

# MASTER PLAN HINSDALE, NEW HAMPSHIRE UPDATE 2014



Photo by Jill Collins

Prepared by the Hinsdale Planning Board with assistance from the  
Southwest Region Planning Commission

# TABLE OF CONTENTS

INTRODUCTION.....1  
CHAPTER 1 - Population and Housing .....6  
CHAPTER 2 - Community Services and Facilities..... 19  
CHAPTER 3 – Recreation.....29  
CHAPTER 4 - Economic Development .....36  
CHAPTER 5 - Conservation and Preservation.....56  
CHAPTER 6 - Construction Materials .....68  
CHAPTER 7 - Traffic and Transportation.....73  
CHAPTER 8 - Land Use Plan.....86

LIST OF MAPS	FOLLOWING PAGE
COMMUNITY FACILITIES.....	28
HINSDALE WATER & SEWER INFRASTRUCTURE AND WATER SERVICE DISTRICTS.....	55
UTILITIES & INFRASTRUCTURE.....	55
ZONING MAP.....	55
CONSERVATION LAND.....	67
STRATIFIED DRIFT AQUIFERS.....	67
STRATIFIED DRIFT AQUIFERS WITH WATERSHEDS/BASINS, SOUTHWEST REGION.....	67
WETLANDS AND HYDRIC SOILS.....	67
STEEP SLOPES.....	67
CONSTRUCTION MATERIALS – SAND & GRAVEL.....	72
CONSTRUCTION MATERIALS – ROADFILL.....	72
CONSTRUCTION MATERIALS – TOPSOIL.....	72
TRAFFIC COUNTER LOCATIONS/ROADWAY CLASSIFICATION.....	85
MULTIMODAL TRANSPORTATION.....	85
TRANSPORTATION SAFETY.....	85
LAND USE.....	97
DEVELOPMENT CONSTRAINTS.....	97

## Introduction

New Hampshire state law mandates Planning Boards to “*prepare and amend from time to time a Master Plan to guide the development of the municipality.*”<sup>1</sup> The sole purpose of the Master Plan is to aid the Planning Board in the performance of its duties. The duties of the Planning Board are varied, but the only duty specifically required<sup>2</sup> is the maintenance of the town’s Master Plan.

The statute goes on to say that the Master Plan may include consideration of any areas outside of the town which, in the judgement of the Planning Board, bear a relation to or have an impact on the planning of the town.

### What is a Master Plan?

The Master Plan may be comprised of a collection of reports, statements, land use and development proposals, with accompanying maps, diagrams, charts and other descriptive matter that shows as fully as is possible and practical the Planning Board’s recommendations for the desirable development of the town. The Master Plan shall include, at a minimum, the following required sections<sup>3</sup> :

- (a) “A vision section that serves to direct the other sections of the plan. This section shall contain a set of statements which articulate the desires of the citizens affected by the Master Plan, not only for their locality but for the region and the whole state. It shall contain a set of guiding principles and priorities to implement that vision.”
- (a) “A land use section upon which all other sections shall be based. This section shall translate the vision statements into physical terms. Based on a study of population, economic activity, and natural, historic, and cultural resources, it shall show existing conditions and the proposed location, extent, and intensity of future land use.”

The Master Plan may also include the following sections (RSA 674:2.III):

- (a) Transportation Section;
- (b) Community facilities section;
- (c) Economic development section;
- (d) Natural resources section;
- (e) Natural hazards section;
- (f) Recreation section;
- (g) Utility and public service section;
- (h) Cultural and historic resources section;
- (i) Regional concern section;
- (j) Neighborhood plan section;
- (k) Community design section;

---

<sup>1</sup>RSA 674:1.

<sup>2</sup>Other Planning Board duties, such as subdivision and site plan review, etc., are actually allowed only if the voters at town meetings authorize the Planning Board to take on these responsibilities.

<sup>3</sup>RSA 674:2.

- (l) Housing section;
- (m) Implementation section;
- (n) Energy section;
- (o) Coastal Management section.

Where appropriate, the plan may contain appendices or separate reports that contain the underlying scientific and statistical data that support the various elements of the plan.

### **What will the Master Plan Accomplish?**

The Master Plan provides a framework for the Planning Board in particular and the town as a whole to use in shaping the future over a period of years (5-10 years is recommended for Master Plan updates<sup>4</sup>). The Planning Board should be able to refer to the town's Master Plan whenever a development proposal comes before it, to determine whether development that is being proposed is consistent with the Master Plan.

Most importantly, in order for any municipality in the State of New Hampshire to adopt a zoning ordinance, a Planning Board must have adopted, at a minimum, a general statement of goals and objectives and the land use section of a Master Plan.

This Master Plan represents - to the best ability of the Planning Board to determine - the wishes of the residents of Hinsdale regarding the present and future vision of the town for the next 5-10 years. Throughout this process, the Planning Board has informed the public and solicited comment in order to reach the concluding recommendations.

### **Vision Statement and Implementation**

The Town of Hinsdale will always be a unique and desirable place to live and to visit. We, the people of Hinsdale, value our history, our natural surroundings, and our location within this great State of New Hampshire. We are dedicated to preserving our unique and small-town character by guiding new growth to reveal our community's individuality.

Within that context, Hinsdale citizens and town government will continue the work of guiding responsible development within our community that preserves a connection with open spaces and the natural beauty of the area. We will strive to:

- ◆ protect our natural resources;
- ◆ promote a well-planned and balanced infrastructure;
- ◆ encourage a diverse local economy with employment in services, retail, manufacturing and agriculture among other fields;
- ◆ provide quality education with emphasis on parental and community involvement;
- ◆ further develop recreational opportunities for residents and visitors to enjoy; and
- ◆ promote strong and open communication between its citizens and town government.

Specific objectives are grouped into the following categories, and listed in detail below:

---

<sup>4</sup>RSA 674:3.II.

Chapter 1- Population and Housing  
Chapter 2- Community Services and Facilities  
Chapter 3- Recreation  
Chapter 4- Economic Development

Chapter 5- Conservation and Preservation  
Chapter 6- Construction Materials  
Chapter 7- Traffic and Transportation  
Chapter 8- Land Use Plan

The data and analysis that support these objectives are given in succeeding sections of this plan. For specific actions of each goal, see Implementation Plan in Chapter 8.

**HOUSING & POPULATION** (see Chapter 1)

**Goal:** To continue to provide areas in Hinsdale to allow for a diversity of housing opportunities while striving to enhance the visual and aesthetic qualities of both existing and proposed housing.

**Objectives:**

1. Support the preservation and maintenance of the existing and future housing stock through public and private actions.
2. Ensure the housing stock and residential development opportunities support the needs of residents and Hinsdale’s economic development goals.

**COMMUNITY FACILITIES** (see Chapter 2)

**Goal:** To maintain and enhance the quality of the community facilities and municipal services in Hinsdale in a manner compatible with the Town’s financial resources.

**Objectives:**

1. The town should annually update and maintain the Capital Improvements Plan to help identify and schedule major improvements of the town municipal assets.
2. Continue buying and/or sharing of equipment, materials and/or services with other towns, as feasible.
3. Anticipate the demands that new growth will place on Town services and facilities, and plan accordingly.
4. Maintain and continually upgrade and improve the quality of education in Hinsdale at all levels.
5. Relocate the Fire Station and the Emergency Operations Center.
6. Relocate the old Town Hall to Main Street.
7. Support Community Gardens throughout the town.

**RECREATION** (see Chapter 3)

**Goal:** To enhance the quality of life for residents of Hinsdale, as well as visitors, through recreation.

**Objectives:**

1. Provide a range of year-round recreational opportunities for users of all ages and mobility levels to enjoy.
2. Preserve open space and plan to acquire land for future recreational purposes.

**ECONOMIC DEVELOPMENT** (see Chapter 4)

**Goal:** Promote a stable economic environment for existing businesses and encourage the development of new businesses as a way to protect and enhance the quality of life in Hinsdale.

**Objectives:**

1. Ensure proper land allocation and municipal land use regulations to support economic development in Hinsdale.
2. Ensure that adequate public and private infrastructure are in place to support economic growth and development in Hinsdale.
3. Create and maintain a business-friendly environment.
4. Support efforts to strengthen the vibrancy of downtown Hinsdale.
5. Increase educational opportunities for Hinsdale residents to promote a more educated work force.
6. Ensure the housing stock and residential development opportunities in Hinsdale support the economic development goals.

**CONSERVATION AND PRESERVATION** (see Chapter 5)

**Goal:** Balance new development with protection of the Town's sensitive and significant natural, cultural and historic resources, year round recreational opportunities, and preservation of the Town's identity.

**Objectives:**

1. Preserve and protect agricultural lands, environmentally sensitive lands and historic structures to enhance the open space and retain the town characteristics.
2. Encourage preservation and management of agricultural Town and private lands to mitigate the risk of food and water resource isolation due to catastrophic events.
3. Establish conservation areas and open spaces throughout the town.
4. Protect the scenic elements and ecological qualities of the natural environment, viewsheds and valuable water resources throughout the Town. Above ground and underground water resources are a vital asset worthy of protection from all forms of pollution.
5. Retain and improve access to open space and environmental areas for public use.
6. Maintain Hinsdale's system of Class VI roads and range ways.

**CONSTRUCTION MATERIAL** (see Chapter 6)

**Goal:** To identify existing or potential sources of construction materials within the town boundaries.

**Objectives:**

1. Any extraction of potential resources should be done in a manner that respects the environment, abutting land uses, and the neighborhood in which the operation takes place and can provide full reclamation.

**TRAFFIC AND TRANSPORTATION** (see Chapter 7)

**Goal:** To maintain a convenient transportation network and allow for the safe movement of goods and people throughout Hinsdale while protecting the aesthetic and scenic qualities of town roads.

**Objectives:**

1. Develop a transportation system/network that supports and maintains all roads and thoroughfares.
2. Establish standards of construction, maintenance and improvements that balance the need for safety on the highways with residents' concern for maintaining a rural atmosphere.
3. Advocate for and encourage alternative modes of transportation within town and within the subregional area of Hinsdale.

**LAND USE** (see Chapter 8)

**Goal:** To promote a balanced pattern of development for housing, agriculture, recreation, business and industry.

**Objectives:**

1. Ensure that development occurs at a rate consistent with the capability of the land to support it and the Town's ability to provide services.
2. Balance new development with protection of Hinsdale's sensitive and significant resources.

## CHAPTER 1 - POPULATION AND HOUSING

### Population

#### Housing

- Existing Housing
- Housing Trends
- Low/Moderate Income Housing
- Future Housing

### Population

The purpose of a Master Plan Population Section is to serve as a flexible framework to guide the orderly growth of a community over a period of years. Since growth is dependent upon many factors, this plan and its components should be regularly reviewed to determine their applicability. The population study will alert the town to the possible future demands on schools, housing, public facilities and other forms of land use. Population growth is attributed to two factors: natural increase (the excess of births over deaths), and migration (movement of people in or out of the town).

**Table 1**  
**Hinsdale Population Trends 1960-2010**

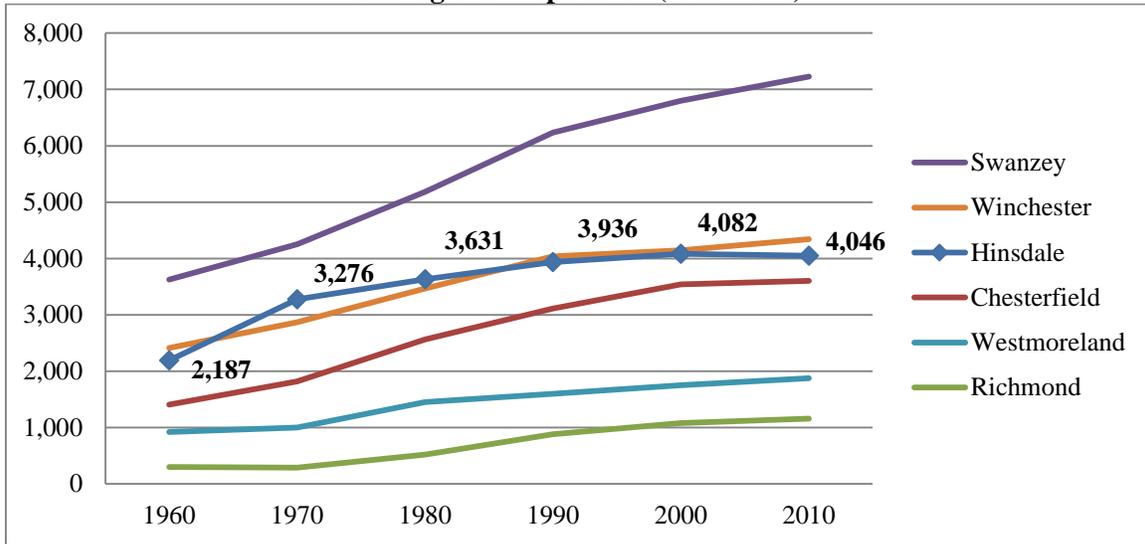
Year	Population	% Change
1960	2,187	--
1970	3,276	50%
1980	3,631	11%
1990	3,936	8%
2000	4,082	4%
2010	4,046	-1%

*Source: U.S. Census Bureau 2010*

Table 1 charts the population in Hinsdale between the years of 1960 to 2010 based on US Census data. Hinsdale experienced a significant growth between 1960 to 1970 which was the latter end of the “Baby Boomers”. The information on this table indicates that the population increased each decade between 1960 to 2000, but at a slower pace than the previous decade. It also indicates that there was a decline in population in the most recent census collection.

When planning for future town needs, an overall look at the surrounding towns, as well as county and state information, is useful since the need for adequate housing and employment opportunities can be influenced by the economy beyond the town line. Graph 1 below provides a visual representation of the population of the same time period as Table 1, but also includes the surrounding towns. With the exception of Swanzey, the surrounding communities had very slight growth during the last decade and experienced relatively similar population changes during the years shown.

**Graph 1  
Subregional Population (1960-2010)**



Source: U.S. Census Bureau 2010

An important statistic for community planning is the age categories of the residents. The percentage of the total population for the age groups can provide valuable indicators for planning the needs of a community. This helps provide a “looking glass” of the potential services needed by the residents in the upcoming years. For example, combining the four blocks showing the age categories between 0-4 through 15-19 will help plan for school enrollment needs. Another group with specific needs is the older population. Combining the blocks showing the age categories that are 65 and greater can help the community prepare for housing needs and services of that population. Observing the trends of the blocks showing the age categories of 55-59 and 60-64 is also beneficial for similar potential needs within the next 10 years. Following trends in this way can assist the town with planning and budgeting for projects that may be necessary to meet the growing demands of the public.

