\$)	Other Revenues (\$)
1984	20,014.21	9,446.39	107,099.66
1985	21,052.22	15,039.91	61,133.70
1986	21,637.34	15,514.29	80,206.35
1987	28,106.45	17,985.64	57,922.44
1988	32,823.36	19,844.88	19,749.61
1989	36,911.85	23,768.29	59,672.46

Source: Roxbury Annual Town Reports

Excise taxes have increased by approximately \$16,900 or 84% over the 5 year period. The periods between 1986 to 1987 and 1987 to 1988 show the largest increases at 30% and 17%, respectively. This trend is difficult to predict but the annual average increase of just over 13% is not expected to continue due to slumping automobile sales. Increases in the range of 5-10% appear more likely. Revenue sharing sources have increased substantially over the period but a reduction is assumed given the current state budget situation. Miscellaneous (other) revenues have fluctuated dramatically and there is no apparent trend, making this category undependable for financial planning purposes.

Expenditures

The largest annual expenditure for Roxbury is for School appropriations. This accounted for an average of 53% of the Town's total expenditures between 1984 and 1989. The second largest expenditure for Roxbury is for Municipal operating and maintenance costs. The operating and maintenance costs accounted for approximately 41% of the Town's total expenditures from 1984 through 1989. The following table lists the significant items of expenditures for the town for this six year period.

TABLE 1-35
Significant Items of Expenditures
Roxbury, 1984-1989

Year	Operating & Maintenance	Education	County Tax	Overlay	TOTALS
1984	83,893.91	117,126.34	6,545.00	806.56	208,371.81
1985	96,845.00	127,279.57	7,350.00	3,046.40	234,520.97
1966	115,648.67	136,969.54	9,039.00	6,401.56	268,058.82
1987	142,922.91	146,214.56	10,200.00	8,431.49	307,774.96
1988	117,671.57	191,364.87	10,335.00	5,330.56	324,702.49
1989	144,336.68	190,322.16	10,998.00	7,382.65	353,030.49

Source: Roxbury Annual Town Reports

Operating and maintenance expenditures increased \$60,443 or 72% over the 5 year period while school expenses increased by \$73,196 or 62%, and county taxes rose by 68%. Capital overlay expenditures have fluctuated dramatically, ranging from nearly a 300% increase to a 37% decrease over the period.

Table 1-36 presents information on property valuations, revenues and expenditures for 1984-1989.

Debt

The Town's total outstanding debt is limited by State law to 15% of the Town's last full state valuation. This limit is reduced to 7 1/2% if the debt for schools, sewer and airport, water and special district purposes are excluded. In 1989, the Town of Roxbury had no outstanding debt.

TABLE 1-36

Revenues and Expenditures, ROXBURY, 1984-1989

CATEGORY	YEARS ENDED:						% Change 1984-1989	%Change per year
	1984	1985	1986	1987	1988	1989		
VALUATION								
Land & Buildings		12,310,050		12,723,700	12,750,134	14,215,012		
Personal property		33,000		33,000	33,000	33,000		
TOTAL	\$12,128,400	\$12,343,050	\$72,726,150	\$12,756,700	\$12,783,134	\$14,680,572	17	
REVENUES								
Property Taxes								
Will rate	.016	.0175	.0175	.018	.0205	.019		
Projected	194,172.80	210,003.38	222,707.63	229,836.60	262,054.27	277,332.80	43	7.4
Excise tax	20,014.21	21,052.22	21,637.34	28,106.45	32,823.36	36,911.85	84	13.3
Revenue Sharing	9,446.39	15,039.91	15,514.29	17,985.64	19,844.88	23,768.29	152	21.6
Other Revenues	107,099.66	61,133.70	80,206.35	57,972.44	19,749.61	59,672.46		
TOTAL	\$330,733.06	\$347,564.25	\$340,065.66	\$333,851.13	\$334,472.12	\$399,685.40	21	5
EXPENDITURES								
Municipal Op. & Maintn.	83,893.91	96,845.00	115,648.67	142,922.91	117,671.57	144,336.68	72	12.6
School Appropriation	117,126.34	127,279.57	136,969.54	146,214.56	191,364.87	190,322.16	62	10.9
County Tax	6,545.00	7,350.00	9,039.00	10,200.00	10,335.00	10,998.00	68	11
Overlay	806.56	3,046.40	6,401.56	8,431.49	5,330.56	7,382.65		
TOTAL	\$208,371.81	\$234,520.97	\$268,058.82	\$307,774.96	\$324,702.49	\$353,030.49	69	11.4
EXCESS/(DEFICIT)	\$4,181.67	\$33,906.60	\$29,787.67	\$26,076.77	\$9,769.63	\$40,054.91		

The Town is allowed to borrow 7 ½ percent of its full valuation, according to Maine State law. However, that would amount to over \$1,100,000 which is a considerable amount of money and the impact upon the towns mil rate would be significant, It is recommended that Roxbury exceed no more than about 4 percent of the valuation. Even limiting the debt to 4 percent of the full valuation would allow the Town to borrow nearly \$580,000 to finance capital expenditures.

Fiscal Capacity

Roxbury's fiscal capacity is in excellent shape as can be seen from preceding table showing Roxbury's revenues and expenditures for 1984-1989. Since the Town currently has no outstanding debt, it's fiscal capacity is such that the Town can borrow to finance necessary major capital expenditures.

SECTION II PLANNING ISSUES

PLANNING ISSUES

Introduction

The Inventory and analysis element of the Roxbury Comprehensive Plan presents information pertaining to the Town's existing character and makes projections of the future. The overall purpose of the comprehensive plan is to plot a realistic future direction for community development. The plan will contain policies which present future directions for Roxbury and implementation strategies or actions to achieve the stated policies.

The first step in the development of policies and strategies is to define areas of concern or issues. This may be accomplished through the examination of the inventory and analysis and from public input. Once the areas of concern or planning issues are defined, appropriate policies and strategies can be developed.

The following presents a preliminary listing of planning issues.

Population

- Roxbury's year-round population is expected to increase by 73 persons by 2003, a rate of growth similar to that which occurred between 1980 and 1990.
- Roxbury's 1990 peak seasonal population totaled 1,128, two and one half times greater than the Town's year-round population.
- Roxbury's seasonal population will continue to increase through the year 2003.

Economic Conditions

- Roxbury's local economy is closely related to direct and indirect employment in the pulp and paper industry. Roxbury's economy will be affected by gains and losses in the industry.
- The continued decline in population in Mexico and Rumford will decrease employment opportunities for Roxbury's residents.
- In-home businesses and small businesses are the cornerstone of Roxbury's local economy. Opportunities for such businesses must continue.
- Economic opportunities exist in relation to the Town's and region's seasonal population and development.

Housing

- An unknown number of seasonal dwellings have been converted to year-round, The majority of these conversions are adjacent to Roxbury Pond.
- Seasonal dwellings comprise the majority of the Town's housing stock (58%).
- The availability of rental housing in Roxbury is extremely limited.
- Between 1990 and 2003, there will exist a demand for 33 new year-round dwelling units.

