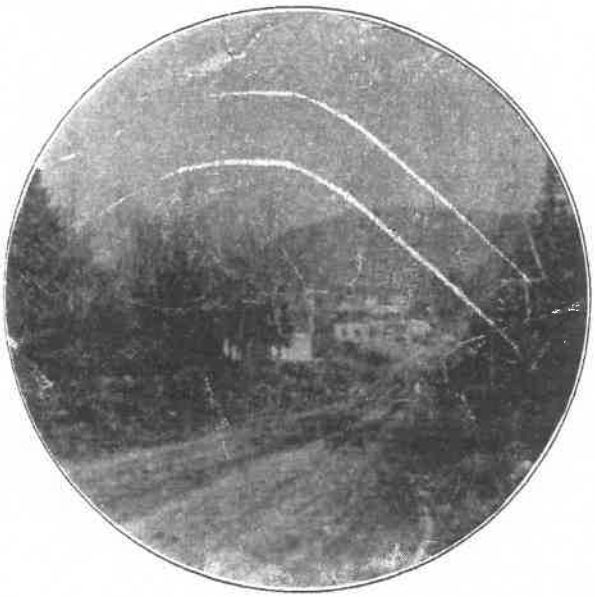
Hartford
Comprehensive Plan

Atheneum Hall
Horse Stable
Railroad Depot



Main Street

Lake
Anasagunticook

1992

Designed by
Lorraine Parsons
Norman Vashaw

- NOTE TO READERS -

Since the time portions of the Inventory and Analysis were completed, results of the 1990 Census, pertaining to population and housing, has become available.

Significant trends reported by the 1990 Census include the following:

* *Hartford's population increase to 722 between 1980 and 1990 - a 50 percent increase.*

* *The median age of Hartford's 1990 population was 31.7 - the fourth lowest median age in Oxford County.*

* *The average persons per household in 1990 was 3.0 - This was the greatest persons per household of any Oxford County town.*

* *The 1990 Census reported a total of 483 dwelling units (year-round and seasonal) - This represents 144 new dwelling units or a 43 percent increase above that of 1980.*

COMPREHENSIVE PLAN OF HARTFORD, MAINE

PART ONE

INVENTORY & ANALYSIS

June 20, 1992

Prepared by: The Hartford Comprehensive Plan Committee
Assistance by: The Androscoggin Valley Council of Governments

COLD SPRING

In Maine, where Nature spreads her bowers,
Amid trees, and plants and blooming flowers,
Lies Oxford, a thrifty growing County,
Containing towns of industrious wealth,
Among which is Hartford, prized for health.
Within that town of fruitful hills and dales,
There is a Spring that never, never fails.
A Cold Spring that was never known to rise
Or fall, or freeze. Ever yields large supplies
Of pure cold, cold water, to slake the soul
Of all, that would their parching thirst control.
I love this Fount. To me, a happy place,
Where I can drink "my glass" and not disgrace
Myself. Here, away from all care and toil,
It is pleasant to see the water boil
Within the Spring. It comes forth clear and bright.
Bringing no alloy of mankind to blight
My happiness, while in this mortal life,
By urging me to that which ends in strife.
I love this Fount. For here I can survey
Nature in her more beautiful array,
Among the fruitful hills, and vales, and lawns.
I see the dwellings, the cultivated farms,
Of Oxford's industrious sons, where 'huge paws'
Are ever ready to defend the cause
Of that Liberty, which their fathers won,
Which stands like yonder mount, Mount Washington.
I love this Fount. From here this mount is seen
Rising majestic in this lovely scene,
Standing sublime. As the twelve months march by
I see no cap of white, when comes July.
Fair Mount! Fit emblem of our Nation's Son,
To doff thy cap of white, beneath the sun,
When Nature, clothed in her rich array,
Welcomes July the Fourth, our NATAL DAY.
I love this Fount. For from this sightly ground
I can behold Liberty's reign around--
Where all of either sex, while in their youth,
Can find a school to learn this one great truth:
Pure Liberty consists in learning well
How to practice principles she does tell;
Truths that never die; but will ever reign
Where children are taught her rights to maintain.
I love this Fount. Away from worldly cares
Thank my Creator for my earthly share,
A home. Where I do this Liberty prize
As the greatest boon known below the skies:
Liberty to worship God through his dear Son
Free from the slavish fear of any one.

Hartford, Maine W.B. (William Bicknell) 1858

PART I : INVENTORY AND ANALYSIS

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CHAPTER ONE

INTRODUCTION

PURPOSE OF THE COMPREHENSIVE PLAN

This Comprehensive Plan is presented as a municipal document to establish acceptable guidelines for Hartford's growth and development.

Although the idea of community planning is fairly new, the 1973 Hartford Planning Board compiled a basic document that began to inventory and analyze the status of the Town at that time.

This Plan is a continuation and update of that document. Many factors can contribute to the necessity of undertaking the planning process. Here in Hartford the reasons are several. First, the existing plan is sufficiently outdated to be of little value in establishing current or future policies.

Secondly, Hartford finds itself increasingly impacted by the pace of development in this area of Maine. Unplanned growth threatens the integrity of Hartford's natural resource base and the ability of the Town to provide necessary public services. Changes can take place before residents realize what has happened. This pace makes it imperative to review and revise the previous plan to establish appropriate goals and policies for Hartford that are consistent with the changes which are occurring.

This Comprehensive Plan seeks to avoid a "crisis-to-crisis" system of community development by laying out rational guidelines. It serves to identify how Hartford residents desire to see the Town in the future, and then to identify actions or policies that would achieve that goal.

The Comprehensive Plan is not an ordinance, law, or regulation. Rather, it is an assessment and evaluation of our natural resources, social and economic characteristics (such as population, housing, and employment), land use, water resources, and municipal services. These data are presented relative to the past, present, and future of Hartford.

Maintaining the desirable characteristics of the Town of Hartford requires long-range planning. Since this planning is viewed as much a process as a document, it is recommended here that the Comprehensive Plan be updated every five years, or whenever the number of residential units has increased by 10 percent, whichever comes first.

HARTFORD HISTORY
(written by Lorraine Leighton Greig)

The Town of Hartford is located in Oxford County about fifteen miles northeast of Paris, the County Seat.

Two townships in the County of Cumberland, Commonwealth of Massachusetts, known as Butterfield No. 6 and Butterfield No. 7, were surveyed in 1785 and became recognized in 1798 as Sumner and Hartford, respectively. Hartford was incorporated as a town by the General Court of Massachusetts on Wednesday, June 13, 1798. At the time of this incorporation, the Court made the following reservations:

200 acres for the use of the ministry
200 acres for the first settled minister
200 acres for a grammar school
200 acres near the center of town for the future of the Court
100 acres for all who had settled said land before January 1, 1784
100 acres for all who had served in the military.

The first town meeting of the inhabitants was held at the residence of William Hayford on August 13, 1798. These officers were elected:

Moderator –	William Hayford
Clerk –	Malachi Bartlett
Selectmen and Assessors –	Freeman Ellis, William Soule and Andrew Russell
Collector and Constable –	Arvida Hayford
Treasurer –	Malachi Bartlett
Fence Viewers –	Joseph Chandler, William Soule, John Elwell and John Ames
Tithingmen –	Davis Parsons, Beza Soule
Hogreeves –	Samuel Ellery, John Bartlett
Surveyor of Lumber –	Andrew Cushman

The original settlement was on a spotted trail from west to east which was called Meeting House Hill or "Centre". Here could be found the first cemetery, a school, a pound, a powder house, and an old muster field where military drill was practiced every day. A store and a Free Baptist Church were located here. By 1807 a post office was established and later --1834-- moved to Hollis Mills (Halls Mills) or presently known as Hartford Center.

COMMONWEALTH OF MASSACHUSETTS, in the year of our Lord, one thousand, seven hundred and ninety eight.

An Act to Incorporate the Plantation called East Butterfield in the County of Cumberland into a town by the name of Hartford.

PINEWOOD YEARS

It was early in 1913 that the trees began to fall and Otis Richardson began to build Pinewood Camps on one of the slopes bordering Lake Anasagunticook. Originally, there were six cabins grouped around a central lodge, nestled in the edge of the forest that covered Thorn Mountain.

This was in the heyday of the hotel and boarding house vacations where people travelled by train and trunk, often staying the entire summer. Mr. Richardson had a dream – he wanted to share the outdoor life he loved so well with the city people who seldom knew it. He built cabins that brought the outdoors in, he cleared trails for hikers and revealed the wonders of nature to those that came. He built a wide porch on the lodge where people could sit and rock, admiring the beautiful view of the lake and Oxford Hills. Canoes were available for would–be paddles. A sturdy launch, the Red Wing, carried guests to Pinehaven as well as swimmers and picnickers to Sandy Beach. There were day trips to Dixville Notch, Richardson Lakes, White Mountains, Belgrade Lakes with an occasional trip to Cundy's Harbor on the coast. Lobster cookouts were held weekly on the shore of the lake.

In the evenings, there were hay rides, campfires with sing–a–longs, dances, masquerades, minstrel shows and theatricals. When the campers returned to their cabins at night, it was a twinkling candle that showed them the way. Special lanterns had been made and one was assigned to each cabin.

For the fisherman, there were several nearby lakes and ponds. Maine guides were available. Salmon were to be had in Lake Anasagunticook, the result of annual stocking. Bass fishing was excellent and in 1936, Pinewood was made headquarters for the Annual Bass Fishing Tournament. The top rating went to a Bay Stater who had netted 116 bass in one day. Osa Johnson, the famous African explorer, walked away with one of the cubs. There were many tales to be told about the one that got away.

Tennis courts were built and a riding stable established.

At the time of Otis Richardson's death in 1922, the camp was well known and Pinehaven had been added. His children and wife continued to carry on his work. Still later, his son, Frank and his wife, Wilma, became owner managers. In 1925, Lakefield was acquired. This allowed for the construction of a nine–hole golf course. Docks were built for boating and swimming. There were sailboats, rowboats, outboard motors and canoes available for the guests. Guests came from many parts of the country and firm friendships were formed. For many years, mid–winter reunions were held in New York and Boston.

Pinewood grew from 6 cabins to 37 and Lakefield from 6 to 28 with Pinehaven growing to 19. During the busy season, there were 30–35 employees.

Associated with Pinewood Camps, there were outlying camps at Rapid River, B Pond and Cupsuptic, as well as, Camp Mayhew for boys at Washburn Pond. In 1944, Pinehaven was sold to Mr. Wood and Mr. Steadman who had been former guests.

After the death of Frank Richardson in 1964, the camps continued to operate under the direction of his widow, daughter and son–in–law, Dudley Clemence. Due to changing times, a small campsite was built with plans to enlarge it. However, this did not materialize, and in 1970 the camps were sold to Investment Properties in Durham, New Hampshire. Later they were sold to H. Riley Patton who once again opened the doors to vacationers. The property has now been sold to Daniel and Evelyn Somers who have converted the main lodge at Pinewood into a year–round home.

The era of Pinewood has gone and no longer do the sounds of happy vacationers emanate from the lake, fields and woods. Otis Richardson's dream of long ago came true for hundreds of guests who found their lives richer and happier because of it.

MARCH 4, 1886, A FIVE DAY BLIZZARD

On the night of February 25, 12 to 15 inches of heavy snow fell in the north, driving storm, extending over Maine and the provinces. The wind blew hard Friday and Saturday, with a cold, gray sky and a squally atmosphere. Sunday a lull of a few hours gave hope that the last had blown out, but at night and the next day a following storm and a continuing squall. Monday night and Tuesday were but little improvements from the proceeding days and as far as limited communications led us to ascertain, Maine has just experienced the worst snow blockade in 20 years. All railroad communications had been stopped for several days, and telegraph lines were down. The Maine Central was completely blocked up Tuesday, with 20 engines either stalled or off the track. A Grand Trunk Special consisting of a snowplow and two engines were off the track Saturday. Another special plow and two engines were wrecked above Locke Mills. On the Rumford Falls and Buckfield Railroad at Sumner, the railroad bridge was torn partly from its foundation, but a crew of men replaced it one day after the wind eased away.

There are photographs around the Canton and Hartford area of the snow blockade of 1886. The photographs were taken on the backside of Canton Lake on the Hartford side of the Pine Grove.

A snowdrift in the yard at Mrs. Waitt's has been tunnelled a distance of 50 feet to make passage to the stable to feed the livestock.

August 19, 1886, Universalist Grove Meeting, was held with nearly 2,000 people at Canton Grove, known today as the Pine Grove, on the Hartford end of Canton Lake. Fourteen carloads of people came from Mechanic Falls and down the line to the Universalist Grove Meeting at Canton. Sunday reports about three more carloads came from Canton and the woods at the Grove is full of teams brought the folks from nearby. Over a thousand tickets were sold by Rumford Falls and Buckfield Railroad Company. The day was clear and cool with exceptional wind was as nice as could be asked for. The Grove had been well cleaned and many new seats had been put there to accommodate the people. The speakers stand was artistically arranged with evergreen, wild grasses, flags and flowers, and a canvas was placed on the back side to prevent a strong wind from the lake. As he stood looking at the distance hills across the lake, a stranger was heard to remark that such a view could not be imagined but must be seen to be realized.

The Congregation was very orderly and paid good attention to the services which were as follows. Forenoon: Voluntary by Thompson's bank being John W. Thompson, publisher of the Horsebreeders Monthly in Hartford, Maine. Singing by the Hebron quartet; brief address of Welcome by Honorable John P. Swasey, ex-governor Perham, spelled appropriate remarks after which prayer was offered by Reverend J. C. Stowe of Haverille, Massachusetts. Sermon by Reverend Mr. Nye. Singing by congregation. Benediction by Reverend Mr. Nye.

GREEN ACRES

In the early years of the 20th century, the Edward Poland family was on the way to the Rangeley Lakes on the train. As the train rounded Lake Anasagunticook, someone remarked, "What a beautiful lake and setting. I wonder if some farm takes summer boarders?"

The following spring, Mr. Edward Poland came to Canton, stopped at the hotel across from the station and was recommended to the Caleb Mendall place. He looked it over, liked what he saw, and made arrangements for the family to spend some of the summer there. It was a real operating farm. There was a corn field to raise corn for the cannery in Canton. The dairy herd produced milk and cream for the table; the balance was delivered to the creamery in Canton. A flock of hens produced eggs. The apple orchard produced many barrels of apples to be picked and shipped in the fall. There was also a small pear orchard and even a cranberry bog.

The Poland's loved it and came year after year. When son Everett married, the Mendall's built a small cottage for him and his wife, which was known as the Adelaide Cabin, named after their first daughter. A few years later, son Larry married Marjorie Kerr, the daughter of widow Henrietta Kerr who had become Edward Poland's second wife. Soon the Mendall's built another cabin and called it the Lloyd Cabin.

Larry Poland was in business in Boston with E.G. Leighton. They ran a garage where the creamery trucks were garaged. After the end of World War I, the big creameries decided they would prefer to own their own garages and offered to buy them out. Mr. Leighton took his share and went into the gas and diner business, but Mr. Poland decided to use his share to buy the farm from Mr. Mendall, who was getting old and wanted to retire.

In 1920, the deal was made and Mr. Mendall stayed on for one year to train Mr. Poland in the farm end while Mr. Poland was building the resort end. One by one, more cabins were added. Mr. Edward Poland bought a piece of land across the road and had his own cabin built, but ate his meals at Green Acres. (After he died, his third wife sold that cabin to be added to the growing number of cabins at Green Acres.)

As the years went on, the farm operations declined, but the resort grew. Mr. Leighton brought the Ludden farm next door as a summer home for his wife and daughter. Mr. Edward Poland bought the old Billy Richardson place for the lumber that was on it. Both properties gave Mr. Poland use of the fields for hay and pasture for his herd.

In the mid–1920s, the Danvers (Mass.) Riding Club came to Green Acres for a two week vacation. They shipped about 20 horses up by freight and had them unloaded at the Canton Depot. Two horselers traveled with the horses which were stabled in the barn at the old Billy Richardson Place.

A polo field was made down on the flat, and the club put on an exhibition at the fair grounds to keep the fair alive, as Mr. Poland had become the head of the Fair Association.

In the meantime, to provide more rooms and more space for activities, the cows were moved up the hill, and the inside of the barn was torn out and renovated as a lodge.

Then came the stock market crash of the 1930s. The Danvers Riding Club, along with most of the other riding clubs around Boston, disintegrated. The few members who could still afford horses joined Myopia, which became all that was left of the polo league. With polo gone, the corn field was turned into a golf course, and the business prospered another 40 to 50 years. It then began to slowly wither on the vine.

Still, in the Poland family today, Green Acres is run by Lloyd and Ann Poland, primarily as a bed and breakfast establishment, with the cabins still in use.

Section 1 – Be it Enacted by the Senate and House of Representatives in General Court assembled and by the Authority of the same, that the Plantation of East Butterfield in the County of Cumberland, Bounded as follows, viz... beginning at

the Northeast Corner of Buckfield, thence running North, twenty six degrees East, two miles and three hundred rods, to the Northeast Corner of Turner; thence North, three miles and two hundred and sixty rods; thence North, eighty–one degrees West, four miles and one hundred and sixty rods; thence North, sixty–five degrees West, one mile and two hundred and twenty–eight rods to the middle of the East branch of Twenty Mile River so called; thence down the middle of said River to the North Line of Buckfield; thence South, eighty–one degrees East, three miles and two hundred and sixty–six rods adjoining Buckfield, to the first Bound, with the Inhabitants thereon, be and they hereby are Incorporated into a town by the name of Hartford. And the said Town is hereby vested with all the Powers, Privileges and Immunities, which other Towns in this Commonwealth do or may by law enjoy.

CHURCH –– The church, formerly Hartford Baptist Church, was completed April 17, 1830, and stood on Meeting House Hill. In 1858, the building was moved by oxen to East Hartford where it now stands to serve as a meeting house. On July 3, 1892, while a service was going on a cyclone blew through the area lifting the roof from the church and setting it down beside the pasture fence where horses were tethered during service. In October 1968, the church was deeded to the Hartford Community Church.

Introduction

Since a much–publicized lawsuit made against Hartford by the Patten Corp. in 1987, the sentiment in the community has generally been that the Town needs a new plan to replace an inadequate one adopted in 1973. Since early 1988, a volunteer committee (with a fairly level membership of about 8 persons) has been working to collect information about the Town.

Community Overview

Hartford is located on the eastern border of Oxford County, and is surrounded by six other towns; 4 in Oxford County, and 2 in Androscoggin County. Townspeople are proud of the rural, self–reliant way of life in Hartford: for a long time, the Town was known mainly to its own families, or by those who came to enjoy the lakes in the summer, or perhaps by those who remember Hartford's more prosperous days before the Depression of the 1930s.

Natural resources are rich, and highly–valued, in Hartford. There are two great ponds: Lake Anasagunticook (a.k.a. Canton lake) and Bear Pond (including Little Bear Pond). Two–thirds of the shoreline of these lakes, and 90 percent of their watersheds, are in Hartford. There are over 200 seasonal homes here, accounting for one–third of the property tax base. Bear Mountain is another significant natural resource, as are numerous, dramatic, scenic views.

Hartford's 1990 population was 722 persons, an increase of 50 percent since 1980. However, with the 2 adjacent Androscoggin County towns (Turner and Livermore) having 10–times the population that Hartford has, and with Lewiston–Auburn only a short commute away, there are tremendous regional growth pressures.

Hartford has very little economic activity, and limited employment opportunities. Farming has diminished in importance, there are some logging operations, and perhaps 10 percent of the residents are supported by part– or full–time enterprises run from the home. Residents seem to favor some sort of small business or commercial development in Town.

There are a number of locations or community centers in Town, including Hartford Center, North Hartford, East Hartford, South Hartford, and Tyler Corner.

Community Assets and Liabilities

The following list of community assets and liabilities was developed by the Comprehensive Plan Committee for this assessment. Their insights come from years of experience in collecting information about the Town, and from resident attitudes expressed in a community survey in 1987.

ASSETS	LIABILITIES
Scenic, rural character: *peace and quiet	Recreation opportunities: *no Town-owned recreation land *no formal, public access to water
Beautiful, natural resources: *lakes, ponds, streams *Bear Mtn, Little Bear Mtn, *no pollution *clean air	Development opportunities: *large areas of poor soils and steep slopes *poor location for most economic development *residential growth overflow from nearby towns
Quality of life: *good place to live and commute *self-reliant values *opportunity to participate in local gov't. affairs	Environmental management: *poor septic systems in lakeside camps *no enforcement of forest management practices *lack of accurate set of maps for: - shoreland zoning - stream protection zones
Good tax situation: *seasonal homes pay 1/3 of property taxes	Municipal facilities/services: *town office too small *inadequate town record keeping *lack fee structure for permits CEO function doesn't pay for itself

Preliminary Planning Issues

While the following list is not an exhaustive one, it does present the primary planning issues that face the people of Hartford in 1990.

* Surface water quality is vulnerable to a number of threats. The Town's Shoreland Zoning Ordinance protects all perennial streams flowing into Great Ponds, but would like to adopt some form of watershed protection.

* Forestry management abuses have resulted in serious surface and ground water problems, including erosion and sedimentation in Bear Pond and some of its feeder streams, and well contamination.

* The Town has a wealth of natural and cultural resources, and places a high value on them, but they have not been formally identified in a plan.

* There are more than 200 seasonal homes in Hartford, which account for one-third of the property tax revenue.

* Several neighboring communities are growing very fast, and the threat of this growth overflowing to Hartford is of great concern. There have already been a noticeable number of conversions of seasonal homes to year–round use.

* Hartford has been trying to develop a "growth management program" of its own, utilizing a Growth Permit Ordinance, a Minimum Lot Size Ordinance, and other measures, but these efforts are not supported (or "justified" by a comprehensive plan.

* Housing construction codes and affordable housing techniques need to be addressed.

* The area lacks employment opportunities.

* Municipal services are getting very costly, and are placing a burden on taxpayers.

  - The town has no fire department, but relies on Turner, Canton and Buckfield.

  - Hartford's landfill is virtually full, and the state has delayed approval of a new landfill for more than six years.

  - Winter road maintenance is subcontracted out, but rising costs may force the Town to take over this function in a few years of great expense.

  - Code enforcement is not supported by a fee structure, and costs the taxpayers money.

* The Town has no fire department, no police force and no highway department.

* There are no public recreation areas, nor public access points to water. Also, the issue of public recreational use of private land needs to be addressed.

* The Town lacks a capital investment plan and program.

* A new public attitudes survey needs to be taken to reassess current opinion on specific or new issues.

* Existing land use regulations need to be reviewed, updated and revised.

* Working relationships need to be developed and maintained between the Hartford's Boards and the Lake Associations, nearby communities,and other regional groups and agencies, to help the Town meet its goals.

Regional Planning Issues

The Comprehensive Planning Committee is also aware of and concerned about the following regional issues:

* Water quality/watershed management for Bear Pond and Canton Lake.

* Emergency services (fire, law enforcement, rescue).

* Regional solid waste alternatives.

* Nezinscot River: recreational opportunities and environmental protection.

* Regional economic development.

* Transportation systems: Routes 140 and 219.

Community Planning Goals

The Hartford Comprehensive Planning Committee has drawn from the Town's existing plan and a 1987 resident survey to identify a number of preliminary planning goals, which are identified below.

It is the goal of Hartford to:

1. Define and maintain its rural character and self-reliant way of life.

2. Manage growth such that it is orderly, within a reasonable rate, and does not threaten the Town's rural values and resources.

3. Preserve and/or enhance the Town's natural resources so their values are maintained, and so that increased expenditures as a result of their misuse are minimized.

4. Encourage business/commercial/light industrial development, but in a way which can be accommodated by the Town's rural character and lifestyle.

5. Reduce the residential property tax burden.

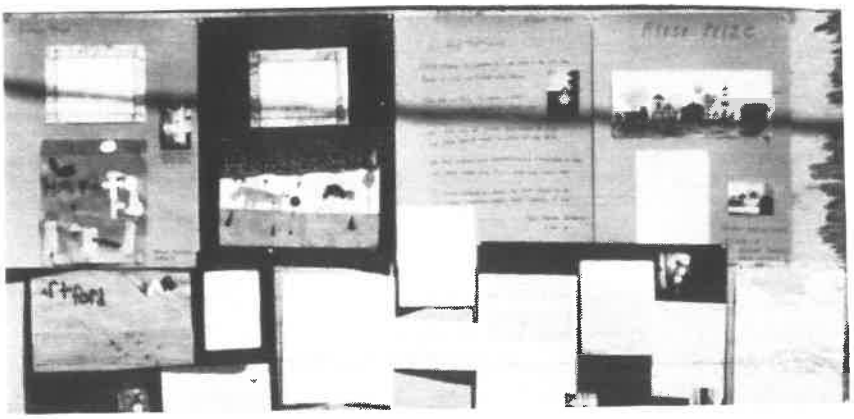
6. Provide for variety of housing types and densities, at varying price and rent levels, while maintaining the Town's rural character.

7. Protect all significant historical and natural features.

8. Identify the community's recreation needs and enhance recreation opportunities for all residents.

9. Maintain a program for citizen involvement in the planning process and to support the citizen activity with information and resources that will make it viable and vital to our local planning and decision–making.

10. Develop cooperative relationships with neighboring municipalities to address common goals.



Our children speak out about our town.

Selectmen Wesley Bennoch and Gordon Abbott and Planning Board member Arthur Harvey at "Planning Day".

Anne Kinney, Comprehensive Plan Chair and John Maloney, AVCOG Planner.

CHAPTER TWO

DEMOGRAPHIC CHARACTERISTICS

The People of Hartford

This comprehensive plan will serve as a framework for decision–making for the Town for many years to come. In order for the plan to be effective, it must be based on a clear understanding of the people in the community. Population analysis and projections are basic elements of a community's comprehensive plan; to some extent, all other plan elements depend on the current and expected future population. Population information enhances the capability of Town officials to prepare for future growth and the impacts it will have on land use and community facilities and services.

This chapter examines and documents historic, current, and future population trends, income and education characteristics, and other descriptive statistics of the people of Hartford. This information will play a key role in planning for future land use, housing, and community services and facilities.

HISTORICAL POPULATION TRENDS

(Note: This section describes population data available **prior** to the release of 1990 Census figures. However, the results of the 1990 Census reported a 1990 population of 722, which represents a 50 percent increase in population over the ten year period.)

In the 1980 U.S. Census, Hartford's population was 480 persons, and had increased 54 percent in the previous 10 years (see Table 2–1). This 54 percent growth rate during the 1970s was considerably more than the 13 percent growth rate experienced by both Oxford County and the State, and the 9 percent growth rate in Androscoggin County.

For the purpose of comparison, population figures for Peru, Sumner, Buckfield, Canton, Livermore, and Turner were averaged. This average (called the "Surrounding Towns") is included in Table 2–1; it indicates that Hartford's population grew much faster (54%) than the surrounding towns (31%) during the 1970s. Only Turner grew at a faster rate (58%) during this decade.

Since 1980 (based on 1989 population estimates), Hartford's population has grown at a rate (6%) comparable to those of the State as a whole and the average of the

surrounding towns (6%), and somewhat greater than Oxford County (3%) and Androscoggin County (1%) (see Table 2–1). Only Turner (14%) and Buckfield (9%) appear to have grown faster during this period.

TABLE 2 – 1
Population Levels and Changes, 1970–1987

Year	HARTFORD	Surrounding Towns	Oxford County	Androscoggin County
1970	312	7,397	43,457	91,279
1980	480	9,706	48,958	99,657
1987	510	10,270	50,600	101,050
% Change				
1970–1980	54	31	13	9
1980–1987	6	6	3	1

NOTE: Hartford's 1990 population was 722.

Sources:
1970,80 = U.S.Censuses of Population
1987 = Estimates developed by ME Dept. of Human Services

Table 2–2 lists the natural population changes recorded for Hartford for the years since the 1980 Census––that is, the births and deaths which occurred within the population of the Town for those years.

TABLE 2 – 2
Natural Population Changes
HARTFORD 1980 – 1990

Year	Births	Deaths	Natural Increase
1980	10	5	5
1981	7	1	6
1982	9	6	3
1983	8	4	4
1984	5	5	0
1985	9	1	8
1986	8	5	3
1987	8	4	4
1988	9	3	6
1989	17	7	10
1990	9	1	8
Totals:	99	42	57

Source: Hartford Town Reports

Although the numbers vary somewhat from year to year, the average number of births per year was 9, the average number of deaths per year was 4, and the average net increase per year was 5. This is not to say that the **total** population of Hartford is increasing by about 5 persons per year; only that, on average, the resident population increased by this amount each year due to **natural causes**. The actual number of total population change is somewhat different due to people moving into and out of Town--and in Hartford's case this number is significantly higher.

HOUSEHOLD SIZE, AGE, and SEX CHARACTERISTICS

The 1980 Census reported that the average household size in Hartford (that is, the average number of people living in households in Town) was 2.89 persons (see Table 2-3). On average, then, households in Town were larger in 1980 than those in the State, Oxford County, Androscoggin County, Cumberland County, and Franklin County, all of which had averages of 0.12 to 0.24 persons less per household.

TABLE 2 - 3
Regional Average Household Sizes
1980-1985

	Ave. Household Size 1980	Ave. Household Size 1985
Hartford	2.89	n.a.
Oxford County	2.77	2.61
Androscoggin County	2.73	2.61
Franklin County	2.77	2.69
Cumberland County	2.65	2.51
Maine	2.75	2.61

Source: U.S. Bureau of the Census

NOTE: Hartford's average household size in 1990 was 3.00.

Since 1980, the trend, both nationally and in Maine, has been for household size to decrease. This is due to many factors, including young, single persons living alone rather than with their families, elderly people choosing to live on their own rather than with their children or in group quarters, and couples having fewer children than in previous decades.

However, the rate of decrease of the average household size in Hartford appears to be lagging behind those of the other areas listed above. That is, Town records reported 78 year-round housing units from 1980 through 1990 (bringing the total to 256), and preliminary 1990 Census figures indicate 722 persons living in Town in 1990. 722 divided by 256 equals 2.82 which is not as low as would otherwise be expected. However, this Plan assumes that Hartford's household size will continue to decrease in the future, as was the case with the average household sizes of the State, Oxford County, Androscoggin County, and Cumberland County during the early 1980s. Furthermore, it is assumed that the rate of decrease will decline, eventually stabilizing by the first quarter of the next century. Table 2-4 lists estimated and projected average household size for Hartford through the year 2010. (Note that the "Reduction Factor" is the rate by which the previous 5-year average household size has been reduced to produce the current 5-year average household size.)

TABLE 2 - 4
Average Household Size
HARTFORD, 1980-2010

Year	Average Household Size	Reduction Factor
1980	2.89	--
1990	2.82*	--
1995	2.68	0.950
2000	2.57	0.960
2005	2.51	0.975
2010	2.47	0.985

* 722/256 = 2.82
Source: Androscoggin Valley Council of Governments, 1991

Table 2–5 shows that the proportions of persons living in Town in 1980 who were younger than 18 years, or between 18 and 44 years, or between 45 and 64 years, were about 1 or 2 percent points higher than for the same age categories in Oxford and Androscoggin Counties and the State. There was a significantly smaller percentage of persons 65 years and older (9%) than in Oxford County (14%), Androscoggin County (13%), and the State (13%).

TABLE 2 – 5
Regional Age Distribution, 1980

	Hartford		Oxford County		Androscoggin County		State of Maine	
Age	#	%	#	%	#	%	#	%
Under 18	143	30	14,258	29	29,093	29	322,162	29
18 – 44	185	39	17,387	36	38,359	38	442,151	39
45 – 64	107	22	10,456	21	19,447	20	219,431	20
65 and over	45	9	6,867	14	12,758	13	140,916	13
Totals:	480		48,968		99,657		1,124,660	

Source: 1980 U.S. Census

It would therefore appear from Table 2–5 that Hartford's population of elderly persons in 1980 was smaller than expected from comparable State and county data, suggesting a lack of housing and support services.

Table 2–6 indicates that there was a fairly even male–to–female ratio in all age groups in Hartford in 1980, except among persons older than 65 years, where women outnumbered men by nearly 3 to 2.

TABLE 2 – 6
Sex Distribution by Age Category
HARTFORD, 1980

	Male		Female		Total
Age	#	%	#	%	#
Under 18	69	48	74	52	143
18 – 44	94	51	91	49	185
45 – 64	55	51	52	49	107
65 and over	19	42	26	58	45
Totals:	237	49	243	51	480

Source: 1980 Census

EDUCATION LEVELS

Based on 1980 Census data, Hartford's population had similar general education levels as those of Oxford County's general population. Some differences are seen with Androscoggin County and the State, however, as shown in Table 2-7.

For instance, the percentage of Town residents with less than a high school education (31%) is much less than in Androscoggin County (39%). Also, the percentage of persons who are high school graduates living in Hartford (48%) is much greater than in both Androscoggin County and the State (39%).

The percentage of Town residents who attended college or are college graduates (18%) is somewhat lower than for Oxford and Androscoggin Counties (21% and 23%, respectively), and noticeably lower than the State (29%).

TABLE 2 - 7
Educational Levels, HARTFORD, 1980
(persons 18 years and older)

	Hartford		Oxford County		Androscoggin County		State of Maine	
Age	#	%	#	%	#	%	#	%
Secondary through 3 yrs. of High School	101	31	10,970	32	27,140	39	207,322	31
Completed 4 yrs. High School	154	48	16,004	46	27,188	39	259,910	39
1 to 3 years of College	42	13	4,300	12	9,562	14	99,208	15
4 years of College	20	6	2,245	6	4,098	6	59,396	9
5+ years of College	7	2	1,141	3	2,391	3	35,888	5
Totals:	324		34,660		70,379		661,724	

* persons 25 years and older
Source: 1980 Census

Table 2-8 shows the number of Hartford children enrolled in Maine School Administrative District Number 39 (MSAD-39) from 1979 through 1990. This Table indicates a noticeable increase in students from Hartford over the past decade.

TABLE 2 - 8

Hartford Student Enrollment in M.S.A.D. # 39
1980 - 1990

	GRADES															Yearly Totals
	K	T-1	1	2	3	4	5	6	7	8	9	10	11	12	SpEd	
1979 - 80	6	0	11	6	13	6	7	5	5	10	8	6	6	8		97
1980 - 81	7	0	6	12	7	15	6	8	5	5	7	9	6	8		101
1981 - 82	7	0	7	5	8	7	15	9	5	4	5	8	8	7		95
1982 - 83	6	0	10	7	4	9	7	16	8	9	2	5	8	5		96
1983 - 84	10	0	9	8	5	4	9	7	17	8	10	6	9	12		114
1984 - 85	11	0	11	8	9	8	5	9	6	9	12	6	4	6		104
1985 - 86	11	2	8	7	8	8	5	7	7	10	9	8	4	7		101
1986 - 87	8	4	10	10	5	8	9	6	8	18	11	10	3	11		121
1987 - 88	10	4	8	10	10	7	9	9	3	12	7	12	6	2		109
1988 - 89	11	1	13	9	10	10	8	11	11	3	8	6	7	5		113
1989 - 90	12	1	10	13	11	11	10	8	15	12	2	10	9	13		137

Source: Superintendent's Office, MSAD #39

GENERAL HOUSING CHARACTERISTICS

In the following chapter (HOUSING), analysis indicates 256 year-round homes in Hartford in 1990. This number represents a 44 percent increase since 1980 (178 year-round homes), and a 139 percent increase since 1970 (107 year-round homes). When compared with similar statistics from Oxford County, Androscoggin County, and the State, Hartford is found to have more than the average number of single-family homes, significantly fewer multi-family units, and significantly more (two to three times as many) mobile homes.

Table 2-9 compares the numbers of each of the types of housing structures in Hartford at the end of 1990 (according to Town records) with comparable numbers reported in the 1980 Census. Growth in the numbers of single-family homes was strong during the 1980s, while there was no growth in the number of multi-family units. An even stronger trend was apparent, however: the number of mobile homes in Hartford grew by over 70 percent during the decade, resulting in this housing type accounting for 30 percent of the year-round housing stock in 1990.

TABLE 2 - 9
Housing Units, Change by Type
HARTFORD, 1980-1990

	1980	1990	# Change	% Change
Single-Family	133	181	48	36
Multi-Family	2	2	0	0
Mobile Home	43	73	30	70
Seasonal	161	180	19	12
TOTALS	**339**	**436**	**97**	**29**

Sources: 1980 U.S. Census; Hartford Town records

It was also determined that approximately 92 percent of the housing in Hartford was owner-occupied in 1980.

INCOME CHARACTERISTICS

Income information indicates the general well-being of the people of a community. Table 2-10 shows 1979 household income levels for Hartford, Oxford County, Androscoggin County, and the State, as reported in the 1980 Census. The percentage of Town households earning less than $10,000 (35%) was the same as in the Counties and the State. However, the proportion earning $10,000-19,999 was higher in Town, the proportion earning $20,000-29,999 was considerably less, and the proportion earning $30,000 or more was higher than that found in the Counties and the State.

TABLE 2 - 10
Household Income Levels
Hartford, 1979

	Hartford		Oxford County		Androscoggin County		State of Maine	
Household Income	#	%	#	%	#	%	#	%
Below $10,000	55	35	6,259	36	12,589	36	137,881	35
$10,000 - 19,999	66	41	6,555	38	12,788	36	141,042	36
$20,000 - 29,999	16	10	3,098	18	6,619	19	76,309	19
$30,000 or more	23	14	1,550	9	3,267	9	40,230	10
Totals:	160		17,462		35,263		395,462	

Source: 1980 Census

Table 2–11 confirms that, on average, Hartford residents typically earned about the same as, or more than, other residents in Oxford County, Androscoggin County, and the State. Per capita income in 1985, for example, was estimated to be substantially greater in Town than in the Counties and State. However, Table 2–11 also shows that the percentages of Hartford residents and families living below the poverty level in 1979 (21% and 17%, respectively) were much greater than in the Counties or the State.

TABLE 2 – 11
General Income Characteristics
1979–1985

	Hartford	Oxford County	Androscoggin County	State of Maine
Estimated per capita income (1979)	**5,693**	5,562	5,631	5,766
Estimated per capita income (1985)	**9,166**	8,379	8,718	9,042
Median household income (1979)	**13,333**	13,029	13,524	13,186
Population below poverty level (1979)	**21%**	13%	13%	13%
Families below poverty level (1979)	**17%**	14%	10%	13%

Sources: 1979 = 1980 Census
1985 = Maine Dept. of Human Services, 1987

An encouraging trend can be found in Table 2–11. The per capita income level in Hartford in 1979 was 102 percent of that for Oxford County, 101 percent of that for Androscoggin County, and 99 percent of that for the State. However, the 1985 per capita income figures suggest that Hartford's residents have fared well, earning 109 percent of the Oxford County average, 105 percent of the Androscoggin County average, and 101 percent of the State average.