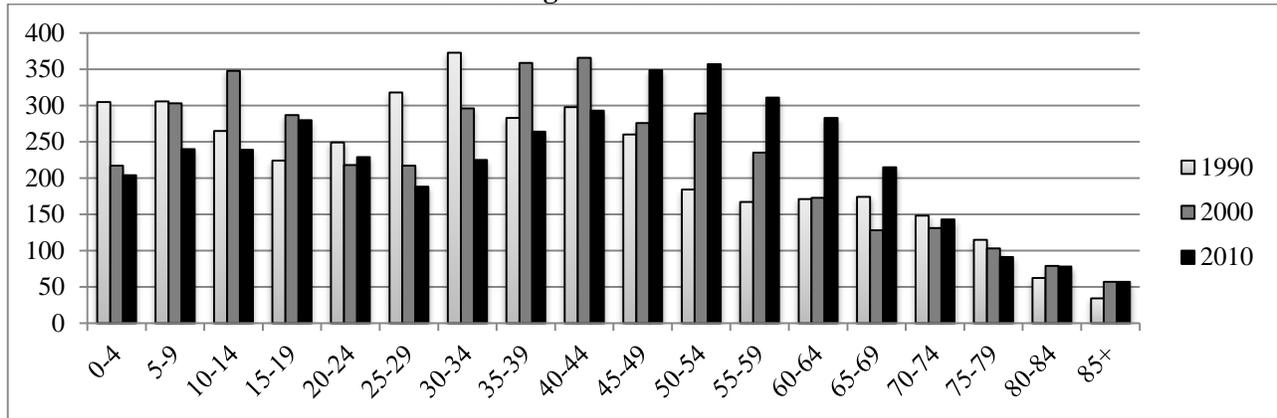
**Table 2 Hinsdale Age Distribution 1990 – 2010**

Age Distribution			
	1990	2000	2010
0-4	305	217	204
5-9	306	303	240
10-14	265	348	239
15-19	224	287	280
20-24	249	218	229
25-29	318	217	188
30-34	373	296	225
35-39	283	359	264
40-44	298	366	293
45-49	260	276	349
50-54	184	289	357
55-59	167	235	311
60-64	171	173	283
65-69	174	128	215
70-74	148	131	143
75-79	115	103	91
80-84	62	79	78
85+	34	57	57

Age Distribution in % of Population			
	1990	2000	2010
0-4	7.7%	5.3%	5.0%
5-9	7.8%	7.4%	5.9%
10-14	6.7%	8.5%	5.9%
15-19	5.7%	7.0%	6.9%
20-24	6.3%	5.3%	5.7%
25-29	8.1%	5.3%	4.6%
30-34	9.5%	7.3%	5.6%
35-39	7.2%	8.8%	6.5%
40-44	7.6%	9.0%	7.2%
45-49	6.6%	6.8%	8.6%
50-54	4.7%	7.1%	8.8%
55-59	4.2%	5.8%	7.7%
60-64	4.3%	4.2%	7.0%
65-69	4.4%	3.1%	5.3%
70-74	3.8%	3.2%	3.5%
75-79	2.9%	2.5%	2.2%
80-84	1.6%	1.9%	1.9%
85+	0.9%	1.4%	1.4%

Source: U.S. Census Bureau 2010

**Graph 2  
Hinsdale Age Distribution 1990 – 2010**



Source: U.S. Census Bureau 2010

The age categories with the most residents in 2010 include the five consecutive age groups between the ages of 35 – 64 as shown in Table 2. This span accounts for 46% of the total population in Hinsdale. It will be important to consider the changing needs of this population over the next twenty years. The yellow blocks show the progression of this age group during the last three decades. Not only has this group continued to grow each decade, it has also added another age block indicating that this group is further expanding. Another trend seen in this table, as depicted in the orange blocks, shows a steady decline in school age residents with the exception of the block showing the 10-14 age category between the period of 1990 to 2000. Graph 2 provides a visual representation of the age distribution between 1990 to 2010.

When planning for future needs, population projections should also be considered. While this is useful information to help in planning, caution should be used since it is a *projection* and is subject to change based on several factors including economic, housing needs and other unknown conditions. Table 3 provides population projections for Hinsdale from 2010 to 2040.

**Table 3  
Hinsdale Population Projections 2010 - 2040**

Year	Population	% Change
2010*	4,046	
2015	3,938	-2.6%**
2020	3,874	-1.6%
2025	3,926	1.3%
2030	3,964	1.0%
2035	3,990	1.0%
2040	3,994	0.1%

Source: NH Office of State Planning, Municipal Population Projections, Fall 2013 \*actual 2010 US Census figure \*\*based on comparison between actual census data and projection- not to be used as reliable %change.

## Housing

This portion of the Master Plan discusses the present status and future goals of housing in Hinsdale. It includes statistics on housing supply and type, people per household, affordability, and various other data related to housing in order to describe the status of the housing supply.

Because of its geographic location and its terrain, Hinsdale has much to offer to natural growth. A diversity of industries provides employment opportunities for citizens, while contributing significantly to the tax base of the community. A complex in which educational facilities as well as recreational opportunities are available for the citizens of the town is centrally located. Housing for the elderly is also in close proximity to the town's central business district and recreational areas. Hundreds of homes have access to a sewage treatment system with many more receiving town water service. These are only a few of the assets which are presently lending themselves to the development of Hinsdale's character. In order to continue to provide services demanded by the townspeople, while allowing for continued responsible fiscal management, an effort must be made by the town to maintain and, perhaps, to enhance these assets. Every consideration should be given to determining what Hinsdale has and what it will need.

### Existing Housing

Beginning with the basic number of total housing units, Table 4 below presents these numbers for the years 2000-2010 along with the number of persons per household. According to the 2010 Census, there were 1,681 *occupied* housing units within the Town of Hinsdale; this represents a 4 percent increase in housing since 2000. It also shows that there was a slight decline in total population in occupied housing units which results in a lower *persons per household* figure.

A housing unit, as defined by the US Census, is a house, an apartment, a group of rooms or a single room intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have a direct access from the outside of the building or through a common hall.

The main concentration of multi-family units is located within the downtown area, including 80 units of subsidized elderly housing and 35 units of subsidized low income housing. Single family units are also scattered throughout this vicinity, but a majority of these structures can be found in surrounding neighborhoods.

More residences in Hinsdale have access to town supplied water than to sewer facilities. Sewer service is limited to the urban core of the community. The more densely populated areas have access to town water service.

Manufactured housing is dispersed throughout town. There are several areas where manufactured housing is highly concentrated in areas identified as "parks". All of these parks are serviced by town water, but are not serviced by town sewers, making on-site facilities necessary. Although the present zoning ordinance does not permit the creation or expansion of manufactured housing parks, manufactured housing is permitted in residential and rural agricultural areas on individual lots.

**Table 4**  
**Hinsdale Household Size 2000-2010**

	2000		2010		2000-2010
	% of Total	Number	% of Total	Number	% Change
1-person household	25%	402	27%	440	2%
2-person household	35%	573	40%	643	4%
3-person household	16%	266	18%	284	1%
4-person household	14%	231	11%	180	-3%
5-person household	6%	103	5%	87	-1%
6-person household	2%	37	2%	27	-1%
7-or-more-person household	1%	10	1%	20	1%
Occupied households		1,622		1,681	4%
Total housing units		1,714		1,827	
Total population in occupied units		4,082		4,046	-1%
Population per unit		2.52		2.41	-4%

Source: U.S. Census Bureau 2000 and 2010 Census Summary File 1, Table QT-H2

Along with the persons per household information, it is useful to know the average number of occupants per room to help determine overcrowding, which is a factor of knowing if there is an adequate supply of housing in Hinsdale. Based on the Census criteria for overcrowding, households ideally should have between 0.5 and 1.0 person per room. Table 5 makes a comparison of occupants per room for the years of 2000 and 2011. In 2000, the data was obtained using the 2000 Census. Since the 2010 Census did not include questions regarding similar household characteristics, the data for the 2011 table uses a sampling of residents as compiled in the American Community Survey estimates for 2007-2011 which may not be a true representation of the towns' housing information. However, it is the most accurate information available and is therefore used for this comparison.

Table 5 shows that the number of occupants per room has decreased slightly overall in the owner occupied units. The category of .5 or less occupants per room increased by approximately 13% in the past decade. This would indicate that there is not an overcrowding issue in households among homes that are owner occupied. In the rental category, however, there was a 3.5% increase in the units that have between 1 to 1.50 occupants per room, which is likely due to the economic issues and the need to share housing costs to offset the economic downturn. As the unemployment rate lessens and the economy returns to a healthier status, this figure is likely to be reduced.

**Table 5**  
**Hinsdale: Occupants per Room 2000, 2011\***

2000		
<b>Owner occupied:</b>	<b>1,186</b>	<b>73.1%</b>
0.50 or less occupants per room	792	66.8%
0.51 to 1.00 occupants per room	376	31.7%
1.01 to 1.50 occupants per room	18	1.5%
1.51 to 2.00 occupants per room	0	0.0%
2.01 or more occupants per room	0	0.0%
<b>Renter occupied:</b>	<b>436</b>	<b>26.9%</b>
0.50 or less occupants per room	301	69.0%
0.51 to 1.00 occupants per room	135	31.0%
1.01 to 1.50 occupants per room	0	0.0%
1.51 to 2.00 occupants per room	0	0.0%
2.01 or more occupants per room	0	0.0%
<b>Total:</b>	<b>1,622</b>	

Source: U.S. Census Bureau 2000 Summary File 1, Table H11

2011*		
<b>Owner occupied:</b>	<b>1,314</b>	<b>71.6%</b>
0.50 or less occupants per room	1,044	79.5%
0.51 to 1.00 occupants per room	260	19.8%
1.01 to 1.50 occupants per room	10	0.8%
1.51 to 2.00 occupants per room	0	0.0%
2.01 or more occupants per room	0	0.0%
<b>Renter occupied:</b>	<b>521</b>	<b>28.4%</b>
0.50 or less occupants per room	365	70.1%
0.51 to 1.00 occupants per room	138	26.5%
1.01 to 1.50 occupants per room	18	3.5%
1.51 to 2.00 occupants per room	0	0.0%
2.01 or more occupants per room	0	0.0%
<b>Total:</b>	<b>1,835</b>	

\*Source: U.S. Census Bureau American Community Survey (ACS) 5-Year Estimates 2007-2011, Table B25014

**Affordability**

The information in this section is intended to determine how affordable and available housing is for Hinsdale residents. Table 6 presents the relative cost of housing in Hinsdale, based on the 2007-2011 American Community Survey data. It also provides figures for the region during the same time period.

**Table 6**  
**Hinsdale: Cost of Housing 2000, 2011\***

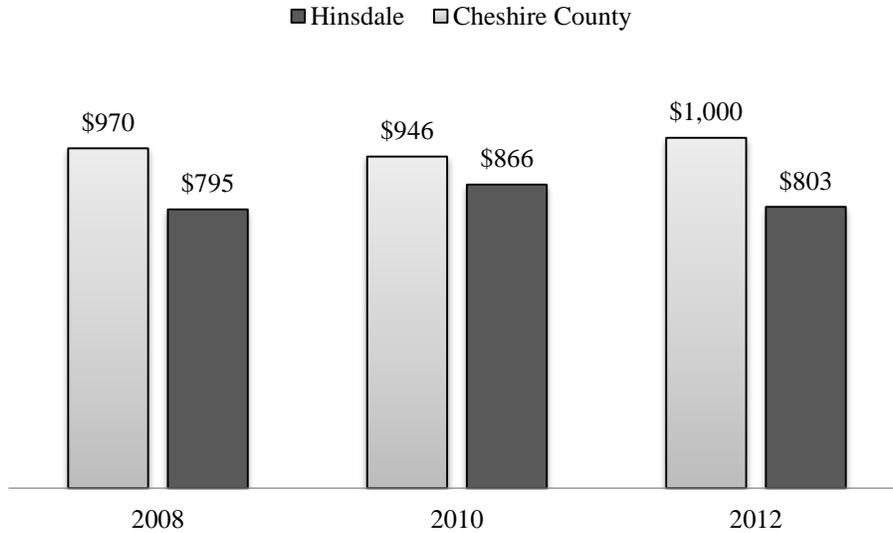
Hinsdale	2000	2011*	% change 2000-2011
Median Home Value	\$84,300	\$138,500	64.3%
Median Gross Rent	\$496	\$818	64.9%
<b>Southwest Region</b>			
Median Home Value	\$113,431	\$227,926	100.9%
Median Gross Rent	\$653	\$931	42.6%

Source: 2000 Summary File 3 Table H063, H085 and \*2007-2011 American Community Survey 5-Year Estimates Table B25077

Housing costs for both owners and renters have increased over the years, as they have in the region and state as well. Hinsdale’s cost of housing for both ownership and rental units has been relatively stable between 2000 to 2011 with a 64.3% and 64.9 % increase, respectively. The change in the southwest region of the state, however, was much different during the same period with a 100.9% increase in home values and a 42.6% increase in average rents. This can be an indicator that the number of housing units in Hinsdale currently meets the demand, which is most likely due to the reduction in population during the same period. Graph 3

shows a visual representation of the average rental costs for the years of 2008, 2010, and 2012 for Hinsdale and for Cheshire County.

**Graph 3**  
**NHHFA Hinsdale Residential Gross Rental Cost 2008, 2010, and 2012**



Source: New Hampshire Housing's Annual Residential Rental Cost Survey.

Table 7 refines the data in the previous table by illustrating not just what people pay for housing, but what percentage those costs are of their income. It has been recognized that people in lower income brackets pay more proportionally for housing than do people in higher income brackets.

