

SOUTHWEST HARBOR COMPREHENSIVE PLAN 1996
Final Draft



Vol. 2 The Inventory

(Vol. 1 contains Issues, Policies & Implementation;
Future Land Use Plan; Capital Investment Plan;
and maps relating to all parts.)

2000 census site

<http://www.census.gov/mrm/www/cen2000.html>

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<http://www.hepcmc.org/>

VOLUME TWO - INVENTORY

http://www.southwestharbor.homestead.com/files/pdf/2000_censusinfo.pdf

TABLE OF CONTENTS

	<u>PAGE</u>
LIST OF TABLES	i
CHAPTERS	
<i>Jean Marshall</i> I. POPULATION AND DEMOGRAPHICS	1
<i>KRH</i> II. THE ECONOMY	13
<i>KRH</i> III. MARINE RESOURCES	29
<i>Cris Rauls</i> IV. EXISTING LAND USE	43
<i>BB?</i> V. HOUSING	55
<i>S.H?</i> VI. PUBLIC FACILITIES AND SERVICES	71
<i>Jean Marshall</i> VII. TRANSPORTATION	93
<i>Katie Falte</i> VIII. RECREATION AND OPEN SPACE	105
<i>LW</i> IX. NATURAL RESOURCES	113
X. AGRICULTURAL AND FOREST RESOURCES	127
<i>Katie Falte</i> XI. HISTORIC AND ARCHAEOLOGICAL RESOURCES	131
<i>KRH</i> XII. WATER, SOIL, AND TOPOGRAPHIC RESOURCES	137
<i>O.C</i> XIII. FISCAL PERFORMANCE AND FUTURE CAPACITY	145
APPENDICES	159
A. OPINION SURVEY, November, 1994	
B. RESULTS OF THE OPINION SURVEY	
C. COMPREHENSIVE PLAN NEWS, Volume 1 Issue 1, February, 1995	
D. COMPREHENSIVE PLAN NEWS, Volume 1 Issue 2, September, 1995	
E. COMPREHENSIVE PLAN NEWS, Volume 1 Issue 3, April 1996	

LIST OF TABLES

<u>CHAPTER I. POPULATION AND DEMOGRAPHICS</u>	<u>PAGE</u>
Table I. Southwest Harbor Growth	3
Table II. Southwest Harbor and Mount Desert Island Population	3
Table III. Southwest Harbor and County Population	3
Table IV. Southwest Harbor Population Change by Decade	4
Table V. Southwest Harbor's Births, Deaths, and Net Migration	4
Table VI. Southwest Harbor's Birth and Death Rates	4
Table VII. Comparison of Household Size Locally and Regionally	5
Table VIII. Increase in Number of Households in Southwest Harbor	5
Table IX. Educational Attainment of the Southwest Harbor Population (25 years and over)	6
Table X. A Comparison of Educational Attainment in Southwest Harbor, the County and State in 1990	6
Table XI. Southwest Harbor's Population Distribution by Age	7
Table XII. Hancock County's Population Distribution by Age	7
Table XIII. Pemetic Elementary School Enrollment	8
Table XIV. Projected School Enrollment	9
Table XV. A Comparative Income Status for Southwest Harbor - 1990	9
Table XVI. A Comparison of Regional Migration in the Last 5 Years	10
Table XVII. Hancock County Population Forecast	11
Table XVIII. Southwest Harbor Population Forecast	11
Table XIX. Hancock County Forecast of Household Size	12
Table XX. Southwest Harbor Forecast Number of Households	12
<u>CHAPTER II. THE ECONOMY</u>	
Table I. A Comparison of the Characteristics of the Southwest Harbor Labor Force with the Hancock County Labor Force	16
Table II. Class of Worker: Employed Civilians Over 15 Years of Age	17
Table III. Employment by Sector: Employed Civilians Over 15 Years of Age	18
Table IV. Occupation: Employed Civilians Over 15 years of Age	19

Table V.	Comparison of Occupations on Mt. Desert Island	19
Table VI.	1994 Labor Force Statistics in Southwest Harbor	20
Table VII.	Employment Trends: Southwest Harbor and Hancock County	21
Table VIII.	Rate of Unemployment on Mt. Desert Island, 1990 - 1995	21
Table IX.	Number of Persons Employed by Industry, 1994	22
Table X.	Median Incomes by Island Towns	23
Table XI.	Average Weekly Wage	23
Table XII.	List of Employers in Southwest Harbor	25

CHAPTER III. MARINE RESOURCES

Table I.	Fish Landings - 1995 Season	33
Table II.	Marine-Related Employees	34

CHAPTER IV. EXISTING LAND USE

Table I.	Land Area for Towns on Mt. Desert Island	43
Table II.	Existing Land Use in SWH, 1995, by Acres and Percentage	45
Table III.	Characteristics of Existing Zoning, 1996	46
Table IV.	Analysis of Undeveloped Land in SWH - 1996	53

CHAPTER V. HOUSING

Table I.	Change in Total, Seasonal, and Year Round Dwelling Units in Southwest Harbor and the County, 1970 - 1990	57
Table II.	Change in Total, Seasonal, and Year-Round Dwelling Units on Mount Desert Island, 1970 - 1990	58
Table III.	Comparison of the Tenure of Year-Round Housing on Mt. Desert Island and the County, 1980 and 1990	59
Table IV.	Comparison of Rent for Year-Round Renter-Occupied Units in Southwest Harbor and Hancock County, 1990	59
Table V.	Median Rent, Locally and Regionally, 1990	60
Table VI.	Comparison of Dwelling Unit Types in Southwest Harbor and Hancock County, 1980 - 1990	61
Table VII.	Housing Lacking Complete Plumbing for Exclusive Use Locally and Regionally, 1980 and 1990	63
Table VIII.	Comparison of Overcrowding in Housing (Units With More Than 1.01 Persons Per Room), 1980 and 1990	63
Table IX.	Southwest Harbor Dwelling Unit Forecast	69

CHAPTER VI. PUBLIC FACILITIES AND SERVICES

No Tables

CHAPTER VII. TRANSPORTATION

Table I.	Town Roads - Width and Length as Accepted by Town	96
Table II.	State Roads - Width and Length	96
Table III.	Summary of Repair Strategies for Paved Roads	97
Table IV.	Paved Roads - Distance/Strategy	97
Table V.	Annual Average Daily Traffic for 1988, 1991, 1993, & 1994	98

CHAPTER VIII. RECREATION AND OPEN SPACE

No Tables

CHAPTER IX. NATURAL RESOURCES

	Land Protected from Development by Conservation Easement or National Ownership	125
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CHAPTER X. AGRICULTURAL AND FOREST RESOURCES

No Tables

CHAPTER XI. HISTORIC AND ARCHAEOLOGICAL RESOURCES

No Tables

CHAPTER XII. WATER, SOIL, AND TOPOGRAPHIC RESOURCES

No Tables

CHAPTER XIII. FISCAL PERFORMANCE AND FUTURE CAPACITY

Table I.	Current Revenues (General Fund plus Special Reserve Funds)	148
Table II.	Expenditures	149
Table III.	Combined Revenues and Expenditures	149
Table IV.	Mill Rate History	152
Table V.	April 1, 1996 Assessed Valuations of 6 Properties	154
Table VI.	Tax Base Analysis, 1995	154
Table VII.	State Equalized Valuation and Town Valuation	155
Table VIII.	Southwest Harbor's Financial Obligations, 6/30/96	156

CHAPTER I. POPULATION AND DEMOGRAPHICS

ISSUES 22, 23, 24, 25

STATE GOAL: No state goal specifically addresses population. But all other goals depend on an understanding of population and demographic data for the municipality and its region.

1. Introduction

Southwest Harbor separated from Tremont in 1905 and had at that time about 900 inhabitants. Today the year-round population numbers over 1900, an increase of 120% in 90 years. The difficulty of finding employment and earning enough to support a family has resulted in a lot of population movement: there has been constant in- and out-migration of wage-earners. In recent years the Town also had significant in-migration of retired people. Most recently, population growth has been derived primarily from the excess of births over deaths. All of these people, young and old, form the basis of the Town - what it is, how it works, and what it is likely to do.

This chapter will describe the size and characteristics of the population that has lived here and that lives here now, both in the Town and in the region. In addition it will estimate the likely growth in population over the next ten years as a basis for the Comprehensive Plan.

This estimate will be used to determine the need, if any, for new economic development, new housing, schools, public services and roads. It will also be used to consider what impact the projected growth may have on the natural resources.

The chapter has a linkage with all other inventories within this report.

2. Key Findings

During the last 90 years, SWH has grown by 120%, while Tremont and Mt. Desert have increased by only 20% and the population of Bar Harbor has remained the same. These facts are probably attributable to the growing public appreciation of the quality of the physical environment and lifestyle available in SWH. The challenge is to maintain this quality.

Between 1960 and 1980, 80% of the population increase was due to migration. During the 1980's, migration in and out equalized and the continuing increase in population was due to the birth rate.

SWH has followed the national pattern of a decreasing family size; this is the result of fewer children per family, later marriages, an increase in single-parent families and longer life spans. During the 1980's SWH's population increased by 96 persons, but the number of households increased by 106. These figures indicate that SWH has had a rapid decrease in household size (from almost 3.0 at the time of the 1970 Census to 2.3 at the time of the 1990 census), and that the number of new dwellings in the Town has increased more rapidly than the population.

The 1990 Census showed increases in numbers of the very young and of the elderly. The former appears due to the relative large group of people born in the 1950's having children of their own, and the latter to an increase in longevity.

Pemetic Elementary School enrollment has been increasing since 1983, but the 1994/1995 figure was almost 40 students less than it was at its peak in 1974. However, changes in education (computer technology, smaller classrooms, special education) require greater expenditure per pupil.

The movement of people into and out of town is a much more striking characteristic than the simple increase in numbers. The 1990 Census found that over 40% had not been living in the same house for more than 5 years, but the net migration into town had been insignificant over the previous 10-year period. Therefore there must have an equal movement out of town.

During the summer months the population is nearly double the year-round figure: the additional 2000 people are made up of seasonal residents, seasonal hotel, motel, b&b clients, campers, and boaters. This obviously has a big impact upon Town services.

During the next ten years, the period covered by this Comprehensive Plan, the population is estimated to increase to just over 2,000 persons. This means only 34 to 54 additional households. However, this small growth is not a good indicator of demand for new houses. Past experience suggests that over 300 inhabitants will be moving in and out of SWH during this period.

3. Population and Demographics Inventory

A. Historic Population

SWH separated from Tremont in 1905, and the next Census (1910) counted 888 persons in the new town. This was 11% of Mt. Desert Island's population and 2.5% of the County's. During the next 80 years, SWH more than doubled while the other towns grew much more slowly or not at all. As a result, SWH now has 20% of the Island's year-round population, and its share of the County population has almost doubled.

TABLE I. SOUTHWEST HARBOR GROWTH

1910	.....	888	persons
1920	.....	824	persons
1930	.....	888	persons
1940	.....	1260	persons
1950	.....	1534	persons
1960	.....	1480	persons
1970	.....	1657	persons
1980	.....	1855	persons
1990	.....	1952	persons
2000		1966	

TABLE II. SOUTHWEST HARBOR AND MOUNT DESERT ISLAND POPULATION

Year	SWHbr	Bar Harbor	Mt.Desert	Tremont	Total	%MDI
1910	888	4441	1569	1116	8014	11
1990	1952 (120%)	4443 (0%)	1899 (21%)	1324 (19%)	9618	20

TABLE III. SOUTHWEST HARBOR AND COUNTY POPULATION

Year	Southwest Harbor	Hancock County	%HC
1910	888	35,515	2.5
1950	1534	32,083	4.8
1990	1952	46,948	4.2
2000	1966	51,191	3.8

Sources: 1990 US Census; Hancock County Statistical Handbook, 1987; and Southwest Harbor Town Reports

B. Recent Population Movement

Since 1960, SWH's population has increased by 472 persons, or 32%, but there has been no discernable quantitative trend. The increase was about 12% during the '60's and again in the '70's, but from 1980 to 1990 it was only 5.2%. During this latest period, the State increase was almost double this, and the County increased by 12.4%.

Population growth depends on two factors - births exceeding deaths and migration in exceeding migration out. The Town has experienced a marked change in the relative importance of these factors over the last thirty years. In each of the previous two decades, 85% of the population increase resulted from net migration into Town. During the last decade, however, only 1% of the population increase was due to this.

TABLE IV. SOUTHWEST HARBOR POPULATION CHANGE BY DECADE

<u>Year</u>	<u>Population</u>	<u>Change</u>	<u>% Change</u>
1960	1480 persons		
		177	12.0%
1970	1657 persons		
		198	11.9%
1980	1855 persons		
		97	5.2%
1990	1952 persons		

TABLE V. SOUTHWEST HARBOR'S BIRTHS, DEATHS, AND NET MIGRATION

<u>Years</u>	<u>1960 - 1970</u>	<u>1970 - 1980</u>	<u>1980 - 1990</u>
Change:	+177	+198	+ 97
Natural Increase:			
Births	305	226	302
Deaths	<u>272</u>	<u>193</u>	<u>206</u>
	+ 26	+ 33	+ 96
Net Migration:	+151	+165	+ 1

TABLE VI. SOUTHWEST HARBOR'S BIRTH AND DEATH RATES

<u>Years</u>	<u>1960 - 1970</u>	<u>1970 - 1980</u>	<u>1980 - 1990</u>
Av. Birth Rate	30.5	22.6	30.2
Av. Death Rate	27.2	19.3	20.6

Sources: 1960 - 1990 US Census Reports

C. Households

The decrease in the size of households in SWH over the last thirty years reflects the pattern throughout the country - fewer children per family, later marriages, an increase in single parent families, and longer life. Interestingly, the household size in other towns on the Island has also decreased significantly over the years, while the County and State figures have remained somewhat higher. This suggests that the Island towns have a greater number of smaller households, probably composed of older residents and single parents.

During the 1980 - 1990 census period, SWH increased by 97 persons and by 106 households. This increase in households is relatively large in comparison to the population increase and appears to result from the splitting of existing households coupled with the decline in average household size.

TABLE VII. COMPARISON OF HOUSEHOLD SIZE LOCALLY AND REGIONALLY

<u>Census Year</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>
Southwest Harbor	2.97	2.48	2.28
Bar Harbor		2.40	2.28
Mt. Desert	2.80	2.52	2.27
Tremont	2.91	2.58	2.39
Hancock County	2.96	2.62	2.48
State			2.56

TABLE VIII. INCREASE IN NUMBER OF HOUSEHOLDS IN SOUTHWEST HARBOR

<u>Census Year</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>
Totals	551	740	846
Increase		189	106
Percentage increase		34%	14%

Sources: 1970, 1980, and 1990 US Census Data

D. Educational Attainment

The 1979 Comprehensive Plan expressed concern about the numbers of individuals who did not obtain a high school diploma. This number has declined significantly over the last twenty years from 39% to 13% of the population.

During this same period, the proportion of high school graduates and those who have obtained additional schooling beyond this level has increased from 59% to 87%. In fact, over 50% of those over 25 years of age now have completed formal education beyond a high school diploma. The number of "drop-outs" with less than 9 years of education has decreased steadily from 9% of the population in 1970 to only 3% in 1990.

A comparison with the 1990 census data for Hancock County and the State indicates that SWH's 25-year-and-over population is more highly educated at both ends of the scale.

**TABLE IX. EDUCATIONAL ATTAINMENT OF THE SOUTHWEST HARBOR POPULATION
(Persons 25 years and over)**

<u>Census Year</u> <u>>24 Years</u>	<u>8 years</u>	<u><High School</u> <u>Diploma</u>	<u>High School</u> <u>Graduate</u>	<u>>High School</u> <u>Diploma</u>
1990 1,330	49 (3%)	133 (10%)	475 (36%)	673 (51%)
1980 1,204	85 (7%)	183 (15%)	502 (42%)	434 (22%)
1970 900	86 (9%)	266 (30%)		548 (61%)*

*Not tabulated separately in 1970.

**TABLE X. A COMPARISON OF EDUCATIONAL ATTAINMENT IN SOUTHWEST
HARBOR, THE COUNTY AND STATE IN 1990
(Persons 25 years and over)**

<u>Population</u> <u>>24 Years</u>	<u>8 yrs</u>	<u><High School</u> <u>Diploma</u>	<u>High School</u> <u>Graduate</u>	<u>>High School</u> <u>Diploma</u>
SWH 1,330	3%	10%	36%	51%
County 31,475	6%	11%	38%	45%
State 795,613	9%	12%	37%	42%

Sources: 1970, 1980, and 1990 US Census

E. Age Distribution

The typical age distribution throughout the United States during the past thirty years shows that the percentage of school age children has declined steadily. The percentage of school age children in SWH was 25% in 1960, 20% and 19% in 1970 and 1980 respectively, and had decreased to 16% in 1990. The under-five-year-olds decreased in the '60's and '70's, but increased slightly during the '80's. Over all, this pattern suggests that the children of the '60's have become the parents of the '90's--thus the recent increase. During this same period, the figures for Hancock County are remarkably similar.

It is interesting to note the somewhat larger percentage of older people residing in Southwest Harbor compared with the County.

TABLE XI. SOUTHWEST HARBOR'S POPULATION DISTRIBUTION BY AGE

<u>Age</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<i>2000</i>
< 5	10%	8%	5%	7%	4.3
5-17	25%	20%	19%	16%	18.4
18-44	31%	34%	39%	39%	31.6
45-64	22%	22%	21%	20%	26.8
> 64	12%	16%	16%	17%	19.6
Population	1,480	1,657	1,855	1,952	1966

TABLE XII. HANCOCK COUNTY'S POPULATION DISTRIBUTION BY AGE

<u>Age</u>	<u>1960</u>	<u>1970</u>	<u>1980</u>	<u>1990</u>	<i>2000</i>
< 5	10%	8%	6%	7%	4.9
5-17	24%	24%	20%	17%	19.8
18-44	30%	32%	38%	41%	32.4
45-64	22%	22%	20%	20%	26.8
> 64	14%	14%	16%	15%	16.1

Sources: 1960, 1970, 1980, and 1990 US Census Data

F. School Enrollment

The Pemetic Elementary School has experienced an increased enrollment over the past several years. Interestingly this increase reflects the pattern of increase during the early '70's. The recent increase probably reflects the "baby boomers" of the '50's having their own children. However, the current enrollment is 54 students less than it was at its peak in the 1973/1974 school year. The latest enrollment figure suggests that the second peak has passed.

TABLE XIII. PEMETIC ELEMENTARY SCHOOL ENROLLMENT

Figures from the 1978 Comprehensive Plan		Figures from the Annual Town Reports	
69/70	280	78/79	254
70/71	264	79/80	242
71/72	286	80/81	223
72/73	303	81/82	211
73/74	318	82/83	194
74/75	316	83/84	201
75/76	286	84/85	213
76/77	295	85/86	214
77/78	279	86/87	218
		87/88	235
		88/89	224
		89/90	229
		90/91	237
		91/92	233
		92/93	249
		93/94	271
		94/95	281
		95/96	264

The School District has projected the anticipated populations for both the Elementary School Age and the High School for the next 10 years. The 6 - 14 age group is projected to slightly decrease over this period and the older grouping to increase, peak, and decrease - the latter figures reflecting the numbers in the upper grades of Pemetic Elementary at the present time (see Table XIV. on the next page).

Source: 1979 Southwest Harbor Comprehensive Plan and Town Reports

TABLE XIV. PROJECTED SCHOOL ENROLLMENT

Year	Elementary	High School
96/97	267	96
97/98	260	113
98/99	285	112
99/00	271	136
00/01	260	146
01/02	263	152
02/03	262	165
03/04	254	156
04/05	253	145
05/06	254	146

Source: Southwest Harbor School Department, 1995

G. Income

SWH and Tremont have much the same median household incomes, much lower than those for Bar Harbor and the Town of Mt. Desert. The figure is essentially the same as the County's and is significantly lower than the State's. This last may be explained, in part, by relatively low household size.

Per capita income in SWH is also significantly lower than in Bar Harbor or Mt Desert. Since "per capita income" is the total income divided by the population, this figure is a better indicator of money within a community than median household or median family income.

Overall, patterns of income in Southwest Harbor and Tremont more closely resemble the County's and State's than do the other Towns on the Island.

TABLE XV. A COMPARATIVE INCOME STATUS FOR SOUTHWEST HARBOR - 1990

	Population	Median Hsehold* Income	Median Family Income	Per Capita Income
Southwest	1,952	\$25,290	\$29,102	\$13,334
Bar Harbor	4,443	28,100	36,495	14,234
Mt. Desert	1,899	31,019	35,565	16,435
Tremont	1,324	26,012	29,034	12,297
Hancock County	46,948	25,247	29,939	12,347
Maine	1,227,928	27,854	32,422	12,957

*includes Family and Non-Family Households

Source: 1990 U.S. Census

US Pop. Below Poverty Level: 12.4%
Maine " " " " 10.9%

H. Migration

In 1990, almost 60% of the population over 4 years old (1200 persons) had lived in the same house for 5 years. It is reasonable to estimate that more than 700 persons moved into the Town over this 5-year period. Since the net migration was only 1 person during the previous 10 year period, just as many people must have been moving out of SWH as in. Even if some of this movement was simply changing house within SWH, the number of people moving is striking.

Comparatively, Tremont and Mt. Desert had more stable populations. SWH more closely reflected the population movement within the County and State, while Bar Harbor exhibited the most mobility.

TABLE XVI. A COMPARISON OF REGIONAL MIGRATION IN THE LAST 5 YEARS
(PERCENTAGE OF THOSE OVER 4 YEARS OF AGE WHO
HAVE LIVED IN THEIR HOUSE FOR LESS THAN 5 YEARS)

Southwest Harbor 42%

Bar Harbor 49%

Mt. Desert 39%

Tremont 33%

Hancock County 43%

Maine 44%

Source: 1990 US Census

I. Seasonal Population

1977 There are approximately 250 summer dwellings in Southwest Harbor. Assuming an average of ~~four persons per dwelling~~, there is an estimated increase of 1000 residents during the summer months.

1800 An MDI League of Towns Survey has estimated 271 beds within the motels, hotels and bed-and-breakfasts of the Town. The three private campgrounds have an estimated total of 150 campsites and the Seawall Campground in the National Park has 214 sites. Assuming an average occupancy of 3 persons per campsite, the camps would cater for an additional 1100 people. Boats in the Marina and others moored in the Harbor probably account for at least another 100 people.

SWH's year-round population of almost 2000 is augmented by another 1500 - 2000 people overnight on any one day during the summer. This does not include brief influxes such as during the Wooden Boat Show, the New York Yacht Club's annual cruise, or celebration of Southwest Harbor Days, etc.

2000?
1/10 Round
Summer 33884=
Transients
3000
1 Day Trippers

4. Projected Population

The forecast for the State of Maine is for a very small increase throughout the next 20 years. This low level of projected growth is the result of proposed military base closures and a projected slow-down in the economy which will provoke out-migration.

Since Hancock County is little affected by base closures, the State-wide forecast rate of increase has been modified upwards by the Hancock County Planning Commission.

The Southwest Harbor forecast accepts the forecast decline in household size. However, it will continue the trend of a larger percentage of older people in Southwest Harbor than in the County.

TABLE XVII. HANCOCK COUNTY POPULATION FORECAST

Year	1990	SLOW ECONOMY		MODERATE ECONOMY	
		1995	2015	1995	2015
Population	46,994	47,371	48,910	47,584	50,021
Increase from 1990		0.8%	4.1%	1.3%	6.4%

Source: Hancock County Planning Commission for the Regional Transportation Advisory Committee, October, 1994.

TABLE XVIII. SOUTHWEST HARBOR POPULATION FORECAST

	SLOW ECONOMY		MODERATE ECONOMY	
	1995	2005	1995	2005
Hancock County Population	47,370	48,150	47,580	48,800
% Increase		1.6%		2.6%
Southwest Harbor Population	1,970	2,000	1,970	2,020
% Increase		1.6%		2.6%

TABLE XIX. HANCOCK COUNTY FORECAST OF HOUSEHOLD SIZE

<u>Year</u>	<u>1990</u>	<u>1995</u>	<u>2015</u>
Average Household Size	2.48	2.41	2.27

TABLE XX. SOUTHWEST HARBOR FORECAST NUMBER OF HOUSEHOLDS

<u>Year</u>	<u>1990</u>	<u>1995</u>	<u>2005</u>
Average Household Size	2.28	2.25	2.20
Number of households	846	876	910 - 920

THE POPULATION PROJECTION FOR 1995 - 2005

The population forecast for the purposes of planning is within the range of 2,000 - 2,020 persons by the year 2005. This means a net increase of 30 - 50 persons and of 34 - 54 households.

It is important to remember that the amount of building activity within the Town during the next 10 years is not due to just this increase. It is estimated that 300 persons will move in and out of SWH during this period.

CHAPTER II. THE ECONOMY

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

1. Introduction

The economy of any community determines its growth or decline. SWH's population did not increase at all from its formation in 1905 to the 1930's. Between 1930 and 1940 the population increased by over 40%. This increase is a direct reflection of economic growth after the Depression. The war effort maintained this economic growth and SWH's population again increased. During the 1950's there was a decline in population, presumably related to the decline of the war economy, to reduced wealth among the summer residents, and to a very different life style from what was seen before the war. The 1960's saw the beginning of the economic boom, of the travelling summer tourist. Southwest Harbor has attracted increased numbers of tourists interested in ecology, the natural environment and physical exercise.

Over the last twenty years, the year-round population has barely increased. However, the number of summer visitors has risen year-by-year, so that now the summer population swells to roughly double the year-round. There is no count of daytime visitors, but certainly the economy is increasingly dependent on this seasonal influx. While some of the year-round population consists of fishermen, boat builders, contractors, and others who are not directly dependent on tourism, the economy as a whole is paced by the tourist trade. There seems to have been a slow increase also in year-round residents, (or nearly year-round), who have come to live in retirement or whose work is quite independent of local economic activity.

During the short period of SWH's history, town government has taken no role in shaping the economy except during the war years. Through development incentives (Tax-Increment Financing - TIF), the Town could try to promote economic development, but, after investigation, such measures did not seem suited to the particular circumstances of SWH. ^{its} Efforts ~~by~~ ^{to} ~~the Town~~ ^{to} manage its resources in order to broaden the base of the economy ^{to} should be tempered by concern that it could inadvertently damage ^{the} welfare of existing businesses or inhibit their growth. ^{avoid} ^{or inhibiting}

This chapter will review the economic characteristics of the labor force, occupations, and class and sectors of employment. Then recent trends within SWH will be analyzed. No community can exist by itself economically, so the regional economy will be analyzed and contrasted.

This inventory is linked to the inventories within the Chapters on Population, Marine Resources (marine employment), Transportation, and Housing.

2. Key Findings

In 1990, SWH's unemployment rate was 5.2%, lower than in the State or County. It was higher than in the other Towns on the Island as it had a much higher rate of female unemployment at the Census count. This latter may have been due to higher seasonal work for the female in SWH (crab picking, waitress, housekeeper, etc.).

SWH and the other Island Towns had a greater percentage of mothers working than did the County.

The largest group of workers was employed in the health, educational, and professional services with retail trade and manufacturing (boat building) coming next.

Employment estimates for 1994 demonstrate the seasonality of the jobs in the Town: in January there were over 200 workers unemployed, but in August there were only 21. On the other hand the numbers employed in August indicate that 400 more came to live in Southwest Harbor during that month.

Between 1990 and 1994 there was an increase in the unemployment rate, but the 1994 and 1995 figures show that the rate has begun to drop.

Southwest Harbor residents commute shorter distances than most townspeople on the Island.

The 1990 Census showed that the Town had the lowest median household income on the Island. The most recent Department of Labor figures show that it has the highest average weekly wage. This anomaly could be largely due to the smaller household size.

It is projected that the areas of economic growth in the County over the next ten years will be in services, retail and construction. The numbers of employed persons and the percentage of employed persons per household are projected to increase.

3. Inventory of The Economy

A. Labor Force

Table I, on page 16, shows the number of persons over 15 years of age in SWH who were in the labor force according to the 1990 Census sample count. The Census defines the labor force as including members of the Armed Forces and the civilian labor force. The civilian labor force had to be at work at the time of the Census count or at least have a job during the week preceding the count to be considered "employed". The Census considered those civilians who did not have a job at the time of the count, but in the process of looking for one and available to take one as "unemployed." Civilians who satisfied neither criteria were not considered part of the labor force. These latter probably were the elderly and others not able or willing to work. These numbers have been broken down into male/female components, as well as by females with children.

The potential labor force for the County has been listed for comparison. Broken down into the same components as SWH, it is represented by percentages for the most relevant comparison.

SWH had a higher percentage of its population over 15 years of age in the labor force than the County (67% compared with 62.7%). Its percentage of males in the labor force was far greater (80% compared with 72%), but the percentage of females was just slightly higher. This could be a reflection of the Coast Guard Station in SWH and the year-round employment in boat-building and boat-repair.

Unemployment Rate - The 1990 Census Rate of Unemployment in SWH of 5.2% was lower than both the Maine State Unemployment Rate of 6.6% and the Hancock County Rate of 6.1%. Interestingly, it was higher than the other Towns on the Island (they ranged from 4.1% to 4.7%). This could reflect the time of year of the Census count (winter), but it seems to be much more related to the female unemployment rate.

The breakdown between the sexes in the labor force showed that the male unemployment rate of 2.4% within Southwest was far lower than the County and the female rate was much higher - 8.6%. The other Towns on the Island ranged from 5.6% to 6.6%. This high female unemployment was probably due to the seasonal job supply - females in Southwest are employed as crab-pickers, shrimp peelers, waitresses, shop assistants, housekeepers, etc.

SWH
Island
Hancock Ct.
State
National

9/17/05
Unemployment Rate 5.9% (Aug.)
Min Wage \$6.35

The statistics show that SWH had a higher percentage of working mothers in the labor force than did Hancock County. As this was also true for the other Towns on the Island, it may be an indicator of the higher cost of living on the Island and therefore the necessity for two salaries, or it may just reflect the job opportunities here.

TABLE I. A COMPARISON OF THE CHARACTERISTICS OF THE SOUTHWEST HARBOR LABOR FORCE WITH THE HANCOCK COUNTY LABOR FORCE

	SOUTHWEST HARBOR	HANCOCK COUNTY
Persons over 15 years	<u>1,528</u>	<u>36,826</u>
IN LABOR FORCE	1,028 (67%)	23,099 (63%)
Civilian	980	22,369
Empl.	929 47.6	21,000 44.5
Unempl.	51 (5.2%)	1,369 (6%)
Armed Forces	48	730
NOT IN LABOR FORCE	500	13,727
<i>Mean Travel Time to Work</i>	<i>10.9'</i>	<i>22.4'</i>
Males over 15 years	<u>729</u>	
IN LABOR FORCE	586 (80%)	(72%)
Civilian	544	
Empl.	531	
Unempl.	13 (2%)	(6%)
Armed Forces	42	
NOT IN LABOR FORCE	143	
Females over 15 years	<u>799</u>	
IN LABOR FORCE	442 (55%)	(54%)
Civilian	436	
Empl.	398	
Unempl.	38 (9%)	(7%)
Armed Forces	6	
NOT IN LABOR FORCE	357	
Females over 15 years	<u>799</u>	
WITH OWN CHILDREN		
Under 6 years	135	
Percent in labor force	66%	61%
6 - 17 years	105	
Percent in labor force	87%	78%

Source: 1990 US Census

B. Class of Worker

The 1990 Census defined "class of worker" as either self-employed, some type of government worker, or on a wage or salary. The SWH pattern of "class of worker" was not very different from the pattern within the County - but note that the County was not a reflection of the State. The State of Maine had 75% of its employed persons over 16 in the private wage and salary sector compared with 67% in the County. It also had only 9% of its workers self-employed compared with 16% in the County. On the Island, Bar Harbor and Mt. Desert had 15% and 14% respectively of their workers self-employed, SWH had 17% and Tremont had over 25%. This points to the relatively high proportion of self-employment in these two Towns.

On the Island, Bar Harbor with 75% and Mt. Desert with 73% had a larger proportion of workers in the private wage and salary class than the 70% of SWH. SWH with the Coast Guard Station accounted for the highest percentage of Federal, State and Local Government workers on the Island.

**TABLE II. CLASS OF WORKER: EMPLOYED CIVILIANS OVER 15 YEARS OF AGE
Southwest Harbor, Hancock County, and Maine: 1990**

	Southwest Harbor		Hancock County		Maine		
	number	percent	number	percent	number	percent	
Private Wage & Salary	652	70%	14,604	10,283	67% 70	428,505	75%
Self Employed	153	17%	3,325	2,405	16% 16	52,602	9%
Federal, State & Local Govts	120	13%	2,998	2,639	17% 14	88,555	15%
Unpaid Family Member	4	0%	73	59	0% 0	2,180	0%
Total	929	100%	15,386	15,386	100%	571,842	100%

Source: U.S. Census, 1990

Should be 21,000.

C. Employment by Sector

The Census divides employment into economic sectors. The definitions of these sectors can be seen in Table III below. The percentages of the SWH employment sectors were similar to the County's except in transportation and utilities; and finance, insurance, and real estate. As would be expected given the profile of the Town, SWH had double the percentage involved in finance, insurance, and real estate with a corresponding 50% less in transportation and utilities. As in the County, the highest employment was in health, educational, professional and related services. The Town has an elementary school as well as two health clinics - more clinic facilities than any other Town on the Island.

