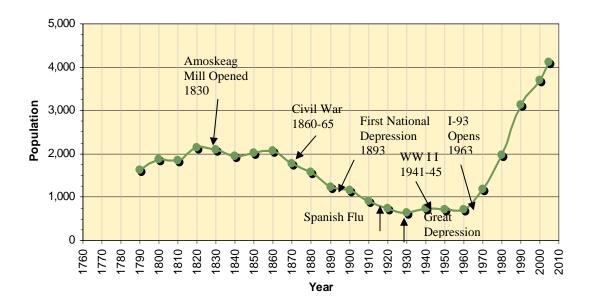
# **Demographic Trends**

Population growth is driven by two factors, the natural changes including births and deaths and the net migration or change in persons entering or exiting a community. Many local and regional factors such as employment opportunities, provision of municipal services, transportation networks, natural features, cost of living, and other quality of life issues may influence the net migration and ultimately impact local population growth or decline. In turn, the changes in population will drive the demand for housing, future land development, and the need for community services for age specific populations such as schools and elder care. Population growth is both directly and indirectly tied to all aspects of local planning.

### **Population Growth Trends**

Deerfield was home to over 2,000 residents in the early 1800's, reaching a peak of 2,113 residents in 1820. However, two major events including the opening of the Amoskeag Mill in the City of Manchester and the Civil War started a decline in population growth beginning in the mid-1800's (see Figure 1 below). During this time period, many young workers left the rural farm life of New Hampshire's small town's to work in the mills and later to fight in the Civil War. Over time the continued impacts of these events, two national depressions, the Spanish Flu Epidemic, and World War I resulted in significant population loss through the turn of the century. By the Great Depression in 1929, Deerfield's population had dropped to 635 individuals.





Deerfield began to experience population growth again after World War II, at which point the town's population gradually increased through the 1950's and 1960's. After completion of the Interstate 93 highway system in 1963, the town grew at unprecedented rates. After 1980, Deerfield once again exceeded 2,000 persons for the first time in roughly 120 years. Since 1960, the town's population has increased by 476 percent.

Between 1990 and 2005, Deerfield's population grew 31.09 percent, while the state as a whole grew 18.09 percent, Rockingham County grew 20.03 percent, and the SNHPC region grew 21.82 percent (see Table 1 below). Deerfield's population growth has been roughly in line with previous population estimates as reported in the town's 1999 Master Plan, which estimated Deerfield's population at 4,000 by the year 2005-2006 (see Table 2 below).

Table 1 Vol. II Deerfield Population Change, 1980- 2005

Year	Total Population	Percent change
1980	1,979	-
1990	3,124	58%
2000	3,678	18%
2005*	4,115	12%

Source: U.S. Census Bureau, \*Office of Energy and Planning, Annual Estimates

Table 2 Vol. II
Deerfield Population Change, 1990-2005

	-		1990-2005		
	1990	2005	Absolute Change	Percent Change	Annualized Growth Rate
Deerfield	3,139	4,115	976	31.09%	2.0%
SNHPC Region	216,479	263,719	47,240	21.82%	1.4%
Rockingham County	245,845	295,076	49,231	20.03%	1.3%
New Hampshire	1,109,252	1,309,940	200,688	18.09%	1.2%

Source: US Census 2000, 1990 American Community Survey, Office of Energy and Planning 2005

# **Population Projections**

The population of a community can fluctuate with changes in national and regional economic conditions. Population is also affected by employment opportunities, the quality of transportation networks, and relevant advantages over neighboring communities (e.g. land resources, educational attainment of citizens, etc). Population projections are statistics developed to help a community picture its likely future. Because



assumptions used in developing the data and the growth factors can change, projections should not be taken to be hard-and-fast data. They are meant to provide general direction as to what is likely to be expected based on the stated assumptions.

It is important for Deerfield to be able to anticipate the likely housing demand of future populations in order to appropriately plan for residential growth, and to evaluate the capacity of schools, roads, fire and police services and other municipal services and facilities to meet anticipated demands. Once future needs are predicted, detailed studies can be done to determine specific project design, capacity, and timing requirements.

There are various methods that can be used to project future population. The Southern New Hampshire Planning Commission (SNHPC) and the New Hampshire Office of Energy and Planning (OEP) have prepared population projections for the Town of Deerfield through the year 2025 (see Table 3 below). The SNHPC projects an increase of 2,349 people between the years 2000 and 2025 (an increase of approximately 63.9 percent), while the OEP projects a somewhat smaller increase of 1,462 people (an increase of approximately 39.8 percent).

Table 3 Vol. II Population Projections for Deerfield, 2000-2025

Year	NH OEP	SNHPC
2000*	3,678	3,678
2005	4,220	4,283
2010	4,510	4,759
2015	4,740	5,204
2020	4,940	5,632
2025	5,140	6,027

Source: \*U.S. Census 2000, NH OEP, and SNHPC

The SNHPC methodology includes more localized data and assumptions about the Town of Deerfield and its surrounding area than does the OEP. The SNHPC projections are based on natural growth and net migration. OEP uses more of a "top-down" approach. That is, after projecting a total for the state, that figure is divided among the individual counties, and then the respective county totals are further divided among the county's municipalities. The SNHPC feels that this procedure is not sensitive to the differences in local situations and, for this reason, the Commission believes that its figures are more realistic than the state's.

Another area of concern for population projections is the impact that the widening of I-93 will have upon communities affected by these changes. The Final Environmental Impact Statement released by the New Hampshire Department of Transportation (NH DOT) in April 2004 included population projections for the horizon year 2020 based upon the build scenario for all the towns in the SNHPC region. The 2020 build population



projection for Deerfield is 5,989. This number is slightly higher than the SNHPC projection for 2020 which is 5,632.

### **Population Structure**

Figure 2 below shows that the median age for Deerfield in 2000 was 36.2, which is slightly younger than the median age for Rockingham County, as a whole, that stands at 37.2 (U.S. Census Bureau). The 35-44 age cohort has the largest number of people with 20.8 percent with the 45-54 year old age cohort being second most with 16.9 percent.

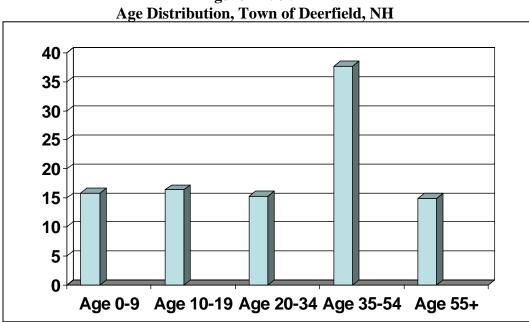


Figure 2 Vol. II

Source: U.S. Census Bureau

# **Declining Young Adult Population**

Recent estimates prepared by the Office of Energy and Planning (OEP) indicate that, while New Hampshire's population continues to grow, the population is now starting to grow at a dramatically slower rate than it has for the past fifty years. Since 2000, according to the OEP, the state's growth has slowed from adding 19,000 people per year to adding about 11,000 people annually. The OEP has stated this is due primarily to more people moving out of state, while the number of those moving into the state has remained roughly constant.

The most noticeable trend has been a decline in New Hampshire's young adult population. The 25-34 age cohort in New Hampshire fell by 7.3 percent between 2000 to 2005. This is a dramatic decline since the retirement age population is expected to soar to 25 percent of the state's total by 2030. The 2000 census shows that New Hampshire

has a higher percentage of baby boomers than the country as a whole and projections say this trend is likely to continue in the future.

There has also been a noticeable decline in the youth population within the Town of Deerfield as well. According to statistics from the U.S. Census Bureau, from 1990 to 2000 the Town of Deerfield witnessed a seven percent decline in the 25-34 age cohort, falling from 592 to 451 young adults in 2000.

This decline represents a significant loss of the working age population of the community and reflects the pattern of out migration to areas where job opportunities are high and affordable housing is available.

It is important the Deerfield Planning Board take this trend into account in order to anticipate the town's future land use, housing, and economic development needs, particularly those needs that will be directly affected by the aging of New Hampshire's population and the large out-migration of the states young adults.

# **Housing Trends**

Household growth and population growth in Deerfield has been roughly parallel that of 1990-2000. Deerfield's population has grown by eighteen percent compared to fifteen percent housing unit growth. At the same time, the number of households in Deerfield has significantly increased over the past decade. Between 1990 and 2000, a total of 226 new households were created in Deerfield, an increase of 22.6 percent (see following Table 4).

Figures 3 and 4 on the following pages indicate the total number of housing units by type in Deerfield in 1990 and 2000. As the data shows, it is not surprising the majority of the housing units in the community are single-family units, increasing from 85 percent in 1990 to 87 percent in 2000.

Table 4 Vol. II Deerfield's Total Households and Families, 2000

	1990	2000	Percent Change
Total Households	999	1,225	22.6%
Persons Per Household	3.12	2.98	-4.7%
Family Households	828	986	19%
Persons Per Family Household	3.37	3.27	-3%
Married-Couple Family Households	724	870	20%
Single-Parent Family Households	104	96	-8.3%
Non-Family Households*	171	186	8.8%

\* Includes Single Person Households

Source: U.S. Census



Town of Deerfield, NH
Housing Units By Type 1990

9%

6%

Multi-family Units

Mobile Home & Other

85%

Figure 3 Vol. II

Source: U.S. Census 2000

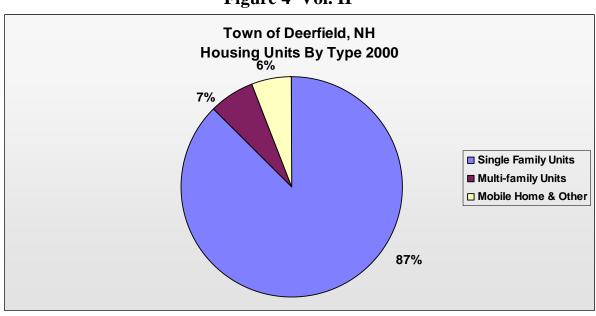
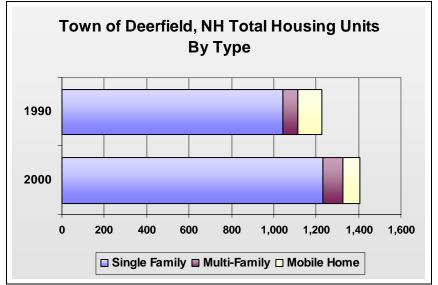


Figure 4 Vol. II

Source: U.S. Census 2000

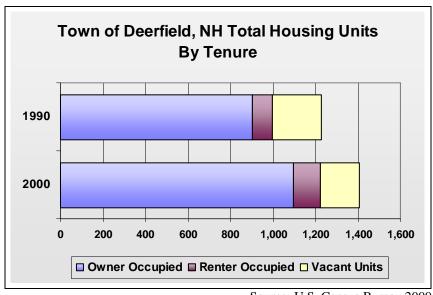
Figures 5 and 6 also display the growth in the number of single family units, multi-family units and mobile homes between 1990 and 2000. The decline in mobile/manufactured homes can be attributed partially to the economic boom of the late 1990's as well as town zoning ordinances that discouraged mobile/manufactured home park development.

Figure 5 Vol. II



Source: U.S. Census Bureau 2000

Figure 6 Vol. II



Source: U.S. Census Bureau 2000



Since 2000, housing costs within the Town of Deerfield as well as the rest of the state have skyrocketed as the housing market entered an unprecedented boom period. In 2000, the median purchase price for a home Deerfield was \$174,600; by 2005, the median purchase price for a home skyrocketed to \$315,000¹. Two main factors for this rise were low interest rates as well as a low supply of available units. In addition, housing purchases and new construction were high. Within the past year, however, the housing market has entered a slump and new purchases and construction have fallen off. According to data collected by the Northern New England Real Estate Network (NNEREN)², during the first quarter of 2008, there were 415 residential (noncondominium) sales in Rockingham County, representing a negative eighteen percent change from 2006/2007 and an 8 percent decrease from 2007/2008.

Table 5 Vol. II Deerfield Housing Unit Types, 1990 – 2000

	1990	2000	Percent change
Single Family	1,043	1,231	18%
Multi-Family	72	93	29%
Manufactured Housing and Other	112	82	-27%

Source, U.S. Census

#### **Economic Trends**

New Hampshire's unemployment rate compared to the rest of New England states remains the lowest in the region. As of October 2006, New Hampshire's unemployment rate stood at three percent, while other states within New England ranged between four and five percent<sup>3</sup>. According to the 2000 Census data, Deerfield's employment population in 2000 stood at 2,700 with most workers employed outside of the community in another county or state.

### **Employment**

Table 6, compares the employment of Deerfield's residents in 1990 and 2000, as well as the region as a whole. The Town of Deerfield, much like the region as a whole, finds its residents employed in a wide variety of industries. The decline of manufacturing employment as witnessed in the 1990 census continues today as a percent of total employment. The manufacturing sector of the economy for the nation as a whole has been in decline for about four decades now. At the same time, there has been an increase in the service sector that consists of retail, finance, insurance, and related services.

Source: http://www.nhes.state.nh.us/elmi/econanalys.htm)



Deerfield Master Plan - 2009

<sup>&</sup>lt;sup>1</sup> Source: NHHFA Purchase Price Database

New Hampshire Real Estate Trends First Quarter 2008, New Hampshire home buyers have more reasons to take action -by Peter Francese, http://monikamcgillicuddy.com/wordpress/general-r/nh-real-estate-market-trends-first-quarter-2008/

Table 6 Vol. II
Employment by Industry for Deerfield Residents and the Region

Industry	2000	1990 Percent	2000 Percent of	2000 Region (Rockingham
	2000	of Total	Total	County)
Construction	239	11.7	12.2	7.0
Manufacturing	310	17.0	15.9	18.2
Transportation/Utilities	104	10.5	5.3	4.8
Wholesale	75	3.2	3.8	4.2
Retail	158	10.6	8.1	13.9
Finance/Insurance	115	10.3	5.9	6.2
Other Services	771	29.0	39.5	41.5
Public Administration	142	4.8	7.3	3.6
Agriculture/Mining/Forestry	40	2.9	2.0	.7

Source: U.S. Census 2000

As indicated in Table 6 above, employment in construction, services, and public administration have increased in Deerfield in the last ten years while manufacturing has declined. There has also been a slight decline in retail and a noticeable decline in finance and insurance. Private wage and salary workers accounted for 72 percent of the workforce, while government workers accounted for seventeen and one-half percent. Self-employed workers accounted for eight percent of the workforce.

#### Income

Deerfield's Median Family Income in 2000 was \$64,737. This was slightly less than Rockingham County's median family income, which was \$66,345. The only disparity between the percentage of household income in the town and the county is that nearly 30 percent of the households in Deerfield have an income of \$50,000 to \$74,999 (see Table 8 below). This is roughly four percent higher than the total number of households in Rockingham County with the same income.

Table 7 Vol. II Types of Income

Types of Income				
Type of Income	Total Households	Region (Rockingham County)		
Wage or Salary Income	1,229	104,586		
Non-Farm Self Employed Income	158	11,609		
Social Security Income	228	22,361		
Public Assistance Income	26	1,634		
Retirement Income	212	16,359		
Other Type of Income	12	2,297		

Source: U.S. Census 2000



Table 8 Vol. II
Income Distribution Totals for Deerfield and Rockingham County

Household Income Level	Deerfield Total Number of Households	Percent of Total	Rockingham Total Number of Households	Percent of Total
Less Than \$10,000	7	0.7	1,503	2.0
\$10,000 to \$14,999	6	0.6	1,318	1.8
\$15,000 to \$24,999	61	6.1	4,304	5.8
\$25,000 to \$34,999	62	6.2	5,997	8.0
\$35,000 to \$49,999	173	17.4	10,994	14.6
\$50,000 to \$74,999	297	29.8	19,625	26.2
\$75,000 to \$99,999	189	19.0	13,864	18.5
\$100,000 to \$149,000	148	14.9	11,518	15.4
\$150,000 to \$199,000	32	3.2	3,173	4.2
\$200,000 or more	21	2.1	2,590	3.5

Source: U.S. Census 2000

### **Education**

The educational attainment of Deerfield's population (aged 25 years and over) in 2000 is similar to that of Rockingham County and the State of New Hampshire as a whole (see Table 9). A slightly higher proportion of Deerfield's residents have completed a Bachelor's degree relative to the county and state levels. There is also slightly higher proportion of graduate or professional degree attainment relative to the state.

Table 9 Vol. II Educational Attainment, 2000

		<u>'</u>	
		Rockingham	New
Attainment Level	Deerfield	County	Hampshire
Less than 9 <sup>th</sup> grade	2.8%	2.5%	3.9%
9 <sup>th</sup> to 12 <sup>th</sup> grade, no diploma	5.5%	7.1%	8.7%
High school graduate (or			
equivalency)	32.4%	28.6%	30.1%
Some college, no degree	17.5%	20.7%	20.0%
Associate degree	10.0%	9.5%	8.7%
Bachelor's degree	21.3%	21.1%	18.7%
Graduate or professional degree	10.4%	10.6%	10.0%

Source: 2000 US Census



### **Poverty**

The state in the last five years has seen a relatively low poverty rate. However, according to a recent University of New Hampshire report (12/20/06), there are at least 48,000 families that are struggling to get by on their current wages.

The University's Carsey Institute<sup>4</sup> found that while New Hampshire has the lowest poverty rate in the nation, one-in-seven families are low income and stagnating wage growth combined with soaring housing costs has compounded problems for these New Hampshire families.

In Deerfield, the 2000 census shows there were seven families whose incomes were less then \$10,000 and six whose incomes were between \$15,000 and \$24,999. There were also 123 families earning between \$15,000 and \$34,999. Comparative poverty statistics are provided in Table 10.

The Carsey Institute estimates that a family of four would have to earn an annual family income of between \$37,000 and \$49,000 in order to meet their basic needs (i.e. housing, food, transportation, healthcare and other necessities).

Table 10 Vol. II Comparative 2000 Poverty Statistics for Town, County, and State

Poverty Status	Deerfield	Rockingham County	New Hampshire
% Of persons below poverty level	3.2%	4.5%	6.4%
% of Families below poverty level	1.3%	3.1%	4.3%
% of elderly below poverty level	10.4%	6.4%	7.2%

Source: U.S. Census 2000

In 1990, six percent of all the individuals in Deerfield lived below the poverty level. By 2000, this number had decreased to three percent (see Table 10 above). This compares to four and one-half percent for Rockingham County and six percent for the state in 2000.

This represents, for the first time, a major decline in the total number of persons below the poverty level for Deerfield since 1980 when the percent then was nine. This represents a decrease of six percent in twenty years. At the same time, the percent of elderly living below the poverty level in Deerfield has increased since 1990 from six percent to ten percent.

Overall, the state has seen poverty levels remain steady since 1990. The latest numbers from the 2005 U.S. Census Bureau's American Community Survey Profile show poverty levels for all persons have increased slightly to seven and one-half percent, the percent for all families has increased to five percent, and the percent of elderly below the poverty



<sup>4</sup> www.carseyinstitute.unh.edu

level has increased to seven percent.<sup>5</sup> The margin of error for these statistics, however, places them on par with the 2000 census.

# **Existing Land Use Study**

### Introduction

Many factors influence a community's land use patterns. Historically, this would include natural resource constraints and opportunities, agricultural/forestry practices, and commercial/industrial development. This section of Volume II of the Master Plan describes the existing land use and zoning patterns in Deerfield and reviews the development patterns that have occurred over the past decade. This section is also designed to assist Town officials and residents in determining present land use needs and identifying future land use trends, potential impacts and conflicts and future land use policies.

The basis for the future land use recommendations in Volume I of this plan is the vision statement and goals and objectives (see Volume I, Vision Statement, Goals and Objectives beginning on page 7). The recommendations also recognize the type and distribution of existing land use activities; opportunities for and constraints imposed on, future development by the community's natural features; population and housing projections and the opinions of those who participated in "Down the Road in Deerfield – You Can Get There From Here" Master Plan visioning session held in March 2007. The recommendations also reflect the opinions of those residents of the community who responded to the Master Plan survey questionnaire distributed on November 24, 2006.

### **Existing Land Use Analysis**

The following analysis examines the various land use categories which make up the existing land use map and compares the amount of acreage shown on the map with previous land use studies prepared for Deerfield. While differing methods were used to calculate the acreages between these various studies, the figures provide enough information to make general comparisons.

As part of the Community Survey, respondents were asked to identify what they enjoyed most about living in Deerfield. A large majority of the responses identified the rural character or rural setting. Similarly, the Regional Comprehensive Plan completed by the Southern New Hampshire Planning Commission (SNHPC) in 2006, identified the following as Deerfield's greatest regional assets:

<sup>&</sup>lt;sup>5</sup> **Note**: The 2005 American Community Survey universe is limited to the household population and excludes the population living in institutions, college dormitories, and other group quarters.



-

- The Deerfield Fairgrounds containing buildings and sites of historical and cultural significance.
- All of the conservation lands within the community, including portions of Pawtuckaway State Park and Bear Brook State Park.
- Open space at the Dodge and Brown property located within the eastern part of town off Mountain Road.
- King Estate open fields on Range Road near the center of town.
- Historic old center on Meeting House Road.
- Historic properties at the intersection of South and Candia Roads.

The Future Land Use Plan in the Town's 1999 Master Plan also identifies a number of strategies that the Town could use in an effort to retain the rural character and feel of Deerfield. These strategies include:

- Promoting the existing pattern of rural land uses; protecting Deerfield's valuable natural resource areas by basing future growth on the land's ability to accommodate it
- Providing adequate areas for limited industrial and commercial growth;
- Providing areas for the continuation of recreational activities, such as hiking, canoeing, fishing, etc.
- Protecting Deerfield's aesthetic and historic values to insure its continued beauty and character, which are important to its residents and non-residents alike.
- Protecting Deerfield's land in agricultural use and providing adequate protected areas for continued forest-based industries.
- Providing for a wide variety of housing types mobile homes, apartments, multifamily, seasonal homes.
- Allowing a variety of housing types that target compatible growth to the village areas and encourage mixed land use of appropriate type, size, and character

The purpose of these policies is to:

- Decrease residential sprawl
- Revitalize the villages
- Minimize future costs for expanding public services
- Encourage more and better jobs for residents
- Help reduce the property tax burden on residential properties
- Manage growth so that fiscal and environmental impacts are minimized.

In analyzing Deerfield's existing land use, the SNHPC merged the town's most recently available parcel data with the town assessors' parcel data to create a parcel based land use GIS layer. This GIS data was utilized to tabulate the current land use acreages as presented in the following Table 11.



Table 11 provides a breakdown of the Town of Deerfield's existing land use. As illustrated, there are approximately 10,878 acres of vacant land in Town. The land use figures in the table were calculated using the Town's Assessor Data, which was also used to create the existing land use map.

Table 11 Vol. II Existing Land Use

Existing Land OSC				
Existing Land Use	Acres	%		
Residential - Single Family	15314.39	45.88%		
Residential - Multi Family	1151.22	3.45%		
Commercial/Industrial	422.87	1.27%		
Cemetery	0.12	0.0004%		
Municipal	724.78	2.17%		
State Land*	3297.96	9.88%		
Agricultural	133.7	0.4%		
Transportation	606.22	1.82%		
Utilities	276.23	0.83%		
Open Water	569.94	1.7%		
Conservation Land	5756	17.25%		
Vacant Land	10878.26	32.59%		
Total Town Area	33375.69	100%		

Source: Town Assessor Parcel Data \*Included in Conservation Land

The Town of Deerfield is unique in that two state parks are partially located within its borders. Also, the Town's land area of 33,375 acres is the largest in the SNHPC region. Pawtuckaway and Bear Brook State Parks occupy roughly ten percent of the Town and an additional seventeen percent of the Town is designated as conservation land. In addition, vacant land makes up over 30 percent of the Town, but due to natural constraints, only roughly 52% (5645.63 acres) is actually developable.

Over the decades, land in agricultural use has steadily declined. At present, there is approximately 0.4 percent, or 134 acres, of land in active agricultural use in Town, compared to roughly three percent (1,022 acres) in the 1990's.

The predominant land use in Deerfield is single family residential, with approximately 43 percent. Multi-family residential uses are significantly smaller, with approximately three percent. Less than two percent of the overall land uses in Town are commercial and industrial uses.



<sup>&</sup>lt;sup>6</sup> 1999 Master Plan

Table 12 Vol. II Land and Surface Water Area Comparison

Source of Data	Total Area (acres)	Surface Waters
OEP/GRANIT	33,347.66	851.07
1999 Master Plan	33,550	765
2007 Master Plan	33,375.6	*569.94

Sources: NH OEP, GRANIT, 1999 Deerfield Master Plan, and SNHPC
\*Open Waters – does not include streams

Land area calculations tend to vary depending on the source. For example, as seen in Table 12, the New Hampshire Office of Energy and Planning (NH OEP) and UNH GRANIT report there is a total land area of 32,496.58 acres in Deerfield and 851.07 acres of surface waters, which equals a total area of 33,347.66 acres. The most recent data collected for this Master Plan update indicates that surface waters represent 568.99 acres, compared to 765 acres as stated in the 1999 Master Plan. All three of the figures for surface waters vary, depending on the source, which may be attributed to the difference in calculation methods and water levels at the time the measurements were taken. The 2007 surface water calculation for "Open Water" is derived from the Town Assessors data and does not include streams, which accounts for much of the disparity. The most accurate source of data is likely the OEP/GRANIT data which includes streams.

# **Existing Zoning Ordinance Analysis**

The Town of Deerfield's Zoning Ordinance divides the Town into the following six districts:

- The Agricultural-Residential District
- The Wetland Conservation District
- The Floodplain Overlay District
- Commercial/Industrial Flexible Overlay District
- The Senior Housing Overlay District
- The Pleasant Lake Watershed Overlay District

### **Agricultural-Residential District (AR)**

The 1999 Master Plan states that "most of Deerfield (98 percent) is in one zoning district - AR, which is a rural residential, low density zone which permits primarily single family homes." The extent of this district has remained largely unchanged at the time of this master plan update in 2008 and the town remains largely zoned AR with several overlay districts.

The AR Zone allows a number a different uses, such as agriculture, single-family, two-family and seasonal residential units, manufactured housing, senior housing, home occupations, portable saw mills, Bed and Breakfast, and accessory apartments. Additionally, a number of uses, such as multi-family, and limited commercial and industrial uses, are also allowed by Special Exception. The lot area and dimensional



requirements require a minimum lot size of three acres; a 200 foot road frontage; 40 foot front setback; 37.5 side yard setbacks; and 37.5 rear yard setbacks. The maximum building height is 35 feet, unless specified otherwise.

### **Zoning Overlay Districts**

#### Wetland Conservation District

The Wetland Conservation District was created in order to protect the health, safety and welfare of the public by regulating the use of land that is located in areas found to be subject to high water tables for extended periods of time. The permitted uses in the Wetlands Conservation District depend on the rate of soil infiltration on the site.

Appropriate development on poorly drained soils is limited to agricultural uses, which do not create significant increases in surface or groundwater contamination by use of pesticides and do not contribute to soils erosion. Some examples include grazing, hay production, forestry, tree farming and wildlife management.

Soils that are very poorly drained can have the same uses as poorly drained soils except alteration of the land, such as dredging and filling is prohibited, as well as the construction of any structure other than fences, catwalks, and wharves, provided they are constructed on posts.

# Floodplain Overlay District

The Floodplain Overlay District applies to lands that are designated as special flood hazard areas by the Federal Emergency Management Agency (FEMA) as identified in the Flood Insurance Rate Map (FIRM) dated May 17, 2005. These regulations overlay and supplement the Town's Zoning Ordinance and are considered part of the Zoning Ordinance. Any development within the special flood hazard area requires a building permit and must adhere to specific provisions. The purpose of these provisions is to prevent or minimize damage and destruction to structures in the event of a flood.

### Commercial/Industrial Flexible Overlay District

The purpose of the Commercial/Industrial Flexible Overlay District is to encourage flexibility in the development of commercial and industrial uses throughout Town. This Commercial/Industrial Flexible Overlay District is a floating zone that has written standards to ensure that any undesirable impacts from proposed projects are minimized. Currently, commercial/industrial development can be located anywhere in Town, provided the proposed development meets the Flexible Overlay District criteria and standards, as listed in the Zoning Ordinance.