**Table 7**  
**Selected Monthly Owner Costs as a Percentage of Household Income (SMOCAPI)**  
**and Gross Rent as a Percentage of Household Income (GRAPI) 1999, 2011\***

	Homeowner Units				Renter-Occupied Units			
	1999		2011*		1999		2011*	
Less than 20.0 percent	338	43%	560	43%	155	36%	93	18%
20.0 to 24.9 percent	149	19%	243	19%	67	16%	101	19%
25.0 to 29.9 percent	138	18%	158	12%	49	11%	140	27%
30.0 to 34.9 percent	24	3%	67	5%	28	7%	19	4%
35.0 percent or more	137	17%	286	22%	89	21%	168	32%
Total	786		1314		388		521	
Not Computed	0		0		41		0	

Source: U. S. Census Bureau 2000 Summary File 3 Table QT-H15, \*U. S. Census Bureau 2007-2011 American Community Survey (ACS) 5-Year Estimates Table C25095

According to the figures found in Table 7, approximately 27% of owner occupied households paid 30% or more of their monthly incomes on housing in 2011 which reflects an increase from the 1999 figure of 20%. Similarly, approximately 36% of renters in Hinsdale paid 30% or more of their monthly incomes in 2011 in contrast to 28% in 1999. The largest increase was in renters paying between 25-29.9% of their monthly income toward housing costs which was from 11% in 1999 to 27% in 2011. This indicates that people are paying more of their monthly income for housing costs.

Changes in the economy, housing market and lending policies continue to have a dramatic effect on the statistics of home ownership and housing costs, and will make it difficult to make projections based on past figures and trends. In addition, the difference in the data source and methodology may result in inaccuracies. Therefore, these figures and trends should be used for generalized planning purposes only.

**Table 8**  
**Home Values in Hinsdale, 2011\***

Owner-occupied units	1,314
Less than \$50,000	318
\$50,000 to \$99,999	79
\$100,000 to \$149,999	367
\$150,000 to \$199,999	370
\$200,000 to \$299,999	124
\$300,000 to \$499,999	56
\$500,000 to \$999,999	0
\$1,000,000 or more	0
Median	\$138,500

*\*Source: U. S. Census Bureau 2007-2011 American Community Survey (ACS) 5-Year Estimates Table DP03*

According to the 2007-2011 ACS 5-Year Estimates, the median home value in Hinsdale is \$138,500. As shown in Table 8, 56 % of the home values are in the \$100,000 to \$199,999 price range. Based on the principle that no more than 30% of a household’s income should be spent on housing to be considered affordable, the possibilities for home ownership in Hinsdale are examined in Table 9.

Under the three scenarios examined in Table 9, median income households could afford a home valued at \$143,638. Those, however, earning 80% or 50% of the median household income could afford a home valued at \$116,224 and \$75,317 respectively. The table shows that the affordability of homes for the median family income and the 80% of the median family income category is being met since 56% of Hinsdale homes range between \$100,000 to \$199,999. This may be somewhat misleading since it is not known how many of those homes are in the lower end of that range to meet the needs of those families falling in the 80% median family income category.

**Table 9**  
**Home Ownership Affordability in Hinsdale, 2011\***

	2011* Median Household Income	80% of 2011* Median Household Income	50% of 2011* Median Household Income
<b>Annual Income</b>	\$47,621	\$38,097	\$23,811
<b>30% of income</b>	\$14,286	\$11,429	\$7,143
<b>Purchase price affordable at 4.5% for 30 years**</b>	\$143,638	\$116,224	\$75,317

Source: New Hampshire Housing Finance Authority Mortgage Qualifier Calculator

\* U. S. Census Bureau 2007-2011 American Community Survey (ACS) 5-Year Estimates Table DP03

\*\*includes 2011 property tax rate of 2.6%, home ins. rate of 0.5%, \$10,000 cash on-hand, and 1% loan origination fee

## Housing Trends

Current trends in New Hampshire's housing supply are monitored by the Office of Energy and Planning (OEP) on a yearly basis. OEP provides this data in a report titled Current Estimates and Trends in New Hampshire's Housing Supply: Update 2009. The report provides housing supply data broken down into three types: single family, multi-family, and manufactured housing. The report presents data about New Hampshire's housing supply from two different sources, the decennial census (2000 figures) and municipal building permits (2009 figures). The 2009 estimates are based on building permits and demolition permits. This estimate may contain information that is not a true representative of the housing supply since the permits may have expired in one year and resubmitted in another, which would be counted as two units instead of one. Other factors, such as conversions are often not indicated. For example, the conversion of a single family home into a multi-family home, or the conversion of a home into an office. The primary use of this data is to show the trend in the housing supply and to assist in determining where the needs are. A mix of housing choices is important to help ensure that there are housing opportunities for all ages and at all income levels. Data for the Town of Hinsdale can be found in the following table and chart.

**Table 10**  
**Hinsdale: Housing Supply by Type 2000\* & 2009\*\***

	2000	2009	% Change
<b>Single Family</b>	935	1022	9.3%
<b>Multi-Family</b>	352	354	<1%
<b>Manufactured Homes</b>	427	505	18.3%
<b>Total Units</b>	<b>1714</b>	<b>1881</b>	

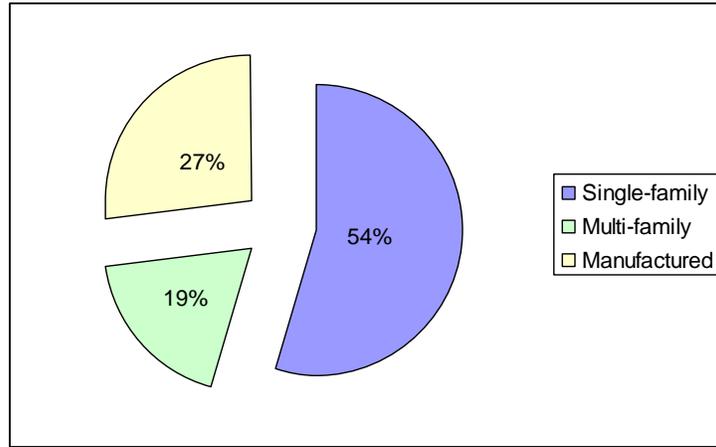
Source: New Hampshire Office of Energy and Planning (OEP)

\*Based on US Census 2000 data

\*\*Based on OEP Estimates as supplied by Town building permits

Table 10 shows that all three types of housing units in Hinsdale experienced increases during the last decade. The greatest percent of change was in manufactured homes (18.3% increase) as compared to single family homes with a 9.3% increase and less than 1% in multi-family homes. Graph 4 shows the 2009 housing supply according to the type of units.

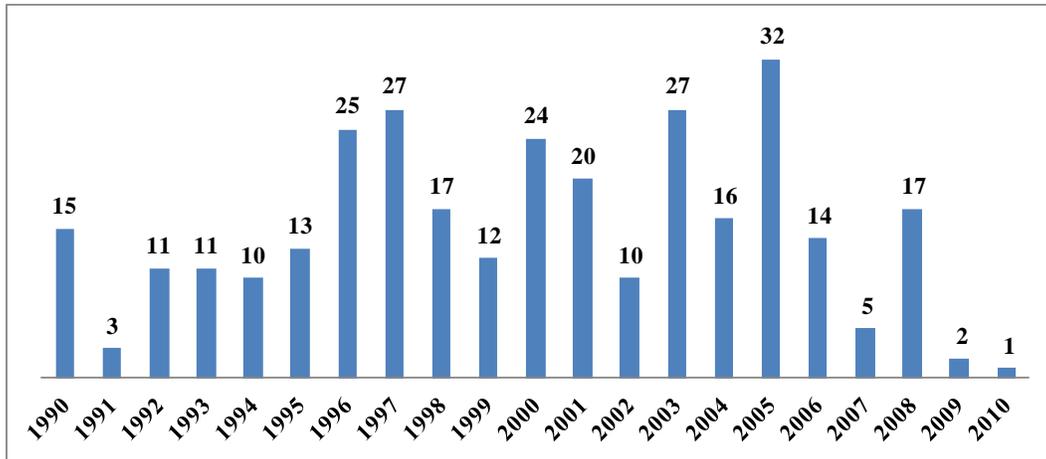
**Graph 4**  
**Hinsdale: Housing Supply by Type-2009**



Source: NH Office of Energy and Planning (OEP) 2011

Graph 5 gives us a visual representation of the fluctuations in building permits between the years of 1990 to 2010. The fluctuations may be the result of one or more subdivisions, multi-family units, or new or expanded manufactured housing parks in a given year.

**Graph 5**  
**Hinsdale: New Building Permits (1990-2010)**



Source: New Hampshire Office of Energy and Planning (OEP)2011

**Low/Moderate Income Housing**

According to the Regional Housing Study and Fair Share Analysis Synopsis, the Town of Hinsdale has an adequate share of low/moderate income housing due to the number of manufactured houses located within the town and the amount of CDBG funded housing programs that have taken place.

Manufactured housing is allowed in the rural agricultural and residential areas, while multi-family dwellings are allowed in all the zoned areas except for commercial/industrial and in accordance with the Hinsdale Zoning Ordinance.

Future goals that the Town and Planning Board could undertake in addressing the issue of affordable housing for low and moderate income households are as follows:

- 1) Allow density bonuses for residential construction of affordable housing in selected situations. The Planning Board may wish to consider applying the density bonus concept to other types of development in other zoning districts.
- 2) Provide more opportunities for subsidized housing in scattered sites of 4 to 8 units. The Town should pursue, where feasible, any state and/or federal funds available for this type of development.
- 3) Encourage local and state financial institutions (for example, the New Hampshire Housing Finance Authority) and the real estate industry to cooperate in the provision of new, and the rehabilitation of existing, affordable housing for owners and renters in the low and moderate income brackets.
- 4) Support other local and state efforts to provide affordable housing, such as the establishment of a housing trust to provide alternative home ownership options.

## **Future Housing**

### **Housing Needs Assessment**

The enabling statute addressing the development of Master Plans (RSA 674:2) requires that the housing section address current and future housing needs of all residents, at all income levels, of the town and the region in which it is located. In order to do this, opportunities for housing development in Hinsdale are examined, as well as population projections that give some indication as to what the town can expect in terms of housing needs for new population.

### **Housing Opportunity**

The town's present zoning ordinance accommodates a range of residential types to meet the housing requirements of the townspeople while preserving the character of the town. In March of 2003, the Town of Hinsdale adopted the following building codes: New Hampshire Building Code, International Residential Code for One and Two Family Dwellings (2000), International Fire Code (2000), International Property Maintenance Code (2000). The requirements set forth in these codes help to assure the availability of safe and decent housing for all its citizens. The town has also established procedures to allow for the construction of new housing to service all age and income levels.

In Table 11, the zoning provisions for Hinsdale are reviewed as they relate to opportunities for various housing types in the town, specifically which types are permitted and the minimum lot requirements for those dwelling units. Hinsdale has five zoning districts that accommodate some form of residential development.

**TABLE 11**  
**Housing Opportunities in Hinsdale**

ZONING DISTRICT	PERMITTED HOUSING TYPES	REQUIREMENTS
Rural/Agricultural	<ol style="list-style-type: none"> <li>1. Single family residence</li> <li>2. Two-family residence</li> <li>3. Multi-family residence</li> <li>4. Manufactured homes</li> <li>5. Tourist homes</li> <li>6. Convalescent home/ Nursing home</li> </ol>	<ul style="list-style-type: none"> <li>◆ 2 acres minimum</li> <li>◆ 200' frontage</li> <li>◆ 35' front setback</li> <li>◆ 20' side &amp; rear setback</li> </ul>
Residential	<ol style="list-style-type: none"> <li>1. Single family residence (including manufactured housing)</li> <li>2. Two-family residence</li> <li>3. Multi-family residence</li> <li>4. Manufactured homes</li> <li>5. Tourist homes</li> </ol>	<ul style="list-style-type: none"> <li>◆ 1/2 acre minimum</li> <li>◆ 100' frontage</li> <li>◆ 35' front setback</li> <li>◆ 10' side &amp; rear setback</li> </ul>
Business	<ol style="list-style-type: none"> <li>1. Single family residence</li> <li>2. Two-family residence</li> <li>3. Multi-family residence</li> <li>4. Tourist homes</li> <li>5. Convalescent home/ Nursing home</li> <li>6. Hotel, motel, &amp; similar uses</li> </ol>	<ul style="list-style-type: none"> <li>◆ 5000 sq. ft. minimum</li> <li>◆ 41' frontage</li> <li>◆ 0' front setback</li> <li>◆ party walls</li> </ul>
Roadside Commercial	<ol style="list-style-type: none"> <li>1. Two-family residence</li> <li>2. Multi-family residence</li> <li>3. Tourist homes</li> <li>4. Convalescent home/ Nursing home</li> <li>5. Hotel, motel, &amp; similar uses</li> </ol>	<ul style="list-style-type: none"> <li>◆ 1 acre minimum</li> <li>◆ 100' frontage</li> <li>◆ 35' front setback</li> <li>◆ 15' side &amp; rear setback</li> </ul>
Commercial/ Industrial	<ol style="list-style-type: none"> <li>1. Convalescent home/ Nursing home</li> <li>2. Hotel, motel, &amp; similar uses</li> </ol>	<ul style="list-style-type: none"> <li>◆ 1 acre minimum</li> <li>◆ 100' frontage</li> <li>◆ 35' front setback</li> <li>◆ 20' side &amp; rear setback</li> </ul>

Source: Town of Hinsdale Zoning Ordinance 2013

### Future Housing Need

In order to estimate what the potential need for housing will be in the future, the available data on housing characteristics and population growth must be reviewed along with estimates for growth in population, and therefore housing need.

The NH Office of Energy and Planning (NH OEP) population projections can be used to estimate future housing need, based on a person per unit estimate. The projections for Hinsdale and surrounding towns are presented below in five-year intervals up to the year 2040, beginning with the Census count from the year 2010.

**Table 12**  
**Subregional Population Projections**

								<b>Population Change</b>	<b>% Change</b>
	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>2035</b>	<b>2040</b>	<b>2010-40</b>	<b>2010-40</b>
<b>Hinsdale</b>	4,046	3,938	3,874	3,926	3,964	3,990	3,994	-52	-2.6%
<b>Chesterfield</b>	3,604	3,557	3,551	3,598	3,633	3,657	3,661	57	1.6%
<b>Richmond</b>	1,155	1,170	1,199	1,215	1,227	1,235	1,237	82	7.1%
<b>Swanzey</b>	7,230	7,294	7,446	7,545	8,640	7,668	7,677	447	6.2%
<b>Westmoreland</b>	1,874	1,899	1,946	1,972	1,992	2,004	2,007	133	7.1%
<b>Winchester</b>	4,341	4,348	4,406	4,464	4,508	4,537	4,543	202	4.7%

Source: NH Office of State Planning, Fall 2013

Hinsdale's future housing need is estimated based on this projected population by dividing population by housing units to reach a person per unit figure. A person per unit figure can be calculated for the decades of 2000 and 2010: 2.5 in 2000, and 2.4 in 2010. In order to calculate future housing need, a reasonable person per unit figure for the future must be assumed; in this case, a simple average of 2.45 is used out to the year 2040. The following calculations will use two possible scenarios: one using the OEP projected population increase over the next thirty years; the other using the known past population increase between 1990 and 2010.