	Southwest Harbor		Hancock County	
	number	percent	number	percent
Health, Educational, Professional and Related Services	212	23%	3,778	25%
Manufacturing (Boat Building in SWH)	151	16%	2,421	16%
Retail Trade	147	16%	2,617	17%
Construction	85	9%	1,468	10%
Fishing	75	8%	1,054	7%
Personal Services, Entertainment, Recreation	58	6%	1,061	7%
Finance, Insurance, and Real Estate	54	6%	466	3%
Public Administration	48	5%	806	5%
Wholesale Trade	39	4%	455	3%
Business and Repair Services	35	4%	524	3%
Transportation & Utilities	25	3%	762 883	5% 3.5
Total	929	100%	15,386	100%

Source: U.S. Census, 1990

D. Occupation

The data on occupations, which shows the actual type of job rather than the economic sector, revealed that SWH had a greater proportion of its labor force involved in executive, administrative, managerial, and professional jobs than the County. It also had half the County's percentage as machine operators and laborers. The total described in the farming, forestry, fishing occupation group were in fact the fishermen.

TABLE IV.
OCCUPATION: EMPLOYED CIVILIANS OVER 15 YEARS OF AGE
Southwest Harbor and Hancock County: 1990

OCCUPATION	Southwest Harbor		Hancock County	
	number	percent	number	percent
Managerial and Professional	246 254	26.7 27%	3,116 7,688	30.7 20%
Technicians, Sales, + Administrative Office	297 234	32.2 25%	3,627 5,781	23.1 24%
Precision Production	129 177	14. 19%	2,552 3,292	13.2 17%
Service Occupations	116 132	12.6 14%	2,414 3,274	12.1 16%
Fishing	38 72	4.1 8%	1,460 1,831	4.1 9%
Operators, Production + Transportation, Laborers Material Moving	97 60	10.5 7%	2,217 2,968	11.9 14%
Total	923 929	100%	15,386	100%
Source: U.S. Census, 1990			25,034	

Construction
Extraction
Maintenance } →

However, a comparison within the Island, revealed that Bar Harbor and Mt. Desert had a greater proportion of their employees in managerial and professional skills. As should be expected, the Fishing, Forestry, and Farming workers composed a greater proportion of the work force in Tremont, followed by SWH and Mt. Desert. Precision production, crafts, repair occupations, etc. were a greater proportion of the labor force in Tremont than the other towns. The proportions in service occupations were similar.

TABLE V. COMPARISON OF OCCUPATIONS ON MT. DESERT ISLAND

	Southwest	Bar Harbor	Mt. Desert	Tremont
Manager. & Prof	254 (27%)	697 (32%)	295 (31%)	132 (20%)
Tech, Sales, Adm	234 (25%)	647 (29%)	243 (26%)	137 (21%)
Precision	177 (19%)	263 (12%)	156 (16%)	157 (24%)
Service Occup	132 (14%)	323 (15%)	121 (13%)	92 (14%)
F, F, and F	72 (8%)	106 (5%)	72 (8%)	67 (10%)
Operator, Lab.	60 (7%)	165 (7%)	61 (6%)	76 (11%)
	929	2209	948	661

Source: 1990 Census

4. Recent Employment Trends

A. Employment and Unemployment

Employment/Unemployment estimates are prepared by the Division of Economic Analysis and Research in the Maine Department of Labor. These BMK LAUS Estimates are based upon the Census figures. The figures are tabulated on a monthly basis and from these an "average annual figure" is determined. The labor force is counted where it lives and includes the self-employed. The ten year count is updated every 2 years until the next count - aided by a count of insurance paid by the employees. The unemployed are also counted by the Census as those not at work nor with a job during the reference week. This number is updated every two years by reference to estimated census age grouping changes over the two year period and the number of unemployment insurance claims. A self-employed person who became unemployed would not be counted. The total labor force is the sum of these two figures, the employed and the unemployed. The unemployment rate is the relationship of the unemployed to the total force.

SWH showed the following pattern of employment and unemployment during 1994 (the latest year for which the Town has information).

TABLE VI. 1994 LABOR FORCE STATISTICS IN SOUTHWEST HARBOR

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
Labor Force	1054	1025	1025	1138	1175	1313	1421	1473	1281	1228	1154	1131	1202
Employment	838	834	853	1018	1120	1277	1395	1452	1258	1182	1038	1013	1107
Unemployment	216	191	172	120	55	36	26	21	23	46	116	118	95
Unempl. Rate	20.5	18.6	16.8	10.5	4.7	2.7	1.8	1.4	1.8	3.7	10.1	10.4	7.9

It is interesting to note that the unemployment figure for January was 216. By August the number had reduced to 21. But in August the employment figure had risen by more than 600. This suggests that whereas 200 of the winter unemployed could have been employed by August, at least 400 more workers had come to work and live in Southwest Harbor. This is a reflection of both the tourism aspect and the seasonal nature of a coastal town.

The unemployed figure was up again in December, but only to half the January high. As the average unemployment rate for the year is almost at the rate it was in 1992, an assumption may be made that employment opportunities seem to have recovered.

31 Labor Market Areas
 Ellsworth LMA; SWH 217

Employment figures for SWH residents are compared to those of Hancock County over the past several years in Table VII. on the next page. The unemployment rate in Southwest Harbor has reflected the increase in the County average. In fact, in 1993 the unemployment rate was even higher than the County's.

TABLE VII. EMPLOYMENT TRENDS: Southwest Harbor and Hancock County

	1991	1992	1993	1994	1995
<u>SOUTHWEST HARBOR</u>					
Labor Force	1,259	1,132	1,114	1,202	1,145
Employment	1,173	1,048	1,016	1,107	1,073
Unemployment	86	84	98	95	72
Unemp. Rate	6.83	7.4	8.8	7.9	6.3
<u>HANCOCK COUNTY</u>					
Labor Force	27,960	26,090	25,490	26,621	26,410
Employment	26,060	24,160	23,330	24,546	24,670
Unemployment	1,900	1,940	2,160	2,075	1,740
Unemp. Rate	6.8	7.4	8.5	7.8	6.6

Source: Maine Department of Labor, Bureau of Employment Security

Two of the other Towns on the Island have shown a similar pattern to SWH's with increasing unemployment through 1993 and a decrease after that time--Mount Desert and Tremont. Bar Harbor has fluctuated around 8.5% since 1991. In 1994, SWH and Tremont exhibited a more dramatic drop in the unemployment rate than the other two Towns, but in 1995 all four towns showed a sharp decrease.

TABLE VIII. RATE OF UNEMPLOYMENT ON MT. DESERT ISLAND, 1990-1995

Towns	1990	1991	1992	1993	1994	1995
SWH	5.25	6.83	7.4	9.7	7.9	6.3
Bar Harbor	6.34	8.23	7.5	8.7	8.3	6.8
Mt. Desert	3.44	5.40	6.3	9.4	8.7	7.0
Tremont	3.86	5.43	7.4	9.0	6.9	6.4

Source: Maine Department of Labor, Bureau of Employment Security

B. Employment by Industry

The Department of Labor also determines the numbers of persons engaged by industry. The 1994 numbers in Table IX. below document SWH's basic year-round industries of boat building, construction, retail and inns. They also show the 50% increase in the labor force of just those living in SWH during July and August.

TABLE IX. NUMBER OF PERSONS EMPLOYED BY INDUSTRY, 1994

Month	TOTAL	Boat Bldg	Retail	Hotel Camps	Constr	Trans	Banks Real Es.	Public Admin	Whole- Sale	Fis.
JAN	854	311	147	105	77	47	91	43	33	0
FEB	865	313	142	107	80	48	99	42	34	
MAR	889	327	142	109	81	45	111	41	33	
APR	862	315	159	128	89	44	45	43	31	8
MAY	1008	346	207	159	98	48	48	42	34	2
JUN	1124	349	256	193	104	56	47	51	42	26
JUL	1326	379	311	287	109	76	49	40	48	2
AUG	1301	369	316	272	107	77	48	41	45	26
SEP	1211	359	256	193	98	71	47	51	42	23
OCT	1062	350	219	191	105	53	47	37	40	2
NOV	968	351	185	138	104	47	46	42	38	17
DEC	967	343	191	149	106	52	47	36	38	

Source: Maine Department of Labor, Bureau of Employment Security

C. Commuting Patterns

According to the 1990 Census, the mean travel time to work for SWH residents was 13.3 minutes compared to 18 minutes for Hancock County and 11.2 minutes for Bar Harbor. SWH residents did less commuting to their jobs than most towns in Hancock County and the other two Towns on the Island - probably due to the number of year round employers.

Mt. Desert was 15.6 minutes and Tremont was 17.1. These figures seem to reflect the lack of year-round employers in these Towns.

An affordable housing survey was conducted by the Town in 1989 amongst SWH employers and a 25% return was obtained - a statistically significant return. At that time about 50% of employees actually lived in Southwest, 30% lived elsewhere on MDI (50% in Tremont and 20% in Bar Harbor) and the other 20% lived off the Island, mostly in Ellsworth. This survey further emphasizes the short commute time.

D. Household Income

The 1990 Census listed SWH with the lowest median household income on the Island, just slightly higher than the County median. The median family income was not much better. Bar Harbor and Mt. Desert are higher with Tremont only slightly lower in median family income.

TABLE X. MEDIAN INCOMES BY ISLAND TOWNS

Town	Median HH Income*	Median Fam Income*
Southwest Harbor	25,300	29,100
Bar Harbor	\$28,100	\$36,495
Mt. Desert	31,020	35,565
Tremont	26,000	29,035
Hancock County	\$25,250	\$29,940

ME

*The Census warns that these figures are based on a sample which is subject to sampling variability and that there are limitations to many of the data.

USA

but these people don't LIVE here!!

On the other hand, the Maine Department of Labor's most recent figures show that SWH has the highest average weekly wage of any town on the Island.

TABLE XI. AVERAGE WEEKLY WAGE

Town	Ave Weekly Wage	# of Firms	#s Employee
Southwest Harbor	\$382	129	947
Bar Harbor	356	361	3548
Tremont	336	40	240
Mt. Desert	334	174	828

2004
H.C.
ME
SWH

Hrly Av. Med.
15.05 12.61
15.83 12.98

E. Consumer Sales

A study was made of retail sales for the period 1981 - 1988. (Stellpflug & Deller report "The Economic Structure of Mount Desert Island, 1989). During that 8 year period, the total Mt. Desert Island sales increased by 80%, an average of 11% per year. Southwest increased by 38%, or 5% per year, and Bar Harbor by 90%, or 13%. During this same period, the State of Maine increased by 60% and Hancock County by only 31%. Thus Southwest's increase in retail sales was better than the County's, but not as rapid as the State, MDI, nor Bar Harbor. (The Source of these statistics is the Maine Taxable Sales Report compiled by the Maine Bureau of Taxation from state sales tax returns. There are some limitations which include: no food products, prescription medicines, gasoline).

In 1990 retail sales slumped, and did not recover until 1993. Over the 6 year period since the Stellpflug report SWH's retail sales increased only by 12% compared with the 38% over the preceding 8 years. However, during 1994 the Town showed a 11% increase in retail sales--to a figure higher than it has ever been, \$19,230,000.

During this same period, the County showed a greater percentage increase in taxable sales since 1989 (19%). Its 1990 slump was minimal, but it certainly did not maintain the previous 8 years growth of 31%. During 1994 its rate of growth was only 6.6% compared to SWH's 11%.

The Bar Harbor Area (the 4 Towns on the Island plus the Cranberry Isles, Swans and Long Island) increased by 6.5% during 1994--about the same as the County. Therefore, SWH's 1994 rate of increase of 11% is greater than either the Bar Harbor Area or the County.

Commodity Groups - Data are reported for seven categories: Business operating, building supplies, food stores, general merchandise, other retail, auto and transportation (which includes boat dealers), and restaurants and lodging. The Stellpflug/Deller study pointed out that in SWH, the transportation sales (basically boats) had the largest share of market activity (36% of the total in 1988). On the Island, SWH's transportation sales accounted for over 50% of the total market. Restaurant and Lodging were the other large market activity (25%) of SWH's market activity, but this in no way compared with the other Towns on the Island. Bar Harbor accounted for over 75% of the total Island market.

By 1994, transportation sales (boats) had dropped from 36% in 1988 to 26.5%. Also building supplies decreased from 8% to 5%. The restaurant and lodging increased from 25% to 27%, as would be suspected by the increase in bed and breakfasts. More interesting is the increase in the sales of non-food items in food stores from 12% to 18% - probably as a result of

the construction of the Southwest Harbor Food Mart and the loss of Tremont's General Store by fire during this 6 year period. Another area which has increased is the "Other Retail", drug store, book store, antique dealers, gift shops, art galleries, etc., from 7.6% to 10%.

Trade Surplus - Based on average purchases of taxable goods and services on a per capita basis, SWH's 2000 year round residents might be expected to spend around \$10 million. In fact, purchases by residents and visitors during 1994 were \$21.4 million; e.g., the economy acts as if there were 4000 people living year round in SWH and making purchases of goods and services. This "trade surplus" is largest in the restaurant and lodging sector and in fact produces "trade deficits" in business services and the automobile/boat and general merchandise sectors. These deficit areas could be approached as business opportunities in the future.

F. Major Employers

The two major year-round employers in town are the H.R. Hinckley Boat Company and the Coast Guard with a combined total of approximately 275 employees. There are more than 100 other boatbuilding employees and 75 -100 fishermen within the Town, showing the firm link of the SWH economy to the sea. Inns and retail shops are significant seasonal employers. Most of the other employers in Town are small. The employers and their employees (not necessarily all living within the Town) are summarized below.

TABLE XII. LIST OF EMPLOYERS IN SOUTHWEST HARBOR

Sea Related:	19 Boat Building		274	
	Coast Guard		100	
	4 Fishing, etc.		44	
	1 Marina		<u>2</u>	
			420	
Retail/Service:	55 Small retail			196
	1 Computer-aided Design		10	
	14 Service		<u>82</u>	
			288	
Tourism:	9 Inns			89
	15 Restaurants		182	
	2 coffee bars		<u>5</u>	
			276	
Construction:	8 Firms		80	80
Government:	Town government		23	
	Post Office		4	
	School		<u>40</u>	
			67	
Real Estate:	5 Sales Offices		22	<u>22</u>
TOTAL EMPLOYED				1153

Source: MDI League of Towns Survey of Number of Employees, 1995

5. Projected Future Employment and Regional Issues

Every survey that is returned by members of the SWH community indicates appreciation of the current status of the community--its mixed economic uses, its working harbor, its "right" size, its year-round activity, and its natural resources. The concern which the community has is that this balance will not last. There is concern about too much seasonal traffic, too many seasonal retail shops, and too few year-round residents. All efforts toward future economic development and employment must be made in complete awareness of these concerns.

It is unlikely that SWH will become a major employment center. However, if a major new employer should wish to locate here, the Town should decide where it would be best sited in order to be least disruptive to the community. Perhaps the most likely new venture could be an hotel or some sort of recreation or health-care resort-type institution.

First priority should be to keep existing jobs in the Town. Second must be to try to strengthen the local economy by diversifying, particularly with year-round economic activities which are not dependent upon the ocean-floor as a resource. The effect upon SWH of economic changes in other Towns on the Island and nearby must be borne in mind, as well as vice versa.

The Town has seen a growth of employment in information-based (computer) occupation. The trend is likely to continue as on-line services become less expensive. Acadia.Net in Bar Harbor is an Internet Access and Services Provider which has local telephone access. This service began operation in the summer of 1995 and currently it is gaining users in SWH at the rate of 3 per week. There are 135 users, 32 of which are listed as business operators. Not only do individuals who operate their businesses out of their homes use the internet, but B&Bs as well as other business in SWH currently advertise on the World Wide Web. One B&B ascribed 17% of its 1996 bookings to advertising by Internet.

The Town should take steps to encourage this type of activity, which seems likely to broaden the economic base and stimulate year-round occupation. It should consider the need to revise the Ordinance with respect to home occupations, and to recognize the rapid depreciation of expensive computer equipment when making tax assessment.

A. Regional Economic Development

Two regional economic groups have formed with the interests of the region, the Island and the Town of Southwest Harbor as their focus.

- (1) Coastal Acadia Development Corporation (CADC) has recently drawn interested and concerned citizens together from the Towns on the Island as well as others on the Coast to propose ways to attract new economic activities to the area in order to try to maintain year-round employment and to encourage the new members of the workforce to stay in the area. This group has set up an Agenda for Action which includes the following: focus on creating high quality, full-time jobs for area residents; expand the seasonally based economy into more year-round activity by supporting existing businesses and their growth and expansion; encourage growth and new development which is compatible with and at a scale appropriate to the area; and improve local business-appropriate education and training. The Town should continue to support this effort.

- (2) A regional group has been formed to try to cope with the problems posed by increasing numbers of summer visitors to MDI (2.7 million in 1994). This group comprises the League of Towns (four towns on MDI plus Trenton and Lamoine and ANP), Maine DOT, Friends of Acadia and the Chambers of Commerce in the region. The group's objectives include: protect the natural environment to ensure the very qualities which the visitors come to enjoy, alleviate traffic congestion (both boats and cars), and maintain year-round businesses and employment on Mt. Desert Island. They will investigate the possibility of trying to get some of the journeys by visitors into public transport rather than private cars, limiting the numbers of cars permitted in parking areas, and physically prohibiting parking on the bike paths beside the roads while still maintaining economically viable towns.

There is the possibility of a charge for access in order to limit the number of tourist cars as they come onto the Island. Such measures may have the effect of slowing the rate of increase in numbers of tourists to the Island and therefore of slowing economic growth.

B. Future Projections

As stated in the Population Projection, the economic forecast for the State of Maine is for a very small increase throughout the next 20 years. This projected low level of expected growth is the result of proposed military base closures and a projected slow-down in the economy. As Hancock County is little affected by base closures, the Statewide forecast rates

have been modified optimistically by the Hancock County Planning Commission (HCPC) to reflect this.

There will be a net growth of 34 - 54 households in the Town during the next ten years. However, there will also be a great deal of migration. It is anticipated that the sectors to show growth in employment will be: services, retail and construction. HCPC anticipates that the number of employed persons within the SWH population will increase - this is currently just slightly below 50%. They also project that the percentage of employed persons per household will increase slightly.

CHAPTER III. MARINE RESOURCES

STATE GOAL: To protect the State's marine resources industry, ports, and harbors from incompatible development and to promote access to the shore for commercial fishermen and the public.

1. Introduction

The coastal location of archaeological sites within SWH shows the dependence this community has always had upon marine resources. The economy still depends upon the coastal waters and coastal lands - tourism and recreation in summer with fishing year-round. Almost half of the employed residents have jobs connected with the harbor. SWH lies on the southwest side of the Great Harbor of Mt. Desert and is therefore sheltered from all directions except east. It is somewhat protected from the stormy northeast winds by Greenings Island. The harbor accommodates some 750 moorings for small-craft. There also is a cove north of the harbor which was dammed in the early part of this century for a logging pond. The area to the east of this cove, partially sheltered by Greenings Island, Connors Point, and Fernald Point, is the most likely location for additional moorings in the future. For 12 miles off the coastline the waters are controlled by the Federal Government, the first three miles of which are under State jurisdiction.

This chapter will describe the marine-related resources and facilities within SWH - the harbor, commercial and recreational moorings, commercial and town docking facilities and related parking, shell-fishing areas, and shore access. In order to ensure their preservation, an assessment will be made of any possible threats and proposals will be made for their protection.

2. Key Findings

The Harbor supports several vigorous types of economic activity. Fish landings for the 1995 season were estimated to have been worth over \$9 million. These coupled with the wages from marine-related employees (\$9.5 million) are the principal source of the Town's vitality. It is important that the fishing industry should not be pushed out of the Harbor which could occur with the growth of pressure from residential and non-marine related commercial land uses around the harbor and seasonal pleasure-boat usage.

The Harbor caters to over 600 boats at moorings in the summer months. Most of these are recreational, with the number of year-round fishing boats remaining constant at 50. Many of the recreational boats are visitors, but some are products of the several local boatbuilders within SWH either being tested or completed. There is now a waiting list for moorings and this poses concern.

Access to the water by car, by foot or just for viewing is available at many places throughout the Town. The Harbor includes three Town Docks as well as many private restaurants, shops, and the Marina. This access must be maintained.

Pollution is a threat. Bacterial pollution from the Town's sewer plant and the plant in Northeast Harbor as well as from overboard discharges has closed the clamming areas. The large number of transient boats within the harbor during the summer increases pollution as pump-out stations are rarely used. This situation must be improved.

3. Links to Other Inventory Sections

Chapters on natural and water resources, recreation, public facilities (sewer treatment plant) and transportation (parking) are linked to this chapter.

4. Marine Resource Inventory

A. The Marine Resource Industry - Shellfish

→ The shellfish industry in SWH consists of clams, crabs, lobsters, mussels, quahogs, sea scallops, sea urchins, shrimps, and snails - oysters are not found. All clamming areas are closed at the present time except at Ship Harbor in Acadia National Park, but mussels and snails are available along the shores. Lobsters and crabs are obtained by trapping, scallops and shrimps by dragging, and urchins both by diving and dragging. Recently, some scalloping has been done by diving.

Lobster - This is, together with scallops, the largest segment of the seafood industry in Southwest Harbor. Some lobstermen leave their traps out all winter in deeper water. Most traps are laid in May (when the lobsters come closer to shore) in the Great Harbor and in the waters off Seawall. The season ends toward the end of the year when the lobster returns to deeper water. Fresh lobsters are available year-round, as they can be

kept in flowing waters in pounds or in wooden cages called lobster cars, and fed with fish.

Crabs - Crabs are caught within lobster traps during the spring, summer and fall seasons. Some whole crabs are sold, but the market consists primarily of crab meat. Processing is done on land. There is one major crab picking firm in Southwest, but many individuals "pick" as a home occupation.

Scallops - Scallops are generally available fresh only during the winter months, although some large boats pursue scallops outside local limits during other periods. They can be successfully frozen. During the first two weeks of the local season harvesting is usually restricted to a certain distance from shore (this is peculiar to this area.) Scallops are processed at sea on the boats. Shells ought to be thrown overboard in the area where caught as the female lays her eggs on the old shell. Harvesting occurs during the treacherous stormy winter months.

Shrimps - Most shrimp harvesting occurs outside local waters. Shrimp spend most of their time far offshore with the exception of the females who come closer to shore in the winter. The "Maine shrimp" is a small version which is all male when first born. After two years, it transforms to female. She is harvested full of eggs during the winter months (December through March) and sold either picked or in the shell. Shrimp are obtained by dragging (and sometimes by trapping, although this is not a desirable method).

Clams - All of the shoreline of SWH including Greenings Island has clams. None of these areas is open to clamming at the present time (except Ship Harbor in Acadia National Park) due to bacterial pollution. Clams sold in the area are brought in from other locations.

Mussels - These are available on most of the coast, but particularly at Valley Cove, Fernald Cove, the east side of the Clark Point Peninsula, and by the Cable Crossing on the Manset shore. They are not gathered here for commercial use, but by visitors and residents for domestic consumption. Availability is restricted by "red tide" closures. Red tide, a diatome indicating danger to humans, is a bacteria which proliferates when the water

warms producing a red film on the water, hence the name.

Snails - Whelks are picked off the rocks in SWH at very low tide or they are found in traps. The catch is not a commercial crop, but some are sold locally as escargot.

Urchins - This part of the industry is a relatively new harvest. These prickly shellfish are obtained by divers fairly close to the rocky shores of the community. The edible portion of the sea urchin is the roe, which are highly prized by the Japanese. They are not processed in SWH at present, but are shipped to other areas. Some of the urchins are shipped whole to Japan if they are fresh and of the right type.

B. The Marine Resource Industry - Groundfish

Up to 1983 groundfish were the more important part of the marine resource industry, but in the last ten years this catch has been seriously diminishing. Some experts suggest that this is due to overfishing, while others believe it is just a cycle.

Fish caught in areas off SWH for commercial sales include: Atlantic cod, haddock, redfish, silver hake, red hake, pollock, halibut, monkfish, and bluefish. Flounders caught in this region include the yellowtail, dabs, American plaice, winter flounder, witch flounder and sand flounder. Herring used to be a very important fish to this area - the sardine cannery in the Harbor, which closed in 1987, was one of the largest employers in the Town. This fish is beginning to reappear again. Sport fishermen in the area catch bluefin tuna, blue fish, and striped bass. Mackerel, bluefish, pollock, and striped bass are caught within the Great Harbor in abundance and run up Somes Sound en mass in the summer!

The statistics for the Gulf of Maine landings over the last few years show a marked decline in most categories and a corresponding increase in the price per pound. Some of the fish have had restrictions placed upon the size, or weight, or age of the catch. One of the problems with regulation efforts is the "bycatch", which means the fish caught inadvertently by fishermen targeting one species of fish and finding others in their net (scallopers with monk fish; groundfish draggers with lobster).

C. The Marine Resource Industry - Freshwater Fish

The Town has very little freshwater fishing. Freshwater salmon, trout, bass, and pickerel can be caught in Long Pond. Several of the streams act as hatcheries for the very young sea fish.

D. The Marine Resource Industry - Cucumbers, Eels, and Worms

Sea cucumbers - A few of these fish are harvested during the winter and marketed in Japan. The industry has potential if the market remains stable. They are not currently processed in Southwest Harbor.

Eels - This fish is a minimal part of the harvest of seafood in Southwest Harbor. Eels are caught as very tiny young fish and shipped to Japan to be raised for breeding purposes.

Worms - The worming industry provides an important source of income. Marine bloodworms and sandworms are gathered at low tide from the mud flats at Fernald Cove, head of the harbor, and the inner pool within the Harbor. Most are transported out of the area for use as bait by commercial and sport fishermen.

E. The Marine Resource Industry - Economy

Fish Landings - The following table of 1995 fish landings shows the incredible economic importance of the harbor to the SWH community.

TABLE I. FISH LANDINGS - 1995 SEASON*

	POUNDS	SALES
SCALLOPS	850,000	3,650,000
LOBSTERS	818,000	\$3,050,000
URCHINS	1,400,000	1,340,000
CRAB	500,000 (70,000 meat)	630,000
GROUND FISH	170,000	300,000
CLAMS	900 (bushels)	90,000
SHRIMP	75,000	75,000
BAIT	7800 (bushels)	50,700
TOTAL GROSS SALES FROM FISH LANDINGS		\$9,185,700

*Information obtained from the industry

In 1994 it was estimated that there exists a spinoff worth 2.75 times the value of fish landings within the State. Based upon this calculation, the \$9 million gross sales from fish landings in Southwest Harbor in 1995 could mean a total income of \$24.75 million. This figure is approximately 8% of the total economic impact of Maine's fisheries estimated by the State in 1993. (Source: Bar Harbor Times, September 7, 1995; James Wilson, Ph.D., Professor, Department of Resource Economics at the University of Maine)

Number of Employees - The Harbor is the greatest source of employment within the Town. The world-famous boat building company of Hinckley Boat is the biggest employer and the Coast Guard Station is the second. Other boat building firms, the fishing industry, marine-related workshops, restaurants, and transient and tourist accommodations which are related to use of the harbor also provide employment.

TABLE II. MARINE-RELATED EMPLOYEES

<u>Sector of Employment</u>	<u>Numbers</u>	<u>Average Wage</u>	<u>Gross Wages</u>
Boatshops - 14	315	\$ 12	\$7,560,000
Marine related: 6 Sail Lofts, Motors, Parts, Electronics	20	12	480,000
USCG	101		1,212,000
Commercial Dock - 2	30		168,000
Crab Shop	25		240,000
TOTAL WAGES FROM MARINE-RELATED EMPLOYEES			\$9,660,000

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Other businesses which are related to maritime business include: 8 restaurants, a Marina and several shops, retail fish shops, 2 motels, 4 B & Bs, rentals in private homes, 1 ferry, 2 boat charter companies, 3 boat rental companies, 6 cruise companies, and an Oceanarium. Lobstering employs about 28 full time fishermen with 13 stern men and 12 part time fishermen; scalloping, 5 full-time, 10 part-time plus 30 stern men; 36 men on 12 urchin boats.

The preceeding analysis shows that at least \$17 million in cash flow through the community is directly related to the Harbor. The importance of the Harbor can not be too strongly stated - it is the reason for the continued life and vitality of SWH.

F. The Marine Resource Industry - Pollution

The clams which are brought for sale to SWH are not from the clam flats around the shores of the Town. These flats have been closed for several years now. The Department of Marine Resources in Lamoine has been testing the water quality for possible clam flat seeding and has been monitoring the Town. DMR says that high readings of fecal coliform tests is the first reason for closure; in addition, if areas are near sewage treatment plants or overboard discharge systems, they will be closed. (DMR says that one closing costs \$800, so if there are several overboard discharges in a large area, the whole area will be closed as an economy measure.)

All of the tests in the Harbor show high fecal coliform readings. (The sewer plant has outflow problems during heavy storm surges.) The area around Fernald Point also has a high reading. The rest of the area south of Fernald Point to Seawall is closed because of overboard discharges in the area. The Seawall area is overshadowed by the National Park overboard discharge system in the area. The only area which is not polluted and open to clamming during the season is within Ship Harbor, the southern boundary of the Town with Tremont.

G. The Harbor and Harbor Management

The waters of the Atlantic Ocean within the town are part of the Great Harbor of Mount Desert Island, a large and relatively deep area, somewhat sheltered to the seaward by the Cranberry Isles. The town's name came from the fact that Southwest Harbor lies to the southwest of a ship anchored in Great Harbor.

A pilot is not needed if entering the Harbor from the Eastern Way, a deep and well-marked channel northward of Sutton Island recommended for deep-draft and low-powered vessels approaching from the north, east and south. The approach from the west over the Bass Harbor Bar and Cranberry Island Bar in the Western Way may require some assistance. Navigation is not restricted by ice, even in very severe winters. If ice does form, it is carried out to sea by the current out of Somes

Sound at the first ebb tide or it is broken up by icebreakers.

In 1960 the Army Corps of Engineers adopted a dredging project within SWH. During the next two years, they provided two adjoining anchorage areas of 5 acres each westerly of Clark Point, on the north side of the Harbor. The more westerly area, or the inner "pool" was dredged to a 6' depth below mean low water and the outer area to 10'. These areas have not needed redredging since then.

In 1988 the Town approved a Harbor Plan for moorings produced by the Harbor Committee. The Town also adopted the Coastal Waters and Harbor Ordinance, and in 1989 amended it to describe the fairways and anchorages: one major and two minor fairways, with anchorages formed by these routes. Three of these areas, the dredged areas to the north of the Harbor, were designated primarily for commercial use. Commercial boats, scows, lobster cars and floats are to be moored in this area - repair facilities and marine builders are allowed to moor on a temporary basis. Commercial fishing is to have priority if the area becomes filled to capacity.

There are 633 moorings within the Harbor limits registered as follows:

Recreational	380
Boatbuilding and repair	170
Fishermen	55
Transient boats - Fishing	20
<u>Big boats (70' - 100')</u>	<u>8</u>
TOTAL REGISTERED MOORINGS	633

The allocation among residents and non-residents (excluding the boat building and repair facilities) is as follows:

Resident	395
Non-resident	68
<u>Boat Building and Repair</u>	<u>170</u>
TOTAL REGISTERED MOORINGS	633

The Marina within the Harbor currently has over 70 berths.

The Harbor Master has a waiting list for recreational boats, particularly non-resident.

The Board of Selectmen approve the Harbor Committee's recommendations for the annual mooring fees for boats in the Harbor. Fees are also charged for dinghy storage, dockage fees, and seasonal rental of a dock space by a boat builder or tourist boat. The Town assesses an annual excise tax for a boat registered in SWH based on the boat size, age, and engine size.

In 1990 the Town approved a land use proposal put forward by the Harbor Committee which zoned the land areas around the Harbor corresponding to the water zoning. The area on the Clark Point side, north of those areas designated as commercial areas, with the fishing boats having paramount location rights, was zoned "Commercial Fisheries/Maritime Activity". This zone gave incentives to the fishing industry, restricted marina development, and did not allow new hotels, condominiums, or in fact any new residential development. The area to the south of the Harbor was zoned as "Maritime Activity", with incentives to the marine industry and similar restrictions on hotels, condominiums, and residential development. The rest of the area to the west was zoned "Harbor" and although single family residential use was allowed, hotels and condominiums were not. This has probably been responsible for the economic health of the Harbor and its tremendous vitality.

H. Shore Access

Access to the Harbor - There are three Town Docks, the Lower, the Upper, and the Manset Docks. They all provide vehicular and pedestrian access to the shore. The Lower Town Dock and the Manset Dock have boat ramps to the Harbor, although the Lower Town Dock is badly in need of repair. Parking is not easily available at the Lower Town Dock, available but sometimes in conflict with Greenings or Cranberry Island residents at the Upper Town Dock, and plentiful at the Manset Dock - but dependent upon the leasing of adjacent privately-owned land. The docks and boat ramps, particularly in Manset, provide the access needed by the several boat building and boat storage companies which are located back from the shore. Some builders lease space at the piers from the Town.

Clark Cove, a small inlet on the north side of the Harbor near Clark Point, is potentially accessible to the public as the Town owns the granite causeway as well as the pumping station. The area currently provides a public outlook over the harbor.

★
S/W No. 1 near old Causeway Lane
Harbor Avenue is a Town Road on the north side of the Harbor which goes to the water. It currently only provides visual access to the Harbor for pedestrians as there is no turn-around at the end of the road and there are no stairs to the water.

Lawler Lane is a Town Road on the west side of the Harbor which goes to the water. This roadway continues onto "Little Island", a rock outcrop in the western part of the Harbor which belongs to the Town. This road is not currently maintained to the water's edge and no use of it is made for any form of access to the Harbor.