EMPLOYMENT CHARACTERISTICS

Occupations

The 1980 Census reported 194 Hartford residents as employed. As discussed in a later chapter (ECONOMY), about twice the proportion of Hartford's residents (8%) were employed in "Agriculture, Forestry, Fishing, and Mining" jobs as were the residents in Oxford and Androscoggin Counties or the State (3–4% each). The Town had approximately the same percentage of people employed in "Durable Goods Manufacturing" (12%) as the State (11%), but much less than Oxford County (20%), and much more than Androscoggin County (8%). A significantly greater proportion of persons were employed in "Non–Durable Goods Manufacturing" (28%) than in Oxford County (20%), and the State (16%), but about the same as in Androscoggin County (26%). A much smaller percentage of people were employed in "Retail Trade" jobs (4%) than in Oxford County (13%) and Androscoggin County and the State (16% each). In all other categories, there were only minor variations between Town and County and State employment levels.

Commuting Patterns

Of 194 workers 16 years or older living in Hartford in 1980, only 6 (3%) reported they also worked in Hartford, while 163 (84%) worked outside Hartford, and 25 (13%) did not report. Of the 163, Hartford residents who travelled out of Town to work, 79 (41%) went to other towns in Oxford County, 51 (26%) went to Androscoggin County, and 33 (17%) went to Jay in Franklin County. It is assumed that in 1991 the proportion of Hartford workers having to leave Town to go to their jobs is greater than the 84 percent found by the 1980 Census.

There were a total of 24 persons reported to be working in Hartford in 1980. The six Hartford residents mentioned above comprised 25 percent of these, and the remaining 75 percent were from outside of Town.

Unemployment

Rates of unemployment have been computed by the Maine Department of Labor, for Hartford, the Rumford Labor Market Area (LMA) (which includes Hartford), various other LMAs in western Maine, Oxford, Androscoggin, and Franklin Counties, and the State of Maine, from 1981 through 1989 (see the later chapter, ECONOMY). These data suggest that although unemployment rates fluctuate from year to year, and in fact from season to season, unemployment rates in Hartford generally have been much lower than the rates for the Rumford LMA as a whole, as well as other areas in Maine.

POPULATION PROJECTIONS

Year-Round Population

Anticipating population growth is an integral part of planning for the future. To do this, it is also important to recognize past trends and to understand their effect in shaping the future. For example, a significant national trend of the late 1900s is the maturing of what is known as the "baby boom". The baby boom refers to those people who were born in the post-World War II era of economic prosperity--in general, between 1946 and 1964. The "boom" refers to the sharp increase in the number of children who were born during these years compared to years immediately before and after.

The period between 1965 and 1976 produced what is known as the "baby bust", since the actual number of children being born during this time was significantly lower than in the baby boom period. This reduction in the birth rate occurred primarily because of lifestyle decisions of the baby boomers--the boomers tended to remain single longer and delay having children longer than previous generations.

Eventually, however, (beginning around 1977) the birth rate began to increase again as the boomers began to have children, causing an echo effect of the baby boom, or what is sometimes referred to as a "baby boomlet". While not as large in number as the baby boom, the boomlet does represent a significant increase, and is just now reaching the elementary schools of communities, like Hartford, across the country.

Maine is typical in that the combined effects of the baby bust and the baby boomlet are that overall school enrollments may be decreasing as the bust moves its way through the schools, but the elementary schools are beginning to swell with students. The baby bust will soon be through the school system (1994 will be the last graduating senior class of the bust), while the baby boomlet may force expansions of all types of school facilities and programs as they age through the school system. The earliest members of the boomlet will graduate from high school in 1995.

While this discussion has addressed waves of population in the nation and the state, in general, it points out how the age structure of the population affects its growth. Added to this, it is important to consider that population can change dramatically (by increase or decrease) as people migrate from one region to another seeking such things as housing, employment, or a better quality of life. Generally speaking, people of child-bearing age (and consequently their children, too) are more likely to migrate than other age groups, causing potentially significant strains on municipal and school services in those areas affected by their moving.

It should be apparent, then, that being able to predict population change is very important for a community to do to improve its planning efforts for the future. It should also be apparent that this is not an exact science.

Table 2–12 lists population projections (through 2005) developed by the Maine Department of Human Services (DHS) in 1989. These projections were derived from a statewide population projection developed using the State Planning Office's econometric model. The Hartford projections were produced using a multiple-regression model based on the 1980 Census population, birth and death records, migration estimates, and other variables.

These projections suggest that Hartford's population is expected to increase at a moderate rate for the next several years, growing 6 percent between 1988 and 1995, and 15 percent between 1988 and 2005. This projected rate of growth is somewhat higher than the rates for the surrounding towns, Oxford and Androscoggin Counties, and the State. (NOTE: Of the "surrounding towns", only Turner--with projected rates of 11% and 23% for the same periods--is predicted to grow faster than Hartford.)

TABLE 2 - 12
DHS Population Estimates and Projections
HARTFORD and Selected Areas, 1988–2005

	Hartford	Surrounding Towns	Oxford County	Androscoggin County	State of Maine
1988	**520**	10,480	51,450	102,200	1,205,900
1989	**520**	10,480	51,650	102,250	1,212,550
1990	**530**	10,660	52,400	102,950	1,234,150
1993	**540**	10,830	52,950	103,150	1,249,300
1995	**550**	10,960	53,650	103,700	1,268,750
1997	**560**	11,190	54,200	103,800	1,283,750
1999	**580**	11,320	54,900	104,550	1,302,400
2001	**580**	11,490	55,500	105,100	1,315,050
2003	**590**	11,610	56,050	105,650	1,325,650
2005	**600**	11,710	56,550	106,250	1,335,550
% Change:					
1988–1995	**6**	5	4	1	5
1988–2005	**15**	12	10	4	11

Source: Maine Dept. of Human Services, 1989

This Plan assumes that the State's population projections in the previous table are too low. For example, preliminary 1990 Census figures place Hartford's year-round population at 722, and local and regional indicators of population growth--such as the number of housing starts in Town and the level of student enrollment in S.A.D. 39--suggest a larger population and a faster rate of growth.

Two alternative methodologies were used to develop other population projections for Hartford. In the first methodology, future population is based on an assumed yearly increase of 5 percent, as shown in Table 2-13. The basic assumption for this model is that Hartford currently limits the number of housing permits issued in a given year to 5 percent of the number of houses in Town.

TABLE 2 - 13
Compound Interest Method
Population Estimate and Projection
HARTFORD, 1988-2005

Year	Population
1988	532
1989	559
1990	587
1991	616
1992	647
1993	679
1994	713
1995	749
1996	786
1997	825
1998	866
1999	909
2000	954
2001	1,002
2002	1,052
2003	1,105
2004	1,160
2005	1,218

Source: Hartford Comprehensive Planning Committee, 1988

For a second, alternative methodology, Androscoggin Valley Council of Governments developed population projections which reflect local growth trends--in particular, housing starts. The AVCOG model, shown in Table 2-14, makes the following assumptions:

1) the **average** annual number of housing starts in the 1980s will continue each year through 2005;

2) housing units will be occupied by persons according to the average household size;

3) the average household size will change in the manner outlined earlier in Table 2-4;

4) the age cohort proportions for each year in the AVCOG model are the same as the corresponding years in the DHS model.

Table 2 - 14
AVCOG Population Estimates and Projections
HARTFORD, 1980 - 2005

Age Cohort	1990 Population (Estimate)	1995 Population (Projection)	2000 Population (Projection)	2005 Population (Projection)
0- 4	56	56	56	59
5-17	136	155	172	183
18-44	300	311	316	335
45-64	136	155	187	213
65+	94	103	109	117
Totals:	722	780	840	907

Source: Androscoggin Valley Council of Governments, 1991
* 1990 U.S. Census, preliminary count

Conclusion. The three population projection methodologies, outlined above, have suggested that, in 2005, Hartford could have 600, 907, or 1218 residents. This Plan assumes that the Town's population will be approximately 910 persons in 2005. In addition, Hartford's population will not only be getting larger, but it will also be getting older, as suggested by DHS and the AVCOG model. And finally, if the Census reports an increase of 242 residents but Town records report a natural increase of 57 (see Table 2-2), it would appear that inmigration of new residents is occurring at a rate $3^1/_4$ times the rate of natural increase: it is expected that this trend of Hartford growing largely due to external pressures will continue.

Seasonal Population

Seasonal population is a measure of the number of people in Town who are not year–round residents. This includes, people staying for extended periods of time in camps and other seasonal homes, as well as for shorter periods of time in motels, bed and breakfast establishments, campgrounds, and so on. Knowing peak seasonal population is very useful––for example, the designing of public facilities (such as sewer and water systems, landfills, recreation areas, and road intersections) and the planning of public services (such as police staffing) must realistically take into account the maximum population which they are inevitably meant to address, and not just those people who are Hartford's year–round residents.

The Public Affairs Research Center (Bowdoin College, 1972) estimated that the peak seasonal population for Hartford (that is, non–year–round persons) was 703 people in 1970.

As noted elsewhere in this Plan, Hartford had 15 lodging rooms, 0 campsites, and 1 boys–and–girls camp (225 campers, 100 staff) in 1990. It is also estimated there were 180 seasonal homes in Town in 1990. These facts were applied to the equation

$$P_s = P_{90} + P_c + P_l + P_{sh} + P_{gq}$$

to estimate the seasonal population, where:

P_s = Total seasonal population
P_{90} = Estimated 1990 year–round population (DHS)
P_c = Campsite population
P_l = Lodging population
P_{sh} = Seasonal home population
P_{gq} = Seasonal group quarters population.

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

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

Therefore, from the preceding assumptions,

$$P_s = (720) + (0x4) + (15x2) + (180x4) + (225+100)$$

$$= \mathbf{1,795}.$$ That is, in 1990 it is estimated that Hartford's seasonal population increased by 1,075 persons, or 150 percent, above the year-round population level.

In order to adequately plan for future population levels, it is necessary to also try to predict the expected future seasonal population. To do this, additional assumptions must be made. Therefore, it is assumed that in the year 2005, the number of campsites and the number of lodging rooms in Town will remain the same, and the number of seasonal homes will decrease (principally due to conversion to year-round residences) by 10 percent. It is also assumed that Camp Wekeela will remain in operation, and at the same level of use.

Therefore, using the same methodology as above, it is expected that in 2005, the seasonal population will be approximately **1,000 people** greater than the year-round population.

Gary Dyke, Beverly Murphy review "resources" maps.

"Comprehensive Planning"

CHAPTER THREE

HOUSING

INTRODUCTION

The general New England economy experienced strong gains in the 1980s, and Maine's economy also prospered. One result of this prosperity was a significant increase in residential development throughout the State as many of Maine's towns saw an increase in both population and residential development. However, the future is unclear with regard to housing in Hartford: Will the development pressures of the 1980s continue, with soaring costs for land and construction, and shortages of affordable, single-family homes? Or, will the threats of higher fuel costs and recession drastically reduce new housing starts in the 1990s, and beyond?

This chapter analyzes the current housing stock of both Hartford and the surrounding region, and examines how demands for housing might be met for future residents. This chapter also addresses the affordability of housing.

HOUSING UNITS

Except for shorefront units, housing is widely dispersed in Hartford along highways and back roads. The Village, which remains from the railroad and mill era, has seen no new houses built in the past 30 years, and only a few mobile homes. With only the Town Hall and Town Office as a centralizing influence, the Village contains less than 10 percent of Hartford's population.

As discussed in an earlier chapter, the 1980 Census reported 178 year-round housing units in Hartford. The majority of these (75%) were single-family homes, followed by mobile homes (24%) and multi-family units (1%). Table H-1 compares these percentages with those of Oxford County, Androscoggin County, and the State, and shows that Hartford had more than the average proportion of single-family homes, significantly fewer multi-family units, and significantly more (two to three times as many) mobile homes.

TABLE H - 1
Comparison of Year-Round Housing Units
Hartford, 1980

	Single-Family		Multi-Family		Mobile Home	
	#	%	#	%	#	%
Hartford	**133**	**75**	**2**	**1**	**43**	24
Oxford County	13,190	70	3,786	20	1,857	10
Androscoggin County	19,378	52	15,358	41	2,540	7
State of Maine	282,560	66	110,580	26	35,105	8

Source: 1980 U.S.Census

NOTE: The 1990 Census reported 268 year-round housing units. This represents an increase of 90 dwellings over the ten year period.

Table H-2 compares the numbers of each of the types of housing structures existing in Hartford in each of the past two censuses. The 1970s saw an increase of 69 new housing units in Town. Included in this count, however, was a net loss of 4 multi-family units and 2 seasonal homes (the latter were probably converted to year-round homes). The increase in housing units was due, in approximately equal numbers, to single-family and mobile homes. It is the increase in mobile homes--a 438% increase for the decade--which draws the most attention.

TABLE H - 2
Housing Units, Change by Type
HARTFORD, 1970-1980

	1970	1980	# Change	% Change
Single-Family	93	133	40	43
Multi-Family	6	2	-4	-67
Mobile Home	8	43	35	438
Seasonal	163	161	-2	-1
TOTALS	**270**	**339**	**69**	26

Source: 1970, 1980 U.S.Censuses

Table H-3 lists new construction, by housing type, in Hartford for each year since the 1980 Census. Housing construction continued at a very strong pace in the decade, with the 65 new, year-round homes of the 1980s nearly matching the net increase of 71 non-seasonal homes of the previous decade.

TABLE H - 3
New Housing Units
Hartford, 1980–1990

Year	Single Family	Mobile Home	Seasonal Home	Yearly Total
1980	4	1	3	8
1981	5	1	0	6
1982	2	0	3	5
1983	2	1	2	5
1984	7	0	1	8
1985	1	0	6	7
1986	2	1	0	3
1987	5	7	2	14
1988	4	9	2	15
1989	8	5	0	13
1990	8	5	0	13
Total	48	30	19	97

Source: Hartford Town Records

Table H–4 compares the numbers of each of the types of housing structures in Hartford at the end of 1990 with comparable numbers reported in the 1980 Census. Growth in the numbers of single–family homes was very strong during the 1980s, while there was no change in the number of multi–family units. An even stronger trend was apparent, however: the number of mobile homes locating in Hartford during the 1980s accounted for one–third of all new, year–round homes, and the rate of placement of mobile homes in Town was higher than that of any other type, resulting in a ninefold increase since the 1970 Census.

TABLE H - 4
Housing Units, Change by Type
HARTFORD, 1980–1990

	1980	1990	# Change	% Change
Single–Family	133	181	48	36
Multi–Family	2	2	0	0
Mobile Home	43	73	30	70
Seasonal	161	180	19	12
TOTALS	**339**	**436**	**97**	**29**

Sources: 1980 U.S. Census; Hartford Town records

REGIONAL HOUSING GROWTH

The previous section showed that Hartford had 178 year-round housing units in 1980, and that the number of year-round homes in Town increased by 71 (40 percent) from 1980 to 1988. Table H-6 compares the rate of growth of Hartford with those of the surrounding communities.

Table H - 6
Regional Housing Growth
1980-1988

Town	# Hsng Units 1980	# New Units 1980-88	# Hsng Units 1988	Growth Rate (%) 1980-88
Hartford	**178**	**71**	**249**	**39.9**
Peru	809	65	874	8.0
Sumner	303	38	341	12.5
Buckfield	482	51	533	10.6
Canton	312	20	332	6.4
Livermore	816	56	872	6.9
Turner	1,392	424	1,816	30.5

Sources: 1980 U.S. Census
Maine State Housing Authority, 1989.
Hartford Town Records

Table H-6 indicates that Hartford had a much higher rate of growth in its housing stock from 1980 through 1988 than did the surrounding communities. However, Turner, only one town away from Hartford, experienced a very high increase in housing units (424) for the period, and a high growth rate (30.5), and this may indicate that the rate of growth in Hartford may continue to be affected by similar development pressures in the future.

COMPONENTS OF THE HOUSING STOCK

Table H–7 lists the proportions of housing units by type in Hartford in 1980 and 1990. Although there was a decrease in the percentage of year–round, single family homes as a proportion of the total housing stock between 1980 and 1990, single family homes are still the predominant house type in Hartford. The number of multi–family units remained the same during the 1980s, and the proportion of multi–family units in Town is still significantly less than the county and state averages. The number of mobile homes in Hartford increased by nearly three–quarters in the 1980s, however, and they now comprise nearly one–third of the Town's housing stock. There are no mobile home parks in Hartford.

Nearly all seasonal housing units are located on Bear Pond and Canton Lake. The growth of seasonal housing was greatest during the 1950s and until the early 1970s. (Note: the U.S. Census showed a decline from 163 seasonal units to 158 between 1970 and 1980, although Town records show at least 20 new units during that period.) As shorefront land becomes built up, future seasonal housing growth may decline, although non–shorefront lots continue to be sold for recreational use and "investment". It is difficult to predict how many of these will be used for housing of any type.

Table H – 7
Housing Units, By Type
1980 and 1990

	1980		1990		# Change	% Change
	#	%	#	%	1980–1990	1980–1990
TOTAL YEAR-ROUND						
Single–Family	133	74.7	181	70.7	48	36.1
Multi–Family	2	1.1	2	0.8	0	0.0
Mobile Home	43	24.2	73	28.5	30	69.8
TOTAL UNITS						
Year–round	178	52.5	256	58.7	78	43.8
Seasonal	161	47.5	180	41.3	19	11.8

Sources: 1980 U.S. Census
Hartford Town Records

Another significant trend is apparent from Table H–7. The proportion of the total housing units which are year–round increased from slightly over half in 1980 to nearly 60 percent in 1990. (In 1970, the proportion of year–round units was only 40 percent.) Only a small part of this change is due to conversion of seasonal homes to year–round use. As the number of year–round homes increases––and as the year–round population increases, too––the demands for Town facilities and services will undoubtedly also increase. The costs of providing those facilities and services in the future will increasingly be borne by taxes on year–round properties.

HOUSING OCCUPANCY

According to the data listed in Table H–8, most Hartford residences (91.6 percent) were owned by their inhabitants in 1980 rather than rented by them. Current ownership data are not available, but it is assumed by this Plan that the proportions found by the 1980 Census are reasonable and continue to be valid.

Also, the 1980 Census reported 12 of Hartford's 178 year–round homes as being vacant––a vacancy rate of 6.7 percent. It is assumed in this Plan that, because of the demand for housing which occurred in the 1980s, the vacancy rate in the early 1990s is approximately 3.0 percent, and that this rate will remain the same for the next 10 years.

Table H – 8
Status of Occupied, Year–Round Housing
Hartford, 1980

Occupancy Type	Number	Percent
Owner Occupied	152	91.6
Renter Occupied	14	8.4
TOTAL	166	

Source: U.S. Census, 1980

CONDITION OF HOUSING

An assessment of the condition of all housing units in Hartford was not feasible for the development of this Plan. In lieu of this information, the ages of the homes in Town have been used to determine the condition of the housing stock. Table H–9 lists the numbers of homes in Hartford according to the years in which they were built. (NOTE: Although older mobile homes are sometimes brought into Hartford, this Table assumes that the year a mobile home is placed in Town is the year it was constructed.) Based on the data in Table H–9, 55.1 percent of the homes in Town were built after 1970, two–thirds were built after 1960, and 27.7 percent were built before 1940.

Table H – 9
Proportion of Total, Year–Round Housing Stock
By Date of Construction
Hartford, 1990

	Hartford		Oxford County	
Year Built	# Units	Percent of Total	# Units	Percent of Total
1979–1990	86	33.6	3,081*	14.1
1975–1978	27	10.6	2,060	9.4
1970–1974	28	10.9	1,986	9.1
1960–1969	30	11.7	1,961	9.0
1950–1959	9	3.5	1,699	7.8
1940–1949	5	2.0	1,421	6.5
PRE 1940	71	27.7	9,706	44.3
TOTAL	256	100.0	21,914	100.2

* 1980–1988
Sources: 1980 U.S. Census
Hartford Town Records

The housing stock in Hartford is believed to be in generally good condition, although standards vary according to income and lifestyle choices. However, several mobile homes have been brought into Town which were constructed before June 15, 1976, and do not meet current construction standards. In addition, several cases have been noted by Selectmen, Planning Board members, and others, of people moving into houses or mobile homes before they had been properly fitted with adequate electricity, water and septic plumbing, and heating facilities.

HOUSING COSTS AND RENTAL COSTS

Although prices vary greatly among all homes sold in a given year, and from year to year, some information can be gathered by comparing yearly average home sales prices. Table H–10 lists figures for Hartford and the surrounding towns for the period mid–1986 through mid–1988, as reported by the Maine State Housing Authority (MSHA).

(Real Estate Transfer Tax data are compiled by the Maine State Housing Authority from real estate tax declaration forms. The figures are for all non–waterfront homes sold: new and existing homes, mobile homes, and single–family to four–unit homes. The 1986 data include transactions occurring between July 1, 1985, and June 30, 1986; the 1987 data include transactions occurring between July 1, 1986, and June 30, 1987; the 1988 data include transactions occurring between July 1, 1987, and June 30, 1988.)

Table H – 10
Average Home Sales Prices *
Hartford and Surrounding Towns, 1986 – 1988

	1986 ($)	1987 ($)	1988 ($)	% Change 1986–88
Hartford	**31,104**	**35,938**	**61,140**	97
Peru	50,667	43,250	37,308	–26
Sumner	31,159	32,813	43,720	40
Buckfield	47,585	39,405	44,089	–7
Canton	31,613	37,240	34,067	8
Livermore	37,431	46,270	57,664	54
Turner	46,531	62,370	69,330	49

* Includes new and existing structures, mobile homes, and single family homes. Prices do not include waterfront sales.
Number of sales reported for Hartford: 1986=12, 1987=10, 1988=10.
SOURCE: Real Estate Transfer Tax Information, Maine State Housing Authority, 1989.

Bearing in mind that the data in Table H–10 are averages (and reflect the influence of all non–waterfront homes sold––whether they are more expensive or less expensive), it is still apparent that the prices of homes in the area escalated greatly in the late 1980s. The average selling price of a home in Hartford, however, was 97 percent higher in 1988 than in 1986, an increase even higher than those reported in all the surrounding towns. The average selling price of a home in Hartford increased during the period to become approximately the same as those in the adjacent Androscoggin County towns of Livermore and Turner, suggesting an increase in real estate market pressures in Hartford similar to the pressures––although perhaps not to the same extent––as in those other towns.

Real Estate Survey

An independent survey of Hartford's real estate market, from 1989 to early 1991, was made for this Plan between 1–15 April 1991, and the results are summarized below. The survey included all sales recorded in the Town Office (Transfer Tax forms) during the analysis period (1989–91), and all properties offered for sale at the time of the survey. (Small strips of land sold between abuttors are excluded from the analysis.)

Year–round. Three sales of lakefront homes were recorded during the analysis period, averaging $100,000. Eighteen other year–round homes were sold, with prices ranging from $8,400 to $100,000, and averaging $53,000. At the time of the survey, one lakefront year–round home was for sale at $131,000, and fourteen other year–round homes* were being offered from $35,000 to $131,000 (with an average asking price of $70,000).

[* Note: In instances where enough frontage existed to create more building lot(s), the value of the potential building lot(s) (figured at $6,000 to $9,000 each––a conservative estimate based on the analysis) was deducted from the price before calculating the average cost of the homes. Likewise, extra acreage above 5 acres was deducted at the rate of $300 to $400 per acre.]

Seasonal. Nine sales of lakefront seasonal camps were recorded during the analysis period, with prices between $14,000 to $85,000, averaging $48,500. One other camp (non–lakefront) sold for $10,000. At the time of the survey, three lakefront seasonal camps were being offered with an average asking price of $70,000, and one non–lakefront camp was being offered for $26,900.

Building Lots. These are lots defined as large enough for home construction, but not large enough for a second home. (Such larger lots are listed below under "Acreage"). Fourteen sales of non–lakefront building lots were recorded during the analysis period, with prices between $2,000 to $27,000, averaging $16,000. Two lakefront lots sold for an average price of $37,500. At the time of the survey, eighteen non–lakefront building lots were being offered from $9,500 to $24,000, with an average asking price of $18,600, and one lakefront building lot was being offered for $44,900.

Acreage. This is defined as land without enough road frontage to be classified as a building lot. [Note: In instances where 250 feet or more of road frontage existed, the value of the potential building lot(s) (figured at $6,000 to $9,000 each––a conservative estimate based on the preceding analysis) was deducted from the price before calculating the average cost per acre.] During the analysis period, ten parcels totalling 600 acres were sold at prices ranging from $200 to $750 per acre, with an average of $350 per acre. At the time of the survey, 1100 acres in 8 parcels were being offered for sale at prices ranging from $275 to $1,510 per acre. The general trend during the period was for prices to be declining so it is expected

that prices are somewhat less in 1991.

AFFORDABILITY OF HOUSING

The market pressures of the 1980s caused housing prices to increase dramatically throughout southern and central Maine. The result of this was that many lower- to moderate-income residents were unable to afford safe and decent housing, and many middle-income residents were unable to afford other available housing, too. Hartford is no exception to the "affordable housing problem". A crucial part of this Plan will be to address this issue in hopes of providing affordable, safe housing for Hartford residents in the future.

The U.S. Department of Housing and Urban Development (HUD) has established guidelines for computing general income guidelines of the local population to determine housing affordability. The income levels which are of primary concern with respect to affordability are **moderate, low-income**, and **very-low-income** which are defined as being 120 percent, 80 percent, and 50 percent of median household income, respectively. For example, in 1979 (the year for which income was reported in the 1980 Census), median household income in Hartford was $13,333. Therefore, a household which earned no more than $10,666 in 1979 would be classified as low-income, and one which earned no more than $6,667 would be classified as a very-low-income household. Table H-13 shows that the median income level for Hartford in 1979 was about $2^1/_2$ percent higher than the median income for Oxford County, about $1^1/_2$ percent lower than the median income for Androscoggin County, and about 1 percent higher than the median income for the State.

Table H - 13
General Income Characteristics
1979

	Hartford	Oxford County	Androscoggin County	State of Maine
Median Household Income	$13,333	$13,029	$13,524	$13,186

Source: 1980 U.S. Census

Although the data are outdated, the 1980 Census was used to estimate the proportions of Hartford households in each of the income levels for which affordable housing is a concern. Table H-14 shows the percentage of households that fell into the moderate, low-income, and very-low-income brackets, according

to 1979 income figures. Approximately 25 percent of the households in Hartford were considered to be earning moderate income in 1980, and 37.5 percent fell into the "affordable housing gap" (low-income and very-low-income categories).

Table H - 14
Moderate, Low-Income, and Very-Low-Income Households
As a Proportion of Total Households
Hartford, 1980

Household Income Level	Upper Income Amount ($)	Percentage of Total
Moderate	16,000	25.0
Low	10,666	8.1
Very Low	6,667	29.4

SOURCE: U.S. Census, 1980.

Comparable income figures for years since the 1980 Census are not yet available for Hartford. However, the Office of Comprehensive Planning (OCP) has developed the following figures for Oxford County (shown in Table H-15): the moderate-income (150% of median), low-income (80% of median), and very-low-income (50% of median) thresholds, and amounts which constitute "affordability" for home purchase, monthly mortgage payment, and monthly rent for each of the three income categories, all for 1990. These affordability figures were developed to adhere to definitions established in the Maine growth management law, using the following HUD formulas (Note: These definitions have limited applicability to Towns such as Hartford where many owners construct their own homes, often without mortgages):

a) An owner-occupied housing unit is "affordable" to a household if the unit's selling price/market value does not exceed that for which reasonably anticipated monthly housing costs (including mortgage principal and interest payments, mortgage insurance, homeowners' insurance, and real estate tax) would equal 28 percent of the household's gross monthly income. Determination of mortgage amounts and payments are to be based on down-payment rates and interest rates prevailing in the housing market.

b) A renter–occupied housing unit is "affordable" to a household if the unit's monthly housing costs (including rent and utilities) do not exceed 30 percent of the household's gross monthly income. Monthly housing costs do not include government subsidies.

Table H – 15
Estimated Affordable Housing Data
Oxford County, 1990

Income Level	Household Income ($)	Affordable Monthly Rent ($)	Monthly House Payment ($)	Affordable Selling Price ($)
Median	28,300			
Moderate	42,450	960	896	89,300
Low	22,640	490	457	45,600
Very Low	14,140	270	252	25,000

SOURCE: Maine Office of Comprehensive Planning, 1990

If Hartford's median household income is assumed to have remained 2 to 3 percent greater than Oxford County's (as it was at the time of the 1980 Census), then the dollar amounts shown in Table H–15, above, can be increased by this percentage to produce an estimate of comparable figures for Hartford in 1990, as shown below in Table H–16.

Table H – 16
Estimated Affordable Housing Data
Hartford, 1990

Income Level	Household Income ($)	Affordable Monthly Rent ($)	Monthly House Payment ($)	Affordable Selling Price ($)
Median	29,010			
Moderate	43,510	984	918	91,530
Low	23,210	502	468	46,740
Very Low	14,490	277	258	25,625

The Institute for Real Estate Research and Education, at the University of Southern Maine, reports that in 1988 two homes were sold in Hartford by realtors using the Multiple Listing Service for an average price of $85,750. In 1989, seven homes were sold in Town for an average price of $79,571. From these figures, then, it would seem that the average selling price of homes in Hartford is far beyond the reach of the very–low–income and low–income households, and even of many moderate–income households in Town.

It should be noted that many residents of Hartford bought their homes years ago when housing prices were relatively less expensive, and some may have inherited their homes. In instances such as these, it is possible that moderate– and lower–income families are living in homes that may be assessed well above the "affordable" sales prices calculated in Table H–16. For people such as these (and others, such as retired people and those on fixed incomes), increasing property taxes could, in time, raise the cost of owning their homes. It should also be noted that very few, if any, speculative houses have been built in Hartford.

Increasing home prices would be of less concern if there were corresponding increases in wealth or income of local residents. Unfortunately, this is not necessarily the case in Hartford, or in this part of Maine. While average real wages (controlled for inflation) remained virtually the same during the 1980s, housing prices––whether actual or real––have increased significantly.

In the spring of 1991, no housing units (homes, mobile homes, apartments) in Hartford were receiving any form of federal/state housing subsidies.

Several factors in Hartford favor the creation of affordable housing in Town. First, the Residential Growth Ordinance provides an exemption from growth limits for public housing intended for "elderly, handicapped and economically disadvantage persons", and gives preference in the allocation of permits to houses built to sell for less than $45,000 (not counting the price of the lot). In addition, although the Maine Department of Transportation recommends that towns require new roads to be paved, Hartford's Construction Standards Ordinance for new roads does not require paving, because that would increase land valuations and raise the cost of housing through higher taxes on dwellings. And finally, the results of the Real Estate Survey in the previous section indicate that the market price of buildable land, and, in fact, of many homes, in Town is certainly within "affordable" limits.

FUTURE HOUSING NEEDS

In a previous chapter of this Plan, it was projected that Hartford's population would increase to approximately 910 persons by 2005, an increase of 190 people over the 1990 population (according to the U.S. Census). It is also assumed by this Plan that in 2005 the average household size in Town will be 2.51 persons. Therefore, Hartford can expect to see an additional **100** to **105** new, year-round housing units created in Town in the next 10 to 15 years to accommodate the anticipated population growth.

CHAPTER FOUR

ECONOMY

HISTORY

The railroad first came to Center Hartford in November, 1867. It was the Portland and Oxford Central Railroad. Later it was the Buckfield Branch. The first station was located in back of Irish's Place. Here also was a gallows turn table, and a carriage shed, which was used to store passenger cars. In 1868 the Hartford Center Railroad Depot was built, but was dismantled by the end of the 1950s. The railroad was discontinued in 1952–53 and the rails removed. The East Sumner Depot was actually located in Hartford on the east side of the East Branch of the Nezinscot River. It was built in 1878. In 1914 there were six passenger trains a day--three up and three down.

The earliest mill within the bounds of Hartford was erected at the Center Village just above the railroad bridge where a part of the old dam was located. A second mill was built by Winslow Hall below the railroad station. This was a saw and grist mill, and the village which sprung up became known as "Hall's Mills" until about 1838, when it was changed to Hartford Center. Later the mill ran down and Robinson & Corliss purchased the site, erected a new mill for manufacturing excelsior (which was shipped to Mechanic Falls) in 1865, for the first manufacture of paper. James Irish bought out Mr. Corliss and operated the mills with Mr. Robinson until the railroad was extended to Hartford from Buckfield in 1869 and this mill privilege bought for the site to bridge Bunganuck Stream. A clover mill is mentioned and steam mills operated the saw mills.

The early industries in Town were farming and orchards. Among the proprietors of the plantation was one whose name became a household word throughout New England. It was Colonel Loammi Baldwin, the originator of the famous apple which bears his name. Hartford had many large apple orchards. The most famous one was "Orchard Heights". Hundreds of barrels of apples were shipped to European markets from the railroad siding at Hartford Center.

It was noted that Dr. Maxim cultivated a garden of trees loaded with choice apples. Fifty trees grafted or budded began to bear a large white fall apple, which he named "Fremont".

The brick yard was apparently in operation from 1880 until 1895, maybe longer. Plates and pots were made and glazed, as well as bricks. The mortar was mixed in a box by a rotating board which was propelled by a horse travelling in a circle. The brick yard was located just north of the present Town Hall in Hartford Center. On the opposite side of the road from the brickyard was a grand sand resource for making bricks.

The J & O Irish Store was built in 1867. Owned by the Honorable James Irish and brother, Orlando Irish, grandsons of Edmund Irish, Sr., who was one of the first settlers of Hartford. A Post Office was later built in the General Store building. This building is now the Hartford Heritage Museum, donated by James Irish during the Bicentennial to the Hartford Heritage Society. The original store and post office have been kept intact as a museum, with antiques on display donated by local families and has been open to the public during Hartford Heritage Day in June, annually.

The Minot Packing Company, in the southeastern part of the Town, was built by Gerry & Thurston about 1892. Each season, a large business was done canning sweet corn raised by the farmers of the surrounding section.

The business done by the Hartford Cold Spring Company (renamed the Hartford Mineral Company), has been one of considerable importance. This spring is located on the Bicknell Farm. Shipments were first made of the clear spring water, in 1881. Bottles were embossed with "Mount Hartford".

EMPLOYMENT CHARACTERISTICS

Regional Perspective

Hartford is located in the Rumford Labor Market Area (LMA). An LMA consists of a central community, or communities, and the surrounding territory within commuting distance. It is an economically integrated geographical unit within which workers may readily change jobs without change of residence. The Rumford LMA includes not only Hartford, but also Andover, Bethel, Byron, Canton, Dixfield, Gilead, Hanover, Mexico, Newry, Peru, Roxbury, Rumford, Upton, and numerous unorganized townships. Table E–1 summarizes non–farm wage and salary employment in the Rumford LMA in 1986, 1987, 1988, and 1989.

According to this table, slightly less than one–third of the jobs in the area are manufacturing, and more than two–thirds are non–manufacturing. The manufacturing sector had negligible gains for the period. Durable goods employment suffered the most: in particular, the lumber industry lost more than a quarter of its jobs.

All the categories in the non–manufacturing sector either maintained their levels of employment during the period, or had good to excellent gains. These categories include such diverse economic activities as retail sales, finance, insurance and real estate, health care, tourism, and other commercial and service sector businesses. The greatest gains occurred in the construction trades, which benefitted immensely from the real estate and building boom of the late 1980s. As seen in Table E–1, the rate of growth in non–manufacturing jobs overall, from 1986 through 1989, was 20.4 percent, or an annual average of about 5 percent. The non–manufacturing sector certainly had the greatest increase in the number of jobs.

Table E - 1
Non-Farm Wage and Salary Employment
Rumford LMA, 1986-1989

Employment Category	1986	1987	1988	1989	Percent Change 1986-89
TOTAL	**7,080**	**7,500**	**7,550**	**8,100**	**14.4**
Total Manufacturing	**2,280**	**2,430**	**2,330**	**2,300**	**0.8**
Durable	920	910	770	690	-25.0
Lumber	910	890	750	670	-26.4
Logging	170	160	140	140	-17.6
Sawmills	210	230	230	230	9.5
Misc. Wood Products	420	390	250	160	-61.9
Other Durable	10	20	20	20	100.0
Nondurable	1,350	1,500	1,560	1,630	20.7
Total Non-manufacturing	**4,810**	**5,070**	**5,220**	**5,790**	**20.4**
Construction	230	330	490	680	195.7
General Building	110	160	290	380	245.5
Special Trades	110	160	190	160	45.5
Transportation & Utilities	300	290	300	300	0.0
Wholesale Trade	80	90	120	110	37.5
Retail Trade	1,090	1,150	1,210	1,300	19.3
Finance, Ins. & Real Estate	180	180	190	180	0.0
Services & Mining	1,640	1,760	1,600	1,850	12.8
Hotel & Lodging	170	180	210	240	41.2
Health Services	620	590	610	620	0.0
Government	1,290	1,270	1,320	1,370	6.2

SOURCE: Maine Department of Labor, ES-202

Historic Work Force and Occupations

As discussed in Chapter Two, the 1980 Census reported 194 Hartford residents as employed. Manufacturing appears to be the base of employment for Hartford: in 1980, 40 percent of Hartford's workers were employed in manufacturing jobs, compared to 40 percent in Oxford County, 34 percent in Androscoggin County, and 27 percent in the State. As seen in the previous table, however, more current statistics for the LMA suggest that other sectors, especially retail and services, are supplying more jobs than before. Table E–2 shows 1980 employment by industry for the Town, Oxford County, Androscoggin County, and the State of Maine.