One advantage of the Flexible Overlay District is that it allows for flexibility in locating commercial and industrial development throughout town, whereas traditional zoning would only allow commercial/industrial uses in designated zones. However, the application process for the Flexible Overlay District requires that specific criteria and



standards are met, in addition to the three phase application process, which can seem tedious and may discourage some applicants.

Another disadvantage is that the flexible zoning does not provide many safeguards for abutting landowners when businesses change ownership and use...the impacts and traffic patterns may change within a neighborhood. Also, there is no incentive to achieve smart growth principles within the town such as clustering higher intensity uses near a village center as commercial/industrial uses can be spread out all over the town leaving haphazard and unplanned growth patterns.

The same lot area and dimensional requirements apply to the Commercial/Industrial Flexible Overlay District as the Agricultural-Residential Zone.

To prevent a sprawling landscape, the town could consider following options:

**Option A-** Concentrate commercial growth around the existing villages

**Option B-** Concentrate growth along vehicular corridors

**Option C-** Provide incentives to encourage commercial development along transportation corridors and/or village centers

**Option D-** Strengthen home business zoning regulations/Allowed use

**Option E-** Eliminate the flexible Overlay District and establish commercial/industrial districts.

### Senior Housing Overlay District

The Senior Housing Overlay District, which was approved by the voters at the 2001 Town Meeting, was developed to promote affordable housing for senior citizens as well as preserve the open space that contributes to Deerfield's rural setting. The Senior Housing District applies to those developments for persons 62 years of age and older. The number of senior housing developments in Deerfield is restricted to no more than ten percent of the total number of dwelling units that exist at the time the determination is made, but does not include units already set aside for senior housing

Senior housing is permitted in the AR District and must have a minimum lot size of three acres. The number of units permitted in a development is one to three units per acre, depending on the distance the furthest extent of the property is from the common intersection of Old Center Road South (Church Street), Candia, North and Raymond Roads (i.e. the closer to the intersection, the higher the density). The developments must have a 200 foot frontage and 50 foot front, side and rear building setbacks. Each unit is restricted to a maximum 2 bedrooms and maximum lot coverage of 25 percent. Each unit must also have at least 400 square feet of living space, with 2-bedroom units having a minimum of 600 square feet. Each Senior housing development is also required to have a community building for its residents to utilize as a place of assembly and to provide the needed amenities.



Deed restrictions and covenants are recorded with the Rockingham County Registry of Deeds in order to ensure that the developments remain as a senior housing development in perpetuity. Additionally, each development must develop a Homeowner's Association and Articles and By-Laws, which are to be submitted in advance to the Planning Board and Town Counsel for review.

### Pleasant Lake Watershed Overlay District

The Town of Deerfield adopted the Pleasant Lake Watershed Overlay district and accompanying regulations on March 13<sup>th</sup> 2007. This overlay district was approved to help ensure adequate protection of Pleasant Lake and its watershed from the effects of point and non point source pollution, including sedimentation. The watershed district is intended to protect everything ranging from public health to surface water, aquifers and wetlands. All development proposals and subdivisions and site plans and potential contaminating activities within the watershed are subject to the requirements set forth in Section 330 of the Zoning Ordinance.

## **Open Space Development**

Conservation Development or Conservation Subdivision is a development option allowed under NH RSA 674:21 I (f). In Deerfield, the approach is referred to as an Open Space Development (OSD). The purpose of this overlay zone is to provide a method of development for land that permits variation in lot sizes and housing placement, and provides for the protection of natural, environmental and historic land features and a reduction in road length. The intent is to allow subdivisions with varying lot sizes to provide homebuyers a choice of lot sizes and homes according to their needs and preserves open space, tree cover, scenic vistas, natural drainage ways and outstanding natural topography.

In Deerfield, open space developments are required for all subdivisions greater than twelve acres. The Planning Board can grant exemptions from this requirement if the applicant can demonstrate that there are mitigating circumstances that prevent the land from being developed as an open space development.

The number of dwelling units permitted in an open space development cannot exceed the number of units that would be permitted under a conventional subdivision layout plan. Unlike a conventional subdivision, an open space development must designate at least 50 percent of the gross tract area as open space.

# **Recent Subdivision and Site Plan Activity (from Town Reports)**

Due to the recent downturn in the housing market, like many communities nationwide, the Town of Deerfield experienced a decline in the number of residential subdivisions and site plan activity from 2005 to 2006. According to the 2006 Town Report, the



Deerfield Planning Board approved fifteen subdivisions that created 52 new building lots, and two residential site plans that created 91 elderly housing units. Additionally, conditional approval was granted to two subdivisions which created 68 lots. In 2007, the Planning Board approved seven subdivisions and six conditionally approved subdivisions which created a total of 99 new building lots. Additionally, one non-residential site plan was approved. These figures are down from the last few years where in 2005 there was the approval of twelve subdivisions, with the potential of creating up to 200 lots, and three approved site plans, and more recently, in 2006 with the approval of 120 new residential building lots and 91 units of elderly housing.

### **Overall Land Use Trends**

The Town of Deerfield covers approximately 52 square miles and has about 70 miles of roads. The Town is largely composed of single family residential dwellings that are randomly separated on lots fronting upon pre-existing town roads and state highways.

Historically older settlements such as Deerfield Center, Deerfield Parade and South Deerfield are conspicuous by their more closely developed residential structures. A number of the settlements are associated with the town's early history and are considered to be good examples of the architectural styles which were popular in the various periods during which these settlements were established.

The Town of Deerfield originally adopted its Open Space Development Ordinance in the 1990s. The original ordinance was superseded in 2005 and revised further in 2007. The intent of the Open Space Development Ordinance is to discourage sprawl, preserve natural resources and open space, avoid development on naturally constrained lands, and to provide housing opportunities for persons of various income levels, ages and needs.

At the 2007 Town Meeting, an amendment was adopted making it mandatory that all residential subdivisions over twelve acres, as opposed to sixteen acres, be Open Space Subdivisions. Prior to the recent mandate on residential subdivisions over twelve acres, there was very little interest from developers to build open space subdivisions.

Since the inception of the Open Space Subdivision Ordinance, and prior to the recent amendments, there were only two elective Open Space Subdivisions constructed in Deerfield and four Open Space Subdivisions have been approved, two of which were elective (Cotton Wood Estates and Sawyer Farms) and two that were required (High Meadows and Forest Glen).

Furthermore, according to permit data collected by the New Hampshire Office of Energy and Planning, there was a 2.57 percent increase in residential dwelling units in Deerfield during the period from 2005 (1,672 units) to 2006 (1,715 units). Residential uses make up almost 50 percent of the total land acreage in Town. The 1999 Master Plan reported that residential land use comprised only nine percent of the Town's total land area.



A potential reason why the 2007 figure is significantly higher than the 1999 figure may be due to a difference in data collection methods, i.e. the current land use data was calculated using parcel based data, whereas the 1999 figure may have been obtained through a land use based method. Deerfield is one of many communities within the SNHPC Region where this trend of increasing residential land use can be seen.

Table 13 Vol. II Residential Units by Type, 2006

Municipality	Population	% of Sub- area	One Family (Units)	Two Family (Units)	Multi Family (Units)	Manufactured Housing (Units)	Total Residential (Units)	% of Sub-area
Candia	4,091	11%	1,380	20	24	50	1,474	11%
Chester	4,642	13%	1,383	33	21	29	1,466	11%
Raymond	10,780	29%	2,619	165	531	911	4,226	31%
Deerfield	4,314	12%	1,472	65	10	136	1,683	12%
Hooksett	13,201	36%	3,265	265	1,103	216	4,851	35%
Sub-area Total	37,028	100%	10,119	548	1689	1342	13,700	100%

Sources: NH OEP 2006 Population Estimates and the SNHPC 2006 Land Use Report

As seen in Table 13 above, homes in Deerfield are predominately single family residential units, which is similar throughout the SNHPC Region.

# **Historic Town Villages**<sup>7</sup>

As Deerfield developed and grew in population a number of distinct centers within the Town began to appear.

The **Parade**, located on an elevated position on the main road from Portsmouth to Concord was a center of activity in trade and entertainment. Several stores and taverns flourished doing a brisk trade with the passing travelers. The settlers who developed the Parade area were of an affluent and intellectual nature. Their concern for the betterment of the Town's younger population led to the establishment of a high school called the Academy in 1798. The Academy was supported by the Parade area residents and resulted in a large number of well educated students who went on to become noted and respected personalities.

**Rand's Corner** located a few miles northwest of the Parade on the same highway was also a center of trade. Several taverns catered to the needs of travelers while a good deal of space was devoted to trade among locals and residents of the surrounding area. Included in the merchandise were such things as molasses, salted fish, rum, farm goods and barrels.



Deerfield Master Plan - 2009

<sup>&</sup>lt;sup>7</sup> Deerfield 1999 Master Plan

The **Old Center** (Deerfield Center) located southwest of the Parade is the highest point of land capable of successful cultivation. This area was the early focal point of Deerfield's official community activity. The first town meeting house was built here with the field around it used for musters and other activities. When New Hampshire was preparing to establish its capital city, the Old Center was considered as a possible site.

The South Road area is located in the south central portion of the Town. This section of Deerfield developed into a prosperous business area during the Town's development. Lumber production was a major industry along with potash manufacture and a shoe and boat manufacturing business established by Joseph J. Dearborn.

Deerfield owes much to the early settlers who made their homes within her boundaries. Their talents and abilities together with a broad community spirit produced the foundation upon which the present day Deerfield has grown.

Each of Deerfield's villages has a unique history and mix of land use and includes the **Deerfield Parade**, **Deerfield Center**, **Rand's Corner**, **Leavitts Hill and Butler's Corner** in south Deerfield. They each have their own identify and vital role to play in Deerfield's future just as they have in the past. The rural New England village is an important part of the heritage of a town like Deerfield and needs to be protected. Villages can assimilate new development and actually benefit from it, if land use controls are designed to do so.

The Town of Deerfield's current zoning ordinance would not permit Deerfield's existing villages to be built today.



# **Insert Map 12**



Deerfield should encourage the continued existence of its villages and encourage a compatible mix of land uses including residential, commercial, public and surrounding agricultural lands.

The Town of Deerfield should provide opportunities for the villages to grow and also work to establish a buffer between the villages and surrounding development.

Traditional zoning, with minimum frontages, setbacks, and lot sizes, tend to stifle village development. Attempts at strict zoning in these areas make for lengthy, cumbersome ordinances. The goal in Deerfield is to create land use regulations that would allow the existing villages to be built if they were proposed today.

# **CTAP Build-Out Analysis**

#### **Build Out Results**

A build-out or a growth capacity analysis is a planning tool based on a theoretical condition that exists when all available land suitable for construction is developed. The analysis estimates the maximum number of housing units that would exist when build-out is complete and what the population of the town could be at that time. The calculations are driven by the community's existing land development regulations and the supply of "build-able" land.

This analysis was performed with the use of an advanced Geographic Information Systems (GIS) software program called Community Viz. The process involved multiple steps using available data from the Town, the regional planning commission, and New Hampshire GRANIT's database at the Complex Systems Research Center. Maps were created to illustrate the analysis in a graphic format. Calculations were performed to determine the total number of acres, commercial floor area, dwelling units, and population that could be expected if all the identified "build-able" lands in the community were developed as set forth by the town's existing zoning regulations.

One of the primary benefits of a Build-Out Analysis is that it can show how much land area could be developed under existing land use regulations and where this development could occur within a community. It can also show how many residential dwelling units, or how much commercial floor area could be developed and how much the population of the community could increase at full build-out. The existing zoning ordinance, especially the density requirement, determines the build out.

The results of a Build-Out Analysis are intended to raise awareness of a community's future growth and development possibilities. The results can generate numerous questions such as:

• Is this the way we want our community to grow and develop?



- Are our land development regulations working the way we want them to?
- Are there areas within the community that should not be developed or be developed at lower densities?
- Are there areas that should be developed at higher densities?
- What steps should the community be taking now to address future growth?

The Build-Out Analysis conducted for Deerfield began by first identifying all the existing developed lands as well as all the potential "build-able" lands located in Town. This was accomplished by the SNHPC digitizing a land use GIS dataset base off of high-resolution (1 ft.), color, leaf-off, digital orthophotography, and selecting the land use classifications that are considered undeveloped lands. A number of natural constraints, including but not limited to wetlands, conservation land, steep slopes (>15 percent) and special flood hazard areas were then overlaid on top of the base map during the build out to identify all the "build-able" lands.

Utilizing the minimum road frontage, dimensional and lot size requirements of each of the Town's zoning districts, the "build-able" lands were then evaluated to determine what the potential future number of dwelling units could be. Several assumptions were made to complete this evaluation. Three different scenarios were used to conduct the build-outs for Deerfield, as described in the following section.

# **Background Information**

The Southern New Hampshire Planning Commission conducted three build-out analysis scenarios for Deerfield based on standard methodology and datasets to ensure consistent and comparable results as part of the community technical assistance program (CTAP). CTAP was developed to assist the 26 Southern New Hampshire communities that will be affected by the rebuilding of I-93. CTAP is a five-year program comprised of state agencies, regional planning commissions and several non-profit organizations. The goal of this program is to manage the impacts of growth due to transportation improvements. The primary purpose of CTAP is to promote growth patterns in a manner that effectively manages the impact of the expected growth on community services, remaining open space, schools, traffic patterns, environmental quality and existing residential and commercial development so that the growth is beneficial to the communities.

The software used in this study was the Community Viz Scenario 360 build-out tool and ArcGIS by ESRI. The first two build-outs were standard scenarios conducted for each CTAP town. The third build-out was based on input from the community based on the results of the first two build-outs and issues unique to their own municipality. A standard set of GIS data was required for the analysis:

Land Use and Regulatory
Land Use Polygons – CTAP
Zoning
Current Buildings



Community Centers (Sprawl Indicators Data)
Roads
Sewer Service Areas
Other Regulatory Overlays

<u>Development Constraints</u>
Natural Services Network (NSN)
Wetlands (National Wetlands Inventory (NWI))
100-Year Floodplain (FEMA)
Conservation Lands

GIS layers from this analysis came from a number of sources; the towns, regional planning commissions, NH DOT and NH GRANIT. Some GIS layers such as land use and current buildings were generated by the regional planning commissions. The GRANIT website provided NSN, NWI, 100-year floodplain, community centers, and conservation lands GIS layers. The conservation lands and community centers dataset were updated by the SNHPC with cooperation from the Town planning board. The community centers for Deerfield represent the 5 historic village centers and 2 commercial centers within the town. The NSN consists of flood storage lands, productive soils, important wildlife habitat and water supply lands. The scenarios are:

### Build-out 1: Base CTAP Build-out

The maximum amount of development that can occur based on current zoning regulations was calculated. Build-able land areas were identified through land-use polygons and zoning overlays. Current density, setbacks and lot coverage were applied to the analysis. NWI Wetlands, the 100-year floodplain and conservation lands were applied as constraints to development.

### Build-out 2: CTAP Standard Alternative

This build-out applied the NSN layer as an additional constraint (the NWI wetlands and the 100-year floodplain are part of the NSN data). This scenario was growth neutral with the base CTAP build-out. The allowable densities were made to maintain an equal number of new housing units and non-residential square feet plus or minus 3%. Growth was focused around community and commercial centers in the towns with the highest density being within ½ mile, then within ½ mile, then within 1 mile, and using current zoning density outside 1 mile.

### Build out 3: Community Scenario

This build-out started with the CTAP standard alternative and added additional constraint layers for steep slopes (between 15 percent and 60 percent), and applied a 100-foot setback buffer for wetlands, and surface water. A 100-foot buffer was applied to the NWI data to create the wetlands buffer, and a 100-foot buffer was applied to the New Hampshire Hydrologic Dataset- flowline and waterbody layers.



### **Timescope**

A timescope is a decision making tool that helps look at growth and development changes over time. Two timescopes were run on each scenario to determine what year the town would build out based on the available land and the zoning and constraints that were used. The timescope build rates are based on the building permit data obtained from *Current Estimates and Trends in New Hampshire's Housing Supply* from the NH OEP. The first timescope, as shown in Table 15, is an average of the number of housing permits issued each year from 1990 – 2006 with a linear growth. The second timescope is an average of the percent change per year of housing permits from 1990 – 2006 and is an exponential growth based on the average percent change.

### **Assumptions and Indicators**

The focus of this project was on indicators or impacts of build-out and how they changed for different scenarios. There are 40 indicators that were calculated for each build-out in seven categories, as follows: Build-out totals, Demographics and Employment, Transportation, Water/Energy use, Land Use Characteristics, Environmental/ Open Space, and Municipal Demands. Indicators were derived using state, regional, and national standards.

Build-out Totals
Dwelling units
Buildings
Commercial

Developed residential acres
Developed non-residential acres

Total developed acres

Transportation Vehicles

Vehicle trips per day Annual CO auto emissions Annual CO2 auto emissions

Annual hydrocarbon auto emissions

Annual NOx auto emission

Environmental/Open Space

Residential Imperviousness Commercial Imperviousness

Percent Imperviousness

<u>Land Use Characteristics</u>
Residential housing density
Employment density

Demographics & Employment

Population

School-aged children

Floor area Labor force

Commercial jobs to housing ratio

Commercial jobs

Water/Energy Use
Residential water use
Total energy use

Commercial energy use Residential energy use

Municipal Demands

Solid waste demand

Emergency Service Calls – Fire &

Ambulance

Emergency Service Calls – Police



Total density
Walkability
Proximity to community centers
Average distance to recreation
Recreational density
Development footprint

The Build-Out analysis for Deerfield resulted in the following findings: The Community Scenario, which added additional buffers and constraints to the Base Alternative, resulted in the least amount of developable land with 6,179 acres; the Base Scenario, which is based on the Town's current zoning regulations, resulted in the largest increase with 21,424 acres of developable land; and the Base Alternative Scenario, which took the NSN data and selected environmental constraints into account, landed in the middle with an additional 6,179 acres of developable land.

Table 14 Vol. II Build-Out Analysis

	2005 CTAP			· ·			
	Estimate*	Base Scenario		Base Alternative		Community Scenario	
		# Added	Total	# Added	Total	# Added	Total
Population	4,106	16,077	20,183	16,965	21,071	12,304	16,410
Buildings (all)	1,647	6,691	8,338	7,577	9,224	5,431	7,078
Commercial Floor Area (sf)	343,906	37,649,919	7,408,825	3,574,046	3,917,952	2,609,151	2,953,057

\*Population estimates were derived by multiplying the number of buildings identified from the 2005 aerial photos (used to create the existing buildings layer) by the persons per household reported by the 2000 Census for Deerfield Source: SNHPC

As seen in Table 14 above, the most perceptible increase in population was seen in the Base Alternative Scenario with 16,965 additional persons, compared to an increase 12,304 persons from the Community Scenario, which is roughly 27 percent less than the Base Scenario and 25 percent less than the Base Alternative.

Table 15 Vol II Deerfield Timesope Data

	Growth Rate	Base Build- Out Year	Base Alternate Build-Out Year	Community Scenario
Exponential Timescope	2.30%	2080	2085	2073
Linear Timescope	33.4 permits/year	2209	2209	2171

Source: SNHPC

Through the use of the timescope feature of the Community Viz software, as explained on page 24, the year in which Deerfield would reach build-out was able to be estimated. As seen in Table 15 above, two different methods were used to determine the estimated build-out year: linear growth, which utilized and average of Deerfield's historical residential building permit data from 1990-2006; and exponential growth, which utilized



the annual average percent change in housing permits from 1990-2006. According to this data, the earliest estimated date for build out in Deerfield would occur in the year 2073 under the Community Scenario, which is only seven and five years less than the Base and Base Alternative Scenarios, respectively. The linear timescope estimates that the earliest build out would be reached would be in the year 2171 under the Community Scenario. Build out based on both the Base and Base Alternative methods estimates that build out would be reached in the year 2209. Based on the findings from the various methods and scenarios, the soonest Deerfield is estimated to reach build out is 65 years from the time this plan was completed.

#### **Future Land Use**

Based on the results from the Community Survey and the Community Profile, overall, the residents feel that the preservation of open space and natural resources which largely contribute to Deerfield's rural character are a very high or high priority. The purpose of the future land use map is to provide the Planning Board with a planning tool that can be used in an advisory nature to guide the future growth and development of the Town, as well as assist the Board in developing and improving the Town's land use regulations. As mentioned previously in this chapter, the Town is largely zoned AR, which permits a variety of different uses, which seems to work for the community. Therefore, the future land use pattern projected for Deerfield offers no dramatic changes from the current land use patterns. The only proposed change would be the development of the Historic Town Villages to allow higher density development and mixed uses and to continue commercial development in the two areas identified by the Planning Board as existing commercial centers. Three of the Historic Town Villages are most viable for development today: Deerfield Center, The Parade and South Deerfield.

In addition, the overall concept of the draft Future Land Use Map is guided by the following themes: (1) Protecting the rural character and natural environment of Deerfield; (2) Creating strong Town Villages; and 3) Implementing the principles of smart growth. These components are described as follows:

# **Strategies, Tools and Actions**

### **Increase Density in the Historic Town Villages**

Deerfield's historic Town Villages should be an integral part of the community. Due to proximity to new and existing development patterns, some of the historic village areas may presently be more viable for development than others and could benefit from the implementation of a mixed use zoning designation. The historic villages could once again become thriving centers that serve as focal points of the community by introducing commercial and residential uses to encourage walkability. In order to achieve this, the historic villages must be maintained and protected as a thriving and sustainable part of the community.



It is recommended in this plan that this be accomplished by implementing the following techniques:

- First, by updating the zoning to create a new Village District zoning designation;
- Second, by enhancing the historic character of the Historic Village Centers through architectural design standards; and
- Third, through implementing the characteristics of livable and walkable communities. These include:
  - 1 **Walkability**. In general, a walkable village center or neighborhood is defined by the distance a person can safely walk or travel in 10 minutes or less. By increasing density and allowing a mix of uses in the historic Town Villages determined to be most appropriate, Deerfield could accomplish this.
  - 2 A Civic Core and Mix of Neighborhood Uses. This can be a simple green area or a crossroads with civic buildings. The core needs to be in a central location and proportional to the size of the village area. In Deerfield, the historic Town Villages may not have the land available to create a centrally located green space; therefore it is recommended that smaller scale green spaces or landscaped areas be installed where feasible.
  - 3 **An Interconnected Street Network.** The challenge is to avoid dead-end streets and high volumes of through traffic that can divide a neighborhood or village and diminish the livability of the area. When feasible, the Town of Deerfield should encourage developers to create an interconnected street network between new and existing developments.
  - 4 **Sensitivity to Human Scale.** Neighborhoods and villages with a human scale are enjoyable places to linger, walk in, or interact with other residents. Streets tend to be narrow with sidewalks and shade trees. Buildings are generally close to the street. Parking is located in the rear. The Town should review its zoning regulations and make revisions where feasible to allow future developments to be built in a manner that will encourage residents and visitors to walk and to come together.
  - 5 **Neighborhoods and Villages.** Neighborhoods and villages tend to have distinct boundaries and a good overall balance between privacy and opportunities for public interaction. The Town has several existing historic Town Villages which should be enhanced to become more visibly distinct in the community.
- The plan should also attempt to:
  - 1 **Use Land Efficiently.** This can be accomplished by extending village land use patterns, encouraging multi-story/compact development as well as appropriate infill development.



- 2 **Encourage Mixed Use.** While not all residents in Deerfield may support mixed-use development, this concept should be encouraged. New community uses as well as residential development can successfully and attractively accommodate complementary uses.
- 3 **Address People's Needs.** This can be accomplished by implementing the livable and walkable goals and recommendations of this plan: connecting existing public and recreational facilities through pedestrian pathways and crosswalks; providing opportunities for green space/outdoor gathering areas; also ensuring that views of the hills are protected and public facilities and services are provided.
- 4 **Promote Good Design.** This can be accomplished by considering the historic character of existing buildings and improved aesthetics of existing commercial sites. It can also be accomplished by enhancing the gateways to the Town and providing opportunities for new development consistent with existing architecture.
- 5 **Enhance Environmental Benefits.** This can be accomplished through improved through traffic patterns and enforcement; better drainage, storm water and sidewalk improvements; traffic calming and improved pedestrian access; and better buffering of existing uses.

### **Continue to Protect the Rural Character and Natural Environment**

Residents of Deerfield have consistently expressed the importance of protecting the natural environment and maintaining the rural character of the community as expressed in this and past Master Plans. Much of this work is still relevant today. This Master Plan confirms that these central concerns remain an important priority to the residents of the Community and to the Town in the conduct of existing and future planning functions.

The following natural features have been identified as being significant and important priority areas that warrant special protection. These areas include but are not limited to:

- Farmland Soils
- Steep Slopes
- Wetlands
- Rivers, Lakes and Shorelines
- Aquifers
- Floodplains
- Forest Resources
- Open Space/Land Conservation



To protect these resources, the following land use strategies are recommended and are reflected by or included in the goals and objectives of this plan:

- 1 Encourage both residential and non-residential development to identify existing natural resources so that they are conserved in an appropriate manner.
- 2 Utilize the New Hampshire Department of Fish & Game's Wildlife Action Plan, the NH Audubon and Jordan Institutes Natural Services Network, and other available information sources to identify important natural resources and prepare strategies designed to preserve them for future enjoyment.
- 3 Integrate and utilize wildlife corridor plans developed by NH Fish & Game in an effort to protect those areas of vital importance.
- 4 Encourage new residential and non-residential developments to protect and, where possible, enhance valuable natural and open space resources.
- 5 Encourage public/private partnerships between the town and other private and civic organizations to provide open-space opportunities.
- 6 Identify for future protection important scenic areas and view corridors; develop a priority ranking of these areas for purposes of protection.
- 7 Identify the water resources in Town in effort to protect them.
- 8 Protect wetlands and floodplains to minimize property damage, public safety risks, and economic disruptions during extreme precipitation events.
- 9 Encourage protection and restoration of forest cover to protect air and water quality, absorb carbon dioxide, meliorate local climate, and enhance quality of life.
- 10 Encourage protection of adequate habitat to sustain populations of native wildlife.
- 11 Consider developing Low Impact Development guidelines and regulations as part of the Town's subdivision and site plan regulations to promote the use of natural systems in stormwater and watershed management.
- 12 Promote the use of conservation and open space easements to protect valuable natural resources.
- 13 Continue with on-going land preservation activities in Town.
- 14 Identify and prioritize the existing historic Town Villages that would be most suitable for increase density development.



These strategies need to be pursued as part of and in combination with the Future Land Use Map.

# **Implement Smart Growth Principles in the Context of Deerfield**

There are two state statutes that play an important role in the development of Deerfield's Future Land Use Map. RSA 9-A:1 states that local planning boards are encouraged to develop plans consistent with the policies and priorities established in the state comprehensive plan.

RSA 9-B:2, the State's Economic Growth, Resources Protection, and Planning Policy, indicates that it is the policy of the state that state agencies (and, by extension, local boards when developing plans that are consistent with state plans) act in ways that encourage smart growth.

RSA 9-B: "Smart Growth" is defined as "the control of haphazard and unplanned development and the use of land that results over time, in the inflation of the amount of land used per unit of human development, and of the degree of dispersal between such land areas." Smart growth also means the development and use of land in such a manner that its physical, visual, or audible consequences are appropriate to the traditional and historic New Hampshire landscape.

Among many approaches, smart growth may include denser development of existing communities, encouragement of "mixed use" in such communities, the protection of villages, and planning, so as to create ease of movement within and among communities. Smart growth preserves the integrity of open space in agricultural, forested, and undeveloped areas.