A Harbor access survey was conducted by the Harbor Committee in 1989 and the respondents ranked new harbor uses as follows: open space for a park or walk, a picnic table, or a walkway; charter boats; fish market; school for marine activities; school for boat building; and marine museum.

Access to the coastal waters north of the Harbor - The most northern point of access to the water is through the Acadia National Park on the north side of the Fernald Point Road just past Fernald Cove. Vehicular access has recently been reduced to parking just off the road, but pedestrian access is available through the old roadway to Valley Cove just to the north of SWH in Mt. Desert. This access to the water provides a wonderful view.

Fernald Point Road abuts the water at Fernald Cove. This stepped Town granite wall provides visual as well as pedestrian access to the water. There is no vehicular access.

North Causeway Lane is a Town Road which goes toward the water abutting the east side of the Causeway Club property until near the shore it diverges eastward toward the water. The road is not currently maintained by the Town over the section between the Causeway Club and the beach. It provides pedestrian and visual access to the water. There used to be a Town dock at the end of the Road, but there is no room to turn a vehicle around. There is no parking available.

Norwood Cove Overlook is on Route 102 and belongs to the State. It is the first glimpse of the waters of Southwest, but it is on a dangerous curve for crossover traffic. It is a local lunch spot as well as selling area. Norwood Cove is not accessible from this point for pedestrian traffic.

permitted?? ★

Rhoades House is a Town property which abuts Norwood Cove. It was given to the Town for a park near the water. It does provide pedestrian as well as visual access to the water, but this is not well publicized. Vehicular access is provided to the house, but there is no ramp into the water.

*sign says
Cable Crossing Rd*

Access to the coastal waters south of the Harbor - Beach Road, the road containing the cable which crosses to Cranberry at the bottom, is a town road which goes to the water. It provides vehicular access to the edge of the beach and has a small turn-around area, pedestrian access and a commanding view.

An unexcelled view of the Great Harbor is afforded across fields just to the north of Beach Road.

No other access is available to the sea, except for brief glimpses through trees, until the Seawall Causeway on the State Road in Acadia National Park. The National Park provides vehicular, pedestrian and visual access to the sea at the Seawall Picnic Area just south of the Causeway. Wonderland and Ship Harbor provide walking pedestrian access to the sea's edge and visual glimpses throughout the walks.

Access to the fresh water of Long Pond - Vehicular access is available over the Long Pond Town Road. This road provides access to the Town's pumping station and to the ramp provided by Acadia National Park for boat access to the Pond. There is a parking area nearby. Pedestrian and visual access is provided at this point, as well as throughout the many trails which surround the Pond.

Access to privately owned areas - There are several privately owned businesses which provide varying degrees and forms of access to their customers. The Claremont is a hotel and restaurant providing seasonal shore access and a view across Somes Sound to customers coming by boat or by car. Beal's Lobster and Southwest Lobster each provide shore-front seasonal restaurants on the Harbor west of the Coast Guard. The Spinnaker Restaurant, which is set-up and back from the shore, provides a year-round view overlooking the Harbor from the western side. The Hinckley Great Harbor Marina provides moorings for its customers and shops and restaurants for the general public. It is practically a quasi-public operation. The Head of Harbor Restaurant, directly behind the Marina and overlooking the Harbor,

provides a seasonal restaurant near the shore. XYZ provides a seasonal restaurant directly opposite the Manset Town Dock. The Mooring's Restaurant on the shore of the most southeastern point of the Harbor provides year-round access to the waterfront and a stunning view up Somes Sound to its customers. Down at the end of the Town, Annabelle's Seawall Diningroom on the Causeway provides practically continuous year-round service as a motel and restaurant.

Some privately owned boat repair facilities lease space to the boat builders who are not located on the water or who do not have enough depth in front of their facility.

There are several privately owned roads and other lands which either did or do provide pedestrian access to the water's edge or do provide a view of the water: the National Park's path to Valley Cove; South Causeway Lane; Brook's Passage and Phillips Lane along the northwestern side of the Inner Pool in the Harbor; and the fields north of Beach Road on the Seawall Road; and the Causeway Club.

5. Assessment of Threats to the Marine Resources

The Marine resources in the town are not urgently threatened. There are, however, several areas of concern which need to be recognized and funding should be sought to meet them before they become major problems.

The results of the first survey which the Comprehensive Plan Committee sent out to all residents, summer and winter, disclosed several areas which were seen as threats to the marine industry and the harbor. These included the inadequacy of parking at all town docks during the summer, the inadequacy of dinghy space at Upper and Manset Town Docks, and the inadequacy of the channel from the Coast Guard Base to the Upper Town Dock; sewer overflow into the Harbor, oil spills, boat sewage discharge, and the inadequacy of toilet facilities at all town docks; and insignificant revenue to run the Harbor.

The continuing closure of the clam flats is a cause for concern. Before permission will be granted to open this activity, the number of overboard discharge systems must be reduced, and some improvements must be made to the outflow of the SWH and NEH sewer treatment plants. DMR has reiterated its desire to seed clams in SWH. The increase in revenue to the Town probably would not be significant if the flats were opened, but this traditional form of fishing should be available to the community.

The Harbor Master and the Harbor Committee have expressed their concerns about the lack of an adequate ramp for clearing the harbor of an ever increasing number of boats in the event of a hurricane or other strong storm. They are also concerned about the condition of the steel at the Manset dock.

As a result of the increase in numbers of visitors, some of the traditional routes of access to the water over private land have been discouraged or withdrawn. The town might consider the need to try and negotiate for the permanent right of public pedestrian access down from Freeman Ridge to the town center, along the shore at the head of the harbor close to the town center, and between the High Road and the southern end of the Causeway, (i.e., South Causeway Lane).

The biggest threat and the largest unknown is the future of the groundfishing industry. The reduction in everyone's catch over the last years and the closures of fishing areas to the south have put particular pressure on this immediate area. The State Government and the local counties are struggling to find ways to protect the young groundfish and shellfish for the future. This is not a simple task, either to regulate or to administer or to enforce, but it is essential.

6. Assessment of Existing Measures to Protect and Preserve the Marine Resources

The Harbor has an Ordinance which is updated each year by the Town upon the recommendation of the Harbor Committee. This has done an extremely good job protecting the Harbor Marine uses, particularly those relating to fishing, but it also recognizes the worth of the tourist boat to the economic well-being of the Town.

The Planning Board has held firm on its harbor land use classifications over the years since the Harbor Committee made its zoning recommendations. Some people have criticized the Land Use Ordinance for not doing more to encourage the boat-building and marine engineering industries. Certainly the protection of marine uses from the competition of hotels and condominium development has been successful for waterfront land. Several new marine uses have developed within the Harbor over the last eight years.

An area within the Land Use Ordinance which may need reconsideration before too long is the type of commercial use allowed within the marine-related zones. Currently any type of commercial use may be developed. It may be that some types of activity should not be located on the docks, or possibly only combinations of uses should be allowed; e.g., fishing boats, docks, retail and wholesale sales, and a restaurant primarily selling the fish.

Other measures which would protect and preserve the marine resources include the following. The Town could increase the size of the dredged area, acquire shore property for better water access, further encourage recreational boating to locate on the Manset side, develop Little Island, sponsor research and educational activities, and combine resources with neighboring towns. Possibly the Town could encourage co-operation among the water dependent users and study incentives for the expansion of existing water dependent users and new ones.

CHAPTER IV. EXISTING LAND USE

STATE GOAL: 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.

1. Introduction

Traditionally land within SWH has been used not only for a mixture of uses upon one lot at one time, but also for a succession of different uses. A lot could change from a single family residence to a Doctor's office to a small store and then back to a single family residence over a period of 50 years. This tradition of mixed land-use is an important part of the culture of SWH.

Another tradition which contributes to the character of SWH is the home occupation. A large proportion of the year-round residents conduct a business from their home, be it the major occupation of the family or just augmenting the family income. Many of these activities involve the storage of articles in the yard - firewood, lobster traps for either collecting lobsters or selling as decorations, buoys, fish boxes, etc. In addition many of the yards store at least one yacht or fishing/lobstering boat during their off-season.

SWH's land area is only 8884 acres or almost 14 square miles. Mt. Desert Island covers approximately 73,300 acres, of which SWH comprises 12%. Over half of this is owned by the United States Government represented by Acadia National Park and the Coast Guard. SWH's coastline is 15% of the Island's coastline.

TABLE I. LAND AREA FOR TOWNS ON MT. DESERT ISLAND

Town	Land Area	Percentage
Bar Harbor	28,465 acres	39%
Mt. Desert	25,699 acres	35%
Tremont	10,329 acres	14%
Southwest Harbor	8,884 acres	12%

Source: Statistical Handbook, 1992, Hancock County; land & water figures, Maine Inland Fisheries & Wildlife Dept

This chapter will summarize the major categories of predominant land use within the Town and the changes in patterns over the last 8 years since town-wide zoning was adopted. Land areas suitable for the growth projected for the next ten years will be identified, and also those areas which are not.

The inventories in this chapter are linked to all of the other chapter inventories. Particularly, the inventories of land for recreation and conservation, the water and sewer systems, and transportation systems. The sections concerning economic and population projections are also linked.

2. Key Findings

All the Town land within the Park, plus some small additional parcels, is already zoned Natural Resource Protection. This safeguards the future use of these areas even in the unlikely event of a change in Federal legislation regulating the use of National Parks. Five percent of the Town's area has been placed under special taxation act protection in either tree growth, farmland, or open space.

The remaining 44% of the Town's area is mostly zoned as mixed-use (42% of the total) - 27% of the total is already in some degree developed, leaving only 17% still available for entirely new development (1,500 acres).

The citizens have adopted mixed-use zoning limited by performance standards designed to prevent new developments from having an excessive adverse impact on existing residential properties. Broadly, these standards consist of restrictions on building size, height and lot coverage, setbacks from lot lines, and in some circumstances the maintenance or creation of landscaped buffering. Such buffering is required when a non-residential or multi-family use is introduced next to a single-family use, and the planting has to be established within the property of the new land-use.

Consistently, citizens have supported the idea of being "free to do what I want with my land" while at the same time being protected from the effect of their neighbors' actions.

The survey carried-out as part of the current plan showed that residents desire more precision in the definition of buffering standards and also better enforcement. The existing Ordinance attempts to define the buffering required by first describing its purpose and then setting-out some minimum dimensions for the planted areas. Applications are reviewed by a landscaping committee which submits its recommendation to the Planning Board.

The Town can be divided into several neighborhoods. The areas in the northern part of town have the best soils. Carrolls Hill and Robinson Hill on either side of the approach road have the most favorable soils for development. As the hills diminish toward the southern part of the Town, the land becomes very wet and not easily developable. The wettest parts of the Town and the parts with the greatest slopes lie within Acadia National Park.

The building of boats and their storage during the winter is the largest industrial use of land. Heavy industrial development has not been attracted to this community.

The projected increase of 110 - 120 dwellings is likely to be accommodated largely within existing subdivisions, the "split" of large existing lots, and the building of second dwellings on existing occupied lots. The area towards the northern end of town of each side of Main Street has the most potential for development: good soil, Town sewer and water nearby, and immediate access to the rest of the Island.

3. Land Use Inventory

A. Analysis of Existing Land Use

Whereas the total land area of Southwest Harbor is 8884 acres, less than half of this is available for development. The Federal Government owns more than 50% of the Town as part of Acadia National Park and the Coast Guard Station. Park Legislation prohibits any type of development within the Park. The land uses within the Town are as follows, (205 acres of inland water area have been excluded):

TABLE II. EXISTING LAND USE IN SWH, 1995, BY ACRES AND PERCENTAGE

Category*	Estimated Acreage	Percent Developed Land	Percent Total Land
Residential	1,733 ac.	74%	19%
Single family	1,656 ac.		
Multi-family	77 ac.		
Commercial	201 ac.	9%	2%
Industrial	141 ac.	6%	2%
Public Lands	121 ac.	5%	2%
Town	108 ac.		
State of Maine	3 ac.		
Federal Govt	10 ac.		
Semi-Public	21 ac.	1%	0%
Private Recreation	50 ac.	2%	1%
Roads	78 ac.	3%	1%
Town	31 ac.		
State	47 ac.		
DEVELOPED LAND	2,345 ac.	100%	27%
Acadia National Park	4,430 ac.	70%	51%
Agricultural Land	52 ac.	1%	1%
Tree Growth	330 ac.	5%	4%
Undeveloped Land	1,522 ac.	24%	17%
UNDEVELOPED LAND	6,334 ac.	100%	73%
TOTAL LAND AREA (less inland water)	8,679 acres		100%

- *Residential land use: single family, multi-family, small bed-and-breakfasts, apartments, and subsidized housing
- Commercial land use: inns, hotels, motels, retail stores, etc.
- Industrial land use: construction companies, quarries, the transfer station, and boat building operations
- Public land use: properties owned by the Town, the Federal Government (Coast Guard and Post Office), and the State
- Semi-public land use: land owned by churches and non-profit groups

The striking fact shown by this Table is the small amount of developable land available within the Town, 17%. This compares with 27% already developed (19% in residential use).

B. Analysis of Existing Zoning

In 1988 SWH adopted town-wide zoning. Until that time, the only zoning within the town boundaries was the State Mandated Shoreland Zoning. It was also at this time that the Federal Government approved the boundaries of Acadia National Park. The following Table shows the land acreage within the several zones (again 205 acres of inland water area has been excluded):

TABLE III. CHARACTERISTICS OF EXISTING ZONING, 1996

Current Zones*	Estimated Acreage		Minimum lot size (sq.ft.)
A	54.8 ac.	(1%)	6,500
B	830.0 "	(9%)	20,000 (sewered) 40,000(non-sewered)
C	2,841.0 "	(33%)	40,000
CF/MA	13.5 "	0%	non-resid.-no minim.
MA	12.2 "	0%	non-resid.-no minim.
Harbor	43.4 "	(1%)	20,000 residential non-resid.-no minim.
Residential Shoreland	295.1 "	(3%)	40,000
Resource Protection	4,589.0 "	(53%)	-
<hr/>			
TOTAL LAND AREA (less inland water)	8,679.0 acres, 100%		

- *Zone A - Village center; mixed use; no non-maritime industry
- Zone B - Mixed use; 20,000 sq.ft. lots on sewer, 40,000 off, 20% lot coverage
- Zone C - Mixed use; 40,000 sq.ft. lots; 10% lot coverage
- CF/MA - Emphasis on Commercial Fisheries/Maritime Activities; no new residential development; all commercial uses
- MA - Emphasis on Maritime Activities; same as CF/MA
- Harbor - Same as MA but new single family development permitted
- Residential Shoreland - Single family residential only
- Resource Protection - Only non-residential development related to govt, instit.

SWH has designated over 50% of its land as Resource Protection. All of the area of Acadia National Park was placed into that Zone in the unlikely event that something could happen to National Parks legislation. Most of the other 140 acres in this category are areas of future Park acquisition which are along the Bass Harbor Marsh.

Zones B and C comprise 44% of the land. All uses are allowed within this area, but they must comply with a series of Performance Standards. One of these is "buffering and landscaping" which, amongst other requirements, specifies the amount of buffering which is required by a new non-residential use adjoining a residential use.

The Harbor is protected by Zones whose intention is to stimulate marine activities. In two of the Zones, no new residential activities are permitted. These Zones were created in order to prevent the type of multi-family development which has occurred in other harbors along the Maine coast. Marinas are not allowed on the north shore of the Harbor as this area of the Harbor has been zoned in the Harbor Plan as a commercial boating area. In the third Zone on the Harbor, single-family residential development is allowed. No hotel or motel development of any kind is permitted within the Zones surrounding the Harbor, except to the extreme northwest where a small amount of Zone A, (the downtown zone), touches the Harbor.

Surveys showed that citizens are alert to the need to maintain the current system of controls and to ensure that it is enforced, particularly the buffering which is called-for to protect residential properties from the effects of new adjoining non-residential uses.

C. Land Use Patterns

SWH is composed of several identifiable neighborhoods. There are problems and needs associated with each one of them.

The Main Street-Carrolls Hill Area - Upon entering the Town from Mt. Desert on Route 102, the personality of the community is gradually revealed - a campground, offices, supermarket, single family houses and heavily wooded areas are intermingled down the hillside. At the bottom there is an opening to the East for a view of the sea across Norwood Cove. Citizens have shown concern that this road should not grow into a continuous strip of commercial development which would damage the character of the whole town (including ultimately land values).

The Fernald Point Area - Located to the east of the first area and north of Norwood Cove, this area contains the most important archaeological sites within the Town. It also was the site for the first settlement within the community and has some of the oldest homes. Most of the homes along the shore are now owned by summer residents, but recent subdivision development upon the hill has attracted year-round residents. There are no commercial uses within this area - in fact the subdivisions exclude this use. Fernald Point Road is an old Town road with a very narrow right of way.

The Seal Cove Road Area - This area extends to the west off Route 102 just before entering the Village area. In the 1980's a small shopping area was developed which attempted to offer easier and more available parking than in the downtown. The individual shop size is small - attracting brand new businesses for an "incubation" period before moving to larger premises or including the shop next door for expansion. The State Road extends to the top of the ridge with small lots of very heavily mixed-use on either side - a large storage building, a natural water bottling business, several cottage rental enterprises, and many home occupations (day-care, lobster trapping, crafts).

The Freeman Ridge/Long Pond Area - This ridge was developed in the 1970's with a mixture of residential and some commercial development. The lots are quite large and have offered for many the potential for mixed-use upon a single lot, be it a home-occupation or a larger commercial enterprise. A private transfer/recycling station is located to the north-west of the ridge. There are several single-family subdivisions on the eastern slopes of the ridge (some exclude commercial development). The Town's only time-share of 40 units is located atop the ridge.

The Marshall Brook Area - Low density, large scale commercial and industrial development is the characteristic of this area. There is a private campground (at the Park entrance), an earthmoving contractor complete with gravel quarry, a boat building operation, a masonry business, and the Town Public Works lot. There are a few single-family homes mixed in with this larger scale development.

The Village Center - Historically, the center has moved south down Main Street from the Fernald Point area to its current location at the Harbor. The Clark Point Road led from the Center to the old Steam Boat Wharf (now the Coast Guard Station). This commercial area is characterized by heavy seasonal use - only a few shops are able to maintain a presence during the winter. Characteristically, many of the shops change ownership every few years and some change tenants practically yearly. The location of the Marina and the recent increase in boat sales has led to a more "up-market" seasonal shop - art galleries, specialty shops, coffee houses, and counter-eating/take-out food shops.

Few existing businesses meet current Ordinance requirements for off-street parking, nor is there any way they could do so. Growth and change of use therefore is inhibited because of the need to conform. There is a danger that commercial activities

will gradually be driven to relocate away from the center, and that new uses will not come in. This would tend to lead to empty buildings and dereliction which is most undesirable. Citizens agree that steps are required to ensure the continuing vitality of the center.

The Clark Point Peninsula - In the early part of this century, the large "colonial house" hotels were located in this area - guests arrived by ferry from Boston and other points south and stayed for several weeks. Many large old homes on large parcels of land are still located on the shore of the peninsula. The oldest hotel in the area can be found on the eastern shore. There is a distinct difference between the this area and the area surrounding the Clark Point Road. Practically all of the commercial uses south of the Road are related to the Harbor: the Coast Guard Station, several lobster/crab/scallop/fish businesses (with seasonal restaurants), marine businesses (engine repairs, marine supplies, sail lofts, pier pile driving), and boat building. The north side of the Road contains many old larger homes belonging to year-round people. This has become the growth point for development within the Town as the homes have converted to bed-and-breakfasts and inns. There is inevitably some abrasion as non-residential uses jostle existing residential properties in this area.

The Manset Area - This was the older second village area within SWH. Over the years it has become less important as a second center. It still has a small general store and a church with some of the larger "cottages" located along the shore from the Manset Corner toward the Town dock. Several large boat building enterprises are located in this area - both along the shore and away from it.

The Seawall Area - This even smaller village area used to have its own school, but now is a complete mixture of uses. The shore contains some very large homes and no mixture of land uses. The year-round residents live along the Seawall Road with most of the Shore owned by seasonal residents. Two of the three mobile home parks within SWH are in this area - one of which has almost ceased. The inland area is very wet and has a mixture of land uses on large lots. There seems to be a growing demand for low intensity non-residential uses on large lots, such as boat storage, which appear to be well suited to this area. Road access to this area is presently very inadequate.

The Bass Harbor Road Area - This road is the continuation of the journey through SWH into Tremont. The area changes from residential to a highly intensive commercial and industrial area containing another earthmoving company, boat storage, a gasoline/store, crab-picking, and builders. Two of the Town's older subdivisions are located off this road. There is some danger of this road tending to become a strip type of development in the same way as Carroll's Hill.

The Greenings Island Area - This is the only Island within the Town's ownership. It has very large summer residential properties. The Island has a private supply of town water off Clark Point Road/Town Wharf Road. One of the homes receives electricity supplied from the Town of Mt. Desert. Many of the residents have placed conservation easements and open space tax exemptions on their properties.

4. Development Trends

In a Town which is generally zoned for mixed uses, it is not useful to explore at length the trends of separate uses. However, it does provide a measure of the growth.

Only 3 new subdivisions have been created since 1988 - when zoning was approved. These 3 subdivisions together comprise 16 lots - one-third of these have restrictive covenants which prohibit commercial development.

- A. Residential Development - Most residential development over the last 10 years has been infill to previously approved subdivisions. There has also been a "splitting" of lots and subsequent additional residential development (a split is a division of one lot into two which in the State of Maine does not count as a subdivision).

* The Land Use Ordinance permits a second dwelling on a lot of minimum size provided the owner never sells it separately, the new dwelling is no more than 70% of the size of the principal dwelling, and the State's sewerage laws can be met. This attribute has encouraged an already existing pattern of mother-in-law apartments and mobile homes for young adults. It also provides a source of seasonal income.

Building permits have been required only since 1987. The Town issues an average of 10 new residential home permits each year. However, as the year-round population has not increased over this period, the homes can be assumed to be replacements of existing houses (particularly mobile homes), new homes for

seasonal residents, or homes for people who previously were sharing.

Home Occupations - SWH has had a very large number of permits for these occupations which occur within a home without disturbing the appearance of a residential establishment. This "way of life" within the town has provided remuneration for a retired person or a second income within a family. Currently it is a reflection of the change in job mobility as a result of the rapid changes in the computer industry. Some home occupations reflect the traditional fishing industry (crab picking and lobstering) and low impact businesses (craft sales, framing, painting).

Concern has been expressed about pollution generated by some kinds of home occupation, particularly noise. There is also a problem of unsightly discarded cars, car parts, home appliances, etc, which accumulate around certain premises.

B. Commercial and Industrial Development

Commercial growth reflects the seasonal character of SWH. Over the last 9 years, a total of 62 new commercial use permits were issued - but 33 of these uses were replacing another commercial use. A number of the older homes have been purchased for transient accommodation at a scale that is a commercial venture. These businesses are attempting to spread the tourist season toward the edges into spring and fall and some do remain open over the winter. A recent trend is to add dining facilities as a supplement to seasonal accommodation.

There has been a change in demand from outdoor boat storage to indoor, and the Town has seen the development of several very large buildings for this purpose. This seems likely to grow. The boating industry also brought a large commercial venture to the Town in the form of a 104-slip marina.

The primary industry in the Town is boat building. This has expanded considerably during the last 10 years and 2 new boat building operations have been started.

The Harbor - As this area was zoned to restrict all new multi-family and most single family development, the prices of the properties on the shore remained attractive to commercial/industrial users. There were 42 permits issued in the maritime zones over the past 9 years - 14 were for new maritime uses, but the other 28 were for expansions to the existing maritime uses. It is reasonable to assume that this

would not have occurred if multi-family and hotel development had been allowed in the Harbor, so in this respect the current Ordinance has been successful. Concern has been expressed about enlarging and improving public access to the Harbor and protecting views of the water.

C. Public Land

Most of the public land within SWH is Acadia National Park. The Town maintains a small park on Main Street which occupies a part of the Town Office/Fire Station/Police Station/Ambulance Service lot which extends back up the hill to include Frog Pond. This lot was bequeathed to the Town for Town Offices and Parks. The Town also owns a lot further south down Main Street which is flooded in the winter for skating - Uncle Chris's Pond. A conservation easement has been placed upon this piece of land. The Town was left a piece of land on the Norwood Cove shore called "The Rhoades House". There are picnic tables on the shore for the use of the Town Public. Pemetic Elementary School is located on the largest parcel of Town land. Other public lands in Town ownership include: the Public Works Department's two parcels of land on the Seal Cove Road; the Sewer Treatment Plant's small lot on the edge of the Harbor; the Water Pumping Station on a sliver of land on the southern shore of Long Pond; and two parcels of land at the end of Freeman Ridge Road which hold the water tanks.

5. **Assessment of the Lands Available for Development**

Developed Lots - Several of the lots already developed are large enough to be "split" into another residential lot or lots. There are currently 1000 lots developed for residential use amounting to 1,733 acres. As the Land Use Ordinance calls for at most 1 acre as the minimum lot size, this means that at least another 733 acres could be available for residential or commercial development within the existing developed area. As some of this land is probably wet, or rocky, an assumption of a potential maximum of 500 additional homes and/or businesses on existing developed lots is reasonable.

Undeveloped Land - The undeveloped lands stated at the beginning of this chapter totaled 1,522 acres. They are available in the following areas:

TABLE IV. ANALYSIS OF UNDEVELOPED LAND IN SWH - 1996

<u>Areas</u>	<u>Acreage</u>	<u>Range of Soil Conditions</u>
Northern part of Main Street*	160 ac	High to Medium
Fernald Point	130 ac	Low to Medium
Marshall Brook	76 ac	Very low to Low
Western Freeman Ridge	253 ac	Very low to Med
Bass Harbor Road	223 ac	Very low to Med
Manset	250 ac	Very low to Low
Seawall	430 ac	Very low

*Robinson Hill and Carrolls Hill

The soil conditions are those prescribed by the Hancock County Soil Conservation Service for "Soil Potential Ratings for Low Density Development". Low designations do not mean that it is impossible for development on the lands, just that it would be more expensive and probably need additional acreage due to wetlands or rock cover.

6. Assessment of the Future Development Patterns

The land availability assessment prescribes the area to the north of the Town as the area with the greatest growth potential. The area towards the northwest of Main Street has sewer potentially available, as a new sewer was recently constructed along Route 102 to serve the supermarket and laundromat. Water is not immediately available, but it would be possible to pump up the hill from the termination at Robinson Hill Road. Development in this area would be desirable from the point of view of not increasing traffic congestion further south on Main Street.

As in the past, no doubt, lots will continue to be split as families age. There is no way to predict this.

There are two new inputs into future development patterns. One is growing awareness, throughout the USA, of the value of "quality of life" and the ability of people to pay for it. The wet soils and shallow topsoil distance to bedrock become an asset in the modern world rather than a handicap. The other input is the freedom of location conferred by the computer age.

One inference from these trends is that SWH should be careful not to whittle-away the quality and character of its physical

environment, which is what gives it its attraction. Excess and unwise type of development would eventually have a negative impact on the economic welfare of the town, not only on tourism but on its ability to attract other kinds of enterprise.

SWH is projected to increase within a range of 110 - 120 dwellings by 2005. This increase seems to suggest that a minimum of 110 acres of land will be needed for residential development during the next 10 years (based on the 1 acre minimum required for a house not served by Town sewer). However, part of the increased number of dwellings will be located on properties already developed with one house and part will be accommodated in multi-family development. Given the circumstances of Southwest, there is no way to judge how many acres of land will be required for non-residential uses.

It is estimated that a maximum of 40 - 50 undeveloped acres will be required for all types of development within the next 10 years in addition to the expansions on lots already partially developed.

CHAPTER V. HOUSING

STATE GOAL: To encourage and promote affordable, decent housing opportunities for all Maine citizens.

1. Introduction

The supply of housing is central to any community. No town can have a thriving economy without being able to provide housing that is adequate in both cost and variety. No town can attract new business without an affordable housing supply. There is a large demand for seasonal housing in SWH by summer residents, seasonal workers, and visitors. There is a risk that seasonal visitors tend to push the market value of property beyond the means of permanent residents.

The State legislature has been very specific in its requirement that the goal for affordable housing be met in a Comprehensive Plan. This goal is not always easy to achieve in a community with a high tax rate and a seasonal economy.

This chapter will describe the housing stock in SWH and compare it with that in other towns on the Island and in the County. The method used to determine "affordability" will be described and SWH's "fit" will be determined. The numbers of additional housing units needed because of the estimated increase in population will be determined.

The inventory and projections in this chapter are linked to the inventories in the chapters on population, economy, and marine resources. The projections are linked to the same chapters, but the impact of the estimates should also be linked to the chapters on natural, water, historic, and archaeology resources.

2. Key Findings

Census 2000 1288

The 1990 Census reported that SWH's housing stock was 1266 units with more than a quarter being seasonal housing. During the previous twenty years, 36% of the houses built were seasonal homes. Many of these owners are people who are planning to retire in Southwest Harbor: they invest in a piece of land and build a home which is only used in the summer until retirement.

Compared with its neighboring towns, Southwest Harbor had a slightly higher percentage growth in housing stock; in absolute

terms it gained only 500 units compared with the 900 units in Bar Harbor.

SWH has shown an increase in the number of renters from 1980 to 1990. This is probably due to a growing trend to rent housing during the off-season rather than leaving the property vacant. The median rent per month was \$336, slightly higher than the County's median of \$325.

The median value for homes listed by SWH home-owners in 1990 was \$104,000, and was significantly higher than in the County (\$85,200). The comparable figure for Bar Harbor was the same as SWH's, and Tremont's was slightly less. The median value in Mt. Desert was \$122,000.

SWH has two condominium ownerships - Western Way with 18 units and Windward Shores with 3. There also is a 40 unit time-share enterprise which is scheduled for completion by the end of 1996. There are a few other multi-family buildings (apartments, duplexes), but most of SWH's housing is single family. This includes a typical percentage of mobile homes (12% compared to 14% in the County), since SWH treats a mobile home no differently than any other form of housing in terms of zoning.

Almost 40% of the houses were built before 1940 and most of the balance were built after 1970. Some of the latter replaced unsatisfactory housing; others had the effect of reducing the numbers of families who had been obliged to share housing.

The existing supply of housing in SWH satisfies the State's criteria for affordability, with the possible exception of the very low income group. An increase in the supply of housing for this group might be accomplished by encouraging the MDI Housing Authority to build an additional complex of low-cost housing. More work would have to be done to establish whether there is a real demand.

Estimates for additional housing needed within the Town during the next ten years must include both year-round and seasonal units. The population estimates suggest that 40 - 50 new units will be needed for year-round use. Since the population estimate is based upon an assumption of slow economic growth, an increase in this factor would increase the number required. It is estimated that 80 new seasonal units will be required as well.

3. Housing Inventory

A. Number of Housing Units - Year Round and Seasonal

According to the 1990 Census, the total number of housing units in SWH was 1266. This figure represents a 63% increase since 1970 (compared with a 56% increase in the County) of which 36% was in seasonal homes. As a result, the percentage of seasonal homes increased from 21% to 27% during that period. However, the proportion of seasonal units being built since 1990 appears to be diminishing.

There was no net migration recorded in SWH during the 1980 - 1990 period. In addition, the increase in year-round housing (15%) was just slightly greater than in the number of new households formed (14%). Therefore, some of the increase in housing must have been due to a decrease in household size.

The increase in seasonal homes is due to the attraction of this area to people who wish to summer here or eventually retire here.

TABLE I. CHANGE IN TOTAL, SEASONAL, AND YEAR ROUND DWELLING UNITS IN SOUTHWEST HARBOR AND THE COUNTY, 1970 - 1990

	1970	1980	Increase		1990	Increase		
SW HARBOR	777	1034	257	33%	1266	232	22%	2000 1,28
Year-Round	610 (79%)	800	190	31%	923 (73%)	123	15%	
Seasonal	167 (21%)	234	67	40%	343 (27%)	109	47%	337
HANCOCK COUNTY	19,460	24,428	4968	26%	30,396	5968	24%	
Year	13,924 (72%)	16,944	3020	22%	20,260 (67%)	3316	20%	6,885
Seasonal	5,536	7,484	1948	35%	10,136	2652	35%	

Source: US Census.

SWH's housing stock grew at a faster rate over the last twenty years than any other Town on the Island. In addition, it is the only Town which experienced an increase in the proportion of seasonal housing during the same period. Mt. Desert's housing stock has grown least over the twenty year period. Bar Harbor contains the greatest proportion of year-round housing and Mt. Desert the least. Bar Harbor and Mt. Desert have retained the same ratio of year-round to seasonal housing over the past twenty years. Tremont had a sharp increase in year-round housing during the 70's, but that leveled off. Overall, these figures suggest that SWH and Bar Harbor have active, working communities year-round.

TABLE II. CHANGE IN TOTAL, SEASONAL, AND YEAR ROUND DWELLING UNITS ON MOUNT DESERT ISLAND, 1970 - 1990

	1970	1980	Increase	1990	Increase
BAR HARBOR	1695	2094	399 (23%)	2586	492 (23%)
Year-Round	1410 (83%)	1751 (84%)	341 (24%)	2132 (82%)	380 (22%)
Seasonal	285	343	58 (20%)	454	111 (32%)
MT. DESERT	1272	1548	276 (22%)	1700	152 (10%)
Year-Round	705 (55%)	872 (56%)	167 (24%)	930 (55%)	58 (7%)
Seasonal	567	676	109 (19%)	770	94 (14%)
SW HARBOR	777	1034	257 (33%)	1266	232 (22%)
Year-Round	610 (79%)	800 (77%)	190 (31%)	923 (73%)	123 (15%)
Seasonal	167	234	67 (40%)	343	109 (47%)
TREMONT	597	723	126 (21%)	947	224 (31%)
Year-Round	405 (68%)	518 (72%)	113 (28%)	633 (67%)	115 (22%)
Seasonal	192	205	13 (7%)	314	109 (53%)

Source: US Census.