Transportation

- Route 17 from south of Roxbury Village to the Roxbury/Byron line is in poor condition and in need of upgrading.
- Route 120 is in need of upgrading.
- The majority of town-maintained roads are in fair to poor condition.
- Privately owned roads in the vicinity of Roxbury Pond are narrow and in poor condition. Future development and/or the conversion of seasonal dwellings to year-round dwellings will aggravate these poor conditions.
- Roxbury lacks road construction standards for new development.

Public Facilities and Services

- The Town lacks planning for major public expenditures.
- There is no local building code regulations to assure minimum safety standards for construction.
- White goods and demolition debris are frequently disposed of on privately owned land.

Recreation Resources

- Several privately owned pools on the Swift River are enjoyed by the public for swimming. A change In attitude by owners whereby public access is restricted would remove these traditional recreation areas.
- A change in attitude in public access policy by major landowners would significantly

alter recreation opportunities.

Natural Resources

- Approximately 70 percent of Roxbury's land area exceeds 15 percent of slopes. Development; road construction and forestry management practices become more difficult on slopes greater than 15 percent and the potential for erosion increases.
- All sewage disposal in Roxbury is accomplished via subsurface sewage disposal. The majority of the land area in Roxbury with development potential is not well suited for low density residential development utilizing subsurface sewage disposal.
- The Swift and Ellis Rivers are major natural resources in Roxbury, land use activities adjacent to these rivers may impact water quality and/or reduce recreation and scenic values.
- Land use activities including timber harvesting within the watershed of a pond or lake may impact water quality. Phosphorus carried by soil particles is a major contribution to water quality degradation. The Town lacks adequate standards to control phosphorus export to surface waters.
- The Roxbury (Ellis) Pond and watershed are located in both Roxbury and Byron, Watershed management requires joint action.
- Various land use activities adjacent, to the Town's ponds, rivers and streams may lead to water quality degradation, loss of wildlife and fisheries values and alter current character.
- Water quality testing indicates that Roxbury (Ellis) Pond has a high phosphorus level (13.0 ppb) a dramatic increase in Chlorophyll and a decrease in water clarity since the early 1980s.
- All potable water is derived from ground water; its contamination can create health problems and costly solutions.
- Sand and gravel aquifers can be major suppliers of water. To maintain the quantity and quality of these water resources, protection is necessary.
- Existing floodplain mapping in Roxbury is not accurate.
- Development in floodplains can increase levels and endanger structures and human lives.
- Except for land areas regulated by the Town of Roxbury Shoreland Zoning

Ordinance, important wildlife habitats are not protected by local regulations.

- Woodlands and agricultural land are major natural resources. Their maintenance and conservation are critical to the Town's future.
- There are several important scenic locations in Roxbury. Their loss would alter the character of Roxbury.

Rare and Endangered Natural Features

- Rare and endangered natural areas outside these areas regulated by Shoreland Zoning are not protected by local regulations.

Land Use Development Patterns

- Sale and/or the development of commercial forest land may significantly alter development patterns and Town character.
- Residential development adjacent to public roads will alter Town character.
- The conversion of seasonal dwellings to year-round dwellings will place burdens upon the Town for additional services and roadway upgrading.
- The Town of Roxbury has limited areas that are well suited for residential development. Future development should be guided to best utilize these areas and maintain town character.
- The Town lacks suitable standards to review subdivisions and non--residential development.
- Large residential developments will demand new and improved municipal services.
- Large single-family and multi-family development will alter Town character.
- Route 17 Is a designated Scenic Highway. Residential development immediately adjacent to Route 17 will alter Town character.

Regional Issues

- Maintenance and Improvement of Roxbury Pond's water quality will take joint efforts from Byron and Roxbury.
- The Ellis and Swift Rivers are important natural resources. Joint efforts with other municipalities and the Land Use Regulation Commission are necessary to maintain

these values.

- Routes 17 and 120 are Important to the Region. Their upgrading is necessary.
- The region's forest resources are critical to the economy: and character. Joint efforts are necessary to maintain their values.
- The region's economy Is based upon the pulp and paper Industry and recreation, Joint efforts to expand economic opportunities are needed.

SECTION III

Policies and Implementation Strategies
Future Land Use Plan
Capital Investment Plan
Regional Coordination Program

POLICIES AND IMPLEMENTATION STRATEGY

Introduction

The cornerstone or most important element of the comprehensive plan is the policies and strategies which the community adopts. They present the directions the community will take to address issues identified in the inventory and Analysis element of the plan. Strategies define specific actions the Town should undertake in order to carry out the directions presented in the policies.

Roxbury's community policies and strategies are presented in a series of planning issues. These planning issues were identified through the analysis of Roxbury's Community Survey and input from the members of the Comprehensive Plan Committee. After the identification of the planning issue, the State goal, as adopted in the Comprehensive Planning Land Use Regulation Act which relates to the planning issue, is identified. After each strategy, who is responsible to implement that strategy is identified as well as the time period when that strategy should be implemented. Lastly, an estimated cost, if any, to implement that strategy is identified, it is important to understand the adoption of the comprehensive plan does not raise the money to Implement the various strategies. These monies will require specific appropriations and votes at future town meetings.

PLANNING ISSUE: Economy/Economic Development

State goal relating to planning issue:

- To promote an economic climate that increases job opportunities and overall economic well being.

Town Goal:

- It is a goal of the Town of Roxbury to provide for economic growth and development which is appropriate with town character.

***Policies:**

- It is a policy of the Town to allow in-home business/home occupations in all areas of Town.
- It is a policy of the Town to encourage appropriate economic development including recreation/tourism related businesses that are compatible with Roxbury’s current character and environment.
- It is a policy of the Town to recognize wind energy as a valuable natural resource and to allow reasonable utilization of that resource.

Implementation Strategies:

1. Local ordinance provisions should define home occupations as “occupation or business activity which results in a product or service and is conducted In whole or in part in the dwelling or accessory structure.”

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: Not Applicable (N.A.)

2. Local ordinance provisions should identify suitable locations and define the types of businesses appropriate for Roxbury.

Responsibility: Planning - Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

PLANNING ISSUE: Historical and Archaeological Resources

State goal relating to planning Issue:

- To preserve the State’s historic and archaeological resources,

Town goal:

- It is a goal of the Town of Roxbury to assure that potential archaeological resources and historical features are conserved,

Policies:

- It is a policy of the Town to assure that, before development takes place in areas with known archeological resources, their values are assessed.
- It is a policy of the Town to maintain historic values.

Implementation Strategies:

1. Local ordinances should require that documented archeological sites be assessed by the Maine Historic Preservation Commission before development begins.

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

2. The Selectmen should determine if a history of Roxbury exists. If not, the Selectmen should encourage an individual or individuals to develop or update a town history.

Responsibility: Selectmen
Time Frame: 48 months from Plan Adoption
Estimated Cost: N.A.

3. Local ordinance provisions should contain standards to assess impacts upon historic locations and allow the Planning Board to require mitigation measures.