The following are examples of some of the outcomes of smart growth principles:

- Vibrant commercial activity within cities and towns
- Strong sense of community identity
- Adherence to traditional settlement patterns when identifying potential sites for municipal and public buildings and services
- Ample alternate transportation modes
- Uncongested roads
- Decreased water and air pollution
- Clean aquifer recharge areas
- Viable wildlife habitat
- Attractive views of the landscape
- Preservation of historic village centers

Some of the principles of smart growth recommended by the NH OEP for communities across the state are summarized as follows:



- 1 Maintain traditional compact settlement patterns to efficiently use land resources, and investments in infrastructure.
- 2 Foster the traditional character of New Hampshire downtowns, villages, and neighborhoods by encouraging a human scale of development that is comfortable for pedestrians and conducive to community life.
- 3 Incorporate a mix of uses to provide a variety of housing, employment, shopping, services, and social opportunities for all members of the community.
- 4 Provide choices and safety in transportation to create livable, walkable communities that increase accessibility for people of all ages, whether on foot, bicycle, or in motor vehicles.
- 5 Preserve New Hampshire's working landscape by sustaining farm and forestland and other rural resource lands to maintain contiguous tracts of open land and to minimize land use conflicts.
- 6 Protect environmental quality by minimizing impacts from human activities and planning for and maintaining natural areas that contribute to the health and quality of life of communities and people in New Hampshire.
- 7 Involve the community in planning and implementation to ensure that development retains and enhances the sense of place, traditions, goals, and values of the local community.
- 8 Manage growth locally in the New Hampshire tradition, but work with neighboring towns to achieve common goals and address common problems more effectively.

The following are some examples of Smart Growth Principles specific to Deerfield:

- The Town should locate workforce housing targeted for Deerfield residents in the Historic Village Areas.
- The Town should continue to encourage connectivity between developments to foster walkability.
- Where feasible, the Town should revise its regulations to increase density and allow a mix of uses in areas of Town to encourage walkability and to potentially decrease the number of resident vehicle trips per day.
- To maintain contiguous tracts of open land, the Town should require that open space land within conservation subdivisions be contiguous, usable parcels of land.

It is recommended that the above principles be incorporated into the Town's Zoning Ordinance and the Town's Non-Residential Site Plan and Subdivision Regulations, as applicable to Deerfield.



# **Future Land Use Recommendations**

# **Village Land Use District**

The establishment of Village Districts in the Town's Zoning Ordinance and Zoning Map are recommended. This recommendation is supported by the Planning Board, as well as the Community Survey results with 41 percent of respondents stating that they were in favor of promoting village centers/clusters. The intent of this new district would be to create an opportunity to expand neighborhood commercial development, expand age restricted and workforce housing opportunities in the Historic Town Villages determined to be most suitable. The Village District would regulate development of the Historic Villages to maintain the community's rural, small town character. This character is dependent upon preserving architecture and a mix of commercial and residential uses in these districts.

Zoning regulations for the Historic Village Districts should allow for a mix of uses. The development of architectural guidelines should be considered to develop a consistent architectural style throughout the Village Districts. Fire protection, lighting, open space, suitable parking, and pedestrian issues should also be investigated and addressed as part of the development of the Village Districts. Where feasible, traffic in the Village Districts should be reduced by re-routing through traffic or by applying other solutions such as traffic calming techniques.

# **Low Impact Development**

Low Impact Development (LID)<sup>8</sup> is a stormwater management strategy concerned with maintaining or restoring the natural hydrologic functions of a site to achieve natural resource protection objectives. Developed in the mid-1980s, LID addresses stormwater through small, cost-effective site design and landscape features that are distributed throughout the site. The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. LID techniques include conservation of forests and sensitive waters, water reuse, and stormwater controls that detain and retain runoff.

The LID approach includes five basic tools, as follows:

- 1 Encourage conservation measures
- 2 Promote impact minimization techniques such as impervious surface reduction
- 3 Provide for strategic timing by slowing flow using the landscape
- 4 Use an array of integrated management practices to reduce and cleanse runoff
- 5 Advocate pollution prevention measures to reduce the introduction of pollutants into the environment

<sup>8</sup> For more information on LID, please visit the Low Impact Development Center's website at www.lowimpactdevelopment.org/home.htm; the EPA Office of Water website at www.epa.gov/owow/nps/lid/; or New Hampshire Department of Environmental Services (DES) www.des.state.nh.us/factsheets/wmb/wmb-17.htm



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The Planning Board should evaluate the Town's current Site Plan and Subdivision Regulations to determine if LID Guidelines could be developed for Deerfield. At a minimum, the Town should review the existing stormwater regulations to identify where LID techniques could be implemented.

It is recommended in this plan that this be accomplished by implementing the following techniques:

- 1 First, by updating the zoning to create a new Village District zoning designation
- 2 Second, by enhancing the historic character of the Historic Village Centers through architectural design standards
- 3 Third, through implementing the characteristics of livable and walkable communities.

# **Housing Report**

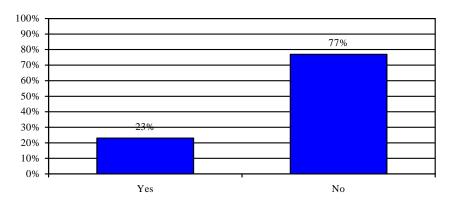
### **Community Survey Results**

During the fall and winter months of 2006, the University of New Hampshire Survey Center conducted a community-wide master plan survey for the Town of Deerfield. The purpose of the survey was to obtain information about specific areas of interest and attitudes of town residents about the services and activities of the Town of Deerfield as well as future planning initiatives for Deerfield. On November 24, 2006, 1,775 surveys were mailed to all Deerfield postal patrons and a reminder notice was mailed out on December 12, 2006. Between November 24 and December 22, 2006, 466 Deerfield residents responded to the survey for a response rate of 26 percent.

The two questions identified below directly relate to issues and needs of housing in Deerfield.

### **Housing Survey Questions**

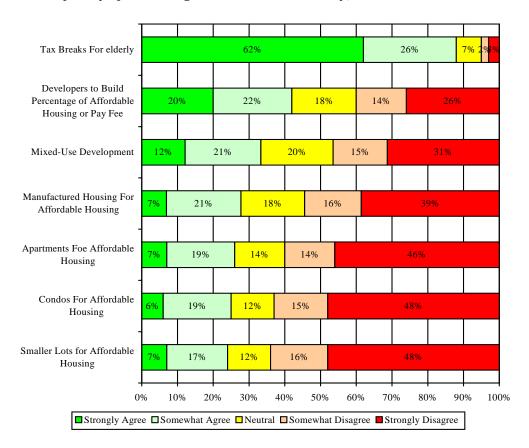
Question 6: Do you feel it is the Town's responsibility to provide housing that is affordable for people with a limited income?





**Summary of Results:** Over three-quarters of Deerfield residents (77 percent) *do not feel* it is the Town's responsibility to provide housing that is affordable for people with limited income. However, the way the question was presented may have been interpreted as the Town *providing* affordable housing (i.e. subsidized housing), as opposed to *encouraging the development of* affordable housing in Town.

Question 7: What is your opinion of the following possible actions the Town of Deerfield could take to assist with affordable housing? (Defined as a family of 4 earning less than 60K annually)



Summary of Results: The majority of the respondents answering this question (88 percent) either strongly agree (62 percent) or somewhat agree (26 percent) with providing tax breaks for the elderly, followed by only 44 percent that believe developers should be required to either build a percentage of affordable homes or pay a fee to support affordable housing within the community. 33 percent of the survey respondents agree with permitting mixed-use development for affordable housing; 28 percent agree with permitting manufactured housing for affordable housing; 26 percent agree with permitting apartments for affordable housing; 25 percent agree with permitting condominiums for affordable housing; and 24 percent agree with permitting smaller single-family building lots for affordable housing.

Overall Summary: The Deerfield Master Plan Community Survey indicated that residents would support tax breaks for the elderly, with 88 percent. In addition, a sizable number of respondents stated that they agree that developers should be required to either build a percentage of affordable homes or pay a fee to support affordable housing. However, most residents did not feel that it was the Town's responsibility to provide housing that is affordable for people with a limited income.

# Housing

### **Workforce Housing**

The need for affordable housing opportunities for working households has become an issue statewide. The State Legislature recently passed Senate Bill 342, which:

- 1 Requires municipalities that exercise the power to adopt land use ordinances to provide opportunities for the development of workforce housing; and
- 2 Establishes a mechanism for expediting relief from municipal actions which deny, impede, or delay qualified proposals for workforce housing.

The Bill amends RSA 674 by adding the following new subdivisions: RSA 674:58 defines affordable, multi-family housing, reasonable and realistic opportunities for the development of workforce housing, and workforce housing; and RSA 674:59, which states that municipalities shall provide reasonable and realistic opportunities for the development of workforce housing, including rental multi-family housing. In order to provide such opportunities, lot size and overall density requirements for workforce housing shall be reasonable. A municipality that adopts land use ordinances and regulations shall allow workforce housing to be located in a majority, but not necessarily all, of the land area that is zoned to permit residential uses within the municipality. Such a municipality shall have the discretion to determine what land areas are appropriate to meet this obligation. This obligation may be satisfied by the adoption of inclusionary zoning as defined in RSA 674:21, IV(a). This paragraph shall not be construed to require a municipality to allow for the development of multifamily housing in a majority of its land zoned to permit residential uses. However, the legislature clearly states that the adoption of voluntary inclusionary zoning provisions that rely on inducements that render workforce housing developments economically unviable will not fulfill the requirements of the RSA.

In an effort to assist municipalities with the development of inclusionary zoning provisions, the New Hampshire Housing Finance Authority (NHHFA) introduced a new funding program called the Inclusionary Zoning Implementation Program (IZIP) in 2008. This program will provide funds to towns to obtain technical assistance to prepare inclusionary zoning ordinances with the goal of having ordinances adopted by local legislative bodies in 2008 and 2009. Through IZIP, NHHFA will award approximately ten grants of up to \$9,000 each with no matching funds are required.



The Town of Deerfield should utilize this funding opportunity through NHHFA in order to develop an inclusionary housing ordinance. By creating and adopting proper inclusionary provisions, the Town would not only be in compliance with State Statutes, but would have more flexibility when working with developers to encourage them to include below market rate units in proposed residential developments.

## **Existing Housing Conditions**

Deerfield's existing housing characteristics are one of the most visible manifestations of the Town's population growth since 1990. Housing and population growth are inextricably linked and the trends in housing and population affect housing price appreciation and the general diversity of housing stock available within a municipality.

### **Housing Type**

A diverse housing supply is essential to meet the social, economic, and cultural needs within any given community. Diversity of housing offers more and affordable choices and allows younger couples and younger wage earners to own a home. It also encourages mixed use development, and affordable housing opportunities for the elderly. Historically, Deerfield's predominant housing type has been single family dwellings and this trend is growing as the Town's primary source of housing.

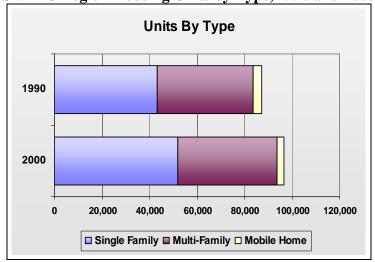
At one time in 1990, the SNHPC region was almost perfectly balanced between the total number of single family units (50 percent) and total number of multi-family units (46 percent) existing within the region. By 2000, however, this balance had changed and the total number of single family units in the region had grown to 54 percent and the total number of multi-family units had fallen to 44 percent (refer to the following Figures 1 and 2, and Table 1).

One reason for the region's increased growth in single family dwellings has been the booming housing market that occurred during the early to mid-2000's.

Today, however, in 2006-2008 the housing market has slowed down dramatically as interest rates increase, and the surplus of housing units put on the market due to the increase in foreclosures due to issues with predatory lending practices.

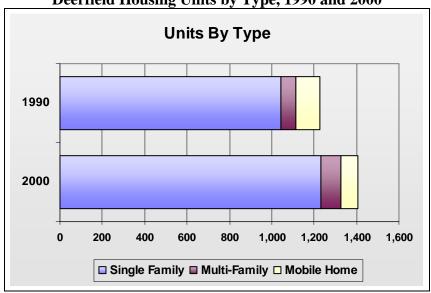


Figure 7 Vol. II SNHPC Region Housing Units by Type, 1990 and 2000



Source: U.S. Census 1990, 2000

Figure 8 Vol. II Deerfield Housing Units by Type, 1990 and 2000



Source: U.S. Census 1990, 2000



Table 16 Vol. II SNHPC Region Housing Units by Type, 1990 and 2000

		Percent	J J1 /	Percent	Percent
Type	1990	of Total	2000	of Total	Change
Total Units	87,233		96,510		11%
Single Family Units	43,361	50%	51,747	54%	19%
SF Owner Occupancy	39,015		47,570		22%
SF Renter Occupancy	2,429		2,706		11%
Multi-family Units	40,193	46%	42,057	44%	5%
MF Owner Occupancy	8,244		9,913		20%
MF Renter Occupancy	27,008		30,332		12%
Mobile Home and Other	3,679	4%	2,706	3%	-26%
Source is Units in Structure and	Units in Stru	cture by Tenu	ire		

Source: US Census

In 1990, 85 percent of Deerfield's total housing units were single family dwellings and six percent were multi-family with nine percent mobile home and other units. Of the 1,043 total single family units in 1990, 788 were owner occupied, 43 were renter occupied, and 228 were vacant units. In 2000, the total number of single family units in Deerfield increased from 85 to 88 percent, while the total number of multi-family units increased slightly from six to seven percent, and the total number of mobile homes and other units decreased substantially from nine to five percent. Of the 1,231 total single family units in 2000, 1,012 units were owner occupied, 38 were renter occupied, and 181 were vacant.

Overall, between 1990 and 2000, the increase in single family owner occupied units and decrease in renter occupied single family units has lessened the diversity of Deerfield's housing stock. The lack of housing options has also made it harder for younger workers and citizens to live in Deerfield. This has also decreased options for limited-income individuals and families that work in the Manchester metropolitan area and cannot afford an expensive mortgage along with high property tax rates to live in Deerfield.

Table 17 Vol. II
Deerfield Housing Units by Type 1990 and 2000

		Percent		Percent	Percent
Type	1990	of Total	2000	of Total	Change
Total Number of Housing Units	1,227		1,406		15%
Total Single-Family Units	1,043	85%	1,231	88%	18%
SF Owner Occupied Units	788		1,012		28%
SF Renter Occupied Units	43		38		-12%
Total Vacant Housing Units	228		181		-21%
Total Multi-Family Units	72	6%	93	7%	29%
MF Owner Occupied Units	39		23		-41%
MF Renter Occupied Units	27		70		159%
Mobile Home & Other Units	112	9%	82	5%	-27%
Source is Units in Structure and Units in S	Structure b	y Tenure		•	

Source: US Census 1990 and 2000



Table 18 Vol. II Units by type in Neighboring Towns

Units by type	Candia		Hooksett		Raymond		Allenstown	
V VI	1990	2000	1990	2000	1990	2000	1990	2000
Single Family Units	89%	91%	59%	61%	55%	63%	38%	42%
	(1,060)	(1,261)	(2,043)	(2,641)	(1,856)	(2,348)	(701)	(829)
Multi-Family Units	6%	6%	32%	33%	21%	19%	29%	26%
	(72)	(78)	(1,102)	(1,400)	(690)	(695)	(542)	(507)
Mobile Home and Other	5%	3%	10%	6%	24%	18%	33%	32%
	(60)	(45)	(339)	(266)	(804)	(667)	(625)	(626)

Source: NH Housing Finance Authority

The neighboring communities of Candia, Hooksett, Raymond, and Allenstown show how Deerfield's housing stock compares to towns with more diverse housing options. While the Town of Candia is similar to Deerfield in primarily relying on single family homes as the dominant housing type, the Towns of Hooksett, Raymond, and Allenstown all have Multifamily and Mobile or Other units accounting for well over a third of their housing stock. In the Town of Allenstown the availability of a diverse housing stock is apparent with Multi-Family units accounting for 26 percent of all units and Mobile Home or Other accounting for 32 percent of all housing units. This diversity of housing options contrasts sharply with Deerfield's housing stock, which is almost completely comprised of single family units. While Candia more closely mirrors Deerfield's housing stock, most adjoining and adjacent towns have remarkably more diverse options than what are available presently in the town of Deerfield.

## **Building Permits**

Deerfield's most recent building permit records (2006) indicate that single family home growth has not risen substantially since 2005. In 2005, there were only 27 building permits issued for residential developments: 25 being for single family and two for multifamily units. In 2006, 29 building permits for residential units were issued. The noticeable absence of building permits being issued for multi-family and manufactured homes in prior years has to do with the Town's zoning ordinance, which makes multifamily unit development difficult. Pursuant to Section 310 of the zoning ordinance, multi-family housing is limited to four units and is only allowed in existing residential buildings. This is compounded by a housing stock that is geared towards single family units and away from multi-family or manufactured homes. The table below provides building permit information for the years 2000-2006.



Table 19 Vol. II Deerfield Building Permits, 2000-2006

Year	2000	2001	2002	2003	2004	2005	2006*
Single Family	81	58	30	16	51	25	26
Multi-Family	0	0	20*	0	0	2	2
Manufactured	0	0	0	2	0	0	0
Total	81	58	30	18	51	27	28

Source: NH OEP, \*U.S. Census Bureau Town of Deerfield, Building Department \*Sherburne Woods Senior Housing

### **Cost of Housing**

Housing costs in the Southern New Hampshire region have risen remarkably in the last five years, due in large part to low interest rates for home buyers, limited supplies, and strong job growth and population growth in the region. Residential sales data relative to Deerfield for the years 2001-2005 are shown in Table 5 below.

This data indicates the average sales price of a residential dwelling in Deerfield in 2001 was \$197,500 compared to an average sales price of \$172,000 in the SNHPC region as a whole. By 2005, the average sales price for a residential dwelling in Deerfield had increased by 60 percent to \$315,000 and the median purchase price of a residential dwelling in the SNHPC region increased by 47.7 percent from 2001 to 2006 standing at \$254,100.

While national economic trends have fueled housing growth within the region, Southern New Hampshire's quality of life continues to remain a large factor in bringing in new home buyers from both within and outside the state. Overall, the cost of housing continues to rise incrementally and future demographic trends indicate that purchase prices will continue to increase into 2010 as new jobs are created in the region and more residential units are added.

The New Hampshire Housing Finance Authority (NHHFA) collects data on annual housing costs across the entire state. In tabulating the sales data provided in Table 5 below, the NHHFA notes that "calculations based on a sample size of less than 50 are highly volatile and not considered valid". As a result, median purchase price numbers are displayed with an asterisk in Table 5 if the sample size is less than 50. Many of the smaller towns and other geographic divisions of New Hampshire may have fewer than 50 property sales within one year.



Table 20 Vol. II Residential Real Estate Sales in Deerfield and SNHPC, 2001-2006

	Deerf	ield	SNHPC R	egion
Year	Average Price	Number of	Average Price	Number of
		Sales		Sales
2001	\$197,500	69	\$172,000	3,934
2002	\$244,900	65	\$205,000	3,871
2003	\$262,000	53	\$227,000	8,086
2004	\$273,000	60	\$248,424	4,067
2005	\$315,000	69	\$252,733	4,146
2006*	\$296,900	47	\$253,600	3,151
2007*^	\$297,000	24	\$240,000^	1,557
Percent Change	50.3%		47.4%	

Source: NHHFA Purchase Price Database

\*Calculations based on a sample size of less than 50 are highly volatile and not considered valid.

^January – July 2007

The median prices of the adjoining Towns of Epsom, Candia, Raymond, Allenstown and Nottingham fall above and below the median price trends for Deerfield's housing stock during the years 2001-2006. Raymond's and Allenstown's median home purchase prices were well below Deerfield's throughout the period. In 2005, Raymond's median purchase price was \$248,000, while Allenstown's was \$199,000. These figures are below Deerfield's median purchase price for that year of \$260,000. By contrast, Candia's median purchase price for 2005, which was \$320,000, is significantly higher than Deerfield. These figures represent the effect that the diversity of housing stock has upon purchase prices for a specific town.

Table 21 Vol. II Average Home Prices and Number of Sales for Adjoining Towns

Year	Eps	om	Can	dia	Raymond		Allens	town	Notting	gham
	Average	Number								
	Price	of Sales								
2001	\$140,000	57	\$224,933	42*	\$172,000	147	\$132,500	49*	\$189,900	55
2002	\$169,900	51	\$259,900	45*	\$194,000	163	\$146,600	60	\$239,933	75
2003	\$192,500	48*	\$256,000	54	\$210,000	155	\$174,000	51	\$250,000	105
2004	\$255,000	35*	\$272,000	42*	\$247,903	242	\$198,900	48*	\$291,800	109
2005	\$240,000	52	\$320,000	45*	\$248,000	214	\$199,000	53	\$299,500	103
2006	\$285,000	51	\$320,000	42*	\$262,500	137	\$216,400	42*	\$314,900	58
Percent	104%		42.30%		52.60%		63.30%		66%	
Change										

Source: NHHFA Purchase Price Database

\*Note: Calculations based on a sample size of less than 50 are highly volatile and not considered valid

In 2007, the U.S. Department of Housing and Urban Development's (HUD) median family income for Western Rockingham County<sup>9</sup> was \$86,000. The average family in this region making a five percent down payment would be able to afford a home with a

 $<sup>^9\,\,</sup>$  Includes Auburn, Londonderry, Candia, Deerfield, Nottingham and Northwood



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selling price of \$250,500.<sup>10</sup> For the Manchester HMFA<sup>11</sup>, the HUD median family income for 2007 was \$71,300. Using the same assumptions, a family earning the median family income in the Manchester HMFA could afford a home with a selling price of \$214,689.

Table 22 Vol. II Deerfield Income Limits, 2007

Median Income	FY 2007 Income Limit Category	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
\$86,000	Very Low (50%) Income Limits	\$30,100	\$34,400	\$38,700	\$43,000	\$46,450	\$49,900	\$53,300	\$56,750
	Extremely Low (30%) Income Limits	\$18,050	\$20,650	\$23,200	\$25,800	\$27,850	\$29,950	\$32,000	\$34,050
	Low (80%) Income Limits	\$41,700	\$47,700	\$53,650	\$59,600	\$64,350	\$69,150	\$73,900	\$78,650

NOTE: Deerfield town is part of the Western Rockingham County, NH HUD Metro FMR Area. The Western Rockingham County, NH HUD Metro FMR Area contains the following areas:

Based on the income limits presented in the table above, and following the similar assumptions<sup>12</sup>, a family of four in the extremely low income range could afford a house with a maximum cost of \$75,924; a family of four in the very low income category could afford a home with a maximum cost of \$126,540; and a family of four in the low income category could afford a home with the maximum cost of \$175,390.

## **Housing Conditions**

Housing growth in Deerfield has shadowed population growth in the last few decades as table 23 below indicates. During the mid 1970's, and continuing into the 1980's, Deerfield's population began to witness tremendous growth after a long period of population decline throughout the early twentieth century. The 1970 Census reported that Deerfield had a population of 1,178 people at that time. The period from 1980-1990 was the largest population increase in recent decades with population increasing from 1,979 in 1980 to 3,124 in 1990. Housing growth in this period, represented as the number of owner occupied units built, showed a corollary growth rate. From the period 1980 to 1989, 322 owner occupied units were built in the Town of Deerfield. As population growth leveled off from the explosion of the 1980's, owner occupied unit growth leveled off as well. For the period 1990-2000, population increased by 554 individuals as compared to the growth from 1980-1990 of 1,145 individuals. The total number of owner occupied units built from 1990-2000 was 271, representing this leveling off of population

<sup>&</sup>lt;sup>13</sup> See Demographic trends study in this Master Plan for historic population trends. Also, population estimates for Deerfield going back to the 18<sup>th</sup> century are available on the Office of Energy and Planning's website, under OEP programs, Data center. http://www.nh.gov/oep/programs/DataCenter/library.htm



Deerfield Master Plan - 2009

<sup>+</sup> ROCKINGHAM COUNTY, NH TOWNS OF Auburn town, NH; Candia town, NH; Deerfield town, NH; Londonderry town, NH; Northwood town, NH; Nottingham town, NH.

<sup>&</sup>lt;sup>10</sup> NHHFA: assuming 5% down; 6.33% interest rate; 30% cost burden; 30-year mortgage; ½ point at closing; \$17.53 full value tax rate; and PMI and Hazard Insurance

<sup>&</sup>lt;sup>11</sup> Includes Manchester, Bedford, Weare and Goffstown

<sup>&</sup>lt;sup>12</sup> 6.2% interest rate and 0 points

growth. While figures are not yet available for the period 2000-2010, the recent housing market downturn will surely have an impact on keeping housing unit growth at levels below the remarkable growth period of 1980-1990.

Table 23 Vol. II
Housing Construction for Owner Occupied Homes and Population, 1980-2000

Year	Population	Number of Owner Occupied Units built		
1980	1,979	1980-1989	322	
1990	3,124	1990-1994	115	
2000	3,678	1990-2000	156	

Source: US Census 2000

As seen in Table 24 below, during the ten-year period from 1990-2000, Deerfield experienced a fifteen percent increase in housing growth. During the same period, the most significant increase occurred in Bedford with 54 percent, and the smallest increase in Manchester with three and one half percent. During the five year period from 2000-2005, housing unit growth in Deerfield increased to eighteen and one half percent, with the largest increase seen in Chester with seventeen percent, and the smallest increase in Goffstown with .2 percent.

Table 24 Vol. II Housing Unit Growth 1990-2006

	Numbe	r of Housir		1990-	-2000	2000-	-2005	
Municipality	1990	2000	2005	Absolute Change	Percent Change	Absolute Change	Percent Change	Annualized Growth Rate (1990-2005)
Auburn	1,354	1,622	1,745	268	19.8%	123	7.6%	1.71%
Bedford	4,156	6,401	7,198	2,245	54.0%	797	12.5%	3.73%
Candia	1,192	1,384	1,469	192	16.1%	85	6.1%	1.40%
Chester	924	1,247	1,461	323	35.0%	214	17.2%	3.10%
Deerfield	1,227	1,406	1,666	179	14.6%	260	18.5%	2.06%
Derry	11,869	12,735	12,966	866	7.3%	231	1.8%	0.59%
Goffstown	5,022	5,798	5,811	776	15.5%	13	0.2%	0.98%
Hooksett	3,484	4,307	4,837	823	23.6%	530	12.3%	2.21%
Londonderry	6,739	7,718	7,826	979	14.5%	108	1.4%	1.00%
Manchester	44,361	45,892	46,747	1,531	3.5%	855	1.9%	0.35%
New Boston	1,138	1,462	1,609	324	28.5%	147	10.1%	2.34%
Raymond	3,350	3,710	4,221	360	10.7%	511	13.8%	1.55%
Weare	2,417	2,828	3,218	411	17.0%	390	13.8%	1.93%
SNHPC Region	87,233	96,510	100,774	9,277	10.6%	4,264	4.4%	0.97%

Sources: 1990 U.S. Census SF1-H1, 2000 U.S. Census SF1-H1, and the SNHPC 2005 Annual Land Use Report; SNHPC Regional Comprehensive Plan



### **Age Restricted Housing**

While Age-Restricted Housing is a form of "Elderly Housing" that most closely parallels independent living arrangements, there are many types of Age-Restricted or Elderly Housing developments that exist. One of the main distinctions between these various elderly housing types is the age of the residents and the level and type of health care and services that the development or facility offers. Ultimately, the residents choose the type of Age-Restricted or Elderly Housing that best fits their needs.

The Town of Deerfield has a senior housing overlay district that was enacted in 2002 and as of 2006 there were 32 total age restricted units. The purpose and intent of Deerfield's Senior Housing Overlay District is to establish and promote affordable housing for the senior population and provide for the efficient use of land and utilities consistent with the needs of the senior population 62 years of age and over to preserve open space. Table 25 on the following page includes information on Deerfield's age restricted units and summarizes the age restricted housing trends within the SNHPC region.