It is very difficult to accurately determine which housing is occupied seasonally and which year-round. Many of the year-round residents go on vacation during several months of the winter, but do not consider themselves "seasonal". Some of the seasonal housing appears to be vacant, but in fact is used for vacation also in winter. Furthermore, the use of a unit may not be constant over time--some become seasonal as residents prefer to extend their annual visit to a warmer climate, while others become year-round when an owner can finally retire.

B. Tenure of Households (Home Owners and Renters)

Between 1980 and 1990 SWH experienced an increase in the rate of expansion of renter-occupied housing compared with owner-occupied. By 1990 the percentage of renter-occupied housing within the total housing stock had increased by 5%, or by 73 units compared with 27 owner-occupied units. This increase appears to be due to a trend to rent housing during the non-summer months rather than leaving the property vacant. It also appears due to the increase in new housing units (particularly condominiums) which are rented during the winter while the owner is in Florida. As a result, more affordable housing is available for rent during the winter months.

The percentage of the housing stock in year-round renter-occupied units was greater in SWH than in Hancock County and in the other towns on the Island except Bar Harbor. The fact that Bar Harbor and SWH have more rental units again suggests that these are the more active year-round communities.

TABLE III. COMPARISON OF THE TENURE OF YEAR-ROUND HOUSING ON MT. DESERT ISLAND AND THE COUNTY, 1980 AND 1990

	RENTER OCCUPIED				OWNER OCCUPIED			
	1980		1990		1980		1990	
SW HARBOR	208	28%	281	33%	538	72%	565	67%
BAR HARBOR	555	34%	710	38%	1092	66%	1141	62%
MT. DESERT	180	22%	219	26%	637	78%	618	74%
TREMONT	86	18%	127	23%	388	82%	427	77%
HANCOCK COUNTY	3,355	22%	4,466	24%	11,597	78%	13,876	76%

Source: US Census.

The median monthly rent in SWH in 1990 was \$336 which compares with Hancock County's \$325. Bar Harbor had the same median as SWH, while Tremont's and Mt. Desert's were higher. In addition, SWH had a much lower percentage of "rents unknown" than the County. This might explain the larger percentage of units within the \$250 - \$499 category.

TABLE IV. COMPARISON OF RENT FOR YEAR-ROUND RENTER-OCCUPIED UNITS IN SOUTHWEST HARBOR AND HANCOCK COUNTY, 1990

MONTHLY RENT	SOUTHWEST HARBOR		HANCOCK COUNTY	
Less than \$250	70 units	25%	1072 units	24%
\$250 - \$499	167 units	59%	2152 units	48%
\$500 - \$749	19 units	7%	252 units	6%
\$750 or more	1 unit	0	19 units	0
Rent not known	24 units	9%	971 units	22%
TOTAL	281 UNITS		4466 UNITS	

Source: US Census

TABLE V. MEDIAN RENT, LOCALLY AND REGIONALLY, 1990

SOUTHWEST HARBOR	\$336
BAR HARBOR	336
MT. DESERT	391
TREMONT	380
<hr/>	
HANCOCK COUNTY	\$325

Source: US Census

The values of owner-occupied homes listed in the 1990 Census were provided by the owners themselves, and the median value for SWH was \$104,000. This is higher than the County median of \$85,200, but not as high as the median for a similarly-situated town like Castine (\$187,500). The value of houses in other Towns on the Island ranges from \$99,400 in Tremont to \$122,800 in Mt. Desert with Bar Harbor's practically the same as SWH's. The fact that all Towns on the Island have a significantly higher median value than elsewhere in the County is partly due to the higher cost of house building and partly to land value.

SWH had a 3.1% homeowner vacancy rate compared to 2.1% for Hancock County (Bar Harbor was 1.9% and Tremont and Mt. Desert clustered around the 2.15 range). A 2% vacancy rate is considered desirable for owner-occupied homes. This means that there are sufficient units for sale, but not too many. The higher vacancy rate in SWH is not considered significant as the total number of units is so small.

SWH's vacancy rate of 12.7% for rental housing is high. Although similar to Bar Harbor's (14.6%), it is higher than Hancock County's (8.5%), Tremont's (9.3%), and Mt. Desert's (6.4%). A 5% vacancy rate is usually considered desirable for rental housing, so that people have an opportunity to find the "right" lodging. It may be that some of the rental housing available in Bar Harbor and SWH is not suitable for year-round occupation.

Much of the housing rented seasonally in SWH commands weekly rents for July and August which far exceed the monthly rate for year-round housing.

C. Type of Housing Stock

As could be anticipated, the most common type of dwelling in SWH is single family - 72% of the stock in 1990. (This was 5% less than in the County.) However, SWH seemed to have a large percentage of complexes containing over 9 units (9%) compared

to the County which had only 2% of its units in this category. From 1980 to 1990, SWH experienced a marked increase (211%) in this category as a result of the construction of two condominiums and housing for senior citizens. The County had a slightly higher percentage of mobile homes, but the actual number of such homes in SWH has doubled since 1980. SWH makes no distinction between a mobile home and a "stick-built" house in terms of zoning. In addition, SWH allows for an accessory dwelling on the same lot as the principal residential unit; examples include an apartment, a mobile home, and a detached structure.

The decrease in the 2 - 9 unit category may be due to an error in tabulating as well as to a return to single family use of some of the homes which previously had an accessory dwelling unit. This classification should be reevaluated in the next Census.

TABLE VI. COMPARISON OF DWELLING UNIT TYPES IN SOUTHWEST HARBOR AND HANCOCK COUNTY, 1980-1990

	1980	1990	%	Change	
SOUTHWEST HARBOR	1,034	1,266		232	22%
Single Family	804	910	72%	106	13%
2 - 9 Units	125	91	7%	-34	-27%
More than 9 Units	35	109	9%	74	211%
Mobile Home	70	146	12%	76	108%
HANCOCK COUNTY	24,428	30,396		5968	24.4%
Single Family		23,412	77%		
2 - 9 Units		2,126	7%		
More than 9 Units		595	2%		
Mobile Home		4,263	14%		

Source: US Census.

Condominium Housing and Time Shares - SWH has two condominiums: one with 18 units, the other 4, and both complexes are located on the Harbor. The units are owned by both year-round and summer residents. The latter sometimes rent their units during the winter to employees of the Jackson Lab in Bar Harbor, teachers at the High School, or employees of Hinckley Boat in SWH.

The Time-Share project was approved in the spring of 1991 (having been proposed originally for condominium ownership in 1987). Thirty-two of the proposed forty units have been completed. The sale price for one week a year ranges from \$3,900 during the winter to a high of \$14,900 in the summer. Almost 20% of the sales have been to residents of the Island

and the nearby region. Owners purchase a unit planning to use it themselves, and also for the ability to participate in international time sharing.

Mobile Homes - Currently, there are 76 mobile homes in the Town, most of which are not located in the Town's two mobile home parks. Many of the others share a lot with a principal residential unit. These homes are viewed no differently than any other form of housing in the Town. In fact, mobile homes are the only type of affordable housing available to low income families.

D. Age and Condition of the Housing Stock

Age - Almost 40% of the housing stock was built over 55 years ago. During the war years and afterwards (1940 - 1970), approximately 70 units were added each decade. However, the 1970's brought a new economic climate to this part of the United States. Over 320 new houses were built in the '70's, followed by an additional 250 during the '80's. Many of these buildings were replacements of old houses rather than additions to the housing stock; others represented new housing that relieved overcrowding by enabling families to move out of shared accommodation.

Currently about 10 new residential building permits are granted per year. Some "purpose-built" houses replace mobile homes and some "double-wide" mobile homes replace smaller ones. Thus, such units change the figures for housing types but not the total number.

Condition - Housing is rated as either standard or sub-standard. The latter is usually defined by a lack of plumbing facilities and by overcrowding due to either too many people or too small a home. Accordingly the Census classifies those housing units which "lack complete plumbing for exclusive use" as well as those units containing more than 1.01 persons per room to determine the condition of the existing housing stock.

The following tables indicate that the housing stock in SWH is not sub-standard. The number and percentage of units in these categories are very small and appear insignificant when compared with the County.

TABLE VII. HOUSING LACKING COMPLETE PLUMBING FOR EXCLUSIVE USE LOCALLY AND REGIONALLY, 1980 AND 1990

	1980	1990
SW HARBOR	18 (2.4%)	21 (1.7%)
BAR HARBOR		40 (1.5%)
MT. DESERT		25 (1.5%)
TREMONT		26 (2.7%)
HANCOCK COUNTY	1421 (9.2%)	1752 (5.7%)

Source: US Census

TABLE VIII. COMPARISON OF OVERCROWDING IN HOUSING (UNITS WITH MORE THAN 1.01 PERSONS PER ROOM), 1980 AND 1990

	1980	1990
SW HARBOR	48 (2.4%)	16 (1.7%)
BAR HARBOR		19 (0.7%)
MT. DESERT		7 (0.4%)
TREMONT		7 (1.0%)
HANCOCK COUNTY	1421 (9.2%)	1752 (5.7%)

Source: US Census.

4. Affordable Housing

One very specific State goal for a Comprehensive Plan is "to encourage and promote affordable, decent housing opportunities for all Maine citizens." The State has defined the target areas for this housing, and they include very low income households, low income households, and moderate income households (the income ranges for these categories will be discussed later). Some of these households want to buy their homes while others prefer to rent. SWH must show that its existing housing stock provides the following: adequate numbers of housing units for each of these income ranges; an adequate number of home sales within the last three years for each of these income ranges; and an adequate number of rentals that fall within each of these income ranges. The Town also has some subsidized housing owned by the Mount Desert Island Housing Authority, as well as housing financed by FMHA. The ability of these specific units to help meet the demand for affordable housing will be discussed. The Town will project its housing needs based upon its population growth and the in- and out-migration of its inhabitants. The Town will also determine if additional strategies for providing lower cost housing must be identified.

For the purposes of evaluating affordable housing, the State Planning Office has defined three categories of household incomes in a given community. Each category is defined further in terms of a specific range of median annual family income for that County.

DEFINITIONS OF HOUSEHOLD INCOMES

Source: State Planning Office

Very Low Income Household: annual income not greater than 50% of the County median annual family income

Low Income Household: annual income more than 50% but not greater than 80% of the County median annual family income

Moderate Income Household: annual income more than 80% but not greater than 150% of the County median annual family income

1994 DATA FOR HANCOCK COUNTY

Source: Office of Community Development

Estimated Median Annual Family Income = \$31,100

Very Low Income Household: income not greater than \$15,550

Low Income Household: income from \$15,551 - \$24,880

Moderate Income Household: income from \$24,881 - \$46,650

Percentage of Households Within These Income Ranges = 80%

Very Low Income Households = 27%

Low Income Households = 20%

Moderate Income Households = 33%

Affordable Housing	Monthly Rents	Purchase Price
Very Low Income Households	< \$300	< \$37,800
Low Income Households	< \$540	< \$69,000
Moderate Income Households	< \$1,050	< \$134,900

A. Affordable Housing in Southwest Harbor - 1995

Number of Households - SWH had 846 households at the time of the 1990 Census. Based upon the definitions of "affordable housing" given previously, these households in SWH would be distributed as follows:

Very Low Income Households = 230 (27%)

Low Income Households = 170 (20%)

Moderate Income Households = 280 (33%)

Private Rental:

The 1990 Census reported that SWH had 257 housing units which were renter-occupied. The Real Estate firms who serve the Town said that there are many rentals that do not use a Real Estate listing: for example, private home owners solicit renters by contacting the College of the Atlantic, the High School, the Jackson Laboratory, and boat-building shops directly.

Very Low Income - The maximum monthly rent which very low income households in SWH can pay is \$300. The Census reported that there were 72 rental units within this range. Real Estate Firms in the Town report that they have no rentals at that price. One reason for not handling such properties at this rental was said to be the poor condition in which they are often left.

Low Income - The maximum monthly rent which low income households in SWH can pay is \$540. The Census reported that there were 135 rental units within this range. Real Estate Firms in the Town report that they have 39 rentals in this category.

Moderate Income - The maximum monthly rent which the moderate income households in SWH can pay is \$1,050. The Census reported that there were 50 rental units within this range. Real Estate Firms in the Town report that they have 16 rentals in this category.

Private Purchase:

Very Low Income - The maximum purchase price which very low income households in SWH can afford to pay is \$37,800. There are 75 homes (building-plus-land) in the Town currently assessed below that price, and 62 (80%) of them are mobile homes. Real Estate transfers show that since 1992 no homes have been sold for less than \$37,800. However, over 15 lots have been sold at a price which could "afford" a mobile home and fall within this category.

Low Income - The maximum purchase price which low income households in SWH can afford to pay is \$69,000. There are 113 homes (building-plus-land) in the Town currently assessed between \$37,800 and \$69,000, and 13 of them are mobile homes. Real Estate transfers show that since 1992, 11 homes have been sold within this price range.

Moderate Income - The maximum purchase price which moderate income households in SWH can pay is \$134,900. There are 390 homes (building-plus-land) in the Town currently assessed between \$69,000 and \$139,900, and only 2 of them are mobile homes. Real Estate transfers show that 43 homes have been sold in this price range since 1992.

The MDI Housing Authority:

The Mount Desert Island Housing Authority has two low cost housing projects primarily for senior citizens. Ridge Apartments, the older of the two, is located behind the Town Office and has 32 units. Norwood Cove Apartments is located near the corner of Main Street and the Seal Cove Road, opposite Norwood Cove, and has 18 units.

Both of these apartment complexes operate under the following criteria:

1. An applicant must be at least 62 years; OR
be handicapped or disabled; OR
be single and satisfy the income requirements.
2. Income requirements:
Ridge Apartments* - 1 person income <\$17,800
2 person income <\$20,350

Norwood Cove Apartments - 1 person income <\$11,150
2 person income <\$12,700

*Subsidized units built before 1982 allow higher incomes

3. **Priorities:** The Housing Authority must recognize the plight of any applicant who meets the Federal definition of a Homeless Person OR whose current housing is substandard and whose rent equals at least 50% of their income.

The Housing Authority must give a preference to "priority applications" for at least 50% of the available apartments; in addition the Authority now requires references for each "priority application".

Rents are set by the Federal Government and range from \$50 to \$250 a month. Tenants are required to pay 30% of their income, and the Federal Government pays the rest. An applicant's income is verified, including unearned income such as interest on assets, medicare payments, etc.

The Housing Authority maintains a separate application list for each Town, and applicants are given the opportunity to indicate their preference. However, if a unit becomes available in a Town not of their choice, they are allowed one refusal but are placed at the bottom of the list after the second refusal. These apartments currently have a short and active waiting list, and most of the applicants are local.

Beech Cliff Apartments:

Twenty-one apartments are located in three buildings at the end of Forest Avenue. These units were built in 1988 with FMHA financing, and are administered by the MDI Housing Authority.

Applicants must be over 18 years of age. There is a very short waiting list, as a family has to be earning at least \$1000 a month. The rents are \$350 per month for a one bedroom apartment and \$385 for a two bedroom.

If an applicant cannot afford the rent, a "Rent Voucher" for subsidizing the rent must be obtained according to the Authority's "priorities" described above.

East Ridge Estates:

This complex was built in 1988. It contains 9 two-bedroom apartments, 16 one-bedroom apartments, and a central dining/recreation area. These units are for low income elderly, handicapped, or disabled applicants, but are not subsidized. Income levels are set by the Federal Government (FMHA). Rents include utilities and are \$363 per month for a 1-bedroom unit and \$436 for a 2-bedroom unit.

B. AFFORDABLE HOUSING IN SOUTHWEST HARBOR

	<u>Demand</u>	<u>Supply</u>
Very Low Income:	230 Households	(0 rentals - agencies)* 72 rentals - census 50 units - MDI Housing 21 units - Beech Cliff <u>75 owned</u> 218 HOMES
Low Income:	170 Households	(39 rentals - agencies)* 135 rentals - census 25 units - East Ridge <u>113 owned</u> 273 HOMES
Moderate Income:	280 Households	(16 rentals - agencies)* 50 rentals - census <u>390 owned</u> 440 HOMES

*Homes rented by Real Estate Agencies were not counted in these calculations to avoid possible duplication with rentals reported in the Census.

C. CONCLUSION

The supply of affordable housing in SWH is currently adequate to meet these income levels with the possible exception of the very low income group. However, 95% of the demand in this category appears to be met. On the other hand, some young family members live in smaller apartments or mobile homes, do not pay rent, and therefore have not been counted.

One way to eliminate any concern about meeting the State's requirements for affordable housing would be to encourage the MDI Housing Authority to construct another housing complex with 10 - 12 units for very low income households. This would also aid in the provision of housing for the increasing older age group over the next 10 year period.

5. Housing - Projected Dwelling Units

The number of occupied dwelling units needed by the year 2005 can be estimated by dividing the projected population by the projected household size (see POPULATION chapter). However, SWH's population includes 20 members of the Coast Guard living in group quarters. It can be assumed that this number will remain constant as the Coast Guard is not anticipating any expansion during this time period. Therefore, the population estimates have been reduced by 20 persons in the determination of the numbers of occupied dwelling units.

The 1995 total dwelling unit count reflects an increase in occupied housing units based upon population and family size projections; in addition, it assumes 1990 vacancy rates for 1995 and a reduced rate of growth in seasonal homes. Estimates for the year 2005 will reflect the population figures for the occupied dwelling units, a slight decrease in the vacancy rate due to a decrease in the high rental figures, and a slight increase in the percentage of seasonal units. Currently, the increase in construction of seasonal homes appears to be slowing down, and more seasonal visitors appear to be buying year-round homes than in the past.

The accuracy of this estimate will be confirmed by the actual number of building permits issued by the Town for new (not replacement) dwellings over the years. Obviously these figures should be compared with the Census in the year 2000 and adjusted accordingly.

TABLE IX. SOUTHWEST HARBOR DWELLING UNIT FORECAST

Year	1990	1995	2005
Population	(1952)	(1950)	(2,000 - 2,020)
less group qtrs	1932	1930	1,980 - 2,000
Household Size	2.28	2.25	2.20
Occupied Dwelling Units	846	858	900 - 910
Seasonal Units	343	395	475
Vacant Units	77	78	63 - 65
TOTAL DWELLING UNITS	1266	1331	1438 - 1450

6. Numbers of Dwelling Units to be located within the Town

The seasonal component of dwelling units is an integral part of the demand for housing. It is not only important to know the number of dwelling units likely to be required by the year-round population, it is equally important to know the number of units required by people planning for seasonal use or for retirement. There is no particular pattern of housing location that distinguishes between year-round and seasonal housing.

It has been estimated that the Town needs space for between 110 to 120 new dwelling units of which 80 will be seasonal units.

One of the assumptions for the lower estimate is slower growth in the local economy (rather than moderate). If this should prove incorrect, then the estimate should be raised.

CHAPTER VI. PUBLIC FACILITIES AND SERVICES

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

1. Introduction

An assessment of SWH public facilities and their current and future capacities is an important element in the Comprehensive Plan. The infrastructure of the community provides the backbone for development.

SWH is expected to continue with very little growth of population into the next century. Therefore, the emphasis is on identifying how present facilities can meet the objective to "maintain a year round working community with a diverse economy"...(Citizen survey, November 1994).

This chapter links with those on Water, Soil, and Topographic Resources; Transportation and Fiscal Capacity.

2. Key Findings

Public Facilities - The Town Office, a schoolhouse building constructed in the 1920's, currently houses not only the administrative offices of Town Government and a meeting room, but also the Police Department, Fire Department, Dispatch, and the SWH/Tremont Ambulance Service. The building is seriously undersized to accommodate all of these together. The Town has embarked on a study to determine which of these departments might best be moved to a new facility.

Perhaps the most urgent item of major public expenditure is the need for renovations in the sewerage system and wastewater treatment plant. The Wastewater Treatment Plant suffers from periodic overload due to infiltration of storm water into the town's sewerage system. Major expenditure will be required to correct this and other deficiencies. The Town may need to install a new diffuser to the outflow pipe in the Harbor urgently in order to meet the requirements of DEP.

The Town is committed to building a new water Filtration Plant, and a Bond has been issued to pay for this. The Town is negotiating to exchange three parcels of land which lie within the boundaries of Acadia National Park for a site within the Park on which to build it.

The Public Works Department's space and equipment is adequate. It needs a new storage shed for the Dump Truck and an additional fuel storage tank.

Public restrooms are not adequate. Restrooms are needed at two of the town docks and the two existing facilities need improvement to make them less difficult to maintain.

The Elementary School in SWH is at capacity. This is due more to changes in teaching needs rather than to increases in the student body size.

Community Services - The Harbor House building, which is the Community Center, is in need of repairs.

The Library needs more space. The Library Trustees are raising funds for an addition to its current building or a new building in a new location.

The Gilley Museum and the Oceanarium have no plans for major changes.

There would no doubt be scope for making economies of scale by merging certain public services with adjoining Towns. At present the Nursing Service (Ambulance), the Community Center (Harbor House) and the Chamber of Commerce are jointly supported by SWH and Tremont, and the High School is common to the four towns on MDI. The Fire Service has a mutual assistance agreement, and negotiations are taking place about the possibility of introducing a common Dispatch service throughout the Island. Other public services for which there may be scope for reducing per capita expenditure are the Highway Department, the Police and the Elementary School, of which the last is by far the largest cost item.

3. Public Facilities Inventory

A. Administration

The Town Office is housed in a building in the center of town which was constructed as a schoolhouse in the 1920's. All primary administrative services plus the SWH/Tremont Nursing Service are located on the upper floor. On the lower floor are the Police, Fire, and Dispatch offices. There is an office for the Director of Public Works at the Town Garage on the Seal Cove Road. There is also a summer office for the Harbor Master at the Manset Town Dock.

Personnel - For the daily administrative functions, the Town employs a Town Manager, Administrative Assistant, Town Clerk, Assessor/Code Enforcement Officer, Planner (part-time), and 3 clerical employees (one of them for part-time). Other personnel are discussed in the sections below.

Facilities - The Town Office is divided into 3 areas. Administrative Services are housed in two and the third area serves for conference room and board meetings. The first

area houses basic services for citizens (registrations, tax services). Staff are available at the reception desk to greet residents and visitors. The Town Manager has an office in this section.

The second area is a large room with desks for a clerical assistant and for the Harbor Master. There are two offices, one for the Assessor/Code Enforcement Officer and one for the Planner, plus a small room that serves as a kitchen/lunch room.

The third area is the room used for meetings (Board of Selectmen, Planning Board Hearings, etc.). This room is often not large enough to allow adequate seating for the members of the Boards and also for the general public. Town Meetings and Public Hearings are held in larger rooms elsewhere, such as the Elementary School gymnasium or the American Legion Hall.

B. Public Safety

This comprises the Fire, Police and Dispatch Departments and the Nursing Service. All services are operated 24 hours a day. The Fire Department has a mutual aid agreement with other Island communities to assist and be assisted in emergencies. The Police Department is the primary police agency with technical assistance from the State Police/Sheriff. The Police Chief also acts as the enforcement officer in marine incidents as the Harbor Master does not have police authority. Dispatch receives calls for ambulance, fire, and police services from all areas of SWH. Ambulance service from Southwest to any required medical facility is provided by the SWH/Tremont Nursing Service.

The Fire and Police departments have separate Chiefs and report to the Town Manager. The Dispatch office reports to the Police Chief. The Nursing Service is a private organization which has its own board of directors.

Facilities - The Police, Fire, and Dispatch Departments and the Nursing Service presently share the lower floor of the Town Office building (the Nursing Service also uses a room upstairs in the Town Office). The section housing the Police consists of the Chief's office and an officers' room which contains a kitchenette, the charging facility for the portable radios, lockers, record files, and the computer. Behind these two is the Firemen/Police meeting and training room, which also acts as the evidence room for the Police. It contains the emergency generator activation switch (performed by a dispatcher), emergency washdown, and photocopier. The majority of the ground floor is devoted to four bays for the fire trucks and one for the ambulance. Dispatchers operate from the front room. There is a security door locking system.

POLICE - The Department has 2 cruisers. One was purchased in 1993 and has over 140,000 miles and the other, in 1995, has over 80,000 miles. These need to be renewed on an average of every 3 years. Clerical services are performed by the Police themselves, by Dispatch during the quiet hours, or by the Town clerical staff during office hours. The radio system used by the Police is located in the Dispatch Office with aerials on the roof.

FIRE - During the past 5 years, the Department has averaged 40 calls per year, 80 miles per year answering alarms and put 4,000 miles per year on their vehicles. Last year, 1995, the response time to a call was reduced to 2 minutes 30 seconds (the average had been 3 minutes 30 seconds). The Department has the following fire vehicles:

	<u>YEAR BUILT</u>	<u>TYPE</u>
#101	1975	Primary Attack Pumper Engine
#102	1969	Secondary Attack Pumper Engine
#103	1987	Pick-up Truck - Utility
#104	1980	Fast Attack Pumper Engine
#105	1981	Water Supply Pump Engine-Newest
#106	1989	Fast Attack Pumper Engine

Owing to the shortage of garage space, trucks #103 and #104 are parked outside for 7 months of the year and are out-of-service for the other 5 months. During the winter, #104 is permanently stowed behind the Town Garage on Seal Cove Road and #103 has a cap placed on its back which reduces its usefulness.

Calls to the Department in 1995 which they responded to:

Structure fires	7	Car fires	7
Mutual aid calls	5	Chimney fires	4
Fire alarms	7	Brush/grass fires	6
Smoke investig.	2	Car accidents	4
Rescue calls	1		

DISPATCH - The office equipment includes: a radio console and mike; 2 pager incoders; a radio system which ties the Town Office to the Water and Sewer Departments; caller ID's for Police, Ambulance, Fire which identifies names; programmed telephones; an intercom with the Town Office; six identified lines (4 lines are used for dispatching); 2 additional separate lines for the Ambulance Service; Scanner; clocks; dictaphone (records radio and telephone conversations); typewriter for daily logs & Police records; Microfiche reader (used for vehicle identification, license identification, etc.).

AMBULANCE - The Nursing Service has one ambulance in Southwest and one in Tremont. The Southwest ambulance is quite new. The Service offers several advanced facilities within the ambulance. Two hundred and thirty-three runs were made during 1995 - a slight decrease from the 1994 figure. The Service is dependent upon the Dispatch Department of the Town for its communications - it has its own telephone lines into the Town Office. The Nursing Service pays a percentage of the dispatch budget. It is financially dependent upon donations and memorials from the people of SWH and Tremont as well as money authorized by each Town at their annual meeting (\$19,000 from SWH in 1995).

Personnel

POLICE - The Police Department has 5 staff including the Chief. (In the summer an additional officer is sometimes hired.) The staff is adequate, but the workload is heavier in the summer.

FIRE - The Fire Department has a Chief and 2 Deputies. They have other employment and are engaged as volunteers with a stipend reimbursement. The remainder of the force is composed of 22 volunteers paid \$100 each per year.

DISPATCH - The Dispatch Department has 4 full-time employees. Staffing is adequate.

AMBULANCE - The Nursing Service has 1 full-time employee whose office is upstairs in the Town Office. He provides advice and personal medical equipment from 9 - 5 during the week. He rides in the ambulance when it is called. The Service is composed of 24 volunteers.

Training

POLICE - Police officers receive 12 weeks of mandatory police academy training. Part-time officers receive 100 hours of training. Additional training has been cut and police attend only mandatory training sessions.

FIRE - All volunteer fire fighters are provided training to meet OSHA standards.

AMBULANCE - All volunteers attend the basic emergency medical technician course offered on the Island.

C. Public Works

The Public Works Department consists of the Highway Division, Wastewater Division and the Waterworks Division. The Department is under the supervision of a Director with an office located at the Highway Division Compound on the Seal Cove Road. It would be an advantage to have desk space also within the Town Office.

1. HIGHWAY DIVISION

The Highway Division maintains 10.1 miles of Town roads and streets and provides winter maintenance only - plowing and sanding - to an additional 5 miles of State-maintained roads. The Division maintains about 3 miles of sidewalks, the Public Parks, Public Restrooms, Parking lots, Public Grounds and the storm water drainage systems. It also provide excavation, trucking and other construction services to the Wastewater and Water Works Divisions as required.

Personnel - The Division has 2 full-time employees and an additional employee is added during the Summer. Personnel from the Wastewater Division and the Waterworks Division assist in winter maintenance of the streets and sidewalks.

Facilities and Equipment - The Highway Compound is located on the Seal Cove Road and consists of a sand and salt storage shed, the Public Works Director's office, a 5-bay garage that is shared by the School Department, Fire Department and the Water Works Division for buses and other equipment storage. There is also an old metal building that is used in winter to keep loaded plow and sand trucks under cover for protection from winter weather. The compound also includes land used as a laydown area for various aggregates and storage of infrastructure material; i.e., culverts, catch basins, etc. Fuel storage (gasoline & diesel) is located on the compound and is used by the Public Works, School, Fire and Police Departments. The present underground 5000 gallon tank must be removed before 1998 (DEP requirement). Major equipment consists of:

- 2 Heavy Trucks with 13' plows, 10' wing assembly and tailgate sanders
- 1 1-Ton Dump Truck with plow gear and
 - 2 - 3 yard hopper sander
- 1 Loader Backhoe
- 1 CY Loader
- 1 small yard tractor with snowplow for sidewalks

2. WASTEWATER TREATMENT

The Wastewater facilities are a division of the Public Works Department. The Town owns and operates a wastewater treatment facility and a wastewater collection system that went on line in 1975. The collection system contains approximately 7.28 miles of delivery piping and 3 pump stations that collect the wastewater generated and transport the flow to the treatment plant. The plant provides secondary treatment by means of the activated sludge process and disinfection by gaseous chlorine. The flow is then passed through a dechlorination system and discharged into the Harbor at an average dilution rate of 20 to 1 during dispersal. The collection system as a whole has sufficient capacity to handle current and future flows. The plant was designed for 375,000 gallons per day. (During the summer the system averages about 250,00 gallons per day.) It has received over a million gallons during storms. Storm water intrusion is a significant problem and diminishes the system capacity to transport and treat wastewater. There are about 20 days per year when the plant is overloaded. The original design was intended to serve a community of 4,950 by the year 2000. Service is provided to about 50% of the community - that is roughly 1200 people in the summer months.

Personnel - The treatment plant is operated by 2 full-time employees each holding an appropriate Waste Water Treatment Plant Operators Certificate as required by current law. Administrative, budgeting and planning assistance is provided by the Public Works Director. Infrastructure maintenance support is provided by other divisions within the Department as required. The clerical business of the system is conducted by the Town Office.

Facilities and Equipment - The treatment plant is located at the end of Apple Lane off Main street. The plant building includes a pretreatment room, a lab, an office, a pump and equipment room, a chlorination contact tank, clarifiers, a generator room, and chlorination and dechlorination equipment.

The collection system consists of some 7.28 miles of pipe ranging in size from 4 to 18 inches in diameter. The sewage system is made up of 8" collector pipes, and 8" or 12" interceptor pipes. Maximum capacity of the plant is 375,000 gal/day. Average usage is 225,000 gal/day, or 60% of capacity.

There are three pumping stations in the system, all with propane fueled backup power. The Clark Point Road station has two 125 GPM pumps; Norwood Cove station, two 150 GPM pumps and the Manset station, two 200 GPM pumps. The pumping stations are now nearly twenty years old.

Over the past decade only one significant expansion has occurred. A developer paid for an extension of the north Main Street line to service a small shopping area. No extensions are expected in the near future.

While most of the system components are publicly owned, there are many sections of privately-owned sewer. These were privately built and maintained and do not meet the specifications of the public sewer system. It is principally in these sections that the problem of stormwater intrusion arises. For the Town to take over these lines, they would have to be upgraded.

3. WATERWORKS DIVISION

Long Pond is the Town's water supply. Over two-thirds of Long Pond is in the Town of Mt. Desert. As the watershed for the pond is also shared by both SWH and Mt. Desert, they share in maintaining its quality. Much of the land surrounding Long Pond is in Acadia National Park.

In 1974 the Town bought the private SWH Water Company. The Board of Selectmen is the Board of the Corporation. On the Island, SWH is the only Town which provides water as a municipal service. Bar Harbor and Mt. Desert are served by private companies.

Whereas the Division is owned and operated by the Town, by State of Maine law it is subject to all the rules and regulations of the Public Utility Commission (PUC). The Board of Selectmen must obtain approval of the PUC for rate increases. The State Environmental Protection Agency and Maine Department of Human Services determine the pure water requirements.

At the present time, there are about 700 residential and commercial customers (an additional 145 - 150 seasonal residents are "summer water" users). Customer charges are based on water usage. The system is supported by user fees and the rates are set by the Board of Selectmen.

Personnel - The Waterworks Division is manned by 2 full-time employees holding appropriate State Certification for Water Quality Control. Administrative, budgeting and planning assistance is provided by the Public Works Director. Infrastructure maintenance support is provided by other divisions within the Department as required. The staff manage the pumping station at Long Pond, are responsible for the normal maintenance of the system of underground pipes, and for turning the summer water on and off.