TABLE E – 2
Employment by Industry, 1980
(persons 16 years or older)

	HARTFORD		Oxford County		Androscoggin County		State of Maine	
	#	%	#	%	#	%	#	%
Agriculture, Forestry, Fishing, Mining	16	8	709	4	1,157	3	15,521	3
Construction	15	8	1,521	8	2,357	5	25,926	6
Manufacturing: Durable Goods	24	12	4,060	20	3,670	8	52,253	11
Non–Durable Goods	55	28	4,141	20	11,439	26	73,105	16
Transportation	8	4	502	2	903	2	16,695	4
Communications, Public Utilities	0	0	297	1	856	2	10,149	2
Wholesale Trade	8	4	348	2	2,009	5	16,665	4
Retail Trade	8	4	2,708	13	6,874	16	73,645	16
Finance, Insurance, Real Estate	5	3	520	3	1,662	4	20,247	4
Business and Repair Services	7	4	450	2	927	2	12,237	3
Personal Entertainment, Recreation	2	1	738	4	1,291	3	13,827	3
Professional: Health Services	17	9	1,414	7	4,144	9	39,346	9
Educational Services	17	9	1,842	9	3,381	8	44,181	10
Other Professional	4	2	479	2	1,366	3	17,027	4
Public Administration	8	4	527	3	1,682	4	24,875	5
TOTALS	194		20,256		43,718		455,699	

SOURCE: 1980 Census

Most of the categories in Table E–2, above, show only minor variations between Town and County and State employment levels, but there are some categories which are notable exceptions. First, about twice the proportion of Hartford's residents (8%) were employed in "Agriculture, Forestry, Fishing, and Mining" jobs as were the residents in the two counties or the State (3–4% each). Further, the Town had approximately the same percentage of people employed in "Durable

Goods Manufacturing" (12%) as the State (11%), but much less than Oxford County (20%), and much more than Androscoggin County (8%); a significantly greater proportion of persons were employed in "Non-Durable Goods Manufacturing" (28%) than in Oxford County (20%), and the State (16%), but about the same as in Androscoggin County (26%). Finally, a much smaller percentage of people were employed in "Retail Trade" jobs (4%) than in Oxford County (13%) and Androscoggin County and the State (16% each).

As indicated earlier in Table E-1, the loss of lumbering and other durable goods production jobs which occurred in the LMA in the late 1980s must certainly have affected Hartford residents. However, the large proportion of Town residents employed in non-durable goods production jobs were probably helped by recent trends. Since unemployment in Town (discussed in a later section of this Chapter) was low during this period, it is assumed that residents were able to adjust to changing employment conditions and found suitable jobs.

Commuting Patterns

Of 194 workers 16 years or older living in Hartford in 1980, only 6 (3%) reported they also worked in Hartford, while 163 (84%) worked outside Hartford, and 25 (13%) did not report. Of the 163, Hartford residents who travelled out of Town to work, 79 (41%) went to other towns in Oxford County, 51 (26%) went to Androscoggin County, and 33 (17%) went to Jay in Franklin County.

There were a total of 24 persons reported to be working in Hartford in 1980. The six Hartford residents mentioned above comprised 25 percent of these, and the remaining 75 percent were from outside of Town.

Since there are few employment opportunities in Hartford, it is assumed that in 1991 more than 84 percent of residents (the proportion in 1980) travel outside Town for employment.

Unemployment

Table E–3 lists rates of unemployment, computed by the Maine Department of Labor, for Hartford, the Rumford Labor Market Area (LMA) (which includes Hartford), various other LMAs in western Maine, Oxford, Androscoggin, and Franklin Counties, and the State of Maine, from 1981 through 1989.

TABLE E – 3
Unemployment Statistics
Hartford and Selected Areas, 1981–1989

	1981	1982	1983	1984	1985	1986	1987	1988	1989
HARTFORD	5.4	5.2	4.1	2.9	1.7	1.2	1.6	1.1	1.1
Rumford Labor Market Area	8.4	9.8	10.1	8.0	8.3	8.3	6.3	6.6	6.6
Livermore Falls Labor Market Area	10.2	11.7	12.4	10.6	7.9	7.6	6.5	5.5	5.4
Norway–Paris Labor Market Area	8.2	10.1	11.1	8.5	6.5	6.8	4.9	3.9	5.8
Lewiston–Auburn Labor Market Area	7.8	9.7	9.8	7.3	7.0	6.9	5.5	4.3	5.2
Sebago Lakes Reg'n Labor Market Area	7.2	8.1	8.1	4.9	4.1	3.6	---	2.6	3.5
Farmington Labor Market Area	7.3	8.2	9.0	8.0	8.9	7.6	5.7	4.5	4.9
Portland Labor Market Area	5.7	6.3	6.5	4.0	3.1	2.6	---	1.9	2.4
Oxford County	8.1	9.9	10.1	7.9	6.9	6.7	5.1	4.6	5.6
Androscoggin County	8.1	10.1	10.2	7.4	7.0	6.9	5.4	4.3	5.1
Franklin County	7.3	8.1	9.0	8.0	8.9	7.6	5.8	4.5	4.9
State of Maine	7.2	8.6	9.0	6.1	5.4	5.3	4.4	3.8	4.1

Source: Maine Department of Labor, Bureau of Employment Security

Although unemployment rates fluctuate from year to year, and in fact from season to season, the information suggests that unemployment rates in Hartford generally have been much lower than the rates for the Rumford LMA as a whole, as well as other areas in Maine.

Employment Base

The following table lists the known local businesses and/or self-employed contractors in Hartford in 1991.

Table E - 4
Businesses and Contractors
Hartford, 1991

Business/Contractor	Type of Business	Location
D & B Antiques (Betty and Donald Hutchins)	Antiques	Rt. 140, Hartford Center
Ralph Walton Auto Body and Repair	Auto Body & Repair	Route 219
Bim's Repair Shop (Alan McNeil)	Auto Repair & Service	Corner, Rts. 140 & 219
Robert Russell Auto Service	Auto Service	Rt. 140, near East Sumner
Green Acres Camps (Ann and Lloyd Poland)	Cabins, Dining, & Golf Course	Green Acres Rd.
Camp Wekeela (Lauren and Eric Scoblionko)	Girls & Boys Summer Camp	Route 219/Bear Pond
Richard Salisbury	Building Contractor	Stetson Road
Michael Darling	Building Contractor	Town Farm Road
Emmons Associates (Jerrold Emmons)	Professional Engineers	
David Gammon	Livestock Dealer	Rt. 140, near East Sumner
Alan McNeil Allen Marston Philip Adams Robert Russell, Jr.	Loggers	
Maine Mold & Machine (David Bullecks)	Machinist	Town Farm Road
Hutchins Excavating (Donald Hutchins, Jr.)	Excavation	Tucker Road
Fox Hollow Associates (Kathleen Tucker)	Consulting & Marketing	Tucker Road
Melissa Leavitt	Blacksmith	Church Street
Maine Specialty Wholesale (Armand Rowe)	Novelty Catalog Order	Bear Mountain Rd.
Greenleaf Books (Arthur Harvey)	Mail Order Retail Sales	Rt. 140, Hartford Center
Crestview Orchards (Anthony Leavitt)	Apples	Church Street

Source: Hartford Comprehensive Planning Committee, 1991

The several businesses in Hartford range from individuals working part-time from their home, to farms and orchards, to logging contractors, to service-related businesses. The exact number of persons employed in Hartford is not known, but is estimated to be ** year-round, and 100 seasonal (Camp Wekeela). The number of jobs by employment sector is not available from the Department of Labor at the town level, but as Table E-1 showed earlier, the trend appears to be that non-manufacturing jobs are on the increase in the Rumford LMA. However, included in this increase are construction jobs-- reflecting the increased pace of residential and industrial/commercial building activity in the mid- to late-1980s-- and indications in 1991 are that this latter activity has slowed considerably.

Conclusion

Hartford has a very small employment base, although a growing number of persons earn at least part of their income working in Town. Most residents, however, must travel to other areas for employment. A large proportion of residents are employed in jobs affected by cyclical trends.

ECONOMIC BASE

Retail Sales

The Maine Department of Economic and Community Development has no record of taxable consumer sales for Hartford. However, records for Turner indicate less than $8,000,000 in total consumer sales in 1989, and $9,200,000 in total retail sales that same year. For Canton, records indicate less than $1,000,000 in either category in 1989. (Total consumer sales include total taxable retail sales to consumers. Total retail sales include consumer retail sales plus special types of sales and rentals to businesses where the tax is paid directly by the buyer, such as commercial or industrial heating oil purchases.)

SUMMARY

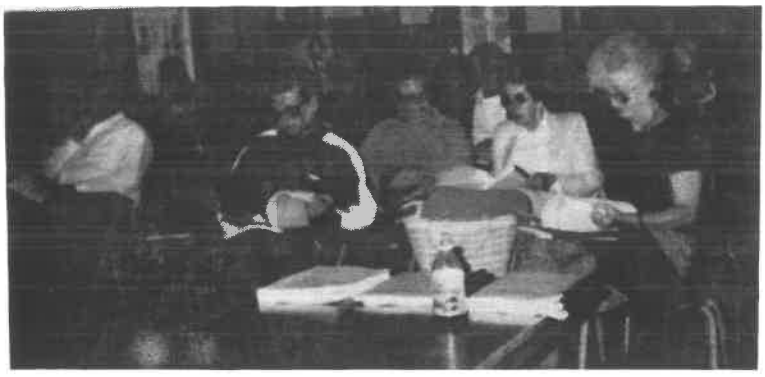
As indicated earlier (Chapter Two), on average Hartford residents typically earn about the same as, or more than, other residents in Oxford County, Androscoggin County, and the State. However, the percentages of Hartford residents and families living below the poverty level is probably much greater than in the Counties or the State. Unemployment levels are generally low.

The Town has a very limited job base, despite a number of small, home-based businesses. The general area has had limited success as a retail center. For Hartford, the potential for commercial growth is limited for the foreseeable future.

Co-chair Tony Leavitt, Elizabeth Gravalos and June Davis outline goals.

Tom Adams, AVCOG Planner Steve DeGoosh and Arthur Harvey discuss policies.

Public hearing on the draft plan.



CHAPTER FIVE

TRANSPORTATION FACILITIES

INTRODUCTION

The pattern of transportation routes in Hartford today are in large part a result of the influences of growth and development in the Town's history. At the same time, that same pattern today will help shape how and where growth and development are likely to occur in the future.

This chapter examines Hartford's roadway and transportation systems; current uses and conditions are assessed, and future demands are estimated.

ROADS

For most towns in the state, the second highest expense of municipal taxes is for roads and their maintenance. According to the Maine Department of Transportation (MDOT) there are 49.51 miles of roads in Hartford. Of this total, 13.56 miles are state roads with Route 219 (4.8 miles) running east–west and Route 140 (8.76 miles) running north–south.

An assessment of the condition of Hartford's roads was conducted by the Town as part of development of this comprehensive plan. Each road within Town was driven and rated using forms designed to utilize the Road Surface Management System (RSMS) computer program. Listed below is a summary of the program results:

Repair Category	Paved Roads		Unpaved Roads	
	Distance (miles)	% of Total	Distance (miles)	% of Total
Reconstruction	8.20	28.9	.65	4.0
Rehabilitation	1.70	6.0		
Regrade Road			7.07	43.0
Preventative	6.21	21.9		
Routine Maintenance	0.00	0.0	8.73	53.0
None Required	12.28	43.3	0.00	0.0
Total	28.38	100	16.45	100

Source: Androscoggin Valley Council of Governments

The results of the RSMS Program indicate that overall Hartford's roads can be considered to be in generally good condition. Specifically, for paved roads, forty percent require no miantenace, an additional twenty percent require routine maintence, thirty percent reqiure reconstruction and the remaining ten percent require rehabilitation. For the unpaved roads located within Hartford, over fifty percent reqiure routine maintence, over forty percent rquire regrading and less than 5 percent require reconstuction. Probably the most alarming figure from the above results is that almost one third of Hartford's paved roads need to be reconstructed.

Highway Costs. The following table lists the expenditures on winter and summer roads for the Town for the past several years.

Table T – 1
Expenditures, Winter Roads and Summer Roads
Hartford, 1985–1990

Year	Expenditures ($)		
	Winter Roads	Summer Roads	Yearly Totals
1990 *	112,000.00	90,000.00	202,000.00
1989	82,654.92	80,001.98	162,656.90
1988	71,517.61	91,187.14	162,704.75
1987	67,742.90	58,190.51	125,933.41
1986	62,637.98	55,319.86	117,957.84
1985	49,020.40	49,368:53	98,388.93

* Warrant amounts: Jan 1, 1990 to June 30, 1991
Source: Hartford Town Reports

(Note: Hartford changed its fiscal year in July, 1990, from one coinciding with the calendar year to one going from July 1 to June 30. Therefore, the 1990 period in Table 5–1 includes an extra $30,000 for winter roads for the extended 6–month period. For purposes of comparison, the discussion which follows is based on an amount arrived at by subtracting $30,000 from both the winter roads amount and the total amount for the period Jan, 1990, to June, 1991.)

As Table 5–1 shows, total warrant expenditures for 1990 (adjusted) were 75 percent greater than in 1985. The table also shows that winter maintenance, plowing, salting, and sanding accounted for a 67 percent increase over the period (adjusted), and that summer maintenance accounted for a 82 percent increase (with no adjustment). Between 20 to 25 percent of the change for summer roads might be attributed to increased costs for road maintenance (i.e., inflation).

Winter road maintenance does not add to improvement of roads, but only provides for safe travel. The increase in the winter maintenance budget has been fairly gradual, but constant, over the years (with noticeable jumps in 1986 and 1989). Therefore, it appears that the increase is largely due to increased demand from residents for improved plowing and ice control. A small percentage may be due to severe winters requiring excessive ice control in certain years, and, as in the case of summer roads, 20 to 25 percent may be due to inflationary costs.

The Town also has other concerns related to roads. Hartford has more than 300 culverts to maintain, and brush clearing is a significant problem from year to year. Further, funding from the State for local roads is expected to suffer significant cuts during the next few years. With the increases in summer road budgets, it would appear that Hartford may have some difficulty maintaining the status quo of their roads, given the level of funding and the miles of roads involved. However, one significant advantage is that the roads with the most use have generally adequate road base in place. Therefore, deterioration of these roads occurs at a somewhat slower pace than some of the other roads.

Hartford does not have a formal, long–term road improvement plan which addresses all aspects of road and bridge construction, improvements, and maintenance, as well as culvert and ditch work, and brush clearing. Any future road improvement plan should be coordinated with the findings of this Plan, and specifically with the growth and rural designations of the Future Land Use Plan.

State Highways. There are two State routes which run through Hartford: 219 and 140. Each of these routes is classified as a Group I roadway––that is, a roadway which carries commuter traffic and exhibits little seasonal change in traffic volume.

Route 219 connects Hartford to Sumner to the west, and Turner to the east, passing just south of Hartford Center. The Maine Department of Transportation (MDOT) has generated traffic volume data for Route 219. An MDOT volume count on Route 219 just east of the intersection with Route 140 estimates 385 daily trips (on an annual average) in 1980 and 590 daily trips in 1988––an increase of approximately 53 percent. An MDOT volume count on 219 at the Turner town line indicated an average 600 daily trips there in 1980. Finally, an MDOT volume count on Route 219/140 at the Sumner town line indicated an average 930 daily trips in 1980 and 1130 daily trips in 1988––an increase of approximately 22

percent. Route 219, from the perspectives of safety and congestion, is acceptable by state engineering standards at this time. However, Comprehensive Plan Committee members note two intersections along Roue 219 which are recognized to be unsafe due to visibility. The intersections include Route 219 and Pratt Hill Road and Route 219 and Church Street. The road capacity of Route 219 is generally adequate to handle the existing and projected volumes. The Town is responsible for all plowing and maintenance of Route 219.

Route 140 connects Hartford with Buckfield to the south and Canton to the north. An MDOT volume count on Route 140 just north of the intersection with Route 219 estimates 400 daily trips in 1980 and 760 daily trips in 1988--an increase of approximately 90 percent. In the same vicinity, but just south of the intersection with Route 140, MDOT estimates 700 daily trips in 1980 and 1100 daily trips in 1988--an increase of approximately 57 percent. Two other volume counts were estimated along Route 140 in 1980: 600 daily trips at a point just above the Buckfield town line, and 420 daily trips at a point just south of the intersection with Stetson Road at Tyler Corner. The Comprehensive Plan Committee has identified two intersections along Route 140 which are recognized to be unsafe due to visibility. The intersections include Route 140 and Tucker Road and Route 140 and Green Acres Road. The road capacity of Route 140 is generally adequate to handle the existing and projected volumes. The Town is responsible for plowing and maintenance of Route 140.

SIDEWALKS and PARKING

Hartford has no sidewalks at this time.

The only municipal parking is located at the Town Hall and Town Office in Hartford Center. Parking capacity there is barely adequate for most functions: cars are often parked along the roadway during suppers, hearings, dances, receptions, and especially for Town Meetings.

PUBLIC TRANSPORTATION

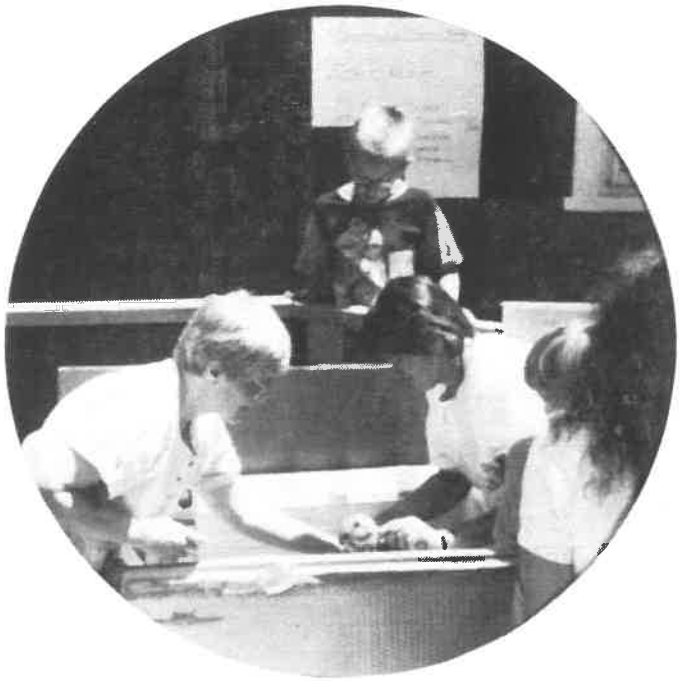
As of the spring of 1991, Hartford is not served by public transportation.

RAIL SERVICE

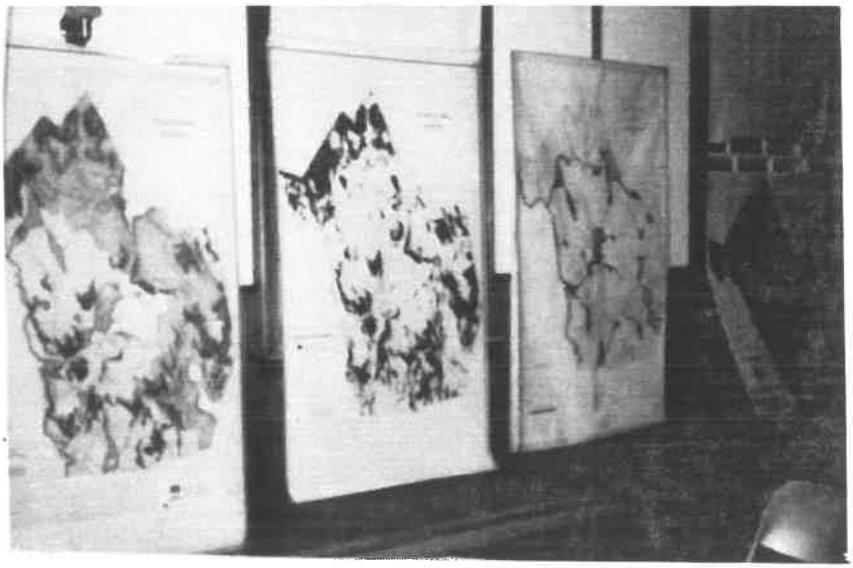
There is no rail service in Hartford, although there is an abandoned railroad bed which goes through Town.

ROAD NAME SIGNS

During the development of this Plan, several comments have been made about the inadequacy, or absence, of signs indicating the names of roads in Town. This problem is critically important, for example, for giving directions to out–of–town fire and rescue units trying to find their way in Hartford.



Kathy Tucker and Brigitte Marston have the scoop on public participation.



Ground water aquifers, steep slopes and shoreland areas are mapped.

CHAPTER SIX

PUBLIC FACILITIES AND SERVICES

INTRODUCTION

This chapter identifies Hartford's public facility and service systems, and profiles their extent, capacity, and use. The adequacy of those systems are assessed in terms of their current condition and use demands, and whether they are expected to meet the demands of projected population growth, or whether improvements will be needed. Providing adequate municipal services can be an expensive venture, but through careful planning it can be done without overburdening the Town's fiscal capacity.

MUNICIPAL LAND/FACILITIES

The Town of Hartford owns land and facilities which serve the of Town residents. Specifically, the Town owns three parcels of land: a small (0.1 acre) shorefront lot on Little Bear Pond valued at $10,000, a 2-acre parcel (which is the site of the Town Hall, Office, and garage) in Hartford Center valued at $150,000, and a 68-acre site (three-quarters of a mile north of Swan Pond) which is the location of the Town's 10-acre landfill and is valued at $35,000.

The following is a description of municipal facilities in Hartford:

> Pine Grove Beach is a 6.83-acre swimming area on Canton Lake. It is supposed to be deeded to the Town according to a settlement agreement with the Patten Corporation, although this has not occurred as of mid-1991. It has approximately 900 feet of sandy beach, but no changing facility. There is a Beach Recreation Committee, but no budget has been established for the management of the beach, nor for related programs.
> Hartford Town Hall, on Route 140 in Hartford Center, serves as the cultural center for the community, being used for municipal-related meetings and public suppers put on by various groups. The building, a wood frame shingled structure, was built in 1924 and is in good condition. It can seat as many as 200 people, and has complete kitchen and toilet facilities. Parking at the Town Hall is generally adequate for most gatherings, but does not properly accommodate Town Meeting attendance. The floor in the Hall is tentatively scheduled to be refinished in the next year or two, and a 'medium' priority is identified by the Selectmen for replacing the 35-year-old oil furnace, at a cost of $4-6,000.

The Hartford Town Office, located next to the Town Hall on Route 140 in Hartford Center, is where the municipality's administrative functions are performed. The building, a concrete block structure, was constructed in 1983. It's dimensions are 20' by 30', and it is in good condition. It provides office and meeting space for the Selectmen and the Town Clerk, and storage space for Town records. Capacity is about 12 people. Currently, there are plans to construct a wall between the bathroom and storage area within the next year or two for about $50. Also, a 'high' priority has been identified by the Selectmen for purchasing a computer for tax assessing and billing, and other Town business, at an expected cost of $8–10,000 (NOTE: A computer was purchased during development of this comprehensive plan).

The Town has a Garage for the storage of Town equipment near the Town Hall and Town Office on Route 140 in Hartford Center. The building, a wood frame shingled structure, was built in 1928, is 30' by 40', can house four large pieces of equipment, and is in fair condition. The garage has two bays, but they are generally not large enough to permit convenient work on road equipment. There are currently no plans to improve this facility.

PUBLIC WORKS

The Town contracts with a private contractor for road maintenance and winter plowing. The function of Road Commissioner, including oversight of the contractor's performance for maintenance and plowing, is performed by the Road and Budget Committee.

The following table lists the Road Department's equipment, as of mid–1991.

Table 6 – 1
Road Department Equipment/Condition
Hartford, 1991

Equipment	Year	Make	Condition
Grader	1978	Galion F500	Good

Source: Road & Budget Committee

WATER SUPPLY

There are no areas of Hartford being served by public water supplies--all homes get their water from ground or surface water sources. Areas of ground water supply are, in general, adequately protected, but these measures should be strengthened and expanded to those areas offering future potential water sources. There are three dry hydrants in Town, so providing adequate fire protection to most areas of Town must rely on tank trucks and pumpers.

SEWERAGE

The homes and businesses in Town use subsurface sewage disposal (septic) systems. Many of the systems are old but there are no reports of significant problems. Septage pumped from subsurface disposal systems is disposed by several private pumpers which serve the area. Septage disposal is available for private pumper contractors at the Lewiston–Auburn Water Pollution Control Facility.

STORMWATER MANAGEMENT

Hartford has no stormwater system. Instead, stormwater is carried by a series of roadside ditches and culverts which generally enter the nearest natural surface drainage feature. Ditches are maintained on a regular, but infrequent, basis by the state Department of Transportation for state roads and the Town's contractor for local roads. Particularly in the hillier sections of Town--the glacial till areas--ditches are generally not maintained to prevent erosion and sedimentation. Therefore, they may contribute significant sediment loads to nearby surface water bodies. However, no documentation of problems exists.

SOLID WASTE

The Town of Hartford currently disposes of its solid waste at an old open dump near Route 140 and the Nezinscot River in East Sumner. Under pressure from DEP in the early 1980s, Sumner abandoned the shared use of the site and entered into an agreement with Buckfield to develop and operate a transfer station. Hartford proceeded to purchase a piece of land within Hartford and attempted to permit a new landfill.

Once the land was purchased in 1984; hydrogeological and engineering studies were conducted and a permit application was made to DEP. Concurrently, the Town developed a road into the site. As of March 1991, the permit process has not been completed. DEP has requested additional information on the hydrogeology of the site several times and does not appear to be satisfied that the information received to date is adequate.

Hartford is faced with a serious need to address solid waste disposal. DEP targeted the existing site for closure several years ago. State law also requires older sites similar to the existing one to be relicensed by January, 1992. Due to the soils and proximity to the Nezinscot River, relicensing of the existing site on Route 140 is impossible. Further, the site is also filling up and, therefore, will have to be closed due to a lack of space. If a license for the proposed landfill in Hartford is not forthcoming, Hartford will be faced with finding an alternative solution.

Table 6 – 2
Total Residential Wastes Generated, Hartford 1990

Waste Name	Tons
Newspapers	23
Office Paper	2
Corrugated Cardboard	14
Glass Containers	3
Ferrous Containers (tin cans)	7
Major Appliances (white goods)	16
Plastic Containers (HDPE)	5
Nonpackaging Plastic (mixed)	9
Leaves	7
Yardwaste (grass and brush)	9
Woodwaste (demolition debris)	16
Tires	2
Miscellaneous	187
TOTALS	**300**

Estimates based on data compiled by AVCOG and the Maine Waste Management Agency

Therefore, Hartford generates approximately 250 tons of solid waste each year. Further, the waste contains recyclable components as listed in Table 6-2.

Alternatives to the development of the local landfill would entail sending waste to a regional or commercial disposal facility. These consist of either incinerators (energy recovery facilities) or landfills. Some facilities accept waste on a contractual basis while some public facilities require membership in a non-profit corporation which owns and operates the facility. Below is a list of alternative disposal facilities with the ownership and location.

* PERC (Penobscot Energy Recovery Corp.), Private, Orrington, Maine - requires contract
* MERC (Maine Energy Recovery Corp.), Private, Biddeford, Maine - requires contract
* RWS (Regional Waste Systems), Public, Portland - requires associate membership
* MMWAC/Mid-Maine Waste Action Corp, Public Corp., Auburn
* Turn-key Landfill, Private, Rochester, N.H. - may have contract or spot market
* Sanco Landfill, Private, Bethlehem, N.H. - may have contract or spot market
* CWT Transfer Station, Private, (Transfers to final disposal site) - Norridgewock, Maine - generally requires contract

The costs (tipping fees, 1991) at these sites are mostly in the $45 per ton range. MMWAC is higher at roughly $80 per ton and CWT charges approximately $55/ton to $65/ton at Norridgewock. Costs are expected to rise into the $80/ton range for all as new ash landfill capacity is brought on line.

Another alternative would be to use a nearby municipal transfer station; these facilities do not actually dispose of waste but rather provide bulk transportation to one of the above disposal sites. Four large stations exist in the area. The stations are listed below:

Norway-Paris Solid Waste (public)	- Norway
Northern Oxford Solid Waste Board (public)	- Mexico
Jay Transfer Station (municipal)	- Jay
BAR Corp (private)	- Oxford

The Northern Oxford Solid Waste Board requests municipalities to join the Corporation to participate in its service. Both the Norway-Paris corporation and the Town of Jay will contract with municipalities. The cost for Jay and Norway-Paris including the disposal (tipping fee) is approximately $65 per ton. Costs at Northern Oxford should be slightly lower. The BAR Corp contracts with various municipalities to dispose of waste; their cost is approximately $75/ton.

If a regional site or one of these transfer stations is used, then waste must be transported to it. The Town would either have to collect waste at curbside, as many smaller communities do, or develop a transfer station. An alternative to go to MMWAC would be to share the Buckfield/Sumner transfer station.

A transfer station could be developed at the proposed new landfill site. While most transfer stations use electrical power, some stations, especially ones serving municipalities the size of Hartford, can operate without electrical power. Extending electricity to the site would be expensive; therefore, the most viable alternatives will not include electrical hook-up.

Two alternatives not requiring power include a green box transfer station and a rear-loader truck. A green box station consists of a number of 6 to 10 cubic yard green boxes (similar to those used by small businesses) located on a gravel pad. Users simply place their waste in the boxes which are then emptied by a rear-loading rubbish truck (similar to those which collect waste at curbside). In such case, the waste collection from the green boxes is generally contracted to the private sector. Another alternative would be to place a rear loading rubbish truck either at a "transfer station" site such as the proposed landfill site or at the town office or school. The truck would be placed there once or twice per week depending on the town's needs. Residents would bring their waste to the site. However, if the truck were to be rented for this purpose, two days per week, the costs could approach those for curbside collection since the truck would be dedicated to Hartford's needs about the same length of time it would take to serve a collection route.

The Town Hartford will need to provide for white goods storage, tire storage, and demolition debris disposal. This could be done by contract with the private sector, by joining a regional site, or by developing a local site. While periodic collection of these materials is possible, storage areas at the transfer station are probably most viable.

A transfer station can be developed under DEP's Permit-by-Rule requirements which simplify the process greatly from a full application. The transfer station may include white goods and tire storage areas and a demolition debris storage/transfer area. However, if demolition debris were to be disposed on-site, a full DEP application would be necessary. The existing information on the hydrogeology of the proposed landfill site may be adequate to obtain DEP approval for a demolition disposal site, especially if the site were to be regional in nature. However, the size of the disposal area would be limited to five acres due to the DEP regulations (demolition disposal facilities over that size have to meet all the requirements of a regular landfill), and, therefore, only a limited member of regional towns would be allowed to use it. The users would help pay for the permitting and development costs and could be asked to provide additional funds for the convenience of using the site. Such additional funds could be used to off-set the costs of Hartford's transfer operation.

PUBLIC SAFETY

Fire protection.

Before 1991, there had been no fire department in Hartford. Instead, the Town had been serviced by the volunteer fire departments of adjacent towns. In the spring of 1991, Hartford appointed its first Fire Chief whose goals will be:

> to encourage townspeople to volunteer their services to the new department, to provide basic equipment (water tanks, hand tools, etc.) to the Town for controlled burns, to save the Town money by responding to small brush fires or small chimney fires, and to improve the relations with the departments of surrounding towns as well as give them occasional assistance.

Canton is Hartford's primary fire department, although additional coverage is provided by Buckfield, and occasionally by Turner. Calls to Canton are received through 10 fire phones (**597-2222**), and Canton's Fire Chief reported that his department answered 13 calls in Hartford in 1990. In 1989 the Canton Fire Department purchased an 1800 gallon tanker, in part to handle calls to Hartford. The Canton F.D. indicates it has a good working relationship with Turner and Buckfield. In 1990, Hartford paid $4,000 to the Canton Fire Department for its services.

The Buckfield Fire Department generally responds to two or three calls in Hartford each year. Calls to Buckfield are handled by the 911 system, and 14 members of the fire department carry pagers. Buckfield has two pumpers which cover the Hartford area with approximately a 15 minute response time to Hartford Center. One of these has a 750 gallon tank, carries 1,800 feet of $2^1/_2$ inch line, and can pump 1,000 gallons per minute. Buckfield's Chief Wes Ackley feels that the coverage of Hartford by Buckfield and Canton is mutually beneficial for all the towns. The arrangement costs Hartford $1,500 a year. The Chief also notes that Hartford has good coverage because of its location between Canton, Turner, and Buckfield, and that Buckfield and Canton have an excellent working relationship.

The Turner Fire Department responded to five calls in Hartford in 1990. Calls to Turner are handled by the 911 system in Turner Village and South Turner, but by telephone number **224-7711** in the North Turner area. Again, the confusion about where Hartford residents should call is a problem. Hartford pays $1,500 annually to the Turner Fire Department for its services.

Work needs to be done to inform Hartford residents as to where to call in case of emergencies. Also, fire departments and rescue units from adjacent towns are not well-informed about the location of Hartford's roads, houses, and residents. Both situations should improve with the development of the **"911 System"** town-wide,

when computerized directions will be available to every home, coded by the particular home's telephone number. The fire chiefs of the three surrounding towns encourage Hartford residents to join their departments. As of mid-1991, two Hartford residents are on the Canton F.D., one is on the Buckfield F.D., and some also serve on the Turner F.D. And now, with the initiation of Hartford's own volunteer Fire Department, there are numerous needs and opportunities for volunteer help--for fire fighters, fund raisers, phone volunteers, and others. In addition to the problems outlined above, Hartford also may need to develop adequate water supply sources for fire protection. Currently, there are 3 dry hydrants in Hartford.

Police Protection.

One of the concerns in Hartford is the lack of focused police protection in Town. The Town of Hartford does not provide any municipal law enforcement but rather, relies on the Oxford County Sheriff's Department and Maine State Police. The Sheriff's Department is on call 24-hours a day and the officer on duty responds unless more help is called in, in which case additional Deputies will respond. The type of calls the Oxford County Sheriff's Department typically responds to in Hartford are burglaries, accidents, court processes, and civil cases.

In addition to the Sheriff's Department there is a Town Constable to handle complaints when called. When more serious incidents arise, the Town Constable contacts the Oxford County Sheriff's Department. Finally, the last available person for distress calls are the Selectmen. The selectmen respond to calls on an as-needed basis and call the Sheriff's Department when needed.

Emergency and Rescue Services.

These services have traditionally been provided to Hartford by out-of-town sources--generally in Canton, Buckfield, and Turner. At best, the coverage was confusing and inadequate. Although different areas of Town were best served by rescue units from the various adjacent communities, the phone numbers to call and the division lines of coverage were unclear. There is no emergency phone number listing in the Oxford County Telephone Book for Hartford residents to use.

In 1988, during an assessment of these services by the Comprehensive Planning Committee, the Selectmen were appraised that Hartford had a critical rescue service situation. In June of that year, a public meeting was held to stress to the community the need for Hartford residents to become directly involved in providing some of these services as "first responders". As a result, nine residents volunteered to take classes in Advanced First Aid and CPR for the certification and licensing process, and subsequently organized as the Hartford Rescue Service.

By April, 1989, the Town appropriated funds for basic equipment and supplies, and by June, 1989, the Hartford Rescue Service began to respond to calls in conjunction with the Turner Rescue Service.

In 1990 the Town appropriated $2,000 and the Service raised another $1,700 of its own. No money will be requested of the Town in 1991. The moneys are used to acquire higher licensing for members and to update equipment as needed. The group responded to 30 calls in 1990. Due to an agreement reached with Laurel Gagne of Turner Rescue and Selectmen of Hartford, Buckfield Rescue now covers a small portion of Hartford. This involves a small stretch of Route 140, Apples Hill Estates, Old Route 140 and Cary Hill Road. This was done to lessen the response time to emergency calls.

All Hartford Rescue members are licensed under Turner Rescue, and Hartford makes an annual donation to the rescue squads of Turner, Buckfield, and Canton. As of mid–1991, there were 11 members of the Rescue Service. Approximately 170 hours each week needs to be covered by this group, with one to three persons on call at all times. Consequently, expanded membership in the future will be essential, as will cooperation with adjacent towns, rescue units, and other emergency services.

Bureau of Civil Emergency Preparedness.

An appointed CEP director monitors radiation readings in Hartford with equipment provided by the County. There has never been a reading above normal.

However, the director has noted a decline in air quality in Hartford in summer months, with wind currents from the south. Additional threats to clean air in Hartford are posed by the paper mills in North Jay and Rumford. Affects of chlorine leaks have been detected in Town, and effects of other toxins are possible.

EDUCATION FACILITIES

Public Schools. Hartford is a member community of Maine School Administrative District # 39 (Nezinscot Valley, MSAD-39). The District--which also includes the towns of Buckfield and Sumner--has the Buckfield Junior/Senior High School built in 1990, and the Hartford-Sumner Elementary School in Sumner built in 1968 (with additions in 1986). SAD-39 has very good academic and extra-curricular programs for its students, and provides Adult and Community Education Programs for all residents throughout the District. School facilities, including the gymnasium, are available to Town organizations, Boy Scouts, Girls Scouts, and others.

Hartford has three members on the School Board, Sumner has three, and Buckfield has five. Hartford's representatives are elected at Town Meeting, and serve three-year terms on a staggered basis. The following Hartford residents are members of the School Board.

Judy Roberts
Ken Schuler
Sandra Cowett

In addition, all parents may be involved in school activities through P.T.A., Open House, field trips, volunteer programs, and grade level special events. General enrollment statistics for Hartford students in the public school district is found in an earlier chapter of this Plan.

Private Schools. Christian schools in Sumner and Turner Village serve parishioners from area towns.

Vocational Schools. Hartford is a member of Southern Oxford County Vocational Region 11, which has its training facility in Norway about 20 miles away. Other vocational schools are nearby: Northern Oxford Vocational Area (NOVA) in Rumford, and Central Maine Technical College (post-secondary) in Auburn.