Table 25 Vol. II Summary of Age Restricted (AR) Housing in the SNHPC Region

	E-i-4	, ,			
Municipality	Existence of	Year	Age Group	Total AR	% of AR
	AR Ordinance	Enacted		<b>Units 2006</b>	Units as %
					of Total
					Units^
Auburn	No Ordinance	N/A	N/A	0	N/A
Bedford	Yes	1993	55/62 plus	270	3.73%
Candia	Yes	2007	55 plus	0	N/A
Chester	No Ordinance	N/A	N/A	0	N/A
Deerfield	Yes	2002	62 plus	32	.02%
Derry	Yes	2005	55 plus	84	.65%
Goffstown	No	2001	55/62 plus	140	2.40%
Hooksett	Yes	1988	55/62 plus	196	4.02%
Londonderry	Yes	1990	55 plus	273	3.46%
Manchester	Yes	2001	55/62 plus	602	1.29%
New Boston	No Ordinance	N/A	N/A	0	N/A
Raymond	Yes	2003	55 plus	216	5.09%
Weare	No Ordinance	N/A	N/A	0	N/A
Totals				1,813	

Source: SNHPC Summary of Age Restricted Housing, 2007

#### **Homeowner Characteristics**

Table 26 shows the age distribution of homeowners in Deerfield and neighboring towns. Of the 1,096 resident homeowners, approximately 51 percent are under the age of 45 and



<sup>\*</sup> The Town of Candia recently passed an Age-Restricted Housing Ordinance in March 2007. The Town of Goffstown does not have a specific Age-Restricted Housing Ordinance in place, but allows Elderly Housing through other provisions within their zoning ordinances.

^2006 Units from SNHPC 2006 Land Use Update

49 percent are over the age of 45. The percentage of homeowners under the age of 35 is 16 for the town and is higher than the percentage of homeowners under the age of 35 in the adjacent communities of Candia, Auburn, and Chester. Despite Deerfield's comparatively greater numbers of homeowners below the age of 35, the ability of younger workers and couples to afford a home has deteriorated due to the increases in the purchase prices of new homes in recent years. The New Hampshire Housing Finance Authority's "New Hampshire Housing Challenge" cites the development of an increasing affordability gap in the state since 1995 with median income increasing 47 percent in the period 1995-2003 while purchase prices have increased 96 percent. This disparity is also noticed when comparing real wages and purchase prices. The fact is that increasing housing costs are outpacing the ability of many families to own a home.

The reality is that the booming housing market has left many people behind who could not afford the cost of skyrocketing mortgages. A large number of people who purchased homes beyond their means during this period through sub-prime lenders have been hurt by adjustable rate balloon mortgages which were common practice by predatory lenders seeking to gain larger profits. The downturn engendered by increasing delinquencies and foreclosures has had a noticeable effect on the leading macroeconomic indicators.

Table 26 Vol. II
Age of Deerfield Home Owners of Surrounding Towns, 2000

Municipality	< 35	35-44	45-54	55-59	60+	Total
Auburn	11%	33%	27%	14%	15%	1,461
Candia	11%	31%	28%	11%	19%	1,254
Chester	10%	35%	29%	8%	18%	1,129
Deerfield	16%	35%	26%	8%	15%	1,096
Derry	17%	33%	28%	7%	16%	7,977
Londonderry	14%	36%	27%	8%	15%	6,656
Raymond	16%	30%	26%	8%	21%	2,725

Source: 2000 U.S. Census

Information pertaining to household income by age cohort, shown in the following table, generally supports the view that the majority of homeowners with higher household income levels are those in the higher age cohorts.

What is evident from this table is that median household income for the age cohort 25-34 is the highest among all age cohorts. Although median household income remains high for age cohorts above 25-34, there is a large disparity in median incomes between households with owners under 25 and households with owners between the ages of 25 to 34.

<sup>&</sup>lt;sup>14</sup> NH Housing Sponsored Report, <u>Housing Solutions for New Hampshire</u> Report partners: Northern New England Housing Investment Fund and Fannie Mae Completed by: Jeffrey H. Taylor and Associates



Deerfield Master Plan - 2009

While this means there is a large and noticeable gain in median household income in households with owners over the age of 25 and under the age of 34, it also means that for people in their lower to mid twenties, homeownership may not be achievable due to low incomes. The fact that median incomes plateau, rather than appreciate considerably over time is also an issue in light of rising purchase prices.

Table 27 Vol. Ii Household Income by Age Cohort

		ousciloiu i		8				
	Households <sup>1</sup>	Househo	olds by Ag	e of House	eholder <sup>2</sup>			
		Under	25 to	35 to	45 to	55 to	65 to	75 and
		25	34	44	54	64	74	Over
Less Than \$10,000	40	0	0	5	6	7	0	22
\$10,000 to \$14,999	6	0	0	0	0	6	0	0
\$15,000 to \$19,999	33	0	0	16	0	12	0	5
\$20,000 to \$24,999	56	0	10	16	0	6	11	13
\$25,000 to \$29,999	35	0	0	0	13	6	11	5
\$30,000 to \$34,999	54	0	14	29	11	0	0	0
\$35,000 to \$39,999	95	0	14	24	23	12	11	11
\$40,000 to \$44,999	33	6	0	11	8	8	0	0
\$45,000 to \$49,999	73	8	0	26	31	8	0	0
\$50,000 to \$59,999	172	0	33	54	53	0	21	11
\$60,000 to \$74,999	187	0	29	78	58	22	0	0
\$75,000 to \$99,999	215	0	36	40	81	35	23	0
\$100,000 to \$124,999	95	0	20	35	32	8	0	0
\$125,000 to \$149,999	60	0	4	22	34	0	0	0
\$150,000 to \$199,999	54	0	12	16	15	11	0	0
\$200,000 or More	21	0	6	15	0	0	0	0
<b>Total Households</b>	1,229	14	178	387	365	141	77	67
Median Household								
Income <sup>5</sup>	\$61,367	\$45,313	\$69,500	\$61,953	\$66,875	\$63,417	\$51,250	\$22,321

Source: US Census 2000, SF3, <sup>1</sup>Table P52, <sup>2</sup>Table P55, <sup>3</sup>Table P76, <sup>4</sup>Table P79, <sup>5</sup>Table P56 NH Housing Finance Authority: Household Income by Age Cohort

## **Household Income by Tenure**

Table 28 on the following page provides an illustration of how income levels vary according to housing type. The noticeable trend is that those who dwell in renter occupied housing units have far less levels of household income than those who dwell in owner occupied housing units. As shown in the table below, there are no renter occupied units where household income exceeds \$75,000 in Deerfield.



Table 28 Vol. II Household Income by Ownership Type in Deerfield, 1999

Household Income 1	Occupied Housing Units	Owner Occupied Housing Units	Renter Occupied Housing Units
Less Than \$5,000	14	5	9
\$5,000 to \$10,000	31	22	9
\$10,000 to \$15,000	5	5	0
\$15,000 to \$20,000	37	28	9
\$20,000 to \$25,000	58	40	18
\$25,000 to \$35,000	97	73	24
\$35,000 to \$50,000	196	155	41
\$50,000 to \$75,000	346	327	19
\$75,000 to \$100,000	203	203	0
\$100,000 to \$150,000	160	160	0
\$150,000 and More	78	78	0
Total	1,225	1,096	129
<b>Median Household Income</b> <sup>2</sup>	\$61,422	\$65,179	\$34,531

Source: Census 2000, SF3, Table HCT11, Table HCT12

## **Future Housing Needs**

An understanding of future needs for housing units is invaluable to the planning process. Future housing projections are utilized both in transportation modeling, as well as growth management and future land use planning. Prior to 2003, the SNHPC's housing projections were based on the historical annual average increase in housing units. This figure was assumed to be constant, and projections were calculated at five year intervals for both the community and traffic zone levels. Housing projections were utilized in transportation planning, and this method was the most acceptable, since projections for these studies had to be made independent of population or employment projection data.

The latest housing projections are based on a model pioneered by Bruce Mayberry on behalf of the New Hampshire Housing Finance Authority. In this model, three alternative projections are generated for 2010 and are primarily based on 1990 and 2000 census data and employment and population growth for the region. The first projection assumes the region maintains its constant share of the State's employment through 2010. The second projection assumes the region will retain its share of the State's 2000-2010 employment growth. Both the first and second projections allow housing unit growth to respond to employment growth within the region. The third method is based on municipal level population projections. The final estimation of the region's future housing needs is an average of the original historical average method and the three newer methods developed by Bruce Mayberry.



Table 29 Vol. II
Deerfield Dwelling Unit Projections

	2000	2010							
Municipality	U.S. Census	Constant Historical Average	Table 9 Projection 1	Table 9 Projection 2	Table 9 Projection 3	Average all 4 Projection Methods			
Auburn	1,595	1,943	1,920	2,018	1,877	1,940			
Bedford	6,350	7,984	7,645	8,036	7,471	7,784			
Candia	1,371	1,633	1,651	1,735	1,613	1,658			
Chester	1,233	1,639	1,485	1,560	1,451	1,534			
Deerfield	1,233	1,772	1,485	1,560	1,451	1,567			
Derry	12,500	13,417	15,050	15,819	14,708	14,748			
Goffstown	5,694	6,695	6,855	7,206	6,700	6,864			
Hooksett	4,255	5,443	5,123	5,385	5,006	5,239			
Londonderry	7,652	8,974	9,213	9,684	9,003	9,218			
Manchester	45,101	48,515	54,301	57,075	53,066	53,239			
New Boston	1,445	1,896	1,740	1,829	1,700	1,791			
Raymond	3,534	4,340	4,255	4,472	4,158	4,306			
Weare	2,667	3,491	3,211	3,375	3,138	3,304			
SNHPC Region	94,630	107,742	113,932	119,754	111,342	113,193			

Source: SNHPC Housing Needs Assessment, 2005

As shown in Table 14, using the average of all projection methods, Deerfield is expected to experience the largest increase in dwelling units in the SNHPC Region (2.43 percent). Both the City of Manchester and Town of Derry are projected to experience the smallest increase in dwelling units with two percent. The high projection of dwelling unit growth in Deerfield may be attributed to Deerfield having the second largest land area in the SNHPC Region of which approximately 73.5 percent is vacant. The Town of Weare, which holds the largest land area in the Region, has roughly 69.2 percent that is vacant.

Although the Regional Comprehensive Plan provides a vision for the region to the year 2015, housing projections have not been extended to 2015 because the methodology used cannot produce a valid projection beyond 2010. In order to project to 2015, the annualized employment growth rate from 1990-2000 would have to remain constant for fifteen years, rather than ten years. Admittedly, the 2010 projections presented here may be overestimated, since two of the four projection methods assume that the 1990-2000 employment growth rate will remain constant from 2000 to 2010. In fact, the actual annualized employment growth rate from 2000 to 2003 has been only one half percent in the SNHPC Region compared to an annualized growth rate of three percent from 1990-2000.

<sup>&</sup>lt;sup>15</sup> SNHPC 2006 Land Use Report



### **Housing Needs Assessment**

According to RSA 674:2, a Master Plan shall, "analyze existing housing resources and address current and future housing needs of residents of all levels of income of the municipality and the region in which it is located, as identified in the regional housing needs assessment performed by the regional planning commission..." The SNHPC, the regional planning commission for Deerfield, published its first housing needs assessment study in 1988, and recently published its latest housing needs assessment in January of 2005. Table 30 summarizes some results of the 2005 Regional Fair Share Housing Needs Assessment for Deerfield.

Adequate, affordable housing for everyone is an important factor that is vital to the welfare and security of those residing in the SNHPC region. Affordable housing is defined as housing for individuals or families of low and moderate income (LMI) in which rent does not require more than 30 percent of income. A low-income household earns 50 percent of the median family income in its relevant geographic area, while a moderate-income household earns 80 percent of the median family income.

Since the SNHPC wrote the previous Housing Needs Assessment in 1999, Bruce Mayberry, a noted economic development and planning consultant, developed a new methodology of fair share allocation for the New Hampshire Housing Finance Authority (NHHFA), which is adopted in the 2005 edition of the Housing Needs Assessment. This revised model distributes renter occupied moderate and low-income housing need for 2000, primarily derived from the 2000 U.S. Census, and projected housing supply for the year 2010. The new NHHFA method developed four models (A through D) that each reviews a different level of need. This format is established to allow regions flexibility in determining their base need as locally appropriate. NHHFA suggests the following alternative levels of need (the figure in parentheses is the number of renter households in the SNHPC region meeting each level of need):



Table 30 Vol. II Low and Moderate Income Households and Cost Burden by Tenure, 2000

	Renter Occupied Households					Owner Occupied Households				
Municipality	Total # of Renter Households	Under 50% MAI	Under 50% MAI & Pay 35%+	Under 80% MAI	Under 80% MAI & Pay 30%+	Total # of Owner Households	Under 50% MAI	Under 50% MAI & Pay 35%+	Under 80% MAI	Under 80% MAI & Pay 30%+
Auburn	120	41	19	87	19	1,460	153	74	268	134
Bedford	744	174	78	281	170	5,507	456	211	826	476
Candia	104	21	7	51	7	1,255	191	54	284	152
Chester	85	44	13	69	20	1,129	176	98	268	177
Deerfield	127	65	29	112	32	1,098	160	57	245	139
Derry	4,349	1,731	976	2,896	1,404	7,978	1,264	509	1,936	1,149
Goffstown	1,136	553	265	850	361	4,505	668	238	967	505
Hooksett	843	373	198	577	271	3,304	405	120	643	294
Londonderry	986	262	135	492	260	6,637	742	324	1,041	767
Manchester	23,880	11,453	5,533	17,518	7,923	20,367	4,161	1,619	6,094	2,923
New Boston	190	62	36	122	61	1,244	142	71	244	159
Raymond	769	310	164	521	241	2,724	685	264	768	424
Weare	340	138	85	204	131	2,278	292	93	492	276
SNHPC Region										
Total	33,673	15,227	7,538	23,780	10,900	59,486	9,495	3,732	14,076	7,575
Percent of Ho	useholds	45.22%	22.39%	70.62%	32.37%	[	15.96%	6.27%	23.66%	12.73%

Sources: New Hampshire Housing Finance Authority, 2000 U.S. Census Note: Low Income is defined as 30% to 50% of the Median Area Income with the upper limit at 50%. Moderate income is 50% to 80% of the MAI with the upper limit at 80%.

While there is no set way of determining the actual number of dwelling units needed for low to moderate income households in a given community, it is possible to estimate such needs by deriving "fair share" estimates from the available data. The "fair share" concept relies on the assumption that all communities have an obligation to accommodate a "reasonable" proportion of a region's low to moderate-income households.

In 2000, Deerfield only had 32 units qualifying as affordable for low to moderate income residents, but according to the Regional Fair Share Distribution, the Town should have had 493 affordable housing units available. Furthermore this number should increase to 571 by 2010. The communities that shoulder the largest burden of fair share housing are the City of Manchester and the other municipalities with the largest populations in our region such as the Town's of Londonderry, Derry, and Bedford. The communities with smaller population sizes outlying Manchester, which are sometimes referred to as "bedroom" communities," do not meet their fair share distributions. These communities, such as Deerfield, have a less diverse housing stock.



Table 31 Vol. II Proportionate Distribution of Moderate and Lower Income Housing Needs

	20	000	2010		
Municipality	Number of Households	Fair Share Distribution	Number of Households*	Fair Share Distribution	
Auburn	19	272	23	314	
Bedford	170	1,029	204	1,198	
Candia	7	324	8	374	
Chester	20	302	24	348	
Deerfield	32	493	38	571	
Derry	1,404	984	1,688	1,206	
Goffstown	361	684	434	807	
Hooksett	271	620	326	742	
Londonderry	260	1,135	313	1,313	
Manchester	7,923	3,499	9,527	4,430	
New Boston	61	434	73	501	
Raymond	241	489	290	569	
Weare	131	634	158	732	
SNHPC Region	10,900	10,900	13,106	13,106	

Source: SNHPC 2005 Housing Needs Assessment

While the Town of Deerfield recognizes the need for affordable housing in the region, it does not feel that the Fair Share Housing numbers for Deerfield are feasible. The lack of public infrastructure (public sewer, water, transit, etc.) and jobs in Town, in addition to increased land values, makes providing housing opportunities for lower income households increasingly more difficult.

The SNHPC maintains that the estimate produced by using the fair share formula is only a guideline that each community should refer in meeting its goal of increasing the housing supply and providing decent, affordable housing. The distribution results should not be used as a directive or requirement that communities must provide a specified number of low to moderate income housing units. It merely provides a mechanism by which each community can assess its fair share needs relative to other communities in the region.

## Potential Tools/Techniques to Implement Affordable Housing

There are a number of potential regulatory tools and methods available to create a greater variety of housing affordability within Deerfield. These techniques include inclusionary zoning, adaptive re-use ordinances, development of non-conforming lots, mixed use zoning, permit accessory dwelling units, and provide greater opportunities for



<sup>\*</sup> Equals the 2000 number of households projected at a 1.8604% annualized growth rate, derived from the average of the four dwelling unit projections for renter occupied households as established in table 9 of the 2005 Housing Needs Assessment.

\* Renters Under 80% MAI and Overpay at 30%+

manufactured housing, along with other incentives and disincentives, including density bonuses.<sup>16</sup>

**Inclusionary Zoning:** Inclusionary Zoning provides incentives to developers that create housing for moderate, low, and very low-income households. Incentives could be zoning exemptions and/or density bonuses if a portion of the proposed development is reserved for elderly, handicapped, or targeted lower-income households. Accessory dwelling units, while not an incentive for affordable housing, can help provide a more diverse and affordable housing stock in a community. Most communities in the SNHPC region define standards for accessory dwelling units.

Adaptive Re-Use Ordinances: This approach to zoning allows for the re-use of facilities or buildings that were formally one type of use such as commercial or industrial and then reusing the facility for residential units. The reverse can also be applicable where formerly residential units were re-used as small or large scale commercial enterprises. This approach has been useful in areas of New England, such as the City of Manchester, where former mill yard buildings have been converted into affordable apartment units. Redevelopment of once aging and abandoned sites such as these have been vital to economic development programs and housing options for many nineteenth century mill communities such as Lowell, Dover, and Manchester.

**Mixed Use Zoning:** Mixed use concentrated development is seen as a key "smart growth" tool to reduce auto dependence, preserve green space and natural resources, and promote revitalization, economic development, and modestly priced housing. It offers residents more of a sense of community and opportunities to socialize with their neighbors than a more isolated suburban lifestyle. Thus, many communities are turning to mixed use, which generally refers to a deliberate mix of housing, civic uses, and commercial uses, including retail, restaurants, and offices.

The Town of Amherst has an existing Housing Affordability Ordinance which was adopted in 1989 as section 8-5 of the town zoning ordinance. It defines affordable housing as: "Affordable Housing shall be a residential dwelling unit available for sale or lease at a cost not to exceed the amount a household or family, whose gross annual income is one hundred percent (100%) or less of the median income. Median income is the amount defined by the U.S. Census for the Nashua Primary Metropolitan Statistical Area as updated yearly. Median income figures, adjusted for number of occupants, shall be determined annually by the Planning Board. 3-14-89 (3-10-98)". The Planning Board is required pursuant to the terms of Section 8-5 to make a determination in January of any calendar year of the maximum number of units that it may approve pursuant to said ordinance.

The ordinance first establishes suitability criteria for proposed projects including style, affordability standards, environmental concerns, and required tract areas. Amherst's

Additional ideas and programs are listed in the Housing Solutions for NH Handbook at http://www.nhhfa.org/frd\_housingsolutions.htm and Section 4 of SNHPC's 2005 Housing Needs Assessment.



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ordinance defines affordability as dwelling units available for sale or rent to households earning at or below 100 percent of the median area income. In exchange, the Town provides flexible lot size, setback, and density standards which are reduced from those for traditional subdivisions. This allows otherwise non-conforming lots to be developed for affordable units. Additionally, a maximum dwelling unit size of 1,300 square feet is set, which cannot be expanded or increased for ten years. Using the ordinance, developers have created a variety of affordable housing types in Amherst including duplexes, multifamily, and single family homes. By requiring smaller units and allowing smaller lots, prices have been reduced from \$350,000 or higher for market rate townhouses down to \$170,000 for affordable ones.

## **Open Space Zoning**

A major key to lowering home costs is reducing the land costs associated with new construction. The only absolute method of reducing land costs is to reduce the required amount of land for each dwelling unit. Open Space zoning is one method of achieving these ends.

Cluster or open space zoning allows developers to build units on smaller than average lot sizes in return for the remaining acreage to stay protected as open space. For instance, rather than building on the entire parcel, and spreading out the homes to encompass all the available land area, the homes are built on a reduced portion of the land area, and the remainder is preserved through easements.

In order for open space zoning to work successfully work in Deerfield and reduce home prices, not only must units be clustered to minimize infrastructure costs, but it must also permit a greater overall density than conventional subdivisions. By creating a higher density, and decreasing the number of acres per unit, the land costs are reduced per unit, thus ideally reducing the purchase price of the home. Additionally, permitting multifamily units within the open space development will add another layer of construction and purchase cost reductions. Not only does multi-family housing reduce costs but it allows for units to be clustered on an even further reduced parcel, leaving more land area undisturbed and in its natural state. Currently, multi-family dwelling units are only allowed in the Town's Agricultural-Residential district by special exemption.

### **Recent Legislation**

The New Hampshire legislature just recently passed <u>SB 217-FN-A</u>, an act establishing the New Hampshire Housing and Conservation Planning Program. This program will be of great assistance to municipalities in planning for future housing and economic growth. The text of the bill states that:

4-C:25 Housing and Conservation Planning Program Established. There is hereby established the housing and conservation planning program, which shall be administered by the office of energy and planning. The program shall provide technical assistance matching grants to municipalities to plan for growth and



development in a manner that permits a balanced housing stock, including higher density and workforce housing opportunities, and promotes, whenever possible the reuse of existing buildings, including historic properties, while protecting communities' natural resources through more efficient and compact development. Participation in the program is voluntary.

The program establishes four stages of developing and implementing a growth and development strategy to be funded through the housing and conservation planning program. These stages are as follows:

- 1 Natural and Historic Resource and Housing Data Gathering and Analysis
- 2 Development of the Growth and Development Strategy
- 3 Integration of Growth and Development Strategy into Master Plan
- 4 Implementation into Regulatory Framework.

The NH Office of Energy and Planning (OEP) states that municipalities seeking a technical assistance grant through the program will need to provide a match to the grant, resulting in an increase in local expenditures and an increase in state revenue by an indeterminable amount. The match amounts will be determined through the administrative rules process. The 2008-2009 budget, as passed by the House, contains \$400,000 over the biennium for this program.

#### Conclusion

Housing growth in Deerfield has exceeded the region's population growth rate from 1990-2000 and the town's housing growth trends are expected to continue in the future even with the current downturn in the housing market. Demographic trends support this future growth scenario as the population continues to grow in Southern New Hampshire. Generally, the need for housing in Deerfield will reflect the region's future population growth.

The diversity of housing stock will continue to play a critical factor in Deerfield's future housing needs. The Town will continue to be a bedroom community to the Cities of Manchester and Concord. Maintaining affordable housing opportunities within the region and in Deerfield is important to support the workforce. Without affordable housing choices, employers often have a difficult time hiring or retaining qualified workers. Some of the major impacts to employers resulting from the lack of affordable workforce housing include: longer commutes, higher absenteeism, difficulty in recruiting, lower retention rate, increased training costs, and upward pressures on wages and benefits to attract prospective employees. Deerfield is projected to have one of the highest annualized housing growth rates in the region between 2000-2010. Managing this growth through 2010 and beyond will be critical to balancing the town's future social and economic needs.

#### **Recommendations:**



- Step 1: Establish a Municipal Housing Commission
- Step 2: Consider Applying for Affordable Housing Grant(s)
- Step 3: Consider Various Affordable Housing Strategies/Actions such as Inclusionary Zoning, the Town of Amherst's Affordable Housing Ordinance, or the Upper Valley Housing Coalition Project Endorsement Guidelines as summarized on the following page.

<u>Example</u>: Upper Valley Housing Coalition Project Endorsement Guidelines

## Section 1: Purpose

To encourage the planning and production of a diversity of housing that:

- 1.1 Increases the supply of rental and ownership housing to serve a diversity of incomes and abilities in the workforce of the entire Upper Valley region.
- 1.2 Is consistent with "Smart Growth" town planning principles as described below

#### Section 2: Use

The Guidelines are to be used as follows:

- 2.1 To educate the general public and employers about the need for workforce housing;
- 2.2 As a resource for town boards and staff in their formulation of master plans and land use regulations and in their review of project applications;
- 2.3 To educate the general public about the benefits of using Smart Growth planning principles;
- 2.4 As a guide for developers in the planning of projects; and
- 2.5 As an evaluation tool for reviewing a developer's request for the Coalition's support of a proposed project

#### **Section 3: Endorsement Methods**

- 3.1 Actively work with the local community to inform and gain project support from the residents and employers
- 3.2 Encourage members to attend public permitting hearings for the project and testify on behalf of the project
- 3.3 Serve as a resource for members attending public permitting hearings
- 3.4 Serve as a resource bank for technical and professional expertise which is available to offer testimony regarding the economy, housing market, and innovative practices during the permit application process
- 3.5 Support municipal officials in their review of housing proposals and regulations that are consistent with these Endorsement Guidelines



# **Economic Development Study**

### **Results of Community Master Plan Survey**

The economic health of a region has a direct impact on a town's population and employment growth. In most cases, a town will not experience growth unless its regional economy is prospering. All communities within the SNHPC region have varying potentials for industrial and commercial development. While Deerfield certainly does have the potential for economic growth it is not likely to become a major employment center within the region. One reason for this is that Deerfield lacks the infrastructure that is necessary to support expanded facilities that could employ a large number of people.

The Deerfield Master Plan Community Survey indicated that residents would support the development service sector job expansion and office space for professionals, 71 percent favor development of restaurants/food service, 66 percent favor development of professional offices, 64 percent favor small retail stores. While there is support for small scale development of certain sectors in Deerfield residents have concerns about balancing the tax rate with expansion and preserving open space. When asked about areas of concern regarding growth in Deerfield, 72 percent responded that they are very concerned about the need to balance the Town budget against the tax rate, and 59 percent are very concerned about the loss of open space.

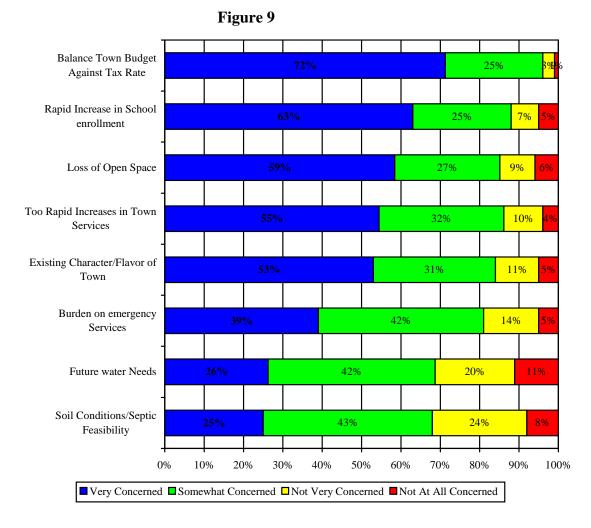
## **Economic Development**

Question 4: How concerned are you about the following factors with regard to growth in Deerfield?:

• Overall Summary of Results: Almost three quarters of residents (72%) are very concerned about the need to balance the Town budget against the tax rate, 63 percent say they are very concerned about the too rapid increase in school enrollment, 59 percent are very concerned about the loss of open space, 55 percent say they are very concerned about the too rapid increases in Town services, and 53 percent say they are very concerned about the existing character or flavor of the Town. Residents express less concern about an increased burden on emergency services (39% are very concerned), the future water needs of the Town (26%), and soil conditions and septic feasibility (25%).

See Following Figure 1



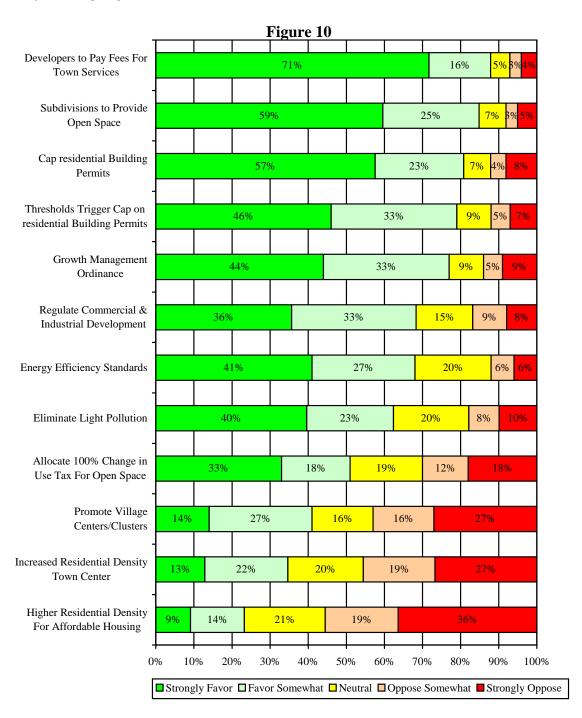


Question 5: What is your opinion of the following methods for guiding and managing growth in Deerfield?