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

PLANNING ISSUE: Outdoor Recreation

State goal relating to planning issue:

- To promote and protect the availability of outdoor recreation opportunities for all Maine citizens including access to surface waters,

Town goal:

- It is a goal of the Town of Roxbury to assure that traditional outdoor recreation opportunities continue and new demands for outdoor recreation are met.

Policies:

- It Is a policy of the Town to manage development such that traditional outdoor recreation opportunities are maintained,
- It is a policy of the Town to assure public access to traditional swimming locations.
- It Is a policy of the Town to support the efforts of the snowmobile club to maintain the trail system.

Implementation Strategies:

1. Local ordinance provisions should require low density development in the recreation/woodland rural areas (refer to Future Land use Plan for locations). An overall density not to exceed one dwelling unit per ten (10) acres with the area to be built upon or developed not to exceed 40,000 sq. ft. The remaining land, If the land is leased, should be managed by the lessee. When the land will be owned, the landowners should be encouraged to form a landowners association to manage the land, Management objectives should relate to forestry or agriculture.

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

2. The Selectmen should seek public access (for water-related activities), easements or public and private funds to purchase traditional river swimming locations.

Responsibility: Selectmen
Time Frame: Ongoing
Estimated Cost: Refer to Capital Investment Plan

3. The Town should support the snowmobile club with snowmobile registration fees and with specific projects which will contribute to the implementation of Town policies. The Town may provide additional funding to the club. In return, the snowmobile club will respect the rights of private landowners, while working to secure or improve access for the trail system.

Responsibility: Town/Snowmobile Club
Time Frame: N.A.
Estimated Cost: Ongoing

4. The Selectmen should encourage participation in Project Land Share sponsored by the Maine Forest Products Council by the Town's large landowners.

Responsibility: Selectmen
Time Frame: N.A.
Estimated Cost: Ongoing

PLANNING ISSUE: Agricultural and Forest Resources

State goal relating to planning issue:

- To safeguard the State’s agricultural and forest resources from development which threatens those resources.

Town goal:

- It is a goal of the Town of Roxbury to encourage the continued use of land for agricultural and forest purposes.

Policy:

- It is a policy of the Town to encourage the presence of an agricultural land base.
- It Is a policy of the Town to minimize the conflicts between agriculture and adjacent non-agricultural land uses.

It is a policy of the Town not to restrict commercial forest landowners from practicing ecologically sound forest harvesting practices.

- It is a policy of the Town to maintain the integrity of the forest.
- It Is a policy of the Town to require development (year-round and seasonal) that takes place In forested areas to conserve forest lands and resource values.

Implementation Strategies:

1. The Town should encourage agricultural landowners to participate in any State programs for the purchase of development rights of farmland and assist in the application/proposal development.

Responsibility: Selectmen/Planning Board
Time Frame: Ongoing
Estimated Cost: N.A.

2. Local ordinance provisions should be developed which contain guidelines that provide a separation between new non-agricultural development and existing agricultural land uses,

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

3. The Town should develop an agricultural land tax assessment program which encourages participation in the Farm and Open Space Tax Law by assessing land lower, if it is registered under the Farm & Open Space Tax Law.

Responsibility: Selectmen/Assessors
Time Frame: April, 1995
Estimated Cost: N.A.

4. The Town's Subdivision Standards should include a provision for all lots of less than 500 acres to be considered lots for the purpose of subdivision review.

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

(The purpose of this strategy is to allow the Planning Board to review the division of large blocks of land into smaller lots even if there was the division of a 2,000 acre lot into five 400 acre lots.)

5. The Town should request that the Bureau of Forestry supply the Town with a copy of the "Notification Prior to Harvest":% as required by Title 12, M.R.S.A, Section 8883.1. The Town should maintain a file and notify the Planning Board of such harvesting operations.

Responsibility: Selectmen
Time. Frame: Ongoing
Estimated Cost: N.A.

6. Local ordinance provisions should require low density development in the recreation/woodland rural areas (refer to Future Land use Plan for locations). An overall density not to exceed one dwelling unit per ten (10) acres with the area to be built upon or. developed not to exceed 40,000 sq. ft. The remaining land, if the land is leased, should be managed by the lessee, When the land will be owned, the landowners should be encouraged to form a landowners association to manage the land Management objectives should relate to forestry or agriculture.

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

7. Local ordinance provisions should allow for non-traditional and innovative residential development where lot sizes and frontage area is reduced as long as overall required densities are maintained.

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

PLANNING ISSUE: Housing/Affordable Housing

State goal relating to planning Issue:

- To encourage and promote affordable, decent housing opportunities for all Maine citizens.

Town goal:

- To encourage the development of safe and affordable housing.

Policies:

Policies:

- It is a policy of the Town to assure new residential construction and major renovations comply with acceptable safety standards.
- It is a policy of the Town to assure that the conversion of seasonal dwellings to year-round dwellings comply with State code requirements.
- It is the policy of the Town that mobile/manufactured homes on individual lots should be allowed in all locations that traditional single-family homes are allowed and that they are placed on a slab.
- It is a policy of the Town to allow mobile home park development In areas where such densities are environmentally suited.

Implementation Strategies:

- The Selectmen should propose a warrant article which would authorize them to appoint an “inspector of buildings” as provided for in Title 25, M.R.S.A. Section 2351. The law allows the inspector of buildings to inspect buildings under construction and buildings being repaired to see that all proper safeguards against the catching or spreading of fire are used, that the chimneys and flues are made safe and that proper cutoffs are placed between the timbers in the walls and floorings where fire would be likely to spread, and may give such directions in writing to the owner or contractor, as he deems necessary, concerning the construction of such building so as to render the same safe from the catching and spreading of fire.

Responsibility:	Selectmen
Time Frame:	March, 1994
Estimated Cost:	N.A.

- The Town should review suitable building codes, including the Building Officials and Code Administrator's One and Two-Family Building Code, and recommend adoption of a suitable code.

Responsibility: Selectmen/Code Enforcement Officer
Time Frame: March, 1995
Estimated Cost: N.A.

- The Town should adopt a town-wide Conversion of Seasonal Dwelling Ordinance provisions that require the standards to be met as contained in Title 30-A, M.R.S.A. Section 4215 - Conversion of Seasonal Dwellings In Shoreland Areas and such dwellings meet minimum life and safety standard's, suitable off-street parking is provided and documentation of how a private road will be maintained, if one is used for access to the dwelling.

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

PLANNING ISSUE: Natural Resources

State goals relating to planning issue:

- To protect the quality and manage the quantity of the State's water resources Including lakes, aquifers, great ponds, estuaries, rivers and coastal areas.
- To protect the State's other critical natural resources Including without limitation wetlands, wildlife and fisheries habitat, shorelands, scenic vistas and unique natural areas.

Town goal:

- The Town recognizes that its natural resources are and will continue to be Important to the community. Community values could be altered without management of these natural resources. Therefore, it is a goal of the Town to maintain these natural resources. By maintaining these natural resources, future expenditures should be minimized.