Post-secondary Education. The following schools are within reasonable commuting distance of Hartford:

University of Southern Maine at L/A	Lewiston
University of Southern Maine	Portland and Gorham
Bates College	Lewiston
Bowdoin College	Brunswick
Westbrook College	Portland
Mid-State Business College	Auburn
Andover College	Portland
St. Joseph's College	Standish

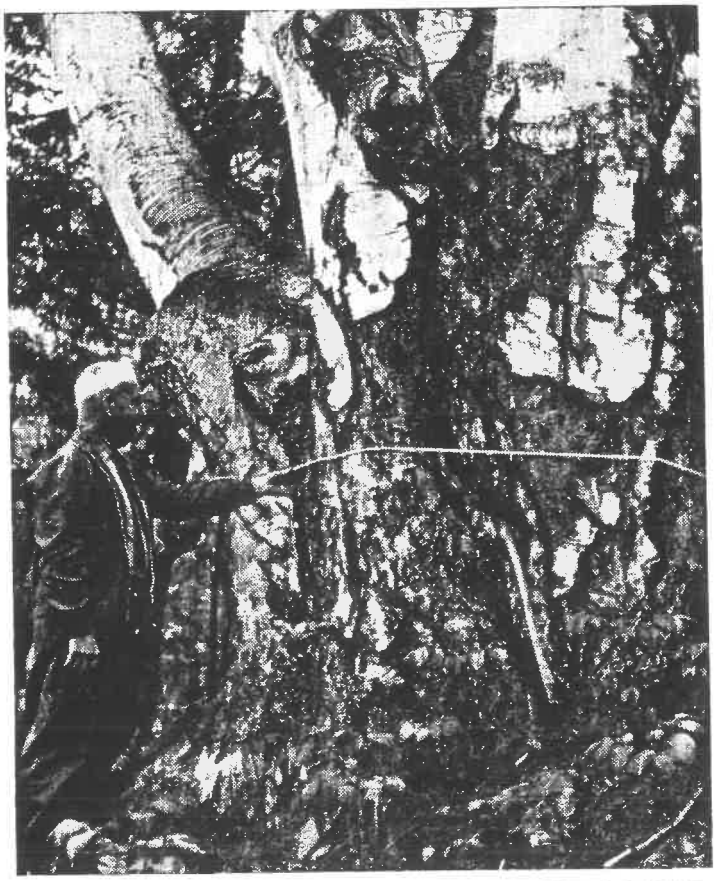
HEALTH CARE FACILITIES

Hartford residents are served by Central Maine Medical Center and Saint Mary's Hospital, both in Lewiston (25 miles away), Stephens Memorial Hospital in Norway (20 miles away), Rumford Community Hospital (20 miles away), and Farmington Memorial Hospital (30 miles away). No medical, dental, optical, chiropractic, mental, counseling, and other related services are available in Hartford, but they are provided in nearby communities.

SUMMARY

Fire protection in Hartford is not particularly good. Response time from nearby fire departments is at least 15 minutes to Hartford Center. Continued year-round and seasonal development will require improved firefighting capacity. Rescue service has improved dramatically in recent years, but additional volunteers and improved cooperation with adjacent towns will be required in the future. Fire departments and rescue units from adjacent towns are not well-informed about the location of Hartford's roads and houses. As of mid-1991 there are no published emergency numbers in the Oxford County Telephone Book directing Hartford residents where to call for these services, although much of the Town is served by "911" service.

Despite the initiation of recycling efforts in Town, solid waste disposal will continue to be a major concern in the foreseeable future. Maintenance of the roads and ditches in Hartford, and particularly winter plowing, is a major annual expense for the Town. There is disagreement as to whether contracted snowplowing or municipally-provided snowplowing with Town-owned equipment would better serve Hartford's residents. The Town-owned buildings in Hartford are in good shape, and appear to be adequate for the planning period, although some specific, needed improvements have been identified. There is no funded recreation program in Hartford, nor plans for improving recreation facilities. The Town does not formally identify and schedule major capital expenditures.



HARTFORD - MAINE

MAINE'S LARGEST WHITE (PAPER) BIRCH

CHAPTER SEVEN

FISCAL CAPACITY

INTRODUCTION

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

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

REVENUES

Hartford's largest source of revenues is from property taxes. Table FC–1 indicates trends in the Town's net assessed valuation, projected property tax revenue, and mil rate for the last six years.

Table FC – 1
Property Tax Revenues
HARTFORD, 1984–1989

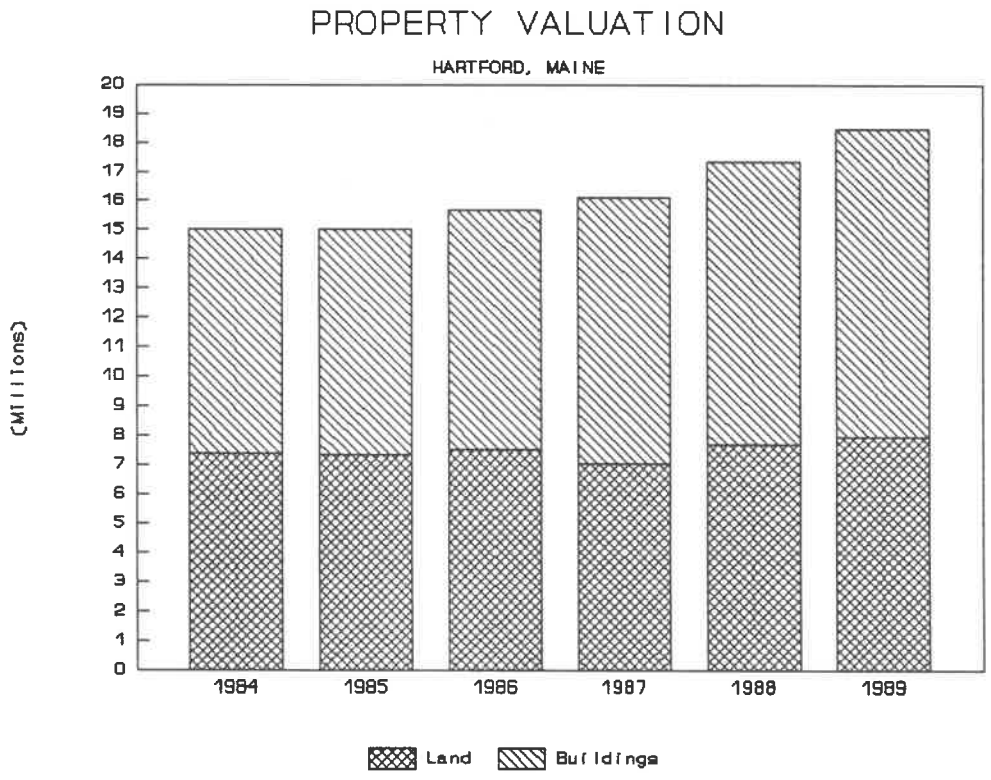
Year	Net Assessed Valuation ($)	Projected Property Tax Revenue ($)	Mil Rate
1984	$15,029,719	$236,718	15.75
1985	$15,020,710	$236,576	15.75
1986	$15,650,563	$246,496	15.75
1987	$16,122,161	$278,107	17.25
1988	$17,353,813	$355,753	20.50
1989	$18,455,164	$380,176	20.60

Source: Hartford Annual Town Reports

Table FC–1 shows that from 1984 to 1989 the Town's valuation increased by 23 percent (about 4 or 5 percent per year). Since 1985, these increases have averaged around $850,000 per year. This trend can be expected to continue so the 1990 valuation would be expected to be in the 19 to 20 million dollar range.

Over the 5–year period shown in Table FC–1, property tax revenue to the Town increased by nearly $143,500 (or 61 percent). This translates to an annual average increase of approximately 10 percent per year over the period. However, a review of Table FC–1 indicates that the change in revenues from year to year has been sporadic; for example, revenues decreased by a fraction of a percent from 1984 to 1985; then, they increased by 4.2 percent from 1985 to 1986, by 12.8 percent from 1986 to 1987, and by 27.9 percent from 1987 to 1988, before they finally subsided to a 6.9 percent increase from 1988 to 1989. Figure FC–1 is a graphical representation of the Town's assessed property valuation from 1984 through 1989.

Figure FC–1



Other significant sources of revenue for the Town for this period included excise taxes, federal and state revenues sharing, and "other" revenue. Although Hartford continues to receive revenue sharing funds from the State, the federal revenue sharing program has been discontinued. "Other" revenues include essentially all other sources of revenue to the Town, such as interest on loans, refunds, and other taxes. Table FC–2 lists these revenues for the years 1984–1989.

Table FC – 2
Significant Sources of Revenues
HARTFORD, 1984–1989

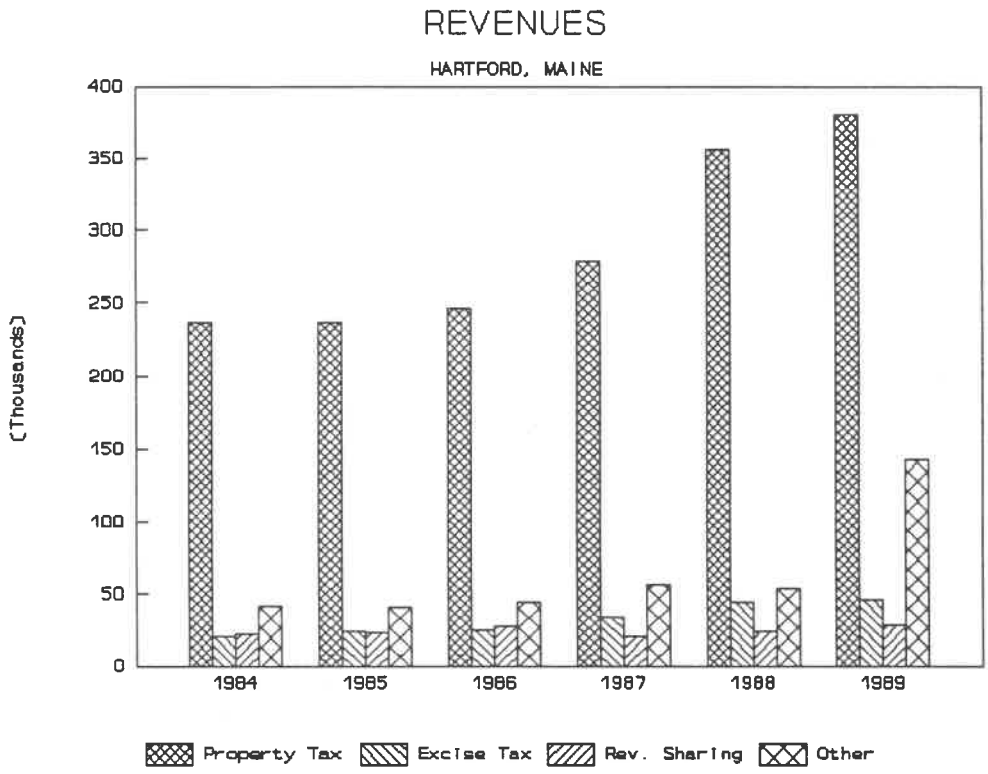
Year	Excise Taxes ($)	Federal/State Revenue Sharing ($)	Other Revenues ($)
1984	$20,492	$21,971	$41,234
1985	$24,305	$25,401	$40,226
1986	$25,099	$27,645	$44,442
1987	$33,251	$20,534	$56,172
1988	$44,452	$23,809	$54,067
1989	$45,764	$28,354	$143,306

Source: Hartford Town Reports

Excise taxes collected in 1989 were $45,764, or 123 percent higher than five years earlier in 1984, with increases from 1986 to 1987 and 1987 to 1988 showing the largest increases at 33 percent and 34 percent respectively. How this trend is likely to continue in the future is difficult to predict, but annual increases in the 20 percent range are expected. Revenue sharing sources increased steadily during the period, except in 1987 when the Town received no Federal revenue sharing monies. A leveling off of this revenue source should be expected, given the current outlook for state and federal budgets. Miscellaneous (other) revenues have also shown steady increases during the period--however in 1989 this amount was significantly higher as a result of a one–time FEMA payment of over $37,000, and several other revenues which typically do not occur on a regular basis.

Figure FC-2 is a graphical representation of the Town's major revenue sources for the 1984 to 1989 period.

Figure FC-2



EXPENDITURES

The largest annual expenditures for Hartford is for general operating and maintenance costs. These expenditures accounted for an average of 51 percent of the Town's total expenditures between 1984 and 1989. The second largest expenditure was Hartford's share of the SAD #39 budget. The school budget accounted for approximately 45 percent of the Town's total expenditures from 1984 through 1989, which are listed in Table FC–3.

Table FC – 3
Significant Items of Expenditures
HARTFORD, 1984–1989

Year	Operating & Maintenance	Education	County Tax	Overlay	TOTALS
1984	$141,617	$122,064	$9,202	$8,235	281,118
1985	$158,666	$138,863	$9,675	$1,576	308,780
1986	$178,919	$160,251	$11,004	$5,631	355,805
1987	$194,015	$184,615	$12,348	$3,005	393,983
1988	$241,326	$220,490	$13,182	$4,749	479,747
1989	$313,451	$253,578	$16,154	$3,745	586,928

Source: Hartford Town Reports

Operating and maintenance expenditures increased $171,834, or 121 percent, over the 5 year period, while school expenses increased by $131,514, or 108 percent, and County taxes rose by 76 percent. Hartford's overlay expenditures, though relatively low, fluctuated significantly from 1984 through 1989, showing alternating increases and decreases from year to year. The Town's total expenditures therefore, increased by no more than 15 percent a year in the first half of the period, but an average 22 percent each year during the latter half of the period.

Figure FC–3 is a graphical representation of Hartford's major expenditures for 1984–1989.

Figure FC–3

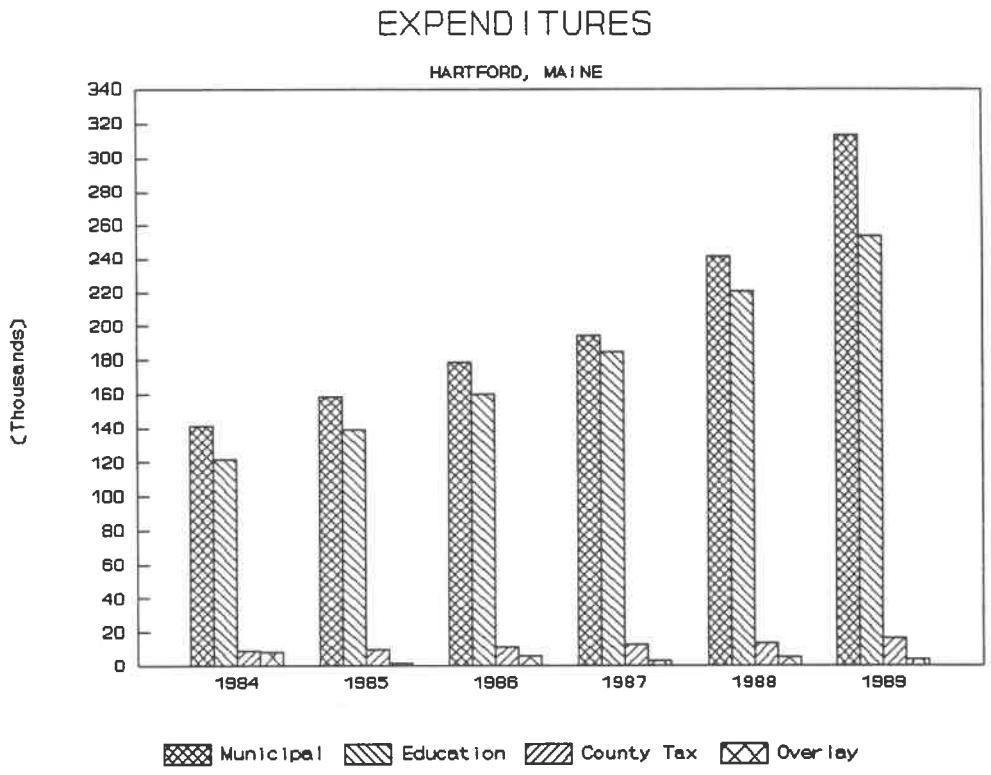


Table FC–4 presents information on property valuations, revenues, and expenditures for Hartford for the 1984 to 1989 period.

Table FC – 4
Revenues and Expenditures, HARTFORD, 1984–1989

CATEGORY	YEARS ENDED:						% Change 1984–1989	% Change per year
	1984	1985	1986	1987	1988	1989		
VALUATION								
Land	$7,383,804	$7,359,561	$7,532,276	$7,021,862	$7,710,320	$7,972,490	8	2
Buildings	$7,645,915	$7,661,149	$8,118,287	$9,100,299	$9,643,493	$10,482,674	37	7
TOTAL	**$15,029,719**	**$15,020,710**	**$15,650,563**	**$16,122,161**	**$17,353,813**	**$18,455,164**	**23**	**5**
REVENUES								
Property Taxes								
Mill rate	0.01575	0.01575	0.01575	0.01725	0.02050	0.02060	31	6
Commitment	$236,718	$236,576	$246,496	$278,107	$355,753	$380,176	61	12
Excise tax	$20,492	$24,305	$25,099	$33,251	$44,452	$45,764	123	25
Revenue Sharing	$21,971	$23,124	$27,645	$20,534	$23,809	$28,354	29	6
Other Revenues	$41,234	$40,226	$44,442	$56,172	$54,067	$143,306	248	50
TOTAL	**$320,415**	**$324,231**	**$343,682**	**$388,064**	**$478,081**	**$597,600**	**87**	**17**
EXPENDITURES								
Municipal Oper. & Mnt.	$141,617	$158,666	$178,919	$194,015	$241,326	$313,451	121	24
School Appropriation	$122,064	$138,863	$160,251	$184,615	$220,490	$253,578	108	22
County Tax	$9,202	$9,675	$11,004	$12,348	$13,182	$16,154	76	15
Overlay	$8,235	$1,576	$5,631	$3,005	$4,749	$3,745	(55)	(11)
TOTAL	**$281,118**	**$308,780**	**$355,805**	**$393,983**	**$479,747**	**$586,928**	**109**	**22**
EXCESS/(DEFICIT)	**$39,297**	**$15,451**	**$(12,123)**	**$(5,919)**	**$(1,666)**	**$10,672**		

Source: Hartford Annual Reports

DEBT

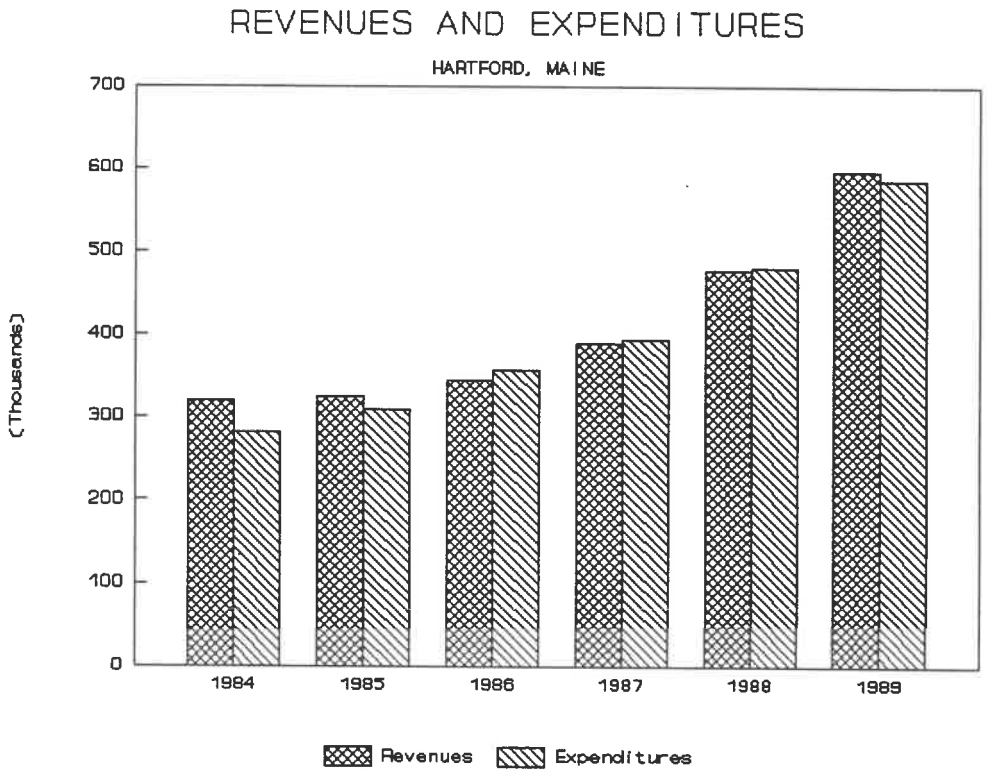
In Maine, a town's total outstanding debt is limited by State law to 15 percent of the Town's last full state valuation. This limit is reduced to $7^1/_2$ percent if the debt for schools, sewer and airport, water and other special district purposes are excluded. Currently, **Hartford has no outstanding debt**, and thus has available the full $7^1/_2$ percent of its valuation for financing, if necessary.

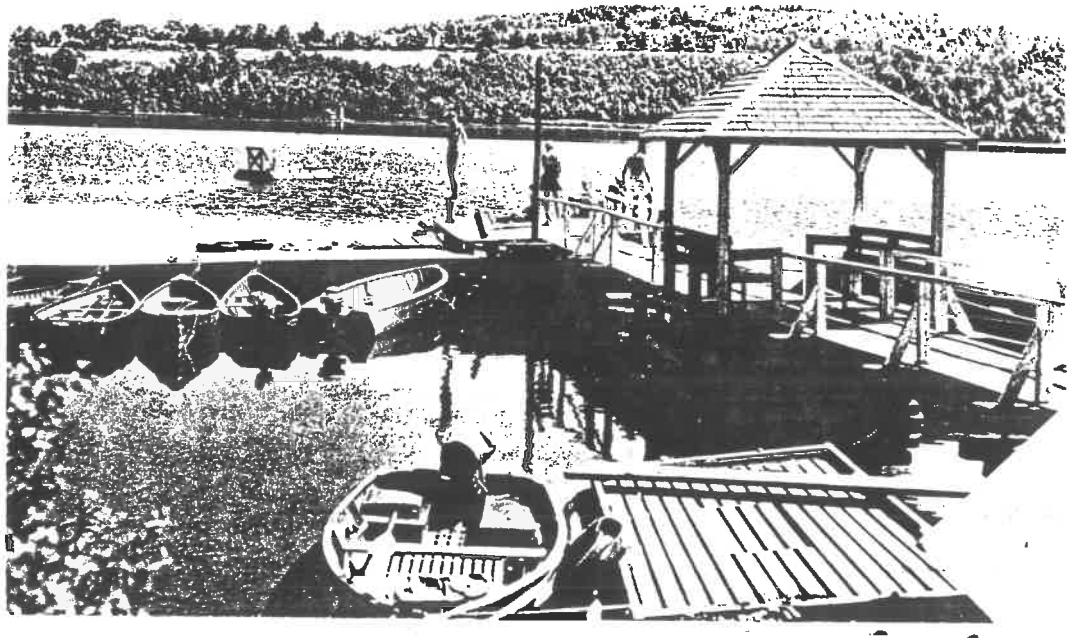
However, if the Town were to borrow the full $7^1/_2$ percent of its valuation, as allowed by State law, the debt would amount to $1,384,137--a considerable amount of money--and this could certainly cause some financial difficulties for the Town in the future. It is recommended that Hartford exceed no more than half this amount, or about 3 percent of the valuation. Even limiting the debt to 3 percent of the full valuation would allow the Town to borrow over $550 thousand to finance capital expenditures.

FISCAL CAPACITY

Figure FC-4 shows Hartford's revenues and expenditures for the 1984 to 1989 period, and indicates that **Hartford's fiscal capacity is in very good shape.** Since Hartford has no current outstanding debt, its fiscal capacity is such that, if necessary, the Town could reasonably borrow to finance major, capital expenditures.

Figure FC-4





LAKEFIELD

CHAPTER EIGHT

HISTORIC RESOURCES

INTRODUCTION

There is a growing recognition among citizens and governments across the country of the value of communities' historic resources. Historic buildings and historic and prehistoric archaeological sites provide insights into a community's past as well as help answer broader questions about history and prehistory. Serving as functional elements of a community, maintained historic buildings can conserve resources, energy, time, and money while they sustain a sense of the community's character. Although Hartford is fairly small, its historic resources are significant, and valued by its residents.

Known in its plantation period as "East Butterfield" or "Number Seven", Hartford was the subject of a petition by Samuel Butterfield and others of Dunstable, Massachusetts, in January 1781. The group of land speculators requested permission from authorities in Boston to begin a new settlement here. It was not until 1786, after two surveys of land now encompassing the towns of Hartford and Sumner (then known as "West Butterfield") were made, that a "Deed of Agreement" was signed. After several more petitions and an influx of first families, the plantation (which originally included the present village at East Sumner; see S–14) was incorporated in 1798 as the town of Hartford (after Hartford, Connecticut). Some of the first settlers were members of the Robinson, Thompson and Butterfield families.

Predominantly a farming community during the 19th and early 20th Centuries, Hartford had its first road laid out from Buckfield through the whole length of the township and on to New Pennacook (Rumford) before 1788. As soon as saw mills were built (the first was undoubtedly that constructed by Increase Robinson at East Sumner Village in 1784), framed houses began to appear, and the beginnings of Hartford's several small village clusters became a reality. Around 1825, Winslow Hall came to Hartford from Buckfield and erected saw and grist mills a short distance north of present Route 219 on Route 140. The settlement that grew up around the mills became known as "Hall's Mills", but in later years was changed to Hartford Center due to its geographic location. In 1868, the Rumford Falls and Buckfield Railroad passed through Hartford, and two depots were constructed; that for the East Sumner and South Hartford area still stands off old Route 140 near Cary Hill Road. In the latter half of the 19th Century, agricultural production was supplemented by numerous small businesses, including a brickyard, corn shop,

tannery, mineral spring, and numerous apple orchards. However, the number of working farms in the town today has dwindled to a mere handful, and with the removal of the railroad tracks in 1950, Hartford became increasingly dependent on other communities for its economic stability. Though it retains much of its rural character, the Town no longer claims an active social center, as compared with its prosperous 19th Century condition.

Hartford's history is today preserved by both the Hartford Historical Society and the Hartford Heritage Society, the latter headquartered in the Irish Store, one of two properties in Town currently listed on the National Register of Historic Places.

Hartford's population in 1880 stood at 863 individuals; a century later it had dropped to 480.

NATIONALLY SIGNIFICANT HISTORIC STRUCTURES

There are two properties in Hartford currently listed in the National Register of Historic Places:

The David Warren House (described below), owned by Charles T. and Eleanor T. Jones, was placed on the Register in April, 1983.

The J. & O. Irish Store (described below), given to the Hartford Heritage Society by James Irish, a descendant of the original proprietors, was placed on the Register in December, 1983. It is maintained as a museum, housing local artifacts, and is open to the public on Hartford Heritage Day each June.

REGIONALLY SIGNIFICANT HISTORIC STRUCTURES

"Oxford County's historic architecture exists far from those geographic centers where America's major eighteenth, nineteenth, and early twentieth century building styles and forms originated; for this reason, the local built environment most often reveals the vernacular adaptation of forms, plans, and decorative devices developed elsewhere. Due also to this somewhat remote location, however, the arrangement of villages within our towns often reflects the original late eighteenth and early nineteenth century settlement patterns, a characteristic that has disappeared in more populated areas of Maine. Despite the ongoing demolition of irreplaceable examples of the county's architectural heritage, and the thoughtless intrusion of buildings that fail to consider the historic environment, a great number of aesthetically significant structures still remain to describe the county's social, political, and economic history. In

recognizing the need to conserve this valuable resource, current residents have an opportunity to preserve the best of the past for future generations."

The previous quote, and the following descriptions of significant historic buildings, were taken from Randall H. Bennett's excellent book, Oxford County Maine: A Guide to Its Historic Architecture, published by the Oxford County Historic Resource Survey, 1984. That survey had as its major goal to compile the most significant historic architecture in Oxford County dating before 1930.

The **PARSONS FARMSTEAD** is on Route 140 north of Hartford Center. It is a connected complex of buildings, its main block an example of the high-posted Greek revival Cape seen throughout the County. It has seen enlargements and alterations since its construction in 1816. Other interesting examples of Greek Revival Capes in Hartford include the **HOPESTILL BISBEE--DR. FRANKLIN MAXIM HOUSE** on the Town Farm Road, and the **HOWARD FARM** on the Howard Road in South Hartford, both of which have inset doorways on their facades. North of the Parsons Farmstead, the **TOBIN-BRAGG FARMSTEAD** is another, equally interesting, multi-unit connected wood frame structure.

The **JAMES AND ORLANDO IRISH STORE**, a vernacular wood frame structure of two-and-a-half stories built ca. 1870, represents a common building type once seen in most Oxford County villages. The store section closest to the road may be part of an earlier store recorded on the county wall map of 1858 as being operated by A. G. Tinkham. Entered through double doors on the gable-end facade, the store has cases, counters, and shelves typical of a general merchandise store of the late nineteenth century. The floors above, with stair hall and separate entrance on the long, right facade of the building, provided a residence for storekeeper and family. The carriage house, probably built sometime after 1880, is connected to the store by an unusual second story corridor, but otherwise remains separate from it.

To the left of the store is a small Cape, probably an earlier building, with a Queen Anne porch. The small Queen Anne style office building adjacent dates from the turn-of-the-century.

North of the store, on the opposite side of Route 140, is the shingle-covered **HARTFORD TOWN HALL**, constructed in 1922. The vernacular structure replaced a much larger town meeting place, "Atheneum Hall", which stood on the site from 1871 to 1921 when it was destroyed by fire.

The **ORIN ROBINSON HOUSE**, a simply finished high-posted Cape with central chimney and dormered ell, was Hartford's town farm from 1885 to 1933. A single room in the second story seems to have been used as a jail, with indications that it had barred windows and a barred door. The house's main entrance doorway

exhibits a vernacular Federal style emerging into the Greek Revival. A related treatment is found on the doorway of the low-posted, broad-roofed **BRIDGHAM CAPE** on Route 140 in South Hartford. Though some changes have been made, these two Capes and the Bard House (discussed below) retain in their exterior appearance elements of their original design, which other equally venerable houses in Hartford have lost.

Built in another location in 1810 for the local Baptists, the small **HARTFORD COMMUNITY CHURCH** was moved to Church Street (off Route 219 in East Hartford) in 1868 to serve the Methodists. A gable-roofed building with Greek Revival corner boards and cornice, the church is quite similar to the East Bethel Church from the same era. Built to serve a small rural congregation, the Hartford Church has a small Queen Anne tower added after a cyclone touched down in 1892, removing the building's roof. The single, central entrance doorway seen today may have replaced a two-door arrangement, also reminiscent of the Bethel building.

The **DAVID WARREN HOUSE**, built ca. 1805, is a substantial, two-and-a-half story, center-hall house on Sam Annis Road off route 140. It is significant as a transitional type, falling between the heavier Colonial or Georgian houses of the mid-eighteenth century and the lighter designs of the later Federal period. Retaining its two massive interior chimneys and a fine late Georgian doorway with an elaborated entablature and framing pilasters, the clapboard-covered house may have originally been hip-roofed, a roof form usually associated with early Federal buildings in Oxford County. There are seven functional fireplaces inside, including one with a beehive oven. Wide-board wainscoting and simple paneling on fireplace walls also remain, and one room on the second story has a deep ceiling molding, apparently original.

Probably Hartford's finest surviving early Cape, the **WILLIAM F. BARD HOUSE** on Sam Annis Road was built in the 1790s. It is a simply finished small frame structure with central chimney and pilastered doorway with transom light. The main, story-and-a-half section of the house retains several notable early features, including original window openings exhibiting nine-over-six pained sash, and vertical and horizontal boarding and wide-board wainscoting on several walls. The ell, with its two-over-two pained sash, was modernized into a kitchen lat in the nineteenth century. The large barn, once attached to the house by a series of sheds, was rebuilt into the present gambrel-roofed form early in the twentieth century.

LOCALLY SIGNIFICANT HISTORIC STRUCTURES AND SITES

Cemeteries.

The following table lists the cemeteries in Hartford.

Table 8 – 1
Cemeteries
Hartford, 1989

Cemetery Name	Location/Description
Meeting House Hill ("Starbird") Cemetery	Many Revolutionary soldiers are buried here. Also Rev. Daniel Hutchinson, of early church history, and Christiana Hayford, daughter of Arvida Hayford, who was the first death in Hartford on March 12, 1799, age 14 years.
Hartford Center Cemetery	Near central 4 corners
North Hartford Schoolhouse Yard Cemetery	The corner above Green Acres Inn, also called Oakes Thompson's Yard.
North Hartford Yard Cemetery	Near D.A. Goding residence (Sparrow), and later Norman Vashaw's (Pulkkinen).
Glover Cemetery, or Young Cemetery	Near Mose Young Farm (Edith Gammon – old farm)
Parsons Cemetery	Route 140
Fuller Cemetery	Near Wilder Decoster Farm
Swan Pond Cemetery	South Harford, near Swan Pond section
Maple Grove Cemetery	Church Street in East Hartford, near Canton line
Howard (Ricker–Warrent) Cemetery	Hartford/Buckfield line on Route 140 near residence of Franklin Roy
Jackson Cemetery (private)	Near residence of Lida Waterhouse (Alice Merrill); perhaps also called Little Bear Pond Cemetery
Blake Cemetery (private)	Near former Blake Homestead (Bradford Beedy) on Route 219
Soule Cemetery	Tyler Corner Road north to beyond residence of late Grace Darrington (Stachiewicz/Lane)--road probably discontinued beyond homestead

Source: Lorraine Greig, 1989

Threats to Historic Resources

Continued development poses several threats to Hartford's historic resources, and consequently to the Town's character. These threats include: inappropriate renovation and other alterations; roadway improvements; changes in land use; introduction of incompatible buildings, structures, and land use; deterioration and abandonment; replacement; disturbance of archaeological sites; and more. Currently, there is little the Town can do by way of formally protecting its historic resources: there is no Site Review Ordinance, and the language in the Subdivision Ordinance regarding protecting historic qualities is minimal and vague.

ARCHAEOLOGICAL RESOURCES

Archaeological resources are physical remains of the past, most commonly buried in the ground or very difficult to see at the surface. Archaeological sites are classified as being either **prehistoric** or **historic**. Prehistoric sites are those areas where remains are found which were deposited before written records were kept by civilization. The physical remnants from these sites provide us with important information about the prehistory of our area. Historic sites, on the other hand, are more recent, occurring after written records began. Archaeological sites are most commonly found within 25 yards of an existing or former shoreline, as these areas provided good locations for boat access and temporary or permanent camps.

According to the Maine Historic Preservation Commission (MHPC), no historic archaeological survey has taken place to date in Hartford. It is believed, however, that there are sites in Hartford which contain remnants of the early wave of Euro-American settlement in Town. Also, no professional prehistoric archaeological survey has yet been accomplished in Town. It is believed that other prehistoric sites exist along the banks of Hartford's waterways which bear evidence of the Town's prehistoric inhabitants.

CHAPTER NINE

CULTURAL, SCENIC, AND RECREATIONAL RESOURCES

INTRODUCTION

The topics covered in this chapter describe the characteristics and qualities of the community which are often the most significant in the way the residents feel about their home town and its way of life. Along with historical resources (which were discussed in the preceding chapter) the cultural, scenic, and recreational resources of Hartford are what makes the Town "a home" to its people. They help describe what Hartford is, and what makes it special to all who live or visit here. In the Community Survey, conducted during the development of this Plan in 1990, an overwhelming majority of residents felt that historic, scenic, and recreational resources were important or very important qualities of Hartford, and by more than a 2–to–1 ratio was in favor of special protection for them.

CULTURAL RESOURCES

Facilities

The **Hartford Heritage Museum** in Hartford Center, formerly the J. & O. Irish Store, was given to the Hartford Heritage Association by James Irish, a descendant of the original proprietors. Placed on the National Register of Historic Places in December, 1983, it houses local artifacts, and is open to the public on Hartford Heritage Day each June, and Sunday afternoons during the summer.

The **Hartford Community Church** on Church Street (off Route 219 in East Hartford) now serves a Presbyterian ministry, and also The Hartford Women's Association (described below).

The **Hartford Town Hall** on Route 140 in Hartford Center serves as the primary cultural facility of the community. Used by various groups for various functions, it can seat as many as 120 people, and has full kitchen and restroom facilities.

Organizations

The **Hartford Heritage Society's** goals are the preservation of the older buildings in Town, and the promotion of education. The Society is funded by an appropriation from the Town, private donations, and proceeds from public suppers. Each year on Hartford Heritage Day the Society awards a scholarship. Membership is open to anyone, and in 1991 is about 15 persons. The group meets every other month at the Town Hall.

The **Hartford Historical and Improvement Society** has as its goal the preservation of the old schoolhouse and the Community Church. The Society is funded by private donations. Membership is open to any interested persons, and in 1991 is about 3 active members. They meet once a year in the schoolhouse.

The **Hartford Women's Association** (a Presbyterian Women of America affiliate) provides a food bank and a clothing center to local residents. The Association is funded by donations and the proceeds from public suppers and craft fairs. Membership is open to any woman in Town, or in the Church, and in 1991 there are approximately 12 members. Meetings, which include Bible study and fellowship, are held in members' homes on the fourth Wednesday of every month.

SCENIC RESOURCES

Our feelings about the quality of our lives, the communities in which we live, and the places where we work and visit are strongly influenced by how the landscape looks. This Plan recognizes that people enjoy places more when those places provide high-quality visual experiences, and it seeks to protect visual resources as the Town's landscape is developed and changed.

Hartford is endowed with a number of scenic views, and these resources are one of the most important qualities which residents and visitors use to describe the Town. The topography of the area, and the roads and trails which traverse it, provide many striking views--some of local landmarks, and some of distant ones, including the White Mountains. Also, the community's architectural character--whether in the Village or in the rural areas--is an important scenic quality.

During the development of this Plan, a number of significant scenic vistas were identified by the Comprehensive Planning Committee and by residents and land-owners (via the Community Survey and public forums). Although many areas throughout Hartford were felt to be generally scenic, the following list is representative of the most significant.

Table 9 – 1
Significant Scenic Vistas in Hartford, 1991

View #	Scenic Location	View
1	Ridge, above Bog Brook, north of Davenport Rd	Hills in Hartford, Lake Auburn
2	Knoll, east of Russell Brook, north of Davenport Rd	Canton Lake, Bear Mtn, hills in south of Town
3	The Pinnacle, between Camp Road and Canton Lake	Ledges on the Pinnacle, Canton Lake
4	At Canton town line, Church Street	Canton Lake, mountains in north of Town
5	Trail from Green Acres Rd, Thorne Mountain	Canton Lake, Bear Mtn
6	Town Farm Rd, Robinson Hill	Mountains to north of Town, into Canton & Peru
7	Summit, Deacon Pinnacle	East Sumner Village
8	Cary Hill Rd, Cary Hill	Robinson Hill, Deacon Pinnacle
9	End of Howard Rd	Northeast Pond, Cary Hill
10	Corner, near Jones home, Sam Annis Rd	Apple orchards, White Mtns
11	Gurney Hill Rd, Russell Hill	Hills and mountains to north
12	Crestview Orchards, Church St	Apple orchards, Holmes Hill, Bunganock Pond, western Maine mtns, White Mtns
13	Summit, Little Bear Mountain	Ledges, views in all directions, White Mtns
14	Summit, Bear Mountain	Ledges, views in all directions, White Mtns
15	Near Murphy home, Bear Pond Rd	Little Bear Pond, Hayford Hill
16	Trail from Gilman Rd, along Hayford Brook, off Rt 219	Bear Pond, Bear Mtn
17	At Turner town line, Rt 219	Bear Mtn, Little Bear Mtn, other mountains to north
18	The Pinnacle, at Buckfield town line on Perry Rd (aka East Buckfield Rd)	Hayfields and hills to west in Buckfield
19	Upper end of Sparrow Brook, off Darrington Rd, about 1 mi from Rt 140	Sheep Tick Falls

Source: Hartford Comprehensive Planning Committee, and other residents of Hartford

RECREATIONAL RESOURCES

Facilities

There are a number of public and private recreational facilities in Hartford. The following facilities are listed in the 1988 inventory of Maine's State Comprehensive Outdoor Recreation Plan (SCORP), produced by the Bureau of Parks and Recreation.