• Overall Summary of Results: The majority of Deerfield residents (87%) either strongly favor (71%) or favor somewhat (16%) requiring developers to pay fees to help offset the additional costs of Town services and improvements such as roads, schools, recreation, solid waste, etc., 84 percent favor requiring subdivisions over a certain size to provide open space, 80 percent favor capping the number of residential building permits allowed each year, 79 percent favor identifying thresholds, which when activated, could trigger a cap on residential building permits, 77 percent favor implementing a growth management ordinance, 69 percent favor regulating commercial and industrial development, 68 percent favor establishing energy efficiency standards for new buildings, 63 percent favor implementing practices to eliminate light pollution of the night sky, 51 percent favor allocating 100% of the change in use tax for purchase of open space, 41 percent favor promoting the creation of village centers or clusters for higher density residential and commercial development, 35 percent favor permitting increased residential density in the Town

center and other built up areas, and only 23 percent favor permitting higher residential density as a bonus for affordable housing.

See following Figure 10.



Question 23: What is your opinion of the following types of development in Deerfield?

• Overall Summary of Results: The majority of Deerfield residents (77%) either

strongly favor (47%) or favor somewhat (30%) development in Deerfield that includes home businesses, 71 percent favor development of restaurants/food service, 66 percent favor development of professional offices, 64 percent favor small retail stores, 52 percent favor light manufacturing/technology business, while only 27 percent favor a supermarket, 20 percent favor shopping centers, and 17 percent favor heavy manufacturing.

## See Following Figure 11

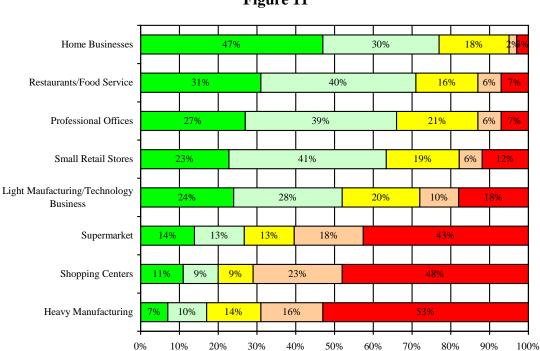


Figure 11

# **Economic Development**

■ Strongly Favor ■ Favor Somewhat ■ Neutral ■ Oppose Somewhat ■ Strongly Oppose

According to the 2000 U.S. Census figures, the median household income in the Town of Deerfield was \$61,367. Within the SNHPC region as a whole Deerfield's median household income hovers around the midpoint, while Bedford has the highest median household income with \$84,392 and Manchester has the lowest with \$40,774. Deerfield's median household income has risen greatly in since 1990. From 1990-2000 median household income in the Town of Deerfield rose from \$40,980 to \$61,367 by 2000, an increase of 50 percent. This noticeable increase may be attributed to the increase in number of residents in New Hampshire who commute to Massachusetts and other higher wage paying states for employment, as well as other various factors such as the towns tax structure, housing costs, educational attainment of the town residents as well as job growth in Manchester, the main regional center of industry.

Table 32 Vol. II Median <u>Household Income for the SNHPC Region and t</u>he State

Municipality, County, and State	Median Household Income
Bedford	\$84,392
Auburn	\$70,774
Londonderry	\$70,501
Chester	\$68,571
New Boston	\$66,020
Hooksett	\$61,491
Candia	\$61,389
Deerfield	\$61,367
Weare	\$59,924
Goffstown	\$55,833
Derry	\$54,634
Raymond	\$48,829
Manchester	\$40,774
Rockingham County	\$58,150
New Hampshire	\$49,467

Source: US Census 2000, SF-3, P-53

According to the 2000 Census Data, the number of households in the SNHPC region that were within the income bracket of \$60,000 to \$74,999 is 12,832 or fourteen percent as shown in table 33. Deerfield's median household income falls within this range. However, the majority of households in the SNHPC region below under this income bracket, with 58 percent of households earning less than \$60,000 annually. There are only five percent of households in the SNHPC region earning more than \$150,000 annually.

Table 33 Vol. II Number of Households by Income in the SNHPC Region, 2000

Income	Number of	Percentage Percentage
	Households	
Less than \$15,000	9,715	10%
\$15,000 to \$29,999	13,982	15%
\$30,000 to \$44,999	16,178	17%
\$45,000 to \$59,999	14,650	16%
\$60,000 to \$74,999	12,832	14%
\$75,000 to \$99,999	12,877	14%
\$100,000 to \$124,999	5,864	6%
\$125,000 to \$149,999	2,785	3%
\$150,000 to \$199,999	2,374	3%
\$200,000 or more	1,937	2%
Total	93,914	100%

Source: US Census 2000 SF-3-QT-P32



#### **Educational Levels**

Economists, geographers, and demographers, have established a direct relationship between one's income and their level of education. This relationship is understood by many and generally speaking, the higher the level of education that an individual attains the higher the income earned by that particular individual will be. The educational attainment of Deerfield's population (aged 25 years and over in 2000) is slightly higher than that of the SNHPC region, Rockingham County and the State of New Hampshire as shown in table 34 below. This higher level of educational attainment does explain, to some degree, the growth in median income from 1990 to 2000. The number of residents who have attained a Bachelor's degree or graduate/professional degree is 31.7 percent, which is higher than the SNHPC at 27 percent, equal to Rockingham county, and higher than the state at 28.7 percent.

Table 34 Vol. II Educational Attainment, 2000

Attainment Level	Deerfield	SNHPC	Rockingham	New
		Region	County	Hampshire
Less than 9 <sup>th</sup> grade	2.8%	5.0%	2.5%	3.9%
9 <sup>th</sup> to 12 <sup>th</sup> grade, no diploma	5.5%	9.0%	7.1%	8.7%
High school graduate (or equivalency)	32.4%	29.1%	28.6%	30.1%
Some college, no degree	17.5%	20.8%	20.7%	20.0%
Associate degree	10.0%	9.1%	9.5%	8.7%
Bachelor's degree	21.3%	18.2%	21.1%	18.7%
Graduate or professional degree	10.4%	8.8%	10.6%	10.0%

Source: 2000 Census, DP-2

Household income sources in Deerfield are predominately generated from wages or salary income. Income sources in Deerfield are similar to income source numbers for Rockingham County and the state. Retirement income as a percentage of household income is slightly higher in Deerfield than in the county or the state while social security income is slightly lower. Another interesting statistic is that Deerfield has a higher percentage of self employment income than both Rockingham county and the state.

Table 35 Vol. II Source of Household Income, 2000

Household Income by Source,	Town of Deerfield	Rockingham	State of New
1999		County	Hampshire
	Percent of P	opulation Over 16 y	ears of Age
Wage or Salary Income	44.4%	43.5%	41.8%
Self Employment Income	9.4%	7.6%	7.3%
Interest, Dividends, Net Rental	22.2%	22.4%	21.6%
Income			
Social Security Income	9.5%	11.1%	12.8%
Public Assistance Income	1.0%	0.8%	1.5%
Retirement Income	8.8%	8.1%	8.5%
Other Types of Income	4.7%	6.4%	6.5%

Source: Census 2000 SF-3, P59, P60, P61, P62, P64, P65, P66



## **Employment in Deerfield**

According to the N.H. Economic and Labor Market Information Bureau, a total of 502 persons were employed in Deerfield in 2005. About one third are employed in federal, state, or local government. In the private sector, 352 persons are employed at different enterprises. Unfortunately, the paucity of data for 1995 for goods and service producing industries makes growth analysis somewhat difficult. However, general trends can be identified, as well as regional comparisons made. Employment growth in private industry and government has exceeded population growth which was about 30 percent from 1995-2005 (OEP population estimates), where employment growth has been about 50 percent from 1995-2005. Service providing industries employed roughly 234 persons in 2005 and goods producing industries provided about 118 jobs in 2005. The average weekly wage of a goods producing employee in Deerfield was twice as much as a service sector employee.

Unfortunately for some, the dominant trend in the SNHPC region and the nation as a whole is for further depreciation of the manufacturing sector and job growth in the service providing sectors. As discussed above, these service sector jobs have average weekly wages that are far lower than goods producing industry wages. Local experts often look to soft industry to replace the manufacturing that once dominated the region. Software development, corporate headquarters, and legal and financial business support services all show signs of growth throughout the next few decades. Other recent developments in the SNHPC region include new opportunities in the arts, culture, and sports as well as related support industries and businesses. Also, growth in the transportation sector, particularly the airport development and the I-93 widening, will enhance the region's potential to host larger national or international businesses.

All of this leads to the inescapable fact that for wage earners to increase their salary in an economy where knowledge is valued most, they must attain higher education degrees. As mentioned in Table 3 above, Deerfield's residents are above regional averages in higher education attainment levels and this bodes well for the continuing growth of the region's knowledge sector as well as maintenance of the town's quality of life.

#### **Deerfield Business Ventures Council (DBVC) Survey**

The DBVC grew out of the UNH Cooperative Extension's Natural Resources Outreach Coalition (NROC) that made recommendations in 2005 that as part of Deerfield's dealing with growth process the town should form a group to explore development issues in Deerfield and focus on businesses that would support a sustainable natural resource base. The DBVC issued a survey to Deerfield Business Owners and the results were compiled on April 30, 2006. A total of 52 responses were received out of the 100+ surveys distributed. The results are located in Appendix G, and can be used to help identify current business operations in town and what industries are predominant.



#### **Town Economic Industries**

Average weekly wages for goods producing industries in 2005 were \$723 per week. Service providing industry average weekly wages were far lower. As stated above, the growing trend in service sector expansion and resulting depressed wages can possibly act as a deterrent to economic growth. Some possible recommendations that can alleviate this trend from a regional perspective and increase Deerfield's chances of economic growth are as follows.

Key economic development needs and concerns in the region are:

- 1 Attract high paying skilled jobs
- 2 Improve and expand infrastructure to support and attract commercial and
- 3 industrial development
- 4 Improve and expand the local tax base through non-residential development.
- 5 Seek a balance in quality of life and growth management
- 6 Provide housing and childcare
- 7 Encourage Green Building

Table 36 Vol. II Employment in Deerfield by Industry, 1995-2005

Employment in Decinera by maustry, 1995-2005							
Industry	1995	2005					
Goods Producing Industries							
Average Employment	n	118					
Average Weekly Wage	n	\$723					
Service Providing Industries							
Average Employment	n	234					
Average Weekly Wage	n	\$389					
Total Private industry							
Average Employment	233	352					
Average Weekly Wage	\$345	\$501					
Government (Federal, State, and Loca	1)						
Average Employment	100	150					
Average Weekly Wage	\$389	\$629					
Total, Private Industry plus Government							
Average Employment	333	502					
Average Weekly Wage	\$358	\$539					

Source: NH Economic and Labor Market Information Bureau, Community Profiles n = indicates that data does not meet disclosure standards

According to Census bureau data in 2000 service sector jobs accounted for about 37 percent of all industry for the Town of Deerfield. Manufacturing remained second with about sixteen percent of all industry, and construction came in third with about twelve



percent. The service industry represents a large and disparate industry category encompassing both public services as well as private services such as food service. The smallest industry sector in Deerfield falls under the category of agriculture, forestry, fishing, and mining accounting for only two percent of all industry. This statistic is a function of historical trends stretching back to the dawn of the industrial age that lead to the development of much of the states productive cropland. The preservation of prime agricultural lands should be a top priority for Deerfield as well as the SNHPC region as a whole.

### **Agricultural Sustainability**

Despite the importance of agriculture to the region's economy and culture, prime agricultural land is being developed significantly. Rockingham County lost one-third of its productive cropland in just five years (1997-2002). Hillsborough County lost nineteen percent in the same time period<sup>17</sup>. Much of New Hampshire's most productive farmland remains unprotected from development. A key issue in New England is the stark contrast between urban and rural lands, which are extremely close in proximity. This encourages more developmental threats to farmland in the region.

Within the SNHPC region, no municipalities have adopted a zoning district designed specifically and exclusively for agriculture. Goffstown has a district entitled "Agricultural District" and Weare has a district entitled "Rural/Agricultural District," but both of these zones have been established with the purpose of encouraging low or limited density residential development and maintaining the rural character of the towns. Additionally, Bedford, Chester, Deerfield, Londonderry, New Boston, and Raymond all have Agriculture/Residential districts. These districts generally permit all types of agriculture, yet they are overwhelmingly occupied with low-density residential developments rather than agricultural operations. The town of Candia only permits unrestricted commercial agriculture in its Industrial District. The remaining municipalities (Auburn, Derry, Hooksett, and Manchester) allow agriculture in rural or low-density residential zones. Many of the towns also offer limited or special exception agricultural operations, such as forestry, farm stands, and pesticide-free farming, in commercial, industrial, conservation, and other residential districts (for specific zoning regulations, refer to each municipality's individual Zoning Ordinances).

 $<sup>^{17}</sup>$  Society for the Protection of New Hampshire Forests 2005



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Table 37 Vol. II Businesses by Industry

	Number of	
<b>Industry Group</b>	Businesses	Percent
Agriculture, Forestry, Fishing, Mining	40	2.0%
Construction	239	12.2%
Finance, Insurance and Real Estate	115	5.9%
Manufacturing	310	15.9%
Public Administration	142	7.3%
Retail Trade	158	8.1%
Professional, scientific, management,		
administrative, and waste management		
services	167	8.5%
Information	47	2.4%
Educational, health, and social services	386	19.8%
Arts, entertainment, recreation,		
accommodation, and food services	68	3.5%
Transportation and Public Utilities	104	5.3%
Other services (except public		
administration)	103	5.3%
Wholesale Trade	75	3.8%
Total	1,954	100%

Source: U.S. Census 2000 SF-3

## **Commuting Patterns**

One of the major economic development concerns facing the region is the large number of residents who commute to jobs outside of the region. The average daily commute time (one-way) for SNHPC residents was 29.35 minutes in 2000, as illustrated in Table 38. Figure 12 shows the percentage of residents in each town who commute out of state. This illustrates the drain on the potential workforce in the region and state.



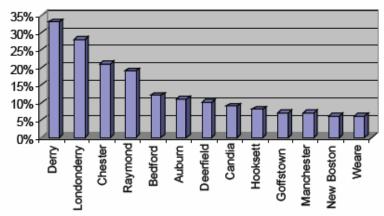
Table 38 Vol. II Commuting Methods and Times for the SNHPC Region, 1990-2000

	Drove Alone				Public Transportation (Including Taxi)		Bicycled or walked			rcycle ther ans		travel work
	1990	2000	1990	2000	1990	2000	1990	2000	1999	2000	1999	2000
<b>Mutnici</b> pality	79.3	87.9	15.4	6.8	0.5	0.4	1.5	0.3	0.4	1.3	25.6	26.7
Bedford	85.5	86	7.5	5.4	0.4	0.3	1.2	0.5	0.5	1.5	21.4	27.2
Candia	79.6	86.5	12.1	9.4	1.1	0.5	2.1	0.5	0.8	0	25.8	28.3
Chester	79.9	84.2	10.4	6.8	0.6	1.2	2.4	0.6	1	0	32.3	32.2
Deerfield	82.6	86.6	9.7	7.8	0.3	0	1.4	1	1	0.3	33.6	33.9
Derry	83.3	84.9	12.1	9.7	0.6	0.8	1.3	1.4	0.5	0.6	29.6	31.1
Goffstown	78	81.7	11.5	8.5	0.1	0.1	6	5.1	0.5	1	22.6	26.1
Hooksett	87.8	82	6.9	8.8	0.5	1.6	1.6	3.6	0.2	0.4	20.7	25.7
Londonderry	82.8	86.3	12.1	7.9	0.8	1.3	1.7	0.7	0.5	0.6	28.3	29.7
Manchester	76.9	81	14.2	11.9	1.5	1.4	4.8	3.1	0.6	0.4	18.8	21.3
New Boston	79.1	82.4	14.1	10.5	0	0.5	3	1.3	0.5	0.6	29.3	32.7
Raymond	81.2	83.7	14.4	12.3	0.6	0.2	1.3	1.5	0.5	0.2	31.2	31.6
Weare	82.4	81.6	13	11.5	0	0.4	0.4	2.1	0.6	0.4	31	35.1
SNHPC	80.0	83.0	12.7	10.0	0.9	1.0	3.3	2.3	0.5	0.6	26.94	29.35
Region												
State of New Hampshire	78.2	81.8	12.3	9.8	0.7	0.7	4.4	3.1	0.8	0.6	21.9	25.3

Source: 2000 Census Transportation Planning Package

A main concern of this commuting information is the noticeable drop in carpooling and biking or walking to work from 1990 to 2000. The increasing reliance on the single occupant vehicle as the primary mode of transportation has become a problem that threatens the local, state, and national economy as the cost of energy supplies continue to rise. A clear change in energy policy will be needed in the years ahead at all levels of government and community planning if we are to continue to see constant economic growth. Energy conservation measures should be combined with promotion of public transportation infrastructure to help avoid the pitfalls of our coming energy crisis. Through the use of smart planning and public education, communities, the region, and the state may be able to mitigate the impact of soaring energy costs.

Figure 12 Vol. II Percent of Residents Working out of State, 2003



Source: 2003 New Hampshire Employment and Labor Market Information Community Profiles.

#### **Tax Base**

The economic base of any community can be defined as all the sources from which the town receives revenue. In general, the more diverse the economic base, the lower the per capita tax burden. In Deerfield, as with most surrounding towns, the primary source of revenue is property taxes, with the greatest percentage of those taxes coming from residential properties. The ratio of residential to commercial property in Deerfield is 24:1. In the smaller communities outlying the city of Manchester residential property is the dominant type of property in terms of the percentage of total property.

Table 39 Vol. II Summary of Town Wide Assessed Valuation, October 2006

Type of Property	Total Local Assessed Valuation Land Only	Total Assessed Valuation Buildings Only	Total of Land + Buildings	Percent of Total
Commercial/Industrial	\$ 7,320,500	\$13,028,700	\$20,349,200	3.8%
Residential	\$ 241,787,200	\$274,502,700	\$516,289,900	95.8%
Other	\$ 2,243,458	\$47,120	\$2,290,578	.4%
Total Value	\$ 251,351,158	\$287,578,520	538,929,678	100%
Residential to Commercial/In				

Source: Town of Deerfield, MS-1 form revised October 2006

Table 40 on the following page illustrates the tax rate comparison between Deerfield and the rest of the SNHPC region. In 2006, Deerfield's total tax rate was the sixth lowest in the SNHPC region at \$17.53 and Goffstown had the highest tax rate in the region with \$24.68



<sup>\*</sup> Total value excludes public utilities; see MS-1 form column 3 for public utilities assessed valuation

Table 40 Vol. II Property Tax Rate, SNHPC Region, 2006

Municipality	Town	Town Tax	Local	<b>State Education</b>	County	Total Tax
	Valuation		<b>Education Tax</b>	Tax	Tax	
Auburn	\$669,128,033	\$1.47	\$8.70	\$2.24	\$0.89	\$13.30
New Boston	\$611,464,248	\$2.05	\$10.32	\$2.03	\$0.9	\$15.30
Weare	\$882,139,926	\$2.76	\$10.28	\$2.09	\$0.92	\$16.05
Bedford	\$3,085,197,931	\$2.85	\$9.92	\$2.49	\$1.08	\$16.34
Manchester	\$9,589,899,446	\$7.96	\$5.36	\$2.48	\$1.05	\$16.85
Deerfield	\$562,403,759	\$2.56	\$12.01	\$2.15	\$0.81	\$17.53
Chester	\$556,895,700	\$4.37	\$10.74	\$2.26	\$0.85	\$18.22
Londonderry	\$3,267,784,875	\$4.44	\$10.55	\$2.43	\$0.86	\$18.28
Candia	\$366,691,810	\$3.75	\$11.53	\$2.64	\$1.02	\$18.94
Raymond	\$955,151,785	\$4.96	\$11.34	\$2.14	\$0.83	\$19.27
Derry	\$2,951,488,988	\$7.50	\$11.32	\$2.41	\$0.93	\$22.16
Hooksett	\$1,274,733,978	\$6.17	\$11.15	\$2.84	\$2.52	\$22.68
Goffstown	\$1,248,659,200	\$8.22	\$12.35	\$2.86	\$1.25	\$24.68

Source: NH Department of Revenue Administration, Municipal Services Tax Rates 2006

### **Future Employment Trends**

As in many rural bedroom communities, Deerfield's future economic well-being is closely linked with the economic climate of Southern New Hampshire. Assuming that Southern New Hampshire's economic prosperity continues, Deerfield residents will have favorable employment opportunities within a reasonable distance of their homes. The region's economic prospects should be viewed as a catalyst for Deerfield's own economic development in order to expand ventures on a local level.

Situated in Western Rockingham County, Deerfield residents are likely to be affected by the employment trends for the county. The industries in Rockingham County expecting the largest percentages of growth between 2004 and 2014 are Health Care and Social Assistance (35.6 percent), Information (31.4 percent), Arts, Entertainment and Recreation (27.3 percent), Administrative and Waste Services (26.9 percent), and Professional, Scientific and Technical Services (25.2 percent). A two percent decrease is expected in Manufacturing related jobs and a 0.2 percent decrease in Utilities.



Table 41 Vol. II Employment Projections by Industry for Rockingham County, 2004-2014

INDUSTRY	Base 2004	Projected 2014	Actual Change	Average Annual Percent Change	Percent Change
Total Employment, All Occupations	148,469	175,897	27,428	1.8%	18.5%
Goods Producing Industries	21,943	23,089	1,146	0.52%	5.2%
Agriculture, Forestry, Fishing, and Hunting	270	302	32	1.2%	11.9%
Mining	57	60	3	0.5%	5.3%
Manufacturing	14,419	14,187	-232	-0.2%	-1.6%
Construction	7,197	8,540	1,343	1.9%	18.7%
Service Providing Industries	113,871	138,882	25,011	2.2%	22.0%
Utilities	1,102	1,100	-2	0.0%	-0.2%
Wholesale Trade	6,485	7,777	1,292	2.0%	19.9%
Retail Trade	25,712	31,382	5,670	2.2%	22.1%
Transportation and Warehousing	4,910	5,623	713	1.5%	14.5%
Information	2,666	3,504	838	3.1%	31.4%
Finance and Insurance	6,284	6,926	642	1.0%	10.2%
Real Estate and Rental and Leasing	1,919	2,251	332	1.7%	17.3%
Professional, Scientific and Technical Services	6,708	8,397	1,689	2.5%	25.2%
Management of Companies and Enterprises	2,346	2,890	544	2.3%	23.2%
Administrative and Waste Services	7,062	8,964	1,902	2.7%	26.9%
Educational Services	10,797	13,320	2,523	2.3%	23.4%
Health Care and Social Assistance	12,635	17,130	4,495	3.6%	35.6%
Arts, Entertainment, and Recreation	2,941	3,744	803	2.7%	27.3%
Accommodation and Food Services	12,177	14,390	2,213	1.8%	18.2%
Other Services, Except Government	4,621	5,524	903	2.0%	19.5%
Total Government	5,506	5,960	454	0.8%	8.2%
Self-Employed and Unpaid Family Workers	148,469	175,897	27,428	1.8%	18.5%

Source: Economic & Labor Market Information Bureau, NH Employment Security

Geographic Location: In many ways, geographic location is one of the most significant contributors to Deerfield's economic base. Deerfield is located approximately 20 miles northeast of the City of Manchester and roughly 21 miles southwest of the City of Concord, both of which are major metropolitan areas. The Town's proximity to these two major metropolitan areas, combined with the amount of open space, has made Deerfield an attractive area for residential development. Additionally, the community's abundant natural resources make it a desirable place to own a home while the adjacent metropolitan areas provide a pool of economic opportunities for the Town's residents.



Land/Building Availability and Zoning: Deerfield has a land area of 32,585 acres of which roughly 73 percent remains undeveloped. The term 'developed' means land in use for residential, public, commercial, or industrial purpose, as well as land used for utilities and streets. There are approximately 120 acres of land in Deerfield that are currently developed for commercial and industrial use, which represents only 1% of the SNHPC regions commercial and industrial land.<sup>18</sup>

Home Businesses: Home businesses are an important component of the local economy of Deerfield. Home businesses are regulated under Article III of the Town's Zoning Ordinance and are permitted by right and by Special Exception in the Agriculture-Residential zone. The ordinance states that home businesses, offices or shops are permitted as a subordinate use to the principal residential use of the dwelling. Additional criteria in terms of number of employees, parking, signage, outdoor storage, exterior improvements, and noise are also applicable. The Town does not currently have any type of mechanism in place to track the home occupations in Deerfield. The Town should consider establishing a Town Business License in order to keep track of all home occupations and businesses operating within the community and to ensure compliance with local regulations.

**Water/Sewer Coverage:** The Town of Deerfield does not have access to public water and sewer systems. These circumstances hinder the ability to bring in certain types of commercial and industrial development to Town. Even with a small scale development approach there will still be the need for certain infrastructure requirements.

#### **Regional Components Essential for Business Vitality**

There are relatively few economic initiatives that are getting regional attention since much economic planning in the region is done at the town or municipal level. Transportation planning is a noticeable exception due to the economic impacts associated with the I-93 widening project. The Southern New Hampshire Planning Commission (SNHPC) assists with identifying transportation issues and their intersection with economic interests. The SNHPC works with Auburn and other communities within the region to identify areas experiencing traffic congestion and to plan for future needs. In turn, the SNHPC works with NHDOT to prioritize these issues and to obtain funding where possible.

A number of regional issues have been identified by the SNHPC, but there are no dominant regionally effective organizations in place to address these concerns:

**Affordable Housing:** This has become an extremely important issue within the SNHPC region. The state as a whole will have to better provide affordable housing opportunities for its workforce as well as for lower income families. The southern region of the state will face the most serious demand for housing as population continues to increase.

<sup>&</sup>lt;sup>18</sup> SNHPC, <u>Regional Comprehensive Plan</u>, November, 2006.



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Housing demand will continue to soar and there will be a corollary upward pressure on prices. For community business to expand there must be an ample supply of affordable housing for the state and regions workforce.

Labor Supply: Both the quantity and quality of the town and the region's work force will be a vital determinant of future economic growth. The skills and educational attainment of Deerfield and the region's labor supply are tied into the way municipalities deal with education funding. Although it is beyond the scope of the town to identify the future technical skills that would benefit Deerfield and the region, this investigation could be taken up by local business and organizations in cooperation with local schools.

Child Care: High quality, affordable childcare is an essential ingredient in the recipe for economic vitality. Deerfield should investigate its capacity related to child care opportunities, perhaps even establishing a Child Care Task Force which could have regional implications in the availability of childcare in Deerfield.

## **Funding Strategies**

The initial investment required to bring new business into a town can be a financial burden to the local government. The New Hampshire Department of Resources and Economic Development (DRED) recommends contacting their representatives to better navigate and successfully obtain grants and technical assistance. The following are some of the resources and strategies available to ease the costs of development.

## Community Development Block Grant (CDBG)

Program funds projects that benefit low- to moderate-income populations (80 percent or less of an area's median household income). The grants are allocated to states and large cities by the U.S. Department of Housing and Urban Development. Grants of up to \$500,000 are offered in the categories of housing, public facilities, and economic developments.

## Impact Fees

A one-time fee charged to new development for the construction or improvement of public facilities necessitated by that development. The fees must go towards costs directly attributable to growth as opposed to maintenance or quality improvement of existing facilities. Municipalities most commonly use impact fees from residential development to pay for schools, but they can also be used for parks, libraries, water, sewer, and road improvements (RSA 674:21). Communities should be cautious not to impose large impact fees that may discourage companies from relocating to their town. Bedford, Deerfield, Goffstown, Hooksett, Londonderry, Manchester, and Raymond currently impose impact fees.