Policies:

- It is a policy of the Town to permit development and other land use activities only upon or in soils which are suited for such use, unless technological advances remove the possibility of environmental harm or degradation.
- It is a policy of the Town to protect the integrity of open fresh water wetlands as defined In the Shoreland Zoning Law so that their overall benefits and values are maintained.
- It is a policy of the Town to place a high level of protection on wetlands and the areas within 260' of the upland edge of such wetlands identified as being of significant wildlife value and the Maine Department of Inland Fisheries and Wildlife regulated by the Mandatory Shoreland Zoning Act.
- It is a policy of the Town to maintain its wildlife resources including deer wintering areas, riparian habitats, wetlands, surface water, and upland habitat through habitat conservation and/or enhancement.
- It is a policy of the Town to regulate construction and development in floodplain areas that increase the risk of property loss and/or increase the level of flooding.
- It is a policy of the Town to recognize scenic views as a natural resource and assure such values are maintained.
- It is a policy of the Town to maintain unique natural areas.

- It is a policy of the Town to regulate development and other land use activities adjacent to surface waters In such a manner as to maintain and/or Improve water quality.
- It is a policy of the Town to manage development in the watersheds of Birch, Bunker, Ellis and Muskrat Ponds to ensure water quality will be protected from long-term and cumulative increases in phosphorous.
- It is a policy of the Town to encourage corrective actions to address water quality degradation of Ellis Pond.
- It is a policy of the Town to minimize sedimentation and water temperature Increases caused by improper construction and forestry practices adjacent to surface waters and in watersheds.
- It is a policy of the Town to protect the quality and quantity of ground water resources for current and future use.
- It is a policy of the Town that activities over or in the sand and gravel aquifers be regulated to minimize the danger of ground water contamination.

Implementation- Strategies:

1. Local ordinances should Include provisions that require soils to be of such nature as to accept the proposed use and erosion and sedimentation control plans be developed for all developments.

Responsibility: Planning Board
 Time Frame: 24 months from Plan Adoption
 Estimated Cost: N.A.

2. The shoreland zoning provision should place wetlands Identified by the Maine Geological Survey In such zoning districts that comply with the standards set forth in the State of Maine Guidelines for Municipal Shoreland Zoning Ordinance.

Responsibility: Planning Board
 Time Frame: 24 months from Plan Adoption
 Estimated Cost: N.A.

3. All appropriate local ordinances should include provisions which authorize the Planning Board and Code Enforcement Officer, as elements of. their development reviews, to require appropriate permits by the Natural Resource Protection Act (Title 38, M.R.S.A, Section 480-A-S) and Section 404 of the Federal Water Pollution Control Act (FWPC) 33 USC Section 1344), prior to final approval of an application where wetlands are involved.

Responsibility: Planning, Board/CEO
Time Frame: Ongoing .
Estimated Cost: N.A.

4. Local ordinances should include provisions that require that when a development activity is proposed that will directly impact a significant wildlife habitat area, as identified by the Maine Department of Inland Fisheries and Wildlife, an analysis be conducted to determine potential impacts and necessary mitigation measures to minimize any negative Impact,

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

5. Wetlands rated as moderate. and high valued waterfowl habitat by the Maine Department of Inland Fisheries and Wildlife should be zoned as resource protection and the area 250 feet from the wetlands upland edge,

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

6. The Planning Board should annually provide written correspondence to each of the commercial wood landowners of the Town's interest in maintaining significant wildlife habitat and request that management and cutting plans consider such habitats. If such voluntary measures do not achieve the policies of this plan, local ordinance provisions should be enacted that requires, prior to harvest, significant wildlife habitat is identified and measures are undertaken to maintain its value.

7. Shoreland Zoning provisions should place undeveloped floodplain areas along the Ellis and Swift Rivers that are within 250 feet of the normal high water mark in Resource Protection District which prohibits new structural development.

Responsibility, Planning Board
Time. Frame: 24 months from Plan Adoption
Estimated Cost: N/A

8. The Planning Board and Code Enforcement Officer should strictly administer and enforce the Town's Floodplain Management Ordinance.

Responsibility: Planning Board/CEO
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

9. The Selectmen should make a formal request to the Federal Emergency Management Agency to update Roxbury's floodplain maps.

Responsibility: Selectmen
Time Frame: November, 1993
Estimated Cost: N.A.

- *10. Local ordinances should contain provisions which require an assessment by the Planning Board of the impact upon scenic sites as identified in the Comprehensive Plan caused by proposed structural development and grant the Board authority to require development which is found to impact identified scenic sites and views to minimize negative impacts caused by such development. In the case of Wind Energy Facilities requiring approval by the Maine Department of Environmental Protection, the Planning Board shall accept the findings of the Maine Department of Environmental Protection under the Maine Department of Environmental Protection Regulations concerning the effect on scenic character

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

11. When road construction or reconstruction of an existing public road is undertaken by developers, town and/or state, design plans should include turn-outs or suitable shoulders to allow vehicles to leave the travel way in identified scenic view locations.

Responsibility: Planning Board/Selectmen
Time Frame: Ongoing
Estimated Cost: N.A.

12. Local ordinances should contain provisions to allow the Planning Board to require information concerning the impact of proposed development on unique natural areas and measures to minimize negative impacts.

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

13. Local ordinances should contain the requirement for a Phosphorous Impact Analysis and Control Plan as set forth in Phosphorus Control in Lake Watershed prepared by the Maine Department of Environmental Protection for proposed development within the watersheds of Birch, Bunker, Ellis and Muskrat Ponds and a long-term maintenance plan for imposed phosphorous control measures.

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption

Estimated Cost: N.A.

14. The Sliver Lake Preservation Committee should continue an education program for pond residents relating to septic system operation and maintenance - and phosphorous control.

Responsibility: Silver Lake Preservation Committee
Time. Frame: Ongoing
Estimated Cost: N.A,

15. The Town should seek and accept grants to correct malfunctioning subsurface disposal systems adjacent to Roxbury Pond.

Responsibility: Selectmen
Time Frame: Ongoing
Estimated Cost: N.A. .

16. The Town should seek a Comprehensive Plan Implementation Grant and use a portion of that grant to assess sewage disposal improvement options adjacent to Roxbury Pond and Roxbury Pond Watershed management options.

Responsibility: Selectmen
Time Frame: 6 months from Plan Adoption
Estimated Cost: \$5,000 from Grant Funds

17. The Town should adopt, as local regulations, the Best Management Practices for Erosion Control and Water Quality Protection In Timber Harvesting Operations as prepared by the Bureau. of Forestry.

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

18. Local ordinances should contain provisions which require proposed new or expansions to development other than residential to meet standards that will safeguard groundwater resources including sand and gravel aquifers. These standards will include, but not be limited to, the identification of the potential sources of contamination to groundwater from the proposed use; the utilization of the Best Management Practices endorsed by the Maine Department of Environmental Protection to reduce the risk of contamination; a nitrate nitrogen analysis; and the Installation and regular sampling of water quality monitoring wells for a use deemed to be significant actual or potential source of pollutants or excessive drawdown.