**Table 13**  
**Housing Needs Assessment**

Methodology Used	Population Increase	2030 Projected Population	Persons Per Unit	Total Housing Needed
Past Trend Method	2.8%	4,159	2.45	1,698
Projection Based Method	-2.0%	3,964	2.45	1,618

Source: NH OEP Population Projections and U.S. Census Bureau

Based on both methodologies used, Hinsdale has an adequate supply of housing units for the projected population until the year of 2030. This estimate does not, however, provide an indicator for the type of units, or the range of affordable units needed. It also does not provide information regarding the condition of the existing housing units.

### **Regional Housing Study and Fair Share Analysis**

At the time of this update, a statewide and regional housing study was being conducted. It can be added to this chapter upon completion.

## Chapter 2 – Community Services and Facilities

### Introduction

**Hinsdale School District**

**Hinsdale Town Hall**

**Hinsdale Town Cemeteries**

**Hinsdale Library**

**Hinsdale Fire Department**

**Hinsdale Police Department**

**Hinsdale Highway Department**

**Solid Waste Disposal**

**Hinsdale Water Works**

**Hinsdale Wastewater Treatment Plant**

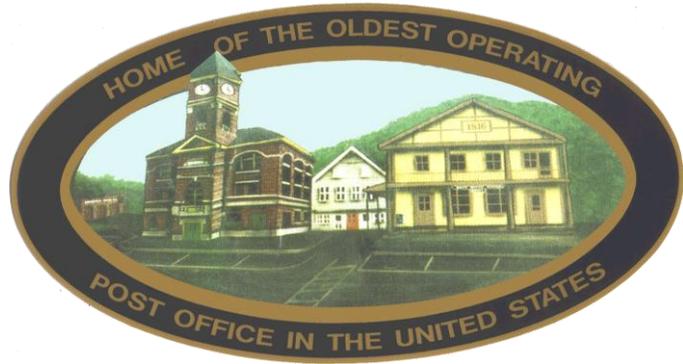
**Community Organizations and Facilities**

The Hinsdale Historical Society

Historical Sites and Points of Interest

- Post Office
- Churches

Community Center



### Introduction

One of the important functions of a community is the provision of certain public services and facilities for its residents. The degree to which services are provided and the manner of their development greatly determines the social equity of the community. These services and facilities have a direct impact on the education, natural resources, and livelihood of the town, its residents, and visitors.

This section presents an inventory of such services and facilities, an assessment of the adequacy of the current level of service, and any plans or recommendations to expand, improve, or add to an existing service or facility.

### Hinsdale School District

Following two years of study, the Withdrawal Committee and School Board recommended Hinsdale withdraw from School Administrative Unit #38 and form its own district. In August 2009 the NH Board of Education unanimously approved the withdrawal plan, as did Hinsdale voters in October 2010. In July 2011 the new Hinsdale School Supervisory Union (92) began serving the school and community. The new SAU #92 staff totaled 14 with 1 p/t superintendent, 1 business manager, 1 administrative assistant, 1 accounts payable/payroll clerk, 2 speech pathologists, 1 school psychologist, 1 speech assistant, 1 p/t special education director, 1 p/t curriculum coordinator, 1 extended learning coordinator, 1 technology director, 1 technology technician, and 1 OT/PT. SAU #92 offices are located in the portable classrooms behind the middle/high school.

### Educational Philosophy, Expectations, and Design

With the move to its separate SAU, the central office and School Board now had a single focus on Hinsdale students. Short/long term improvements setting higher student academic standards, staff teaching expectations, and new programming will help Hinsdale students become productive members in the technological world that faces them. The education design described below was developed to meet state testing and performance objectives set by NH DOE and student/staff needs as Hinsdale moves forward.

**School District Facilities**

The elementary school, located on School Street, was built in 1949 with additions constructed in 1956 and 1969, and completely renovated in 2007. The building has 3 floors totaling approximately 39,000 square feet. There are 20 classrooms, a library, activity room, special education room, two reading rooms, a cafeteria/gymnasium, a kitchen, a music room, and art rooms. The school has been updated with the latest technological equipment, lab, and instructional programs for both students and teachers. Grade reconfiguration in school year 2008-2009 moved the sixth grade to the middle/high school. Enrollment in grades one through five for school year 2013-2014 was 269 students. Staff totaled 58.6 with 1 principal, 23 teachers, 4 special education teachers/18 para-professionals, 1 guidance counselor, 1 social worker, and 10.6 other support personnel.

The high school, located on School Street, was built in 1961 with additions constructed in 1965 and 1970. In school year 2006-2007 the facility was totally renovated and included a new library, computer rooms, guidance offices, and a middle school with 10 classrooms. This middle/high school has the latest technology equipment and programming. Grades six through twelve are located in the facility, and school year 2013-2014 enrollment was 127 Middle and 152 High school students. Staff totaled 64.5 with 1 principal, 1 assistant principal, 28.8 teachers, 5 special education teachers with 2 life skill classrooms/16 para-professionals, and 10.7 other support personnel.

In 2013 roof repairs/replacement and upgrading/implementation of security system/cameras occurred at both school facilities.

A 13-acre parcel adjacent to both school facilities has soccer and practice fields that accommodate outdoor physical education classes.

**Hinsdale School and Town Population (2003 – 2013)**

Year	School Population	% Change	Town Population	% Change	School Population as % of Town Population
2003	746	-4.7%	4,214	1.1%	17.7%
2004	741	-0.7%	4,219	0.1%	17.6%
2005	676	-8.8%	4,194	-0.6%	16.1%
2006	699	3.4%	4,205	0.3%	16.6%
2007	664	-5.0%	4,191	-0.3%	15.8%
2008	654	-1.5%	4,170	-0.5%	15.7%
2009	628	-4.0%	4,109	-0.5%	15.7%
2010	631	+0.5%	4,046	-1.5%	15.6%
2011	613	-2.9%	4,036	-0.2%	15.2%
2012	587	-4.2%	4,032	-0.1%	14.6%
2013	548	-6.6%	4,039	+0.2%	13.6%
2003-2013		-30.01%		-3.1%	

Sources: Hinsdale School District Annual Reports; U.S. Census; NH Office of State Planning; Table 5: Annual Estimates of the Resident Population for Minor Civil Divisions in New Hampshire, Listed Alphabetically Within County: April 1, 2000 to July 1, 2008 (SUB-EST2008-05-33) Source: Population Division, U.S. Census Bureau, Release Date: July 1, 2009; Enrollments in New Hampshire Public Schools As of October 1, 2013, New Hampshire Department of Education.

### **School District Future Plan**

Capital improvements including further roof renovations and upgrading of elementary fire stairwells, as well as regular maintenance, are in future plans with no major additions. Energy conservation measures will be carefully implemented.

### **Hinsdale Town Hall**

The Hinsdale Town Hall, located on Main Street, was built in 1900 to replace a similar structure damaged by fire. The Town Hall houses the offices of the Selectmen, town clerk and administration, community development, tax collector, water collector, building inspector, welfare services and emergency management. The public library was previously located in the Town Hall, but was relocated to another building on Brattleboro Road in 2003 which provided additional space for office use.

The building is also used for public functions such as school plays and after school activities. The residents of Hinsdale take pride in their Town Hall as is evidenced by the annual expenditure of funds for preservation and repairs to the building. Over the past several years improvements for energy efficiency and ADA compliance, and general maintenance have left the building in overall good condition.

### **Town Hall Future Plan**

The Hinsdale Town Hall will undergo normal maintenance. There are plans to refinish the front foyer stairwell and to update the electrical systems. Energy conservation measures will continue to be monitored and improved.

### **Hinsdale Town Cemetery**

The Town of Hinsdale maintains six cemeteries of varying sizes:

- ◆ Pike Cemetery located on Northfield Road (0.25 acres);
- ◆ Hooker Cemetery located on Prospect Street (0.69 acres);
- ◆ Fort Dummer Cemetery located off Old Brattleboro Road (0.210 acres);
- ◆ Crowningshield Cemetery located on the Hinsdale/Chesterfield town line (0.23 acres);
- ◆ Pine Grove Cemetery located on Depot Street (14 acres);
- ◆ Oak Lawn Cemetery located on Meetinghouse Road (2.7 acres).

Of these six, Pine Grove and Oak Lawn are the only cemeteries with available plots. With an average of two to three lots sold each year, the cemeteries are expected to provide capacity well into the future. There is no possibility for future expansion at any of the cemeteries, however. The Town will eventually need to consider the siting of a new cemetery.

### **Town Cemeteries Future Plan**

The Town should consider the purchase of additional property for the expansion of Pine Grove Cemetery, preferably land abutting the existing site.

### **Hinsdale Public Library**

The Hinsdale Public Library found its new home on Brattleboro Road in 2003. The library now consists of 4,533 square feet and is open to the public 20 ½ hours per week. It is staffed with three part-time employees

who oversee the 20,000 volumes, three computers, and one copier located there. The library is used for many functions including summer reading programs and other children’s activities.

**Public Library Future Plan**

There are no future plans for the library at this time.

**Hinsdale Fire Department**

The Hinsdale Fire Department is located on Depot Street in the fire station that was built in 1953. The fire department employs 34 part time employees. Ambulance service is contracted annually with Brattleboro Rescue Inc. out of Vermont. At present the department owns and maintains the following equipment:

**Hinsdale Fire Department Equipment Inventory**

<b>Front Line Equipment:</b>	<b>Forestry:</b>	<b>Specialty Units:</b>
1989, 1999 & 2010 Pierce Pumpers / Tankers 1968 Chevy Pumper	1991 4X4 One Ton Truck 1968 Pumper 1952 State-owned Jeep	1979 One Ton Reel Truck / Pumper 1960 85’ Aerial Ladder 2013 Utility Vehicle

*\*Source: Hinsdale Fire Department*

Fire Department responses have increased slightly since 2001. The Department responded to 125 calls in 2000, 166 calls in 2008 and 171 calls in 2012. On average the Department responds to 165 calls per year. Mutual assistance responses have remained relatively stable over the past five years, comprising approximately 20% of yearly calls. The current building is at capacity and parking is limited. The number of personnel available for quick response during the day on weekdays is an ongoing concern. Typically 4-6 personnel respond, but sometimes only 2.

**Fire Department Expenditures (2000, 2008 & 2012\*)**

<b>Expenditures</b>	<b>2000</b>	<b>2008</b>	<b>1/1/2011-6/30/2012 *</b>
<b>Equipment</b>	\$12,242.00	\$27,500.00	\$41,454.00
<b>Training</b>	\$1,251.00	\$3,000.00	\$5,405.00
*22 month expenditures 1/1/2011-6/30/2012 per 2010 Warrant Article #16 when the Town adopted the optional fiscal year.			

*Source: Hinsdale Fire Department*

**Fire Department Future Plan**

The present fire station has no more room to house additional equipment. A utility/rescue vehicle was recently purchased so the 1979 hose truck will have to be housed at a different location until a new station is built. Other purchases which need to be addressed in the near future include a brush truck to replace the 1968 former pumper, replacement of the 1960 Ladder Truck, an off road ATV to assist with off road rescue and brush fires, and a rescue boat due to the increasing numbers of boaters on the Connecticut River. There is no worse feeling than watching someone in need of assistance and having to wait over 20 minutes for another town to arrive with a boat to help.

Rescue Inc. currently handles all rescue calls, but is short staffed at times, and the need to provide immediate assistance to the residents of the Town of Hinsdale is an issue. The Fire Department could take up some of the slack if properly trained, staffed and equipped. The department is looking into running a first responders

and rescue squad, but this is difficult because it requires a commitment to be able to respond to calls 24/7 and be sure personnel are available to handle the calls.

A committee was established to look into possible sites for a new fire and rescue facility. The study conducted in 2008 to determine municipal improvements to the fire and police stations also investigated sites for a new fire station and determined property in the area of Route 119 and School Street to be the best site. The study suggested building a 12,212 square foot fire station which would also house the Emergency Operation Center. The new building with land purchase will cost approximately \$3,530,000. No further action has taken place after voters decided not to pursue purchase of the property located next to the schools, which would have been an ideal location for a new Fire Station.

Unfortunately, due to the loss of several large industries over the years that had several firefighters employed and allowed them to leave work for fire calls, the Town is in a vulnerable position where it is no longer a guarantee that the Fire Department can respond to emergency calls as needed. This is a pain felt among many small towns throughout the country. In the very near future, the Town should look at full time positions within the Fire Department for the safety of the Town of Hinsdale residents.

### **Hinsdale Police Department**

The Hinsdale Police Department is located at 102 River Road in the former Higgins home, purchased in 1972, and remodeled to serve as the police station. There are 8 full time police officers, five part time police officers, and a full Office Manager/Certified Dispatcher. Of the 8 full time officers one serves as a full time School Resource Officer with a full time dedication to all schools within SAU 92. The Police Department provides 24/7 365-coverage utilizing overlapping 10-hour shift schedules, when possible, to ensure the best possible patrol force coverage. There are 4 command staff positions, Chief, Lieutenant, Sergeant and Corporal.

Service vehicles include four police cruisers, 2008 Ford Crown Victoria, 2010 Ford Crown Victoria, 2012 Ford Expedition, 2014 Ford Interceptor SUV, three of these cruisers are in good condition and the 2008 Crown Victoria is in poor condition. The Cheshire County Sheriff's Department Dispatch Center is the primary county police dispatch service and is used when the office is unoccupied, and/or when additional resources are needed and not available to the Hinsdale Police Department dispatcher, i.e., motor vehicle and criminal record inquiries, or when radio dispatch is required.

Service equipment is regularly replaced and/or repaired as needed with focus being on grant funding, when available, to offset any tax appropriation requests. Most equipment is in good working condition and functional at this time. The Department currently serves as medical first response and all cruisers on duty are equipped with a semi-automatic defibrillator. These defibrillators are out dated and need to be replaced within the next 12 months.