#### Bonds

Municipal bonds in New Hampshire are issued through the state municipal bond bank per RSA 35-A:4. A bond is evidence of a loan. The buyer of the bond is the lender or investor. The seller of the bond is the borrower or issuer. The issuer typically uses



proceeds from a bond sale to pay for capital projects or for other purposes it cannot or does not desire to pay for immediately with current funds. Because of the special tax-exempt status of most municipal bonds, investors usually accept lower interest payments than on other types of borrowing. This makes the issuance of bonds an attractive source of financing to many municipal entities, as the borrowing rate available in the open market is frequently lower than what is available through other borrowing channels. Bonds are one of the safest ways a municipality can finance a needed capital project.

## **Recent Legislation**

In June 2007, the New Hampshire legislature passed <u>SB 217-FN-A</u>, an act establishing the New Hampshire Housing and Conservation Planning Program (HCPP). This program will be of great assistance to municipalities in planning for future economic growth. The text of the bill states that:

4-C:25 Housing and Conservation Planning Program Established. There is hereby established the housing and conservation planning program, which shall be administered by the office of energy and planning. The program shall provide technical assistance matching grants to municipalities to plan for growth and development in a manner that permits a balanced housing stock, including higher density and workforce housing opportunities, and promotes, whenever possible the reuse of existing buildings, including historic properties, while protecting communities' natural resources through more efficient and compact development. Participation in the program is voluntary.

The program establishes four stages of developing and implementing a growth and development strategy to be funded through the housing and conservation planning program. These stages are as follows:

- 1 Natural and Historic Resource and Housing Data Gathering and Analysis
- 2 Development of the Growth and Development Strategy
- 3 Integration of Growth and Development Strategy into Master Plan
- 4 Implementation into Regulatory Framework.

Municipalities seeking a technical assistance grant through the HCPP will need to provide matching funds, which will result in an increase in local expenditures and an increase in state revenue by an indeterminable amount. The match amounts will be determined through the administrative rules process. The 2008-2009 budget, as passed by the House, contains \$400,000 over the biennium for this program. The first round of grant applications will be announced in April 20.



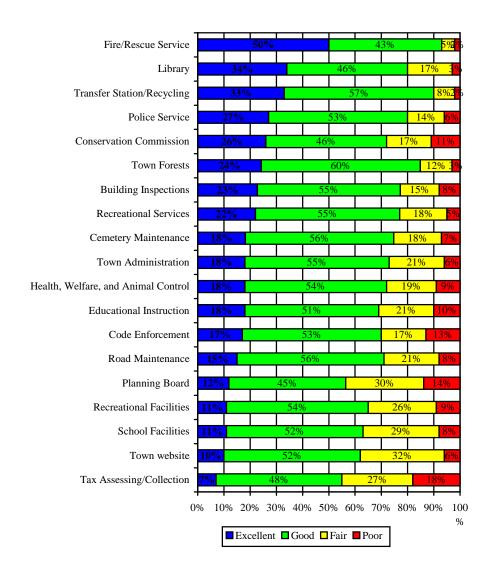
## **Community Facilities Study**

## I. Results of Community Master Plan Survey

The University of New Hampshire Survey Center conducted a survey for the Town of Deerfield. The specific areas of interest are the attitudes about the Town of Deerfield and future planning initiatives for Deerfield. Seventeen hundred seventy-five (1,775) surveys were mailed to all Deerfield postal patrons on November 24, 2006 and a reminder was sent December 12, 2006. Four hundred sixty-six (466) Deerfield residents responded to the survey between November 24 and December 22, 2006; the response rate is 26 percent.

## 1.1 Community Facilities/Services Questions

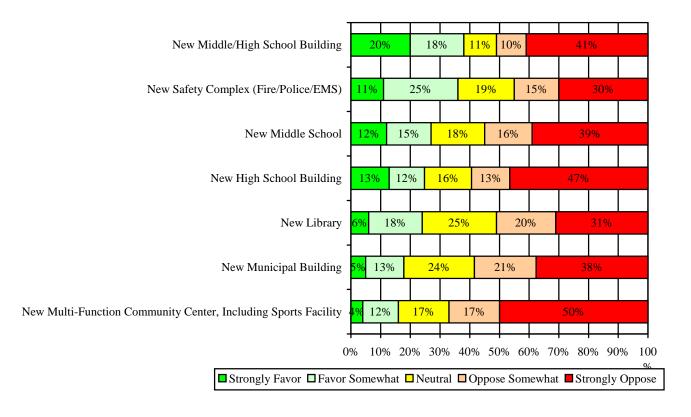
Question 1: Please rank the following Town facilities or services that you have used





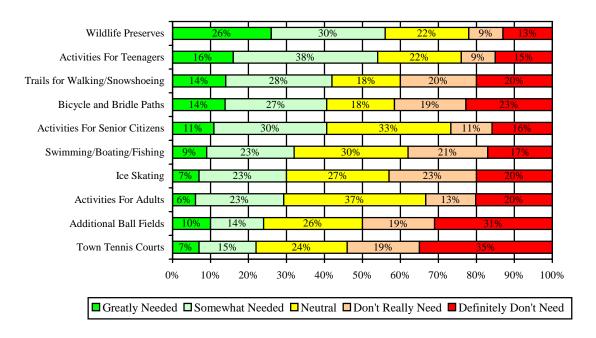
Summary of Results: Half of Deerfield residents (50%) rank the Town's fire/rescue services as excellent, followed by the library (34%), transfer station/recycling (33%), police service (27%), Conservation Commission (26%), Town forests (24%), building inspections (23%), recreational services (22%), cemetery maintenance (18%), Town administration (18%), health, welfare and animal control (18%), educational instruction (18%), code enforcement (17%), road maintenance (15%), Planning Board (12%), recreational facilities (11%), school facilities (11%), Town website (10%), and tax assessing and collection (7%). The majority of Deerfield residents consider most town services and facilities average (good or fair).

Question 14: What is your opinion of the following additions to Deerfield?

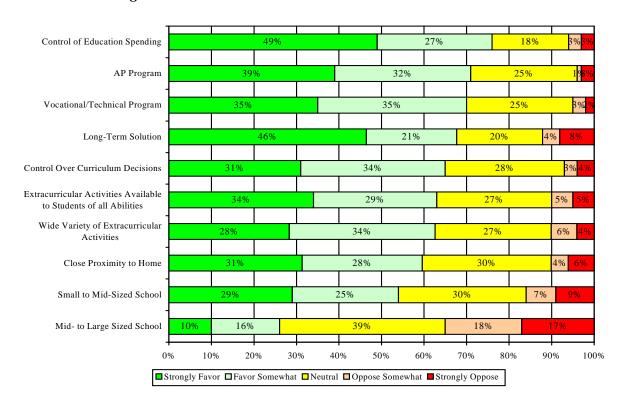


**Summary of Results:** Half of Deerfield residents (50%) strongly oppose building a new multi-function community center, including sports facility; 47% strongly oppose building a new high school building; and 41% strongly oppose building a new middle/high school building. A strong majority of the respondents do not support building any new public facilities within the town.

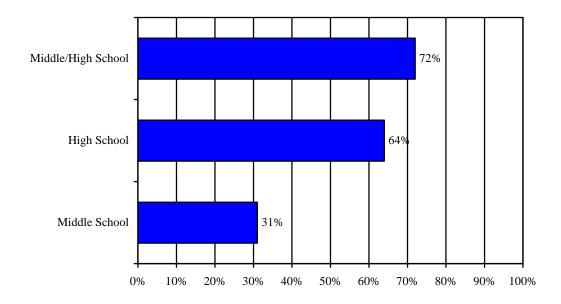
Question 19: How great a need is there in Deerfield for the following recreational facilities?



Question 27: Currently the Town of Deerfield is in contract with Concord High School until 2014; please answer the following questions with that in mind. What is your opinion of the following features as they relate to a High School?



Question 29: If you agree with building new school facilities, please indicate whether you would consider a joint arrangement with another community for each type of school:



**Overall Summary:** Although the majority of the respondents do not wish to build any new public facilities, many respondents support the establishment of wildlife reserves, activities for teenagers, trails for walking and snowmobiling, bicycle and bridle paths and most other recreational programs and services. In addition, while a clear majority of respondents would like to see greater control of educational spending at the high school level, many respondents favor AP, vocational training and extracurricular activities, as well as seeking a long term solution to the town's existing contract for high school services and considering a joint agreement with another community for a middle/high school.

## **Community Facilities**

Recent population growth in the Town of Deerfield has had an impact on its community facilities. While a majority of town residents (based upon the results of the Master Plan Community Survey) do not favor building new facilities, clearly the town's existing services and facilities will continue to face the challenge of improvement and expansion to keep up with local growth, and will continue to feel these pressures in the coming years.

The Deerfield Master Plan Community Survey indicated that some residents were satisfied with some services and disappointed in others. The services that received the highest satisfaction scores were Fire and Rescue Services, Library, Transfer Station Recycling, Police Service, and the Conservation Commission. Recreational Facilities,



School Facilities, Town Website, and Tax Assessing and Collection were rated on the lower end of the scale by residents.

This study presents the current status of community facilities and identifies areas where future expansion would be most economically and socially beneficial. The information presented here was developed through interviews with town officials and town department heads, a community facilities survey distributed to town departments and/or from 2005 Capital Improvement Program (CIP) requests. The Town of Deerfield's Capital Improvement Program was adopted in 2004. It covers the projected capital improvements and purchases for the years 2005-2010.

Capital Improvement Programs allow expenditures to be scheduled or phased over time, minimizing the impact on the local property tax rate. Additionally, all CIP improvements or developments are brought to the annual town meeting for resident authorization. Funding mechanisms for capital projects include: current revenues, capital reserves, bonds, impacts fees, and grants and donations.

Impact fees were adopted by the Town of Deerfield and went into effect January, 1994. Generally, impact fees are collected from a new development to pay for new facility capacity and collected fees are placed in a fund until they are either expended during a six-year period as part of project financing or they are returned to the party from whom they were collected. Impact fees are established pursuant to New Hampshire RSA674:21,V. Information about the Town of Deerfield's impact fees can be found in section 708 of the zoning ordinance.

## Fire Department

The Deerfield Fire Department operates out of South Station located on Birch Road and the Main Station located on Church Street. The Deerfield Fire Department is an all volunteer force. There are currently nineteen volunteers and five explorers in the Department. The first Deerfield Fire Department was formed by resident volunteers of the Town of Deerfield in 1932. The Deerfield Fire Department has only had four fire chiefs since the department's formation. Leon W. Harvey - Deerfield's first chief was killed in the line of duty on December 10, 1947.

Staffing statistics compiled by the National Fire Protection Association (NFPA) reveal different lengths of workweeks and ratios of career firefighters per 1,000 population for various size communities. These staffing statistics or norms differ by region. Northeastern municipalities tend to employ higher ratios of career firefighters than do other regions. The average ratio for communities with populations of 25,000 to 49,999 is 1.76; a population of 50,000 to 99,999 is 2.07; and a population of 100,000 to 249,999 is 2.46. No ratios are available for municipalities smaller than 25,000 residents. <sup>19</sup>

The Deerfield Fire Department's call response figures for 2000-2006 are as follows:

<sup>&</sup>lt;sup>19</sup> Municpal Benchmarks, David N. Ammons, 2<sup>nd</sup> Edition, 200. Pg 144





Table 42 Vol. II Fire Department Calls

Number of Calls
124
156
177
141
163
188
185

Source: Deerfield Fire Department, April 2007

For the year 2006 the Fire Departments calls consisted of the following:

Table 43 Vol. II Fire Department Calls By Type

Type of Call	Number of Calls	Type of Call	Number of Calls
Accidents	70	Fire Alarms	19
Mutual Aid	17	Wires Down	17
Brush Fires	11	Smoke in Buildings	9
Chimney Fires	7	Carbon Monoxide	6
Smell of Gas	5	Assist Public	3
Car Fires	3	Flooded Basements	3
Lighting Strikes	3	Assist Rescue	3
Structure Fires	2	Propane Leaks	2
Washer Fire	1	Tree Down	1
Mailbox Fire	1	Tree Fire	1
Smoke Investigation	1		

Source: Deerfield Fire Department, April 2007

The Town of Deerfield has not expanded or built any new additions to the town's existing fire stations since the last Master Plan in 1999. There have, however been several improvements made upon the Town's existing fire stations as well as upgrades of equipment. The roof shingles on both fire stations have been replaced. In addition, the Fire Department has made several equipment upgrades since 1999 including, the purchase of an International 4X4 Pumper in 2002, a command Vehicle 1981 6X6 Forestry Truck in 2004, a Ford F-550 Heavy duty Rescue Truck in 2006, and a 4X4 Gator 1988 GMC Forestry Truck.

The Town of Deerfield is divided into two fire districts covered by Main Station and South Station. Deerfield does have mutual aid assistance agreements in place with neighboring towns and is a part of the Interstate Emergency Unit for Hazard Mitigation. The Town of Deerfield has recently reported that they have not recently had any problems or issues with their ability to respond to fires or to conduct daily operations.



The Deerfield Fire Department was last evaluated by the State Fire Marshall and NH Department of Fire Standards and Training in 2004-2005.

Table 44 Vol. II Fire Department Equipment

	ent Equipment
Item	Remaining Lifespan
2004 Tahoe, Command	7 years
1994 Freightliner pumper	7 years
2002 International	15 years
1980 International	1 year
1988 GMC	past average lifespan
1981 General	past average lifespan
1963 REO White Contour	past average lifespan
1970 Dodge Tanker	past average lifespan
2006 Ford F550	10 years
1975 Chevrolet	past average lifespan
1987 Ford	past average lifespan
2006 Gator	20 years
2006 Trailer	20 years
1931 International pumper	Historic Artifact (Antique)
(inactive)	

\*Deerfield Fire Equipment

Source: Deerfield Fire Department, April 2007

## Future Needs

The most pressing need identified by the Fire Department was to have 1 or 2 EMT/Firefighters by 2010. A long-term goal is to have a new fire station constructed by 2015. The 2005-2010 Capital Improvement Program (CIP) outlines the need for a new fire station as follows:

"A new fire station is needed to adequately serve the expanding needs and growth demand of our Town. Our existing fire station is highly inadequate. For example, there are only 2 to 3 feet separating our fire trucks, while parked inside. That space is further encumbered by building columns that define each bay of the building. This makes it very difficult to open vehicle doors, work on trucks, or service equipment. Due to a lack of space between the top of the trucks and the ceilings in the bay, it is very difficult to repack fire hoses into their hose beds on the top of the fire trucks. When backing the trucks into the bays, there is only about one inch of clearance on either side of the trucks mirrors. There is inadequate clearance to install a ventilation system to clear exhaust from vehicles. This is a violation of OSHA regulations. Rather than ordering a new piece of apparatus to meet our needs, we have to limit our fire truck requirements to fit our existing station."





Photo: SNHPC

## **Police Department**

The Deerfield Police Department operates out of 8 Raymond Road, which is part of the Town Office Building. The current force numbers are as follows: eight full-time police officers, one full-time administrative assistant, and three part-time officers.

Officer-to-population ratios can serve as good indicators of demand for law enforcement services.

Data from FBI reports in 1998 indicate that municipal police departments in New England had an average of 2.2 full-time sworn officers per 1,000 residents and 2.7 full-time law enforcement employees (sworn and civilian) per 1,000 population.<sup>20</sup> While these averages will vary depending upon local economic conditions, perceived crime problems, and community values, they represent benchmarks that can be used as a general level to assess the adequacy of service and police staffing within the region. In relation to these benchmark standards, Deerfield's population of 4,115<sup>21</sup> is just under the New England average where 4,000 residents would equal 9 full time sworn officers.

Deerfield calls for service for the period 2000-2008 are as follows:

Table 45 Vol. II Police Department Calls, 2000-2008

Tonce Department Cans, 2000-2000		
Year	Number of Calls	
2001	4,733	
2002	5,644	
2003	6,355	
2004	6,396	
2005	5,718	
2006	4,611	
2007	4,395	
2008	2,653	

Source: Deerfield Town Reports

<sup>21</sup> Source: U.S. Census Bureau, 2005 Population Estimates



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<sup>&</sup>lt;sup>20</sup> Municipal Benchmarks, David N. Ammons, 2<sup>nd</sup> Edition, 2001. Pg300

The Town of Deerfield expanded upon their current police station in 2006 by adding a classroom which was separated into four offices and a kitchen area. The Police Department has made several upgrades since the last Master Plan. The department has new digital cruiser radios and portables. The department recently acquired new handguns for all officers. The cruiser laptops, light bars, and radars were upgraded with the installation of Car 54.

The Police Department divides the Town into north and south sectors. Certain areas of the Town can have a response time of up to fifteen minutes. The Town has mutual aid with all the surrounding Towns (Raymond, Candia, Allenstown, Epsom, Northwood, and Nottingham) and there has also been a County wide mutual aid agreement signed in March of 2007. The Deerfield Police Department provides the Town with twenty-four hour coverage, seven days a week. The Rockingham County Sheriff's Department provides dispatch services for the Police Department and Fire Department.

One problem that the Deerfield Police Department has experienced, which hinders its ability to respond to calls, is that the Department has a difficult time in the winter because they do not have any four-wheel drive vehicles. The Deerfield Police Department was evaluated in 2001; however, results are not readily available.

#### Future Needs

The Police Department has satisfied a short-time need for space. There is also a need for cruiser replacement. The 2005-2010 CIP enumerates an annual cruiser replacement for the years 2008-2010. This will replace one of the Ford police cruisers. The cruiser that will be replaced will be either the oldest, the one in the worst condition, or the one with the most mileage. With the amount of calls for service remaining high and the number of miles traveled each year increasing, the cruisers will only last for three to four years.



Photo: SNHPC

## **Rescue Squad**

The Deerfield Rescue Squad is a volunteer organization that provides emergency medical services. The Deerfield Rescue Squad consists of nineteen full time members plus two EMT/Police. The Rescue Squad operates on an "on call" basis and is dispatched by



Rockingham county Sheriff's Department. The number of calls that the Rescue Squad responded to for the period 2000-2006 are as follows:

Table 46 Vol. II Rescue Squad Calls, 2000-2006

2100000 5 40000 50000, 2000 2000				
Year	Number of Calls			
2000	104			
2001	122			
2002	138			
2003	158			
2004	170			
2005	185			
2006	204			
2007	193			

Source: Town of Deerfield

The Rescue Squad is currently located at the Main Fire Station, on 4A Old Church Street. The existing fire station is highly inadequate as the reasons above have already enumerated. The changes that have been made since the last Master Plan update in 1999 include the addition of a bay for the Rescue Vehicle and space for an office and storage area. The Rescue squad has mutual aid agreements with Raymond and Exeter ALS to provide ambulance services. The average response time is six to fifteen minutes and service is provided twenty-four hours a day. The only vehicle that the Rescue Squad has as inventory is a 2004 4X4 Chevrolet Van AWD. The Rescue Squad reported that there have been no problems or issues in respect to their ability to respond to calls or conduct daily operations.

## Future Needs:

The Rescue Squad has identified the following as future needs:

2010 – 2 Full time EMT/Firefighters 2015 – New Facility for Fire/Rescue Ambulance Stipends

## **Educational Facilities:**

Deerfield Community School provides education for school-aged children in grades K-8. High school students attend Concord High School per Town contract that runs until 2014. The travel distance from Deerfield to Concord High School is about 21 miles. The appropriated and actual expenditure of public funds (property tax revenues) from the Town of Deerfield for the years 2000-2006 are as follows:



Table 47 Vol. II Deerfield School District Budget Expenditures

Declinia School Basilet Baaget Expenditures						
Fiscal	Local Town	State Tax	Total Local	Surplus	Actual	% of
Year	Appropriation	Appropriation	Taxes	Offset	Expenditure	Appropriation
2 042	11pp1 op11ution	11pp1 op11deion	1 42105		Lapendicare	11pp1 op11uuon
				Taxes		
1999/2000	1,268,447	1,023,596	2,292,043	506,190	6,298,856.52	36.39%
2000/2001	2,619,572	1,206,210	3,825,782	196,068	5,921,233.41	64.61%
2001/2002	3,652,898	1,256,902	4,909,800	217,867	7,324,972.08	67.03%
2002/2003	4,148,807	1,358,449	5,507,256	160,896	7,756,840.45	71.00%
2003/2004	4,632,761	1,370,651	6,003,412	197,188	8,631,276.71	69.55%
2004/2005	5,785,825	1,123,831	6,909,656	36,992	9,048,956.71	76.36%
2005/2006	6,390,214	1,128,827	7,519,041	266,260	9,887,462.73	76.05%

Source: Town Reports

\*\$935,000 Building Addition Bond in FY 1999/2000

The percentage of appropriation has risen sharply since 2000, now accounting for a little over seventy six percent of appropriation. Local tax revenues have also risen sharply in this period to help cover rising costs, while state tax revenue has remained more or less flat.

Table 48 Vol. II
Deerfield Community School Enrollment: 2005-2006

School Name	2005-2006 Enrollment	School Capacity	SAU
Deerfield Community School	575	560	53

Source: Town of Deerfield

The town is currently dealing with serious capacity issues at Deerfield Community School. In 2006 Deerfield Community School was estimated to be thirty-two percent over capacity. Compromises are made at Deerfield Community School in order to maintain acceptable class sizes. Science classrooms, foreign language classrooms, adequate sized computer rooms, and teacher prep areas are forfeited. Storage areas and modular trailers are used for instruction. Due mostly to these efforts, class sizes have been held to an acceptable number, but it will be increasingly harder in the future to sustain adequate class sizes. Projected enrollments for the years 2007-2015 are as follows:

 $<sup>^{\</sup>rm 22}$  Report prepared by Deerfield School Board and the Deerfield Middle/High School Building Committee January 3, 2006



Deerfield Master Plan - 2009

Table 49 Vol. II
Projected Enrollment
Three Year Weighted Average

Year	K-6	7-8	9-12	Total
2007/08	427	143	273	843
2008/09	431	145	271	847
2009/10	425	137	285	847
2010/11	432	134	277	843
2011/12	439	125	278	842
2012/13	424	153	277	854
2013/14	443	143	260	846
2014/15	436	136	285	857

Source: Deerfield School District

Deerfield Community School (DCS) has thirty-one classrooms that are used to house Pre-K through grade 6 students as well as art, music, and world language classes. Additionally, DCS houses five classes in three modular facilities on the school grounds. Pre-K (preschool) class is housed in a room that was retrofitted from an undersized, former staff room and a middle school class is housed in what was formerly the school's science lab. There are currently no spaces at the school that are not being fully utilized.

Using current School Board recommended class sizes, all grade levels are in the recommended range. The School Board's recommendations are: Grades 1 and 2 - eighteen students; Grades 3 and 4 - twenty students; and Grades 5 and 8 - twenty one students. If there were a need to remove some class space such as terminating the lease on the modular facilities, then reconfiguring spaces would mandate class numbers higher than School Board recommendations. According to New Hampshire Department of Education's recommended standards, DCS has a functional capacity of 412 students. The number of full time equivalents, as of December 2005 was 546. This translates to 134 students over capacity.

The state defines space expectations as follows:

*Kindergarten – Grade 2 – 25* students or fewer per teacher, provided that each school shall strive to achieve the class size of 20 students or fewer per teacher

 $Grades\ 3-5-30$  students or fewer per teacher, provided that each school shall strive to achieve the class size of 25 students or fewer per teacher

*Middle and Senior High School* −30 students or fewer per teacher; or

- These class size requirements may be exceeded for study halls, band and chorus, and other types of large group instruction, including but not limited to, lectures, combined group instruction, and showing of educational television and films.
- In the interest of safety, the maximum number of students in laboratory classes in such areas as science and career and technical education shall be determined by the



number of work stations and the size and design of the area. In no case shall the number of students in laboratory classes exceed 24.



Photo: SNHPC

The Deerfield Community School is a single structure school with two smaller out buildings used for storage. The school was built in 1990 and has undergone routine maintenance over the past 16 years. The modular classrooms are leased and maintained by the company that owns the buildings. This firm addresses routine maintenance. There are no major physical conditions that have warranted concern at this time. In 2000, two kindergarten classes were added to the building. In 2001, there were 5 classrooms and a cafeteria added to the building. Since then, Deerfield has added three modular classrooms to the facility. The first was added in August of 2001. The second was added in August of 2002, and the last was added in August of 2004. The office space was reconfigured in the summer of 2005.

Deerfield is also home to Longview School, a private facility. The Longview School serves students aged 14-21 who have identified emotional and behavioral disabilities. The facility is a log structure located on the highest peak of a 154-acre campus bordering Pawtuckaway State Park. The Longview School at Summit Center is a, state approved, diploma granting high school. The school allows all students to develop self confidence, self awareness, social skills, communication skills, and healthy coping strategies in an emotionally and physically safe environment.

## Future Needs

There are currently no planned improvements at the DCS facility. The community continues to wrestle with the overcrowding situation at this school, but it dovetails with the ongoing lack of a high school facility for the community. Deerfield is currently in a long-term contract with Concord High School to provide education for students in grades 9-12. For many years, the community has had the opportunity to vote on varied building proposals that would address the overcrowding at DCS as well as a guaranteed place for students to attend high school. Coop options, Deerfield stand alone high school proposals, middle/high school options as well as long term tuition agreements have all



been explored. The current ten-year contract has mitigated the urgency to plan for building new facilities or possibly a high school. Until a facility solution has been agreed upon, it is not possible to address firm plans to modify curriculum or programs in the school.

#### Parks and Recreation

For New Hampshire residents, our parks and recreation facilities are not just ancillary benefits enjoyed by a minority of individuals. Quite to the contrary, our parks and recreation facilities are enjoyed by all citizens and are a measure of our quality of life. With abundant forests, streams, and open spaces, Deerfield and the adjacent towns' communities offer a wide variety of outdoor recreational opportunities. Many out-of-town and out-of-state travelers come to the state parks in the summer to enjoy the natural beauty that residents of Deerfield experience on a daily basis.



Photo: SNHPC

A portion of two state parks exist in Deerfield, which offer recreational facilities. Bear Brook State Park offers swimming, boat rentals, picnicking, play fields, fishing, hiking and camping. Pawtuckaway State Park offers a 700 foot beach, play field, picnicking, hiking, snowmobiling, and camping.

The Parks and Recreation Department as of April, 2007 has two full time employees. The Parks and Recreation Director is responsible for creating and overseeing all department programs including maintenance of Bicentennial field. The Director is also responsible for submitting and adhering to the Parks and Recreation Budget. The director works with the Deerfield Recreation Commission on field and facility development. The director reports to the Town Administrator and Board of Selectmen and the director's assistant is responsible for all clerical duties of the Department as well as program creation and implementation.

Table 50 Vol. II



## Parks and Recreation Veasey Park

Part Time Employee	15,545.27
Swim Instructor	1,095.00
Legal Notices	467.50
Telephone	83.40
Contract	1,124.50
Electric	252.43
Repairs 1	40.00
Rubbish Collection	136.73
Supplies	272.64
Miscellaneous	78.00
Total	\$19,195.47

Source: 2006 Town Report, Deerfield

The town has built new recreational facilities and made improvements to existing ones since the last Master Plan update. Since 1999, the Town has built a new children's playground, a gazebo, new dugouts at the school baseball field, a new concession stand (still in progress) at the Bicentennial Field, both infields at the Bicentennial field have been redone and new bath houses were installed at Veasey Park. The town still does not have a full-sized soccer field. In addition, indoor facilities are limited to multi-use buildings with no permanent set up available for recreational programs.

Deerfield's recreational programs serve all ages, from pre-schoolers to senior citizens. The heaviest emphasis is on recreational opportunities for elementary school grade students. Currently the responsibility for monitoring and maintaining Town-owned protected lands and Town forests lies with the Board of Selectmen.

In addition the Department would like to create a more stable and consistent indoor program site. Through 2015, the Department would like to add additional ball fields to accommodate full sized field soccer, lacrosse, and other new programs, as well as to relieve the overburden at the existing field for current programs.

#### Library

The Philbrick-James Library is currently located in the Soldiers Memorial Building, which was constructed in 1914. The building was originally built to honor Deerfield soldiers, house the Town's library, and provide space for meetings of Town Boards.





Philbrick-James Library. Photo taken on day of dedication July 28, 1914.

Caption above: Philbrick-James Library. Photo taken on day of dedication July 28, 1914.