Facilities - The Waterworks maintain one pump station on Long Pond which is the source for the Town Water Supply. The Water is presently treated with flouride and gaseous chlorine at the pump station and transported by a 12" line to 2 storage tanks at the end of the Freeman Ridge Road. One storage tank is the older painted metal 300,000 gallon tank and the other is the new 1,000,000 gallon glass-fused tank. One additional 180,000 gallon tank is also located on site but is no longer in use. The water is then gravity fed from these tanks by delivery and service pipes throughout most of the community from Carrolls Hill to Seawall. An additional 10,000 gallon riveted-iron storage tank is located on Fernald Point for seasonal users. Fire hydrants are strategically located along the delivery routes. The delivery system is made up of a variety of sizes and composition from old cast iron pipes, PVC, Transite and new modern Ductile Iron. There is not a good inventory of the delivery system piping and in some locations there appear to be duplications that occurred when the old systems were left intact during upgrades. It is estimated that there are about 10 miles of piping within the delivery system.

The Town is in the process of exchanging Town land within the Park for a piece of Park land on the Long Pond Road. A new water filtration plant must be built there to meet the Federal Water Quality Standards.

D. Public Restrooms

The public restroom on the Village Green Way is inadequate and difficult to maintain. Similarly with the restroom on the Lower Town Dock. The Upper Town Dock and the Manset Dock have temporary (portable) restrooms during the summer months. These are not satisfactory for the amount of usage they receive.

E. Solid Waste Disposal and Recycling

Commercial dumping facilities have been available since the early '40's. The Town has never been involved in this public function except through the employment of private contractors. Since the early '40's the Town has had a contract with first Worcester Landfill and then Worcester Associates to accept waste delivered by citizens. Several years ago the company name was changed to EMR (Eastern Maine Recycling). The Town currently has contracts with EMR for Solid Waste Disposal and Recycling which expire in the year 2001. EMR receives the SWH tonnage at its site on the Long Pond Road and either recycles, composts, or transfers the materials. The transferred materials are hauled to PERC (Pennobscot Energy Recovery Commission) in Orrington. The costs to the Town are three-fold - the EMR cost for solid waste disposals, the EMR cost

for recycling, and the PERC cost for incineration. Last year these costs totaled almost \$235,000. The total cost to deliver waste to PERC has been estimated at \$78/ton. EMR has a composting facility at its site which mixes crab and lobster shells (obtained from the many crab pickers and lobster pounds in SWH) with wood chips which it has chipped from wood brought to the site. EMR has recently completed a recycling building which requires the individual to separate "the Maine Pack" (newspapers, catalogs, mail magazines, computer paper, etc.), corrugated cardboard, and co-mingled containers from the waste stream. The more shells, wood, papers, containers, etc which are not hauled to PERC, the lower the cost of solid waste removal to the Town.

The Selectmen requested that the Conservation Commission establish a public education program about recycling. The committee has been formed and has also instituted a monthly pick-up of recyclables along the main roads.

F. Emergency Management

The Town has a Comprehensive Disaster Plan completed in 1995 to coordinate Town and Island resources in an emergency.

G. Education

Elementary - The Pemetic School provides K - 8 education. This school, built in 1937, is the only elementary school in SWH. It has had a student enrollment under 300 since the late '70's. In 1995 there were 264 students. There are currently 24 teachers out of a total staff of 36.

The school has 15 general classrooms and 5 dedicated rooms for art, computers, music, remedial work, and the Library. There is a very large auditorium/theater which is sometimes used annually by the Town for its Meetings.

The Principal has said that the school currently is using all the available space to its maximum. There are 2 rooms for the 1st through 4th grades and the 6th grades. The 4th and 5th are combined within 3 rooms. The 7th and 8th grades, called the Middle School, use 4 classrooms as "home rooms".

It is difficult to predict future numbers of students, as in any year roughly 10% of the total student body are transfer students, (half of them being children of Coast Guard personnel). The School Board has established a long-range plan for the facility needs and is currently establishing priorities.

High School - All Southwest Harbor secondary students who choose to attend publicly supported high school, do so at the Mt. Desert Island Regional High School. Less than 10% of a Pemetic graduating class does not continue - some because they are Coast Guard children and their parents have been transferred, others choose private schooling. The school is located 10 miles from the center of Southwest Harbor in the middle of the Island. Built in 1969 after a long Island controversy, the school serves all 4 towns on the Island. Students from the smaller Islands and Trenton may attend, but they must pay a fee.

The 16-acre site is adequate. All students are transported. The curriculum is outstanding and has been acclaimed by the State. The school offers a very high standard in the arts: theater, band music, painting. In the graduating class of 1995, 12% joined the labor force, 5% decided to travel, 5% went into the military, 59% plan to attend college and 12% more will do so after a year out, and 7% were undecided.

H. Medical Facilities

SWH is very fortunate to be served by two medical clinics. There is one hospital on Mount Desert Island in Bar Harbor and another just off the Island in Ellsworth. Each hospital is associated with one of the medical offices. There is a Regional Hospital in Bangor which provides specialized as well as general care.

Dental care is available in SWH as well as in Mt. Desert and Bar Harbor. Chiropractic services are available in Tremont and eye care in Bar Harbor.

Southwest Harbor Medical Center - This facility is associated with the Maine Coast Memorial Hospital in Ellsworth. It has a staff of three doctors and provides emergency services as well as local consulting, diagnostic lab work and x-ray facilities. It is situated in Herrick Road and has adequate space for parking and for expansion.

Community Health Center - The Center is related to the MDI Hospital in Bar Harbor. It is a joint enterprise between Medical Associates - a private association of doctors; MDIRHCC (MDI Regional Health Care Corps) - a subsidiary of the Hospital; and the Hospital itself. Designed to provide community health services to the Southwest Harbor/Tremont area as well as the outer islands, the Center has one Family Practice MD, a PA, and four internists on a rotating part-time basis. Its lab includes a laboratory and x-ray services. The Center provides physical therapy, chemical dependency, nutrition, health and wellness counseling as well as other programs. There is a room available for use by the public in the evenings which has been used for the Women with Children Program, exercise programs and a grief support group. The

Center was established in 1995 and is located in Village Green Way, in premises created by reconstruction of an existing building. The location is convenient for walk-ins, and there is adequate parking in the vicinity except, perhaps, at the peak of the summer season.

I. Community Center

Harbor House - This, the Community Center for Southwest Harbor, is extremely active, well-used, and well-supported by citizens. It has two facilities.

1. The building known as Harbor House is located close to the center of Town within the Pemetic School grounds. It is, in fact, "the old schoolhouse" building - the only school in the Southwest Harbor-part of Tremont in 1905. The building contains four large rooms used for meetings, exhibitions and activities of various kinds, plus offices, washrooms, kitchenette, etc. It provides before-school and after-school care for children of working parents. Many adult classes are held and there is a physical-fitness training room.
2. A day-care facility catering for preschool children is located on the far side of Pemetic School playing fields. The 1.8 acre site is owned by Harbor House. In addition to the kindergarten building the site includes a fenced playground and two recently completed outdoor tennis courts.
3. Harbor House runs a sailing school with its own boats, and other outdoor sports for youth. While young and old are served, the current emphasis within the Center is to concentrate on activities which would interest the 11 - 14-year old. During the last few years, Harbor House has operated a summer day-camp, (the facility called Beechcliff is located on the west side of Echo Lake), and an ambitious three week day-camp Summer Festival of the Arts (an introduction to music, dance, writing, poetry, speech, and theatre). These programs are open to all children on Mt. Desert Island and some of the tuitions are subsidized by the different Towns.

J. Libraries and Museums

Southwest Harbor Public Library - The library, located on Main Street, is a private non-profit organization with a separate Board of Directors. The library is housed in a small building and has a library collection exceeding 21,500 volumes. The demand for service has increased in recent years. Since 1985 the circulation of books and nonprint materials has increased by 61% and has reached 55,000. The number of people coming into the library has increased as have interlibrary loan

requests and other special services offered to the public. The children's programs attract great numbers of children and parents.

During the past 3 years the town has averaged a yearly appropriation of \$35,000. This is 31% of the Library's yearly income. The rest comes from appeal (39%), the endowment fund (12%) and fines, sales, and fund raisers (18%).

The Wendell Gilley Museum - By 1948, when Wendell Gilley sold his plumbing firm and devoted himself to his bird carving hobby, he had become one of the foremost wood carving artists of his time. By the '70's more than one hundred visitors per day came to the residence of Mr. Gilley in SWH to see the carved birds. Residents of SWH, Wendell Gilley patrons, and carvers formed the non-profit organization which sought to ensure the preservation of the carvings. The Museum was opened in 1981 at the corner of the Main Street and the Herrick Road. It remains open all year. Many school groups are brought to SWH to learn from the carvings and films, and to see Wendell Gilley's workshop of carving tools and patterns. Approximately 20,000 visitors came to the Museum in 1995. Carving classes are held for all ages. Funding is dependent on contributions, entrance fees and class fees.

Oceanarium Southwest Harbor - The Oceanarium located at the eastern end of the Clark Point Road is a "hands-on" Marine Aquarium and Fisherman's Museum. The Marine Aquarium contains exhibits about the sea, whale exhibits a scallop tank, over 20 tanks of sealife, a touch tank, and an audio-visual room. The Fisherman's Museum contains exhibits built by fishermen and boat builders. This warehouse-like building is open mid-May to late-October except on Sundays. It is a private business run by the Mills family.

4. Assessment of Current and Future Adequacy

A. Town Office

Currently it scarcely meets the needs of staff and citizens. Shelf space and space for filing is severely limited (many records must be kept indefinitely). Furthermore, most of the storage space is not fire proof. The conference room is not large enough for many of the meetings which are open to the public.

B. Police

The police are badly short of accommodation. They have no secure evidence room or a confidential place for interrogations. The Chief must share his office with the other police officers, making it difficult to keep confidential

materials. This is a particular problem since the most time-consuming issue the police department faces is domestic violence/child abuse.

C. Fire Department

Space is restricted, and there is no real possibility of expansion on this site. The present facility no longer holds all the appliances. The Fire Department recently purchased a pumper truck. One truck currently must remain outdoors all year round and one was housed in Somesville last winter. This will not be possible this year. Both are kept outside of the Town Office during the summer to meet the increased need for fire protection.

New fire trucks tend to be larger than the present trucks. The type of equipment the Town employs affects the insurance rating and hence costs for the town. The pumper truck was purchased to keep the insurance rating down. The ISO (Insurance Services Organization) and other professional consultants suggest that the Town will need a new ladder truck over the next 10 year period. ISO recommend a minimum 55' ladder to reach the 40' high buildings. Manual ladders will currently extend to the 40', but only placed against the buildings.

Fires, although not rising in numbers, continue to be a concern.

D. Dispatch

The service is adequate but expensive since it is a 24-hour operation. The Board of Selectmen has appointed a committee to explore the possibility of merging services with other Island towns. This is now possible because of recent naming of streets and numbering of properties. The State has mandated enhanced-911. When this is in place (not before the summer of 1998), Dispatchers will know where a call is coming from without an individual speaking. Island-wide 911 will almost certainly change the physical location of this service.

E. Ambulance

The Service needs more qualified volunteers. The most serious problem is the overcrowding within the Town Office Building. This private service uses one of the town office rooms free of charge. It does contribute towards the dispatch costs. A relocation of the fire department might impact the location of the Nursing Service.

F. Public Works

Highway Division

Evaluation

- (1) Existing streets and sidewalks are currently being recorded in a data base in order to prioritize the system, suggest maintenance requirements and estimate costs.
- (2) Equipment - All divisions trucks are less than 3 years old and in excellent condition. The Loader-backhoe and loader are nearing the end of their useful life.
- (3) The 5000-gallon underground fuel storage tank must be removed before January 1st, 1998. A 300-gallon above ground fuel tank for Diesel is in good condition. However, it is too small to provide adequate fuel storage for School, Fire and Highway vehicles.

Upgrade and Repair Requirements

- (1) Continue to build on the street and sidewalk data base. It is known that many areas require better drainage and that some road beds are not sufficient for today's traffic. Many streets have insufficient ROWs to properly maintain them. Some streets and sidewalks need to be reclaimed as surface buildup is excessive with underlying deficiencies. Curbing is in poor condition in many places in the center of town, and some additional curbing is badly needed. Short and long range plans will be required to bring all roads up to proper standards while maintaining the better roads in good condition.
- (2) The present loader has a small mileage, but is old. It appears to be in good mechanical condition, but the body is very corroded and must be properly refinished.

A decision will have to be made on what mix of equipment best meets the needs of the Town. Emphasis should be placed on multi-use equipment wherever possible as the Town cannot afford the luxury of specialized low-use equipment that could better be rented as required.

- (3) When the present underground fuel tank is removed as required by DEP, an above-ground tank should be installed with compartmented diesel and gasoline.
- (4) A new storage shed is needed for the Dump Trucks and other equipment.

Wastewater Treatment

Evaluation

- (1) Collection System - The majority of the collection system that was constructed in 1975 appears to be in good condition with limited infiltration. All of the pump stations also appear adequate for current flows. The older original portions of the system are vitrified clay pipe and subject to significant inflow and infiltration (I & I). There are no known direct overflows in the system.

The "Old Main Street" area from the connection to the Norwood Cove interceptor and the Herrick Road collector contributes 90% of the I & I. Based on smoke testing results, the deficiencies in these areas include leaking pipes, foundation drains, catch basins, broken service mains and leaking manholes. These problems are further complicated by the fact that the Herrick Road collector system is privately owned and the residents on this system are unlikely to have the resources available to make the repair necessary to alleviate the problem.

The Wesley Avenue collector system has also been identified as contributing a significant amount of inflow from private connections, possibly due to sump pumps or foundation drains.

- (2) Treatment Facility - The existing sludge management system is inadequate to handle the volume of sludge which should be wasted from the system. The facility was constructed with a dewatering system which has become obsolete, parts cannot be obtained, and it is now inoperative. Presently excess sludge is transported to Bar Harbor by a private hauler for dewatering and composting. However, during the winter months Bar Harbor does not dewater and compost; therefore, excess liquid sludge must be hauled to Orono for processing. It would still be necessary to haul in the winter with a new dewatering system - the sludge would just be in a thickened cake form. Without periodic sludge removal, excess solids would be carried into the treatment process contributing to periodic solid overload and resulting in a washout of solids in the effluent into the Harbor. The sludge handling deficiencies are the major limitations at the treatment facility.

There is currently a surcharging problem 10 - 12 times per year during maximum high tides combined with high plant flow rates. Engineering studies indicate the outflow is adequately designed to prevent these occurrences; therefore, the problem is likely due to the outfall pipe being partially plugged.

Chlorine gas: The Town uses chlorine gas to treat effluent entering the treatment plant. The gas is extremely dangerous. The Town should investigate the feasibility of changing from chlorine gas to liquid chlorine.

Upgrade and Repair Requirements

While some of the deficiencies require a more careful study and evaluation the following are minimum requirements to maintain the present system through its design period. The collection system must be repaired regardless of further facility plans.

- (1) Collection System - Replace the existing lines and services in the Old Main Street and Herrick Road areas to remove a significant portion of I & I.

Require the owners of the Wesley Avenue collector to remove their sources of I & I. The current sewer ordinance provides the Town with the authority to enforce such requirements.

Provide manhole inserts in those that show significant signs of I & I.

(Note that reducing I & I flows in the collection system should result in not having to provide costly additional clarifier capacity at the treatment plant.)

- (2) Wastewater Treatment Facility - The following action should maximize the existing facilities operations by correcting the most obvious deficiencies which could result in violations to the Town's DEP permit. This work will increase the design capacity of the facility.

- a. Study the feasibility of constructing a new aerated sludge storage tank and belt filter press versus contracted outside facility acceptance of "wet" sludge. This should include study of the method of transportation and a reliable facility for services.

- b. Inspect and repair the aeration headers and diffusers in the aeration tanks.

- c. Replace the aeration blower drives with new variable frequency drives (VFD) with cycle controls interfaced with the plant flow monitoring system.

- d. Ascertain with certainty if there is any blockage in the outflow line and if none is found, provide for an emergency pump station to pump effluent through the outfall.

- e. Install 3 new return sludge pumps with VFD with automatic flow controls. The existing sludge pumps would be used for waste sludge only.
- f. Switch from a gaseous chlorination system to a safer liquid sodium hypochlorite disinfection system. This would also prevent replacing the existing chlorine room ventilation system that does not now meet current regulations.

Waterworks Division

Evaluation

- (1) Delivery System - The two major storage tanks presently in use are adequate for the foreseeable future. The glass-fused tank is fairly new and "state of the art". However, some States have experienced corrosion on the interior of the tank at the connector bolts. The 300,000 gallon tank in use now is in good condition and can be expected to last many more years. The system could still function without it. The old unused tank is not useable. The 10,000 gallon tank on Fernald Point is in poor condition and has to be purged frequently to prevent rust build-up and potential degrading of the water supply. Most seasonal piping is above ground PVC and is disconnected in sections and drained to prevent freezing. The old delivery line from Long Pond Road is a 6" cast iron pipe that has serious rust build-up on the interior which has seriously decreased the carrying capacity of the line and weakened it structurally. Frequent breaks occur on this line and it is expected that there are severe water losses and a potential for contamination of the system if a sudden loss of pressure were to occur. On the Seawall Road in Manset an old cast iron line runs on the opposite side of the road from a new line and feeds one side of the road. The section has the same problems as the old Long Pond line. The hydrants appear to be in good condition with adequate location and numbers.
- (2) Pump and Equipment Station - New Federal guide lines require filtration of all municipal water supplies unless the Town obtains a waiver which stipulates certain restrictions. SWH has opted to build a filtration plant and this is planned to be constructed in 1998. The bond has already been floated, but the project is being held-up by site investigations. The building would include maintenance, laboratory and water treatment facilities, some of which are presently located in the Pump House on Long Pond. The pumps would remain in their present location due to elevation restrictions. The pumps are new and not expected

to have any problems in the next 10 years. There is a back-up generator.

- (3) Water - Citizen surveys expressed concern about the cost of "wasting" water - water pouring out of lines. What was observed was, in fact, deliberate flushing by the Department in order to clear the lines of rust.

Citizen surveys also expressed concern about the taste of the water. The water quality, however, is rated excellent by the Department of Environment. The taste of the water is affected by federal and state purification requirements. It probably has more to do with rusty pipes than the water itself.

Up-Grade and Repair Requirements

- 1) Inspect, evaluate and document the infrastructure of the entire system.
- 2) Prepare short and long range plans for the upgrading of the delivery system. Special emphasis should be placed on repairing and/or elimination of the old cast iron delivery piping.
- 3) Continue the process of bringing the filtration plant on line.
- 4) Replace the old seasonal tank on Fernald Point.
- 5) Dismantle and remove the old unused tank on Freeman Ridge.
- 6) Draw down and inspect for corrosion on the 1,000,000 gallon glass-lined tank. Note: the tank is still under Warranty.
- 7) Evaluate billing monthly for water to assist in cash flow for the Town and the Consumer. Quarterly readings could still be done with estimated billing in between.

G. Public Restrooms

Many consider the downtown facilities to be inadequate. This lack of facilities places pressure on downtown businesses to be available to the public. In the summer the Chamber of Commerce/Harbor House restrooms function as public restrooms.

H. Solid Waste

The Town must emphasize the importance of selecting those items which can be kept out of the waste stream (crab and lobster shells, papers, co-mingled containers) and recycling them. This is the only way in which the cost of solid waste to the Town can be reduced. The PERC charges will continue to increase.

I. Education

Pemetic Elementary School. There is no immediate cause for enlargement or renewal of the buildings.

MDI Regional High School. The numbers of students from SWH are projected to increase to a peak in 2002, some 50% higher than at present. There may well be a call on the town during the next 10 years for a capital contribution towards enlargement of this facility.

J. Libraries and Museums

Library. The Library has critical space problems. To begin to meet the demand, it bought the building directly behind it. This space will help expand the children's section, the periodicals area, and add shelves. The computer facilities also need to be improved. The library has limited parking and restroom facilities.

Museums. The Gilley Museum has solved its parking problems by having the use of someone else's land. The Oceanarium has the parking problems associated with the end of Clark Point Road.

5. Assessment of the Major Issues

The major issues are the completion of the water filtration plant, the improvements necessary to the wastewater treatment plant, and the accommodation needs for the Town departments.

The Town has already secured a bond to meet the cost of the filtration plant, based on estimated costs which are now 2 years old. It is imperative that the land exchange with the Park occur within the next few months of 1996. Then the engineers could go out for bid for construction by early 1997. If this tight schedule is adhered to, it may be possible to obtain bids within the current estimates.

The Wastewater treatment plant must have several of its deficiencies corrected before its license with DEP falls due for renewal in 1998. The outflow diffuser may need to be replaced and the sludge removal must be improved.

Alterations to the Town Office Building - The space requirements for all Departments are related. If, for example, it were determined to build new garage accommodation for the trucks of the Fire Department this would free-up space in the ground floor of the present building for all the other Departments. It might also allow public toilets to be included within the building and other improvements to be made in the area between the Town Offices and the Village Green. If SWH should join with other communities in an island-wide Dispatch service, this would free-up additional ground floor space. At the 1995 Town Meeting, citizens voted \$5,000 to be used to examine these issues.

CHAPTER VII. TRANSPORTATION

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

1. Introduction

The Town of SWH is very elongated. It stretches from the border of Mt. Desert in the north toward Tremont on the west and the sea on the east and south. It has only one North-South road (Route 102) and two roads leading westerly which connect the town with the region. During the winter, one of the westerly roads (Seal Cove Road) is closed. There are a few town roads and many private roads, most of which are fairly short dead-ends. The Clark Point Peninsula and the Manset area roads create internal loops. This elongated layout places traffic pressure on Main Street, which is the one north-south through route, particularly on the central section between Seal Cove Road and the point where Route 102A diverges towards Manset.

2. Key Findings

Traffic is forced to a standstill on many days in the summer months at the central intersection (Main Street and Clark Point Road) and it is held-up by curbside unloading at times during this season. There is a tendency for speeding at other times. Speeding, coupled with inadequate sidewalks and uncontrolled pedestrian crossings, creates a risk of vehicle and pedestrian accidents. Control by a central traffic-light during the summer season seems to be the most direct solution to both problems. The capacity of Main Street and of the central intersection could be increased by disallowing parking on one side of the street in the central area during the summer months.

Emergency vehicles are located below the Town Offices, close to the central intersection of Main Street. Concern has been expressed by the Fire and Police Departments concerning road congestion in an emergency or in the event of blockage of Main Street due to an accident. Access to Main Street during traffic congestion would be facilitated by a traffic light with an emergency switch in the Fire Station. Blockage of Main Street could only be circumvented by creating an alternative North-South road.

The Town roads are in a reasonable condition - they have an 80.6% network condition rating. None requires total reconstruction over the next ten years. Over 50% of them only require routine maintenance.

Traffic volumes increased by 30% to 40% over the 5 year period from 1988 to 1993. This increase, which is predominately in the summer, coupled with the 50% increase over the previous 10 year period, suggests that the Town must work with the Region to seek alternative forms of circulation within the Island.

Walking in SWH is not made easy. Absence of sidewalks in several areas means that pedestrians risk being knocked-down, and many sidewalks are not level, are poorly protected by curbs, and have inadequate drainage. The greatest need is on Main Street, South of the central intersection as far as Great Harbor Marina.

Bicycle paths are non-existent, except for the entrance into Town on Route 102. A cycle path system would be an asset to tourism and could do something to relieve traffic congestion in summer. There is a dangerous bottleneck on Main Street, south of the Marina, where State help is needed to increase the road width.

3. Inventory of the Transportation Facilities and Services

A. Roads

1) The System

In 1995 the Town developed a Road Inventory of State and Town Roads. It has almost completed the private road inventory.

State Roads - State roads form the skeleton of the Town. State Route 102 begins at the head of Mount Desert Island. It passes through Somesville and loops through SWH and Tremont. State Route 102-A loops off Route 102 South of the center of Town and rejoins it within Tremont. There is a small portion of Seal Cove Road which belongs to the State - between Main Street and the top of Freeman Ridge. The State maintains its own roads. SWH assists the State in plowing.

The State owns the fee (land under the right-of-way) for Route 102 from the border with Mt. Desert until it reaches Seal Cove Road. The State only has title over the right-of-way for the rest of Route 102, all of Route 102-A and the first 1/2 mile of the Seal Cove Road. The

total mileage of State roads within SWH is almost 10 miles. This compares with 11.5 miles of State roads in Tremont.

Town Roads - The Town owns 30 roadways, most of which are very short. It owns the fee for all of the roads except for a very short distance of North Causeway Lane. The Town is responsible for the maintenance of its roads.

The total length of roads in the Town is 20 miles equally divided between State and Town. Tremont has almost 19 miles of local roads.

Private Roads - There are almost twice as many private roads within the Town as Town Ways - 57. Some are owned by the several property owners who abut them, but many of the older roads are still owned by the original land owner whose heirs are unknown. This leads to confusion over the maintenance of the road. There is also a myriad of private rights-of-way which provide access to properties across someone else's land.

2) The Classification

Small town roads are traditionally classified into three categories: distributors, collectors, and local. Collectors do just what they say - they "collect" traffic and deposit it on the "distributors" - who distribute it. "Local" roads serve the uses of the abutting lands.

Within SWH, parts of Route 102 clearly operate as distributors - distributing traffic out of the Town to the North and West. It distributes the traffic onto various collectors, including Route 102A and Clark Point, Dirigo, High, and the Seal Cove roads. The collectors deposit the traffic onto the local roads, or vice versa. None of these classifications is mutually exclusive, as many of the roads act in all three capacities.

3) Road Inventory

The inventory of Town roads is almost complete. Those which are now State roads were at one time Town roads. It has not as yet been possible to determine when they were accepted as a Town responsibility. They might have been in use before the land was given by the Commonwealth of Massachusetts to Mt Desert, and it is possible that SWH was still part of Mt Desert when the roads were expanded to their present right-of-way widths.

TABLE I. TOWN ROADS - WIDTH AND LENGTH AS ACCEPTED BY TOWN

Road Name	Date Adopted	Width	Length
Alder Lane	1858	33'	771.4'
Beach Road	1911	16.5'	1050'
Cedar Lane	1976	16'	228'
Claremont Road	1937	22'	549.5'
Clark Point Road	1886	33'	4232.8'
Dirigo Road	1884	40'	1567.5'
East Ridge Road	1973 & 1989	66'	2345'
Fernald Point Road	1928 & 1933	26'	6400'
Forest Avenue	1890	33'	891'
Freeman Ridge Road	1965	66'	3900'
Harbor Avenue	1936	22'	410'
Herrick Road	1948	50'	2610'
High Road	1884	40'	1256'
Kings Lane	1858	33'	1567.5'
Lawler Lane	1947	24.75'	450'
Ledge Way	1908	25'	511'
Long Pond Road	1934	33'	6225'
Mansell Lane	1922	24'	885'
Maple Lane	1928 & 1938	22'	475.2'
North Causeway Ln (1)	1916	16.5'	1813'
North Causeway Ln (2)	1923	16.5'	1223'
Ocean House Road	unknown	?	?
Robinson Hill Road	1932	20'	609'
Robinson Lane	1922	18'	578'
Salem Towne Road	1975,	66'	800'+
Shore Road	1858	33'	6491.5'
Spring Brook Lane	1993	60'	750'
Village Green Lane	1989	20'	462'
Wesley Avenue	1889, 1931, 1947	20'; 30'	762'; 150'
Wood Street	1931	22'	283'

TABLE II. STATE ROADS - WIDTH AND LENGTH

Road Name	Width	Length
Bass Harbor Rd	66'	7,761.6'
Main Street	66'	16,737.6'
Seal Cove Road	49.5'	2,957'
Seawall Road	49.5'	3,081.2'
	33'	2,740'

4) Road Conditions

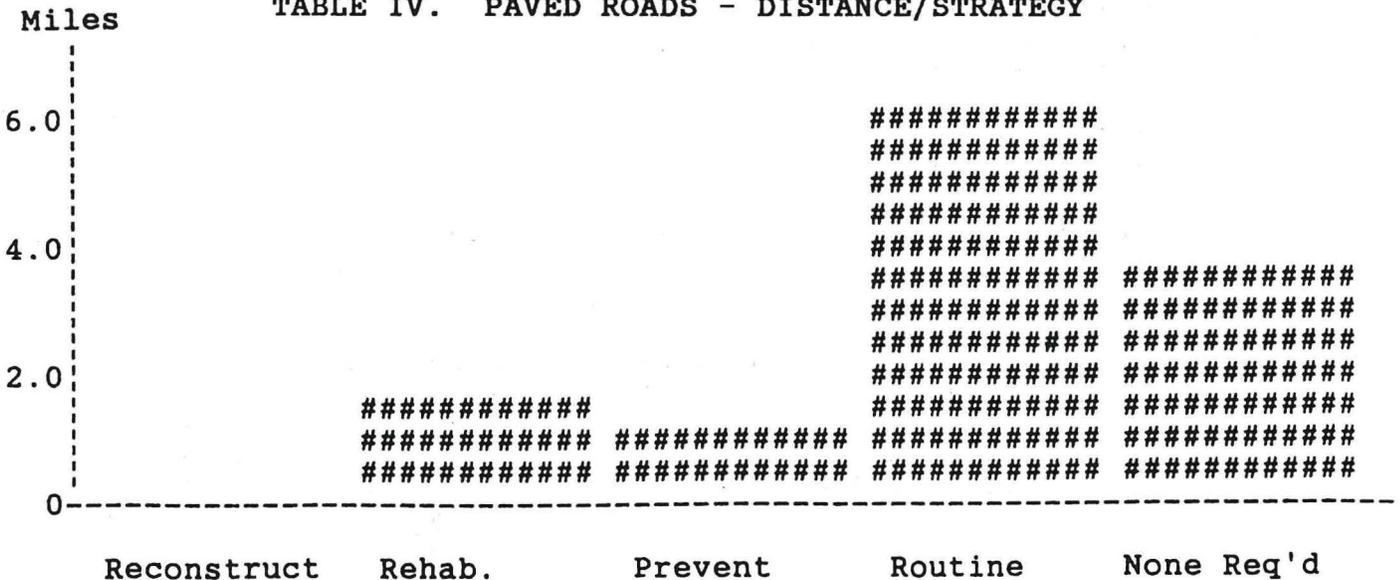
The Public Works Department has recently acquired the Maine Local Roads Center's road surface management system and has been installing the local information. The Department will now be able to put the current condition of the road into a data bank, prioritize its needed repairs and determine the cost for budgeting purposes. The condition and needed improvements are listed below. An estimate of the maintenance costs is set out in the ten year Capital Improvement Program.

TABLE III. SUMMARY OF REPAIR STRATEGIES FOR PAVED ROADS

Strategy	Distance (miles)	Percent of Roads
Reconstruction	0.0	0.0%
Rehabilitation	1.1	10.0%
Preventative	.8	8.0%
Routine Maintenance	5.5	51.0%
<u>None Required</u>	<u>3.4</u>	<u>31.0%</u>
TOTAL	10.8 miles	100%

Reconstruction: Complete removal & replacement of a failed pavement (widening, grade change, drainage work)
 Rehabilitation: Overlays and extensive recycling
 Preventative: Surface seals; stop deterioration before it becomes a problem
 Routine Maintenance: Local patching, crack sealing, etc.

TABLE IV. PAVED ROADS - DISTANCE/STRATEGY



5. Traffic Volumes

The State has maintained a daily count of the traffic which crosses the bridge at the head of the Island since 1970. Every year MDOT places additional counters for 24-hour periods elsewhere on the Island. The following table shows the changes in the volumes of traffic entering and leaving SWH from 1988 - 1994.

TABLE V. ANNUAL AVERAGE DAILY TRAFFIC FOR 1988, 1991, 1993 & 1994

Counter Number & Name	1988	1991	1993	1994	% INCREASE	
					5 yr	6 yr
Trenton Bridge	9687	-----	11,150	-----	15%	
1.Rte 102/198 N of Som Jctn	5200	6070	7620	-----	47%	
3.Rte 102 S of Som Jctn	6590	7690	8780	-----	33%	
14.Rte 102 N of Seal Cove Road	5090	-----	7540	-----	48%	
15.Seal Cove Rd W of 102 Jctn	2700	-----	2310	-----	- 14%	
16.Rte 102 S of Seal Cove Rd	6060	7650	-----	7850		30%
17.Rte 102 N of Rte 102A Jctn	5260	6220	7430	7390	41%	40%
18.Rte 102A SE of Rte 102 Jctn	3100	3390	3970	-----	28%	
19.Rte 102 W of Rte 102A Jctn	2890	3810	4020	-----	39%	
20.Rte 102A S of Rte 102 Jctn, Tremont	2020	-----	2500	-----	24%	
21.Rte 102 W of Rte 102A Jctn, Tremont	2140	-----	2840	-----	33%	

The numbers crossing the Bridge onto the Island increased by 15% over the years between 1988 and 1993. This brought the annual average daily flow across, counting both ways, to over 11,000 vehicles. In 1989*, it was determined that the traffic flow in January was 43% of average and in August it was 180% of average. Therefore,

*"MDI Traffic Study, 1989", J.C.M. Marshall AICP

there were only about 6,300 vehicles per day coming onto the Island in January of 1993, but over 20,000 vehicles per day in August.

The figures show that traffic in SWH increased more than that coming onto the Island, 48% rather than 15%. The figures show similar traffic volumes on Main Street North and South of the town center (7540 vehicles North of the Seal Cove Road and 7430 North of the 102 and 102A Junction). At this point almost 50% of the traffic splits onto 102A, and the rest continues toward Tremont on the Bass Harbor Road. Within Tremont, over half the traffic continues to follow Route 102 towards the North, and the rest turns toward 102A and the ferry to Swans Island.