Responsibility: Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

PLANNING ISSUE: Future Land Use/Development Patterns

State goal relating to planning Issue:

- To encourage orderly growth and development in appropriate areas of each community, while protecting the State's rural character, making efficient use of public services and preventing development sprawl.

Town goals:

- The Town recognizes the need to protect its rural character while assuring quality housing. In addition it is a goal that any future development will be constructed in such a manner that It will not Impose a burden on the Town's resources.
- The Town desires to encourage a pattern of community growth and development that complements existing land uses and community character.

Policies:

- It is a policy of the Town to manage development so that a town character, Including commercial forest land, is maintained and municipal services are not Impacted adversely.
- It is a policy of the Town that new development is served by public or private roads which are suited to anticipated traffic volumes.
- It is a policy of the Town to manage both residential and non-residential development along Route 17 and Route 120 so that the negative effects of strip development are avoided.
- It is a policy of the Town to direct new residential and nonresidential development to those areas suited for such development.
- It is a policy of the Town to provide for innovative residential development techniques that conserve forest land and safeguard natural habitat areas.
- It is a policy of the Town to manage development adjacent to Roxbury Pond in a manner as to maintain and improve the pond's water quality.
- It is a policy of the Town that the conversion of seasonal dwellings to year-round dwellings will not negatively Impact the natural environment and road access is suitable.

- It is a policy of the Town to allow mobile/manufactured homes in all areas where traditional homes are allowed.
- It is a policy to designate suitable locations for mobile home parks.
- It is a policy of the Town to allow home occupations within all areas of the community.
- It is a policy of the Town to direct commercial development to areas where it will minimize conflict with adjacent, less Intense land uses.
- It is a policy of the Town to require new or redeveloped commercial alias to consider "local character" In site design and limit access points to roads.
- It is a policy of the Town to regulate new commercial development to protect the natural environment including groundwater.
- It is a policy of the Town that any industry should be complementary and not detrimental to Roxbury's character and environment.

Implementation Strategies:

1. The Selectmen should appoint- an Ordinance Development Committee (Planning Board, Lake Association representatives and other interested individuals) to draft a Land Development Ordinance, which includes subdivision and site review standards and other ordinances called for in the Comprehensive Plan.

Responsibility: Selectmen
 Time Frame: 4 months from Plan Adoption
 Estimated Cost: N.A.

2. The Selectmen should seek Implementation Grant funds from the Office of Community Development. These funds would be utilized to obtain planning assistance in ordinance development,

Responsibility: Selectmen
 Time Frame: 3 months from Plan Adoption
 Estimated Cost: Local match (\$3,125)

3. The Ordinance Committee should prepare a Land Development Ordinance which Includes zoning, subdivision review standards, standards for review of non-residential development and standards for the construction of public and non-forestry private roads.

Responsibility: Ordinance Committee
Time Frame: 20 months from Plan Adoption
Estimated Cost: \$4,000 from Grant Funds

4. Ordinance provisions should be enacted which accomplish the following:
- a. Municipal services not adversely impacted by new development. When it is determined that an adverse impact would result, phasing of development or upgrading of the services by the developer should be required.
 - b. Road construction standards which establish minimum accepted standards for roads to be accepted by the town and roads which are to remain private should be enacted. These standards should require paving of roads to be accepted by the town and gravel for private roads.
 - c. Standards which allow the Planning Board to consider the capacity of existing public and private roads that will access new development should be enacted.
 - d. Standards should allow for a reduction in lot size and frontage for development which conserves open space and forest land.
 - e. Standards should require new residential and non-residential development adjacent to Routes 17 and 120 have minimum setbacks from the right-of-way of 50 feet, buffers of existing vegetation of a minimum of 20 feet are maintained, and access is limited to one per commercial use and two per any subdivision.
 - f. Standards should be established to ensure environmentally safe commercial/industrial development and such development is compatible with Roxbury's character including advertising features.
 - g. Standards should establish a shoreland district a minimum of 500 feet back from the normal high water line of Roxbury Pond.
 - h. Standards should include seasonal conversion requirements including adequacy of subsurface sewage disposal systems, access and off-street parking.

Responsibility: Ordinance Committee/Planning Board
Time Frame: 24 months from Plan Adoption
Estimated Cost: N.A.

PLANNING ISSUE: Municipal Services

State goal relating to planning Issue:

- To plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.

Town Goal:

- The Town recognizes the importance of basic services such as fire protection, police protection, emergency medical services and civil defense. It is the goal of the Town to maintain and Improve these services in such a manner that will not overburden the Town’s resources.

Policies:

- It is a policy of the Town to prepare and maintain emergency plans for hazardous material spills, floods and forest fires, among others.
- It is a policy of the Town to require new roads proposed for public acceptance to meet construction standards that will minimize needed municipal expenditures for their maintenance.
- It is a policy of the Town to maintain and upgrade, as necessary, the Town beaches.
- It is a policy of the Town to investigate a location for a site for the temporary placement of white goods and bulky wastes.
- It is a policy of the Town to upgrade existing town ways.

Implementation Strategies:

1. The selectmen, fire chief and civil emergency preparedness director should prepare and update emergency plans for the community.

Responsibility: Selectmen, Fire Chief, Civil Emergency Preparedness Director
Time Frame: January 1994 and ongoing
Estimated Cost: N.A.

2. The Land Development Ordinance should include Road Construction Standards for streets to be accepted as public ways.

Responsibility: Planning Board
Time Frame: 24 months for Plan Adoption
Estimated Cost: N.A.

3. The selectmen should develop a town beach maintenance and development plan which includes annual operating expenses and capital improvements. When defined, capital improvements should be included in the Capital Improvement Program.

Responsibility: Selectmen
Time Frame: January 1994 and ongoing
Estimated Cost: N.A.

4. The selectmen should discuss with the Town's solid waste contractor the feasibility of him developing a temporary holding area for white goods and bulk wastes in Roxbury. The purpose of such a facility is to reduce the disposal of such Items on private property.

Responsibility: Selectmen
Time Frame: 6 months from Plan adoption
Estimated Cost: Unknown

5. The Selectmen should arrange with the Town's solid waste contractor pick-up of trash on Mondays at Roxbury Pond.

Responsibility: Selectmen
Time Frame: Summer, 1993
Estimated Cost: Unknown

PURPOSE AND IMPLEMENTATION OF FUTURE LAND USE PLAN

Purpose

The purpose of the Future Land Use Plan and Map is to plot the future development characteristics of Roxbury. The narrative of the Future Land Use Plan identifies three development categories where various land uses should occur. The development categories have been based upon a desire to direct future development to environmentally appropriate areas, to areas where adequate municipal services are available, and to maintain the Town's current character.

The Future Land Use Map visually depicts the four development categories. It is the purpose of the Future Land Use Map to indicate the general locations of desired future development characteristics. The map was developed utilizing various information obtained during the development of the comprehensive plan, including environmentally sensitive areas, soil characteristics and current development patterns. It was developed without consideration of individual property lines or ownership and thus, should be viewed as a visualization of how the comprehensive plan recommends the Town develop in the years ahead.