Bear Mountain Trail

Ownership: Private
Total acres: 11.0
Hiking Trail Miles: 4

Green Acres Inn

Ownership Type: Private
Total Acres: 100.0
Undeveloped Acres: 60.0
Parking Capacity: Adequate for guests
Golf Holes: 9

Pine Grove Beach

Ownership Type: Municipal
Total Acres: 6.8
Parking Capacity: n/a
Picnic Tables: 0
Lake Name: ANASAGUNTICOOK LAKE (MIDAS #:)
Linear Feet of Beach: 800+
Changing Facilities: No

The Comprehensive Plan Committee identified the following areas in Hartford in 1991. (This information was forwarded for inclusion in the next SCORP inventory.)

Fiske University Land

Ownership: Private
Total acres: 34 acres on Canton Lake
39.5 acres in North Hartford
Parking capacity: none

The possibilities for the public to launch boats in Town are limited. There is an informal area at the west end of the railroad bed where people put boats onto Bunganock Pond, but the road has limited areas for turning around and people often get their vehicles stuck. The Town owns a small, undeveloped lot with 37 feet of frontage on Bear Pond, but the potential of this area for public boat access has not been assessed.

Recreation Facility Needs Analysis

Hartford's existing outdoor and indoor recreation facilities were assessed based upon nationally accepted standards suggested for use in this Plan by the Community Parks and Recreation Section of the Maine Office of Comprehensive Planning (OCP). Table 9–2 shows this analysis, based upon the facilities identified in Hartford by the Comprehensive Plan Committee. The first column identifies the type of facility; the second column lists the level of service recommended for each type of facility by OCP (per 1000 population, or as otherwise noted); the third column lists the facilities which currently exist in Town; and the last three columns indicate the surplus or deficiency which exists, or is projected to exist, in 1991, 1996 (initial CIP planning period), and 2001 (initial Comprehensive Plan planning period).

Table 9 – 2
Outdoor Recreation Facilities and Needs
HARTFORD, 1991, 1996, 2001

Type of Facility	Recommended OCP Stds. per 1000	Existing Facilities	1991[A] Surplus/ (Deficiency)	1996[B] Surplus/ (Deficiency)	2001[C] Surplus/ (Deficiency)
Neighborhood Playground (2–10 acres)	D	0	0	0	0
Community Recreation Area (12–25 acres)	D	0	0	0	0
Community Park (100+ acres)	D	0	0	0	0
Baseball Diamond (90 ft. basepaths)	.16	0	(.12)	(.13)	(.14)
Softball/Little League Diamond *	.75	0	(.55)	(.59)	(.64)
Basketball Court *	.5	0	(.37)	(.40)	(.43)
Tennis Court *	.67	0	(.49)	(.53)	(.57)
Multi–Purpose Field (Football, Soccer, Field Hockey) *	.5	0	(.37)	(.40)	(.43)
Swimming Area (square feet)	750	40,000	39,453	39,408	39,359
Ice Skating Area * (square feet)	5000	0	(3,650)	(3,950)	(4,275)
Playground *	.5	0	(.37)	(.40)	(.43)
Day Camping Area	D	0	0	0	0
Horseshoe Court	D	0	0	0	0
Shuffleboard Court	D	0	0	0	0
Picnic Table *	2	0	(1.46)	(1.58)	(1.71)
Nature Study Area	D	0	0	0	0

[A] Based on a 1991 population of: 730

[B] Based on a 1996 population of: 790

[C] Based on a 2001 population of: 855

[D] Standards are as follows:

neighborhood playgrounds, 2–10 acres, for towns with a population greater than 1000, should be located within 1/2 mile of housing concentrations of 50 or more homes and include playgrounds, basketball courts, playfields, etc.;
one **community recreation area**, 12–25 acres, for towns with a population greater than 5,000, developed with ballfields, tennis courts, swimming facilities, ice skating, etc.;
one **community park**, 100+ acres, largely undeveloped, for walking, X–C skiing, nature study, etc., for towns with a population greater than 5,000;
day camping area for towns with a population greater than 5,000;
horseshoe courts and **shuffleboard courts** for towns with population greater than 1,000;
minimum one **nature study area** for towns with population greater than 1500.

* Minimum one per Town.

The preceding table indicates a surplus of swimming area in Town: this facility is Pine Grove Beach on Canton Lake (40,000 sq. ft., assumed to be 800 linear feet of beach X 50 feet).

The preceding table also indicates some recreational facility deficiencies in Town: picnic tables, horseshoe courts, a playground, a multi–purpose field, a baseball diamond, a softball/little league diamond, an outdoor basketball court, a tennis court, and ice skating area. A baseball diamond in a town the size of Hartford is not justified, and probably will not be needed until the population reaches 4–5,000 (although the Town may certainly decide to develop one earlier than that). Also, although there is no skating rink in Hartford, skating is available, conditions permitting, on the ponds and lakes in Town, and an arrangement has been made for developing a 10,000 square foot skating area in front of the Irish Store beginning the winter of 1991–92. The remaining deficiencies (picnic tables, horseshoe pits, a playground, a multi–purpose field, softball/little league field, basketball court, and tennis court––one of each being recommended for the Town by OCP––should be met by Hartford residents as soon as reasonably possible, however.

Table 9–3 shows a similar analysis of indoor recreation facilities in Hartford, again using OCP suggested standards.

Table 9 – 3
Indoor Recreation Facilities and Needs
HARTFORD, 1991, 1996, 2001

Type of Facility	Recommended OCP Stds. per 1000	Existing Facilities	1991[A] Surplus/ (Deficiency)	1996[B] Surplus/ (Deficiency)	2001[C] Surplus/ (Deficiency)
School Facilities (avail. public use)	*	1	0	0	0
Gymnasium or large multi–purpose room	.20	0	(.15)	(.16)	(.17)
Auditorium or assembly hall	*	1	0	0	0
Arts & crafts shop	D	0	0	0	0
Teen center	D	0	0	0	0
Senior Citizen center	D	0	0	0	0
Game room	D	0	0	0	0
Public library	*	0	(1)	(1)	(1)

[A] Based on a 1991 population of: 730

[B] Based on a 1996 population of: 790

[C] Based on a 2001 population of: 855

[D] Standards are as follows:

one **arts & crafts shop, teen center, senior citizen center,** and **game room** for towns with populations greater than 2,000.

* Minimum one **school facility** available for public use, one **auditorium** or **assembly hall,** and one **public library** per town.

The preceding table indicates that Hartford has adequate capacity for school facilities available for public use (in neighboring Buckfield, Sumner, and Turner) and an assembly hall (Town Hall). Furthermore, these are expected to be adequate for the population growth projected for the CIP planning period and for the comprehensive planning period.

The preceding table also indicates that the Town has a need for a public library, although there are several available in a relatively short commute. The other facilities listed in the table are not justified, and probably will not be needed until the population reaches 1500 or more, although the Town may certainly decide to develop them earlier than that.

Programs

There are no formal, municipally-funded recreation programs in Town as of mid-1991. Nevertheless, Hartford boys have an opportunity to play Little League baseball in Buckfield, and Hartford girls can play softball in Sumner. There is also local interest for organizing some activities in Town for pre-schoolers.

Organizations

Currently, the Town of Hartford does not have a Recreation Committee, although there is a **Beach Recreation Committee**. This latter group is part of a new program to manage an 800-plus foot section of sandy beach on Canton Lake which has been acquired by the Town as part of a negotiated settlement with the Patten Corp. However, the mission and budget for the program have yet to be established.

Snowmobile Clubs. There are local clubs open to Hartford residents in Sumner, Canton, Buckfield, and Turner. Their interests are purely snowmobiling, and they maintain trails throughout Town.

Informal Recreation.

As in most areas of Maine, the residents of Hartford are still fortunate to be able to use privately-owned lands for most outdoor recreation activities, including hunting and fishing, hiking, snowmobiling, and horseback riding. This is a long-standing Maine tradition, and is almost taken for granted by most people. However, in recent years, certain conflicts have been created. As one example, people moving to the area "from away" may be unused to having strangers crossing their land with guns or on snowmobiles and may post their land. There is also a growing problem with vandalism and other abuses (including, but not limited to, ATVs and 4-wheel drives) to private land which prompts the owner to restrict access. The consequences are the same: a loss of public recreation opportunities on that private land.

Currently, the residents of Hartford enjoy all sorts of recreation benefits by using private lands. (For example, there are approximately 16 miles of snowmobile trails and at least 4 miles of hiking trails in Town--all of them across private land.) There are no formal arrangements which assure the public of future access to these resources, however. Also, the Town has no Conservation Commission nor other group which might have as one of its goals the securing of public access. It is expected that without a deliberate effort by interested parties to secure formal access to traditional recreation areas, they may eventually be lost to the public.

SUMMARY

The needs of the Town's residents for cultural, scenic, and recreational resources, facilities, and services are, in general, being adequately met in 1991. Hartford is a small town, but has a number of groups and individuals actively involved in providing cultural services to the community. The cultural facilities in Town are adequate to meet the expected needs in the planning period. However, no formal process exists to plan for the improvement of existing facilities and services, or the acquisition of additional ones.

There are numerous, impressive, scenic views in Hartford. However, no formal process exists to protect these resources, nor to plan for their continued access/-enjoyment by future generations.

An analysis of recreation facilities in Hartford suggests the Town needs to develop picnic tables, horseshoe courts, a playground, a multi-purpose field, a softball/little league field, a tennis court, an outdoor basketball court, and a public library. There is a Committee which will have some responsibility for managing the Town's beach on Canton Lake, although their mission and budget have not been determined. Otherwise, their is no formal process to manage, plan for, fund, or acquire recreational facilities, land, or services; nor is there a process for securing public access to traditional recreational resources on private land.

CHAPTER TEN

NATURAL RESOURCES

BEAR POND

Long ago as stories say, when the
World was young, on a summer day
Two bears arose from out of the ground.
They started ambling around.
They found a spot and settled there,
One a big, one a little Bear.

Two big holes were left where they arose,
Enormous holes as the story goes.
Water rushed in to form a pool.
We call them ponds when we go to school.
They were given names as they were formed there,
One a big, one a little Bear.

That is how two mountains and
Two ponds were named.
In this part of the country they are quite famed.
Like two bears the mountains seem to sleep
Over two ponds a watch they keep.
You may see them too, if you will look there,
One a big, one a little Bear.

-- Ruth Henry Daignault

INTRODUCTION

Just as Hartford's natural beauty has been inspirational in the past, protection of the natural environment of the Town is essential to insure a healthy quality of life for future generations in the Town. To adequately protect the environment, it is important to identify the natural elements affecting Hartford, and to understand their ecology--that is, to understand how these elements work together in processes which make the natural system work for our benefit. This chapter documents what is known about environmental resources and processes in Hartford, and examines the opportunities and limitations they present for present and future development.

SETTING

Hartford is located in the east-central portion of Oxford County, Maine, and is bordered by six other towns. These neighboring towns include Turner and Livermore (in Androscoggin County), and Canton, Peru, Sumner, and Buckfiield (all in Oxford County). The land area of Hartford is 46.8 square miles (121.3 square kilometers), or 29,695 acres (12,127 hectares). There are also numerous ponds and lakes, including Lake Anasagunticook (Canton Lake), Bear Pond, and Little Bear Pond. These water bodies have a surface area (in the Town) of 723 acres. The total area of Hartford is therefore 30,418 acres, or 47.5 square miles.

The climate of Hartford is marked by severe winters and moderate summers. The average temperature in the summer months (June through August) is 66.5 °F, and in the winter months (December through February) is 19.5 °F. The average annual temperature is 44.0°F. Precipitation averages 40.1 inches per year, and average annual snowfall is approximately 91 inches.

TOPOGRAPHY

Topography, or "the lay of the land", can influence not only the views in Town and the general, natural aesthetics of the area, but also where and how development may occur. Two factors are considered here: relief and slope.

Relief. The general height of land above both sea level and other surrounding areas varies throughout Hartford. Local relief ranges from 1374 feet above sea level at the top of Thorne Mountain in the north end of Town to about 330 feet above sea level at the southwestern edge of Town where the East Branch of the Nezinscot River (which is the boundary between Hartford and Sumner) flows into Buckfield.

Generally speaking, there are three physiographic areas of Town:

1) an area of high, steep hills in the northwest end of Town which drains southerly, into the Nezinscot River system and into the Anasagunticook Lake system;

2) an area of low, gently-rolling hills and valleys, some containing sizeable wetlands, in the central third of Town;

3) an area containing rugged hills and the Little Bear/Bear Pond valley in the southeast third of Town.

Slope. The amount of rise and fall of the ground in a given horizontal distance presents various limitations to development and other land use activities. Generally, as slopes become steeper, construction is more expensive, roads and services are more difficult and expensive to construct and maintain, and the potential for environmental degradation increases.

As was the case with relief, slope also varies throughout Hartford. In general, most of the areas of steep slope run in sinuous strips in a north–south direction along the sides of hills. This pattern was created by the intense scouring action of the ice sheet, which melted away approximately 12,000 years ago.

U.S.G.S. topographic maps were analyzed, at a scale of 1 inch = 1000 feet, to determine areas in Hartford with steep slopes. This method, and scale, are perfectly acceptable for identifying such areas for planning purposes, and these maps suggest areas in Town where particular concern and precautions should be exercised. However, approval for any development, and certain uses, in any area of Town should have site–specific review regarding slope characteristics. A general discussion of areas of steep slope appears later in this chapter.

SOILS

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

A system for rating soil suitability for low density development, based on drainage characteristics, has been developed by the Soil Conservation Service. Based upon the soils suitability, and identifying soils within a four category classification system (suitable with conditions, suitable, marginal, and not suitable), the general suitability of soils for development has been mapped and analyzed for Hartford.

Prime Farmland Soils. As defined by the United States Department of Agriculture, Soil Conservation Service, prime farmland soils are those which, nationwide, have physical characteristics which make them the best agricultural lands. Except for urban land, the designation of "prime farmland" is tied directly to soil properties, and not to current or past land use--it can be land in cultivation, forest, pasture, or idle, and it can be remote or inaccessible. If, however, the land is urban, or built–up, it cannot be designated as prime farmland.

LAND COVER

Table 10 - 1
Estimated Land Cover by General Category
Hartford, 1991

Land Cover Category	Acreage	Percent
Built-up Area	775	2.6
Agriculture	1,281	4.2
Water and Wetlands	1,812	6.0
Forest Lands	26,550	87.3
TOTAL	30,418	

Source: Hartford Comprehensive Planning Committee, 1991

Of the 30,418 acres in Hartford, nearly 27,000 acres are mixed forest in various stages of maturity, and over 1800 acres are waterbodies or wetlands of various types. These lands provide numerous benefits. Direct economic benefits are derived when timber is harvested for logs, pulp, firewood or other uses. Both woodlands and wetlands provide indirect values through recreational opportunities, wildlife habitat, and aesthetic enjoyment.

There is still a stand of virgin timber in Town--a pine lot owned by Robert and Dwight Parsons. There are several tree farms: for example those owned by Wilbur Libby, Arthur Mahoney, Boise Cascade, and the Irishes (near Swan Pond).

The largest white birch of record in the United States is located near the George Bitner home.

WETLANDS

Wetlands are often underestimated, and overlooked, but they are nevertheless extremely important natural resources. They provide temporary storage of large amounts of storm water runoff, helping to reduce flooding; they filter the water which flows through them, by chemical and biological action, increasing its natural purification; they control the effects of erosion by filtering silt and organic matter; they provide breeding, feeding, and resting habitats for many species of game and non-game wildlife--mammals, fish, birds, reptiles, and amphibians; they offer important habitat for certain plants and insects; and for more than a few people, wetlands offer unique recreational opportunities. Even the slight alteration of a wetland can seriously impact its natural function, and these benefits are difficult and expensive to regain.

The Maine Geological Survey (MGS) has identified wetlands with an area of ten acres or more, except for those which are heavily forested. The Soil Conservation Service (SCS) has mapped hydric ("wetland") soils. Also, the Hartford Comprehensive Planning Committee, during the process of preparing this plan, delineated additional areas of Town known to exhibit wetland characteristics. Boundaries of wetlands are often difficult to define precisely without thorough field-checking, so the boundaries which are mapped (including those by MGS and SCS) are therefore approximate. However, these maps do indicate areas which deserve particular attention, and approval for any development, and certain uses, in any area of Town should have site-specific review regarding wetland characteristics. Wetlands are regulated by State and Federal laws. Significant wetland areas in Hartford include:

1) From Canton Lake to Bog Brook to Nezinscot River which goes the width of the north end of Hartford;

2) Around Bunganock Pond area, some 93 acres;

3) The flood zone the length of Nezinscot River;

4) Large area around Northeast Pond and Swan Pond;

5) Lowlands in the Mud Pond area between Mahoney Road and Little Bear Mountain;

6) Small area off Route 219 and Cowett Road (Gilman Road);

7) Small area by Camp Weekeela on Little Bear Pond;

8) Area off Berry Road behind home of the Addie Berry's; and

9) Peat Bog behind Town Office owned by James Irish.

WATER RESOURCES

Watersheds. The land area that contributes water to a particular stream, river, pond, or lake is known as its watershed. Watershed boundaries are identified by connecting points of highest elevation around a body of water--that is, all the land within the watershed drains to the body of water, and all the land outside the watershed drains somewhere else. Rain and snow falling within this area eventually flow by gravity in surface runoff, streams, and ground water to the lake, pond, stream, or river which is the lowest point in the watershed.

There are a number of major drainage systems in Hartford. About 20 percent of Hartford's area--running in a broad, northwest-southeast swath across the north end of Town--drains into Lake Anasagunticook (Canton Lake, as it is more commonly called) by feeder streams, or tributaries. Significant Hartford tributaries to Canton Lake include Sparrow Brook and Thompson Brook. About one-third of Canton Lake is in Canton, where the outlet stream from the Lake (Whitney Brook) empties into the Androscoggin River.

The second, major drainage system involves approximately 50 percent of Hartford, on the west side of Town, where surface water is taken away by the East Branch of the Nezinscot River--which eventually flows into the Androscoggin River on the east side of Turner. The Nezinscot drains surface water directly from Hartford via Russell Brook and Bog Brook, and from the Bunganock watershed, which includes Bunganock Pond and Northeast Pond. Two other smaller watersheds in Town--those of Swan Pond (which is fed by Mitchell Brook) and Drew Brook--eventually drain into the Nezinscot River after including areas of Buckfield.

The final, major drainage system in Hartford contains Bear Pond and Little Bear Pond in the southeast end of Town. About one third of Bear Pond is in Turner, where the outlet stream from the Pond flows into Martin Stream, which in turn flows into the Nezinscot River.

None of these watersheds, with the exception of that of the Nezinscot, have any appreciable "upstream" areas in other towns: that is, essentially all the land area in Hartford is contained in watersheds which have their upper limits, at least, in the Town.

Surface Waters: Rivers, Streams, and Brooks. There are a number of streams and brooks that drain portions of Hartford. They include the following:

Nezinscot River, East Branch
Russell Brook
Bog Brook
Bunganock Brook
Northeast Pond Brook
Mitchell Brook
Swan Pond Brook
Drew Brook
Hayford Brook
Thompson Brook
Sparrow Brook

All these streams and brooks are designated as Class B under the State Fresh Surface Waters classification system.

Surface Waters: Lakes and Ponds. Hartford has all or a portion of seven lakes or ponds and their watersheds within its boundaries. Of these, only Lake Anasagunticook, whose watershed is only partially in Hartford, is considered to be relatively large (nearly 600 acres of surface area), while Bear Pond, whose watershed is also only partially in Hartford, is considered to be fairly large (nearly 325 acres). The other ponds in Town include Little Bear, Bunganock, Northeast, Swan, and Mud. Lake Anasagunticook and the Bears support heavy year-round and seasonal residential development along their shores. None of the other ponds have experienced any significant shoreland development; in fact, most have remained somewhat isolated and undeveloped. (It should also be noted that while Brettuns Pond is located entirely in Livermore, approximately one-seventh of its watershed is located in Hartford.)

Development activities, such as house and road construction, timber harvesting, and agricultural practices, disturb the land which is drained to a lake by streams and ground water--in other words, the watershed. Disturbed and developed land contributes pollutants and other substances to the lake; in turn, lake water quality is degraded. Activity anywhere in the watershed, even miles away from the pond or lake, has the potential to impact lake water quality.

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

as in a watershed where the vegetation holding the soil in place has been removed for house or road construction, the phosphorus can be transported, along with eroded soils, and deposited in lakes and streams.

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

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

The Maine Department of Environmental Protection (DEP) has developed a phosphorus control method which uses a phosphorus loading model to determine an allowable increase in phosphorus export from the watershed. The method arrives at this figure by coordinating the lake's sensitivity to phosphorus (DEP supplied) with information on the current water quality (DEP supplied) and the level of protection which the town selects for the lake. The latter factor is a policy decision to be made by the town, or towns, in the watershed, and is based on the importance and use of the lake.

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

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

The following is an application of the phosphorus control method to the lakes in Hartford.

In general, **a lake's vulnerability is proportional to the phosphorus load which will cause a one part per billion change in the lake's phosphorus concentration**; lakes which can accept higher phosphorus amounts without a significant rise in phosphorus concentration are less vulnerable than those which cannot. Table 10-2 is a listing of Hartford's lakes and their 1987 Phosphorus Coefficient data, as estimated by DEP. The list includes the name of the lake or pond, its surface area, direct drainage [watershed] area, and percentage of the watershed area within Hartford. Table 10-2 also lists the allowable phosphorus load which would produce an increase in phosphorus concentration of 1.0 parts per billion (which is considered the change in phosphorus concentration which will cause a noticeable change in water quality), and the allowable phosphorus load which can be generated within Hartford's part of the watershed.

Table 10 - 2
Lake and Pond Vulnerability
HARTFORD, 1987

Lakes	Lake Area (acres)	Drainage Area in Hartford (acres)	% of Watershed in Hartford	Phosphorus Load (kg/ppb)	Load from Hartford (kg/ppb)
Anasagunticook	592.8	7366	86.0	93.9	77.8
Bear	323.6	766	78.0	38.7	8.3
Little Bear	108.7	3417	100.0	22.4	22.6
Bunganock	46.9	1591	100.0	10.6	10.6
Swan	22.2	1732	100.0	10.8	10.9
Mud	7.4	435	100.0	2.9	2.9
Brettuns	153.9	336	14.0	22.0	3.1

Source: Maine Department of Environmental Protection, 1987

An inventory was undertaken late in 1990 to determine the amount of land that was subdivided in each watershed in Hartford from 1980 through 1990. Table 10-3 lists the information collected in that subdivision inventory.

Table 10 – 3
Subdivisions Within Watersheds, HARTFORD 1980–1990

WATERSHED	SUBDIVISION	YEAR	TOTAL SUBDIV ACRES	TOTAL # LOTS	AVE LOT SIZE	# LOTS – 5 ACRES	# LOTS + 5 ACRES	LOT SIZE RANGE	ACRES COMMON
Bear Pond	Mtn. View Acres	1988	31.69	4	7.90	0	4	7.25–8.52	0
Total			32	4	7.90	0	4		0
Canton Lake	Church Park	1990	16.00	5	3.20	5	0	3–3.6	0
Canton Lake	Pine Shores	1990	154.73	55	2.30	55	0	1.37–4.25	2.31
Canton Lake	Might Sightly	1990	25.20	4	6.30	2	2	5.7–6.9	0
Total			196	64	12	62	2		2.3
Nezinscot	James Perry	1985	243.70	6	41.00	0	6	20–100.4	0
Nezinscot	Patten Corp.	1987	57.00	3	19.00	0	3	18.09–20	0
Nezinscot	Ragged Jack Hghts	1987	121.2	3	40.40	0	3	40–41	0
Nezinscot	Alan's Acres	1987	22.90	3	7.60	0	3	6–9.5	0
Nezinscot	Hereford Heights	1987	172.90	9	19.20	0	9	12.7–38.5	0
Nezinscot	McNeil & Poland	1988	25.00	3	8.30	2	1	2.5–20	0
Nezinscot	Add. to Ragged Jack	1988	81.40	2	40.70	0	2	40.2–41.2	0
Nezinscot	Keens Farm	1989	20.70	4	5.20	0	4	5.1–5.23	0
Nezinscot	Ragged Jack Est.	1989	80.57	2	40.30	0	2	40.1–40.47	0
Nezinscot	Peter Roy	1990	35.86	5	7.20	0	5	5.47–10.44	0
Total			861	40	229	2	38		0.0
Town Totals			1,089	108	249	64	44		2.3

Source: Hartford Town Records, 1990

This assessment of Hartford's lakes also includes a calculation of drainage area, and a calculation of developable and undevelopable area in each watershed for which subdivided area was determined. Undevelopable area is assumed to include slopes greater than 20%, wetlands and small surface water bodies, areas over 2,500 feet from existing roads, and areas already developed. Table 10–4 presents this inventory.

Table 10 – 4
Computed Developable Area in Watersheds
HARTFORD, 1991

Lake	Drainage Area (acres)	Wetlands (acres)	Steep Slopes (acres)	Housing Units (1/acre)	>2500 ft From Road (acres)	Total Undevelopable Acres	Total Developable Acres
Anasagunticook	7366	576	1487	115	1064	3242	4124
Bear	766	48	270	97	109	524	242

Source: Androscoggin Valley Council of Governments, 1991

Table 10–5 presents the total drainage area in Hartford for each lake along with the calculated developable area for each watershed. The total subdivided acreage from 1980 to 1990 is also presented in the table, as is a straight line projection if development were to continue at the same pace over the next 50 years. The next column presents the percentage of watershed expected to be developed at this rate, and the following column presents an estimate based upon knowledge of the watersheds, the Town, and overall development patterns. The last column presents the acreage which would be developed over the next 50 years at the estimated rate of development.

Table 10 – 5
Phosphorus Load Projections for Watersheds
Hartford, 1991

Watershed	Total Watershed Area	Developable Area	Subdivided Acres 1980–89	Straight Line Estimate	Formula Estimate (%)	50 Year Estimate (%)	50 Year Estimate (Acres)
Anasagunticook	7366	4124	196	891	22		
Bear	766	242	32	144	60	40	97
Brettuns	336	–	0	–	–	20	67
Bunganock	1591	–	0	–	–	10	159
Little Bear	3417	–	0	–	–	20	683
Swan	1732	–	0	–	–	10	173
Mud	435	–	0	–	–	10	44

Sources: Hartford Town Records
AVCOG, 1991

The last column of Table 10–5 provides the information necessary to determine a per–acre phosphorus allocation when combined with a lake protection level selected from Table 10–6, which is based on each lake's water quality status.

Table 10 – 6
Acceptable Increase in Lake
Phosphorus Concentration (ppb)

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

Source: Maine Department of Environmental Protection, 1989

In determining the 50-year estimate of acreage expected to be developed in those watersheds which had experienced subdivision development, a straight-line projection of subdivisions was considered, along with watershed size, lake shore development, and overall development patterns. Based on these additional factors, the percentage of developed area on which phosphorus control decisions should be made was estimated, and the percentage was converted to acreage. In determining the 50-year estimate of acreage expected to be developed in those watersheds which had not experienced subdivision development, a simplified method was used. This latter method takes into account the location of the watershed relative to growth areas, and the types of development which would be expected to occur within the watershed.

Lake Anasagunticook, known locally as Canton Lake, is one of the more well-known lakes in the area. Anasagunticook has experienced heavy development pressure along its shores and within its watershed, and is the source for the public water supply for the town of Canton. The history of Anasagunticook shows that algae blooms do occur sporadically, indicating that the lake is very sensitive to phosphorus input. Bear Pond and Little Bear Pond have experienced considerable development pressure, also, but have maintained a relatively good water quality, at least through the mid-1980s. Since around 1985, the transparency, or clarity, of the water has shown a slight decline. Hartford shares a small portion of the Brettuns Pond watershed with the neighboring town of Livermore. Brettuns Pond has experienced significant development, not only along its shoreline but also within the rest of its watershed. In the past, the pond received large amounts of nutrients from farming activity in the area, creating some problems with algae blooms in the early 1970s. The pond has gradually improved since that time. While the other ponds have not experienced any subdivision pressure in the past, it is likely their watersheds will in the future. The projections are based on the attractiveness of the lake and its watershed for development.

In Hartford, all of the ponds and lakes have moderate/sensitive water quality. The moderate/sensitive rating generally means that the water quality is about average for Maine lakes, but that the pond or lake is sensitive to increased phosphorus loading and possible recycling of phosphorus from bottom sediments. The smaller of these ponds have routinely been assigned the moderate/sensitive status due to insufficient monitoring data, as is the practice of DEP. The Planning Committee will be charged with determining the actual Lake Protection Levels which will be used to determine the allowable phosphorus allocation for each lake watershed.

It is recommended that a high level of protection be assigned to Canton Lake, since it has regional significance as a public water supply. Bear Pond and Little Bear Pond should receive a medium level of protection. A medium level of protection should provide good, long-term protection for these ponds. It is further recommended that Bunganock, Northeast, Swan, and Mud Ponds should receive a low level of protection. Table 10-7 establishes the suggested protection levels

and the allowable per-acre phosphorus load for each watershed in Hartford, based on those levels.

Table 10 - 7
Lake Protection Levels and
Allowable Per-Acre Phosphorus Loads for Watersheds
HARTFORD, 1991

Watershed	Lake Protection Level	lbs/ppb	Allowable Per-Acre Phosphorus Load (lbs/acre/year)
Anasagunticook	High	77.8	.065
Bear	Medium	8.3	.085
Little Bear	Medium	22.6	.033
Bunganock	Low	10.6	.083
Swan	Low	10.9	.079
Mud	Low	2.9	.082
Brettuns	Medium	3.1	.046

Source: Androscoggin Valley Council of Governments, 1991

Ground Water. Ground water is water that is derived from precipitation that infiltrates the soil, percolates downward, and fills the tiny, numerous spaces in the soil and cracks or fractures in the bedrock below the water table. Wells draw water from permeable layers or zones in the saturated soil and fractured bedrock. In general, the saturated areas which will provide adequate quantities of water for use are called aquifers. Two major types of aquifers occur in Maine: sand and gravel aquifers and bedrock aquifers. Wells in sand and gravel aquifers yield from 10 gallons per minute (gpm) up to 2,000 gpm while wells in fractured bedrock generally yield from 2 to 25 gpm.

Sand and gravel aquifers. A sand and gravel aquifer is a water–bearing geologic formation consisting of ice contact, outwash, and alluvial sediments left by the melting glaciers and subsequent melt–water rivers and streams that were once part of this area of Maine (roughly 12,000 years ago). The sand and gravel deposits range from ten feet to more than one hundred feet thick.

Sand and gravel aquifers are generally large, continuous, sand and gravel deposits that extend along a river valley. The sand and gravel deposits fill the valley between the hills on either side to create a fairly flat valley floor. In most cases, the flow path of ground water through the aquifer is from the valley walls towards a stream or river flowing along the valley floor. The stream, then, acts as a drain where ground water enters the surface water drainage system, and flows downstream.

Water in the aquifer moves between the sand and gravel grains at a rate that is determined by the sizes of the pores (called the porosity) and the steepness of the flow path (called the hydraulic gradient). The flow rates of ground water through the sand and gravel found in the area average from 10 to 500 feet per day, depending on the coarseness of the material the water is travelling through.

Sand and gravel aquifers can be contaminated from any substances that seep into the ground directly or are carried into the ground after dissolving in water. As water infiltrates from the ground surface and goes down through the unsaturated zone above the water table, the soil, sands and gravel act as a filter and remove some of the contaminants. The degree of filtration depends on the thickness of the unsaturated zone above the water table, and the kind of contaminants. Once contaminants enter the water table, they may travel thousands of feet over time. In many Maine aquifers, the water table is generally close to the surface (within 20 feet) so that natural removal of contaminants by the soil is not nearly complete before the pollution reaches the ground water.

The slow rate of ground water movement causes this resource to be particularly sensitive to contamination. Once contaminants enter the ground water, they do not flush out of the system readily and residual contaminants are often left on the particles of sand or gravel to leach slowly into the surrounding ground water.

Often hundreds of years are necessary for an aquifer to clean itself of contaminants through natural processes.

Sand and gravel aquifers have been delineated (by the Maine Geologic Survey, 1985) in Hartford along the Nezinscot River. The majority of these aquifer areas yield 10 to 50 gallons per minute, although a few areas yield over 50 gallons per minute. A reproducible map (scale 1:12,000) which depicts these areas will be made available to the Town by AVCOG.

Bedrock Aquifers. Most of the private individual wells in Maine are drilled into bedrock. The wells penetrate through water-bearing cracks, or fractures, in the bedrock. These water-bearing fractures are bedrock aquifers. Most domestic wells penetrate relatively small fractures and, therefore, produce only small amounts of water. However, there are some areas where the volumes of water are adequate to provide for municipal water supplies.

Over the past several years, it has been found that bedrock aquifers are highly susceptible to contamination. The fracture system in the rock is often generally extensive and interconnected over large distances. Since the water is confined to the narrow fractures, it may move very quickly over the large distances especially when it is being pumped for a supply. The type and depth of soil above the bedrock, as well as the extent of area recharging the bedrock aquifer, determine the degree of contamination. The greatest potential for bedrock aquifer contamination comes from underground storage of petroleum and other chemical products. Underground storage tanks are that much closer to the water table, and, in some cases, may even have been placed in the water table. Most of these tanks do not have a monitoring system to warn of leakage.

Unlike sand and gravel aquifers, bedrock aquifers have not been mapped and resources are not available to conduct any significant research or data gathering to further document the existence of any significant bedrock aquifers. Most threats to the aquifers are from isolated development such as residential subdivisions or occasional commercial businesses, such as convenience store/gas station/garage operations. Since most of the areas where bedrock aquifers exist are hilly, substantial commercial or industrial development is not anticipated. Data collected from local well drillers provide information.

Threats to Water Resources: Non-Point Sources. Often, when one thinks of water pollution, what comes to mind is the pollution which originates through discharge pipes--that is, pollution which is generally collected from known sources and discharged at a single location or point. However, non-point pollution is the pollution which comes from all other sources. It is created by virtually all land use activities, ranging from urban development to agricultural and forestry operations. While a few types of non-point pollution--such as erosion of streambank channels--occur due to natural forces, the primary concern is with pollution resulting from human activities and disturbance of the land. In addition to having a negative impact on surface waters--lakes, streams, and rivers, as well as wetlands--non-point sources may also seriously affect ground water. Any activity which disturbs the land or changes its use has some [although in some cases small] impact on either surface or ground water quality.

The federal, state, and local levels of government have been concerned with non-point pollution for some time. However, there are no widespread regulatory efforts yet, and in Maine there is no concise set of standards to insure that sources are being kept to a minimum. Therefore, the purpose of the State Plumbing Code and of local regulations is to limit the amount of impact on the ground water such that it is still usable for drinking.

Types of Non-point Source Pollution.

There is considerable debate about whether non-point pollution should be considered from the point of view of its sources or the resulting types of pollution. The following paragraphs present some information concerning the more notable types of non-point source pollution and the concerns for water quality related to each source.

> Sedimentation of surface water bodies. When soil is eroded, particles of soil are carried away and then deposited as sediments in lakes, streams, rivers, or wetlands. The sediments adversely impact living conditions for both animal and plant life. While still in suspension, soil particles can irritate and abrade fish gills and reduce sunlight which is required for plant life within the water body. When the soil particles settle out, the sediments can cover bottom habitat, thereby significantly changing it and adversely affecting wildlife feeding and breeding areas.
>
> Hazardous Materials. When allowed to enter surface waters, heavy metals, PCBs, and other types of hazardous materials can accumulate in the tissues of living organisms, causing problems for wildlife, and possibly human, food chains. (An example of this is the pesticide DDT which was found to soften eagle eggs so that the eggs were unable to hatch.) Similar wastes can also enter the ground water through spills, leaks in floor drains or tanks, and poorly constructed storage facilities, and degrade the ground water quality below acceptable drinking water standards. In addition, the

contaminated ground water may discharge to surface water bodies where the problems mentioned previously may occur.

Petroleum Products. Although not all petroleum products are considered to be hazardous, they may impact both surface and ground waters either by creating toxic conditions or by degrading drinking water conditions.

Non-hazardous Leachate Materials. Some chemicals, although not hazardous, can also degrade both surface and ground waters. Perhaps the best example of this is road salt which has been known to contaminate aquifers so that water cannot be used for drinking purposes. In some areas, salt has also degraded surface waters where significant concentrations--from either salt storage piles or road salting practices--have created a salt layer at the bottom of small ponds and lakes.

Non-hazardous Organics. As with the case of sewage, when organic compounds enter surface waters, they are degraded by bacteria. During this process, however, the bacteria demand large quantities of oxygen, thereby stripping the water of the oxygen which is essential to fish and other animal life. Thus, improperly treated organics that enter surface water bodies can have the same negative impact as toxic chemicals in that they may quickly kill off significant numbers of fish and other animals. While it is less likely these types of organics may enter the ground, they can certainly also have an adverse effect on using ground water for drinking purposes. While organics are more commonly the result of point sources of pollution, urban runoff and runoff from areas where significant quantities of organic materials (such as sawdust piles, manure, and vegetative waste) have been either stored or discarded can have the same effect of depleting oxygen from surface and ground water.

Sources of Non-point Source Pollution.