### **Police Department Future Plan**

A study performed in 2008 suggested the Hinsdale Fire Department be relocated to a new structure and for the Police Department to take over the current Fire Station building. An estimate for municipal improvements for the police station transition suggested the cost of renovation will be \$1,464,000. In 2013 this suggestion was altered and the voting community authorized the design and construction of a new 4500 sq/ft police station to be located on Main Street in replacement of 10 & 12 Main Street. The structures on these lots were demolished and the proposed new building will be erected to include a 3 bay garage to the rear of the lots. Progress is on track to begin on or about April of 2015.

## Hinsdale Highway Department

The Hinsdale Highway Department is located at 112 River Street in the highway garage built in 1985. In addition to the 5,000 square foot highway garage, the Highway Department also utilizes a 384 square foot storage shed and a 1,800 square foot salt and sand shed. The department maintains approximately 30 miles of road in Hinsdale. The department head also oversees construction of new roads and driveways that intersect town roads. There are four full-time and two part-time employees. At present they have the following equipment:

- ◆ 2014 F-550 dump truck 19500lb GVW
- ◆ 2008 F-550 dump truck 19500lb GVW
- ◆ 2005 F-550 dump truck 19500lb GVW
- ◆ 2006 Freightliner dump truck 36000lb GVW
- ◆ 2003 Freightliner dump truck 36000lb GVW
- ◆ 1990 GMC dump truck 36000lb GVW
- ◆ 2004 Trackless with plow, sweeper, sander, snow blower (sidewalk plow)
- ◆ 1988 FMC road sweeper
- ◆ 1979 Galion road grader
- ◆ 1988 Woodchuck Chipper
- ◆ 1988 16 ton equipment trailer
- ◆ 1 ton asphalt roller
- ◆ (4) 11 foot plows (4) 9 foot plows
- ◆ (2) 6 yard sanders (3) 1.5 to 2 yard sanders
- ◆ Grapo line stripper
- ◆ 3 different types of cut off saws for steel and concrete
- ◆ 3 chain saws

General operating expenses have decreased from \$554,000 in 2008 to \$551,204 in FY 2012-13. Total wages and salaries for the highway department have increased from \$155,482 in 2008 to \$189,596 in FY 2012-13. Equipment repair expenditures have decreased slightly from \$20,700 in 2008 to \$20,478 in FY 2012-13. In 2008, \$172,600 was spent on gravel, fuel, salt, and other materials; that amount decreased to 168,949 in FY 2012-13. Highway block grant revenues have increased from \$83,892 in 2008 to \$139,221.37 in FY 2012-13.

### Highway Department Expenditures (Select Years)

Expenditures	2000	2008	FY2012-13
General Operating Expenses	\$350,935	\$554,000	\$551,204
Total Wages and Salaries	\$101,462	\$155,482	\$189,596
Equipment / Building Repair Expenses	\$15,000	\$20,700	\$20,478
Fuel, Sand, Salt & Other Materials	\$90,000	\$172,600	\$168,949
Highway Block Grant Revenues	\$71,578	\$83,892	\$139,221.37

Source: Hinsdale Highway Department

## Highway Department Future Plan

The Hinsdale Highway Department will continue to conduct normal maintenance and improvements on town roads and schedule equipment purchases on a rotating basis. Recently completed projects include replacing the box culverts on Monument Road and Oxbow Road. A future project will be the complete reconstruction of Monument Road.

## Solid Waste Disposal

The Hinsdale Transfer Station and Recycling Center is located on approximately 12 acres at 214 Northfield Road. The sanitary landfill was closed in 2000 and capped in 2003. Since the closing of the landfill, the facilities are being utilized as a transfer station and recycling center and operated by the town Highway Department. There is currently one part-time employee. The hours of operation for the recycling center and transfer facility are Friday from 7:00 a.m. to 3:00 p.m. and Saturday from 7:00 a.m. to 4:00 p.m. On the site are a 924 square foot garage and a 160 square foot scale house. At present the following pieces of equipment are used: a 1990 New Holland skid steer in good/fair condition and a Philadelphia Tramway Baler. Total expenditures on wages and salaries have increased from \$19,068 in 2008 to \$19,758 in FY 2012-13.

## Solid Waste Future Plan

The plan for solid waste is to service the Town's residents as best as we can and to keep up with the changes in solid waste rules and regulations.

## Hinsdale Water Works

Hinsdale Water Works is located in the highway garage on River Street. The department is staffed by three employees - two full time (Superintendent/supervisor) and one part-time (laborer/operator). Staff is on call 24 hours, 7 days per week. The water department supervisor oversees maintenance of all water and sewer mains, and is responsible for detecting and repairing damage to both. A yearly leak detection survey is conducted on individual service connections, and several leak detection surveys are done on the system by hydrants. Water meters are read quarterly.

Hinsdale Water Works is comprised of two systems - the Village System and the North System. Construction of the Village System's 8.5 miles of water main began in 1910. The System's two 250,000 gallon storage tanks are served by two gravel packed wells which were built in 1988. The Village System pumps an average of 90,000 gallons a day to 628 residents and 23 other buildings through its 432 connections. The main pump house located off Glen Street, also built in 1988, contains electrical controls, chemical storage and treatment.

The North System's 13 miles of water main began in 1956 with one 250,000 gallon storage tank. A second tank was added in 2003 and has a 475,000 gallon storage capacity. The North System is supplied by two wells located on Meetinghouse Road: one gravel packed main supply Well #5 built in 2011, and the other gravel packed back up Well #3 built in 1988. These wells pump an average of 180,000 gallons of water per day to 755 residences and 21 other buildings in North Hinsdale through 503 connections. The main pump house, located off of Meetinghouse Road, contains the electrical controls for this system and a 2009 Kohler 3-phase 480 volt 100 kilowatt LP generator. In 1997, a new structure was built to house chemical storage and treatment at the same location.

The Department operates and maintains the following equipment:

- ◆ 1999 Ford F450 service truck with a 15-foot 3,300 pound class crane
- ◆ Wachs TM-7 truck mounted valve operator with live hydraulic tool circuits
- ◆ 2004 Ford F250 pickup truck with a 8' Fisher Plow
- ◆ 1997 Ford 655E 15-foot backhoe
- ◆ 1985 Joy Q-185 trailer mounted air compressor
- ◆ 1986 Sreco trailer mounted sewer rodder
- ◆ 1987 SRECO High Pressure Sewer Jet Flushing Trailer with 300 Gallon Tank
- ◆ 2013 Blue Star 100 kw 480 volt 3-phase diesel portable generator for the Village Water pumping station
- ◆ a wide array of hand and power tools

Maps of the existing water mains to include locations, age, size, and materials used are available at the Water Department.

**Hinsdale Water Works Expenditures/Revenues (2000, 2008 & 2013)**

	2000	2008	2013
<b>Expenditures</b>	\$250,537.17	\$334,744.00	\$523,198.00
<b>Revenues</b>	\$280,000.00	\$389,700.00	\$554,755.62

*Source: Hinsdale Water Department*

The reconstruction of well #2 in North Hinsdale, listed in the previous Master Plan under Future Plans, was completed in 2012.

**Water Works Future Plan**

The Hinsdale Water Works proposes the following improvements to the system:

1. Water Main upgrade and additions; the last water main work was done in 2002.
2. Replacement of aging equipment; the last replacement was a 2004 F250 pickup that replaced a 15 year old pickup. The 1999 service truck and 1997 backhoe have been on the CIP for over 10 years and should be replaced. The CIP replacement dates have come and gone.

Water conservation measures are closely monitored and the locations of water leaks are detected during the meter reading process. Normal maintenance of all meters, hydrants and equipment will be continued.

The Hinsdale Water Works will strive to provide a public utilities system that will effectively meet the needs of the people of Hinsdale. There is a goal to develop, expand and set standards of operation and maintenance for public water supply in accordance with the town's ability to support the costs of such services. The Department recognizes that densely developed areas of town should eventually be served by a full range of public utilities. The Department will assist town residents in developing an awareness of the benefits of water conservation, and assist in the protection of the aquifer. The recent adoption of the Wellhead/Aquifer Protection District in the Hinsdale Zoning Ordinance will help to limit the uses allowed within the Wellhead Protection Areas for municipal water supply wells and the Aquifer Protection District. An addendum was made to the ordinance to also include the source waters of Lily Pond and Lily Pond Brook since there is known vulnerability to present and future drinking water protection.

The water department hired Underwood Engineering to do a complete water master plan which was completed in late 2002. The plan identified areas in need of improvements and provided recommendations for the town. The water department has been actively working on these recommendations and will continue to do so.

**Hinsdale Wastewater Treatment Plan**

The Hinsdale Wastewater Treatment Plant is located at 120 River Road. Construction of the plant started in 1978 and the Plant went into operation on October 22, 1979 at a cost of 1.9 Million Dollars with the Federal Government paying 75%, the State Government paying 20% and the Hinsdale Sewer Users paying the final 5% with a 30 year bond. It is an Extended Aeration Plant that includes a grit removal system, oxidation ditches with rotors for aeration, secondary clarifiers, a chlorination / de-chlorination tank, an aerated sludge holding tank and sand drying beds that are no longer used and have been converted into a storage area. The plant is staffed by two full time employees that share being on-call to provide 24/7/365 coverage. The plant's design capacity is 0.3 million gallons per day (MGD).

In 2012 the plant averaged 0.1911 MGD with a total rainfall of 40 inches for the year. In 2011 the plant averaged 0.3146 MGD with a total rainfall of 64 inches for the year. The plant experiences significant infiltration problems during the spring and times of high water table where the inflows at the plant can be double the plant's capacity. Sump pumps are also suspected to contribute to the plants infiltration problem.

The collection system consists of approximately 9 miles of lines servicing in the area of 600 units in the downtown village area only, with the majority of it being constructed in the 1930s. The collection system was extended with Pump Stations being installed on Canal Street in 1988 and on Glen Street in 1989. The State placed a moratorium on new connections to the system on November 27, 2006 due to Inflows at the plant consistently being over 80% of the design flow. The department then developed and instituted an Infiltration and Inflow (I&I) Program to help inform customers of the problems caused by the I&I issues and how they can help. It also initiated inspections of properties to locate illegal sump pumps and drains. The department has been doing smaller projects to help reduce the infiltration problems.

Two major projects have also been completed. In 2007 the collection system on Canal Street was replaced at a cost of over \$400,000 and in 2010 the collection systems on Main Street, Stearns Court and Fitzgerald Court were replaced or repaired at a cost of over \$600,000. Both of these projects were assisted financially by Grants with User Fees funding the remainder. The State rescinded the moratorium on February 1, 2011.

Some major projects that have been done at the WWTP include the influent pumps and control system being replaced in 1997 for \$77,000. The sludge pumps and controls were replaced in 2001 for \$38,000. A new rubber roof was installed on the Operations Building in 2006 for \$12,000. In 2010 the emergency generator was replaced for \$37,000 and the 1982 dump truck and plow were replaced for \$40,000. All of these projects were assisted financially by Grants.

### **Wastewater Treatment Plant Future Plan**

Other major pieces of equipment that are still original and will need attention in the near future include the two Rotors in the Oxidation Ditches, the two Clarifier Drive Units and Rake Arms, the mobile trailer mounted Trash Pump, the heating system Boiler for the Operations Building, the fiberglass enclosures on the drying beds and clarifier buildings, and the concrete work in some of the tanks that is degrading.

The Town must renew the NPDES Discharge Permit from the EPA every five years with the last renewal package being submitted in the spring of 2012. At this time we are still waiting for the new permit to be issued. History shows that most times when new Permits are issued they come with more stringent or additional requirements that must be complied with. Until that time we don't know what expenses we will have to incur to comply with the new Discharge Permit.

### **Community Organizations and Facilities**

#### **The Hinsdale Historical Society**

The Hinsdale Historical Society is located at 609 Brattleboro Road in the Ebenezer Hinsdale House. Major restoration of this building has taken place since 1998, such as updating the heating system, plumbing, wiring and painting of the interior/exterior of the building. The facility will open for public viewing upon request, and is open at designated times during the year.

## Historical Sites and Points of Interest

Historical sites and points of interest in Hinsdale include the following:

- ◆ The Taylor Monument, located at the intersection of Monument Road and Old Brattleboro Road, marks the site of an Indian skirmish in 1748.
- ◆ The Liscom House, located on Route 119, was built in 1759 by Col. Ebenezer Hinsdale. Much history is documented on this house and can be read in the "History of Hinsdale".
- ◆ Fort Dummer Cemetery located on Old Brattleboro Road and Hooker Cemetery located on Prospect Street date back to the mid 1700's.
- ◆ Homes built in the late 1700's include those owned by: Mr. & Mrs. Bernard Nixon, Ms. Patricia Sprague, Mr. & Mrs. Wesley Sprague, Mr. Chris Shaw, Mr. & Mrs. Edwin Smith, and Mr. Paul Hubner, Sr.
- ◆ The site of Fort Hinsdale is located on the property owned by the Hinsdale Historical Society at 609 Brattleboro Road, NH Rte. 119.

### **Post Office:**

The oldest continuously operating United States Post Office is located at 13 Main Street in Hinsdale. The 1,327 square foot building was constructed on September 25, 1816, following the appointment of Hinsdale's first postmaster in 1815. The post office has rented 432 out of 641 available post office boxes and makes 1,438 rural route deliveries. It is open to serve customers Monday through Friday 9:00 a.m. to 5:00 p.m. and Saturday 7:30 a.m. to 11:30 a.m.

### **Churches:**

There are three active churches located in Hinsdale:



*Photo by: Dorianne Almann*

- ◆ The Congregational Church located on Main Street was built in 1835;
- ◆ St. Joseph's Church located on Brattleboro Road was built in 1885;
- ◆ North Hinsdale Community Church located on Meetinghouse Rd in North Hinsdale was built in 1804 and added on to in 1853.

Hinsdale First Congregational Church

### **Community Center** (see Chapter 3 – Recreation)

## Chapter 3 - Recreation

**Millstream Community Center**  
**Community Recreation Programs**  
**Program Recommendations & Policies**  
**State Parks**  
**Town Parks**  
**Public Water Access**  
**Trails**



Millstream Community Center  
 Photo by: Dorianne Almann

Recreation is an important component in community development. It helps to enhance the quality of life of its residents and those who choose to visit the community for the recreational opportunities available. The many benefits that recreation creates are worthy of the community costs and should be a priority for all seasons. Recreational opportunities help to add character to a community and provide a healthy option for personal time.