Implementation

The Future Land Use Plan and Future Land Use Map can only be implemented through the development and adoption of a Land Development Ordinance. The drafters of the Land Development Ordinance must base the ordinance and accompanying zoning map on the Future Land Use Plan and Future Land Use Map. The Future Land Use Plan will provide basic direction to the drafters of the ordinance in relation to the purposes and dimensional requirements of the various development districts. The Future Land Use Map will also serve as a basis for the development of any zoning map which will define the various development districts. Unlike the Future Land Use Map, a zoning map will utilize property lines, setbacks from roads or other definable landmarks or features to allow the districts to be defined on the earth's surface. Any final zoning map will likely be somewhat different from the Future Land Use Map to account for specific district boundaries. It cannot, however, deviate substantially because it would be inconsistent with the comprehensive plan. During the development of the ordinance and map, the public would be given ample opportunity, through public meetings and hearings, for input.

FUTURE LAND USE PLAN

Roxbury's Future Land Use Plan

A major purpose of the comprehensive plan is to establish a guide for ongoing development of the community. The plan establishes the foundation for land use decisions, defines growth and rural areas within the community, and adds in the definition of future capital Improvement needs. It is, therefore, important that the plan sets forth a realistic development guide so that the community can prosper and at the same time maintain valued characteristics.

The Future Land Use Plan identifies desired future development patterns and characteristics. The Future Land Use Map synthesizes the statement of policies presented in the comprehensive plan. It must be realized that as demands dictate, the Future Land Use Plan and Map will require revisions. Principles which guided the development of the Future Land Use Plan included the following:

1. The type and density of development should be compatible with the natural/environmental constraints of the land to absorb future development. Maintenance and protection of surface and ground water, the soils capacity for subsurface sewage disposal, the slope of land and the presence of unique natural areas were key factors in plan development.
2. The desire to encourage the maintenance of commercial forest land.
3. The desire to manage development so that Roxbury's valued characteristics including forest land, surface waters, scenic views, natural resources and open space are maintained.
4. The desire to upgrade Roxbury (Ellis) Pond's water quality,
5. The desire to provide for suitable locations for appropriate commercial activities.
6. The desire to maintain residential areas values.
7. The desire to manage seasonal development so that Roxbury's character is maintained and unreasonable burdens are not placed on municipal services.
8. The desire to maintain important wildlife areas and travel corridors.
9. The desire to maintain the high quality of Roxbury's own natural resources and those it shares.
10. The desire that the type and location of development be compatible with municipal services including the transportation system.

11. The desire to discourage random, uncontrolled development adjacent to Routes 17 and 120.

The comprehensive plan has made various projections and predictions relating to growth and development to the year 2003. Year-round population has been targeted to reach approximately, 510 by 2003. In addition, it has been expected that some 30 new year-round dwellings will be needed to house the 2003 year-round population. Seasonal residential development is expected to increase somewhat less than year-round development.

The Future Land Use Plan and Map has identified general areas of appropriate location and size to accommodate predicted growth and development. The Future Land Use Plan has not attempted to identify precise land areas heeded to accommodate predicted growth and development. Although uninformed individuals may attempt to estimate a land area required for predicted residential development by simply multiplying the number of new housing units by one acre - this results in erroneous Information. Only detailed site specific analysis can determine land suitable for development and at what densities. Current wetland regulations can significantly alter densities and developability of individual sites. In addition, the comprehensive plan has not assessed the individual landowner's desires to sell his or her land for development, to develop it himself or to leave it undeveloped.

With these unknowns considered, the Future Land Use Plan has identified areas of realistic size to accommodate predicted growth and development.

1. Special Protection Areas (Rural)

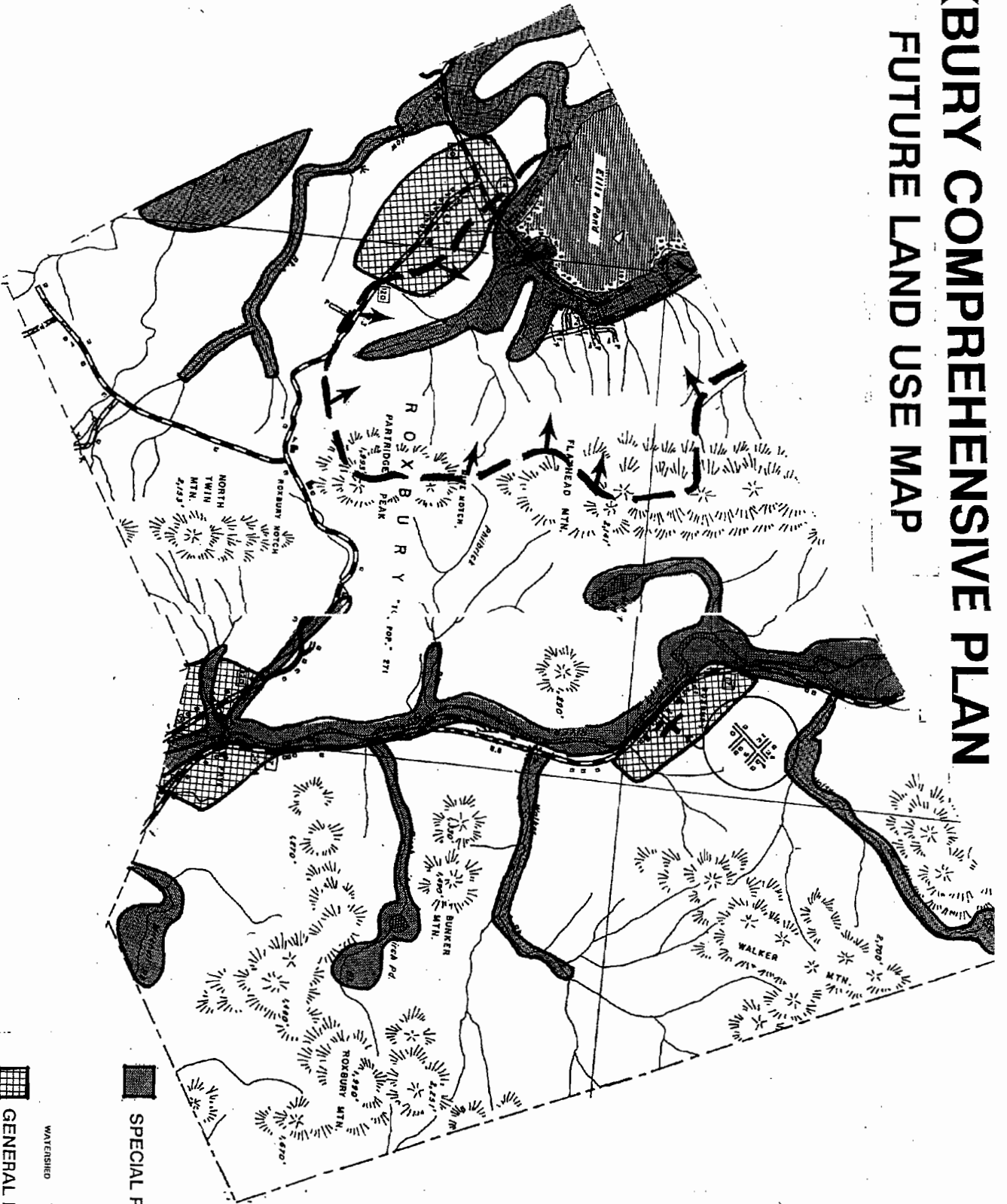
Certain areas within Roxbury warrant special consideration due to their likelihood of degradation as the result of various land use activities. Land use activities within these areas require stricter regulation than in other areas or in some circumstances prohibition. These areas include:

- a. Floodplains

1. The land area within 250 feet of the normal high water mark of the Ellis and Swift Rivers that are also In the 100 year floodplain should be placed in a resource protection district which prohibits structural development. The exception to a resource protection district is those areas where concentrations of development exist. In these areas, the Floodplain Management Ordinance should be strictly enforced.
2. The land area in all other 100 year floodplains should be regulated as required by the Floodplain Management Ordinance.

- b. Wetlands: Wetlands as mapped by the Maine Geological Survey and the areas within 250 feet of their upland edge that are identified as having high and moderate wildlife values should be designated as resource protection areas that

ROXBURY COMPREHENSIVE PLAN FUTURE LAND USE MAP



SPECIAL PROTECTION DISTRICT

WATERSHED

1-3-79



GENERAL PURPOSE

W/0001 ANTI/RECREATIONAL /0111R

prohibit structure development. Areas within 250' of the upland edge of other wetlands not rated or rated as low wildlife value should be zoned shoreland limited residential.

- c. Significant ground water supply areas/sand and gravel aquifers: These areas, because of the potential for degradation and/or contamination, require new non-residential development or redevelopment to take safeguards to minimize the potential of degradation. Ordinances will contain performance standards that protect these water resources through the use of Best Management Practices,
- d. Shoreland areas: The land area adjacent to ponds, rivers and streams as defined by the Mandatory Shoreland Zoning is critical to the well being of the water body. In addition these areas contain important wildlife habitat and serve a wildlife travel corridors.

Those areas within 250 feet from the normal high water line of the Swift River not designated Resource Protection or General Purpose should be limited to residential and low Intensity uses, including home occupations. Densities should not be less than one dwelling unit per 80,000 sq ft with road and shore frontage a minimum of 200 feet.

The area within 250 feet from the normal high water line of Birch, Bunker and Muskat Ponds should be placed in a Resource Protection District which prohibits structural development.

A Shoreland District of a minimum of 500 feet from the normal high line of Roxbury (Ellis) Pond should be created. Lot sizes for new lots should be a minimum of 40,000 sq. ft. with 200 feet of shore frontage for lots that abut the pond and 200 feet of frontage on public or private streets. Standards should also require a Seasonal Conversion Permit when seasonal dwellings are converted to year-round within the entire district,

- e. Steep slopes: Areas of two or more contiguous acres with sustained slopes of 20% or greater that fell within the jurisdiction of the Mandatory Shoreland Zoning Act should be placed In resource protection which prohibits structure development. In other areas, development. standards should require strict erosion and sedimentation measures and provide for safe traffic movement.
- f. Roxbury (Ellis) Pond Watershed: It is the purpose of the Roxbury Pond Watershed Protection District to manage activities within the Watershed to minimize additional water quality degradation. Development and redevelopment should be required to meet phosphorus export standards as established in the comprehensive plan. In addition, prior to road construction for timber harvesting and/or limber harvesting, standards should require town notification of the proposed activity. After notification the Code Enforcement Officer should conduct Inspections to assure Best Management Practices, as developed by the Bureau of Forestry, are followed.

2. Woodland/Recreational/Rural District: The purpose of this district is to encourage commercial forestry, agriculture and maintain current town character while allowing low density development, Residential, forestry and agricultural uses should be permitted. Residential lot standards for lots not part of a subdivision as defined in Title 30-A M.R.S.A. Section 4401 should be a minimum of 80,000 sq. ft. with a minimum of 200 feet street frontage. When, subdivisions occur, an overall density should not exceed one dwelling unit per 10 acres with the area to be built upon or developed (those areas where buildings, driveways, lawns and; clearing will occur) not to exceed 40,000 sq. ft, The remaining land, if leased, should be managed by the lessee. When the land will be owned, the landowners should form a landowners association to manage the land. Management objectives should relate to forestry or agriculture. Home occupation are permissible. New residential development adjacent to Routes 17 and 120 should have a minimum set back of 50 feet from the right-of-way and maintain a buffer of existing vegetation of a minimum of 20 feet.

Commercial uses associated with rural locations including but not limited to forestry/construction equipment sales and service; recreational uses, products, sales and services; forestry and agricultural products; sawmills; and neighborhood stores are permissible after Site Plan Review. Where commercial development and wood landings or yards occur along Routes 17 and 120, performance standards should require that minimum set backs Including parking are 50-feet from the rights-of-way, a maximum of one curbcut and landscaping or retention of natural vegetation. Lot sizes for commercial uses should be a minimum of 80,000. sq. ft. with a maximum lot coverage of structures and parking not to exceed 50%.

3. General Purpose District

The purpose of this district is to provide locations for a greater density and mixture of land uses. Residential, commercial, services and public uses are appropriate in this district. Performance standards should be enacted to safeguard the natural environment and provide separation between potential non-compatible land uses. Mobile home parks should be limited to this district.

Residential densities should not be less than one dwelling per 40,000 sq. ft, with road frontage of 200 feet. Set backs should not be less than 25 feet. Multi-family development densities should comply with the standards set forth in the Maine Subsurface Disposal Rules.

Commercial and other uses should have a minimum lot size of 40,000 sq. ft. with a maximum coverage of 60 percent.

CAPITAL INVESTMENT PLAN

Introduction

Roxbury's capital needs are few due to the limited municipal services the town provides. Although the Capital Investment Plan identifies few needs, their implementation could have significant effect on property tax rates.

Capital Investments as used in the Capital Investment Plan refer to expenditures greater than \$5,000, that do not recur annually, have a useful life of greater than three years and result in fixed assets. They may include new or expanded physical facilities, rehabilitation or replacement of existing facilities, major pieces of equipment which are expensive and have a relatively long period of usefulness, the cost of engineering or architectural studies and services, and the acquisition of land for community facilities.

Capital Investments or Improvements usually require the expenditure of public funds: town, state, federal or some combination thereof. Funding limitations will make it impossible to pay for or implement all needed major public Improvements at any one time or even over a multi-year period. The formal Capital Improvement Program called for within the Comprehensive Plan will be the process whereby the needs identified here will be formalized and specific priorities and implementation periods targeted.

Listed below are the significant capital investments identified during the comprehensive planning program that are expected over the next ten years. Individual items represent necessary equipment replacement upgrading, facility improvements and investments necessitated by projected growth. In addition the various identified improvements have been assigned a high, medium or low priority which relates to the urgency to implement.