Another method of categorizing non-point pollution is by the land use activities which are responsible for causing them. The following paragraphs describe some of the ways certain general land use types may contribute to non-point pollution. Then, Table 10-8 lists some specific land use activities which may generate non-point source pollution. It should be noted that many of these activities can contribute more than one type of pollution.

Housing and Residential Land Use. Residential development has several potential impacts which are related to non-point source pollution. First, the construction activity can lead to erosion and sedimentation. Second, leaky underground fuel storage tanks can cause ground water contamination. Third, septic system leachate which is not totally treated before leaving the leachfield may seep into and degrade surface or ground waters. Usually,

housing densities can be managed to insure that contamination by nitrates does not cause drinking water supply problems. Finally, the application of fertilizers, herbicides, and pesticides to lawns and gardens, the use of household cleaners and other chemicals and their disposal into septic systems, and other releases of chemicals all represent potential sources of serious water contamination.

Commercial Activities. Commercial development also has several potential impacts related to non-point source pollution, ranging from erosion and sedimentation during the construction process to activities which could occur at the commercial establishment. For example, rainwater runoff from parking lots can carry sediments, phosphorus, oils, and other substances to streams or dry wells . Specialty commercial operations--such as filling stations, car washes, and other activities where petroleum products or hazardous materials are stored or handled on site--are also of concern. Even warehousing of dry chemicals--where fires or water damage could carry the material into suspension and allow it to wash into surface or ground waters--can pose a serious threat to water quality.

Industrial Activities. Of particular concern are industries which store, handle, or use various types of chemicals. Leaks, spills, or illegal dumping can contaminate ground and surface waters as the material leaches down through the ground, or is washed into streams or other water bodies.

Gravel Pits. To some extent, earth material acts as a filter between the ground's surface and the ground water table. Any excavation, then, which reduces the amount of earth material also reduces the earth's capacity to absorb any potential contamination, and increases the chance for ground water degradation. Of particular concern are gravel pits located on or near aquifers. For example, inadvertent spills and leaks of petroleum-based fluids during the refueling and/or maintenance of heavy equipment operating in the pit can easily contaminate the ground water. In addition, pits which are abandoned or rarely-used create an attraction to illegal dumping of waste materials (not necessarily by the owner or operator of the pit).

TABLE 10 - 8

Land Use Activities Which May Generate Non-point Source Pollution

gas stations/service stations	wood preservers
truck terminals	paper mills
auto repair/body shops/rustproofers	leather & leather products
fuel oil distributors/storers	textile mills
oil pipelines	electrical equipment manufacturers
auto chemical suppliers storers/retailers	plastic/fiberglass fabricating
small engine repair shops	rubber manufacturing
dry cleaners	silicone/glass manufacturing
furniture strippers/painters/finishers	pharmaceutical manufacturers
photo processors	chemical reclamation facilities
appliance repairers	boat builders/refinishers
printers	industrial waste disposal/impoundment areas
auto washes	residences
laundromats	septic systems
beauty salons	heating oil storage (consumption & use)
medical, dental, vet offices	stormwater impoundment sites
research laboratories	gardening centers/golf course/park
food processors (brines, etc.)	landfills/dumps/transfer stations
meat packers/slaughter houses	junk and salvage yards
concrete/asphalt/tar/coal/companies	abandoned wells
salt piles/sand-salt piles/snow dumps	graveyards
railroad yards	sand and gravel mining operations
airport maintenance/fueling areas	other mining operations
pesticide/herbicide manufacturers, storers, retailers	chemical manufacturers
machine shops	manure piles/feed lots
fertilized fields/agricultural areas	agricultural spreading-machinery filling/cleaning areas
metal platers/heat treaters/smelters/ annealers/descalers	timber harvesting

SOURCE: "The Planning Process for Local Groundwater Protection", Groundwater Standing Committee, Land Water Resources Council, Maine Executive Department, 1988.

The Maine Department of Environmental Protection (DEP) has identified only one underground storage tank in Hartford, owned by Earl Marston. DEP has also classified Hartford's sand-salt storage site as Category 3 ("Moderate-High Priority: any site where chloride levels in nearby domestic or secondary water supplies exceed 20mg/l, OR any site likely to be causing chloride concentrations in existing water supplies to exceed 20 mg/l where water samples could not be collected to confirm this").

HAZARD AREAS

Flood Plains. Every year, floods destroy millions of dollars worth of property throughout America, and these problems are also true for Maine, and Hartford. Unfortunately, many millions of dollars worth of property will be destroyed in the future as a result of short-sighted planning and the desire for short-term profit-taking without regard for future consequences.

A flood plain includes land adjacent to a watercourse which is subject to inundation from a flood having at least a 1 percent chance of occurring in any one year. Stated another way, these lands have a 100 percent chance of flooding within a 100-year period. (Such an event is commonly referred to as a "hundred-year flood", although they can certainly occur more than once in that period of time.)

A flood plain can be thought of as having three separate parts:

1) the ***channel***--that portion of the floodplain which carries the normal stream flow;

2) the ***floodway*** *--that portion of the flood plain which has a 1-percent-or-greater chance of flooding each year; and

3) the ***flood fringe***--that portion between the floodway and the limits of possible known flooding.

***Note:** The Federal Emergency Management Agency (FEMA) is the Federal government agency responsible for administering the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. By FEMA's definition, the floodway is the channel of a stream, plus any adjacent flood plain areas, that must be kept free of encroachment so that the 100-year flood can be carried without substantial increases--i.e., 1.0 foot--in flood heights. By most definitions, then, the channel of the watercourse and the normal course of a 1 percent flood is termed the floodway, and represents a **danger zone** where experience and statistical probability indicate that destructive flooding will most probably occur. The flood fringe area is a **warning area** where both historical evidence and statistical probability indicate that backup water or occasional moving water may occur during periods of unusually high water in the floodway.

A few existing residential structures in Hartford are susceptible to flood damage. Obstructions such as trees, brush, and ice at bridges and dams can aggravate this flooding. Major flooding is generally caused by a combination of heavy winter and spring rains and snowmelt. Less frequently, flooding occurs later in the year as a result of heavy rain from hurricanes.

Significant flooding has occurred on streams in Hartford in the past. The most notable floods in the recent past occurred in April 1987.

Methods for flood protection fall into two categories:

1) structural and corrective, or
2) non-structural and preventative.

Structural measures are extremely expensive, and include reservoir construction and operation, levees and bulkheads, and channel alteration. Some buildings may also be flood-proof to reduce or eliminate flood damage.

Non-structural or preventative measures involve little or no expense, such as keeping people and the development of damage-prone property out of the floodway and regulating uses in the floodway to minimize destruction when flooding occurs. Encroachment on flood plains, such as structures and fill, reduces flood-carrying capacity, increases flood water levels and velocities, and increases flood hazards in areas beyond the encroachment itself.

Flood protection measures in Hartford include flood plain management, flood warning and emergency procedures, and some local structural controls.

The Federal Emergency Management Agency (FEMA) has identified and mapped flood plains in Hartford, and the U.S. Department of Agriculture, Soil Conservation Service (SCS), has identified and mapped flood plain soils in Hartford. Together, these two sources provide information for identifying the flood plain areas in Town. In general, the principle floodplain areas in Hartford are located [at least partly] around the lakes and ponds, streams, and wetlands in Town. A reproducible map (scale 1:12,000) showing FEMA-identified floodplains will be provided to the Town by AVCOG.

Steep Slopes. As discussed earlier, steep slopes can present severe limitations to development. Generally, as slopes become steeper, construction is more expensive, roads and services are more difficult and expensive to construct and maintain, and the potential for environmental degradation increases.

Slopes greater than 15 percent and slopes greater than 20 percent have been delineated for Hartford by AVCOG using USGS topographic data from 7 $^{1}/_{2}$ minute quadrangle sheets, expanded to a scale of 1:12,000. Although approval for any development, and certain uses, in any area of Town should have site-specific review regarding slope characteristics, these maps suggest areas where particular concern and precautions should be exercised.

Generally speaking, there are areas in Hartford where the land slopes greater than 20 percent (i.e., rises 20 feet or more with 100 feet of horizontal run) scattered throughout all parts of Town. There are some areas, however, where steep slopes are more concentrated. These areas include:

1) the mountains in the north end of Town (Ragged Jack, The Saddleback, Thompson, Browns, Trask, and Thorne);

2) several hills in the central part of Town (The Pinnacle, Bartlett, Thompson, Doten, and Holmes);

3) and many hills and mountains in the southern end of Town (Robinson, Cary, Hutchinson, Hayford, and Irish Hills, Deacon Pinnacle, and Big and Little Bear Mountains).

In addition, there are numerous areas of Hartford which have slopes of 15 to 20 percent, generally associated with the areas described above.

WILDLIFE HABITAT

Wildlife should be considered as much a natural resource of Town as are surface waters or forest land. Our wildlife species are a product of the land and, thus, are directly dependent on the land base for habitat. Wildlife habitat is constantly changing through natural succession; and, in today's world, wildlife habitat is increasingly being affected by humans. As local and regional conditions and land use practices change, the wildlife of an area can also be expected to change, for all wildlife requires adequate habitat to sustain their populations. If a habitat does not exist, or an existing habitat is lost, various types of species will not occur. Through thoughtful land use planning, adequate habitat and, in particular, areas of critical concern can be managed to maintain wildlife as a viable resource.

Although there are many types of habitat important to our numerous species, there are four which are considered critical. They are:

1) wetlands
2) riparian areas (shorelands of lands, ponds, rivers and streams) and major watercourses
3) deer wintering areas
4) other unique and/or critical habitats.

Hartford's numerous wetland areas, woodlands, and farmlands provide outstanding wildlife habitats. Due to their limited nature, and their importance to wildlife, any loss of these areas will have an immediate, negative impact on wildlife.

As already mentioned, every wetland has wildlife value. In this sense, small wetlands can be as important as larger ones. Several wetland areas have been identified by the Department of Inland Fisheries and Wildlife as important waterfowl breeding and nesting areas in Hartford. These are primarily associated with several of the Town's water bodies and wetlands. The wetland areas of Hartford are described earlier in this chapter.

The areas along watercourses support high levels of wildlife populations. Besides providing habitat for fish and a variety of aquatic furbearers, these areas provide travel lanes for numerous wildlife species, and act as transition zones between various habitat types. A list of all major water courses occurring in Hartford is included earlier in this chapter.

While deer range freely over most of their habitat during spring, summer, and fall, snow in excess of 18 inches forces them to seek out areas which provide protection from deep snow and wind. In addition, deer may also use cut–over areas and hardwood ridges that provide abundant food. Size, shape, and location of these wintering areas varies from year to year, or within a given year; and as winters in central Maine are not particularly severe nor restrictive for deer, many

of these areas are often associated with the presence of active timber cutting operations. Most wintering areas, however, are traditional in the sense that they are used year after year, and generally the largest "yards" support the largest wintering populations and coincide with the largest undeveloped blocks of forest land. Smaller areas support fewer numbers of wintering deer, and their size seems to be limited by past and present land use patterns. These traditional wintering areas are comprised mostly of spruce or fir, but other softwoods such as cedar, pine or hemlock may be present. Deer wintering areas may represent only 10% of the total deer range, but, without such areas, deer will not survive in any but the smallest numbers. Although many types of human activity are not compatible with deer yards, good timber management can be beneficial.

The Maine Department of Inland Fisheries and Wildlife has documented the location of 9 deer wintering areas in Hartford. These habitats are places where deer go in the winter to seek shelter from deep snow, cold temperatures and wind. These wintering yards are critical to deer populations. They are:

1) Doten Hill in Bunganock area (this is the largest);

2) Northeast Pond and Deacon Pinnacle area;

3) Irish Hill area;

4) Cowett Road (Gilman Road) and Route 219 area;

5) Swan Pond area;

6) Below Big Bear Mountain;

7) Off Little Bear Mountain behind home of George Marston's;

8) Ragged Jack Mountain area;

9) Between Davenport and Stetson Roads.

The number, location, and boundaries of these areas are inexact and variable and therefore do not warrant sole consideration. Assuring that deer have sufficient quantity and quality winter range can best be accomplished by providing ample open space and a mixture and diversity of habitat types.

While the critical areas described above meet the specific needs of certain wildlife species and are necessary for their survival, they alone cannot support adequate levels of population numbers and diversity of wildlife. A variety of habitat types ranging from open field to mature timber are necessary to meet the habitat requirements of most wildlife species throughout the year. Since different species have different habitat requirements and home ranges, loss of habitat will affect

each species in different ways, ranging from loss of individual nesting, feeding, and resting sites, to disruption of existing travel patterns.

Generally, loss of this habitat will not have an immediate negative impact on wildlife populations. However, the cumulative loss will reduce the capacity of the area to maintain and sustain viable wildlife populations. Since any given specie's habitat is too complex and ill-defined to allow presentation on a map, it is recommended that sufficient areas of forest and agricultural open space be maintained to support wildlife in general.

In addition to the critical wildlife habitats discussed above, additional forest acreage must be maintained to meet the year-round habitat requirements of deer and other species of wildlife. Since deer have fairly large home ranges (1-2 square miles), maintaining sufficient acreage for them should also meet the habitat requirements of most other, smaller species.

As the human population of Hartford continues to increase, additional pressures will be levied on existing wildlife resources. (For example, the loss of farmland to development, or the construction of a new road in a subdivision, thereby dividing previously unbroken land, accelerates the loss of wildlife habitat.) The resulting impacts on wildlife populations and diversity can be reduced by preserving critical areas, maintaining the maximum amount of land in forest and agricultural uses, and designing and locating future developments in ways which reduce the physical loss of wildlife habitat.

UNIQUE NATURAL AREAS

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

Rare and endangered plants located in Hartford, according to MNHP, include the following:

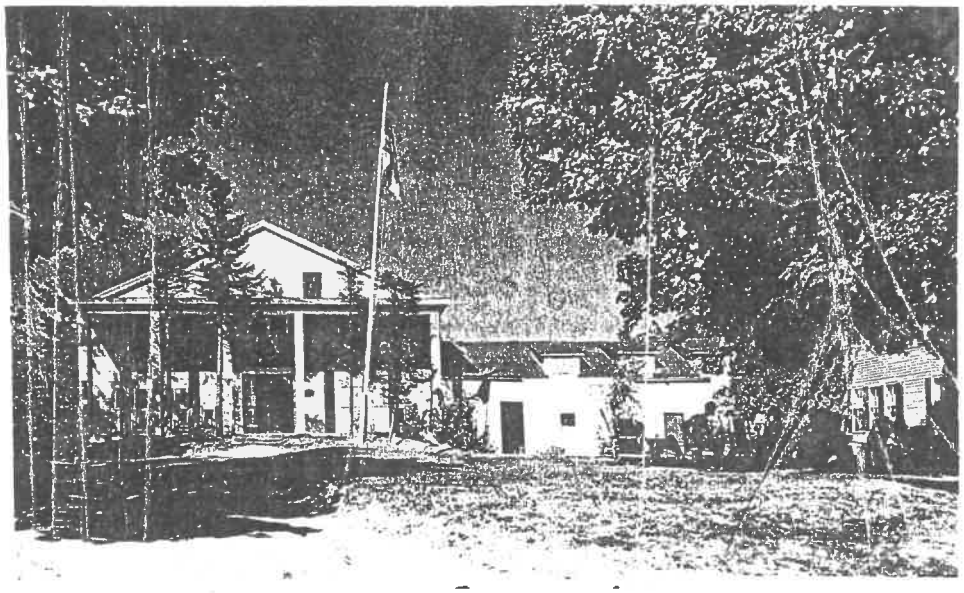
Scientific Name	Common Name
Lycopodium Sabinifolium	Ground Fir
Spiranthes Lucida	Shining Ladies' Tresses
Subularia Aquatica	Water Awlwort
Utricularia Resupinata	Small Purple Bladderwort

The MNHP also lists an Acidic Pondshore in Hartford.

Critical and Natural Areas Programs. The State Planning Office (SPO) has identified no sites in Hartford as Critical Areas and deserving of special attention. The site of the Largest White Birch, however, is listed by SPO as a significant natural area.

BEAR MOUNTAIN, 1883

A wanderer found himself at the height of the land, where the road passes over the mountain, between Big Bear and Little Bear in Hartford, Maine. This is one of the highest points in this part of the state that can be attained with horse and carriage, and can be reached by ascending a long, steep, rocky hill, either from the east or west side. The landscape view is so grand and extensive it is often called ***"the second greatest show on earth".***



GREEN ACRES

CHAPTER ELEVEN

LAND USE

INTRODUCTION

Hartford has a total land area of approximately 47.5 square miles (30,418 acres). During its history, Hartford has changed from a rural, farming community with vast woodlands and a small industrial center in the Village, to a rapidly growing town with significant areas along the shores of its lakes used for seasonal home development. In 1991, there were approximately 900 parcels in Town, with an average area of nearly 25 acres. There were 155 parcels which were 50 acres or larger.

How land in Town will be used for various types of land uses, how much land will be used, and where, depends on decisions made now and in the upcoming years. It is extremely important that those decisions be based on an understanding of current patterns, and the capability of the land to accommodate those future uses.

This chapter documents current land use patterns in Hartford, discusses the trends which have caused those patterns to develop in recent years, estimates future general land use requirements, and identifies areas of Town which are suitable and unsuitable for growth and development.

HISTORICAL LAND USE PATTERNS

In March, 1981, a study was published by Androscoggin Valley Council of Governments which identified land use in Hartford, based on 1977 aerial photography. The following table lists the amount of land in general land use categories in 1977. Following the table is a discussion of each of the general land use categories.

Table LU – 1
Land Use by General Category
Hartford, 1977

Land Use Category	Acreage	Percent
Residential	330	1.1
Cultural/Recreation	506	1.7
Commercial/Industrial	30	0.1
Agriculture	1,331	4.4
Water and Wetlands	1,812	6.0
Forest Lands	26,409	86.8
TOTAL	**30,418**	

Source: Androscoggin Valley Council of Governments, 1981
Hartford Comprehensive Planning Committee, 1991

Agricultural Land Use. This is the second most prevalent land use in Hartford (woodlands make up the greatest use). The agricultural land use category includes those lands used to produce agricultural commodities: croplands, pasturelands, orchards, and farmsteads. Forest lands which are managed and harvested and which are closely associated with agriculture in Hartford are considered as a separate, individual land use category in this Plan.

The family farm, as a means of making a living, is now extinct in Hartford. The last working farm (Bradford Beedy) went out of business in the early 1980s. Agriculture is now limited to tree farms, one producing orchard (Crestview Orchards on Church Street), and three blueberry fields. Several people raise farm animals, mostly for their own use.

It is difficult to calculate the amount of land used for agriculture in Hartford. In the 1981 AVCOG study mentioned above, 1,331 acres were identified as being used for agriculture. The following table shows the various types of agricultural uses which made up the total acreage.

Table LU – 2
Agricultural Land Use
Hartford, 1977

Type of Use	# of Acres
Hayland	862
Row crops	53
Pasture	265
Bare Ag. land	10
Orchards	141
TOTAL	**1,331**

Source: AVCOG, 1981

The majority of land utilized for agriculture is located on Church Street, as apple orchards. Smaller tracts of agricultural land are located throughout other parts of Town.

It is estimated that since 1977 there has been a loss of at least 50 acres of farmland in Hartford. Land once used for agriculture was converted to other uses--principally woodlands, although a small amount has been used for residential development.

Residential Land Use. This category includes those uses listed in the following table, which also shows the amount of land used for residential activity in 1977.

Table LU - 3
Residential Land Use
Hartford, 1977

Type of Use	# of Acres
Single family	255
Seasonal	75
TOTAL	**330**

Source: Androscoggin Valley Council of Governments, 1981
Hartford Comprehensive Planning Committee, 1991

It is assumed by this Plan that the additional amount of land in Town used for seasonal home development since 1977 is approximately 15 acres. In addition, several seasonal homes have been converted to year-round use. The amount of land used for multi-family residential use since 1977 has not changed. The majority of the land area used for residential activities since 1977, therefore, has been for single family and mobile homes. Table LU-4 compares the numbers of each of the types of housing structures in Hartford at the end of 1990 with comparable numbers reported in the 1980 Census.

Table LU - 4
Housing Units, Change by Type
HARTFORD, 1980-1990

	1980	1990	# Change	% Change
Single-Family	133	181	48	36
Multi-Family	2	2	0	0
Mobile Home	43	73	30	70
Seasonal	161	180	19	12
TOTALS	**339**	**436**	**97**	**29**

Sources: 1980 U.S.Census
Hartford Town Records

It is important to note the number of new homes in Hartford (and not the percent increase) in the preceding table. Prior to 1988 there was no minimum lot size in Town, but in 1988 a 3-acre minimum lot size was adopted. However, lot sizes have tended to be generally large. Therefore, an increase of 39 year-round homes (with an assumed 1.5 acre average lot size) and 17 seasonal homes (with an assumed 0.5 acre average lot size) from 1980 through 1987, and an increase of 41 total homes from 1988 through 1990 (assuming a 3-acre minimum lot size) would consume at least 190 acres for residential use. This amount is an estimated minimum increase in land use--two other factors suggest a significantly higher total.

First, since the total acreage amount shown in Table LU-3 was based on 1977 aerial photos, the area used for residential development during the years between 1977 and 1980 is not accounted for. Also, a majority of new house lots since 1980 are at least 3 acres in size. Therefore, it can be reasonably assumed that the additional amount of land area used for residential activities since 1977 is closer to 225 acres, resulting in an estimated total of approximately 480 acres for this type of land use as of 1991. (It should also be noted that as of 1991 another 155 acres have received subdivision approval but have not yet been developed.)

A structures inventory conducted in the spring of 1990 by members of the Comprehensive Planning Committee showed that, since 1980, single family and mobile home development has occurred in Hartford with no pattern of concentration in any particular area of Town. It has been so scattered that no particular areas can be singled out as receiving a majority of the overall development.

Seasonal development patterns are an important element of Hartford's land use. The shorelines of Bear and Little Bear Ponds have at least 120 seasonal dwellings. Anasagunticook Lake has at least 40 seasonal dwellings along its

shorelands. Seasonal development along the shores of these water bodies are, for the most part, served by seasonal roads not designed for year-round use. In addition, the lots upon which seasonal dwellings are located are often at current day size standards. While many of these seasonal dwellings were intended for seasonal use, only some have been converted to year-round. Such conversion raises questions relating to access and water quality.

Commercial, Industrial, and Related Land Uses. Although no land was reported used for the activities in this category in the 1981 study, the Comprehensive Planning Committee has "reconstructed" an acreage figure for that time, taking into account the documented existence of gravel pits and other uses. The proportions of the specific components of this category, as of 1977, are listed in the following table.

Table LU - 5
Commercial, Industrial, and Related Land Use
Hartford, 1977

Type of Use	# of Acres
Commercial	5
Solid Waste Disposal	0
Sand and Gravel Pits	25
TOTAL	**30**

Source: Hartford Comprehensive Planning Committee, 1991

There are a number of gravel pits in Hartford. Donny Hutchins has pits on Darrington Road and Desert Road, Alan McNeil has pits on Route 140 and Desert Road, and Peter Roy has a pit on Route 140. The active acreage is less in 1991 than in 1977.

Cultural, Entertainment, and Recreational Land Use. The following table lists the amounts of land used for these activities in Hartford in 1977.

Table LU - 6
Cultural, Entertainment, and Recreational Land Use
Hartford, 1977

Type of Use	# of Acres
Cultural/Entertainment	74
Recreation	432
TOTAL	**506**

Source: Hartford Comprehensive Planning Committee, 1991

The recreation category in the preceding table accounts for the land used at Camp Wekeela--a boys' and girls' camp on Bear Pond--and 80 acres used for a golf course at the Green Acres Inn (only about 40 acres of which remain in 1991). Also, the entire Pine Grove beach and woods area, then owned by Timberlands Inc., was a significant recreation area with swimming and camping. It included over 250 acres, only about 7 of which are now available for public use as the Town beach and parking area--the remainder was subdivided into 55 house lots.

Forest Land Use. In the 1981 AVCOG land use survey, all land area not classified as being in other uses was assigned to this category. It is, by far, the major land cover type in Hartford.

Table LU – 7
Forest Land Use
Hartford, 1977

Type of Use	# of Acres
Shrub & Brush land	75
Mixed Forest land	26,577
TOTAL	**26,652**

Source: Androscoggin Valley Council of Governments, 1981

Although most of the Town is forested, Hartford tax records indicate that in 1991 only 142 parcels, totalling 12,530 acres, were registered under the Tree Growth Tax Law.

Other Undeveloped Land and Water. This category accounts for all wetlands and water bodies in Hartford. It is assumed by this Plan that total acreage in this category is the same in 1991 as it was in 1977.

Table LU – 8
Other Undeveloped Land and Water
Hartford, 1977

Type of Use	# of Acres
Lakes, Ponds, and Streams	723
Forested Wetlands	380
Non-forested Wetlands	709
TOTAL	**1,812**

Source: Androscoggin Valley Council of Governments, 1981

FUTURE LAND USE TRENDS

Since 1977, Hartford has experienced considerable land use change. In terms of actual numbers of acres, residential development has accounted for the most significant shift in land use over the period--there was nearly as much more additional land used for this purpose in the 13 years after 1977 as in all of Hartford's previous history. These increases have come largely at the expense of forest and agricultural lands. Commercial, industrial, and related activities experienced no change in land area used in Town during the period, and recreation use experienced a sharp drop in the amount of land used.

Table LU - 10
Estimated Land Use Change, by General Category
Hartford, 1977-1991

Land Use Category	Estimated Acreage 1977	Estimated Acreage 1991	Percent Change
Residential	330	480*	45.5
Commercial	5	5	0.0
Cultural/Recreation	506	265	-47.6
Industrial & related	25	25	0.0
Transportation	0	0	0.0
Agriculture	1,331	1,281	- 3.8
Water and Wetlands	1,812	1,812	0.0
Forest Lands	26,409	26,550	0.5
TOTAL	**30,418**	**30,418**	

Source: Androscoggin Valley Council of Governments, 1991
Hartford Comprehensive Planning Committee, 1991
* does not include 155 acres approved for subdivision

Although the data in the proceeding table are estimates, they do demonstrate some clear land use trends occurring in Hartford. Specifically, some recreation opportunities have been lost, and significant areas of forest and agricultural land are being converted to residential uses. All areas of Town have seen some degree of new housing. The level of residential development in Hartford is expected to be above that of adjacent communities over the next ten years, although the exact rate of growth will be affected by economic and market conditions. In other sections of this Plan (addressing population and housing) it was estimated that Hartford's population will grow to approximately 910 by 2005, causing the demand for an additional 100 to 105 new, year-round housing units in Town in the next 10 to 15 years. With the current 3-acre minimum lot size requirement in Town, this could mean the need for at least **300 additional acres of land** to accommodate the expected demand--land that will have to be taken out of some other use, most likely forestry or agriculture.

CHAPTER TWELVE

TOWN GOVERNMENT

ADMINISTRATION

Hartford residents administrate their municipal affairs with a Selectmen/Town Meeting form of government. Town Meeting is held every June at the Town Hall in Hartford Center.

Selectmen. There are three Selectmen who serve on a 3-year rotational basis--that is, every year one Selectman is elected to serve a 3 year term, so that only one position becomes open each year. The Selectmen also perform the role of tax assessors. The Selectmen hold a public meeting on the first and third Wednesday nights of each month at the Town Office. Each Selectman receives $2,000 annually.

Tax Collector. The Tax Collector is elected annually at Town Meeting. The Collector's office is located in the Town Office, and is open on a regularly scheduled basis (three days a week: Monday, Wednesday, and Friday).

Town Clerk. The Town Clerk is elected annually at Town Meeting. The Clerk's office is located in the Town Office, and is open on a regularly scheduled basis (same as Tax Collector).

Town Treasurer. The Town Treasurer is elected annually at Town Meeting. The Clerk's office is located in the Town Office, and is open on a regularly scheduled basis (same as Tax Collector).

Code Enforcement Officer. The CEO is appointed by the Selectmen, with an indefinite contract term. The position is paid by the Town on an hourly basis for time served, an amount which is not currently offset by fees. The CEO's office is located in the individual's home.

Plumbing Inspector. The PI is appointed by the Selectmen, with an indefinite contract term.

Road Commissioner. The Road Commissioner is elected annually at Town

Meeting. Currently, this function is being served by the Road and Budget Committee, but this will change to an individual at 1991 Town Meeting.

Constable. The Constable is appointed by the Selectmen, with a term which is reaffirmed on an annual basis. Duties include traffic control and light security. The Constable is paid $50 per year.

Health Officer. The Health Officer is appointed by the Selectmen, with a term which is reaffirmed on an annual basis.

Animal Control Officer. The Animal Control Officer is appointed by the Selectmen, with a term which is reaffirmed on an annual basis.

Civil Emergency Preparedness Director. The Civil Emergency Preparedness Director is appointed by the Selectmen, with a term which is reaffirmed on an annual basis.

BOARDS, COMMISSIONS, AND COMMITTEES

Planning Board. The Planning Board is appointed by the Selectmen. There are five regular members, each with 5-year terms. The Board meets the first Monday of every month (and on the third Monday, if needed) at 6:30 p.m., in the Town Office.

Board of Appeals. The Board of Appeals is appointed by the Selectmen. There are three regular members, each with 3-year terms. The Board meets in the Town Office when their services are needed--the times are coordinated by the Selectmen and the Board's chairman.

Road and Budget Committee. The Road and Budget Committee is comprised of 7 members elected annually at Town Meeting (will be reduced to three members at 1991 Town Meeting). The Committee meets in the Town Office on the third Thursday of every month.

Comprehensive Planning Committee. The Comprehensive Planning Committee, authorized by the Selectmen, is overseen by the Planning Board. It is open to the public for unlimited membership and participation. The Committee meets on the third Tuesday of every month, at 7:00 p.m., in the Town Hall.

Recreation Committee. The Recreation Committee is appointed by the Selectmen. There are 3 members, with terms which are reaffirmed on an annual basis.

It was found, during the Inventory and Analysis phase of this Plan, that a

tremendous amount of the administrative functions in Hartford are performed by volunteers for little or no pay. This indicates an admirable amount of civic responsibility on the part of many of Hartford's citizens. Nevertheless, there are some issues or problems which deserve attention.

There are no job descriptions for Town personnel, and this may lead to problems, especially in the issue of line of responsibility of elected, hired, and volunteer staff. Also, the terms of office for several positions may be inappropriate for them to be effective, and should be reassessed.

The level of work being done at the Town Office--particularly that related to tax assessment and collection--is burdensome. A computer may be warranted to assist in this work, and, if purchased, appropriate staff will need training.

Current code enforcement of the Town's ordinances is adequate, but enforcement of future ordinances recommended by this Plan will require a dedicated effort. Currently, little or none of the funding for the CEO and PI come from inspection fees, and this doesn't cover the actual cost to the Town for these people's time. Funding for the Town's CEO and PI should be borne (at least to a reasonable extent) by the activities which are being inspected, and the fee structure should not be included within any specific ordinance but should be separate. The positions' terms should be contracted for a specific time period.

The Town has no Conservation Commission.

ORDINANCES AND REGULATIONS

Shoreland Zoning Ordinance. Adopted: March 10, 1990; revised: June 23, 1990. This ordinance is based on the D.E.P. model ordinance, with local modifications. It requires permits for most land use activities within the shoreland areas. Fee: none. It is administered by the Planning Board and CEO, and enforced by the CEO and Selectmen.

Building Lot Standards Ordinance. Adopted: March 12, 1988; revised: March 11, 1989. This ordinance requires a 3-acre minimum lot size for residential development, and that the builder obtain a building permit. Fee: $25 for dwelling, $10 for miscellaneous construction. It is administered by the Selectmen, and enforced by the CEO.

Construction Standards Ordinance for New Roads. Adopted: March 12, 1988; revised: March 11, 1989, and March 10, 1990. This ordinance contains specifications for new road construction in Town. Fee: $200 or more. It is administered by the Planning Board, and enforced by the Selectmen.

Residential Growth Ordinance. Adopted: March 12, 1988; revised: June 23, 1990.

This ordinance restricts the number of new dwellings in Town each year to 5 percent of the total stock. Fee: none. It is administered and enforced by the Selectmen.

Subdivision Regulation. Adopted: March 12, 1988; revised: March 11, 1989. This regulation contains review standards for any subdivision in Town. Fee: $50 per lot. It is administered by the Planning Board, and enforced by the Selectmen.

Floodplain Management Ordinance. Adopted: June 11, 1987. This ordinance is the same as the model ordinance provided by the Federal Emergency Management Agency, and regulates development on the Town's floodplains. Fee: $50. It is administered by the Planning Board, and enforced by the CEO.

The fee structures for the ordinances, above--such as those for application and inspection--are included in each specific ordinance, thus requiring an amendment to these ordinances each time the fees need to be increased. Where practical, the fee structures for all ordinances should be consolidated separately from the ordinances, and managed by the Planning Board and Selectmen to reflect the actual costs to the Town.

ANALYSIS of COMMUNITY SURVEY

INTRODUCTION

In mid-November, 1990, 420 surveys were personally delivered by volunteers to each occupied residence in Town. On December 1st, and subsequently, completed surveys were returned either by being picked up at the residences by volunteers or by being dropped off at the Town Office. The final number of completed surveys returned was 245, resulting in a response rate of 58.2 percent--an excellent return.

RESULTS

General Character of Hartford

Respondents were asked to indicate up to three of the most important reasons why they live in Hartford. The most frequent reasons given were: peace and quiet, privacy, rural quality of life, and being close to family and friends.

Over 56 percent of respondents felt Hartford should not have an ordinance to limit noise nuisances; only 36 percent felt it should.

Land Use

Respondents were asked to indicate the importance of certain natural resources in Town, and whether these resources should receive special protection. In all instances, the overwhelming majority of respondents rated as very important or important: open space (87.2%), farmlands/orchards (89.4%), woodlands (98.2%), aquifers/groundwater (94.9%), lakes (97.3%), the Nezinscot and other streams (92.0%), other surface waters (86.3%), wetlands (79.6%), wildlife habitat (93.6%), and scenic areas (84.3%). In all instances, a strong majority also felt these resources should receive special protection: open space (58.7%), farmlands/orchards (66.4%), woodlands (74.7%), aquifers/groundwater (88.5%), lakes (84.9%), the Nezinscot and other streams (80.7%), other surface waters (60.4%), wetlands (64.6%), wildlife habitat (79.1%),and scenic areas (60.1%).

When asked how Hartford should protect the Town's natural resources and features, only 10.2% felt that these areas should not be protected from development, and 67.3% felt development should be controlled in these areas. However, only 26.5% of the respondents were in favor of adopting local regulations more strict than the State requires. 44.1% were in favor of encouraging preservation with a tax policy which taxed forest and farm land at a lower rate, and only 12.7% were in favor of appropriating money for purchasing some of these resources.

Growth Management

Growth areas, rural areas, and zoning, as required by the Growth Management Law, were explained. The respondents were asked if they agreed with a number of statements related to these concepts. 53.5% would allow smaller lots in growth areas, 40.4% would require larger lots in rural areas, 50.6% would require larger lots in the Bear Pond and Canton Lake watersheds, and only 29.0% would require the same lot sizes for single-family homes throughout Town. Also, 56.7% of the respondents would allow farming and forestry in all areas of Town. Finally, 64.5% agreed that small, family businesses should be allowed in rural areas with larger businesses restricted to specific commercial zones, and only 20.0% would place no restriction on where commercial and professional activities could locate in Town.

When asked which principle should guide zoning in Hartford, 30.6% felt it should be used to prevent the mixing of residential with commercial/industrial uses, 67.8% felt is should be used to protect natural resources and environmental assets, 53.9% felt it should protect property values, and 54.3% felt it should direct residential and commercial development to those areas of Town which are more appropriate for them.

Respondents were then asked to indicate what the minimum lot size should be in the growth and rural areas. The most frequent response for the growth areas was 1 acre (41.6%), followed by 2 acres (23.0%), 3 acres (21.7%), and 1/2 acre (11.9%). The most frequent response for the rural area was 3 acres (33.5%), followed by 2 acres (27.2%), 5 acres (17.1%), and 10 acres (13.4%).

Respondents indicated that single family homes (98.6%) and mobile homes (72.2%) should be allowed throughout Hartford, but that commercial activity (77.2%), manufacturing (75.7%), apartment houses (72.7%), individual retail stores (63.9%), and professional offices (63.4%) should be confined to parts of Town. The group was evenly split on this question with regard to elderly housing. Respondents further indicated that single family homes (95.3%), elderly housing (80.1%), individual retail stores (67.1%), professional offices (63.8%), and other commercial activity (54.6%) should be encouraged to locate in Hartford, but that apartment houses (70.4%), mobile homes (52.7%), and manufacturing (52.4%) should be discouraged.

There were very clear results rom the survey with respect to mobile homes. First, 64.8% of the respondents felt there should be a mobile home park ordinance for Hartford. Also, 62.8% of the respondents indicated they would not favor protecting property values by excluding mobile homes from certain parts of Town, and 77.4% favor allowing mobile homes to locate throughout Town. However, 60.9% believe Hartford should limit the age of mobile homes moved into Town.

A very slight majority (52.4%) of respondents favor a building code for Town. A

large majority (82.1%) favor a site plan review ordinance.

Open Space Development

Open space development was defined in the survey, and respondents were asked if they would favor its use in Hartford. 58.8% felt it should be used for commercial and industrial development, and 55.8% felt it should be used for residential development other than single-family homes. An extremely small majority (51.1%) favor it for single-family homes.

Town-Owned Property

Respondents indicated they would favor land acquisition for the following uses in the following proportions: historic and scenic areas (46.9%), future fire station (41.2%), recreation areas (34.3%), natural resources (26.1%), town forest (20.0%), future school site (18.8%), and town office (13.5%).

57.6% of the respondents said they would not favor a tax-supported land acquisition fund. And 60.4% were opposed to allowing developers a reduction in lot size in exchange for land donated to the Town.

Town Services

The following table lists the ratings by respondents of Town Services:

	% POOR	% FAIR	% GOOD
1. Snow Removal	18.1	37.1	44.8
2. Road Maintenance	21.2	46.8	32.0
3. Road Upgrading	21.3	51.2	27.5
4. Fire Protection	15.8	41.4	42.9
5. Police Protection	40.4	35.0	24.6
6. Dump	27.8	33.5	38.8
7. School Board	12.3	37.9	49.7
8. School, Elementary	6.6	30.6	62.8
9. School, Secondary	7.9	31.9	60.2
10. Recreation	39.7	31.2	29.1
11. Board of Selectmen	13.5	38.6	47.8
12. Planning Board	18.3	37.1	44.6
13. Property Assessment	20.4	47.4	32.1
14. Enforcement of Ordinances	24.3	45.2	30.5

Only snow removal (18.0%), road upgrading (15.1%), road maintenance (14.7),

fire protection (12.2%), and recreation (11.8%) received more than a 10 percent response to the question as to whether respondents would pay more for service.