Based upon the relationship of traffic flow onto the Island in winter versus summer, it is estimated that the daily volume of traffic through Main Street of the Town was over 14,000 vehicles in August, 1994. This volume chokes the Main Street for several hundred feet on each side of the Clark Point Road intersection during the mid-day hours of August.

MDOT has confirmed that a "poor level of traffic service exists in the village...during typical summer peak-hour conditions."

6. Accidents

The number and frequency of accidents at one location can be an indicator of a road design problem, too high a volume of traffic, or too high a speed on the road.

The MDOT has compiled data for SWH from files of reported accidents for the period January 1, 1991 - December, 1993. During this three year period, the DOT has analyzed the accidents on Route 102, Route 102A, and several short segments elsewhere in the Town.

Route 102 had only one area which had a slightly high accident "critical rate factor" (crf*) - right in the center of town just north of the intersection of Main Street with Clark Point Road. As there was only one accident here during this three year period, this could be a function of statistical error in the rate calculation as the segment of road between nodes (link distance) is so small.

**If the crf is greater than 1.00, the accident rate is greater than for a comparable segment in Maine.*

Route 102A had a very low accident rate factor over its whole distance.

The other segments analyzed suggested two additional accident areas: although neither had a crf greater than one, they did have more accidents than other areas of the Town. These areas are known trouble spots within the Town. The first is the Seal Cove Road, between the Main Street and the Long Pond Road. This half-mile segment had 2 accidents reported on it during this period. The second was the Clark Point Road which had 3 accidents reported over the three small segments analyzed (near Main Street, by the Herrick Road junction, and near the Claremont junction). Both of these roads have problems with vehicles travelling greater than the specified speed.

B. Parking

A survey of off-street parking in the central area produced a count of 170 spaces (not including the School, the Bar Harbor Bank, or the Church). There is a perceived shortage during the summer months, but only at certain periods of the day and not on Sundays. Some part of the total, maybe as much as 20%, is composed of employees who park all day. An increase in the number of spaces available for public use in the central area during the summer months should be coupled with measures to persuade all-day parkers to use spaces on the outer edges of the central area rather than in the middle. Only 90 of the total 170 spaces are on public land, or on land leased by the Town; curbside parking in the central area provides 45 spaces. One or two of these are in locations which create a hazard to pedestrian safety by restricting sight-lines. If traffic flow is to be improved in the summer months some 15 curbside spaces would have to be eliminated during this season.

C. Pedestrian and Bicycle Facilities

Pedestrian Facilities - Pedestrian access to the center of SWH is hampered by discontinuity of sidewalks and inadequate curbs and paving in many areas. The following streets lack adequate sidewalks (refer to the Transportation Map).

Main Street: North of Downtown - the west side;
South of Downtown - both sides

Clark Point Road: North and South sides except in Downtown
West of the Dirigo Road intersection

Herrick Road: Both sides

Seal Cove Road: Both sides

Funding for the installation of permanent (concrete or granite) curbs, drainage and paving of sidewalks should be included in the budget for road works.

Great Harbor Marina generates significant seasonal pedestrian traffic, (people coming ashore to visit shops and restaurants), and this will increase with the addition of Bass Harbor Marine's business. This puts more emphasis on the need for a continuous sidewalk on the east side of Main Street leading into town, and slightly less emphasis on one leading out of town towards Route 102A and Manset, (Town Dock and Hinckley's yard).

Pedestrian access is possible directly from the central area to Freeman Ridge Road, but not on a public right-of-way. The paths are not easy to find or to negotiate. The Town could reduce traffic and parking congestion by providing public footpaths in this area.

Bicycle Facilities - Bicycle transportation is even more restricted. Although MDOT has provided shoulder lanes on each side of Route 102 as it enters the Town from the North until it reaches the Seal Cove Road, no special provision has been made for cyclists at the side of any other roads within the Town, and there are no separate bicycle paths. Additionally, the stretch of Main Street between the Marina and the Route 102A junction is particularly hazardous because the road is narrow and sightlines are poor. This bottleneck is a danger to pedestrians as well as cyclists, and it might be considered a case where State assistance should be sought to relieve it.

Bicycle usage for recreational purposes is increasing conspicuously. ANP contains extensive cycle routes, and many visitors to the Island bring their own bicycles or rent them when they arrive. There is a flourishing rental business in SWH, and there is an active MDI Bicycle Association.

The Town should consider ways to help facilitate increased bicycle usage, both by tourists and residents. This ought to help to reduce traffic and parking congestion at the critical time of year.

Ideally, bicycle paths should be made separate from roads and have their own direction signs and parking arrangements. It would also be helpful if visitors staying in SWH did not have to put their bicycles onto their cars to take them to the Park, but could ride them all the way out of town.

Creating new pedestrian and bicycle paths is not easy, and the cost of land acquisition would be yet another competing claim on town funds. New subdivisions could be required to provide pedestrian and bicycle routes, and to lay them out so as to link

up with routes within ANP and with existing public rights-of-way. It might be possible to obtain agreement from the owners of large tracts of undeveloped land to give permission for paths to cross their property.

D. Bus Services

A non-profit company based in Ellsworth, Downeast Transportation, provides public bus services. The Company receives a subsidy to ensure their services are available to the elderly, handicapped and low income citizens. SWH is served once a week by bus to Ellsworth and once a week to Bar Harbor. Under private contract, Downeast will provide commuter services, campground and special event shuttles.

The nearest year-round long-distance buses operate from Bangor. Several companies operate daily to points up and down the coast, including fast services several times daily, to Portland and Boston.

A study has been carried-out on behalf of all the Island towns together with Acadia National Park which explored the possibility of obtaining a State grant to assist in setting-up a seasonal bus system to relieve the Island roads and parking facilities during the summer. The application was successful and the service will be put into effect during the next year. In view of the continuing growth of summer traffic, such a system is highly desirable. There will be some benefit to tourists staying in this area, but for geographical reasons Southwest Harbor will not be as greatly affected as the other Island Towns. Such a service will also provide residents with a useful level of public transportation for commuting or for shopping purposes.

E. Ferry Service

A private service operates in the summer months from the Upper Town Dock to the Great and Little Cranberry Islands. In addition, a State ferry service provides service to Swanns Island from Bass Harbor in Tremont.

F. Airports

Hancock County Airport is located just off the Island in Trenton and is served by one airline, Colgan Air. The latter provides service to Boston twice a day for most of the year, more often

in summer. The airport is about 35 minutes by car from SWH. Bangor International Airport is served by several national carriers, which provide flights to major Eastern cities. It is about 80 minutes driving time from SWH.

G. Rail Service

There is no passenger rail service in the region. Rail freight is available at Bucksport, roughly one hour away.

CHAPTER VIII. RECREATION AND OPEN SPACE

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

1. Introduction

Acadia National Park is a national attraction for outdoor recreation. Not only local residents, but seasonal residents and tourists benefit by public ownership of half of Mt. Desert Island. The parts of the Park which lie within the Town of Southwest Harbor include hiking trails of varying difficulty (Flying Mountain, St. Sauveur, Beech Mountain, Western Mountain which includes Mansell and Bernard Mountains), walks for nature study (Wonderland), harbors for observing marine life (Ship Harbor, Seawall, and Valley Cove), boat launching facilities, and picnic areas. The Town is particularly favored with this amount of protected open space.

This chapter will describe areas used for recreation, open space, or public access to bodies of water. These areas are owned either by the Town, by private individuals, or by companies. The impact of development trends and the threats to these uses will be assessed.

Links with other chapters include Public Facilities, Archaeological and Historic Resources, Natural Resources, Marine Resources, Existing Land Use, and Transportation.

2. Key Findings

The Town is surrounded by Acadia National Park, and approximately 4,000 acres of this Park lie within the political boundaries of SWH. The center of the village is close to the harbor, and most of the Town is within walking distance of the sea or of Long Pond. There is no need, therefore, for additional large-scale public open space. SWH owns nearly 7 acres at the center of the village on which are located the Elementary School, the Community Center and extensive open playing fields. It also owns a number of small parcels, including the central property of the Village Green and the Town Offices.

3. Recreation and Open Space Inventory

A. Recreation Activities

One of the major attractions of the Mount Desert Island area is the diversity of recreational opportunities. The following activities are available in SWH.

Water

sailing, power boating, canoeing, kayaking, rowing, fishing, windsurfing, swimming, ice fishing, ice boating, skating

Land

biking, walking, hiking, climbing, picnicking, camping, birdwatching, berry picking, cross country skiing, snowmobiling, sledding

Organized

tennis, golf, playgrounds, recreational programs, croquet, field sports, basketball, weight room, aerobics, paddle tennis

Many of these activities exist within Acadia National Park, and some of them require equipment. Most of the equipment can be rented from merchants in SWH.

Biking is a rapidly growing activity and it calls for more public investment in rights-of-way.

B. Town Parks and Recreation

There are 9.5 acres of parkland owned by the Town. This varies from wetlands around Chris' Pond and the Frog Pond to the landscaped Village Green. The Town also owns recreational areas which are non-parkland.

Village Green - In the spring of 1932, Walter McInnes of Philadelphia, PA and Joseph D. Phillips and George Neal of SWH deeded the Inhabitants of the Town 2.75 acres of land in the center of Town. This land had belonged to Anson Holmes and horses were stabled there. The Deed required that the Town agree that the property would never be sold and would be used for a Village Green or Park. It instructed Park Commissioners be appointed and in their administration to be sure that the location of "...a parking place for automobiles ...shall not interfere in any way with the other uses of the Park or Village Green." Currently, although a very small part of the

area is used as the Village Green and there is an undeveloped area up the hill, the majority of the lot is used for the Town Offices, Police and Fire Stations, and parking.

Chris's Pond - In 1957, Bill and Bertha Sklaroff and John Noyes offered the Town a piece of land just to the west of Main Street, opposite the head of the Harbor. This was stipulated in the Town Warrant to be used "for recreational purposes". When the Deed for the 1.2 acre parcel was given to the Town, no restrictions were placed upon it. Furthermore, the Town Records did not show that the Town actually accepted the offer - only that they were willing to pay for maintenance! Therefore, at Town Meeting in 1995, the Town voted to confirm the prior acceptance. The Selectmen also granted a Conservation Easement to the Maine Coast Heritage Trust to "...preserve in perpetuity the natural features...for the benefit of the general public." There was an ice pond on the land which had historically supplied the Town with ice. The pond is now used for ice skating in winter.

Rhoades House - Mary Coates deeded approximately 1 acre of land and the buildings upon it to the Inhabitants of the Town in 1970. The parcel had been owned in the '50's by Charlotte Rhoades. Two of the restrictions in the deed require that the Town maintain the land "...as a quiet park to be used by the public in general and, more particularly, by mothers with young children, to be known as the "Charlotte Rhoades Park" and that the Town will supervise the Park so that it "continues to possess a peaceful and quiet atmosphere ...exclude therefrom motorcycles, motorcarts, snowmobiles, radios,..". Rhoades House garden is maintained by the Conservation Commission and continues to provide a recreational resource as intended by its donor.

Pemetic Schoolground - The School property contains 6.8 acres. Approximately 4.5 acres are used for outdoor recreation - soccer fields, basketball, fitness structures, and playgrounds containing swings and slides. There is a large green area in front of the school which is used for craft shows, other specialty shows, and in connection with Harbor House's Summer Festival of the Arts.

Boat Ramps - The Town has a public access boat ramp located at its Manset dock. This ramp was constructed in 1987 with a State grant and has recently been completely renovated by the Town. There is another ramp at the Lower Town Dock on the Clark Point Road near the Coast Guard Station. However, this is not very adequate as it is quite old and very steep.

It is seldom used. The National Park Service has a boat ramp located at the southern end of Long Pond.

Swimming - The southern end of Long Pond is the only lake within SWH, but it cannot be used for swimming as it is the Town's public water supply. This may change when the filtration plant is built. There is lake swimming available nearby both in Mount Desert at Echo Lake and the northwestern edge of Long Pond, and in Tremont at Seal Cove Pond. All of these areas are within Acadia National Park.

C. Other Outdoor Recreation and Open Space, Public or Private

There are a few recreation or open spaces which do not belong to the Town, but are owned privately or are in the Park.

Causeway Club - A private country club was founded in 1916. It is now a 35 acre parcel located on the north shore of Norwood Cove. It provides one of the better golf courses in the area that is open to the public. It also has several tennis courts, a swimming pool, and a wading pool. The grounds are used for sledding in the winter and are considered an important resource to the community.

Harbor House - The Community Center is located within the grounds of the school, (see Public Facilities Chapter). It owns a 1.8-acre parcel adjoining the school grounds which includes two public tennis courts and a pre-school daycare center with its own playground.

Trails - There once were many trails criss-crossing the Town. These were used by hikers, bikers, and skiers as well as those on snowmobiles and all-terrain vehicles. Many of these trails connect with Park trails or roads, such as the Hio Road. Some are still available, but private owners are becoming less sympathetic to trespassers. (See the Transportation Map.)

Boat Ramps - There is a boat ramp on private property at the shore end of Mansell Lane. At one time, Mansell Lane was purported to go to the sea, but when it was finally approved by the Town it only went to Shore Road. Several of the boat builders whose land is not on the water use this ramp.

Another boat ramp is at the Morris Boatyard. The Hinckley Boatyard has 2 boat lifts as does the Brown Manset J Boatyard.

Both the Stanley Boatyard and the Southwest Boatyard launch by railway. There is one private railway on the Manset shore.

Campgrounds - Seawall Campground is in Acadia National Park near the entrance to the Seawall area of the Park. The campground provides 214 forested camping sites. There is a picnic area across the road on the Seawall coast and a large open rocky coastline area.

There are two private campgrounds in the Town. One is at the Mt. Desert town line and has 100 sites, a swimming pool, and trails into National Park land abutting the campground. The other is on the western edge of the Seal Cove Road, has 60 sites, and is surrounded on three sides by the Park.

Fields - There are several open fields in the Town which are private, but are enjoyed by the public from the roadsides: these include the Blueberry Fields on Long Pond Road, Beech Road fields, and several other fields on Seawall Road.

D. Public Access to Bodies of Water

1) Longstanding right of public access to water is available within the Harbor, at other points along the coast, and at Long Pond.

Valley Cove - Non-motorized access via a Park fire road off the Fernald Point Road

Fernald Cove - Access by way of a granite wall along Fernald Point Road

Harbor - Manset Town Dock
Upper Town Dock
Lower Town Dock
Pumping Station Lot at Clark Cove
Along the edge of the Clark Point Road at Clark Cove
o Lawler Lane across to include Little Island

o Coastal - North Causeway Lane
Beach Road (Cable Crossing)

Acadia National Park - Seawall
Wonderland
Ship Harbor

- 2) Access to the water is provided by the following commercial property owners.

Coastal - Claremont Hotel

Harbor - Beal's Lobster Pound
Southwest Lobster Pound
Moorings Restaurant
Downeast Diesel
Southwest Boat
Stanley Boatyard
Morris Boatyard
Manset Yacht Services
Hinckley Boatyard
Hinckley Great Harbor Marina
Pier One
Harborview Motel
Moorings Inn

- 3) There also are traditional paths which generations have used for access to the water, and these paths are an important part of the fabric and character of the town. Many people suppose that these paths are public or quasi-public but they are, in fact, private. The latter include the following:

South Causeway Lane & across the Mill Dam
Phillips Lane and Brook Passage
The turnout at Manset Corner
The southern end of the Freeman Ridge Road and the trails from it to Route 102 and toward the Park

4. Development Trends

A permanent boundary for Acadia National Park was finally established by Congress in 1986. The National Park Service can only acquire fee simple title to land within this boundary. Conservation easements may be acquired outside the Park boundary. One parcel in Federal ownership outside the boundary will eventually be deleted from Acadia National Park and other privately or Town-owned parcels within the boundary are slated for acquisition by the Park Service on a willing seller basis. The Town owns three acquisition lots and is currently attempting to exchange them for a piece of land at the edge of the Park on which to site the Town's Water Filtration Plant.

The development patterns of land within the Town are slowly changing the character of the Town. Forested areas are being fragmented into house lots and open fields to the sea are being developed.

5. Assessment of Threats to Recreation and Open Space

Several open fields still remain along the roads of the Town. Their openness has been taken for granted for many years. The Town should make clear that it attaches great public value to the maintenance of such views. It should also notify private owners that it would, if necessary, try to avert any proposal to subdivide or build on these spaces by creating some kind of legal mechanism to protect the view while at the same time compensating the owner.

Development is currently permitted anywhere on a lot. Often this results in the loss of the open space and the subsequent loss of a public view of the water. Appropriate measures that might limit development to a particular area or require a portion of a lot to remain in its natural state should be considered.

Harbor House Community Center relies on support from the Town to maintain its programs. Harbor House is an extremely valuable community facility and is vital to the Town.

The Town has several points of access to the water which have been allowed to become overgrown. These areas should be cleared and maintained for public use.

CHAPTER IX. NATURAL RESOURCES

STATE GOAL: To protect the State's other critical natural resources, including without limitation, wetlands, wildlife and fisheries habitat, sand dunes, shorelands, scenic vistas, and unique natural areas.

1. Introduction

Natural resources are important to SWH in a number of ways. The land and sea supports all life, and for many years the economic viability of the Town has been directly related to the natural resources of its lands and waters. Steep hills and valleys, forests, meadows and waters provide wildlife and fish habitat, beautiful scenery, contribute to the livelihood and enjoyment of Town residents, and attract visitors from far afield. Wetlands provide drinking water, storm water storage and retention, habitat for wildlife and plants, recreation, and scenic beauty. Inappropriate development in environmentally fragile areas could not only effect the health of SWH, but also its economic welfare.

The chapter will initially describe SWH's critical natural and scenic resources. Then, based upon the planned proposals for growth and development, an assessment will be made about which resources might be threatened and about the effectiveness of existing measures to protect them.

This chapter is also linked to Agricultural and Forest Resources; Marine Resources; Water, Soils and Topographical Resources; and Existing Land Use.

2. Key Findings

The survey gave ample evidence that the diversity of SWH's natural resources and scenic beauty are appreciated by residents and visitors. Acadia National Park extends habitat protection to a variety of plants and animals, as well as watershed protection for Long Pond, the Town's source of drinking water. In addition, the Town and other groups hold conservation easements on a number of parcels (see Table on page 125). Protection of important scenic areas and critical wildlife habitat remains an important policy for the Town.

→ All clam flats within SWH continue to be closed by the Maine Department of Marine Resources, primarily due to the presence of

licensed overboard discharges of septic effluent. This is of concern to many residents of the Town.

All types of wetlands - salt marshes, tidal freshwater, and freshwater - may be found. The wetlands which have been most highly rated as waterfowl habitat by Inland Fisheries and Wildlife are located within the National Park. Most of the western streams empty into the Bass Harbor Marsh, the most important and fragile salt marsh wetland in the area. Continued protection of the watershed of the Marsh and other wetlands is important to the Town.

Shallow soils and steep slopes, especially on the east side of Freeman Ridge and on Carroll Hill, result in heavy stormwater runoff. Some storm drains are connected to Town sewer lines, resulting in occasional overflow from the sewage treatment plant into the Harbor during periods of heavy rains or snow melt. Excessive stormwater runoff from Freeman Ridge floods Main Street. This can create a safety hazard to motorists and pedestrians.

The approach to the Town, down Carroll Hill, is of concern to a number of residents because of the widening and straightening of the road and clearing of vegetation when Route 102 was improved in 1988, the presence of a defunct power sub-station, and commercial development characterized by large parking areas with minimal landscaping. All this has begun to change the rural character of the Town.

3. Natural Resources Inventory

A. Wetlands

Wetlands are lands where periodic water saturation determines the nature of the soil and the types of plants and animals living in - and on - the soil. Wetlands provide habitat, protection, a staging (or breeding and nesting) area and food source for many types of wildlife including migrating birds. There are a variety of wetland types within SWH.

Salt marshes and tidal freshwater marshes. These extend along the coast. The rise and fall of the tide dictates the types of plant and animal life which occupy the marshes. Salt marshes are typically dominated by salt tolerant plants, such as the cordgrasses, while tidal marshes contain more varied vegetation - grasses, arrow arum, pickerelweed, and other herbaceous species. These wetlands together with their vegetation help to minimize the erosive forces of waves, ice and currents.

Freshwater wetlands. They are recognized as a most valuable part of the environment. They act as sponges soaking up rainfall and drainage from the uplands--preventing flooding. They then release the runoff gradually which prevents or retards erosion. During the dry spells, wetlands release water gradually which tends to slow down the drying of streams. They recharge the underground water for domestic well supplies. They also are the home for a number of wild-life species that can live nowhere else. Freshwater wetlands are defined by the type of vegetation growing on them.

Inland freshwater marshes. These areas generally have water depths ranging from a few inches to three feet. The source of their water is direct rainfall, surface runoff, groundwater and streams. Marshes grow cattails, rushes, reeds, sedges, and some grasses.

Forested swamps and shrub swamps. These swamps have water depths of only a few inches and may be dry during parts of the year. The source of their water is surface water or flood waters from streams. They are dominated by woody vegetation, such as shrubs and some types of trees - red maple, hackmatack, hemlock, alders and willows. The ground cover is usually ferns.

Bogs. They are characterized by extensive peat deposits which remain saturated throughout the year, supporting sphagnum moss and sedge. They can also contain lichens, cranberries, blueberries, Labrador tea, and small shrubs.

Location - Most of the major wetlands are located within Acadia National Park. One of the largest, and a Critical Area as defined by the State, is the Heath located within the Park. This wetland of 551 acres is a peat bog. Its importance is related to its geographic location and its vegetative communities. It must remain undisturbed to continue exhibiting its characteristics.

Another area almost totally within the Park is the Bass Harbor Marsh - this is partly within SWH, but mostly within the neighboring Town of Tremont. Bass Harbor Marsh is an important wetland. Historically, Bass Harbor Marsh and its tributaries have been a brook trout fishery. Recent studies have found that the marsh supports juvenile fish species of commercial importance, including herring, pollock, menhaden and yellowtail flounder (Doering et al 1995). Bass Harbor Marsh also provides opportunities for canoeing, kayaking, photography, hunting, and birdwatching. Concerns raised by the Southwest Harbor Conservation Commission and other citizens about water quality and algae blooms in the marsh and it's tributaries have led to extensive studies of the marsh by

the National Park Service. In 1980, a firm of consulting geotechnical engineers and geologists reported that Marshall Brook was receiving contaminants leached from a solid waste landfill located east of the Brook. The landfill was capped in 1985, which seems to have diminished pollution.

There are smaller wetlands within the developable part of SWH, most of which are in the southern part of the Town to the west of the Seawall Road (see Map of Development Constraints).

B. Surficial Geology

The last ice age left surficial deposits of rock and debris, the parent material of soils, on the bedrock. The northern portion of the town, on Bernard, Beech and St. Sauveur Mountains, is granite bedrock with areas of thin drift cover. Glacial till, an undifferentiated mixture of sand, silt, clay and stones deposited directly from glacial ice, lies from Clark Point northward to Norwood Cove. As the ice retreated, it left end moraines south of what are now Long Pond, Echo Lake, and along Clark Ridge. These ridges are composed of mixed rock debris ranging in size from clay to boulders.

Most of the Town is covered with marine sediments deposited when sea level was higher than it is now. Marine sediments, super-imposed on bedrock and glacial deposits, can be found along the Manset shore and in other areas less than 300 feet above sea level. Characteristically, these areas are poorly or very poorly drained. Marine sediments are generally differentiated by size. Coarse-grained sediments such as gravel, pebbles and cobbles lie along Route 102A in Manset, along the ridge west of Hio Hill, on Carroll's Hill, and between Main Street and Freeman Ridge. Fine-grained sediments predominate on Fernald Point, along Main Street, and Route 102 toward Bass Harbor. Most of the peninsula south of the harbor is overlaid by undifferentiated marine sediments that have been mixed by wave action and thus are difficult to distinguish as either coarse-grained or fine-grained.

More recently, sediments deposited by the sea formed beaches and salt marshes, and organic-rich sediments collecting in poorly drained areas formed freshwater wetlands. Such areas, unsuitable for agriculture or development, often serve as important wildlife habitat. Talus slopes were deposited along the base of steep cliffs by the action of gravity on angular rocks.

C. Bedrock Geology

The bedrock geology of SWH is as diverse as that of any town on Mount Desert Island. Distinct bands of different types of bedrock run east to west across the town. To the north, Cadillac Mountain granite, pink and coarse-grained, forms the Western Mountains, Beech Mountain, St. Sauveur, Valley Peak and Flying Mountain. Adjacent and to the south lies a mile-wide band called the shatter zone. The shatter zone is intensely shattered mixed igneous rock which varies in color and texture. Look for it at the entrance to Somes Sound, around Fernald Point to Norwood Cove. SWH granite lies in a band from Norwood Cove to the north shore of the harbor and westward. SWH granite is light gray and fine-grained, commonly with a tan or pink hue. Except for a sliver of siltstones and sandstones displaying regular beds a few inches thick on the south shore of the harbor, most of the Manset shore westward to Bass Harbor is a mixture of felsite and volcanic flows known as the Cranberry Island Series. These rocks are the result of volcanic eruptions that took place 380-400 million years ago. Cranberry Island Series rocks are generally light gray or blue-gray and are easy to recognize by the pieces of rock debris which settled after an explosive eruption. These rocks are easily seen at the front of the parking area at the Seawall picnic ground. Finally, bedrock from Wonderland to Bass Harbor Head is pink, fine-grained granite with a distinctive sugary texture.

Random fractures in bedrock underlying the Town hold groundwater, which is tapped by many private wells associated with homes in the Town. Because of the random nature of fractures, it is impossible to estimate groundwater supplies or depth to groundwater throughout the Town. Water from many wells in the Town is above the desired level of 0.3 mg/l of manganese and iron combined. These high levels of manganese and iron impart color to the water and can affect the taste of beverages. A spring near Seal Cove Road provides clear, good tasting water and supports a bottled water business.

D. Climate

SWH has a cool, moist, maritime climate with temperatures ranging from a high of 41 C in summer to a low of -9 C in the winter and a mean annual temperature during 1941 to 1980 of 8 C. Precipitation during this period averaged 123 cm annually, with snowfall averaging 1.5 m (Patterson et al. 1983). Compared to the mainland, SWH's temperatures tend to be cooler in summer and warmer in winter, and snowfalls less because of the moderating effect of the ocean. In early summer, the coast and nearby islands are often shrouded in thick fog. The growing season is from mid-May until mid-September.

"Northeasters" generate high winds and heavy rain or snow and they can also produce abnormal high tides affecting beaches and coastal installations. The Town's harbor and waterfront are poorly protected from these storms.

During the summer, the predominant wind direction is from the southwest, bringing a cooling sea breeze onto the land. Most summer afternoons see a brisk southeast breeze spring up around 2:00 pm, to the delight of the many sailing enthusiasts in the Town. Southwest winds may also bring urban and industrial air pollution over the Town from large urban areas to the south. The resultant high levels of ozone can be a problem to residents and visitors who suffer from respiratory ailments, and to the young and old.

E. Land Cover

Land cover is vegetation, and it is a factor in the overall system of erosion control and maintaining wildlife habitat. There are six major cover types in SWH: forested areas composed of softwoods, hardwoods, and mixed woods, old fields and meadows, scrub areas, and bare rock and developed areas (see Natural Resource Inventory Map of Vegetation, 1992, SWH Town Office).

Softwoods are defined as forested lands with softwoods comprising 75 percent of the overstory. In SWH, they include spruce/fir, white pine, pitch pine, jack pine, hemlock, northern white cedar, and mixed conifer. The southern part of Freeman Ridge to the Bass Harbor Road is the biggest area of softwoods in SWH. Some are to be found on the easterly side of Greenings Island, to the west of 102A near the Trap Mill Road, on the shore south of Kings Point, and on the northern side of the Clark Point peninsula.

Hardwoods are defined as forested land with hardwoods comprising 75 percent of the overstory. In SWH, hardwoods include birch/aspen forest and scrub, northern hardwoods, red oak and red maple. There are many small areas of hardwoods within the Town. The largest single area is on the eastern slopes of Freeman Ridge, above Norwood Cove.

Mixed woods are defined as forested lands with neither hardwoods nor softwoods comprising over 75 percent of the overstory. The rest of the eastern slope of Freeman Ridge is the largest area within Southwest. There are many smaller areas, including several on Greenings Island.

Old fields and meadows are agricultural lands which have

reverted to a natural vegetation condition. These particular areas are discussed within the Agriculture and Forest Resource Chapter. Scrub areas contain the alders, tamarack swamp, and the sedge bog. These areas predominate in the Manset-Seawall shore areas and inland toward the Park lands west of the southern part of 102A.

F. Wildlife Habitats

Mammals: White-tailed deer are common on Mount Desert Island. According to the Maine Department of Inland Fisheries and Wildlife (MDIFW) there is a deer wintering area on the Freeman Ridge south of the Town water tanks down as far as the Bass Harbor Road. There are also two major areas within Acadia. Black bear and moose are occasionally seen wandering throughout the less developed portions of the Town.

A number of smaller mammals play important roles in the ecology of the area. Eastern coyotes have been seen on Mt. Desert Island since 1982 and displace red foxes to habitats unsuitable for coyotes, including developed areas. Although rare, bobcats are seen from time to time. Mink, beaver, snowshoe hare, raccoons, red and gray squirrels, and other small mammals provide viewing pleasure to many residents.

Rabies is advancing into southern Maine and will move northward, becoming more common in wildlife on Mount Desert Island within a few years. This will temporarily reduce wildlife populations and put humans at risk. Educational efforts will be necessary to reduce the incidence of humans feeding animals, particularly foxes and raccoons.

Birds: Mount Desert Island is nationally known for the variety and abundance of birds which reside and migrate through the area. Birdwatching is a popular activity.

Waterbirds: Many species are resident to the area. The most commonly seen include mallard, old squaw, and black ducks, cormorants, common loons, and common eider. Great blue heron, bittern and other wading birds are frequently seen in the summer at Bass Harbor Marsh and along the shores. The rare cattle egret may be seen in the spring and the snowy egret during most seasons only at Bass Harbor Marsh. Many birds use the shorelines for feeding and staging. MDIFW has designated the area around the small lake at the Seawall causeway as a significant waterfowl and wading bird habitat. Significant wildlife habitats are subject to protection under the Maine Natural Resources Protection Act.

Landbirds: SWH is home to a great variety of species of landbirds. The area is especially noted for the great variety of warblers that nest here, and the uncommon Lincoln's sparrow is a resident of Big Heath. Many town residents feed birds, and visitors come from both within the United States and without to observe warblers and other nesting species in the summer.

Rare and Endangered Wildlife: Bald eagles and peregrine falcons are often seen throughout SWH. A bald eagle nest near Bass Harbor Marsh was abandoned some time ago. Although there are no MDIFW listings of active bald eagle nest sites within the Town, eagles feed and perch along the Town shores. Some eagles nest on the Cranberry Islands and feed on the Seawall shores. Peregrine falcons nested historically on the cliffs at Valley Cove, and an active falcon nest was established on Canada Cliffs above Echo Lake in 1995. The Town's rocky shores may provide habitat for harlequin ducks in winter, although sightings are infrequent.

G. Fisheries Habitats

As in the entire Gulf of Maine, the productivity of commercial fishing in waters near Southwest Harbor has been in decline for the past 50 years. A sardine canning facility located near the head of the Harbor was closed in the 1980's, primarily because of the lack of fish to process. As one species has declined, the commercial importance of other species has increased. The waters off SWH continue to support lobsters, scallops, shrimp, and urchins in sufficient quantities to be of commercial importance. In summer, mackerel are caught with hand lines off piers and in small boats in the harbor. Bass Harbor Marsh and other tidal inlets support juvenile finfish. Marshall Brook supports brook trout and provides opportunities for recreational fishing, as does Long Pond and Echo Lake. This subject is more completely discussed in the Marine Resources Chapter.

H. Plant Habitats

Approximately 1260 species of plants are found in SWH and surrounding Mount Desert Island, and several important plant inventories have been conducted in the area as early as 1894. Some species identified in early inventories have not been relocated, including showy ladies slipper (*Cypripedium*

reginae), small purple bladderwort (*Utricularia resupinata*), and a rare sedge (*Carex adusta*). Important plant habitats include:

Southwest Harbor and Manset Villages - The streets of Southwest Harbor and Manset are graced by American elm trees (*Ulmus americana*); some are probably 200 years old. These trees are valued by Town residents and are closely monitored by the Conservation Commission's tree warden. Annual pruning, supported by Town and private funds, has protected many of the elm trees from Dutch elm disease.

Seawall and other shorelines - Saltwater shores support uncommon plants including oysterleaf (*Mertensia maritima*), beachhead iris (*Iris setosa ssp. canadensis*), fairy flax (*Linum catharticum*), broom crowberry (*Corema conradii*), and golden heather (*Hudsonia ericoides*).

Big Heath - One of the best examples of a raised coastal bog in the northeastern U.S., Big Heath supports a variety of unusual plants and animals. Its importance as a natural area is recognized by the State, and it is designated as a Maine Critical Area. Uncommon plants found in Big Heath include baked-apple berry (*Rubus chamaemorus*), dragon's mouth orchid or swamp pink (*Arethusa bulbosa* and *Arethusa bulbosa forma alba flora*), grass pink (*Calopogon pulchellus*), pole laurel (*Kalmia polifolia*), and dwarf huckleberry (*Gaylussacia dumosa*).

Bernard Mountain - A red spruce (*Picea rubra*) old-growth stand on the top of Bernard Mountain in Acadia National Park is a Maine Critical Area. Old-growth forests are extremely rare on Mount Desert Island, as most of the island was either cut or burned by 1870.