**Identified Capital Investments Needs
1993-2003**

Item	Year	Priority	Estimated Cost	Probable Funding Source(s)
(1) Salt/sand shed	1994	High	\$25,500	(G)(P)
(2) Replacement of culvert at inlet of Roxbury Pond	1993	High	\$15,500	(P)(G)
(3) Road improvements	1994-96	Medium	\$121,440	(G)(P)(B)
(4) Purchase of river access	1994-2000	Medium	Unknown	(P)(RF)(D)

Pay-as-you-go - P	User Fees - OF
Bonding - B	Reserve Fund - RF
Low Interest Loans - LL	Donations - D
Time Phased - TP	Grants – G

Capital Improvements Financing

Capital Improvements, as they are prioritized and scheduled for implementation through Roxbury’s multi-year Capital Improvement Program, require a funding source or means of financing. A variety of techniques for financing capital improvements exist and are outlined here. State laws usually govern which techniques are authorized and how they are to be carried out.

Current Revenues (Pay-As-You-Go)

The most fundamental and simplest means of paying for capital improvements is on a pay-as-you-go basis; funding capital Improvements from current revenues.

Bonding

Borrowing against future taxes (general obligation bonds) or future service charges or fees (revenue bonds) to finance long-term public improvements is widely practiced and makes good sense from the standpoint of “paying-as-you-use”.

Reserve Fund

A reserve fund is analogous to a family savings account for a future big ticket purchase (car, appliance, etc.), Reserve funds are often used to replace equipment with a known service life whose cost and date of replacement are fairly accurately known and can be planned for.

Time Phased Projects

Some, very large scale projects can be broken up into time phased increments and thus paid for over a period of several years through annual bonding or pay-as-you-go arrangements. This, again, avoids sudden tax increases.

Grants and Cost Sharing

A number of state and federal grant-in-aid programs exist to share the cost of certain categorical public improvements. Full advantage should be taken of these cost-sharing programs to maximize the benefits to the community, recapture an equitable share of locally generated taxes and secure vitally needed public improvements.

Low Interest Loans

In some cases, the federal and state governments have developed special low interest loan programs to support certain categories of public improvements.

Capital Investment Plan Implementation

To implement the Capital Investment Plan, the Town of Roxbury should develop a formal Capital Improvements Program (CIP).

The CIP provides a mechanism for estimating capital requirements; scheduling all projects over a fixed period with appropriate planning and implementation; budgeting high priority projects and developing a project revenue policy for proposed improvements; coordinating the activities of various departments in meeting project schedules; monitoring and evaluating the progress of capital projects; and informing the public of projected capital improvements.

In its most basic form, the CIP is no more than a schedule listing capital improvements, in order of priority, together with cost estimates and the proposed method of financing them.

Each year the CIP should be reviewed and updated to reflect changing community priorities, unexpected emergencies or events, unique opportunities, cost changes or alternate financing strategies. The CIP is comprised of three elements:

- a. inventory and maintenance plan;
- b. capital improvements budget (first year); and
- c. long-term CIP (5 years)

Policy

- It is a policy of the Town of Roxbury to develop a multi-year Capital Investment Program by January, 1995.

Implementation Strategy

1. The Selectmen should develop a Capital Improvement Program with input from the Planning Board.

Responsibility: Selectmen
Time Frame: January, 1995
Estimated Cost of Strategy: \$1,500
(from Implementation grant funds)

REGIONAL COORDINATION PROGRAM

Roxbury shares several significant natural resources with adjacent organized and unorganized townships. It is recognized that to maintain resource values, joint action and coordination is necessary. In addition to natural resources, other concerns such as transportation and code enforcement may have Interlocal approaches.

Based upon the results of the inventory and analysis element and the various policies contained in this plan, the following interlocal issues are considered in Roxbury's Regional Coordination Program.

Transportation Routes 17 and 120: Route 17 is a major travel corridor north to the Rangeley area and is designated as a Scenic Highway Route 120 provides access to the Andover and Richardson Lakes Region. Both are in need of improvements.

Forest Resources: The forest resources of the region are a major economic factor in the region's economy. The paper and lumber industries own and manage a significant amount of forest land in Roxbury and in adjacent towns and townships. Not only do the forest resources provide direct and indirect employment, they provide recreation opportunities, wildlife habitat and protection of the water resources of the region. Continued management of this resource as commercial woodland is unimportant.

Water Resources: Roxbury shares Roxbury (Ellis) Pond with the Town of Byron and approximately 80% of its watershed is located in Byron. To improve water quality of the pond, joint efforts are necessary. The Ellis and Swift Rivers are important natural resources. Joint efforts with other municipalities and the Land Use Regulation Commission are necessary to maintain these values.

Code Enforcement: Roxbury and adjacent towns will be required to have certified code enforcement officers by 1993. The Towns of Andover, Byron and Roxbury should assess the advantages of sharing a single certified code enforcement officer.

Conclusion

Roxbury recognizes the value and need to coordinate with adjacent and nonadjacent communities to provide adequate protection of significant shared resources and to address other common concerns. Therefore, the following policies are presented.

- It is a policy of the Town to encourage the Maine Department of Transportation to upgrade Routes 17 and 120.

- It is a policy of the Town to encourage the continued management of the region's forest resources as commercial forest land.
- It is a policy of the Town to maintain water resources shared with other towns and townships.
- It is a policy of the Town to consider a shared code enforcement program.

Implementation Strategies

1. The Selectmen, along with the Selectmen from other communities served by Routes 17 and 120, should participate In the Regional Transportation Advisory Committees to be established by the Sensible Transportation Act and encourage Route 17 and 120 Improvements.

Responsibility: Selectmen
 Time Frame: Ongoing
 Estimated Cost: N.A.

2. The Planning Board should encourage annual "State of the Region's Forest" meetings with adjacent towns, Planning Boards, Land Use Regulation Commission the Northern Forestlands Study and forest landowners. The purpose of the meetings should be to review regional forest issues and identify actions towns may undertake to maintain and encourage commercial forestry.

Responsibility: Planning Board
 Time Frame: N.A.
 Estimated Cost: August 1992/annually

3. The Planning Board and the Silver Lake Preservation Committee should discuss with the Town of Byron watershed management options for Roxbury Pond, necessary corrective measure and ordinance provisions.

Planning Board & Preservation Committee
 Time Frame: Summer of 1993 and ongoing
 Estimated Cost: N.A.

4. The Planning Board should review the municipal comprehensive plans and the Land Use Regulation Commission Zoning as they are In relation to the Ellis and Swift Rivers and offer comments to assure the rivers' conservation.

Responsibility:
 Time Frame:
 Estimated Cost:

5. The Selectmen should assess the advantages and costs associated with the Towns of Andover, Byron, and Roxbury sharing a certified Code Enforcement Officer.

Responsibility:	Selectmen
Time Frame:	N.A.
Estimated Cost:	Summer, 1993