When asked if rising costs meant either cutting these services or raising taxes, respondents indicated they would raise taxes for snow removal (85.5%), fire protection (75.5%), road maintenance (66.7%), the dump (62.5%), and road upgrading (61.4%). They indicated they would cut back service for property assessment (72.4%), school board (71.0%), planning board (66.7%), board of selectmen (60.0%), and recreation (59.0%). The responses for police protection and schools were within 1 or 2 percentage points of being evenly split, and offer no clear conclusion.

Only 25.8% of respondents felt the Town Office should be open more than at present, but 34.4% felt it should be open during weekend hours.

Respondents indicated they would like the following new town services developed over the next 10 years: garbage/recyclable pickup (63.1%), recreation facilities (63.1%), and elderly housing (60.2%). They would not favor the following: public transportation (78.9%), town manager/administrative assistant (63.7%), child care facilities (60.1%), and local law enforcement (58.3%). The responses for affordable housing were within 1 percentage point of being evenly split, and offer no clear conclusion.

Community Services

A significant, but small, group of respondents currently recycle the following: newspaper (30.2%), glass (22.9%), cardboard (20.8%), plastic (14.3%), and other (18.8%). Further, 56.3% of respondents would participate in a recycling program to reduce the waste stream by 50 percent only if there was no additional cost, 34.7% would participate regardless of cost, and 9.0% would not participate.

94.9% of respondents would not agree to allow Hartford to become the site of a nuclear waste dump.

Community Involvement

A number of respondents would like to volunteer to serve on the Planning Board, Recreation Committee, and Comprehensive Plan Committee, and would like to serve on a Watershed District Committee, Conservation Committee, Recycling Committee, and Economic Development Committee, if they were to be created. The Comprehensive Plan Committee has a list of the names of these people.

Background Information

11.1% of the respondents have lived in Hartford for less than 2 years, 25.2% for

2 to 5 years, 14.5% for 6 to 10 years, 22.2% for 11 to 20 years, and 26.9% for more than 20 years. More than two-thirds of the respondents (68.1%) said they were born in Maine.

COMPREHENSIVE PLAN OF HARTFORD, MAINE

PART TWO

GOALS, POLICIES, & STRATEGIES

Capital Investment Plan
Future Land Use Plan

FOR THE TOWN OF HARTFORD

June 20, 1992

Prepared by: The Hartford Comprehensive Plan Committee
Assisted by: The Androscoggin Valley Council of Governments

TABLE OF CONTENTS

1: INTRODUCTION

GOAL, POLICY, AND STRATEGY DEVELOPMENT IN THIS PLAN

The primary objective of this part of the Comprehensive Plan is to develop long-term goals, policies, and implementation strategies which address the various planning issues that the Town faces. For each topic of concern that was identified in Part I--Inventory and Analysis of this Plan, a long-term goal statement, one or more policy statements, and one or more implementation strategies have been developed. The various long-term goals, policies and implementation strategies support and relate to the State goals as adopted in the Comprehensive Planning and Land Use Regulation Act. The State goals as contained in the act are as follows:

The **Long-Term Goal Statement** is a simple, one-paragraph statement indicating a condition the Town shall strive to attain relative to the particular planning issue under consideration. It is considered in the form: "It is a long-term goal of the Town of Hartford to ....".

A **Policy Statement** is a simple, one-paragraph statement of a governing principle intended to contribute towards achieving the stated Long-Term Goal. It is possible that there may be more than one Policy Statement for each Long-Term Goal Statement. The Policy Statement will be considered in the form: "It is a policy of the Town of Hartford to ....".

An **Implementation Strategy** is a simple, one-paragraph statement which identifies the action to be undertaken to implement a stated Policy. It is possible that there may be more than one Implementation Strategy for each Policy Statement. The statement of the Implementation Strategy shall be a simple one paragraph statement which shall describe the action to be taken and shall also indicate who shall be responsible for taking the action, the time frame in which the action should be accomplished, and the estimated cost associated with taking the action.

The remaining sections of this part of the Plan describe the goals, policies, and implementation strategies which have been developed for the Town of Hartford as a result of hours of discussion and hard work at Planning Committee meetings and Public Forums. The opinions of all interested parties have been taken into account, as they were expressed at meetings, forums, and in the community questionnaire. Additions and modifications are to be expected in subsequent revisions of this Plan, reflecting the dynamic nature of the community's growth.

STATE GOALS

The Legislature hereby establishes a set of state goals to provide overall direction and consistency to the planning and regulatory actions of all state and municipal agencies affecting natural resource management, land use and development. The Legislature declares that, in order to promote and protect the health, safety and welfare of the citizens of the State, it is in the best interests of the State to achieve the following goals:

A. 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;

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

C. To promote an economic climate which increases job opportunities and overall economic well-being;

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

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

F. 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;

G. 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;

H. To safeguard the State's agricultural and forest resources from development which threatens those resources;

I. To preserve the State's historic and archeological resources; and

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

2: DEMOGRAPHICS

TOWN GOAL

To address the issues discussed in Part I of this Plan, and to comply with the State goals which are at least partly relevant, the Town of Hartford, as an administrative body, can exert some influence to begin to remedy the situation which faces the community's current and future residents: specifically in the areas of regional housing, education, and regional economic development. Therefore, **it is the long-term goal of the Town of Hartford to enhance the quality of life in Hartford and to improve the standard of living for its residents.**

TOWN POLICY

To support the goal stated above, it is a policy of the Town of Hartford to:

* **Assist and encourage the development of career opportunities that increase the prevailing average wage in Hartford, that provide job training programs, and that offer other benefits to our residents.**

IMPLEMENTATION STRATEGIES

To ensure that the long-term goal is achieved and the prior stated policy is implemented, the following strategies are recommended:

1. The Town, through its representatives, should work directly with SAD 39 and Region 11 to address issues of scholastic achievement, student drop-out, and curriculum development to promote the best academic and vocational education conditions feasible.

   Responsibility: Hartford's School Board representatives
   Time Frame: Annually
   Cost: **$ 0**

2. The Town should cooperate with regional policy-making entities (such as AVCOG, an economic development corporation, a chamber of commerce, etc.) to ensure that Hartford, and the rest of the region, is promoted in a manner which will attract the type of businesses, and employment opportunities, the Town hopes to encourage.

Responsibility: Selectmen/Appointed Committee members
Time Frame: On-going
Estimated Cost: **$ 0**

3: HOUSING

TOWN GOAL

To address the issues discussed in Part I of this Plan, and to comply with the State goals which are at least partly relevant, it is the long-term goal of the Town of Hartford to meet the housing needs of Hartford residents, including safety and affordability, while recognizing the importance of natural resources and preserving the rural character of the community.

TOWN POLICY

To support the prior stated goal, it is the policy of the Town of Hartford to:

* **Maintain or improve the values of existing residential areas.**

* **Ensure that there are acceptable standards for all building construction.**

* **Encourage new residential development to be of such a scale, shape, and form that housing values in the area, and cultural and scenic values in the Town, are maintained or improved.**

* **Encourage a variety of new and creative housing and tenure types and innovative residential development techniques that conserve land, protect significant natural areas, preserve rural character, and reduce construction costs.**

* **Encourage the construction of affordable housing.**

* **Require that mobile home parks be located in environmentally suitable areas, that they be designed and located to conform to the rural character of Hartford, and that they do not place unreasonable demands upon municipal services.**

* **Allow mobile/manufactured homes to be placed on single lots in all suitable locations in the community.**

* **Assure that new residential development has the least possible negative impact upon the natural environment.**

* **Provide for varying residential lot sizes and varying residential densities as ways of conserving land resources.**

* **Direct major, new residential development in such a manner that it will not conflict with economic activities, including productive agriculture, commerce, and industry.**

* **Direct new residential development to those areas where municipal services can be most efficiently provided.**

* **Direct new residential development such that scenic, recreational, historic, and other cultural resources are not adversely affected.**

IMPLEMENTATION STRATEGIES

To ensure that the long-term goal is achieved and the prior stated policies are implemented, the following strategies are recommended:

1. The Zoning Ordinance shall insure that the areas of Town which are designated for various types of residential development are suitable, from cultural and environmental perspectives, for the types and densities of development proposed.

   Responsibility: Planning Board/Ordinance Committee
   Time Frame: 18 Months from adoption of Comprehensive Plan
   Estimated Cost: $ 0

2. The Zoning Ordinance shall:

   * designate new residential development in areas where municipal services can be most efficiently provided;
   * provide for varying residential lot sizes and densities to conserve land and direct development in growth areas;
   * designate environmentally suitable areas for mobile home parks

   Responsibility: Planning Board/Ordinance Committee
   Time Frame: 18 Months from adoption of Comprehensive Plan
   Estimated Cost: $ 0

3. The Zoning Ordinance shall allow specified methods of open-space development in specified areas of Town. A reasonable definition of open-space development (for residential, commercial, and other types of development), to be developed and included in appropriate ordinances, shall:

* not allow the number of dwelling units to exceed the density allowed in the affected zone;
* encourage a reduction in the size of road and utility systems;
* encourage underground placement of utilities;
* create permanent, common open space;
* require at least 60 percent of the developable land to be retained in open space;
* permit the resulting open space to be owned by the residents, by a land trust, or by some other arrangement suitable to the Town;
* require that roads, steep slopes, wetlands, and other sensitive areas not be included in the density calculation.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

4. The Town shall investigate and enact ordinance provisions that establish life-safety standards for new or reconstruction. These standards shall be applied and enforced by the Code Enforcement Officer.

Responsibility: Selectmen/Code Enforcement Officer/Planning Board
Time Frame: March, 1993, and ongoing
Estimated Cost: $ 0

5. The Ordinance Committee shall research and develop reasonable standards to be included in the Zoning and Subdivision Ordinances and used in the review of all applications for residential development. These standards shall apply to the placement of those structures, including mobile homes, and shall address (but need not be limited to) minimum setback from roads and lot lines, roadside vegetative buffers, fire protection, and number of curb cuts along roads.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

6. The Ordinance Committee shall research and develop reasonable standards to be included in the Zoning and Subdivision Ordinances and used in the review of all applications for multi-unit residential development. These standards shall:

* set a maximum number of three dwelling units per structure;
* set a maximum height of the lesser of two-and-one-half stories or 35 feet;
* maintain the specified density (dwelling units per acres) of the affected zone;

* require minimum road frontage of the affected zone for the first unit, and an additional twenty to fifty percent of the minimum for each additional unit;
* require a common driveway.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

7. Ordinance provisions should be included in any life-safety code that requires all manufactured housing built before June 15, 1976, or not built to the National Manufactured Housing Construction & Safety Standards Act of 1974, United States Code, Title 42 Chapter 70 to conform to recognized safety standards.

Responsibility: Ordinance Committee/Code Enforcement Officer
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

4: ECONOMY

TOWN GOAL

To address the issues discussed in Part I of this Plan, and to comply with the State goals which are at least partly relevant, it is the long-term goal of the Town of Hartford to maintain and strengthen the economic base of Hartford while protecting the environment and enhancing the quality of life.

TOWN POLICY

To support the goal stated above, it is a policy of the Town of Hartford to:

* **Support and encourage a diverse industrial and commercial base in the region.**

* **Identify areas of Town which are suitable for various forms of economic development, and designate those areas for those uses.**

* **Establish a long range plan to ensure the adequate supply of Town facilities and services for economic development.**

* **Participate in multi-community and regional approaches for attracting industrial and commercial establishments to the region which meet the goals of the Town, and which maintain or improve the quality of life of its residents.**

* **Encourage the development of those industries and businesses in the region which offer greater employment opportunities.**

* **Encourage the development of businesses which utilize, without depleting, the natural resources of Hartford.**

* **Maintain and strengthen the cottage industry in suitable areas of Town.**

IMPLEMENTATION STRATEGIES

To ensure that the long-term goal is achieved and prior stated policies are implemented, the following strategies are recommended:

1. The Town shall investigate the benefits of participating in the efforts of the Oxford Hills Area Development Corporation and area chambers of commerce, and join if desired. Should the Town elect to join such organizations, suitable representatives should attend meetings of the organizations on a regular basis, advocating the Town's plans and/or policies which may impact or be impacted by area development.

   Responsibility: Selectmen/Voters at Town Meeting
   Time Frame: Ongoing
   Estimated Cost: $ as needed (for rep to attend meetings)

2. Suitable representatives of the Town shall attend, on a regular basis, meetings of the Androscoggin Valley Council of Governments for the purposes of advocating the needs of the Town and exploring areas of mutual interest. To the extent appropriate, these representatives shall provide to the above organizations the Town's plans and/or policies which may impact or be impacted by area development.

   Responsibility: Selectmen
   Time Frame: Ongoing
   Estimated Cost: $ as needed (for reps to attend meetings)

3. The Zoning/Site Plan Review Ordinance shall permit home businesses. Standards shall insure that the residential use of the home remains the primary use, the opportunities for the businesses are enhanced, and the residential character of the area is protected.

   Responsibility: Planning Board/Ordinance Committee
   Time Frame: 18 Months from adoption of Comprehensive Plan
   Estimated Cost: $ 0

5: TRANSPORTATION

TOWN GOAL

To address the issues discussed in Part I of this Plan, and to comply with the State goals which are at least partly relevant, it is the long-term goal of the Town of Hartford to plan for transportation facility developments in a manner consistent with the Future Land Use Plan, and such that an unreasonable tax burden is not placed on community residents.

TOWN POLICY

Therefore, it is the policy of the Town of Hartford to:

Public Roads

* **Emphasize road construction, reconstruction, and maintenance in designated growth areas.**

* **Maintain other existing roads at current levels or better, for anticipated levels of use.**

* **Ensure that development does not adversely affect road capacities and safety standards.**

* **Review the Road Construction Standards Ordinance on a reasonable, regular basis, and bring it before the Town for revisions, when necessary.**

* **Develop a multi-year, annually-updated, Road Improvement Program (RIP) which shall be coordinated with the Capital Improvement Planning process.**

* **Ensure that transportation-related improvements, which are necessitated by new development, and which exceed the planned improvements specified in the Road Improvement Program and the Capital Improvement Plan, be borne by the development.**

* **Allow development on an abandoned road, but require the developer to reconstruct the road to meet acceptable, safe standards set by the Town.**

Private Roads

* **Require the construction or reconstruction of private roads and/or discontinued roads to meet acceptable, safe standards set by the Town.**

* **Require a subdivision (residential or commercial) to have a limited number of access points onto a public road.**

* **Require common drives serving backlots to meet acceptable standards.**

Sidewalks

* **Require, where reasonably justified, new commercial and industrial development to provide and maintain safe sidewalks, or other suitable pedestrian ways.**

Parking

* **Require new residential, commercial, industrial, and other development to provide safe, adequate, off-street parking for the anticipated levels of use.**

IMPLEMENTATION STRATEGIES

To ensure that the long-term goal is achieved and prior stated policies are implemented, the following strategies are recommended:

1. Develop a multi-year, annually-updated, Road Improvement Program (RIP) which shall be coordinated with the Capital Improvement Planning process. It is expected that an outside, private firm may be employed to assist the development of this RIP in its first year, especially because the process will be new, and because engineering estimates may be needed. As a minimum, the RIP shall do the following:

    * identify, prioritize, and schedule all road-related maintenance and improvements;
    * address roads, intersections, bridges, culverts, and ditches;
    * provide reasonable cost estimates for all improvements;
    * give emphasis to work required in designated growth areas of Town;
    * require the RIP be submitted to the CIP Committee for inclusion into the CIP each year.

Responsibility: Road Commissioner/Road Committee/Selectmen/ CIP Committee
Time Frame: March, 1993, and annually thereafter
Estimated Cost: $ 250 for first-year costs, if necessary, and $50 annually for maps and other supplies, thereafter

2. The Planning Board should assess the feasibility of developing a local impact fee ordinance for road improvements necessitated by new residential development. If such an impact fee is feasible, the Planning Board should seek assistance in the development of such an ordinance.

Responsibility: Planning Board
Time Frame: June, 1993
Estimated Cost: $ 0

3. The Zoning/Site Plan Review Ordinance and Subdivision Ordinance should grant the authority to the Planning Board to require applicants to conduct a traffic analysis as part of their development and/or subdivision applications.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

4. Include provisions in the Zoning/Site Plan Review Ordinance and Subdivision Ordinance which require sidewalk construction, or other suitable walkway alternatives, in new commercial, industrial, and residential subdivision development in areas of high pedestrian use.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

5. Include provisions in the Zoning/Site Plan Review Ordinance which require that off-street parking standards meet those of recognized national standards.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

6. Include provisions in the Road Construction Standards Ordinance which require that construction and improvement to public and private roads and culverts in the shoreland zone be done according to best management practices to insure the minimum amount of erosion, runoff, and phosphorus export into adjacent water bodies. At a minimum, and where reasonable, such roads and drives should not be paved.

Responsibility: Planning Board/Ordinance Committee/Road Commissioner
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

6: PUBLIC FACILITIES AND SERVICES

TOWN GOAL

To address the issues discussed in Part I of this Plan, and to comply with the State goals which are at least partly relevant, **it is the long-term goal of the Town of Hartford to plan for, finance, and develop necessary municipal facilities and services which will meet the needs of current and anticipated residents in a manner which does not overburden the community's financial resources**.

TOWN POLICY

Therefore, it is the policy of the Town of Hartford to:

Water Supply

* **Protect the Town's ground water for use by private water supplies.**

Sewerage

* **Require all new development to dispose of all sewage via properly designed and constructed sub-surface disposal systems, or other approved systems.**

* **Require that the type and density of development, and the septic disposal systems of that development, are suitable for the soils which will be used to support them.**

Solid Waste

* **Provide adequate facilities to accommodate solid waste disposal and recycling efforts of the Town.**

* **Increase participation in the recycling program, such that 50 percent of the Town's waste stream is recycled by 1994.**

Public Safety

* **Provide adequate land, space, and equipment for the Town's public safety providers, consolidating and updating as necessary.**

* Include all facility and equipment expenses for fire, rescue, and police protection in the Town's Capital Improvement Plan.

Fire & Rescue

* Provide adequate fire protection for the entire Town.

* Provide adequate emergency medical protection for the entire Town by maintaining a local, volunteer, rescue unit.

* Maintain a good working relationship with the fire departments and rescue units in Canton, Turner and Buckfield which serve Hartford.

Police

* Provide adequate police protection for the entire Town.

Public Works

* Establish a long range plan to ensure the adequate supply of Town facilities and services to accommodate growth in the community.

* Plan for, arrange, and provide adequate municipal public works to meet the needs of the Town's residents.

* Provide adequate land, space, and equipment for the Town's public works activities, improving and upgrading them as necessary.

* Improve/upgrade the Town garage facilities.

* Store road salt and sand-salt mixtures in accordance with applicable State laws.

Municipal Offices

* Provide adequate land, space, and equipment for the Town's administration, consolidating and upgrading as necessary.

* Maintain the Town's administrative offices in a convenient, centrally-located area.

* Plan for the possibility of replacing/upgrading the Town's administrative offices and capabilities.

Education Facilities

* **Remain a member community of Maine School Administrative District #39.**

* **Plan for the future possibility of having an elementary school located in Town.**

IMPLEMENTATION STRATEGIES

To ensure that the long-term goal is achieved and the prior stated policies are implemented, the following strategies are recommended:

1. The CIP Committee shall review municipal facilities needs for inclusion in the Town's CIP. This review should:

   * assess the requirements for providing new or replacement space, land, and equipment for municipal administration, and review the options which would satisfy those requirements;
   * identify the needs of all municipal departments and services (existing or proposed—including the Town Office, Town Hall, Town Garage, solid waste facilities, recreation facilities, fire ponds, fire and rescue services), as well as the needs of the Town's various committees and boards;
   * recommend architectural, engineering, and purchasing costs;
   * include preliminary design and cost estimates to construct a sand/salt shed in compliance with applicable State laws;

   Responsibility: CIP Committee
   Time Frame: 18 Months from Plan adoption and ongoing
   Estimated Cost: $ 0

2. The Town shall provide reasonable training to all public safety and public works employees who need it to perform their tasks—such as the case with new procedures and equipment.

   Responsibility: Selectmen/Town Clerk/Road Commissioner/Fire Chief
   Time Frame: Ongoing
   Estimated Cost: $ As required

3. Hartford should plan for the creation of a series of fire ponds throughout Town. Preliminary feasibility—including applicable regulations, potential locations, size requirements, design, cost estimates, and possible funding sources—should be achievable by volunteer work.

Responsibility: Selectmen
Time Frame: March, 1993
Estimated Cost: $ 0 (although construction costs may ensue)

4. Town officials should annually meet with neighboring communities (Canton, Turner and Buckfield) that are involved in providing fire and rescue service for Hartford residents. The purpose of the meeting will be to reassess public safety service areas, costs, etc.

Responsibility: Selectmen/Fire Chief/Rescue Unit
Time Frame: Ongoing
Costs: As determined

5. Investigate the possibility of establishing a volunteer fire department for Hartford. Ascertain the number of volunteers needed, cost of training, etc.

Responsibility: Selectmen/Fire Chief/Rescue Unit
Time Frame: Within one year of Plan adoption
Costs: $ 0

6. The Civil Emergency Preparedness Director shall develop and maintain adequate, up-to-date documentation related to potentially hazardous materials at residential, commercial, industrial, and other sites in Town. This shall include, but not be limited to, Hazardous Material Data Sheets, and special precautionary procedures required for certain materials known to exist in the community.

Responsibility: Civil Emergency Preparedness Director
Time Frame: 18 Months from adoption of Comprehensive Plan, and ongoing
Estimated Cost: $ 0

7. If the Town's goal of recycling 50 percent of the Town's waste stream is not reached by 1994, a recycling ordinance should be adopted to require mandatory recycling of paper, glass, plastics, and other recyclable materials.

Responsibility: Selectmen/Ord. Com./Rec. and Cons. Commission
Time Frame: March, 1994
Estimated Cost: $ 0

8. The Town should investigate the creation of a composting facility at the transfer station. Preliminary feasibility—including applicable regulations, space requirements, design, cost estimates, and possible funding sources—should be achievable by volunteer work.

Responsibility: Selectmen
Time Frame: March, 1993
Estimated Cost: $ 0 (although construction costs may ensue)

9. The Town's current practice is to contract out for necessary summer and winter roads maintenance. However, the Town must monitor the relative costs of this practice, and plan for the eventuality that it will become advantageous to the Town to modify this arrangement, or adopt a new one, in the future.

Responsibility: Selectmen/Road Commissioner/Road Committee
Time Frame: Ongoing
Estimated Cost: No additional cost.

7: FISCAL CAPACITY

TOWN GOAL

To address the issues discussed in Part I of this Plan, and to comply with the State goals which are at least partly relevant, it is the long-term goal of the Town of Hartford to plan for and wisely manage its fiscal responsibilities.

TOWN POLICY

To support the goal stated above, it is the policy of the Town of Hartford to:

* **Provide good financial management for the Town's fiscal affairs.**

* **Conduct an annual audit of the Town's financial records by a qualified, outside accountant.**

* **Plan for major, municipal, capital expenditures with a Capital Improvement Plan (CIP).**

IMPLEMENTATION STRATEGIES

To ensure that the long-term goal is achieved and the prior stated policies are implemented, the following strategies are recommended:

1. Continue the practice of conducting an annual audit of the Town's financial records by a qualified, outside accountant. The contract to conduct the Town's audit should be put out to competitive bid each year, and the contract should not be awarded to the same auditing firm for more than three consecutive years.

   Responsibility: Selectmen
   Time Frame: Annually
   Estimated Cost: $ 1675 (cost of 1989 audit)

2. Appoint a Capital Improvement Planning Committee to be charged with the responsibility of assessing and prioritizing the requirements of all major, capital expenses to be made by the Town for a planning period of 5 or 6 years, and establishing priorities for these expenses, with recognition that the economy, levels of taxation, and other fiscal constraints may affect and/or delay the prioritized capital decisions. This committee should have broad representation from all segments of the community, similar to the case of the budget committee, and shall report to the Selectmen. (See CIP Section of this Plan for further information.)

Responsibility: Selectmen/Capital Improvement Planning Committee
Time Frame: upon adoption of Comprehensive Plan, and ongoing
Estimated Cost: $ 0

8: HISTORIC RESOURCES

TOWN GOAL

To address the issues discussed in Part I of this Plan, and to comply with the State goals which are at least partly relevant, **it is the long-term goal of the Town of Hartford to maintain its historic and cultural heritage**.

TOWN POLICY

To support the goal stated above, it is the policy of the Town of Hartford to:

* **Encourage the maintenance of its historic buildings and sites.**

* **Support the Hartford Historical Society and the Hartford Heritage Society.**

* **Minimize the impacts of development or other land use activities upon recognized historic buildings, and upon pre-historic, historic, and unique natural sites and areas.**

* **Maintain and enhance the historical settlement patterns of the various areas of Town.**

* **Assure that before known archaeological sites/areas are disturbed, their values are adequately assessed.**

IMPLEMENTATION STRATEGIES

To ensure that the long-term goal is achieved and the prior stated policies are implemented, the following strategies are recommended:

1. Locate the known or suspected archaeological sites in Town on a map, and make available for Planning Board review in conjunction with all permitting applications.

   Responsibility: Planning Board/Recreation and Conservation Commission
   Time Frame: 2 Months from adoption of Comprehensive Plan
   Estimated Cost: $ 10

2. Include provisions in the Zoning/Site Plan Review Ordinance and Subdivision Ordinance which require development to minimize, to the extent practical, the negative impact it may have upon historic buildings or sites identified in this Plan.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

3. Include provisions in the Zoning Ordinance which establishes the dimensions, types, locations, hours of operation, and other characteristics of signs in Town, such that the historic and rural character of the community is protected and maintained.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

4. Include provisions in the Subdivision Ordinance and the Site Plan Review and Shoreland components of the Zoning Ordinance which require an assessment of the archaeological impact of development in known or suspected archaeological areas of Town.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

5. The Town shall continue financial support to the Hartford Heritage Society and of the J & O Irish Store.

Responsibility: Town Meeting
Time Frame: Annual
Estimated Cost: $ 300 (1991 contribution)

9: CULTURAL, SCENIC, & RECREATIONAL RESOURCES

TOWN GOAL

To address the issues discussed in Part I of this Plan, and to comply with the State goals which are at least partly relevant, it is the long-term goal of the Town of Hartford to provide for the cultural, scenic, and recreational enjoyment of its residents.

TOWN POLICY

To support the goal stated above, it is the policy of the Town of Hartford to:

* **Minimize the impacts of development or other land use activities upon recognized cultural facilities.**

* **Recognize identified scenic views as significant natural and cultural resources.**

* **Minimize development encroachments which cause the loss of the values of significant scenic areas and sites.**

* **Provide the public with the opportunity to enjoy the Town's significant scenic resources.**

* **Provide adequate land, space, and equipment for the Town's recreation facilities and programs.**

* **Plan for suitable recreational facilities and areas within the Town.**

* **Include all major facility and equipment expenses for municipal recreation purposes in the Town's Capital Improvement Plan.**

* **Support the efforts of the local Snowmobile Clubs to maintain a multi-use trail system within the Town.**

* **Provide public access to the Town's major surface waters.**

* **Encourage the traditional practice of public access to privately-owned land for recreation activities.**

* **Minimize the negative impact of new development upon trail corridors and traditional recreation activities.**

IMPLEMENTATION STRATEGIES

To ensure that the long-term goal is achieved and the prior stated policies are implemented, the following strategies are recommended:

1. The Town shall expand the function of the existing Recreation Committee to become a Recreation and Conservation Commission [as provided by Title 30-A MRSA, Section 3261]. This group can provide significant assistance in the implementation and ongoing activities suggested by this Plan.

   Responsibility: Selectmen
   Time Frame: 2 Months from adoption of Comprehensive Plan
   Estimated Cost: $ 0

2. Develop a Recreation and Conservation plan. This plan should:

   * Identify ways to provide the public with access to scenic areas, public waters, and Town-owned lands identified in this Plan. This may include easements, roadside turnoffs, formal rights-of-way (especially to ponds and streams), and outright purchases.
   * Identify and prioritize possible access strategies, include their estimated costs, and identify possible funding sources.
   * Identify and prioritize the Town's future recreation needs. This effort should include recommendations for land acquisition, facilities development, and major equipment purchases, as well as their estimated costs and possible funding sources.
   * Produce a five-year plan, with an annual update which shall be submitted for inclusion in the Town's CIP process.
   * Have the following as priorities:

     * satisfy deficiencies identified in Part I of this Plan;
     * identify Town-owned properties, propose management alternatives, and investigate opportunities for funding and acquiring other property (including a possible site(s) for municipal facilities);
     * develop formal, public access to Anasagunticook Lake and Bear, Little Bear, and Bunganock Ponds (with parking, picnicking, trash containers, and other feasible amenities, as required);
     * develop formal, public access to the abandoned railway bed, acquiring easements, if possible;
     * protect Bear Mountain and Little Bear Mountain, and preserve public access to them.
     * provide recreation opportunities for all age groups;
     * promote community involvement in related programs.

Responsibility: Recreation and Conservation Commission
Time Frame: 18 Months from adoption of Comprehensive Plan, and ongoing
Estimated Cost: $ 500 (only for first year)

3. Include performance standards in the Zoning/Site Plan Review Ordinance and Subdivision Ordinance such that they require development to minimize, to the extent practical, the negative impact it may have upon identified cultural resources, significant scenic resources, snowmobile trail corridors, and other recreational sites and facilities.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

4. Include provisions in the Zoning/Site Plan Review Ordinance and Subdivision Ordinance which allow the Planning Board to consider provisions made for public access to identified scenic resources as factors of approval during the development review process.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

5. Include provisions in the Zoning/Site Plan Review Ordinance and Subdivision Ordinance which allow the Planning Board to utilize scenic easements as a method of protecting identified scenic resources.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

6. The Recreation and Conservation Commission should undertake a program similar to "Project Land Share" (used by the Maine Bureau of Public Lands and Department of Inland Fisheries and Wildlife) to support the continued tradition of public use of private land.

Responsibility: Recreation and Conservation Commission
Time Frame: Summer, 1993, and ongoing
Estimated Cost: $ 0 (from operating budget)

7. When road construction or reconstruction is undertaken by private developers, the Town, or the State, turnouts or suitably wide shoulders should be designed into the plans to allow for vehicles to leave the travel way in identified scenic view locations.

Responsibility: Selectmen/Planning Board/
Road Commissioner/Ordinance Committee
Time Frame: Ongoing
Estimated Cost: $ 0

8. Transfer all, or a significant proportion, of snowmobile licensing excise funds returned to the Town to the local snowmobile clubs for maintenance of trails.

Responsibility: Town Meeting
Time Frame: Annually
Estimated Cost: $ returned state funds

10: NATURAL RESOURCES

TOWN GOAL

To address the issues identified in Part I of this Plan, and to comply with the State goals which are at least partly relevant, it is the long-term goal of the Town of Hartford to maintain the high quality of its own natural resources and those it shares, or to improve the quality if it has been diminished.

TOWN POLICY

To support the goal stated above, it is the policy of the Town of Hartford to:

Soils

* **Ensure that development and other land use activities occur upon or in soils which are adequately suited for such uses.**

Wetlands

* **Protect the integrity of wetlands so that their overall benefits and values are maintained.**

* **Consider areas of hydric soils as potential wetland areas.**

* **Place a high level of protection on wetlands, and the areas within 250 feet of the upland edge of such wetlands, identified as being of moderate or high wildlife value.**

* **Require a reasonable buffer around all other wetlands.**

Water Resources

* **Maintain and improve the quality of surface waters.**

* **Provide adequate protection for year-round streams which feed great ponds.**

* **Provide and maintain public access to the Town's major water bodies.**

* **Direct all activities adjacent to surface waters such that the cumulative effects of those activities do not bring water quality below state standards as specified in Title 38 M.R.S.A. 464.**

* Regulate development adjacent to surface waters in such a manner as to protect water quality, maintain wildlife travel corridors, aesthetics, and other natural resources.

* Minimize phosphorus loading in lakes and ponds as the result of development or other activities within watersheds.

* Assign a lake protection level of HIGH to Lake Anasagunticook.

* Assign a lake protection level of MEDIUM to Bear Pond, Little Bear Pond, and Swan Pond.

* Assign a lake protection level of LOW to Bunganock Pond and Mud Pond.

* Participate in a joint effort with Canton to achieve the assigned level of protection for Lake Anasagunticook.

* Participate in a joint effort with Turner to achieve the assigned level of protection for Bear Pond.

* Participate in a joint effort with Livermore to achieve the level of protection for Brettuns Pond assigned by Livermore.

* Improve and protect the quality and quantity of ground water resources for current and future use.

* Control all activities over significant aquifers such that cumulative effect of those activities do not bring water quality below state drinking water standards.

Wildlife

* Maintain wildlife resources through habitat preservation and/or enhancement.

* Recognize and protect deer wintering areas.

* Maintain wildlife travel corridors along streams, rivers, ponds, lakes, and wetlands.

* Maintain surface water quality suitable for fishery habitat.

Floodplains

* **Not allow construction and development in floodplain areas that increase the risk of property loss and/or increase the level of flooding.**

* **Require that all construction activities in floodplains conform to National and State flood insurance standards.**

Slope

* **Discourage development on slopes greater than fifteen (15) percent, and not allow development on slopes greater than twenty (20) percent.**

* **Not allow the construction of any new roadway intended for public use, public or private, that will have a grade of twelve (12) percent or more.**

Special Resources

* **Protect identified rare and endangered plant and animal species from degradation.**

* **Protect significant natural features from degradation.**

IMPLEMENTATION STRATEGIES

To ensure that the long-term goal is achieved and the prior stated policies are implemented, the following strategies are recommended:

1. The Road Commissioner and/or Foreman should be provided with training in soil erosion and storm water control practices (such as is offered by the Maine Local Roads Center and the Soil Conservation Service) to enable them to oversee all road construction/reconstruction in Town.

   Responsibility: Selectmen/Road Commissioner
   Time Frame: Summer, 1992, and ongoing
   Estimated Cost: $ 150, if necessary

2. The adequacy of storm water drainage across public roads in shoreland areas should be assessed, and necessary corrective measures outlined and included in the Road Improvement Plan.

Responsibility: Selectmen/Road Commissioner/
Recreation and Conservation Commission
Time Frame: Fall, 1992, and ongoing
Estimated Cost: **$** 100 for maps and mileage expenses

3. A procedure should be developed by which the Town is notified of commercial forest harvesting operations. This procedure should provide the Town with a copy of "Notification Prior to Harvest" (as required by Title 12, MRSA, Section 8883.1) from the Maine Bureau of Forestry. The Planning Board should maintain a file of such harvesting operations.

Responsibility: Planning Board/Code Enforcement Officer/
Recreation and Conservation Commission
Time Frame: 4 Months from adoption of Comprehensive Plan
Estimated Cost: **$** 0

4. Agricultural land owners should be encouraged to participate with the Soil Conservation Service to identify and implement practices aimed at minimizing soil erosion and phosphorus export.

Responsibility: Recreation and Conservation Commission
Time Frame: Ongoing
Estimated Cost: **$ 0**

5. The Shoreland Zoning Ordinance shall place all non-forested wetlands of 10 acres or more (as identified in Part I of this Plan), and those rated High or Moderate value by the Department of Inland Fisheries and Wildlife, in Resource Protection, and the area within 250 feet of the upland edge of all other non-forested wetlands in the Limited Residential District.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 8 Months from adoption of Comprehensive Plan
Estimated Cost: **$** 0

6. The Recreation and Conservation Commission, the Bear Pond Improvement Association, and the Canton Lake Association should undertake a lakeshore and watershed analysis for Town ponds to determine current and future impacts which may be detrimental to water quality and recommend corrective measures.

Responsibility: Recreation and Conservation Commission/
Lake and Pond Associations
Time Frame: Summer, 1992
Estimated Cost: **$** 50 for maps and supplies

7. The Zoning and Subdivision Ordinances should contain performance standards that require a buffer of 75 feet from the upland edge of non-forested wetlands between two and ten acres.

Responsibility: Planning Board Ordinance Committee
Time Frame: 18 months from adoption of Plan
Estimated Cost: $ 0

8. The Recreation and Conservation Commission and the Lake and Pond Associations should inform lakeshore residents about water quality in general, of the need for periodic septic system maintenance, and instructions for determining whether each septic system is operating properly.

Responsibility: Recreation and Conservation Commission/ Lake and Pond Associations
Time Frame: Summer, 1992
Estimated Cost: $ 0

9. The Zoning/Site Plan Review Ordinance and Subdivision Ordinance should allow the Planning Board to require a Phosphorus Impact Analysis and Control Plan for development proposals located in pond watersheds.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

10. The Zoning Ordinance and Subdivision Ordinance shall require 50 feet of shoreland frontage by 200 feet in depth of common area for each lot or residential dwelling unit which has access to the common area.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

11. The Zoning/Site Plan Review Ordinance and Subdivision Ordinance should allow the Planning Board to require a Nitrate Analysis and Control Plan for development proposals.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

12. The Shoreland Zoning Ordinance shall include provisions which prohibit the creation of lawns within 15 feet of the high water line of any water body.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

13. The Shoreland Zoning Ordinance shall not allow new impervious surfaces on roads and driveways in the shoreland zone.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

14. The Planning Board should develop a joint lake protection level program with those neighboring municipalities which share common watersheds.

Responsibility: Planning Board/Recreation and Conservation Commission
Time Frame: Ongoing
Estimated Cost: $ 0

15. The Recreation and Conservation Commission should meet annually with neighboring municipalities which share common watersheds to discuss water quality protection measures and their effectiveness.

Responsibility: Recreation and Conservation Commission
Time Frame: Ongoing
Estimated Cost: **$ 0**

16. The Planning Board should consult a listing of potential threats to ground water, published by the Maine Geological Survey and the United States Geological Survey, when reviewing development proposals.