A variety of recreation options is important to meet the needs and interests of the whole community. Active recreation, which involves organized activities such as baseball, softball, soccer, and basketball, attract many users and spectators. Equally necessary are the passive recreational opportunities such as hiking, swimming, boating, picnicking, and tourism. All types of recreation, active, passive, indoor or outdoor, add to the social capital of the community. Accessibility to these activities and areas must be available for people of all levels of mobility.

The Town of Hinsdale offers its residents a variety of recreational activities for both indoor and outdoor enjoyment. Through the combined efforts of town staff, organized sports leagues, and many volunteers, the town has had a successful recreation program for many years. Along with the structured school programs of sports and extracurricular endeavors, the open spaces located throughout the town offer additional opportunities for fun and relaxation.

### **Hinsdale Millstream Community Center**

The Hinsdale Community Center, located at 19 Main Street, was built in 1996. The Community Center is available for community functions as well as public or private activities. The entire center will hold a group of 150 people, and is also available for smaller groups; it can be divided into two separate spaces if needed. The Community Center is equipped with a kitchen, two sets of bathrooms, tables and chairs. There is also a patio that is located in the back of the building, giving a wonderful view of the waterfall and is especially beautiful during foliage.

The Community Center has hosted the following non-profits for special events and meetings. Voting, Earn-Program, Monadnock Family Services, Cheshire Mediation, Southwestern Housing and Development Services, Girl Scouts, Boy Scouts, Lions Club, Historical Society, area churches, and the Hinsdale Community Coalition. The Community Center also offers flu shots and fuel assistance program help.

The Community Center regularly hosts Meals on Wheels, blood pressure clinics, WIC Programs, Weight Watchers, Martial Arts classes, Weight Loss Challenge/Nutrition Class, and Strong Living Exercise program for people over 60 years of age. Other programs are welcome to utilize the facility when time is available.

The Community Center is available to rent for special events.

### **Community/Recreation Programs**

The Hinsdale Community Recreation Committee is in charge of the summer ‘camp’ program, pool facility, and youth soccer/basketball programs. These recreation programs are run by a part time paid Seasonal Director with the help of several volunteers.

The summer ‘camp’ program is located at the Field House on School Street. It runs Monday through Friday 9a.m. to 3p.m. for 6-8 weeks, depending on the closing of school for the summer, and offers a safe alternative in a structured environment to Hinsdale children entering first through eighth grades in the fall. The program is a mixture of scheduled events and children having “just plain fun”. Attendance runs from 100-135 children per day. The program works with the school district to offer a free lunch to every child that participates, and is open for all children in Hinsdale between the ages of 5-18. It also works with the Hinsdale After School Program (HASP) and the Hinsdale Community Coalition (HCC) to offer field trips to middle school level campers.

The Town Pool facility is located on Brattleboro Road, across the lawn from School Street. The pool is open seven days a week for approximately nine weeks during the summer. It offers swim lessons to residents at a reduced cost, a small wading pool for younger children, a changing facility, and adult aquarobics twice a day at noon and 7:00 p.m.

The youth soccer and basketball programs are offered during fall and winter. These programs serve approximately 100 children per season, and are feeder programs for Hinsdale Middle High School.

### **Recreation Program Recommendations:**

- Work with HCC and HASP to establish a place in town for youth gatherings, either by purchasing a building or building a structure connecting to the present town pool.
- Organize various performances, sports and trips for community residents.
- Offer sports camps during the summer program, such as soccer, basketball, tennis, and a swim team.
- Offer training for coaches, and work with the Hinsdale Middle High School to offer coordinating efforts in regard to skill sets for soccer and basketball.
- Build an L-shaped addition to the pool with a deeper end for diving and a slide.
- Renovate the summer camp Field House.
- Work with the school district to develop a walking/running program for a wide range of users, including adults.
- Continue to work with the 21<sup>st</sup> Century Community Learning Center Grant (HASP) to offer before-and-after camp programs.
- Continue to work with the school district to offer an educational component to the summer program, such as reading initiative, math, or year-round gardening programs.

### **Other Recreational Activities:**

The Town of Hinsdale has two boat landings along the Connecticut River, at the base of Sand Hill and between

the bridges on Route 119. In recent years the recreational use of the Connecticut River has increased greatly, as evidenced by the number of boats in the summer and the number of fishing huts in the winter. Ice skating on the “set back” area of the river has become a common sight. Some of this increased activity is due to the opening of the railroad right of way, which provided off road parking.

As this report indicates, the Town of Hinsdale has tried to meet the needs of all age groups in providing recreational opportunities.

**Policies**

- ◆ Provide for the preservation of open space and natural preserves to maintain the rural character of the Town.
- ◆ Provide the variety of recreational facilities to accommodate all age groups and all levels of mobility.
- ◆ Continue to provide the use of municipal buildings for recreational purposes.
- ◆ Continue to fund the programs needed to make the town an enjoyable and healthy place to live for our citizens.
- ◆ Protect the scenic elements of the town’s natural environment such as water bodies, streams, rivers, and viewsheds.
- ◆ Retain the access to open space and environmental areas for public use.

The following is a summary of areas available to the public:

**Hinsdale Recreation Areas**

Name and Location	Use	Acreage/Distance	Ownership
<b>Prentiss Taylor Memorial Field</b> Northfield Road	Softball, other outdoor recreation	3 acres	Town
<b>Prospect Street Boat Launch</b> Prospect Street (Off of Route 119)	Public access boat launch to Connecticut River, fishing	-	State
<b>Rail Trails Ashuelot Rail Trail</b> Starts at Dole Junction on Route 63 in Hinsdale and ends in Keene	All non-motorized uses in summer and snowmobiling in winter	21 miles	State
<b>Fort Hill Branch Rail Trail</b> Runs parallel to Route 63 and Route 119 into Brattleboro, VT	All non-motorized uses in summer and snowmobiling in winter	8.9 miles	State
<b>Foster Butler Land</b> Prospect Street and Route 119	Setback land surrounding State boat access	18.10 acres	Town
<b>School District Field</b> School Street and Brattleboro Road	Soccer, gymnasium sports, social clubs	12.46 acres	Town
<b>Wantastiquet State Natural Area</b> Route 119	Hiking, hunting	311 acres	State
<b>Bear Mountain State Park</b> Plain Road	Hiking, hunting/trapping	156 acres	State

Name and Location	Use	Acreage/Distance	Ownership
<b>Heritage Park</b> Route 119	Tennis, basketball, picnics, outdoor concerts, children's pool, softball	6.82 acres	Town
<b>Hinsdale Island</b> Connecticut under Route 119 bridge	Public access boat ramp	6.49 acres	Town
<b>Boy Scout Park</b> Route 119 across from Oak Hill Road	Wooded area overlooking the Connecticut River	9.9 acres	Town
<b>Hinsdale House</b> Route 119	Site of the Ebenezer Hinsdale House and Farm (c. 1759) and Fort Hinsdale	37 acres	Hinsdale Historical Society
<b>Hinsdale Trail Entrance to Pisgah State Park</b> Route 63 North	Multi-use trail	-	Town
<b>Kilburn Loop Trail and Kilburn Pond In Pisgah State Park</b> Route 63	Hiking, swimming, fishing	35 acre pond 5.4 mile loop around pond	Town/State
<b>Millstream Park</b> Main Street (near Community Center)	Public boat access, picnic area	4.44 acres	Town
<b>Pisgah State Park</b> Route 63 North	Hiking, hunting, fishing, snowmobiling, cross country skiing and ATV Trails	543 acres	State

Source: Town Staff

## **State Parks**

### **Wantastiquet Mountain Natural Area**

The Wantastiquet Mountain Natural Area, which is located in the Northwestern corner of town along the Connecticut River, encompasses over 1,000 acres of state owned land between Hinsdale and Chesterfield. Many visit the area to hike the 1,335 feet high Wantastiquet Mountain, which offers outstanding views of Brattleboro, Vermont and the Connecticut River Valley. A wide and easy to follow trail (~2.0 miles) leads from a small lot at the gated end of Mountain Road to the Walter H. Child Monument. This trail connects to Miners Ledge, which provides a sweeping vista of the Connecticut River Valley, and continues on to the Madame Sherri Forest in Chesterfield.

### **Pisgah State Park**

Spanning over 13,300 acres and 3 towns (Hinsdale, Winchester, and Chesterfield), Pisgah State Park is the largest property in the New Hampshire state park system. Although only a small portion of the park (~5%) is located within town boundaries, Pisgah provides great opportunity for residents to engage in activities like hiking, mountain biking, ATV and snowmobiling, cross country skiing, horseback riding, bird watching, fishing, boating, swimming etc. Six trailheads around the park that provide access to over 20 miles of multiple use trails. There are no campsites within the Park, which is open year round at no charge.

Trails that lead from Hinsdale into the Park include the Kilburn Loop Trail, and the Hinsdale Trail.

The Hinsdale Town Forest (28.69 acres) is located within the Park boundaries.

### **Bear Mountain State Forest**

Bear Mountain State Forest is a 156 acre hunting and natural area owned by the state of New Hampshire. The forest, which can be accessed from Plain Road, contains Bear Mountain (1,027 feet). Trapping is allowed within the Forest for which permits can be obtained from NH Fish and Game.

### **Town Parks**

#### **Heritage Park**

Located off of Brattleboro Road (Route 119) next to the Hinsdale School District athletic fields, Heritage Park provides the opportunity and facilities for residents to engage in active recreation. The 19 acre town owned park contains tennis and basketball courts, a softball field, and the Town's only public swimming pool. The Park's gazebo, picnic area, and pavilion offer space for community gatherings, outdoor concerts, and other forms of leisure.

#### **Boy Scout Park**

Located off of Route 119 across from Oak Hill Road, is the so-called Boy Scout Park. This thickly wooded tract of town owned land overlooks the Connecticut River and provides space for picnic areas. The Fort Hill Branch Rail Trail intersects the property, which encompasses approximately 9.9 acres.

#### **Prentiss Taylor Memorial Field**

Close to the center of town, the 3 acre Prentiss Taylor Memorial Field contains a softball field and space for outdoor recreation. The field is located off of Northfield Road, approximately 150 feet from the bridge over the Ashuelot River, which connects Northfield Road (Route 63) to Main St. (Route 119). While the field had been privately owned in the past, it is currently owned by the town.

#### **School District**

The Hinsdale School District's athletic fields, located along School Street and Brattleboro Road next to the Middle/High School and Elementary School provide space for a number of field sports and activities. The site contains a soccer/field hockey field, baseball field, little league baseball field, and a field for smaller children. This site also provides space for gymnasium sports like basketball.

#### **Millstream Park**

Adjacent to Town Hall and the Millstream Community Center on Main Street is a strip of open space referred to as "Millstream" or "River" Park. This small park contains a picnic area and benches as well as access to the Ashuelot River for fishing. In addition, a small parking lot is located next to the park.

## **Public Water Access**

### **Kilburn Pond, Pisgah State Park**

Kilburn Pond is a 35 acre pond partially located in the Hinsdale portion of Pisgah State Park. The pond is used for recreation purposes like swimming and fishing and is only accessible by hiking into the park. The Kilburn Road Trail provides access to the northern end of the pond from Chesterfield Road (Route 63). This trail connects with the Kilburn Loop Trail, which forms a loop around the perimeter of the pond.

The average depth of this mesotrophic water body is 9 feet with a maximum depth of 25 feet. Fish species found in the pond include Chain Pickerel, Yellow Perch, and Hornpout.

### **Prospect Street Boat Launch**

The Prospect Street Boat Launch, located on Prospect Street off of Route 119, provides the public boat access to the Connecticut River. This state owned site contains a gravel boat ramp and gravel parking area. While it is primarily used for boating, fishing is also allowed at this site.



*Photo by Dorianne Almann*

### **Millstream Park**

Individuals can access the Ashuelot River from this park, which is described in the Town Park section of this chapter. There is no boat ramp at this site but there is a paved parking area.

### **Hinsdale Island**

The public can access the Connecticut River via a gravel boat ramp on Hinsdale Island. The Island is located between the Route 119 bridges that connect New Hampshire to Vermont over the Connecticut River.

## **Trails**

### **Rail Trails**

The town contains two recreational rail trails that are owned by NH Department of Transportation: the Ashuelot Rail Trail and the Fort Branch Rail Trail. Both of these trails are managed by the New Hampshire Bureau of Trails.

The Fort Hill Branch Rail Trail is an 8.9 mile long trail that runs alongside the Connecticut River in Hinsdale and continues into Brattleboro, Vermont. Currently, the usable portion of the trail ends at a rail bridge over the Connecticut River that connects the Hinsdale portion of the trail to the Brattleboro, VT section. In the non-winter months, all non-motorized uses are allowed including hiking, horseback riding, and mountain biking. However, snowmobiling is allowed in the winter season.

At Dole Junction, the Ashuelot Branch Rail Trail branches from the Fort Hill Branch. This 21 mile gravel/dirt trail occupies the former Ashuelot Passenger and Freight Rail Route, which operated from the mid 1800's to 1984. From Dole Junction, the trail parallels Route 63 and then follows the Ashuelot River through Hinsdale into Winchester. The trail continues to follow local roads through Winchester, Swanzey, and Keene, where it ends. Like the Fort Hill Branch Rail Trail, all non-motorized uses are allowed on the trail in the non-winter months and snowmobiling is allowed in the winter season.

One mile from the start of the Ashuelot Rail Trail is the Hinsdale Station, a private restoration of a Boston & Maine Railroad station in New England. A Green Mountain Railroad boxcar and an old New Haven Railroad caboose can be found on the property.

### **Hinsdale Trail**

The Hinsdale Trail is a multi-use trail that begins in the Hinsdale portion of Pisgah State Park. The trail entrance is located approximately a mile north of Hinsdale Depot reached via Depot St. to Route 63 North. The trail connects with the Reservoir Trail in Winchester and leads to the trailhead at Reservoir Road. The trail also branches off to connect to Pisgah Reservoir.

### **Kilburn Loop**

The Kilburn Loop is a 5.4 mile long hiking trail that surrounds the perimeter of Kilburn Pond. The trail is considered an easy hike as it gains no more than 200 feet in elevation. Key points along the trail include an inlet that leads to Kilburn pond and junctions with the old Kilburn Road and Pisgah Ridge Trail. The trail is restricted to pedestrian use year round. The Kilburn Loop can be accessed via the old Kilburn Road, a 0.7 mile trail that begins at the Kilburn parking lot located off Chesterfield Road (Route 63) in Hinsdale.