The library currently employs one full-time staffer, two part-time staffers plus a janitor. In addition, there are approximately twenty volunteers who perform duties such as shelving items, preparing program materials, decorating bulletin boards, fundraising, and other varied tasks. The library's current hours are as follows:

Monday & Wednesday 1-8pm
Tuesday & Thursday 9-5pm
Friday 1-5pm
Saturday 9-Noon
Sunday Closed

The estimated number of patrons using the library for the period 2000-2006 are shown in the following Table 51.

Table 51 Vol. II Library Patrons: 2000-2006

	· · · J · · · · · · · · · · · · · · · ·
2000	9,087
2001	8,613
2002	8,637
2003	8,293
2004	9,123
2005	9,678
2006	9,812 (closed 3 weeks-floor project)

Source: Evelyn Decota, Town of Deerfield Librarian

There have been several changes and improvements made to the Philbrick-James Library facility since the last Master Plan in 1999. Some of these are as follows:



- Full-time librarian (2001)
- Added part-time technical assistant (2002)
- Repainted adult room (2003)
- Repainted and replaced carpet in junior room—Friends of the Library project (2003)
- Painted cement floor in reference room (2004)
- Front sidewalk re-designed and replaced-Boy Scout Eagle Project (2003)
- Landscaping along new sidewalk—Friends of the Library project (2003-2004)
- Slate roof repaired—funded by a Moose plate grant (2005-2006)
- Interior maple flooring sanded and refinished (2006)
- Added 2 air conditioning units to main floor (2003)
- Security alarm
- Installed under sink hot water heater (2005)
- Bottled water delivered monthly
- Track lighting installed on main floor
- Highway directional signs (2006)
- New back door (2006)
- Deadbolt on front door (2006)
- Replaced library sign out front with library name and new hours—Friends of the Library (2006)
- Increased open hours from 32 (1999) to 37 (2006) per week year-round
- Painting of one of our founders being restored—funded by a Moose plate grant (2006-2008)
- New music CD collection—Girl Scout Gold Award project—(2006-2007)
- Exterior trim to be painted (2007 budget item)
- Increased Parking space (2007 budget item)
- French drain to be installed (2007 budget item)

In addition to the enumerated facility improvements, there have also been several program changes to the library since the last Master Plan update in 1999. New hours have allowed the library to be open three mornings per week on Tuesday, Thursday, and Saturday. There have been more articles in the FORUM online newspaper and on the town website. A young writers' group was conducted for middle and high school students in the summer of 2005 and an Adult writers' support group was started in 2006. The library now facilitates as many as seven book groups (1 library sponsored, 2 private, 2 church and 2 public school) on an "as needed" basis.





Photo: SNHPC

Several issues with the existing facility have been noticed. The library will need additional space in the future to keep all volumes collected and meet the needs of Deerfield's growing community. Parking has also grown to become a big concern for library staff and patrons wishing to use the library. The library is located next door to the fire house in the center of town. The existing parking facility is small. If there is a fire call or training session for fire department volunteers, then there is virtually no parking available for library patrons. Conversely, when the library has a scheduled program, fire personnel have a difficult time finding parking when there is a fire call. The fire department and the library have asked the town to appropriate money in the 2007 budget to address this problem. (Photo: SNHPC)

As a result of the significant rainfall in the fall of 2005 and spring of 2006, the library building had some flooding on the lower level. As a stop-gap measure, the library had gravel deposited adjacent to the building in the areas where the roof's valleys empty onto the ground. Several contractors have looked at the problem and recommended a French drain be installed around the perimeter of the building. The town is in the process of applying for a FEMA grant to address this issue. The danger of flooding to the integrity of this historic building and its contents cannot be overstated.

In 1999, the Library had 16,089 volumes. In 2006, the number of volumes had increased to 20,907. The number of volumes in the library's collection has increased over the past few years as the library's budget for books and other media has increased. The library's budget for books was \$8,000 in 1999 and it has increased to \$12,000 in recent years. The Deerfield library participates in the interlibrary loan system, which the New Hampshire State Library operates out of Concord. The online catalog connects all the libraries statewide with a weekly van service to deliver requested materials in a timely manner. This is a cost efficient way to satisfy unusual or obscure requests.

The staff of the Philbrick-James Library is presently in the process of inventorying the entire collection. As part of the inventory, a member of the library staff is adding library holdings to the NHU-PAC (New Hampshire Union Public Access Catalog). This process makes it possible to search the library collection in addition to the collections of all the



member libraries in this state. This online searching can be done from home or in the library itself.

## **Future Needs for Facility**

As population growth continues, the library will need to address the long-term need for an addition to the existing facility at the bare minimum, and possibly the creation of a new facility. There is town-owned land adjacent to the present library building that was purchased to allow for expansion of the fire department and the library facilities. The library needs to form a long-range planning committee to study the facility needs.

## **Improvements to the Present Facility**

There is an Americans with Disabilities Act (ADA) compliance issue that is critical and needs to be addressed immediately. The addition of elevator/stair lift/ramps would address this situation. The less-than-efficient forced hot air furnace (pre-1981) will need to be replaced and the out-of-date reference section will need to be updated. There will need to be an additional sidewalk between the new steps to the existing sidewalk once the parking area is completed.

#### Personnel

The library needs to have two staff members on duty at all times for reasons of personal security as well as logistics (bathroom breaks, vacation scheduling, lunches, sick days, etc.) There is a gap of 15 hours per week when double coverage is not possible. The new staff member's primary responsibilities will consist of programming needs, helping with technology issues, performing duties as assigned by the director and filling in as needed for staffing gaps.

## **New Equipment**

There is an immediate need for new computers (2 for present staff, 4 if public access computers are replaced). All computers at present have been donated by the public and therefore are practically obsolete before we acquire them. This item is anticipated to be 2008 budget item. An additional computer may be needed for the new staff member in the future. Shelving units for more books/CDs/DVDs/books on CD/magazines are desirable and will be requested as needed.

## **New Programs**

Additional adult and children's programming will be introduced as space, time and staffing constraints dictate. In the future, the library anticipates additional services such as:

- Outreach to homebound
- More sophisticated tech offerings such as wireless internet, downloadable audiobooks, and website development



- Additional storytimes for school-age children and babies
- Outreach to preschools, public schools and home schooling families
- Additional adult programming (as requested by patrons)

## **Highway Department**

The Highway Department consists of 4 full-time employees. Their primary jobs are to maintain the roads within the Town of Deerfield. Approximately 44 miles of paved roads and 14 miles of gravel roads make up the town's road system. For maintenance purposes, this translates to 116 lane miles of road.

Over the past few years, the Highway facility has had considerable improvements made. The interior of the building has been organized to make it more user friendly, 3 new overhead doors have been installed, and a waste oil burning furnace heating the entire garage has been installed. The Highway facility had been shared with the Ladies Food Pantry until January 2007, when the food pantry moved into the downstairs of the Deerfield Church giving the Highway Department the entire building. The space has been converted to include a small lounge/lunch room, a small kitchen area, new bathroom, locker room and an office area.



Photo: SNHPC

## Currently, the Highway Department has the following equipment:

- 2004 F250 pick up with 8 foot plow and sander, 38,000 miles excellent condition. Sander good.
- 2002 F450 dump with 9 foot plow and sander, 51,000 miles good condition. Sander fair, should consider replacement
- 1994 International 4900 dump with 11 foot power angle plow, wing and sander, 98,000 miles good condition. Sander poor, needs replacement
- 1993 International 4900 dump with 11 foot plow, wing and sander, 185,000 good condition.



- 1984 Cat 120G grader, 7500 hours with Hewitt wing and tower, good condition
- 2000 LB90 New Holland Backhoe with a twist-a-wrist attachment. 3800 hours, good condition. 3 extra buckets
- Torwell sander, fair condition
- 3-Spare 11 foot plows. 2 in excellent condition, 1 good condition
- V plow in fair condition
- 2-spare 10 foot wings in fair condition
- 1 York rake, good condition

2000 watt Honda generator, MQ three inch trash pump, seven older-type two way radios in vehicles, three hand-held portable radios, four chain saws, a pavement cut off saw, an air compressor, a steam/pressure washer, an Eager Beaver 20-Ton trailer, a crack sealer pot with two banders, and miscellaneous hand tools.

According to the Highway Department, with the exception of the 2004 F250 and the 2002 F450, the equipment is older and on the downward cycle. However, it is all under a good maintenance program. At some point within the next few years, at least one of the six wheelers should be replaced. One sander needs immediate replacement and the one assigned to the 450 is in poor condition.

#### Future Needs

Short term projects would include the overlay on Old Center Road, full depth reconstruction of 600 feet on Reservation Road. one mile of Ridge Road also needs attention within the next few years.

Long term planning would include some parts of Cotton Road, Middle Road, and South Road. These appear to be the largest traffic volume roads in town. As the town continues to grow, the demands on the Highway Department will continue to only increase. The major development area remains on the south side of Deerfield.

The Town of Deerfield's Capital Improvement Program (CIP) lists several slated projects for 2007. These are as follows:

## Mt. Delight Road Phase 1 Overlay

The project involves a pavement wearing surface overlay of 8,700 linear feet (LF)

## Mt. Delight Road Phase 2 and Swamp Rd. Overlay

The project involves a pavement wearing surface overlay of 7,000 LF

## **Reservation Road Reconstruction**

This project includes approximately 5,280 LF of total reconstruction which involves additional sub-base, culvert replacement, the re-creation of existing ditch lines plus adding 2 inches of pavement base course.

The CIP lists several other projects. However, when the CIP was done, the projects that were selected were based on the probability that there would be a capital improvement



bond in place allowing the projects to be done and payment spread out over 10 or 12 years.

## **Transfer Station and Recycling Center**

The Deerfield Transfer Station and Recycling Center is located at 51 Brown Rd. In 1997, the Transfer Station was changed from a landfill to a Transfer Station. Most residents haul their own trash in Deerfield. Private haulers are available and have no connection to the town. Recycling is encouraged but not required. The Transfer station budget is \$219,000. Disposal and transport are \$188,000 of the total.

Municipal solid waste is disposed of in Pennacook. Municipal solid waste (MSW) is a waste type that includes predominantly household waste (domestic waste) with sometimes the addition of commercial wastes collected by a municipality within a given area. They are in either solid or semisolid form and generally exclude industrial hazardous wastes. The term *residual waste* relates to waste left from household sources containing materials that have not been separated out or sent for reprocessing.

## Unacceptable Materials

- Compressed Gas Tanks: including all oxygen, acetylene, argon, Freon, and nitrogen
- Harmful, hazardous or toxic substances
- Sludge or septic waste
- Any material which, in the opinion of the Transfer Station and Recycling Center Attendant, constitutes a serious hazard to other users of the facility, to the property of the Town or to the operation of the Transfer Station and Recycling Center facility. This shall include, but not limited to, any industrial by-products
- Stumps to include trees and limbs greater than five (5) inches in diameter, as directed by the

attendant



Photo: SNHPC

The town is seeking less expensive transport methods for Municipal Solid Waste. Needs will expand with population but the current facility should be able to handle the increase with an extension of operation of hours.



The 2005-2010 Capital Improvement Program (CIP) for the Town of Deerfield states that there are no projects, possessing a dollar value of greater than \$20,000, that are currently planned for the next six years.

## Municipal Buildings - Town Offices/George B. White Building

There are currently 20 full-time and thirteen part-time employees and volunteers working in the Town Office buildings for Deerfield. These employees and volunteers represent the various departments such as police, recreation, tax collector, tax assessor, highway, library, building inspector, health and welfare department, transfer station, planning board, zoning board of adjustment, technology department, fire, and rescue squad. The hours in which the offices within the Municipal Building are open to the public are as follows:

Town Clerk-Tax Collector's Office, Assessing Office, Finance, Human Resources

Monday 8 a.m. to 7 p.m. Tuesday through Friday 8 a.m. to 2:30 p.m.

Town Administrator

Monday through Friday 8 a.m. to 4 p.m.

Parks and Recreation

Monday through Friday 8 a.m. to 4:30 p.m.

Overseer of the Welfare

Monday 4 p.m. to 6 p.m.

Tuesday through Friday 8:30 a.m. to 10:30 a.m.

Walk-in Hours

Monday 4:00 p.m. to 6:00 p.m. Wednesday 8:30 a.m. to 10:00 a.m.

Appointments can be made with the Overseer of Welfare during regular business hours. Additionally, a Welfare Official is available during regular business hours of the town offices.

## Building/Code of Enforcement Office

8 a.m. to 12 p.m., other hours by appointment

## Meetings of Committee

Evenings

The ground floor (center section) and lower section of the G.B. White Building is handicapped accessible. The lower level (former cafeteria) has access, but does not allow someone to reach the meeting room floor. There is also a viewing platform in this area. The front section of the G.B. White Building is not handicapped accessible. The offices



currently located in the building include the Town Clerk/Tax Collectors Office, Assessors Office, Police Department, Building/Code Enforcement Department, Parks and Recreation, Planning Board, Zoning Board of Adjustment, Conservation Commission, Welfare Office, Technology Department, Health Office, Town Administration and the Building Maintenance Supervisor. At present, the preference of voters is for Town Offices to remain in the G.B. White Building. The construction of a new building has been considered in the past, but voters have not approved the proposals.



Photo: SNHPC

There have been minimal changes to the building since the last Master Plan update with the exception of general maintenance. As space within the building has been vacated, it has been consumed by the Town Government functions. Interior space allocation for Town Government functions has been restructured to provide as much efficiency as possible with the space currently provided. The maintenance plans have been stepped up to include larger repairs such as the roof and the parking area.

Space problems currently exist in terms of meeting space for Town Boards, Commissions, Committees, and Civic Organizations. All departments have space issues. At present, the space is being restructured to alleviate some congestion but is only a band-aid. There is an immediate pressing need for storage and archive space.

Within the G.B. White Building, the computer systems are linked to the network server. Other Departments such as the Library, Transfer Station, Fire Station, Rescue and Highway Department are not on the network server.

Currently, there are numerous existing problems with the buildings infrastructure. There are many water leaks in the building. The roof was repaired on one section in the summer of 2007 to help mitigate this problem. There is constant maintenance of the light fixtures and electrical system within the building is under stress from all the computer equipment. The plumbing is constantly in need of repair. The windows on the building are not well insulated and are in disrepair; this is a problem in the winter months especially with the rising cost of energy prices. The Septic System requires monitoring and maintenance. Two furnaces in the lower end are 37 years old and will need to be replaced in the near



future. The building currently has a smoke/heat detections system, but lacks sprinklers. These are the most pressing infrastructure needs of the facility identified by town officials

#### Future Needs

Several future needs and upgrades were identified by the town administrator. Interior and exterior renovations are to be addressed each year. Around 2010 but before 2015, the Town will be looking at a new facility or major renovations to the G.B. White Building as the problems enumerated above should make clear. Complete overhaul and replacement of the leach field is necessary. There will also be a need for additional power to be run into the building.

## **Sewer and Septage Services**

There are no current plans for the development of a municipal wastewater collection and treatment system. The town also has no known lagoon pits in town for septage. The community currently relies on individual septic systems. Septage is trucked to various waste water treatment facilities. Concord has agreed to handle septage that is transported by truck from individual residences if other cities refuse it. At this time, the trucking companies choose where they will haul the septage to. There are currently no future plans to alter the Town's septage system in any large scale way.

## **Water Supply**

The Town of Deerfield currently has no plans to develop a municipal water treatment and distribution system anytime in the future. All Deerfield residents and businesses depend primarily on individual wells for their domestic water supply. There are approximately 1,500 wells in town. Water quality issues exist in the area of Mr. Mike's Convenience Store and the Center of Deerfield (Church Street).

The town-owned wells are as follows:

- 1 Fire Station,-4A Church Street, Philbrick-James Library, 4 Church Street (shared)
- 2 South Fire Station, 33 Birch Road
- 3 Highway Department Shed and Town Hall 10 Church Street, South and Town Hall (shared)
- 4 Deerfield Community School, 66 North Road
- 5 G.B. White Building, 8 Raymond Road

To date, these wells have never run dry and they have good water pressure. The town has not experienced any operating or maintenance problems in relations to these wells. There are several community water systems in Deerfield. They are located at the following sites:

- 1 G.B. White Building, 8 Raymond Road
- 2 Sherburne Woods, Elderly Housing, Upham Drive



- 3 Longview School, Reservation Road
- 4 Lazy Lion, North Road
- 5 Deerfield Community School, 66 North Road

Future water supply and water distribution needs will depend on the growth rate of the community and would be addressed during the planning phases of a project.

## **TRANSPORTATION**

## **Community Survey**

In December 2006, the University of New Hampshire Survey Center conducted a Community Input Survey for the Town of Deerfield. The results of the survey provide information on the attitudes of Deerfield residents concerning transportation-related issues and future planning initiatives in the Town. A total of one thousand, seven-hundred and seventy-five (1,775) surveys were mailed to all Deerfield postal patrons in November and December 2006. Four hundred and sixty-six (466) responses to the survey were received. The response rate for the Deerfield Community Input Survey was approximately 26 percent.

The majority of Deerfield residents responding to the survey feel that minimizing traffic and traffic-related noise is a priority. Other transportation-related priorities expressed by Deerfield residents included preserving stone walls along public roadways, enforcement of speed limits, implementing an Adopt-A-Highway program and improving road conditions. The results of the survey indicated that those Deerfield residents responding to the survey strongly favor requiring developers to pay fees to help offset the costs of Town improvements such as roads. The majority of residents responding to the survey also felt that the Town should develop a policy for Class VI roads. Approximately 40 percent of the residents responding to the survey indicated that Deerfield needs more walking trails and bicycle paths.

## **Roadway Classification**

Municipal roads and highways are classified according to administrative and functional classification systems. Administrative classification systems define the roles and responsibilities of the various government agencies for activities such as construction and maintenance. The road and highway network within a municipality can also be defined through a functional classification system based on the role that a roadway facility serves within a network hierarchy. The following sections describe functional and administrative roadway classification systems.

Functional Classification

General functional roadway classifications are:



- **Arterial Streets** are intended to carry traffic from collector streets to the system of highways; that is, to move through traffic to and from major attractors.
- Collector Streets carry traffic between local streets and the arterial system; they are intended to collect and distribute traffic in minor traffic generating areas.
- Local Streets primarily provide access to abutting properties.

The functions performed by higher hierarchy roadways such the major arterials are principally intended to provide regional and inter-city mobility. Where the primary function of a highway is to provide mobility, relatively high sustained speeds are desirable. Lower hierarchy roadways (i.e. minor arterials and local roads) are designed to provide access to local areas and individual properties, and in these areas, low speeds are necessary to provide safe access. Roadway networks providing safe and efficient access for these purposes are generally designed through utilization of the principles contained in a functional classification system. Development and maintenance of a functional roadway classification system will assist the town in highway system planning and encourage the development of a roadway network that meets the needs of both regional through travel and local trip-making.

## **Administrative Classification**

Guidelines for administrative classification of roadways in the State of New Hampshire are based on information contained in *New Hampshire Planning and Land Use Regulation*. Highways under state maintenance and control include Class I, II, and III highways while Class IV, V and VI highways are under the jurisdiction of municipalities. The administrative roadway classification as defined in *New Hampshire Planning and Land Use Regulation* is as follows:

- Class I highways consist of all existing or proposed highways which are part of the primary state highway system excepting all portions of such highways within the compact sections of 27 towns and cities listed in RSA 229:5, V.
- Class II highways consist of all existing or proposed highways on the secondary state highway system, except those portions of such highways which are within the compact sections of 27 towns and cities listed in RSA 229:5, V. Class III, Recreational Roads, consist of all roads leading to, and within, state reservations designated by the legislature.
- Class III-a, highways consist of new boating access highways from any existing highway to any public water in the state.
- Class IV, Town and City Streets, consist of all highways within the compact sections of 27 towns and cities listed in RSA 229:5, V. The extensions of Class I and Class II highways through these areas are included in this classification.
- Class V, Town Roads, consist of all other traveled highways which the town has the duty to maintain regularly.
- Class VI, Unmaintained Highways, consist of all other existing public ways, including highways discontinued as open highways, highways closed subject to



- gates and bars, and those highways which have not been maintained by the Town in suitable condition for travel for a period of five years or more.
- Scenic Roads are special town designations (by vote of the town meeting) of any road, other than a Class I or Class II highway, where the repair, maintenance, reconstruction, or paving work shall not involve or include the cutting or removal of trees, or the destruction of stone walls, except as provided for under RSA 231:158.

Table 51 presents a summary of Deerfield's administrative classified roadway mileage. This information was provided by the New Hampshire Department of Transportation (NHDOT). As of 2003, there were approximately 84.1 miles of public roads in the Town, including approximately 17.4 and 1.3 miles, respectively, of Class II and Class III highways. There are currently no Class I highways in Deerfield. The majority of the town's roads, approximately 54.8 miles, are Class V Town Roads, while there are approximately 10.6 miles of roads classified as Class VI in Deerfield. The Town's classified roadway mileage is summarized in Table 52.

Table 52 Vol. II Approximate Highway Mileage

Approximate ingilway wineage				
Class II	17.4 miles			
Class III	1.3 miles			
Class V	54.8 miles			
Class VI	10.6 miles			

Source: NHDOT 2003

#### **Traffic Flows**

The results of the Community Input Survey indicated that, of those residents responding to the survey, approximately 39 percent travel between 10 and 25 miles to work, while an additional 23 percent travel between 25 to 40 miles to work. Thirteen percent of residents responding to the survey indicated that they travel 40 or more miles to work.

Additional information on the travel behavior of Deerfield residents is also available from the 2000 Census. The results of the Census indicated that approximately 87 percent of employed Deerfield residents commuted to work alone in a private vehicle. This figure is slightly higher than the average for communities in the SNHPC region. An additional seven percent of employed Deerfield residents traveled to work in private vehicle with at least one other individual.

The results of the Census also indicated that approximately four percent of Deerfield residents worked at home. The Census did not reveal the use of public transit or walking as a mode for work trip travel by Deerfield residents.



## Existing Conditions

The SNHPC annual regional traffic counting program and regional travel demand model were used to compile existing and projected traffic volumes on the Deerfield roadway network. Existing (2005) average annual traffic volumes (AADT) on selected roadways in Deerfield are shown on Map 9, volume 1.

The State of New Hampshire Ten Year Transportation Improvement Plan (2007-2016) includes an evaluation of existing (2004) traffic congestion and operational data for the State highway system. Information on the major highway links in Deerfield is included in this evaluation. In the document, congestion is measured by level of service, which is an indication of how well traffic flows on the highway system. Level of Service (LOS) is expressed by a letter grade with LOS A representing little or no congestion and LOS F representing a roadway link operating at capacity.

The information presented for Deerfield indicates that NH 43 and NH 107 in the northern portion of the town are expressed as operating with little or no congestion. These conditions, which are also being experienced on NH 107 in the southern portion of the town, are roughly equivalent to LOS A and B. NH 43 and the portion of Routes 43/107 between the southern and northern junctions of these two state roads in the town are expressed as operating with moderate congestion, roughly equivalent to LOS C and D.

#### Future Conditions

Traffic volumes for the "existing" base year condition were projected to a 2025 "horizon" year utilizing a growth rate from the regional travel demand model. The traffic growth rate was developed through a comparison of the "base" year and "horizon" year assignments from the regional travel demand model. These growth rates were then used to increase the base year volumes from the regional traffic counting program to represent the 2025 horizon year. The 2025 projected AADT traffic volumes are shown in Map 10, volume 1.

#### **Traffic Accidents**

Crash data for the period from 1995 to 2005 was obtained from the NHDOT. A total of 772 accidents occurred in the Town during this period. The highest accident total was recorded in 2004 when a total of 84 accidents were reported. The lowest accident total reported was in 1998 when 51 accidents occurred. A summary of the accident totals for the years 1995 to 2005 is presented in the following Table 52.



Table 53 Vol. II
Total Reported Accidents in Deerfield, 1995-2005

	Total Number of
Year	Accidents Reported
2005	77
2004	84
2003	66
2002	81
2001	80
2000	76
1999	61
1998	51
1997	83
1996	56
1995	57

Source: NHDOT

Crash data for the period 2001 to 2005 was used to identify high accident locations within the town. Table 53 presents a listing of the high accident intersection locations in the town for the period 2001 to 2005. The table indicates that, during this period, the Stage Road/Raymond Road intersection experienced the greatest number of accidents. A total of six accidents occurred at this location during this period. A total of four accidents occurred at the South Road/Cotton Road and Raymond Road/North Road intersections during this period.

Table 54 Vol. II Intersection Accident Locations, 2001-2005

Intersection	2001	2002	2003	2004	2005	Total
Stage Rd (NH 43)/Raymond Rd (NH 107)	3	1	0	2	0	6
South Rd (NH 43)/Cotton Rd	0	0	1	1	2	4
Old Candia Rd (NH 43)/South Rd	0	0	2	1	0	3
Raymond Rd (NH 43/NH 107)/North Rd	0	0	1	2	1	4

Source: NHDOT

Table 54 presents accident data for roadway links (between intersections) in the town for the period 2001 to 2005. The table indicates that North Road experienced the greatest number of accidents during this period. During this period, a total of 74 accidents occurred on this road. The links experiencing the next highest number of accidents during this period were Raymond Road (35 accidents) and Mountain View Road (31 accidents).



## Insert Map 13



## Insert Map 14



Table 55 Vol. II Roadway Link Accidents, 2001-2005

Roadway	2001	2002	2003	2004	2005	Total
North Road (NH 107)	21	16	12	13	12	74
Mountain View Road (NH 43)	3	4	10	10	4	31
South Road	8	0	2	7	10	27
Raymond Road (NH 107)	7	8	3	9	8	35
Old Candia Road (NH 43)	4	2	1	1	0	8
Middle Road	4	3	3	4	3	17
Range Road	1	0	4	1	2	8
Reservation Road	1	1	1	4	0	7
Blakes Hill Road	0	0	1	0	4	5
Nottingham Road	3	2	2	1	1	9

Source: NHDOT

In the ten year period between 1995 and 2005, a total of four fatal accidents occurred in Deerfield. Table 55 identifies the location of these accidents and when they occurred. Three fatal accidents occurred on NH 107 and the other fatal accident occurred on South Road.

Table 56 Vol. II Fatal Accidents, 1995-2005

Year	Fatalities	Location		
1995	1	NH 107 North south of Old Center Road North		
2005	1	NH 107 500 feet south of Charlie Lane		
2005	1	South Rd 2000 feet south of Oak Drive		
2005	1	NH 107 400 North of Reservation Rd		

Source: NHDOT

# NHDOT Ten-Year Transportation Improvement Program/SNHPC Transportation Improvement Program

The Transportation Improvement Program (TIP) represents a vital link between plan development and the implementation of transportation projects. The SNHPC, on behalf of Deerfield and other member communities, is required to participate in the TIP process of project implementation that includes updating the document biannually. The TIP process begins during the Fall of even-numbered years with input from the local communities as they submit their priorities for transportation system projects to the region. The projects are reviewed and ranked and a recommended list of projects is forwarded to the NHDOT for consideration.

The current FY 2007–2010 SNHPC TIP does not contain any improvements projects located in Deerfield. Additionally, the current version of the NHDOT Ten Year TIP (2007-2016) and the draft 2009–2018 TIP that is currently being reviewed through the



Governor's Advisory Council on Intermodal Transportation public hearings also does not contain any improvement projects in the Town.

The NHDOT Bureau of Bridge Design is currently monitoring four bridge structures in the Town. Three of these bridges are municipally-owned "red listed" structures requiring more frequent inspection due to known deficiencies such as poor structural conditions, weight restrictions or type of construction. These bridges are located on Middle Road and Candia Road (over Hartford Brook) and on Blakes Hill Road (over Lamprey River). The bridge carrying NH 43 over the Lamprey River in the southern portion of the town is a State-maintained structure that has been classified by the NHDOT as functionally obsolete. All of these bridges have been included in the NHDOT's priority listing system for repair and/or replacement.