Bass Harbor Marsh - An unusual aquatic plant, horned pondweed (*Zannichelia palustris*), is found in Bass Harbor Marsh.

Flying Mountain - Near the summit of Flying Mountain is found rock spikemoss (*Seligenella rupestris*).

Carroll Farm - Mountain sandwort (*Minuartia gruenlandica*) grows on the forested hillside behind the restored house at the Carroll Farm.

4. Scenic Resources

The scenic resources of SWH are a factor in maintaining property values and the Town's quality of life. Expansive views of the ocean, islands, rocky shores, distant coast lines and mountains are available from many vantage points throughout the Town.

Viewpoints and areas of scenic importance were identified and mapped in 1988 by Bruce Jacobson and Holly Dominie (see Map of Natural Resources).

The villages of Southwest Harbor and Manset create a rural atmosphere with tall trees, historic buildings, and views of the harbor. The approach into SWH from the north is through the Park. Echo Lake, Beech Mountain, and Lurvey Spring are to the west of the main road with Flying Mountain and Valley Peak to the east.

The approach down Carrolls Hill provides a dramatic view of the Town. The disused electric sub-station at the base of the Hill detracts from the view over Norwood Cove. Recent development along the road has diminished the wooded character of the approach. Under the current Land Use Ordinance large parking areas and commercial buildings need to be screened from the road with a belt of planting.

The approach from the south into the Town is again through the Park - either over the bridge at the Bass Harbor Marsh or through the Seawall area. The Bass Harbor Marsh approach provides a superb view to the north of West Peak, the highest point in SWH. The other approach provides access to Ship Harbor and Wonderland, both Acadia Park shore walks. The crossing of the Seawall causeway with the ocean surf pounding the rocks on one side and the wildfowl pond on the left is an asset to the Town.

Specific points which offer views worthy of preservation include:

- Gateway into SWH by predominately undeveloped land down to the turnout by Norwood Cove
- Fernald Cove view toward Clark Point and Seawall
- Brigg's Field at Clark Cove on Clark Point Road
- Manset Corner Turnout overlooking the Harbor
- Shore Road views into the Harbor, across to Greenings Island and Sutton Island, and up Somes Sound
- Beach Meadow view across the Great Harbor
- The Harbor glimpsed along Clark Point Road, Main Street, and the Shore Road
- The town and the eastern side of Freeman Ridge from the water

Other view points which are protected to varying degrees:

- Blueberry Fields on Long Pond Road (open space tax classification)
- Mt. Height Cemetary view toward Flying Mountain and Norumbega Mountain (Cemetary Association)
- View up Long Pond from the Park turnout (Acadia National Park)
- Views of the Islands and seas from Seawall, Wonderland and Ships Harbor (Acadia National Park)
- Bass Harbor Marsh at the Bridge on Route 102 looking toward Western Mountain (Acadia National Park)

5. Assessments of Threats to Southwest Harbor's Natural and Scenic Resources

The biggest threat to the natural resources and scenic views of Southwest Harbor is development. Clearing trees and vegetation and construction of buildings and parking areas can endanger the balance of environmental conditions which is necessary to sustain wildlife. Wetlands are protected at the moment by State legislation, but this protection has twice been threatened with repeal. The State through Shoreland Zoning does control total vegetation clearance within 75 feet of the waters, but no other part of the Town is so protected. Many of the endangered plant species have become so rare that it is difficult to find anyone who will disclose their last habitats. Certainly these are not protected by the Town. Nor are the deer hides and the wildfowl refuges. Many of the scenic views over private land are at risk from development.

The Town should protect the rare plant and tree vegetation within the area by placing development restrictions upon areas known to be fragile. Obviously this would have to be reflected in a tax reduction on the property so restricted. Similarly, the Town should either encourage conservation easements over private lands or should itself engage in conservation easements to preserve views as well as undeveloped areas for the future residents of the Town as well as the visitors.

6. Assessment of Existing Efforts to Protect and Preserve Southwest Harbor's Natural and Scenic Resources

The State's Shoreland Zoning is protecting the shores of SWH as well as Long Pond and some small streams. The DEP is protecting the wetlands through the Natural Resources Protection Act. Both of these legislative directives have been threatened in recent years by strong anti-conservation lobbyists. The Town should propose its own criteria for protecting its natural and scenic resources - both

the physical health of the year-round community depends upon this as does their economic welfare.

The Town has protected the elm trees through the Conservation Commission. A member of the committee, a volunteer "tree warden", is responsible for the continued health of the remaining elms and recently a tree replanting program. Over the years, the Town matches the funds of private donors for this tree program.

Recently a Conservation Commission sub-committee, "the Beautification Committee", has set as its goal the beautification of the Downtown and has been planting flowers and trees. Many local merchants have donated time and materials and the school children from Pemetic School have participated in the seed planting program.

SWH is a partner in three conservation easements:

1. In 1995, the Maine Coast Heritage Trust became the holder of a conservation easement on Chris's Pond, a .6 acre lot owned by the Town, for low-impact outdoor public recreation, nature observation, and study.
2. In 1993, the Town and the Harbor Ridge Condominium Association agreed to hold an easement on a 1.53 acre Conservation Area at the eastern edge of the Harbor Ridge Time-Shares on Freedom Ridge to preserve and protect the area as it possesses significant natural, ecological, wildlife habitat, scenic, aesthetic and natural resource values.
3. In 1979, the Town was granted a Conservation Easement over a 4.75 acre parcel on the Long Pond Road. Larue Spiker recognized the common purpose with the Town to conserve the open space and scenic values of the Long Pond Road Area and its surroundings. Development restrictions were placed upon the property, but the public was not granted access.

Acadia National Park's ownership of 49% of the Town suggests that this 4294 acres will be preserved in its natural state. The Park surrounds the part of Long Pond which is in SWH and the wildfowl pond at Seawall. It encompasses the Heath and the major wetlands within the Town as well as the highest peaks. About 50% of the shoreline of the Town is in Park ownership.

The Park also has covenants over several other parcels of land within the Town which are under private ownership.

LAND PROTECTED FROM DEVELOPMENT BY CONSERVATION EASEMENT OR NATIONAL OWNERSHIP

Description of Property	Holder of Easement	Acres
Harbor Ridge & Spiker lots	Town of Southwest Harbor	6.28
Uncle Bill's Pond	Maine Coast Heritage Trust	0.6
Fernald Point - 6 lots	Acadia National Park	27.13
Greenings Island - 5 lots	Acadia National Park	79.89
Acadia National Park	Acadia National Park	4,294
	TOTAL ACREAGE	4407.9
	% TOTAL TOWN ACREAGE	50%

References

- Gilman, R.A., C.A. Chapman, T.V. Lowell, H.W. Borns, Jr. 1988. The Geology of Mount Desert Island: A visitor's guide to the geology of Acadia National Park. Maine Geological Survey, Dept. of Conservation. 50 pp + maps.
- Doering, P.H., C.T. Roman, L.L. Beatty, A. A. Keller and C.A. Oviatt. 1995. Water quality and habitat evaluation of Bass Harbor Marsh Acadia National Park, Maine. Technical Rept. NPS/NESORNR/NRTR/95-31. U.S. Dept. Interior, National Park Service, New England System Support Office. 147 pp + appendices.
- Jacobson, B. and H. Dominie. 1988. Evaluation of island resources: Hancock County and portion of Knox County, Maine. US. Dept. Interior, National Park Service, North Atlantic Region. 47 pp + maps.

CHAPTER X. AGRICULTURAL AND FOREST RESOURCES

STATE GOAL: To safeguard the State's agricultural and forest resources from development which threatens those resources.

1. Introduction

Fields and forests are more a natural resource in SWH than a source of revenue. At one time there were several small working farms and the fields that are left provide habitat for wildlife and scarce open space.

The area around SWH has always been wooded. Many areas have been completely cleared of wood and replanted or revegetated many times over the years. No land is owned by timber companies.

This chapter will briefly describe the existing conditions of agriculture and forestry in the Town, determine if their viability as a natural resource would be threatened by the development proposed within the plan and assess the effectiveness of existing measures to protect these resources.

This inventory is also linked to the inventories within the Chapters on Natural Resources (particularly land cover) and on Land Use.

2. Key Findings

Most of the older farming areas are now part of the Acadia National Park - in fact, the Carroll Farm has been preserved as an attraction within the Park. The Blueberry Fields are the only areas being commercially farmed. They are privately protected by the Farm and Open Space Act.

There are also several areas privately protected by the tree growth taxation laws. It must be recognized that these are only short-term measures of protection for these resources - the owner has only to satisfy the penalty clause and the land becomes developable.

The areas on the shore of SWH are protected by the State's Shoreland timber harvesting standards. As these standards regulate clear cutting and skid trail formation, the inclusion of the rest of the Town within this protection should be considered.

3. Agriculture and Forestry Inventory

A. Agriculture

Today agriculture plays a very minor economic role in SWH. The only working farm is the Blueberry Fields off Long Pond Road. This 50 acre resource was registered under the Farm and Open Space Law in 1993. There are several households who raise small farm animals mostly for their own consumption. There are also a couple of households who keep horses.

SWH had several working farms in the '30's and '40's, but they have all been abandoned. One, the Carroll Farm, has been acquired by Acadia National Park and is open to the public as an historic place. Acadia Park's Seawall Campground was the site of another farm -- the family cemetery and old apple trees can still be seen. The old Lurvey homestead was farmed. This area just to the west of Route 102 near the Mt. Desert boundary still has fruit trees on the site, old cellars, and the family cemetery. There is a very famous spring there (Lurvey Spring).

B. Forest Land

SWH has several large tracts of forest land which are not within Acadia National Park. There were 9 parcels held in tree growth in 1995 for a total acreage of 328.17 acres - this is 8% of the possible developable area of Southwest. Of this, 72 acres, or 22%, is in softwood and the rest is mixed wood. SWH has no hardwood acreage.

State legislation allows reduced property tax on areas devoted to tree growth and farm and open space. Recently the laws have become more restrictive. New parcels must now have a commercial forest management and harvest plan in order to qualify. Parcels already classified have until 1999 to obtain the forest management and harvest plan. A financial penalty is imposed on the owner in the event of the removal and development of these protected lands.

4. Assessments of Threats to Southwest Harbor's Agricultural and Forestry Resources

The older farms which are now within the Park are not under threat of development. Possible future development is a concern for the Blueberry Fields and for the forested areas. These areas should be considered for measures of special protection.

5. **Assessment of Existing Efforts to Protect and Preserve Southwest Harbor's Agriculture and Forestry Lands as a Natural Resource.**

The fact that over 300 acres of the Town is in tree growth taxation protection is not a long-term guarantee that the land will remain undeveloped. If this land should be protected for the future, other measures must be investigated.

The SWH Land Use Ordinance only regulates timber harvesting within 250' of the State Wetlands - the State Shoreland zoning minimum. This protects the first 75' from the normal high-water line from any clearcut openings. It also requires that a well-distributed stand of trees and other vegetation must remain. Within the 250' depth, no more than 40% of the total volume of trees on the site which are more than 4" in diameter and 4 1/2' high can be cut. This type of protection against clear cutting might be considered for some of the other areas of the Town, particularly those areas on slopes or the edge of ridges or near other natural resources which the Town wants to protect.

CHAPTER XI. HISTORIC AND ARCHAEOLOGICAL RESOURCES

STATE GOAL: To preserve the State's historic and archaeological resources

1. Introduction

The historic and archaeological resources of the Island of Mount Desert are rich and varied. Diggings along the coast of the Island have shown that probably the first established culture was over 5,000 years ago and was known as the "Red Paint People", or Maritime Archaic. Ceramic remains dating back to 3,000 years ago have been unearthed from sites on the Island. Fernald Point in SWH is the richest and most important site from this period.

This chapter will describe the archaeological findings and the historic resources as well as the history of the development of the Town of Southwest Harbor. Then an assessment will be made of the possible threats to these resources from development; this will be followed by proposals to continue protecting them by specific measures.

2. Key Findings

There are prehistoric archaeological sites along the shores of SWH. These are all sites of Indian shell middens. Most of the coastal zone in SWH is considered a potential archaeological site, but only some of this has been professionally surveyed. The Town should assist the Maine Historic Preservation Commission in a completion of this survey.

Apart from Fernald Point all the known historic archaeological sites are within the Acadia National Park, simply because that is the only area which has been surveyed. The Commission recommends a survey outside of the Park focusing on sites relating to the earliest European settlements.

The Town has no Historical Preservation Society to list buildings, structures, and objects of historical importance. There are only two buildings listed on the National Register, the Claremont Hotel and the Raventhorpe cottage. The Commission recommends that a comprehensive survey be conducted to identify SWH's historic above-ground resources.

3. Archaeological Resource Inventory

A. Prehistoric Archaeological Resources

The Maine Historic Preservation Commission is the central repository for all prehistoric archaeological survey information. The Commission has information in many forms (files, map sets, photographs, etc.) all of which is protected at the State level by its exemption from the "right-to-know" legislation. This is to preserve the sites from interference by amateurs.

The latest inventory of SWH data in 1989 recorded six prehistoric sites. All of these were Indian shell middens located in the coastal zone - including the most important one on Fernald Point. This latter is listed on the National Register of Historic Places.

Many of the shoreline areas of SWH are designated as having archaeological resource potential: Fernald Point and the area just abutting the Park in the Northeast, Clark Point from the Coast Guard Station around the Point to the Claremont Hotel, the southwestern part of the Harbor from the Manset Corner Cove to Alder Lane, and the southern shore from Kings Point to Ships Harbor. These potential sites either are known to contain archaeological sites or are likely to do so but have not yet been surveyed. There is a partially complete professional archaeological survey of the coastal zone in SWH. The Commission requests that the Town of Southwest Harbor provide some mechanism for archaeological review of all construction activity or other ground disturbing activity within these areas of archaeological resource potential along the coast.

B. Historic Archaeological Resources

The period of historic archaeology is considered to begin with the first European settlers to the area. In the 1600's the Island was peopled with explorers and then missionaries. French Jesuits attempted to set up a mission on Fernald Point, but were driven off by the English as they could produce no French authorization. Sporadically French and English arrived and stayed briefly until the middle of the 1700's.

The first settlers were fishermen and lumbermen from Massachusetts' coastal towns. Fernald Point became the first settlement by the Tarrs and Fernalds for several generations before the land and buildings were sold to summer residents. Other settlers homesteaded on Clark Point and the Manset shore.

The Maine Historic Preservation Commission has surveyed historic archaeological sites within Acadia National Park. No professional survey such sites has been conducted to date outside the Park area. The Commission recommends that future fieldwork should focus on sites relating to the earliest European settlement of the Town, beginning with the St. Sauveur Mission Site of 1613.

4. Historical Resource Inventory

A. Historic Buildings/Structures/Objects

The Maine Historic Preservation Commission currently has only two buildings listed in the National Register of Historic Places: the Claremont Hotel and "Raventhorpe", a summer home on Greenings Island. The Commission does hold the survey data for over 60 summer cottages within the Town. This survey was begun in the late 1980's particularly for summer cottages on the Island. A few additional buildings are included. Nothing further has been done with this information.

The Commission has very limited financing to do surveys of historic buildings. They have a National Register form on which is to be shown the date the building was constructed, for whom, by whom, etc. The Commission suggests that SWH needs to do a comprehensive survey to identify properties which may be eligible for nomination to the Register. The Town also should finalize the 1980s' survey.

The Town has other buildings and sites which are part of its history. Among these are old school houses, the Harbor House building, the Harmon Block, some of the oldest private homes, and private cemeteries.

B. History Resource

The Plantation of Mount Desert was created by the Commonwealth of Massachusetts in February 1776. In 1789, the Town of Mount Desert was established, which included the entire island and several smaller off-shore islands. As a result of the long distances from one part of the Island to another and disputes over equitable funding for public needs in the northern and eastern parts of the Island, a petition was presented to Boston and in 1796 permission for the establishment of a new Town was granted. This new Town of Eden did not change its name to Bar Harbor until 1918. Similarly, the southern part of the Island separated from Mt. Desert in 1848 as the new

town of Mansel. It later changed its name to Tremont, but still included the current Town of Southwest Harbor.

Historically, the impact of the property tax payment for public school education caused dissension amongst island residents. In the early 1900's the residents of the SWH village of Tremont demanded new school buildings both within their village and in the Manset village. The rest of the Tremont community decided to separate themselves from the SWH side. This was accomplished on February 21, 1905 when the Town of Southwest Harbor was incorporated. True to their desires, the first actions involved the construction of a new schoolhouse (the current "Harbor House") for use as a high school. In 1917 a 2-room primary school was constructed next to the high school. When the current brick Pemetec School was constructed, this primary school was moved over to the Town Lot and now houses the Town Offices, Police and Fire Stations.

5. Assessment of Threats to the Archaeological and Historical Resources

The fact that the Town keeps no record of the specific location of the Prehistoric Archaeological Sites and has no surveys of the Historic Archaeological Sites outside of the Park should be cause for some concern. The Town should also consider keeping a register of buildings of historic or architectural interest, in addition to the two already on the National Register.

Many of the sites are along the coast as the early explorers, missionaries, and settlers lived off foods from the sea. These areas are the most likely to be disturbed by development - subdivision, building demolition or relocation, or a building renovation.

Unfortunately, many towns do not have the financial resources to support historic preservation.

6. Assessment of Existing Measures to Protect and Preserve the Archaeological and Historical Resources

A. Prehistoric Archaeological Sites

The only existing protection is Shoreland Zoning. The 75' structural setback in residential zones protects sites from annihilation. The Town should consider requiring a professional survey before construction is allowed in those

areas which are considered likely to contain sites of potential archaeological or historic interest. The Maine Historic Preservation Commission supports this.

The Town should assist the Commission to complete the archaeological survey, inventory and analysis of the coastal zone.

B. Historic Archaeological Sites and Historic Buildings, Structures, and Objects

Currently, there are no protections for historic sites within SWH. The Commission has made no surveys outside of the Park, and only two buildings within the Town are preserved on the National Register.

The Town should consider forming an Historical Society which would protect and preserve some of the early European settlement sites. The Society also could assist the Commission in completing the survey of summer cottages and other buildings begun in the 1980's. This would provide a list of buildings, structures and other objects which might be considered worthy of preservation. The Commission has funds available for this.

Once the sites are located, Town Ordinances (subdivision and land use) could require a site developer to provide a survey if it is suspected that the site is of historical value. Creation of a resource protection zone would also protect the sites. Similarly, the Town should consider measures to protect buildings, structures and objects of historical value which the townspeople deem important to the history of the community.

Resources:

Bar Harbor Comprehensive Plan, Narrative History, written by the Rev. Edwin A. Garrett, III, President, Bar Harbor Historical Society, 1992.

Traditions and Records of Southwest Harbor and Somesville, Mount Desert Island, Maine by Mrs. Seth S. Thornton, 1938.

The Story of Mount Desert Island by Samuel Eliot Morison, 1960

Conversations with Wally Gilley, Henry Ward, and Beatrice Dunbar Grinnell.

CHAPTER XII. WATER, SOIL, AND TOPOGRAPHIC RESOURCES

STATE GOAL: To protect the quality and manage the quantity of the State's water resources, including lakes, aquifers, great ponds, estuaries, rivers, and coastal areas.

1. Introduction

The water resources of a community are needed for many purposes including drinking, wildlife habitat, supporting fish, crustaceans, and vegetation, and for recreational activities. We are concerned about both surface and underground supplies. The most important characteristics of the water resources are quality and quantity.

Good quality water is running water. The rate of flow depends upon ground conditions and slope.

This chapter describes the surface and ground water resources within SWH, their quality, quantity and use. It also describes soil conditions and gradients. The effectiveness of existing measures to protect these resources will be discussed. It will examine the impact of the development proposed by the Plan.

This chapter should be related to the natural resources, marine resources, and the public facilities inventories.

2. Key Findings, Issues, and Policies

The steepness of the topography means that large areas are either unsuitable for building or are expensive to build on. Consequently areas suitable for commercial or industrial type buildings are quite limited. Coupled with shallowness of topsoil, steep slopes can lead to concern about erosion, and possible pollution in the watersheds of the Town water supply and of Bass Harbor Marsh.

The absorbtive capacity of the soil is generally poor, so it is not easy to dispose of effluent from septic tanks. This also means that the effect of any increase in surface water runoff created by new paved areas and roofs is likely to be more serious.

The Town water supply is assured, but private wells draw water from aquifers which are in fractured bedrock. The size of such supplies is very hard to ascertain, as is also the likely effect of any pollutants.

3. Topography, Soils, and Water Inventories

A. Topography

SWH's topography refers to its high peaks, its slopes, its valleys, meadows, and wetlands. Elevations range from sea level to over 1000 feet at West Peak in the Western Mountains - the area to the west of Long Pond. The United States Geological Survey (USGS) map shows elevations, watersheds, and steepness of slopes. The delineation of watersheds is necessary in order to avoid locating activities which might generate pollution. A knowledge of the steepness of slope and the land elevations helps in the planning of buildable areas and of road layouts (see Development Constraints Map).

Watersheds - All of the areas from which water flows are considered to be the source, or watershed, of a body of water. SWH's northern area has a major watershed (over 1000 acres) draining into the southern part of Long Pond - SWH's drinking water source. Another watershed in this area (over 500 acres) drains into the southern end of Echo Lake, just to the north of the Town boundary. Most of the land in both of these areas is owned by Acadia National Park, so the possible impact of pollutants from development does not arise. A boundary between two major watersheds splits the Town, running north-south along the Long Pond Road and the Freeman Ridge. One watershed drains down to the sea through the Town to the East and the other into Marshall Brook and thence to Bass Harbor Marsh to the West. A lesser north-south watershed boundary exists in the southern part of the Town, draining to the sea on the East and to the Heath on the West. Most existing development in SWH is to the East of these two boundaries.

The Town shares watersheds with Mount Desert to the north and with Tremont to the west. The highest elevations are in SWH.

Elevations - A topographic map (or "relief" map) shows the contours of valleys and hills. It shows possible scenic view points, floodplains, likely routes for any future roadways, etc. The Topographical Map of SWH shows that the Town has a barrier of hills to the north - this land is in the Park. Route 102 comes down into the Town through a valley between Carrolls Hill and Robinson Hill. The Seal Cove Road climbs across countour lines, as it rises to Freeman Ridge, but it intersects Freeman Ridge Road at its lowest point. Main Street continues at the base of Freeman Ridge through the town center. The Bass Harbor Road rises toward the peak of Hio Hill and makes no attempt to seek the lowest route. This area contains many streams and wetlands and this was probably a good choice. There is a valley from the end of Robinson Lane which leads toward the fire road on the western end of the

Seal Cove Road. The topo map indicates that the flatter areas are to the south of the Town. It also shows the highest points for viewing: Hio Hill (at the cemetery), Carrolls Hill (top of Sail Mountain Road), and the Freeman Ridge Road.

Slopes - Slope is defined as the amount of vertical rise or fall over a horizontal distance. This can be seen on the Topo Map (the closer the contour lines are to each other, the steeper the slope). Slope is usually expressed in percent, so that a 10 percent slope represents a rise or fall of 10 feet over a distance of 100 feet. While the lands within the developed area of SWH and Manset are relatively level, surrounding lands are mostly quite steep, with slopes of 10 percent or greater.

Slopes below 8 percent are rated good to fair for development by the U.S. Natural Resource Conservation Service (formerly the Soil Conservation Service). Slopes of 8-15 percent are rated fair for development, while slopes of 15 percent or greater are rated poor to very poor. These ratings are based on increased costs for construction on steep slopes, higher incidence of septic system failures, increased soil erosion and resulting siltation of adjacent streams and waterways, and increased difficulty for access by emergency vehicles and water supply. Most slopes of 15 percent or greater are in the National Park. Most areas on both sides of Freeman Ridge are at greater than 8 percent, and some areas on the west side of the ridge increase to 15 percent. Some parts of Carrolls Hill and Robinson Hill are greater than 8 percent (see Map of Development Restraints).

B. Soils

Soil is the uppermost layer of the earth's surface - vegetation grows in it, water percolates through it. Much of the soil in SWH is shallow or poorly drained. Most of the area south of the Manset village on the Seawall Road is composed of hydric soils ("wet soil") - particularly along the shore south of Kings Point. There are some hydric soils on the northern side of the Clark Point peninsula and on the eastern slopes of Freeman Ridge. Some of the coastal area on Fernald Point has hydric soils. Not surprisingly, the areas which do not contain hydric soils are the areas which have been developed.

The Soil Conservation Service has developed a scale of soil potentials by selecting the best soil in Hancock County for low density development. They define "best" as having the fewest limitations (depth to water table, bedrock, etc.) and

therefore the least expensive soil to construct a home, septic system and road. The scale also takes into account environmental constraints as well as long term maintenance costs. The composite rating for development was determined by a weighted average of the individual soil potential indices:

septic tank absorption fields	- 45%
dwellings with basements	- 20%
local roads and street	- 35%

Mapping the scale of soil potential largely coincides with a map of hydric soils, confirming that these areas have a low potential for development. Areas with a good potential for development according to this rating system are located in the northern part of the Town to the west of Route 102 and on the Bass Harbor Road north of Jody Acres Road. Other areas of undeveloped land, or land which is currently developed in very low density residential, have a low potential. This method of mapping indicates not that the soil conditions prohibit development, but that the soil is particularly water permeable, or the area has steep slopes (see Maps of Development Suitability and Water Resources).

C. Surface Water Bodies

SWH contains a part of Long Pond, and it includes Seawall Pond, several ice ponds and fire ponds, and streams - both perennial and inter-mittent.

Long Pond - The 1979 Comprehensive Plan reports that approximately 1/3 of the Long Pond, or 300 acres, is in SWH. The Department of the Environment classified the water quality of Long Pond to be "outstanding". A secchi disk transparency reading is a measure of the clarity of the water and an accurate method for estimating lake water quality. Within Maine, 5.6 meters(m) is an average depth for clarity - the Long Pond readings range from 9m at the end of July to 11m at the beginning and the end of the summer. There has not been any great change in these readings in the last 20 years.

As discussed under public facilities, Long Pond is SWH's water supply. The Town pumps water to two tanks on the top of Freeman Ridge. It is currently planning a filtration plant which will be located at the top of the Long Pond Hill and the water will be pumped from the Pond to the Filtration Plant before it is circulated to consumers.

Seawall Pond and the Ice/Fire Ponds - The Pond at Seawall is natural and is surrounded with marsh. It is a wildfowl habitat, both summer and winter. The 1979 Comprehensive Plan listed 14 smaller ponds. Many of these were dug as ice ponds in the last century - the ice was exported from the Manset shore. There are several of these west of the Seawall Road in Manset. There is a pond behind the Town Offices which was dug as a Fire Pond in the '30's. Also at this time a reservoir was created for firefighting purposes off a Fire Road now in Acadia Park. Uncle Chris's Pond across from Lawler Lane is flooded for public skating in the winter and drained in the summer so that it does not become a bog. It belongs to the Town.

Estuaries - Seawall Pond is a tidal estuary, although the mixing is minimal. The other estuary which touches the western boundary of the Town is Bass Harbor Marsh.

Perennial and Intermittent Streams - Three streams flow south from the highest elevations of SWH: Mitchell's Stream, Connor's Stream and an unnamed stream toward Norwood Cove and the sea. There are several streams which drain off Freeman Ridge into Norwood Cove and into the Harbor, off Hio Hill into the sea off the Manset shores and toward Buttermilk Brook into the Bass Harbor Marsh. All of these streams pass through developed areas and receive surface water from the developments. Care must be taken to maintain these streams as a system of high quality surface water drainage.

D. Ground Water

Ground water is that part of the surface water which has seeped into the ground rather than running off. Generally, aquifers are geologic deposits and bedrock which contain large quantities of water. In Maine, aquifers are commonly contained in sand and gravel deposits or in fractures of bedrock. Recharge areas are those land areas with coarse or sandy surface soils capable of absorbing rainwater easily and replenishing an aquifer. It is as important to protect these areas for their recharge ability as it is to protect them from pollutant discharge.

In SWH, the aquifers occur in fractures in the bedrock. There is no well history in the Town, although the DEP did begin to collect information from well drillers in the late 1980's. In an area like this, where aquifers are in fractured bedrock it is impossible to determine the extent of recharge areas which feed into a particular aquifer, or where groundwater from an aquifer may travel once the aquifer is fully charged.

It is not possible to detect whether a particular well is being affected from a nearby pollutant without a detailed investigation using dyes. There is some history of wells on the shore becoming saline during a dry summer, but many of these homes switch onto the Town's summer water supply.

4. Assessment of Threats to Southwest Harbor's Topological, Water and Soil Resources

Threats to the topology and the soils within the Town would come from development which could reduce hillsides, cover the slopes and valleys with non-permeable development, and overburden the septic soakage.

Threats to the surface water resources come from point and non-point pollution. Point pollution is attributable to a single source - a pipe. Non-point pollution is much less specific - stormwater run-off carrying oil, or phosphorus, or fertilizer, or effluent from non-functioning septic systems.

The major point pollution source is the sewage treatment plant. During storms surface water infiltrates some sewer pipes and overloads the plant. This results in an early discharge of the treated effluent into the Harbor. A second point source are the 11 overboard sewage discharge systems. About half of these discharge toward the Fernald Cove area, the other half discharge into the Harbor, and Acadia National Park's Seawall Campground system discharges into the Coastal Waters at Seawall.

The non-point sources are not checked in any systematic manner. There are old septic systems close to Long Pond which have been checked regularly by the LPI, but the discharge from parking areas on docks over the Harbor waters or near the edge of the waters is not monitored. There are no DEP records of any non-point sources threatening surface water.

Threats to ground water resources come also from non-point pollution. The greatest threat is from underground storage tanks. Most of the storage tanks in Southwest Harbor have been either removed completely or reconstructed with a cement basin underneath. All of the commercial firms and the Town Garage have responded to the deadline set by the DEP and have either removed or reconstructed their tanks. The several private owners with underground tanks have been permitted to keep them, but the names of the owners are registered with the DEP.

During the 1980's and the early '90's, the Town monitored the area around the private landfill on the Long Pond Road to determine if there was any contamination of Long Pond and of Marshall Brook.

Over the years the tests showed an improvement after the capping of the landfill. The monitoring of these wells was discontinued by the Town in 1993. The owners of the landfill still monitor under the DEP landfill closure requirements.

5. Assessment of the Future Adequacy of Southwest Harbor's Water Supply Resources

As is discussed under Public Facilities, the Town will have a new filtration plant in 1998. As Long Pond's water supply is adequate and the filtration plant will produce impeccable water, the Town would appear to have no more problems with Town water supply. The future of groundwater for the many wells is not as easy to assess. The fractured bedrock source cannot be assessed easily for potential volume nor for the impact of pollution.

6. Assessment of Existing Measures to Protect and Preserve the Topography, Water, and Soil Resources

The topography and the soils are protected to some degree in the Land Use Ordinance by preventing new road construction on steeper slopes, restricting the extent of hard surfaces (such as driveways and parking lots) adjacent to a wetland or stream, and by requiring a minimum lot size of 40,000 sq.ft. in areas where main sewerage is not available. Future Southwest residents might be better served if the minimum lot size was made larger in areas with hydric soils, and if restrictions on the extent of hard surfaces were extended to all areas of the Town; i.e., a lot coverage minimum for the whole town which included all impervious surfaces.

The Land Use Ordinance also has performance standards for storm water runoff and erosion control. These standards should be reviewed after this Plan is completed, as they could be varied according to degree of slope.

The surface and ground waters near a lake are protected by a phosphorus determination formula which has been included within the Subdivision Ordinance. Again the Town would be better served if this phosphorus determination were required of all subdivisions; i.e., family subdivisions which are not required to be reviewed and a single division of a parcel of land.

Sludge pumped out of septic tanks (as well as from the treatment plant) is not disposed of in Southwest Harbor. This should not be a problem as long as other towns are willing to receive it.

The Long Pond water resource has been studied several times as a standard maintenance procedure. As recently as 1994, the Hancock County Planning Commission published a report which suggested measures for watershed protection of the Pond both as a water source for drinking and for recreation. As the watershed is shared by both SWH, Mt. Desert, and Acadia Park, this will need to be a regional effort.

In 1994, the Acadia National Park Service published a summary of management alternatives for a Water Resources Management Plan. When completed, it will guide management of the lakes, ponds, streams, and groundwater within the Park. As it states "water and pollutant movements are not restricted by Park boundaries", so Southwest Harbor could become involved both as a possible source of pollutants and as a receiver of them.

In 1977 Southwest adopted floodplain protection under the Federal Emergency Management Agency (FEMA). This protection mandates that any new structure or a major improvement to an existing structure must be built above the base flood level of a 100-year storm. This not only has reduced the cost of flood insurance of homes and businesses locating in flood hazard areas, but it has protected the existing floodplains and the water courses within them. This protection of these wetlands has been adopted by the Town and this measure should be sustained (see Map of Development Constraints).

SWH does not have a wellhead protection plan. This is not easy to consider with fractured bedrock as the aquifer source, but the Town should consider examining the types of land uses allowed and the extent of paved areas in parts of the Town which rely completely on well water.

CHAPTER XIII. FISCAL PERFORMANCE AND FUTURE CAPACITY

State Goal: To finance an efficient system of public facilities and services to accommodate anticipated growth and economic development.

1. Introduction

Successful comprehensive planning is based upon understanding the financial capacity of a town to meet existing needs and fund new projects. This chapter will assess the ability of SWH to pay for existing, expanded, and new services.