### **Hinsdale House**

The Ebenezer Hinsdale House, c.1759, is situated on 37 acres of land bordering the Connecticut River. The property is the site of Fort Hinsdale as well as the Ebenezer Hinsdale Farm, which was built by the town's founder. Also on site are a carriage/livestock barn, two agricultural barns, and a blacksmith shop. The Hinsdale Historical Society acquired the property in 2009 and plans to renovate the site into a living museum.

Source for parks information obtained from the following: NH Fish and Game Department, NH Department of Resources and Economic Development, Lee Ling – town resident

## Chapter 4 – Economic Development Chapter

### Introduction

- Statement of Purpose
- Overview of Contents

### Background

- Economic History
- Current Business Profile
  - Demographics
  - Land Valuation and Taxation
  - Commuting Patterns

### Utilities and Municipal Services

- Water and Sewer
- Electricity
- Telecommunications
- Transportation

### Tax Increment Finance Districts Overview

### Municipal Policy Analysis

- Zoning
- Master Plan

### Recommendations

Hinsdale and Surrounding  
Labor Market Areas and Counties



## Introduction

### Statement of Purpose

Hinsdale's economic development plan can help the community better understand its present economic circumstances, its short and long term economic goals, and strategies to attain these goals. Efforts to shape Hinsdale's economic future will require cooperation among many groups. It is important to strive for consensus about the community's economic future prior to designing and committing to economic development strategies. Cooperation of residents, taxpayers, business owners and managers, and local government on an economic development team can guarantee the realization of Hinsdale's economic development goals. Likewise, these goals cannot be realized in isolation from other community issues such as the natural environment, historic preservation, infrastructure needs, and other quality of life concerns.

### Overview of Economic Development Plan

This Economic Development Plan begins with a summary of Hinsdale's history and the Town's place in a broader economic landscape. This background section provides an overview of Hinsdale's economic history and a profile of recent business, socio-economic, and demographic trends. Following this background section is an overview of existing utilities in Hinsdale (water, sewer, electric, and telecommunications) and any identified capacity limitations that may impact future economic development in Hinsdale. An overview of Tax Increment Finance (TIF) districts is provided to acquaint town officials and residents with this important community development tool. An analysis of municipal policies addresses the current Master Plan and Zoning Ordinance as they relate to economic development. The final section outlines the recommended goals, policies, objectives, and actions developed through this Plan.

## Background - Hinsdale in the Economic Landscape

### A Brief History of Hinsdale<sup>5</sup>

Before the end of the 17<sup>th</sup> century, the first settlement in Cheshire County was known as Hinsdale. In 1742, Colonel Ebenezer Hinsdale built a fort and gristmill on the shore of the Connecticut River. In the early 1800's significant construction included a bridge between Hinsdale and Brattleboro, a post office, hotel and gristmill. The center of town was established along the Ashuelot River. In 1832 the first regular stagecoach run was introduced, and local taverns and inns thrived. During the mid-1800's a railroad line, tannery, woolen mill, paper mill and the first town hall were built. Later in the century as the Town prospered, a local newspaper was published, a bank opened, and some residents started their own businesses.

Early in the 20<sup>th</sup> century, better roads were built, and residential growth extended into the rural areas of Town. Municipal water mains were laid and a fire hydrant system was installed in the village area. A larger town hall was built for meetings and social gatherings, and Main Street took on a new look. Hinsdale offered its residents a variety of stores, businesses, employment opportunities, professional offices and social functions.

The post-war years resulted in a decline of smaller businesses and professional offices. Many of Hinsdale's younger population moved from the area seeking better paying jobs in larger towns and cities. The once thriving mill town was gradually becoming a community where people lived, but worked elsewhere. Hinsdale's largest paper mill closed down operations in 1983, eliminating several jobs and terminating the location of industry in the immediate downtown area. The paper mill building was razed approximately 10 years later, and in its place grew the Millstream Community Center and park along the Ashuelot River.

### Current Business Profile

Situated in the Southwest corner of New Hampshire, Hinsdale has strong economic, cultural, and social connections with neighboring towns in New Hampshire, Vermont and Massachusetts. This review of economic trends and indicators for Hinsdale situates the town at the center of a tri-state commercial and cultural network. This section will examine economic trends for Hinsdale and surrounding areas to provide background on Hinsdale's recent economic history and how Hinsdale fits in this regional context (see map).

## Business Profile - Demographics

### Population

According to the last hundred years of United States Census Bureau figures, Hinsdale experienced its strongest population growth between 1960 and 1970, where it grew by 48.9% (or 1,089 residents). Since then, population growth has subsided. Between 1980 and 2010, the town's population grew by only 11%, less than neighboring towns, and less than the state, which grew by 43% over the same time period (see Table 1). In terms of population density, Hinsdale grew from a density of 176 persons per square mile of land area in 1980 to 196 persons per square mile in 2010. In comparison, the population density of Cheshire County was approximately 109 persons per square mile based on 2010 population figures.

<sup>5</sup> Taken from "A Brief History of Hinsdale, NH", Hinsdale Master Plan, 1991

**Table 1**  
**Comparison of Past Population Growth Rates 1980 – 2010**

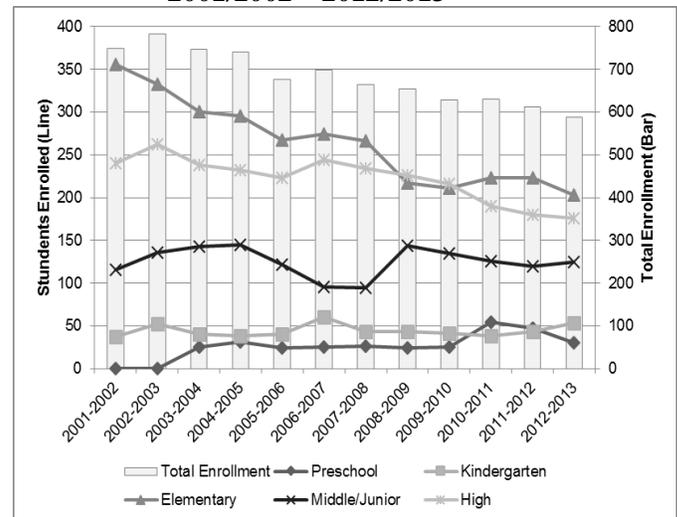
	1980	1990	2000	2010	% Change 1980-2010
United States	226,542,199	248,709,873	281,421,906	308,745,538	36%
New Hampshire	920,610	1,109,252	1,235,786	1,316,470	43%
Cheshire County	62,116	70,121	73,825	77,117	24%
Brattleboro	11,886	12,241	12,005	12,046	1%
Chesterfield	2,561	3,112	3,542	3,604	41%
Hinsdale	3,631	3,936	4,082	4,046	11%
Keene	21,449	22,430	22,563	23,409	9%
Swanzey	5,183	6,236	6,800	7,230	39%
Winchester	3,465	4,038	4,144	4,341	25%

Source: US Census Bureau

**School Enrollment**

Despite a fairly stable population between 2000 and 2010, school enrollment has displayed a steady decrease from the 2002-2003 school year to the 2012-2013 school year showing a decline in enrollment from 749 students to 587 students overall. Graph 1 shows both the *Students Enrolled* (shown as horizontal lines) and *Total Enrollment* (shown as vertical bars). It gives a visual representation of this trend as well as each level of school from preschool through high school. This decline in attendance occurred primarily at the elementary level which decreased from 356 students to 203 students. Other levels that show decline are preschool and high school.

**Graph 1**  
**Hinsdale School Enrollment Trends**  
**2001/2002 – 2012/2013**



Source: NH Department of Education

**Employment - Occupational Trends**

The largest occupational sector in Hinsdale during the past decade was educational services, health care and social assistance, followed closely by manufacturing jobs. Employment in the current decade continues the same trend although both sectors have seen a decline. The educational services, health care and social services experienced a 10% decline between the years of 2000 and 2012, while the manufacturing sector experienced a 30.6% decline in jobs. Overall, the finance/insurance, real estate, and rental/leasing sector had the largest decline (71.4%) in employment, while the information technologies had the largest increase (104.3%) in employment during the same period. Additional sectors are shown in Table 2 and Graph 2. In addition to the industry types, the table shows that the number of civilian employed population 16 years of age and over dropped from 2,237 to 2,006, or a 10.3% decline.

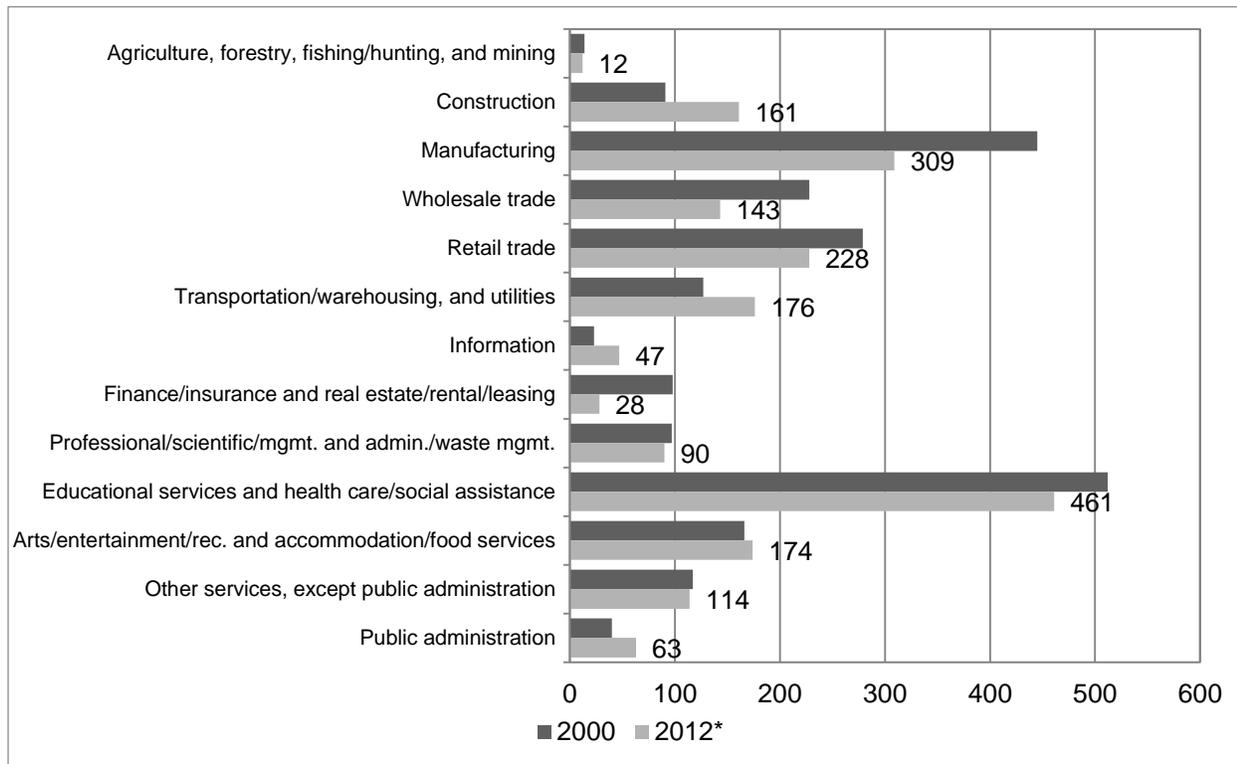
**Table 2**  
**Employed Civilian Population by Industry Type (2000 & 2012)**

Industry Type	2000	2012*	Change
Civilian employed population 16 years and over	2,237	2,006	-10.3%
Agriculture, forestry, fishing/hunting, and mining	14	12	-14.3%
Construction	91	161	76.9%
Manufacturing	445	309	-30.6%
Wholesale trade	228	143	-37.3%
Retail trade	279	228	-18.3%
Transportation/warehousing, and utilities	127	176	38.6%
Information Technologies	23	47	104.3%
Finance/insurance, and real estate/rental/leasing	98	28	-71.4%
Professional/scientific/management, and administrative/waste management services	97	90	-7.2%
Educational services, and health care/social assistance	512	461	-10.0%
Arts/entertainment/recreation, and accommodation/food services	166	174	4.8%
Other services, except public administration	117	114	-2.6%
Public administration	40	63	57.5%

Source: US Census Bureau

\*US Census Bureau American Community Survey (ACS) 5-Year Estimates 2008-2012

**Graph 2**  
**Employed Civilian Population by Industry Type (2000-2012)**



Source: US Census Bureau American Community Survey (ACS) 5-Year Estimates 2008-2012

According to the US Census Bureau American Community Survey (ACS) 5 Year Estimates 2008-2012, the occupational sector with the most employees in Hinsdale is production, transportation, and material moving with 545 workers. The number of employees in other occupational sectors is shown in Table 3.

**Table 3  
Employed Civilian Population by Occupation (2012)**

Occupational Sectors	2012*
Civilian employed population 16 years and over	2,006
Management, business, science, and arts occupations	370
Service occupations	384
Sales and office occupations	452
Natural resources, construction, and maintenance occupations	255
Production, transportation, and material moving occupations	545

Source: US Census Bureau ACS 5 Year Estimates 2008-2012

As of 2014, the current largest employers in Hinsdale are HCP Packaging and Walmart Supercenter. HCP Packaging, founded in Taiwan in 1960, purchased the former Bridgeport Metal Goods factory in 2004. Table 4 highlights the Top 25 Employers according to the number of employees in 2013. These major employers offer a broad range of employment opportunities such as manufacturing, retail sales, governmental, and professional services. Of these businesses, 80% have less than 50 employees, and nearly half employ less than 10 workers.