## **Roadway Surface Management**

The Deerfield Highway Department was contacted to determine priority short term and long term roadway maintenance projects that the town intends to pursue. Based on the information obtained, the town's short term priority roadway maintenance projects include the following:

- Pavement overlay Old Center Road
- Reconstruction Reservation Road
- Reconstruction Ridge Road

Long term priority roadway maintenance projects include the following:

- Reconstruction Cotton Road
- Reconstruction Middle Road
- Reconstruction South Road

In addition, the following roadway projects are included for implementation in 2007 in the town's Capital Improvement Program (CIP):

- Phase 1 Overlay Mount Delight Road Surface overlay of 8,700 Linear Feet
- Phase 2 Overlay Mount Delight Road 2 and Swamp Road Surface overlay of 7.000 Linear Feet
- Reconstruction Reservation Road Total reconstruction of approximately 5,280 Linear Feet involving additional sub-base, culvert replacement, re-creation of existing ditch lines plus two additional inches of pavement base course

CIP projects were selected based on the probability that there would be a capital improvement bond in place allowing the projects to be done and payment spread out over approximately 10 years.

The NHDOT Ten Year TIP (2007-2016) includes 2004 information on pavement condition of numbered routes on the state maintained highway system. This information



was based on observations of maintenance personnel and additional data gathered from pavement condition data collection efforts. The data presented suggests that the majority of the state maintained roadways in Deerfield (NH 43 and NH 107) require at least some work. A substantial portion of this roadway mileage is classified as requiring major work. It should be noted that, in its current redevelopment of the Ten-Year Highway Plan process, the NHDOT has stated its commitment to constructing new highway projects in the state while at the same time ensuring that the existing transportation infrastructure is adequately maintained. Additionally, the **Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)** requires a commitment to the development of operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods.

## **Alternative Modes of Transportation**

The SNHPC is currently assisting the NHDOT to complete an update of the Statewide Bicycle Route System map. The SNHPC recently obtained input from its member communities on which routes should be included in this system. At the present time, the following roads in Deerfield have been included as recommended bicycle routes:

- Mount Delight Road from the Allenstown town line to NH 43/NH 107
- Middle Road from the Allenstown town line to South Road
- South Road from Middle Road to NH 43
- NH 43 from South Road to NH 107
- NH 107 from the Candia town line to NH 43
- NH 43/NH 107 from NH 43 south to Cole Road
- Cole Road
- Candia Road from Cole Road to NH 43/NH 107
- NH 43/NH 107 from Candia Road north to the junction of NH 43 and NH 107
- Parade Road
- Nottingham Road
- NH 43 from NH 43/NH 107 north to the Northwood town line
- NH 107 from NH 43/NH 107 north to the Epsom town line

There are currently no public transit services in the town of Deerfield. As the SNHPC region grows, increasing dispersion of land development in the area is leading to socio-economic and demographic changes. In turn, these changes are resulting in increased regional trip-making, travel across municipal boundaries, and a growing need to ensure mobility and accessibility on a regional scale. In an effort to address these issues, the SNHPC is currently conducting a Regional Transit Feasibility Study. The first phase of the study consisted of a Comprehensive Operations Analysis (COA) of the MTA's existing fixed-route bus services. The COA included a thorough review of the MTA system, including patronage by route, time of day and stop, transfers between routes and schedule performance. The COA recommendations, which were designed to ensure the system operates as efficiently as possible, were implemented in July 2007. The subsequent tasks of the Regional Transit Feasibility Study are now underway. The



remainder of the study will look at the feasibility of expanding the scope of the transit services presently provided by the MTA and how services can be coordinated more effectively and used more efficiently. It is anticipated that all of the SNHPC communities will ultimately benefit from this effort to more effectively utilize the transportation resources.

Deerfield is also participating along with the SNHPC and 25 additional towns and cities in the Community Technical Assistance Program (CTAP). CTAP was developed by the NHDOT in response to the anticipated impacts of the Salem-Manchester I-93 highway widening project. CTAP will provide advanced training for local officials, technical assistance, public information, education resources and innovative demonstration projects. The purpose of CTAP is to provide towns in the study area with the tools required to deal with the impacts of the proposed highway widening. Year One CTAP projects are nearing completion and planning for Year Two is now underway.

# **Regional Concerns Study**

# I. Results of Community Master Survey

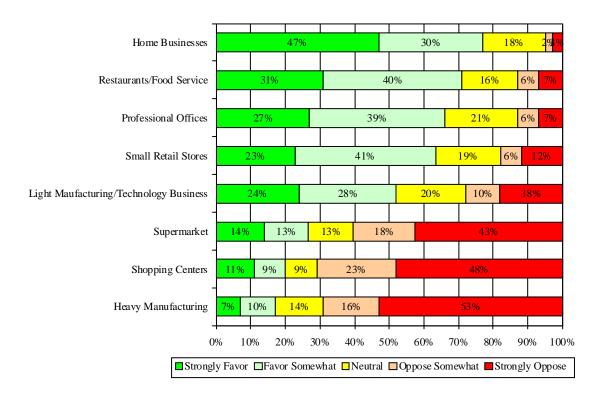
The University of New Hampshire Survey Center conducted a survey for the Town of Deerfield. The specific areas of interest were the attitudes about the Town of Deerfield and future planning initiatives for Deerfield. Seventeen hundred seventy-five (1,775) surveys were mailed to all Deerfield postal patrons on November 24, 2006 and a reminder was sent December 12, 2006. Four hundred sixty-six (466) Deerfield residents responded to the survey between November 24 and December 22, 2006; the response rate was 26 percent.

#### 1.2 Regional Concerns

Question 23: What is your opinion of the following types of development in Deerfield?

• Overall Summary of Results: The majority of Deerfield residents (77%) either strongly favor (47%) or favor somewhat (30%) development in Deerfield that includes home businesses, 71 percent favor development of restaurants/food service, 66 percent favor development of professional offices, 64 percent favor small retail stores, 52 percent favor light manufacturing/technology business, while only 27 percent favor a supermarket, 20 percent favor shopping centers, and 17 percent favor heavy manufacturing.

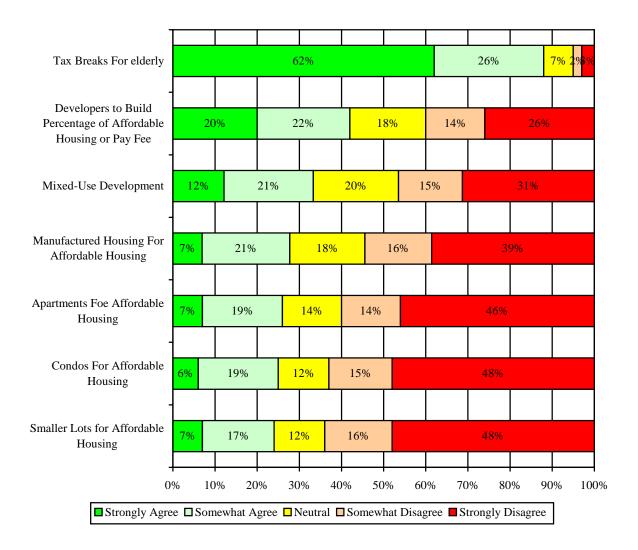




Question 7: What is your opinion of the following possible actions the Town of Deerfield could take to assist with affordable housing? (Defined as a family of 4 earning less than 60K annually)?

• Overall Summary of Results: The majority of residents (88%) either strongly agree (62%) or somewhat agree (26%) with tax breaks for the elderly, followed by only 44 percent that agree developers should be required to either build a percentage of affordable homes or pay a fee to support affordable housing in other areas of Town, 33 percent agree with permitting mixed-use development, 28 percent agree with permitting manufactured housing, 26 percent agree with permitting apartments, 25 percent agree with permitting condominiums, and 24 percent agree with permitting smaller single-family building lots.





#### **Buffer Resources:**

<u>Buffers for Wetlands and Surface Waters: A Guidebook for New Hampshire Municipalities</u> Audubon Society of New Hampshire, NH Office of State Planning, University of New Hampshire Cooperative Extension, U.S. Department of Agriculture Natural Resources Conservation Service, November 1995. Revised edition May, 1997.

Wilkerson, Ethel et al. "The Effectiveness of Different Buffer Widths for Protecting Headwater Stream Temperature in Maine" Forest Science, Volume 52, Issue 3, 2006.

<u>The New Hampshire Estuaries Project</u> website at: http://www.nhep.unh.edu/resources/index.htm



Best Management Practices to Control Nonpoint Source Pollution: A Guide for Citizens and Town Officials. New Hampshire Department of Environmental Services, January, 2004.

<u>Innovative Land Use Planning Techniques: A How-to-Handbook for Sustainable Development, Water Resources Chapter</u> "Shoreland Protection: The Importance of Riparian Buffers" Southern New Hampshire Planning Commission, Draft chapter completed on February 28, 2007.

# **Regional Concerns**

## **Regional Impacts**

Deerfield is a part of a regional network of communities tied together by a common transportation infrastructure, water resources, agriculture and forests, and issues of wide importance such as housing and population growth. For the regional economy to grow in the future, municipalities will have to work together to find an appropriate balance between commercial and industrial growth and preservation of open spaces and natural resources. Projects such as the widening of Interstate I-93 will have a major impact on regional growth well into the future. New projects such as this will continue to present themselves, and the Town of Deerfield should keep up to date on these developments.

By being actively engaged in regional planning initiatives, the Town of Deerfield can adequately participate and plan for its future.

# **Housing Growth**

The Town of Deerfield has seen a fifteen percent increase in total housing units from 1990-2000. In 1990, there were 1,227 total units with 1,043 of these being single family units, while in 2000, there were 1,406 total units with 1,231 of these being single family units.<sup>23</sup>

Deerfield has experienced nearly constant growth in housing units for three decades straight. Compared to the SNHPC region as a whole, whose growth rate from 1990-2000 was only 11 percent<sup>24</sup>, Deerfield is certainly a community with a growing demand for increased housing units. However, despite these large increases, Deerfield remains one of the smaller communities in the region. This may cause rapid growth changes to have greater impacts than would be felt for the same actual changes in a larger community.

Within the SNHPC region, eight of the thirteen communities have adopted growth management ordinances, interim growth management ordinances, or innovative land use



<sup>&</sup>lt;sup>23</sup> www.census.gov 10/12/07

<sup>&</sup>lt;sup>24</sup> Ibid.

controls such as timing incentives and phased development. Three of the communities have adopted growth management ordinances, including: Auburn, Derry, and Londonderry. Two of the three communities—Candia and Raymond—with innovative land use controls border Deerfield. The third community is Chester. The two municipalities with interim ordinances are Hooksett and Weare, with Hooksett located catty-corner to the Town of Deerfield.

The establishment of growth control ordinances essentially push housing development from one community into another. The maintenance of a growth control ordinance, in the communities neighboring Deerfield, may potentially create development pressures on the town that it may not have had otherwise. While the establishment and maintenance of similar ordinances in Deerfield may shift pressure into other communities, creating impacts elsewhere, there is little else that Deerfield can do to balance pressures they may receive for additional housing growth.

While Deerfield does not currently have a growth management ordinance in place, they do have a Phased Development Ordinance (Section 328) which is a process by which the Town can regulate the issuance of building permits for residential subdivisions so that the construction of units occurs at a rate consistent with the gradual expansion of community services needed to support it. Depending on the size of the project, the construction may be phased over a period of 2-8 years.

In addition to the close monitoring of its own growth control mechanisms, Deerfield can also maintain an open dialogue with its neighboring communities, either through one-on-one interactions or in regional forums, to review the regional impacts of housing growth in each community. These conversations may focus on actual growth trends, planning efforts, and growth controls, which all may have regional implications.

#### **Affordable Housing**

The Town of Deerfield has become one of the most expensive places in the Southern New Hampshire Planning Commission Region to own a home. The median purchase price for a home in the Town of Deerfield in 2006 was \$296,900,<sup>25</sup> compared to \$253,600<sup>26</sup> for the SNHPC Region as a whole; a difference of approximately 17 percent. In 2005, the median purchase price of a home in Deerfield was 25 percent higher than the SNHPC Region, which represented a 15 percent increase over the 2004 figure of \$273,000. From January to July 2007, the median purchase price of all homes in Deerfield was \$297,000<sup>27</sup>, compared to \$240,000 in the SNHPC region during the same period. This trend is quickly making Deerfield one of the least affordable communities in the SNHPC region to own a home. This is particularly true for senior households on fixed incomes, younger generations just entering the housing market, and public employees

<sup>&</sup>lt;sup>27</sup> Calculations based on a sample size of 24. Sample sizes less than 50 are highly volatile and not considered valid.



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<sup>&</sup>lt;sup>25</sup> \*Calculations based on a sample size of 49. Sample sizes less than 50 are highly volatile and not considered valid.

<sup>&</sup>lt;sup>26</sup> New Hampshire Housing Finance Authority, "Purchase Price Data for Various Geographic and Political Divisions of New Hampshire" 12/11/07

such as teachers, firefighters and municipal staff. The lack of a diverse housing supply, with opportunities for all households, is a chronic problem in the State of New Hampshire, and is not unique to the Town of Deerfield.

To adequately meet the state, county, and region's overall demand for a diverse and affordable stock of housing, municipalities must work together so that no single community has a surplus of low-valued housing, while others only have higher-priced housing. The goal must be towards maintaining a regional balance of community assets.

The Housing Chapter of this Master Plan outlines opportunities for Deerfield to help promote affordable housing opportunities for all households. In addition, the Town can participate in a variety of housing related regional forums sponsored by agencies such as the SNHPC, the Business and Industry Association, Home Builders and Remodelers Association of New Hampshire, the New Hampshire Housing and Finance Authority, the New Hampshire Office of Energy and Planning, and the Greater Manchester Chamber of Commerce. More information about up-to-date programs can be obtained by contacting each of the agencies.

#### **Water Resource Protection**

Protection of the region's surface waters is important for a variety of reasons. One of the most important concerns is the natural vegetation growing alongside riverbanks and shorelines. These natural shorelines not only serve as wildlife habitat, but also play a significant role in holding stream and riverbanks together as well as preventing erosion and siltation. In addition, stream banks are natural conductors for runoff, and thereby replenish surface water supply. The New Hampshire Department of Environmental Services has compiled a list of great ponds in the State of New Hampshire. A great pond is defined as a natural body of water that is at least 10 acres in size. As a whole, the region has a total of 40 great ponds. The lakes and great ponds located within the Deerfield are provided below:

## Deerfield

- Spruce Pond 21.7 acres
- Beaver Pond 58.4 acres
- Freeses Pond 82 acres
- Pleasant Lake 493.5 acres

The Town of Deerfield has several important great ponds such as Spruce Pond, Beaver Pond, and Freeses Pond. Pleasant Lake and the Lower Suncook River Watershed are important surface water resources for Deerfield which share boundaries with adjacent towns such as Hooksett, Candia, Nottingham, and Raymond. These surface water resources come under the protection of numerous state regulations for environmental protection, such as the State Shoreland Protection Act. However, smaller tributaries are a part of a larger watershed region that, in order to be protected, must be looked at from a regional perspective. Deerfield must work with other communities in concert to ensure there are appropriate setback requirements along entire water bodies, so that potential



contamination at one site does not feed into the water of other towns. It will take this kind of regional approach to ensure that water resources are abundant and clean for future generations.

## **Transportation Improvements**

The major transportation improvements slated for construction by 2015 in the New Hampshire Department of Transportation's *Ten-Year Transportation Improvement Plan* is the I-93 widening from Salem to Manchester. This project could have significant impacts on the Town of Deerfield and the communities' outlying Manchester in terms of population, housing, and employment growth, and increased traffic.

The New Hampshire Department of Transportation (NHDOT) has been planning the widening of 19.8 miles of I-93, from the Massachusetts border to the I-293 split in Manchester and work has already commenced on bridge repairs and ramp work in Salem, as well as park and ride facilities along the corridor. The intent is to increase efficiency and safety and reduce congestion along this section of the highway. In order to accomplish this, the project will expand the existing two lanes in each direction to four lanes; redesign and reconstruct Exits 1 through 5; construct new park and ride facilities at Exits 2, 3, and 5; expand bus and rideshare opportunities; and reserve median space for a possible future train or mass transit system.

In order to assist impacted communities mitigate the potential impacts of the I-93 widening, the NHDOT has launched the Community Technical Assistance Program (CTAP). The CTAP is a five year program that will provide technical assistance to communities to enable the implementation of sound land use planning practices in preparation for future growth. This initiative will be a joint effort between communities, state agencies, and nonprofit organizations focusing on the region, raising awareness of growth-related issues, and developing innovative smart growth tools and techniques.

The CTAP program is unique in that the NHDOT had not predetermined the specific type or form of assistance that communities can receive. Instead, over the past several months through a series of Work Sessions, NHDOT engaged local governments, local non-profit organizations, community groups, and state, regional, and federal agencies in both planning the technical assistance that is needed and working together in providing this assistance over a five-year period. Fifteen representatives from non-profit organizations will work with representatives from government agencies and the 26 client communities to plan for the future of the region.<sup>28</sup> The results to date have been:

- 1 The development of a regional vision for what the participating communities want their communities to look like in the next 20 years
- 2 A strategic plan of what needs to be done, how to do it, and what obstacles need to be overcome to achieve this vision

<sup>&</sup>lt;sup>28</sup> http://www.rebuildingi93.com/content/ctap/ 10/11/07





3 The nomination and election of the 13 member CTAP Steering Committee, which will represent the CTAP communities and help guide the program through the next five years and beyond<sup>29</sup>

The Town of Deerfield can continue to stay involved in the I-93 widening and planning process through local participation and the SNHPC. The SNHPC will host informational sessions and disseminate critical information to the impacted communities throughout the process of the I-93 widening project.

## **Loss of Agriculture and Farms**

New Hampshire agriculture has changed over the years. Today's industry is quite diverse, encompassing many specialty products, crops, and livestock. The value of New Hampshire's agricultural industry is over \$935 million, including agricultural tourism impacts (fairs, scenic travel, etc). Farming activity provides the fields, pastures and meadows that buffer New Hampshire's residential and commercial development and affords the views of the hills, valleys and mountains. Without land kept open by farming, there would be no greenbelts around our towns and cities and, without farming, there would be no barns, silos, or sugar houses that give our state its special character. <sup>31</sup>

In recognizing the importance of the intersection of agricultural land benefits and the expansion of sprawl and development given impetus by population growth, a careful balance must be struck to preserve the identity of our small towns. It is important for the Town of Deerfield to maintain its rural character in the face of economic and social transition. The major issues relating to the loss of agriculture and farms in Deerfield and surrounding regions is a quality of life issue. As external development pressures increase in Deerfield, so too will the demand for developing agricultural lands. Farm and agricultural lands can be protected through open space and conservation efforts in Deerfield. Conservation easements can be used for these types of properties much like they are used for forested lands. Additionally, the Natural Resource Conservation Service (NRCS) is available to assist communities trying to preserve farm and agricultural land.

# **Sprawl and Smart Growth**

Suburban and urban sprawl has accompanied population growth in southern New Hampshire for the last two decades. Forms of planning modeled on the post-World War II suburban sprawl paradigm are unsustainable and increase energy consumption and drive up costs of land. Smart growth embraces the philosophy that, in a world of increased energy demand and dwindling resources (especially fossil fuels), it is smarter for communities to plan towards denser mixed use village areas, which drives down costs and increases affordable housing for younger workers. Emphasis is also placed on creating more walkable communities to decrease congestion on roadways and carbon pollution from vehicles.

<sup>&</sup>lt;sup>31</sup> http://www.nh.gov/agric/publications/documents/2006AgriculturalStatistics\_000.pdf 1/11/07



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<sup>&</sup>lt;sup>29</sup> http://www.rebuildingi93.com/content/ctap/ 10/11/07

http://www.nh.gov/agric/publications/documents/2006AgriculturalStatistics\_000.pdf 1/11/07

Unguided growth and sprawl can lead to land-use patterns that will adversely affect Deerfield's natural environment. The expansion of roads and associated infrastructure relating to increased sprawl leads to additional costs and a greater burden on the taxpayer.

Smart growth would help affirm the values that constitute a town's particular culture by providing for a sense of place, a sense of community, and a sense of economy in the planning process. Mixed use development, innovative zoning, and open space protection for agricultural and environmentally sensitive land should help minimize the impacts of sprawl, environmental degradation, and potentially reduce taxpayer costs in the Town of Deerfield. Increasingly, the choices for residential development for the smaller communities within the Southern New Hampshire Planning Commission region are no longer between low density and concentration, but between suburbanization and rural character. To strike the right balance, the Town of Deerfield must involve the Town's citizens in every essential step forward in the planning process. The creative interaction of citizens, developers, and community officials will be the best way to assure implementation of a smart growth pattern that Deerfield can use for decades to come.

# **Partnership Opportunities**

There are a number of opportunities that the Town of Deerfield can utilize in order to partner with neighboring communities in an effort to collaborate on land-use planning efforts. Primarily, this can occur through the strengthening of day-to-day relations with the surrounding municipalities. Through open communications between communities, potential regional impacts can be identified and resolved as a joint effort and can minimize unintended consequences of development.

In an effort to further strengthen its relationship with neighbors, Deerfield can utilize the review of Developments of Regional Impact (DRI). Per RSAs 36:54 through 58, all municipalities are required to notify abutting communities of any developments of regional impact. The SNHPC has created its Developments of Regional Impact Guidelines to facilitate this effort and establish equitable standards for all communities. The intent is to open dialogue between communities in the SNHPC region, encourage all communities to utilize equal standards, provide equal consideration to neighbors, and minimize potential conflicting points of view between communities.

The guidelines were developed with participation from the region's members through a series of roundtable discussions. They outline the process of proceeding with a development of regional impact and establish standards indicating what may be a regional impact. The list of standards, defining potential regional impacts, was developed to clarify or set more specific standards to the definition provided in New Hampshire RSA 36:55. These standards are meant to serve as guidelines while reviewing proposals and are not absolute. They are to be used as indicators of potential regional impacts.



The SNHPC's guidelines go beyond the notice requirements established in the RSAs by recommending that whenever possible, a courtesy notice or memorandum should be sent to the abutting communities and carbon copied to the SNHPC, *before* a project has been determined to be a DRI. Additionally, a follow-up phone call should be made to ascertain whether the notice or memorandum was received and whether there are any questions to be answered. The community should then proceed according to State statute and make the DRI determination if appropriate.

Deerfield should actively seek the input of abutting communities and the SNHPC if it has a potential development of regional impact. Conversely, if Deerfield is notified of a development in an adjacent community, it should use the opportunity to submit comments to the other municipality so that Deerfield's interests and needs are heard. The SNHPC is available to assist both municipalities as a neutral party when reviewing potential developments of regional impact.

In addition to the SNHPC, there are a variety of organizations and agencies that work in a regional capacity that may be of assistance to Deerfield when planning regional efforts and mitigating regional impacts. The following is a brief description of some of the additional partnership opportunities.

## The Southern New Hampshire Planning Commission

As the Regional Planning Commission for the greater Manchester area, the SNHPC is one of the main conduits of professional help for municipalities in planning areas as diverse as housing, transportation, natural resources, and energy. As a member of the SNHPC, the Town of Deerfield has representatives that are members of the board of commissioners and play a large part in developing a sustainable regional approach to planning for the future of greater Manchester. The SNHPC has several workshops and programs throughout the year that are intended to keep planners and municipal representatives abreast of land use planning issues of relevance as well as educate new planners about the resources and grant opportunities available to their community. Additionally, the SNHPC completed a Regional Comprehensive Plan for its region in 2006 which can be a valuable resource of information for the SNHPC communities.

## **New Hampshire Office of Energy and Planning**

The New Hampshire Office of Energy and Planning (NHOEP) is a part of the Governor's Office and serves to implement the policy recommendations of that office. The NH OEP's general tasks are to implement state policy on smart growth, provide a variety of planning assistance to municipalities, support natural resource protection programs, provide services related to heating fuel assistance and refugee resettlement, ensure reliable energy sources are available, and promote energy efficiency. Possibly the most valuable service NHOEP offers to communities is their training programs. NHOEP sponsors fall and spring planning and zoning conferences with sessions on all planning issues and subjects. Additionally, they maintain the State Data Center, an invaluable planning tool for municipal planning boards.



#### **Local Government Center**

The Local Government Center (LGC) was originally founded as the NH Municipal Center in 1941 and reorganized as the LGC in 2003. The Local Government Center's mission is to provide programs and services that strengthen the quality of its member governments and the ability of their officials and employees to serve the public. To do this they provide a variety of services to its municipal members including legal advice, professional recruitment, the Law Lecture Series, a toll-free hotline, enhanced member services, and pooled risk management services.

## **Manchester Health Department**

The New Hampshire Public Health Network<sup>32</sup> (NHPHN) works to assure coordinated and comprehensive delivery of essential public health services and serves as a local liaison with state agencies involved in the public's health and safety. The Network is comprised of community-based partnerships involving broad public health interests including local health departments and health officers, fire, police, emergency medical services, health care providers, social service agencies, schools, media and advocacy groups, and leaders in business, politics and faith working together to address complex public health issues. The Town of Deerfield is located within the Manchester service area, which also includes the City of Manchester and the towns of Auburn, Bedford, Candia, Goffstown, Hooksett and New Boston.

## The New Hampshire Estuaries Project

The New Hampshire Estuaries Project (NHEP) is part of the U.S. Environmental Protection Agency's (EPA's) National Estuary Program, which is a collaborative local/state/federal program established under the Clean Water Act with the goal of protecting and enhancing nationally significant estuaries. The NHEP receives most of its funding from the EPA and is administered by the University of New Hampshire. The mission of the NHEP is to protect, restore, and monitor the environmental quality of the state's estuaries, including the Great Bay Estuary and the Hampton-Seabrook Estuary. The NHEP study area covers the entire coastal watershed of New Hampshire, including all the freshwater tributaries that flow into the estuaries. Forty-two communities are within the NHEP's area of focus. About 10 percent of the state's land area is in the coastal watershed, and approximately one-third of the state's population and businesses are located here. Although a portion of the watershed lies in Maine, currently the NHEP conducts its activities in the New Hampshire portion only.

#### **Lamprey River Watershed Association**

The Lamprey River Watershed Association (LRWA) was formed in 1980 to promote the restoration, conservation, wise development and use of the natural resources of the Lamprey River Watershed. Conserving fish, wildlife, forests, and soil and water resources, along with pollution abatement, are key goals of the LRWA. Through education and research, the LRWA will work to increase the understanding among citizens about the importance of water and land conservation in the watershed.

<sup>&</sup>lt;sup>32</sup> For more information, visit www.nhphn.org/who/index.html





The Lamprey River Watershed Association works in partnership with other conservation organizations and citizen groups to maintain or improve the natural health and beauty of the watershed. The Lamprey Watershed Association, Inc. is a non-profit 501 (c) (3) organization.

## **Bear Paw Regional Greenway Land Trust**

Bear-Paw Regional Greenway Land Trust is a land trust established by resident volunteers concerned with protecting open space lands. Bear-Paw has proposed a greenway that connects private or public lands with large areas of conservation land in a seven-town region, including: Candia, Deerfield, Epsom, Northwood, Nottingham, Raymond, and Strafford. This network of voluntarily protected lands will provide important wildlife habitat and protect rivers, wetlands and recreational opportunities.

## **University of New Hampshire Cooperative Extension**

The Mission Statement of the University of New Hampshire Cooperative Extension Program (UNHCE) best describes their purpose, as follows:

"UNH Cooperative Extension provides New Hampshire citizens with research-based education and information, enhancing their ability to make informed decisions that strengthen youth, families and communities, sustain natural resources, and improve the economy."

The principal partner of UNHCE is the University of New Hampshire. The Program receives County, State and Federal funding in order to provide services to conduct resident instruction, research and outreach to New Hampshire citizens in an effort address any needs or problems. They are staffed with experts on the topics of agricultural resources, community development, forestry and wildlife resources, sea grant and water resources, and program development and evaluation. As part of the Master Plan process, the UNHCE Community Assistance Program has conducted Community Profiles throughout the state, including Deerfield and many of the other communities within the SNPC region.

## **Rockingham County Conservation District**

The Rockingham County Conservation District (RCCD) has been operating since 1946 as a legal state subdivision. The RCCD provides a variety of services to private landowners, municipalities, and other local interest groups on conservation and natural resource management. They provide technical assistance and guidance on issues such as surface and ground water quality and quantity, non-point source pollution, erosion and sedimentation, storm water management, flooding, wetlands, forestlands, wildlife habitats, and solid waste. The Town currently partners with the Rockingham Conservation District and should continue to do so in the future.