Many of the proposals in the Comprehensive Plan call for cooperation with citizens and other agencies and do not have a cost attached to them. For example, SWH will continue to work with its own Natural Resource Committee, the League of Towns, the National Park Service, and Chamber of Commerce to protect natural resources while at the same time accommodating the needs of tourists during the busy summer season. Other projects, such as the possible need to purchase land for expansion of downtown parking and pier parking, require future consideration. Others such as developing bike paths can be initiated through Community Development Block grants. There are, however, several major items of capital expenditure which the Plan shows will be required over the next ten years. There is also at least one area of recurrent expenditure, education, which has been rising in recent years much faster than revenue and threatens to unbalance the budget. This chapter, then, links with all other chapters, but particularly transportation and physical facilities.

The Chapter outlines the financial performance of the Town based upon tax revenue generated, expenses, and bonds outstanding. It will present recent revenue and expenditure patterns and assess SWH's capacity to finance capital expenditures for the next 10 years.

2. Key Findings

SWH is fiscally sound. Forecasting the fiscal capacity of the town is somewhat easier than in some communities because the tax base is stable. SWH does not anticipate growth in population, but it does expect a small increase in the number of domiciles (ten additional

new homes were built in 1995-1996) increasing the property tax base. The number of new businesses is not expected to increase substantially. Turnover of businesses in the downtown continues to occur, but business locations are not vacant for long.

About 86% of the revenues generated in SWH in 1994-1995 came from property taxes. This has increased from 79% in 1989-1990 due to the fact that while expenditure has risen other revenue sources such as Excise Taxes and State assistance have remained fairly constant. Property tax is a function of the "mill rate" - the amount a property owner pays per \$1000 of assessed value. The mill rate for 1995 is \$13.12 per \$1,000. This is below the average for the State and is close to that of Bar Harbor.

Assessed value should, by State Law, be maintained close to market value. Southwest Harbor was revalued in 1992, and the Assessor reviews property assessments annually. In common with the rest of coastal Maine, SWH experienced an unusual rise in property values in the 1980's; this has now flattened out.

Presently, SWH has the fiscal capacity to take on additional financial burdens. The Town can borrow up to 15% of the State's assessed value, of which not less than 50% must be devoted to educational purposes. Currently, SWH has debts of about 1% of its assessed value, and therefore it has ample borrowing capacity.

3. Fiscal Capacity Inventory

A. Recent Revenues and Expenditures

Tables 1 and 2 on the following two pages show the revenues and expenditures for the past 5 years.

Sources of Revenue - The proportion of revenue derived from property tax has been slowly increasing. In 1994, 86% of revenue was from property tax compared with 79% in 1989. Less than 4% of the revenue of the Town now comes from the State as "Revenue Sharing". Since other sources of revenue have not increased in the past 5 years, it is not surprising that property taxes have had to be raised in order to keep pace with increasing costs.

Annual revenues shown in Tables 1 & 2 have also been shown adjusted by the Consumer Price Index (CPI) to take account of inflation. The 1995 Town revenue was 13% more than it was in 1989. But the 5% decline in revenue from other sources in the same period led to the need for an increase of 18% in property taxes. Thus the property tax has had to be the workhorse for

both the increase in annual expenditure and the decline (in real terms) of other sources of revenue.

50%?
I thought it
was 40%!

The Federal Government owns over half the total area of the Town (Acadia National Park and the Coast Guard Station, see the Existing Land Use Chapter). There are other tax exempt properties within the Town - churches, non-profit organizations. The Town receives about \$3,000 a year from the Federal Government in lieu of property taxes.

State Revenue Sharing is determined by a complicated formula. The State makes an estimate each year of the amount, but this is not always available in practice, so Towns must hold a reserve to tide them over any shortfall.

The fluctuations of "other" is due to the sale of properties which fall into the hands of the Town as a result of non-payment of taxes.

Expenditure - Of the total Town expenditure (3.4 million dollars in 1994/1995) ~~56%~~ currently goes to Education. The next biggest item is Public Safety, 14%; three other items, General Government, Solid Waste Disposal and Highways account for 7% each.

Over the last five years annual total expenditure has increased by 30%, but the increase has not been across the board. School costs have risen by 68%, Public Safety by 72% and Highways by 69%. Increases in other items have been relatively modest.

Of the school costs, Pemetic School costs increased by 81% and the Town's contribution to the High School by 38%. SWH has benefitted from the fact that other towns have been sending increased numbers to the High School, curtailing the rise in cost per head as far as SWH is concerned. Nevertheless the scale of increase in education costs is formidable and it has caused other areas of essential public expenditure to be restricted.

Public Safety expenditure includes the Police, volunteer Fire Department, and the Dispatch Service. Negotiations are underway to try and reduce the cost of the Dispatch Service. The increase in expenditure in the Public Safety and Highway Departments is primarily the result of increases in entitlements for the staff - insurance, retirement, and unemployment-insurance costs have risen sharply - but are not likely to continue increasing at this rate.

Table 1

Current Revenues (General Fund plus Special Reserve Funds)*

	90/91	91/92	92/93	93/94	94/95	95/96 Estimate
Property Taxes	84 2,286,543 (84%)	2,354,888	2,636,257	2,769,143	2,884,096	85 2,944,286 (85%)
Local Road Assistance**	15,868 (1%)	16,500	25,078	16,500	16,500	16,500 (0%)
Excise Taxes (Cars)	194,903 (7%)	191,134	194,186	194,488	219,033	228,089 (7%)
Boat Excise	10,056 (0%)	9,217	10,023	9,913	10,366	b
State Revenue Sharing	83,607 (3%)	75,824	72,649	93,276	91,947	93,049 (3%)
? Misc. Admin. Earnings ?	23,095 (1%)	9,448	12,329	26,800	43,725	53,992 (2%)
? Interest Earned ?	56,982 (2%)	46,530	29,595	22,706	35,011	55,941 (2%)
Int. on Deliq Taxes	13,759 (1%)	41,445	34,122	19,744	21,420	23,025 (1%)
Dock/Float Rentals	14,640 (1%)	16,591	19,985	16,216	20,945	33,719 (1%)
Other ^a	32,684 (1%)	4,807	24,332	8,328	8,609	32,099 (1%)
Annual Revenues	2,732,135 (100%)	2,766,383	3,058,556	3,177,114	3,351,652	3,480,699 (100%)
Annual Rev. in 1995 \$ ^c	3,185,749	2,968,922	3,211,713	3,267,174	3,351,652	3,480,699
Property tax in 1995 \$	2,666,175	2,634,985	2,863,617	2,920,535	2,965,832	2,944,286
% of Annual Rev. from property taxes in '95 \$	84%	89%	89%	89%	88%	85%

*Budget year: July 1-June 30. Special Revenue Funds are set aside for specific purposes such as the purchase of fire trucks.

**Local Road Assistance: State Revenues

^aOther: car registrations, sale of tax acquired property. In 95/96, it included a Community Development Block Grant

^bIn 95/96 Boat Excise was combined with Car Excise Taxes.

^cThe CPI index is used to convert annual revenue and property tax revenue into 1995 dollars. The CPI measures the change in costs of goods and services over time. The CPI index equalled 100 between 1982-84. In 1995, it equalled 152.4. This is a 52% change in the costs of goods and services from 1982-84 to the present. With the CPI index, it is possible to compare each budget year with 1995 figures.

Sources: CPI-U (Annual Average of Monthly Figures, Statistical Abstract of the United States; Revenues: Southwest Harbor Annual Reports.

Table II
Expenditures*

	90/91		91/92	92/93	93/94	94/95	95/96 Estimate	
General Government	324,794	(12%)	317,221	276,387	279,892	276,049	286,326	(8%)
Debt Service	120,393	(4%)	75,273	74,164	98,153	81,298	84,304	(2%)
Education	1,311,554	(48%)	1,599,184	1,596,930	1,741,621	1,886,556	1,872,598	(54%)
Pematic	884,544	(32%)	1,204,705	1,193,572	1,299,424	1,402,205	1,400,928	(40%)
High School	427,009	(16%)	394,478	403,358	442,197	484,351	462,685	(13%)
Public Safety	320,829	(12%)	359,065	411,994	422,130	463,764	522,343	(15%)
Health/Sanitation**	212,552	(8%)	191,825	158,749	255,536	249,777	230,532	(7%)
Ambulance [?]		(0%)	19,515	9,867	21,877	21,620	22,928	(1%)
Solid Waste ^a		(0%)	172,310	148,882	233,659	228,157	230,000	(7%)
Highway and Bridges	263,854	(10%)	347,989	301,415	279,406	251,811	260,263	(7%)
County Taxes	84,090	(3%)	81,192	95,058	95,135	98,253	98,776	(3%)
Other ^b	93,656	(3%)	104,166	96,984	90,648	90,431	119,838	(3%)
Annual Expenditure	2,731,722	(100%)	3,075,915	3,011,681	\$3,262,521	3,397,939	3,474,980	(100%)
Annual Expenditure in 1995 \$	3,056,641		3,341,193	3,176,333	3,354,981	3,397,939	3,474,980	

*Budget Year: July 1-June 30

**Health and Sanitation for 90/91 budget contains all contracted services including ambulance, solid waste disposal, engineering, hydrant rental, street lights.

^a Solid Waste for 93/94 contains carry-over expenditures of @50,000 from 92/93.

^b Other: Community Service, Capital Outlays, General Assistance.

Table III
Combined Revenues and Expenditures

	90/91	91/92	92/93	93/94	94/95	95/96 Estimate
Annual Revenue	2,732,135	2,766,383	3,058,556	3,177,114	3,351,652	3,480,699
Annual Expenditure	2,731,722	3,075,915	3,011,681	\$3,262,521	3,397,939	3,474,980
Annual Surplus/Deficit	413	-309,532	46,875	-85,407	-46,287	5,719
Carry-over Reserve ^c	882,214	882,627	681,195	728,070	642,662	596,375
Balance	882,627	573,095	728,070	642,663	596,375	602,094

^cThe balance from the prior year should equal the carry-over reserve in the next year. The 92/93 carry over does not equal the 91/92 balance because the Town temporarily held \$108,000 in Bonds as surplus.

B. Non-discretionary Obligations

Four budget items are not easy for the Town to control: school costs, solid waste, debt payments, and county taxes.

Schools - In the case of MDI High School, the Town is a minority party in any decision as its proportion of the student body is so small. The budget is discussed and approved at a meeting at the High School. The Elementary School budget is prepared by the School Board and presented to the Warrant Committee and the Board of Selectmen for discussion. The Elementary School budget request and the High School request for authorization of their already-approved budget are presented to the voters as one item expenditure at Town Meeting.

During the financial year 1992 - 1993, the Town floated a bond for \$490,000 for extensions to Pemetec Elementary School. Bonds are not reflected in the education expenditures, but the interest and repayment are paid out of the General Fund (Debt Service). Thus the figures in Table 3 reflect running costs and not capital expenditures.

The cost to the Town of each student at Pemetec in 1995 was \$6100. That year 25 out of the 264 students were children of Coast Guard families. The Federal Government pays no property tax on the Coast Guard base and housing, but it did contribute \$480 toward each child's costs in that year. If the Federal Government were to pay the full cost of students of its employees this would have amounted to \$140,000.

The State provides a subsidy towards school costs, which is adjusted according to a formula taking into account property values in a community. Coastal towns, which have relatively high property values, receive a great deal less than average help. As far as Pemetec Elementary School is concerned, the State provided a subsidy of about \$50,000 in 1994- 1995, or 3% of the cost.

Solid Waste - This cost is largely the outcome of State mandatory requirements which have become progressively more onerous. Some time ago the Town decided to contract this operation out to a private company, so that the opportunity to renegotiate the contract occurs only at certain intervals. Recycling is an opportunity to reduce the amount of waste, and therefore the cost of disposal. The Town is currently engaged in an effort to promote greater use of recycling.

County Tax - The County Commissioners budget for their expenditures. These include County functions like: the County Jail, the Registry, the Sheriff's Department, and the airport. A formula which accounts for property assessment and population is used to determine the appropriate charge to each community. The tax does not correspond to a community's use of the County facilities, but rather the cost of making the facility available for general use.

Debt Payment - The Town incurs debt for necessary or mandated capital expenditure. The interest and rate of payment are determined at the time of borrowing and must be met until the principal is paid-off.

C. Water and Sewer Departments

The Water Department and the Sewer Department are financially independent entities, which are intended to be managed in such a way that costs are met out of user fees. The Boards of both departments are comprised of the Town Selectmen.

Water charges are regulated by the Maine Public Utilities Commission. During the 1980's the operating costs of the Water Department rose, without any increase in user fees, so that the Department became in debt to the general fund of the Town. A rate increase was granted by the PUC in 1992 which was enough to meet the higher operating costs but not enough to eliminate this debt. It is intended to apply for permission to make a further rate increase in 1997 which will enable the debt to be liquidated.

Major capital expenditures are also required for both departments from time to time, but in the past no provision has been made for accruing funds from revenue to meet these when the need arises.

Four years ago the Town was obliged by the State to choose between building a new water filtration plant or adopting what are termed "filtration-avoidance" measures. The Town decided that filtration-avoidance was not an acceptable route to follow (it would have meant restricting the recreational use of Long Pond for what might have turned-out to be only a short-term solution), so it opted to build a plant. The total estimated cost was \$1,080,000 for which the Town has received a grant of \$280,000 and a loan of \$800,000. Construction has not yet started, because of delays over obtaining a transfer of land from Acadia National Park. Bureaucratic difficulties over this have finally been overcome.

There has been an increase in the estimated construction cost due to inflation, coupled with newly-available filtration technology which avoids the use of chemicals, (this will reduce future operating costs). The Town will be requested to approve raising additional money to meet this increase. It is intended to meet the cost of repayments plus interest on the loan out of user fees.

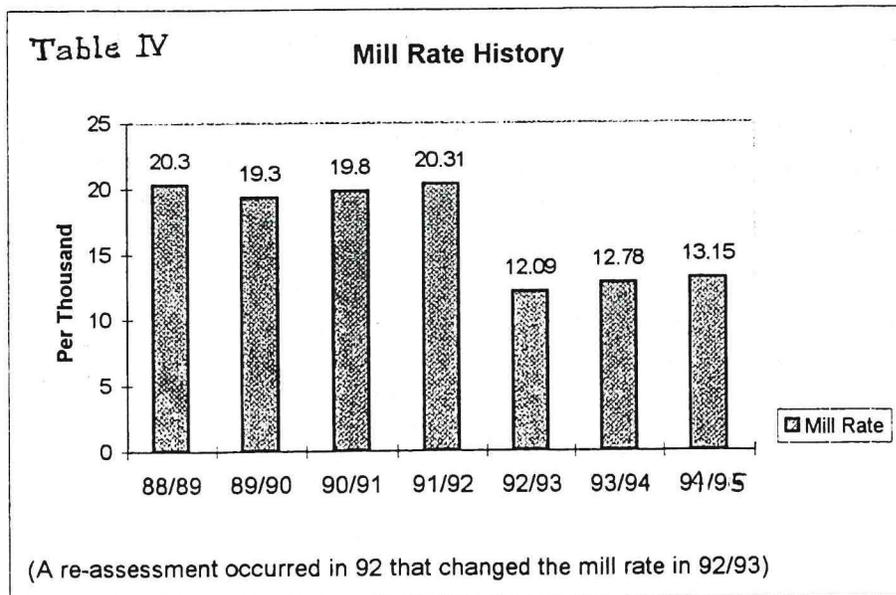
Major capital expenditure is likely to be required during the next few years for repairs and renewal of a large part of the sewer system, together with needed improvements to the Treatment Plant.

In the past, capital expenditure on the sewerage system has come from the Town's General Fund. Consideration should be given as to whether sewer user fees should be raised to help meet the repayments and interest on any loan required for this purpose.

D. Tax Rate History

Annual Town expenditure has to be met by the "levy". In order to determine the amount of money which needs to be raised from property tax, other revenues (State Revenue Sharing, excise taxes, etc.) are subtracted from anticipated expenditure and the balance needed is termed the "net levy". The net levy is then divided by the current valuation to determine the "mill rate". The mill rate is expressed in terms of \$1.00 per \$1,000 of property value.

The graph below shows the fluctuation of the mill rate over the last 5 years. The largest change occurred with the 1992 - 1993 tax year when the mill rate dropped by \$5.7 per 1000 from the previous year due to the revaluation of properties.



In real dollars, the rate of increase in the net levy closely reflects the change in the consumer price index. Over the period of 1990 to January of 1996 the consumer price index rose 23.8% while the net levy increased by only 21.2%, adjusted to 1996 dollars. Thus the levy increased less than inflation. This exhibits an extremely conservative approach to fiscal management. For the period 1989-1994, no other town on the Island showed such restraint. The net levy rose about 29% in real terms for Bar Harbor, Mt. Desert, Trenton, and Hancock County. Even Tremont showed a less conservative approach.

E. Tax Base Analysis

The state of economic health of a community is reflected in the Tax Base. As detailed in the Existing Land Use Chapter, half the land in SWH is within Acadia National Park and is not assessed for property tax. The Town receives a very small amount in lieu of taxes (.75/acre in 1995, or a total of \$3,330). There are slightly under 1,500 properties located in the other half, of which 50 are tax exempt (churches, cemeteries, school, etc.). The remaining 1,450 properties comprise the following categories:

Residential	1050 lots	72%
Commercial	100 lots	7%
Industrial	15 lots	1%
Vacant Lots	285 lots	20%

1450

The 1996 - 1997 assessed value of the land and buildings was \$222,104,900. Of this figure, over half the value was in buildings. Almost 80% of the assessed value is in residential properties. Thirty-five percent of the residential properties were owned by seasonal residents and they contributed slightly over 25% of the tax base - see Table I on the next page. More significant, the commercial and industrial properties were only 8% of the total, but they contributed 16% of the tax base.

Residential	\$ 176,048,200.00	79%
Commercial	\$ 29,437,700.00	13%
Industrial	\$ 6,989,800.00	3%
Vacant	\$ 9,629,200.00	5%
	<u>\$ 222,104,900.00</u>	

The properties with the highest value in SWH are the multi-family structures on 20 acre lots - the Western Way Condominiums and the Harbor Ridge Time Interval Ownership project. The Hinckley Company, the Town's largest boat building employer, is just slightly lower in valuation. The next three in valuation are commercial uses - the Claremont Hotel, the Bangor Hydro-Electric (lines and buildings), and the East Ridge Estate Housing.

TABLE V. APRIL 1, 1996 ASSESSED VALUATIONS OF 6 PROPERTIES

Property	Land	Buildings	Total
Harbor Ridge	621,100	2,576 500	3,197,600
Western Way	1,175,400	1,991,700	3,167,100
Hinckley Prop	560,600	2,580,600	3,141,200
Claremont Inc.	504,700	1,485,500	1,990,200
Bangor Hydro	1,385,600	1,700	1,387,300
East Ridge Est.	165,200	1,187,200	1,352,400

It is interesting to note from Table I that in five cases out of six the highest valuations were in buildings not the land. Western Way has a much higher valuation than the other properties as some of its property is on the shore.

An analysis of the following table shows that the seasonal residents not only own 60% of the properties valued at over \$200,000, but they also own 40% of the lots valued at under \$50,000 (assumed to be vacant). The year-round residents own over 75% of the lots valued at between \$50,000 and \$150,000. The largest number of parcels of property fall into the category of lowest value - the majority of which are owned by year-round residents (231). Thus, the burden of property taxes is fairly evenly spread.

TABLE VI. TAX BASE ANALYSIS, 1995

Property Assessment	Total Parcels			Total Parcels	
	No.	%	Cum %	Year-Round	Seasonal
\$ 0 - 50,000	390	27%	27%	231	159
50 - 75,000	135	9%	36%	104	21
75 - 100,000	172	12%	48%	140	32
100 - 125,000	174	12%	60%	127	47
125 - 150,000	108	8%	68%	80	28
150 - 200,000	161	11%	79%	95	66
200 - 500,000	230	16%	95%	105	125
500 - 1 M.	61	4%	99%	18	43
OVER 1 MILLION	11	1%	100%	5	6

Source: Assessing Office, Town of Southwest Harbor

4. Assessment of Current Fiscal Capacity

A Town's "fiscal capacity" to borrow depends upon the State Equalized valuation.¹ State law currently determines that a Town may borrow no more than 15% of this State valuation, of which half must go to educational projects. This reflects the ability of the Town to consider capital spending on projects.

Table III indicates the change in State valuation over time related to the Town valuation. The State valuation bases its determination upon property sales over the last two years in order to try and reflect a trend. The Town assessment immediately recognizes a sale which is not in line with earlier assessments but which is also not unrepresentative. An examination of the Table shows that since the last revaluation in 1992, the State assessment has followed the Town/s own assessment of property values some two years behind.

Increases in valuation come from two sources: increased value due to improvements made to property and overall increases in property value due to the general real estate market. SWH's assessed valuation has remained relatively stable.

TABLE VII. STATE EQUALIZED VALUATION AND TOWN VALUATION

Year	State	Town
1989	\$ 118,300,000	\$ 105,000,000
1990	158,800,000	117,200,000
1991	172,750,000	118,650,000
1992	215,550,000	215,350,000 (Reval. Yr)
1993	194,550,000	215,850,000
1994	209,050,000	216,150,000
1995	218,050,000	221,750,000
1996	216,150,000	224,800,000

Municipal Debt and Capital Financing - SWH currently has very little long-term debt. The Town has maintained a debt of less than 1 percent for the past 4 years. In 1996, the debt was \$1,515,480, which is 0.8% of the State valuation. In 1995 to conform with the Clean Water Act, the Town approved financing a new water filtration plant through a bond. Since the money has yet to be spent, this money is a net asset and is not reflected in the debt figure. Therefore this figure will increase when the money is used. (The recent purchase of a fire truck will not be reflected in these

¹ Due to definition and methodology differences, the state valuation of property is a slightly different valuation from the Town valuation of property.

figures, as the fire truck was financed out of the Fire Department's reserve account.) Table IV is a summary of the Town's current long-term debt transactions.

TABLE VIII. SOUTHWEST HARBOR'S FINANCIAL OBLIGATIONS, 6/30/96

Purpose	Loan Date	Principal	Payments + Interest	= Total	Balance Due
<u>General Long-Term Debt</u>					
Storm Drain	11/14/86	\$ 6,314.75	\$ 4,916.43 (6.75%)	\$11,231.18	\$ 69,462
Gillespie Parking Lot	07/08/87	\$ 5,000.00	\$ 884.41 (5.88%)	\$ 5,884.41	\$ 10,000
Sand/Salt Shed/Radios	07/02/92	\$15,000.00	\$ 1,744.49 (5.42%)	\$16,744.49	\$ 15,000
School Constr. Project	03/25/91	\$60,000.00	\$17,685.00 (6.55%)	\$77,685.00	\$210,000
Backhoe	08/01/92	\$ 3,882.72	\$ 646.09 (8.00%)	\$ 4,528.81	\$ 4,528
<u>Enterprise Funds*</u>					
GE Funds - Sewer	05/27/76	\$23,000.00	\$17,420.00 (5.00%)	\$40,420.00	\$325,400.
GE Funds - Water	04/21/78	\$31,000.00	\$24,925.00 (5.00%)	\$55,925.00	\$483,000.
FMHA - Water	06/20/90	\$14,764.05	\$24,284.07 (6.00%)	\$39,048.12	\$383,425.
Union Trust**	12/11/95		(4.05%)		\$800,000.
TOTALS	06/30/96	\$158,961.52	+ \$92,505.49	= \$251,467.01	\$1,508,666.

*This debt is repayed primarily through user fees.

**Water bond anticipation note of \$800,000 is due December 10, 1997 with interest of 4.05%. As the money has yet to be spent, it is a net asset.

Source: Town Accounts, 1995-1996, and the Town's Administrative Assistan

During the year fiscal year 1996 - 1997, the Town will pay off the Backhoe debt and the Sand and Salt Shed/Radio debt. The only general debts remaining will be the stormwater drains, the Gillespie parking lot, and the school construction project. The water and sewer departments will still have their 4 Enterprise Funds outstanding.

5. Assessment of Future Fiscal Capacity

A Town can increase its capacity to fund expansion by increasing its tax base, by borrowing within specified limits, by enforcing user fees, or by reducing expenditures by curtailing Town services.

The most valuable type of property in SWH is multi-family (condominium or time-share ownership). In 1988 the Town prohibited multifamily development within the Harbor area in order to protect the maritime uses. There is not a huge market for such properties. The final sale of the 18 units within the Western Way Condominiums was not until 8 years after construction.

There has recently been an increase in the demand for enclosed boat storage sheds to take the place of leaving boats out in the elements. Also, there have been indications of modest growth in computer-based employment.

Even although the Town's finances are such that it retains considerable borrowing capacity, floating new bonds would lead to an inevitable increase in annual expenditure and therefore to higher taxes. This would be felt most severely by those on fixed incomes. Furthermore the picture of recurrent expenditure gives cause for concern. School costs have been rising faster than Town revenues, and as a result the proportion of expenditure devoted to Town services has declined. If this pattern continues it may lead to running-down of the public services.

Financial stringency has obliged the Town to whittle-down its operating surplus and to exhaust most contingency funds in recent years. This is not prudent, because inevitable delays occur in collecting revenue, (late payment of property taxes and even of State revenues), and unforeseen emergencies arise, (extra-heavy snowfall, breakdowns, legal expenses, etc). Raising money by means of short-term bank loans is an expensive route to keep the town operating, but this expedient has had to be employed in one of the last five years.

A P P E N D I C E S

We'd like you to take a few minutes to answer these questions. Your answers will help the Comprehensive Planning Committee devise a plan for the future of Southwest Harbor.

What things about Southwest Harbor do you think are important strengths and necessary to maintain Southwest Harbor's character and vitality?

What are the problems facing Southwest Harbor that concern you most?

For a new comprehensive plan for the town of Southwest Harbor to be a success, we need your opinion. Thank you for taking the time to fill out the survey. Please return it as soon as possible. The Comprehensive Planning Committee will be reviewing these surveys. Watch the Bar Harbor Times for notices of our meetings.

Please drop the survey off in one of the boxes located throughout the town or return to:

Comprehensive Planning Committee
Town of Southwest Harbor
P.O. Box
Southwest Harbor, ME 04679
Phone #
Fax #

Results of the Southwest Harbor Comprehensive Plan Committee's Nov. '94 Survey

Strengths

1. A friendly, charming, unpretentious, small town atmosphere created by a diverse population of year-round and seasonal residents and a town center and harbor that are accessible by walking or bicycle.(52%)
2. A town center with a variety of attractive, locally owned & operated stores.(42%)
3. A year-round working community with a diverse economy centered around the fishing, lobstering, & boat-building industries with tourism as a secondary but not primary focus.(39%)
4. Our special working harbor that combines commercial marine & recreational uses.(30%)
5. The town's beautiful natural setting of the mountains, the Park & the sea.(19%)
6. Very good community services such as the Library, Community Center, & Medical Care.(19%)
7. Zoning is an important and positive means of controlling growth and/or over-development.(13%)
8. A very good school.(10%)
9. Our own town services including Police Force, Fire Department, Public Works & Ambulance.(8%)
10. Miscellaneous

Problems and/or Concerns

1. Zoning - we need increased zoning controls & enforcement of existing regulations to preserve the character of the town.(45%)
2. Traffic congestion, particularly in the summer - ? need by-pass &/or traffic light.(38%)
3. Must preserve the character of the town, attract new businesses in keeping with our small town atmosphere, ensure that tourism doesn't overwhelm us and turn SWH into a predominantly seasonal community, and encourage young families to remain here.(25%)
4. Taxes are too high & continuously rising, in part because the school budget is too high.(24%)
5. Town services are too costly & inadequate: we need additional sewer lines, sidewalks, & police.(17%)
6. Unattractive appearances of too many businesses, yards, and private residences.(14%)
7. Affordable housing for young families and senior citizens.(13%)
8. Parking - conflicting issues - we have inadequate space in the center of town, it is required for new businesses, but results in an eyesore of unattractive black-topped areas.(12%)
9. Lack of activities for teenagers.(10%)
10. Sewer & water rates are too high & continuously rising.(10%)
11. Zoning - our current regulations are excessive, restrictive & burdensome.(8%)
12. The harbor & town docks are too congested.(6%)
13. Miscellaneous

Results of the Southwest Harbor Comprehensive Plan Committee's Nov. '94 Survey

Miscellaneous Strengths

- "Being the 'Quiet Side' is one of our best strengths - I wish we could be more quiet about it."
- The courage of many retail stores to carry handmade, quality products rather than imported trinkets
- Diverse types of buildings without rules for stereotypes
- Pre-1900 architecture
- Friendly and cooperative relationships between year-round and seasonal residents
- Zoning that permits mixed use of a primary residential structure for a business activity
- Low crime rate
- Commercial development should continue to target local people - including summer residents, renters, and year-round citizens
- We have a good Harbor Master
- Elm trees throughout town and a "central" park
- Kind, friendly, polite, and willing people
- The many families of this town whose roots run deep and connect the town to its heritage (such as the Beals, Carrolls, Gotts, Farleys, Stanleys, Willeys, & Worcesters)
- Outstanding Bed & Breakfasts - the latter are a good use for old homes
- Fine restaurants
- Town Boards and Committees are very committed to serving the Town
- Ferry Service to the nearby outer islands
- Our summer people tend to retire here permanently
- The Coast Guard Base and personnel

Miscellaneous Problems and/or Concerns

- People move here and try to change SWH to be like their former community with increased services that have resulted in excessive school budgets and town regulations
- Too many "earth-muffins", do-gooders, and left wing liberals
- Hope Selectmen prevent "transplants" from taking over the running of the town
- Sorry that we've lost the old access to parking behind Sawyer's Market
- Concerned about any plans that would result in decreased property values
- MDI towns should coordinate their town planning with each other
- No place for biking
- Need to restore a more hospitable environment in SWH that is less restricting, regimenting, and burdensome and that encourages individuality, independence, and diversity
- Don't "roll over" for State and Federal mandates!
- Acadia National Park needs to release some of its holdings outside its perimeter line
- Lack of a long range town plan that is supported by the residents of SWH
- Shortage of restaurants operating in "off-season"
- Need better bike lanes
- Need to revive the old town movie theater that used to be where the hardware store is
- Concerned about the handling of solid waste in the future
- Need to promote responsible citizenship and concern for others
- Need to extend the Drug Store's hours "off-season"
- Need a store that sells working clothes and school clothes
- Need to have natural gas for heating
- Need town tennis courts and an indoor swimming pool
- Need to involve the whole community in recycling and expand the scope of our recycling program
- Recycling and trash pick ups should occur together
- Bicycle traffic overuses areas with small roads
- Need more first class restaurants for lunch and dinner
- Need another gas station and one that stays open on weekends
- The town should institute scheduled garbage & trash pickup.

Results of the Southwest Harbor Comprehensive Plan Committee's Nov. '94 Survey

Miscellaneous Problems and/or Concerns (Continued)

- Concerned about cutbacks in the School Budget - especially for gifted students
- Too much government for such a small town
- MDI needs a more centralized approach to town government with more sharing of services so that we can be more cost-effective and have better funding for our schools
- Need well placed signs at the entrance to town that give information about all areas of the town
- Comprehensive Plan Committee needs to emphasize communication, education, & involvement of the public in its work
- Motor boats and swimming in the vicinity of the Long Pond pumping station are not supposed to be allowed
- Need to do something about motorists who litter Main Street with their trash & garbage
- The town has too many "boxy" two story buildings
- Police Department isn't really doing its job: too many unsolved break-ins; noise restrictions must be enforced - especially motor vehicles with noisy or no mufflers; big trucks should be covered with a tarpaulin and not allowed to drive through town uncovered.
- Town office space is not adequate - especially true of the Police Department
- Land development along Mill Road appears unplanned & haphazard
- The big metal tanks next to the Great Harbor Marina need to be moved away NOW
- Drainage along Main Street is inadequate and continues to create problems during the winter
- Concerned about the "gap" between many longtime residents & the town government
- The condos, and large scale development in general, have taken away the quaintness of the town
- We need to recognize that it's only a very vocal minority that believes that zoning & planning threaten personal freedom
- We need public rest rooms, telephones, & life rings at both Town Piers
- Too many Town Laws go unenforced - such as the dog leash law
- We need more control of tourism in SWH
- The Police are not doing anything about the drug problem in SWH
- SWH should have an ordinance that requires owners of multiple dwelling units to provide the town with a list of the names and addresses of their tenants
- "Locals need to stop fighting the newcomers"
- The transfer station needs to be regulated in terms of the noise, odors, & clutter
- Concerned that the Town is being exploited by outside interests that have no real ⁱⁿ in the community itself

Results of the Southwest Harbor Comprehensive Plan Committee's Nov. '94 Survey

Miscellaneous Problems and/or Concerns (Continued)

- Long-time Mainers need to be more involved in the town
- Should consider creating a bicycle loop across Norwood Cove, or even to Valley Cove
- Concerned that our two primary industries, boat building and fishing, are on a collision course with each other - they shouldn't conflict with each other but are
- Harbor House - our Community/Family Center - should be expanded and possibly include a swimming pool and/or ice skating rink
- Our drainage systems and sidewalks are in need of repair - some streets and sidewalks are a disgrace
- We need a sidewalk on Herrick Road
- The Post Office is not very responsive to the needs of the town - its hours are too limited, and we need more drop boxes throughout the town
- We need to attract outside businesses, perhaps national firms, involved in light industry that will support businesses already here
- Special events for the town, such as the excellent Wooden Boat Show last year, should be carefully considered
- We need a leash law for cats
- Concerned about SWH not having quality child care and education for everyone
- Out of staters are buying up all the shorefront and desirable properties