Responsibility: Planning Board
Time Frame: Ongoing
Estimated Cost: $ 0

17. The Town's ordinances should be amended to contain performance standards that regulate proposed new uses and expansions of existing uses that are located on mapped sand and gravel aquifers.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan, and Ongoing
Estimated Cost: $ 0

18. The Town should work with the Department of Environmental Protection and the Department of Human Services to implement measures to correct practices which contribute to ground water degradation.

Responsibility: Selectmen/Planning Board/CEO
Time Frame: Ongoing
Estimated Cost: $ 0

19. The Forest Harvesting Practices Rules of Title 12, MRSA, Section 8869, should be reviewed to assure that they are adequate to protect significant local wildlife habitat, including deer wintering areas. If these rules are determined to be inadequate to protect locally significant wildlife habitat, local regulations should be considered.

Responsibility: Recreation and Conservation Commission/ Planning Board/Ordinance Committee
Time Frame: December, 1992 (review); March, 1993 (regulation)
Estimated Cost: $ 0

20. Known rare, threatened, and endangered plants and wildlife found in Town should be listed and mapped for use in review of development applications. This information shall be gathered with the assistance of the Maine Heritage Program and Dept. of Inland Fisheries and Wildlife.

Responsibility: Recreation and Conservation Commission/Planning Board
Time Frame: 2 Months from adoption of Comprehensive Plan, and ongoing
Estimated Cost: $ 0

21. The Planning Board should request and consider information concerning critical wildlife habitats, as defined by the Maine Department of Inland Fisheries and Wildlife, as an element of subdivision development review.

Responsibility: Planning Board/Recreation and Conservation Commission
Time Frame: Ongoing
Estimated Cost: $ 0

22. The Zoning Ordinance should place non-developable areas within the Town's 100-year floodplains in the Resource Protection district. This element of the Zoning Ordinance should be strictly administered and enforced.

Responsibility: Planning Board/Ordinance Committee/ CEO
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

23. The Zoning/Site Plan Review Ordinance and Subdivision Ordinance should allow the Planning Board to require an analysis, by a wildlife biologist, of the impacts and mitigation measures associated with a development which would affect a known deer wintering area, or other significant critical natural resource.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

24. The Zoning/Site Plan Review Ordinance and Subdivision Ordinance should allow the Planning Board to require an engineering analysis, by the Soil Conservation Service or other suitable authority, of the impacts and mitigation measures associated with a development which would affect slopes of 15 (fifteen) percent or more.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

25. The Subdivision Ordinance should be amended to require that all development proposals include both proposed and back-up septic sites when the limiting factor is less than 24 inches for each lot, or identify an alternative site if open space [cluster] development is proposed.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

11: LAND USE

TOWN GOAL

To address the issues discussed in Part I of this Plan, and to comply with the State goals which are at least partly relevant, it is the long-term goal of the Town of Hartford to direct new development and land use change in such a way that community characteristics are maintained, public facilities are used efficiently, development sprawl is prevented, and unreasonable demands are not placed upon the community as the result of that development.

TOWN POLICY

To support the prior stated goal, it is a policy of the Town of Hartford to:

General

* **Require new or expanded development within 250 feet of a water body, measured horizontally from the normal high water mark, to be such that shoreland values are preserved, water quality is maintained, and unreasonable demands are not placed on municipal services.**

* **Require new residential subdivisions, commercial development, and industrial development within lake watersheds to meet phosphorus runoff standards in accordance with the level of protection assigned to the affected lake.**

* **Assure that new development shall not diminish the physical and visual accessibility of the Town's surface waters.**

* **Limit development along shorelands to recreation use and single family homes, and require strict performance standards for all shoreland development.**

* **Assure that the conversion of seasonal dwelling to year-round minimize threats to water quality, adequate access provided and public health and safety is maintained.**

* **Discourage strip development which results in loss of rural character.**

Residential

* Encourage new residential development to locate in those areas where municipal services can be the most efficiently provided.

* Assure that new residential development is located on, or served by, roads which have the capacity to handle the cumulative traffic caused by such development.

* Require new residential development, which locates along existing public roads, to maximize the use of shared access points.

* Allow for innovative residential development techniques which conserve land, protect significant natural areas, and reduce construction costs.

* Assure that new residential development minimizes impacts upon the natural environment.

* Encourage new residential development in such a manner that it will not conflict with production agriculture.

* Direct residential development in or adjacent to agriculture so that it is located and designed to minimize conflicts with agriculture and conserve agricultural land.

* Allow for mobile home park development only in environmentally suitable areas.

* Allow for mobile home park development only in those areas where municipal services and roads are adequate to accommodate such development.

* Maintain the values of existing residential areas.

* Encourage new residential development to occur in areas of Town where existing residential development is already concentrated.

* Maintain and enhance the historical settlement patterns of the various areas of Town.

Commercial

* Encourage commercial development to locate in suitable areas of Town where it would not conflict with residential uses and values or cause environmental harm or safety problems.

* Encourage new or redeveloped commercial establishments to be designed and constructed so as to fit harmoniously with "Hartford's character".

* Not allow the development of a commercial strip along any of the roads in Town.

* Direct new commercial development, except that commercial development associated with agriculture, away from production agricultural areas.

* Encourage the architectural design of new commercial development to be appropriate for the community and surrounding area.

* Require that the architectural design of new commercial advertising features, including signs, does not detract from the community and surrounding area.

* Allow for reasonable, small business development in residences within the community, provided such businesses do not detract from the value of neighboring properties.

* Assure that new commercial development is located on, or served by, roads which have the capacity to handle the cumulative traffic caused by such development.

* Require new commercial development, which locates along existing public roads, to maximize shared access points.

Industrial

* Assure that new industrial development be complementary and not detrimental to Hartford's character and environment.

* Provide for industrial development in those areas where municipal facilities and services are adequate to accommodate such development.

* Encourage the architectural design of new industrial development to be appropriate for the community and surrounding area.

* Assure that new industrial development is located on, or served by, roads which have the capacity to handle the cumulative traffic caused by such development.

* Require new industrial development, which locates along existing public roads, to reasonably and safely minimize access points to those roads.

Agriculture/Forestry

* Not restrict reasonable agricultural activity from any area of the community.

* Minimize the conflicts between agriculture and adjacent land uses.

* Encourage the use of prime agricultural lands for agricultural activities.

* Promote stable ownership and appropriate levels of management of forest lands such that their economic, recreational, and aesthetic values are maintained.

* Encourage development in forested areas to conserve forest lands and their resource values.

* Enforce all State laws pertaining to timber harvesting within the Town.

* Minimize the impacts of timber harvesting upon water quality and other natural resources.

* Minimize the conflicts between forested land and adjacent land uses.

Other

* Plan for the relocation and/or development of a municipal facility in a convenient, centrally-located area of Town.

* Prohibit facilities intended for the storage or treatment of nuclear and/or hazardous wastes.

IMPLEMENTATION STRATEGIES

To ensure that the long-term goal is achieved and the prior stated policies are implemented, the following strategies are recommended:

1. The Selectmen shall create an Ordinance Committee, open to members of the Planning Board, Comprehensive Plan Committee, Recreation and Conservation Commission, and all other interested citizens, to draft a Zoning/Site Plan Review Ordinance and Zoning Map for the Town of Hartford (to be consistent with the Comprehensive Plan and Future Land Use Plan and Map) and revise the Subdivision Ordinance and other relevant ordinances. This Committee shall report to the Planning Board and the Selectmen.

   Responsibility: Selectmen
   Time Frame: appoint Committee 1 month after adoption of Plan
   Estimated Cost: **$ 0**

2. The Ordinance Committee should seek professional planning assistance from available sources to assist the Ordinance Committee in drafting Hartford's Zoning Ordinance and Zoning Map and revising the Town's Subdivision Ordinance and other relevant ordinances.

   Responsibility: Planning Board/Ordinance Committee
   Time Frame: adopt ordinance 18 months from adoption of the plan
   Estimated Cost: **$**

3. The Zoning/Site Plan Review Ordinance should include specific sign design standards (including number of signs on premises, size, nature of lighting, hours of operation) and lighting standards (which minimize the impact on adjacent properties) for commercial and industrial activities.

   Responsibility: Planning Board/Ordinance Committee
   Time Frame: 18 Months from adoption of Comprehensive Plan
   Estimated Cost: $ 0

4. The Zoning Ordinance should allow agricultural- and/or forestry-related businesses to be located in all areas of Town except shorelands. Performance standards should regulate parking, delivery vehicles, hours of operation, and other factors such that the rural nature of the area is maintained and the capacity of municipal services is not exceeded.

   Responsibility: Planning Board/Ordinance Committee
   Time Frame: 18 Months from adoption of Comprehensive Plan
   Estimated Cost: $ 0

5. The Zoning/Site Review Ordinance should allow the Planning Board to require the analysis of financial impacts upon municipal services of proposed manufacturing/industrial, commercial, recreational, or residential development.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

6. The Subdivision Ordinance should be amended to include provisions which allows and encourages open space/cluster development. A lot size reduction of 50 percent and a density bonus should be provided for such development.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

7. The Zoning Ordinance should limit manufacturing/industrial or commercial developments, or residential subdivisions, to a total of no more than two access points to public roadways.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

8. Upon the transfer of any real estate in Town, a letter which lists the appropriate federal, state, and local ordinances which affect the transferred property shall be sent to the new land owners, informing them that copies of the ordinances are available at the Town Office. The letter shall be drafted and revised, as needed, by the CEO, and mailed to the land owner by the Tax Assessor upon receipt of the notice of property transfer.

Responsibility: Code Enforcement Officer/Tax Assessor
Time Frame: 2 Months from adoption of Comprehensive Plan, and ongoing
Estimated Cost: $ 50 annually

9. The Zoning/Site Plan Review Ordinance shall require performance standards for new industrial, commercial and recreational development—and for alterations to existing such development—which are appropriate for the character of Hartford. These standards should relate to architectural design, landscaping, road setbacks, curb cuts, signage, lighting, and other reasonable factors.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

10. The Zoning Ordinance shall include provisions which prohibit the treatment, storage, or disposal of all radioactive and hazardous wastes. The Zoning Ordinance should also include provisions requiring review of hazardous materials handling, use, storage, and disposal practices, such that establishments which must have such materials on their premises do so in accordance with best management practices. Spill prevention and control plans should be required as determined by the Planning Board. All spill prevention and control plans shall be filed with the Fire Chief (who, in turn, shall inform the fire chiefs of the adjacent towns which serve Hartford) and the Local Emergency Planning Committee.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

11. Local ordinances should be amended to provide for backlot development. Specific standards which include width of right–of–way; driveway standards if the right–of–way will serve more than one dwelling; and backlot size should be contained in the standards.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 months from adoption of Comprehensive Plan
Estimated Cost: $ 0

12. Local ordinances should be amended that requires a seasonal conversion permit. Such permit standards should include: sewage disposal, phosphorus control, minimum dwelling size; access/road maintenance agreement, and off–street parking.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 months from adoption of Comprehensive Plan
Estimated Cost: $ 0

13. A local ordinance should be enacted which requires that timber harvesting operations comply with the Best Management Practices for Erosion Control & Water Quality Protection in Timber Harvesting Operations published by the Bureau of Forestry and administered by the Code Enforcement Officer.

Responsibility: Planning Board/Ordinance Committee
Time Frame: 18 months from adoption of Comprehensive Plan
Estimated Cost: $ 0

12: TOWN GOVERNMENT

TOWN GOAL

To address the issues discussed in Part I of this Plan, it is the long-term goal of the Town of Hartford to provide municipal administration which fairly and adequately serves the residents and taxpayers of the community.

POLICY

To support the goal, above, it is the policy of the Town of Hartford to:

* **Provide adequate municipal administration through a Selectmen form of government to meet the needs of residents.**

* **Involve the public, to the extent feasible, during all municipal decision-making processes. This shall include giving the public the opportunity to ask questions, make comments, submit written and verbal testimony, and, if necessary, vote on the issue at hand.**

* **Provide adequate, reasonable training to Town officials and employees who need it to conduct municipal administration.**

* **Develop and maintain complete and up-to-date job descriptions for all employed and elected municipal positions. This shall include full-time, part-time, and temporary positions.**

* **Properly and fairly enforce all municipal rules, regulations, and ordinances.**

* **Employ a Code Enforcement Officer (CEO) to enforce the Town's rules, regulations, and ordinances which pertain to land use and related activities. This CEO shall be knowledgeable, competent, and certified to hold this position, pursuant to all applicable State laws.**

* **Develop a reasonable fee structure for building inspections and other activities associated with code enforcement, such that the actual costs of providing these administrative functions are borne by the responsible activities.**

* **Give the Selectmen, Planning Board, and other Town officials the responsibility of upholding the specific policies in this Plan which pertain to their particular office, and also give them the authority to apply the intent of these policies, should issues which were unforeseen by this Plan arise.**

IMPLEMENTATION STRATEGIES

To ensure that the long-term goal is achieved and the prior stated policies are implemented, the following strategies are recommended:

1. Initiate a program to familiarize all Town officials and staff in the use and operation of the equipment and materials used for Town administration.

   Responsibility: Selectmen
   Time Frame: Summer, 1992, and ongoing as needed
   Estimated Cost: $ As required

2. Develop, and update regularly, job descriptions for all Town employees and elected officials. These descriptions shall include, as a minimum, job responsibilities, hours worked, line of responsibility, pay or salary range, and benefits.

   Responsibility: Selectmen
   Time Frame: 4 Months from adoption of Comprehensive Plan, and ongoing
   Estimated Cost: $ 0

3. The Planning Board and Code Enforcement Officer shall develop a fee structure which reflects the costs of providing inspections, citations, and other required code enforcement for building and related activities in the Town. This fee structure shall be reviewed and updated on an annual basis, approved by the Selectmen, and disbursed with all appropriate applications.

   Responsibility: Planning Board/Code Enforcement Officer/Selectmen
   Time Frame: 4 Months from adoption of Comprehensive Plan, and ongoing
   Estimated Cost: $ 0

4. Any and all ordinances which include specific fee structures shall be revised to omit those fee structures and, instead, to include reference to the fee procedures referred to in the previous strategy.

Responsibility: Planning Board/Ordinance Committee/ Code Enforcement Officer
Time Frame: 8 Months from adoption of Comprehensive Plan
Estimated Cost: $ 0

5. The Planning Board and Code Enforcement Officer shall develop a checklist of all ordinances, regulations, and other factors which must be considered in a permitting process. This checklist should then be attached to each application released by the Board or CEO so that the applicant is made aware of what will be considered in the review process, and the Board/CEO can check off each item as it considers them, insuring that nothing is forgotten or overlooked.

Responsibility: Planning Board/Code Enforcement Officer
Time Frame: 4 Months from adoption of Comprehensive Plan, and updated regularly, as needed
Estimated Cost: $ 0

6. A simple flyer announcing the date, time, and general topics of the warrant articles of the Town's regular Town Meeting shall be printed and distributed each year. To the extent possible, this should be done using volunteer help (especially the Town's youth: school children, scouts, etc.).

Responsibility: Selectmen
Time Frame: Annually, beginning Town Meeting 1992
Estimated Cost: $ 50

7. The Selectmen should (themselves, or with the aid of a committee) investigate the requirements of initiating neighborhood crime watch groups throughout Town to improve citizen participation, reduce the amount of vandalism and break–ins, and supplement the limited level of police patrols in the area.

Responsibility: Selectmen/Constable
Time Frame: 4 months from adoption of Plan
Estimated Cost: $ 0

8. Officials of the Town of Hartford and the Pond Associations will work in close cooperation to protect the quality of the ponds and their environs. This can be accomplished in part by having a member of each pond association sit on town boards in an advisory capacity, and at least one official have advisory representation at pond association meetings.

Responsibility: Selectmen/Pond Association Presidents
Time Frame: Summer 1992, and ongoing
Estimated Cost: $ 0

CAPITAL INVESTMENT PLAN

Introduction

Roads, school facilities, recreation areas and other public facilities and services will be required to support projected growth in Hartford over the next ten years. To promote appropriate development and accommodate future growth to address existing problems; to improve the quality of life for Hartford's residents; to promote their health, safety and welfare; and fulfill the policies and strategies of this Plan, calls for implementing various public improvements. This portion of the comprehensive plan will identify the significant capital investments which are expected to be required over the next ten years (the planning period of this Plan).

As used in the Capital Investment Plan (CInP), "capital investments" refer to expenditures greater than $2,000, which do not recur annually, have a useful life of three years or more, and result in fixed assets. They may include new or expanded facilities, rehabilitation or replacement of existing facilities, major pieces of equipment which are expensive and have a relatively long period of usefulness, the cost of engineering or architectural studies and services, and the acquisition of land for community facilities. Capital investments, or improvements, usually require the expenditure of public funds--Town, State, Federal, or some combination thereof.

Funding limitations will likely make it difficult to pay for or implement all needed major public improvements at any one time, or even over a multi-year period. The Comprehensive Plan calls for a formal Capital Improvement Program (CIP) by which the needs which were identified in this Capital Investment Plan (CInP) will be formalized, and specific priorities and implementation periods targeted. The information presented in this section is intended to give some basic direction to the Capital Improvement Program Committee (which will be formed subsequent to the recommendation of the Comprehensive Plan) by outlining the anticipated, general, capital needs of Hartford for the next several years, and providing a brief description of several of the ways by which they may be funded.

Identified Capital Needs

The table on the following page lists the significant capital investments which are expected to be required in Hartford over the next several years, and which were identified during the development of this Comprehensive Plan. The various improvements have been assigned a priority rating which relates to its urgency to implement. It should be understood that as the results of the various studies called for by various strategies in the Comprehensive Plan are complete, new capital expenditures are likely to be added to the formal CIP, and will be addressed by the CIP Committee over the coming years. A list of the various studies to be completed is as follows:

1. Develop a Road Improvement Program (RIP),
2. Prepare a Capital Improvements/ Public Facilities Program,
3. Develop a Recreation and Conservation Plan,
4. Fire Ponds Study,
5. Composting Facility Study and
6. Volunteer Fire Department Study.

Identified Capital Investments Needs: 1991-2001
HARTFORD, 1991

ITEM	YEAR NEEDED	PRIORITY	ESTIMATED COST	PROBABLE FUNDING SOURCE
1. Salt Shed				P,RF,G
2. Town Hall Oil Furnace		Medium	$4 - 6,000	P
3. Closure of existing landfill	unk			B,G
4. Landfill (new) Costs - DEP permit processing - transfer station (share site or develop own)? - demolition debris disposal site (share site or develop own) ?	unk			B

NOTE: Capital Investments for MSAD #39 during the planning period have not been addressed in the above table or the Plan. School expansions are a district-wide decision and based upon state funding.

P	Pay-as-you-go	UF	User Fees
B	Bonding	DF	Develop Financing
RF	Reserve Fund	G	Grants
SF	Stabilization Fund	LL	Low Interest Loans
TP	Time Phased	D	Donations

Capital Improvements Financing

Capital improvements, as they are prioritized and scheduled for implementation through Hartford's multi-year Capital Improvement Program, will require a variety of funding sources and techniques for financing the capital improvements which are outlined in this section (as well as other needs which may be realized in the future). State laws usually govern which techniques are authorized and how they are to be carried out.

Current Revenues (Pay-As-You-Go)

The most fundamental means of paying for capital improvements is on a pay-as-you-go basis: funding capital improvements from current revenues. This has the advantage of avoiding bonding and its interest costs. Its disadvantage is that large-scale capital improvements may require a similarly large amount of money to finance them that would create an inordinate tax burden for the implementation period and extreme fluctuations in the tax rate. Spreading these costs over a longer period reduces such sudden impacts and rate swings.

Bonding

Borrowing against future taxes (general obligation bonds) or future service charges or fees (revenue bonds) to finance long-term public improvements is widely practiced and makes good sense from the standpoint of "paying-as-you-use". Bonding evens out the tax impact over time and allows the municipality to obtain vital improvements earlier in time than current revenue or reserve fund arrangements would permit. As a general rule, no improvement or equipment should be bonded beyond its service life and thus violate the pay-as-you-use rule. The chief disadvantage of bonding is the payment of interest on the borrowed money. However, purchasers of municipal bonds are usually exempt from paying taxes on the interest earned by them, causing the interest rate on such bonds to fall below market rates.

Reserve Fund

A reserve fund is analogous to a family savings account for a future big ticket purchase (car, appliance, etc.). Reserve funds are often used to replace equipment with a known service life whose cost and date of replacement are fairly accurately known and can be planned. The full replacement cost thus becomes available at the time when replacement is necessary without the necessity of bonding or suffering a sudden impact on the tax rate. Other advantages are that reserve funds may be invested to collect interest on their principal, thus reducing

the tax revenue contribution required. Reserve funds, like bonding, even out the flow of revenues required for capital improvements.

Stabilization Fund

A combination of techniques is sometimes practiced in the form of a "stabilization fund". As capital improvement bond issues are paid off, taxes dedicated to bond costs are held constant rather than being reduced, with the excess over bond retirement and interest requirements being placed in a stabilization fund for the purpose of paying for future capital improvements on a pay-as-you-go basis. The stabilization fund differs from a reserve fund in that the purposes for which it may be used are unspecified in advance. The projects it pays for are decided through the annual capital budgeting process. (A reserve fund is usually "dedicated" to a specific purpose, e.g. replacement of fire equipment). The advantage of a stabilization fund is more level funding for capital improvements without sudden tax rate impacts. It avoids interest charges and earns investment income while it is accumulating.

Time-Phased Projects

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

Municipal Assessment and User Fees

Development fees, assessment, and user charges, if appropriate and feasible, may also be applied by the municipality to recapture costs from direct beneficiaries or users of specific capital improvements. (For example, these are commonly used to recapture costs of providing street improvements for a new development in an area of Town that was not scheduled for those improvements.) Fees, assessments, and service charges may also lend themselves to contributing to revolving funds. Under this arrangement, the income so generated, after paying off the original improvements, is placed in a fund dedicated to financing future improvements of the same sort.

Developer Financing of Infrastructure

Shifting public sector costs to the private sector is becoming a more frequently used option. The infrastructure required for large scale developments becomes part of the developer's investment costs. If built to municipal specifications, the improvements may later be accepted by the municipality for maintenance.

Grants and Cost Sharing

A number of State and Federal grant–in–aid programs exist to share the cost of certain categorical public improvements. Full advantage should be taken of these cost–sharing programs to maximize the benefits to the community, recapture an equitable share of locally generated taxes, and secure vitally needed public improvements. Cost sharing grant programs exist in a wide variety of areas such as highways and streets, water quality, sewers, energy co–generation, parks, community development, conservation, school construction, bike paths, and others.

Low Interest Loans

In some cases, the Federal and State governments have developed special low interest loan programs to support certain categories of public improvements. These should be investigated as possible funding mechanisms for capital improvements falling within those categories at least cost to the town and its taxpayers.

Capital Investment Plan Implementation

In its most basic form, the CIP is no more than a schedule––listing capital improvements in order of priority, together with cost estimates, and the proposed method of financing them. Each year, the CIP should be reviewed and updated to reflect changing community priorities, unexpected emergencies or events, unique opportunities, cost changes, or alternate financing strategies. The CIP is comprised of three elements:

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

To implement the Capital Investment Plan, the Town of Hartford should develop a formal Capital Improvements Program. This Program will provide a mechanism for estimating capital requirements, scheduling all projects over a fixed period with appropriate planning and implementation, budgeting high priority projects and developing a project revenue policy for proposed improvements, coordinating the activities of various departments in meeting project schedules, monitoring and evaluating the progress of capital projects, and informing the public of projected, necessary capital improvements.

POLICIES

It is the policy of the Town of Hartford to:

* **Plan for major, municipal, capital expenditures with a Capital Improvements Plan (CIP). This CIP shall include, but not be limited to, all facility and equipment expenses.**

* **Borrow funds for long-term, large, capital expenditures (for facilities and improvements), so the costs of the project will be paid over a number of years by those residents who will benefit from it.**

* **Require new growth to assume a reasonable share of the costs of the facilities and services required to support that growth. This requirement shall include, but not be limited to, the development of an Impact Fee Ordinance.**

IMPLEMENTATION STRATEGIES

1. The Selectmen should appoint a Capital Improvement Program Committee (limit membership to four ?) with broad, community representation, such as from the following:

   - Board of Selectmen
   - Budget Committee
   - Road Committee
   - Recreation and Conservation Commission
   - Planning Board
   - school officials
   - the business community
   - civic and neighborhood leaders
   - citizens with special skills (engineers, bankers, contractors)
   - the general public

   Responsibility: Selectmen
   Time Frame:
   Estimated Cost: $ 0

2. The CIP Committee shall develop a functioning, multi-year, Capital Improvement Program by June, 1993.

PURPOSE AND IMPLEMENTATION OF FUTURE LAND USE PLAN

Purpose

The primary purpose of the Future Land Use Plan and Future Land Use Map contained in the comprehensive plan is to plot the future development characteristics of Hartford. The narrative of the Future Land Use Plan attempts to identify the future development characteristics of the Town. It identifies categories where various broad development types should be encouraged. The development types have been based upon a desire to direct future development to environmentally appropriate areas and where adequate municipal services are available.

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

Implementation

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

During the development of the zoning ordinance and map, the public will be given ample opportunity, through public meetings and hearings, for input. At a future town meeting, perhaps sometime in 1993, the Zoning Ordinance will be brought to vote.

FUTURE LAND USE PLAN

Hartford's Future Land Use Plan

A major purpose of the comprehensive plan is to establish a guide for ongoing development of the community. The plan establishes the foundation for land use decisions, defines areas available for growth and those areas less suitable or not suitable at all for growth within the community, and aids in the definition of future capital improvement needs. It is, therefore, important that the plan sets forth a realistic development guide so that the community can prosper and at the same time maintain valued characteristics.

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

1. The type and density of development should be compatible with the natural/environmental constraints of the land to absorb future development. Maintenance and protection of surface and ground water, the soils capacity of subsurface sewage disposal, the slope of land and the presence of unique natural areas were key factors in the identification of growth classifications.

2. The desire to encourage agriculture and forestry.

3. The desire to manage development so that Hartford's valued characteristics including forest land, scenic views, natural resources and open space are maintained.

4. The desire to allow for appropriate commercial/industrial development.

5. The desire to maintain surface water quality through shoreland and watershed protection.

6. The desire to maintain residential values.

7. The desire to manage seasonal development so that Hartford's character is maintained and unreasonable burdens are not placed on municipal services.

8. The desire to maintain important wildlife areas and travel corridors.

9. The desire to maintain the high quality of Hartford's own natural resources and those it shares.

10. The desire that the type and location of development be compatible with municipal services including the transportation system.

11. The desire to discourage random, uncontrolled commercial development along major travel corridors.

12. The desire to minimize the negative impact of residential sprawl.

13. The desire to maintain Hartford's historic heritage and significant scenic values.

The comprehensive plan has made various projections and predictions relating to growth and development to year 2003. Year-round population has been targeted to reach approximately 910 by 2003. In addition, it has been expected that some 100 new year-round dwellings will be needed to house that year-round population. Seasonal residential development is not expected to be a major component of housing growth.

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

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

Special Protection Areas

Certain areas within Hartford warrant special consideration due to their likelihood of degradation as the result of various land use activities. Land use activities particularly structural development within these areas include:

a. Floodplains. Nondeveloped floodplains should be placed in a Resource Protection District which prohibits new structural development.

b. Wetlands. Nonforested wetlands of ten acres or more as mapped by the Maine Geological Survey and the area within 250 feet of their upland edge should be placed in a Resource Protection District which prohibits new structure development and regulates timber harvesting. The area within 75 feet from the upland edge of nonforested wetlands of less than 10 acres but greater than 2 acres should be maintained in a natural buffer through performance standards contained in the Subdivision and Zoning Ordinances.

c. Significant Ground Water Supply Areas/Sand and Gravel Aquifers. These areas, because of potential for degradation and/or contamination, require new development or redevelopment to take safeguards to minimize the potential of degradation. Local ordinances should contain performance standards that protect these water resources.

d. Shoreland Areas. The land area within 250 feet from great ponds, rivers and fresh water wetlands and 75 feet streams as defined by the Mandatory Shoreland Zoning Act is critical to the well-being of the body of water and wetland. In addition these areas contain significant wildlife habitats and travel corridors. In those shoreland areas that are not within a Resource Protection District, uses should be limited to residential in nature. In the Limited Residential, lot sizes should not be less than three acres per year-round or seasonal dwelling with a minimum of 250 feet of shore frontage. Performance standards which comply with the policies of this plan and the Mandatory Shoreland Zoning Act shall be imposed.

e. Watersheds. The land area which drains surface waters to a lake or pond is termed its watershed. Various land use activities ranging from development to timber harvesting within a watershed can significantly impact water quality. Land use activities in watersheds should be managed to minimize water quality degradation.

f. Critical Wildlife Habitats including Travel Corridors. These areas should be maintained through development standards that regulate detrimental alteration to critical areas as they are documented and minimize other negative impacts.

g. Steep Slopes. Slopes that exceed 20 percent for more than over 5 continuous acres should be placed in a Resource Protection District which prohibits new structural development. On slopes of between 15 and 20 percent residential density should not exceed one unit per five acres.

General Development District

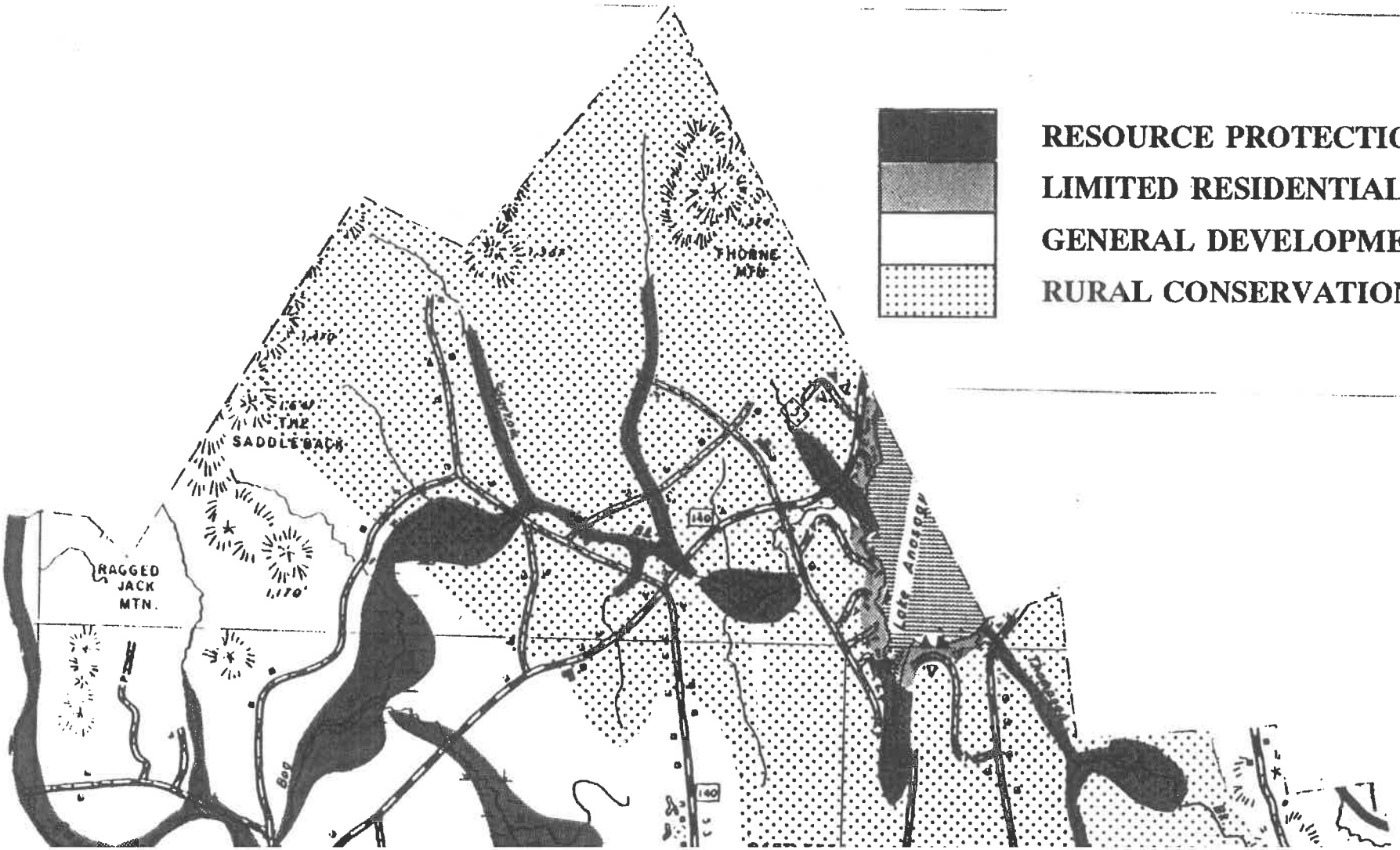
The purpose of this district is to provide locations for a mixture of land uses according to specific performance standards contained in the Subdivision and Zoning/Site Plan Review Ordinances. Land uses activates within this district include but are not limited to agriculture, forestry, residential, mobile home parks, public, commercial, industrial, and institutional. Minimum lot standards should not be less than three acres or have a residential density of more than one unit per three acres. Road frontage should not be less than 250 feet with a maximum lot frontage to depth ratio of 1:4. Performance standards contained in the Subdivision and Zoning/Site Plan Review Ordinances should provide for the following: sub-division abutting Routes 219 and 140 should be access by internal roads or share common entrances; commercial/industrial development should have a minimum front setback including parking of 50 feet from the edge of rights-of-way and buffers to minimize residential impacts; and protection of ground and surface waters.

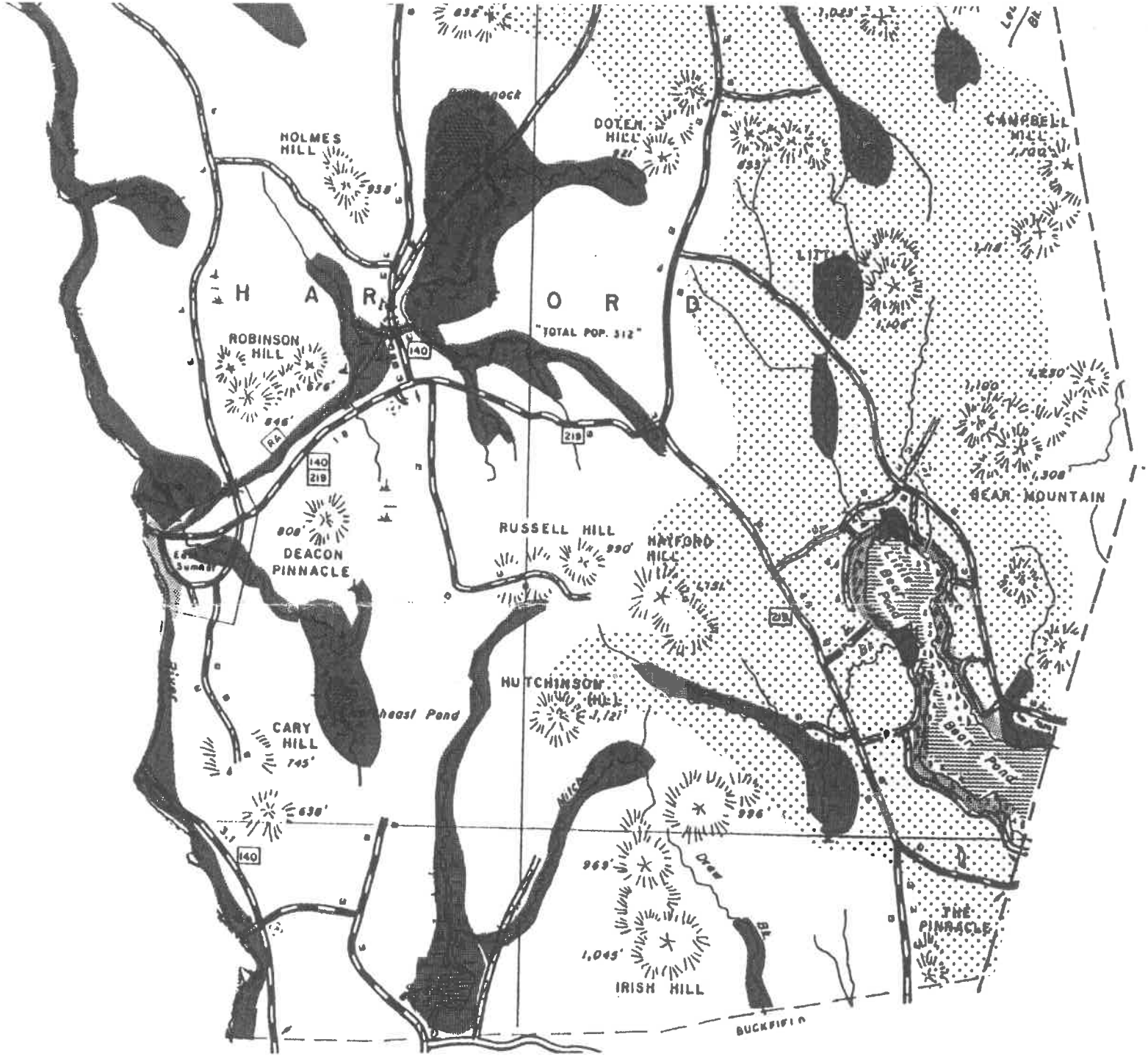
Rural Conservation District

The underlying purpose of this District is watershed management of a sufficient level as to maintain the quality of Lake Anasngunticook and the Bear Ponds. Land used activities that have traditionally occurred should continue and similar activities allowed. Low density residential development, not to exceed one unit per five acres; cluster/open space development with lot sizes of two acres with three acres left in permanent open space; commercial uses which do not create runoff or have more than 20,000 sq.ft. impervious surfaces; public uses, forestry, agriculture and in-house businesses are appropriate for this area.

Performance standards should control phosphorous, erosion and sedimentation, conflicting land uses and roadway access points among others identified in the Comprehensive Plan.

HARTFORD'S FUTURE LAND USE PLAN MAP




HOLMES HILL
938'
DOTEN HILL
CAMPBELL HILL
1,100'
H A R
O R D
"TOTAL POP. 312"
ROBINSON HILL
876'
846'
RA
140
219
DEACON PINNACLE
808'
RUSSELL HILL
990'
HALFORD HILL
1,121'
BEAR MOUNTAIN
1,305'
1,250'
1,100'
Little Bear Pond
Bear Pond
HUTCHINSON HILL
1,121'
CARY HILL
745'
638'
996'
969'
1,045'
IRISH HILL
THE PINNACLE
BUCKFIELD