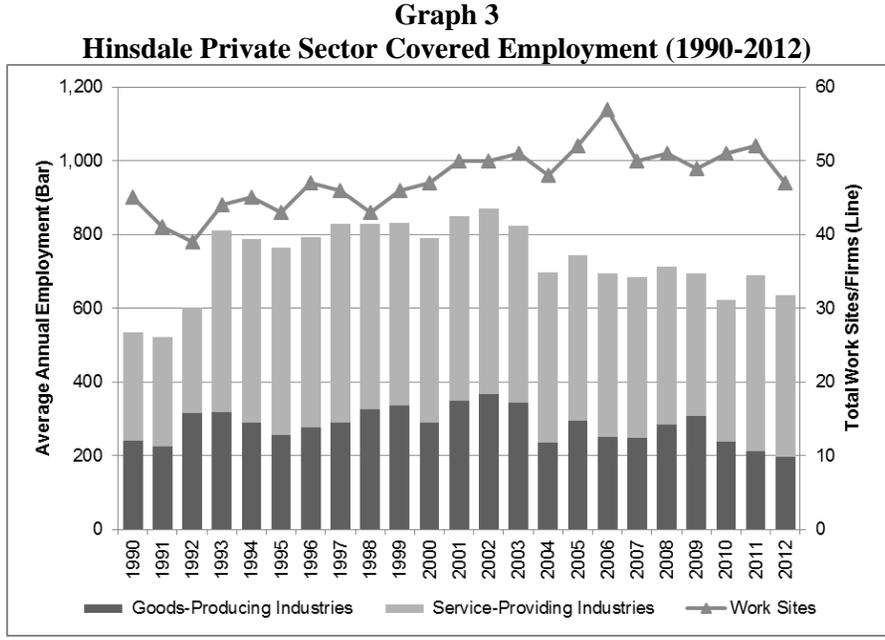
**Table 5  
Top 24 Employers**

Employer	Partial Address	Employer Size	Employer	Partial Address	Employer Size
HCP Packaging	Monument Rd	100 - 249	Tractor Supply	Brattleboro Rd	6 - 14
Walmart Supercenter	Brattleboro Rd	100 - 249	Gamestop	Georges Field	5 - 9
Hinsdale Elementary School	School St	50 - 99	Amity Alarm & Security	Ferncroft Dr	5 - 9
Continental Cable/CBG Industry	Monument Rd	50 - 99	US Post Office	Main St	5 - 9
Hinsdale High School	School St	20 - 49	Rent-A-Center	Georges Field	5 - 9
Hinsdale Town Fire Dept	Depot St	20 - 49	Putney Saw Works	Monument Rd	5 - 9
T-Bird Mini Mart	Brattleboro Rd	20 - 49	Nannys Day Care	Indian Acres Dr	5 - 9
Phantom Fireworks	Brattleboro Rd	20 - 49	Hinsdale Swimming Pool	Brattleboro Rd	5 - 9
Dynamic Landscaping & Supply	Brattleboro Rd	10 - 19	Hinsdale Town Garage	River Rd	5 - 9
Echo Farms Inc	Chesterfield Rd	10 - 19	A1 Pizza Restaurant	Brattleboro Rd	5 - 9
Hinsdale Town Police Dept	River Rd	10 - 19	Shippee Auto Inc	Brattleboro Rd	5 - 9
NH Liquor & Wine Outlet	Brattleboro Rd	10 - 19	Washburn Vault	Monument Rd	3 - 7

Source: NH Employment Security and info USA

According to the Bureau of Labor Statistics Quarterly Census of Employment and Wages, private-sector employment in Hinsdale is dominated by the service-providing industries. As shown in Graph 3, there were

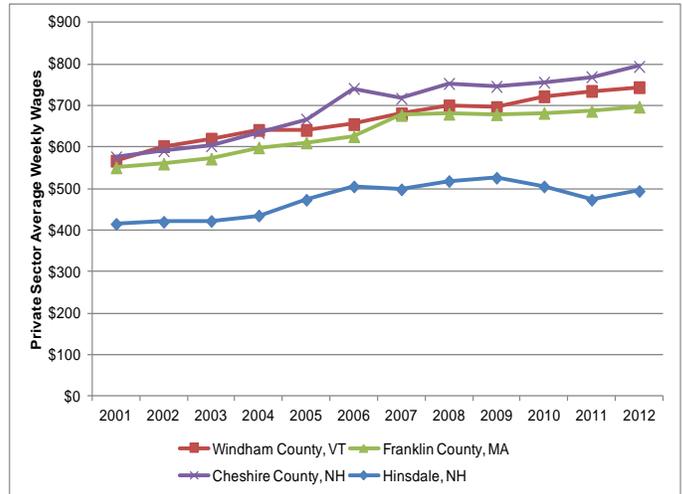
47 total work sites employing 635 employees in 2012, a marked decrease from the decade between 1993 and 2003 where private sector industries employed around 800 workers.



Source: NH Employment Security

Between 2001 and 2012, the private sector average weekly wages increased from \$415 to \$494, down slightly from a high of \$526 in 2009. The composition of job opportunities results in wages much lower than the average for Cheshire County, or neighboring counties in Vermont and Massachusetts. The recession beginning in 2008 has widened the wage discrepancy. These wage statistics refer to places of employment in Hinsdale, and not the wages of employed Hinsdale workers. Average weekly wages in Windham County, Vermont, the destination of many Hinsdale workers, was surpassed by Cheshire County in 2005. It should be noted that goods-producing industries, such as manufacturers pay much higher wages than the service producing sector, \$633 and \$430 in 2012, respectively (Graph 4).

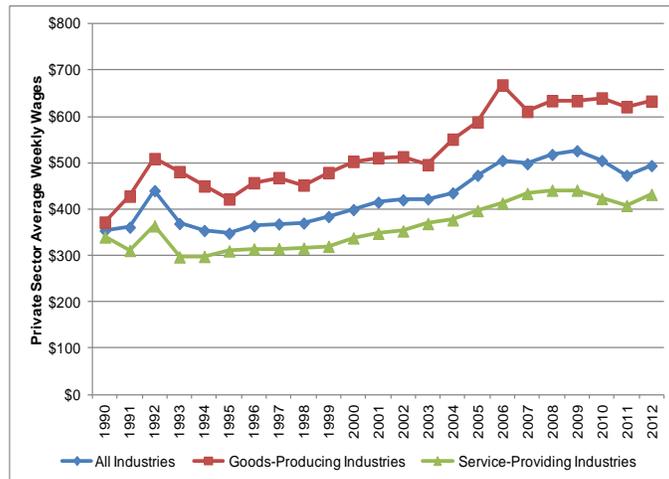
**Graph 4**  
**Private Sector Average Weekly Wage (1990-2012)**



Source: NH Department of Employment Security \*Figures were not adjusted for inflation

The Hinsdale private sector average weekly wage figures for the years between 1990 and 2012 are shown in Graph 5. This graph also breaks the employment down by the type of industry. All three industries show a steady increase in the average weekly wages from 1995 to present, although the goods-producing industries show more fluctuations, most notably between 2005 to 2007.

**Graph 5**  
**Average Weekly Wage by Industry (1990-2012)**



Source: NH Employment Security  
\*Figures were not adjusted for inflation

**Per Capita Income**

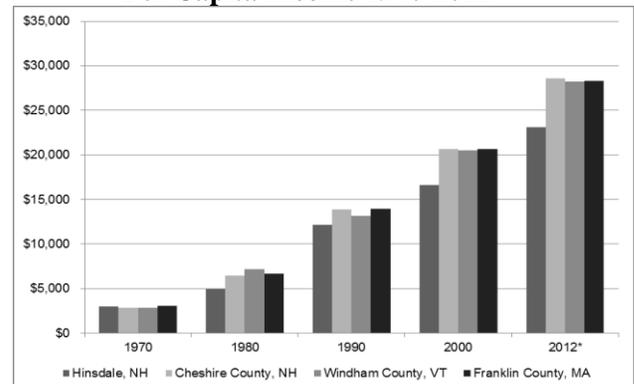
To calculate per capita income, the Census Bureau divides the total income of all people over age 14 in the town by the total population of the town. Therefore, towns with relatively large groups of people not in the workforce, like young adults and the elderly, show a different result than towns where more residents are employed. In 1970, Hinsdale's per capita income was similar to those found in neighboring counties. However, the per capita incomes in the surrounding counties grew at a faster rate than Hinsdale's between 1980 and 2000. Hinsdale, as well as the surrounding counties, saw a significant increase in per capita income between 2000 and 2012 (Table 5 & Graph 6).

**Table 5**  
**Per Capita Income 1970-2000**

	Hinsdale, NH	Cheshire County, NH	Windham County, VT	Franklin County, MA
<b>1970</b>	\$2,973	\$2,865	\$2,848	\$3,075
<b>1980</b>	\$4,935	\$6,442	\$7,188	\$6,678
<b>1990</b>	\$12,127	\$13,887	\$13,134	\$13,944
<b>2000</b>	\$16,611	\$20,685	\$20,533	\$20,672
<b>2012*</b>	\$23,098	\$28,611	\$28,201	\$28,294

Source: US Census Bureau -ACS 5-Year Estimates 2008-2012\*  
Figures were not adjusted for inflation

**Graph 6**  
**Per Capita Income 1970-2012**



Source: US Census Bureau -ACS 5-Year Estimates 2008-2012

**Educational Attainment**

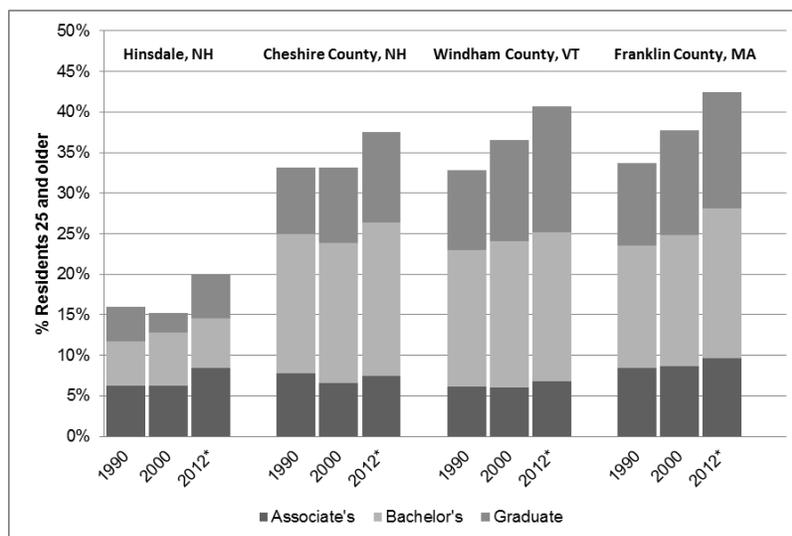
A well-educated workforce is an important resource for both existing and new businesses. As the comparison in Table 6 shows, the educational attainment of Hinsdale residents, especially those receiving Bachelor’s and Master’s degrees, has trailed the averages from the surrounding counties in 1990 and 2000. This trend has continued in 2012. However, the percentage of residents with most of the categories of educational attainment have all increased. The percentage of Hinsdale residents with Master’s degree or higher more than doubled between 2000 and 2012. A visual representation of this trend is shown in Graph 7.

**Table 6**  
**Educational Attainment (1990-2012)**

		High School	Associate's Degree	Bachelor's Degree	Graduate Degree
<b>Hinsdale, NH</b>	1990	73.1%	6.2%	5.5%	4.3%
	2000	82.6%	6.2%	6.6%	2.4%
	2012*	86.4%	8.4%	6.2%	5.4%
<b>Cheshire County, NH</b>	1990	80.8%	7.8%	17.1%	8.3%
	2000	86.2%	6.6%	17.2%	9.4%
	2012*	91.0%	7.4%	19.0%	11.1%
<b>Windham County, VT</b>	1990	81.7%	6.1%	16.9%	9.8%
	2000	87.3%	6.0%	18.1%	12.4%
	2012*	91.2%	6.8%	18.4%	15.5%
<b>Franklin County, MA</b>	1990	82.4%	8.4%	15.1%	10.2%
	2000	88.0%	8.7%	16.2%	12.9%
	2012*	91.8%	9.6%	18.5%	14.3%

Source: US Census Bureau ACS 5-Year Estimates 2008-2012

**Graph 7**  
**Educational Attainment (1990-2012)**

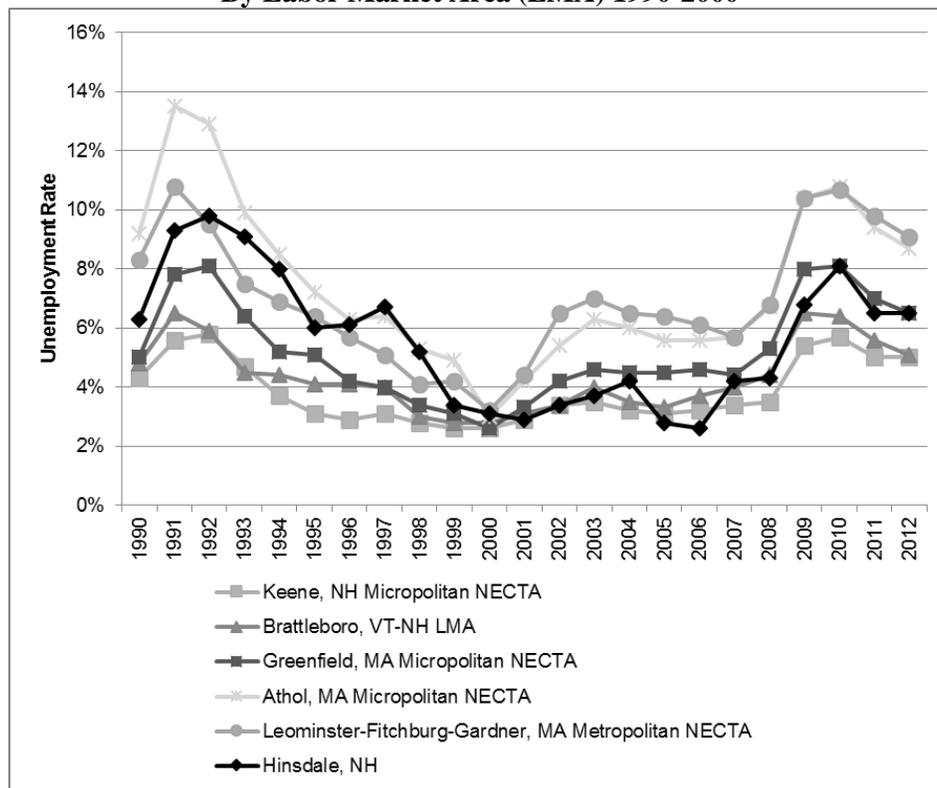


Source: US Census Bureau- ACS 5-Year Estimates 2008-2012

### Unemployment Rates

In New England, labor market areas provided by the Bureau of Labor Statistics are comprised of groups of cities and towns that have economic similarities. Because of Hinsdale’s close economic ties to Vermont, it was the only New Hampshire town assigned to the Brattleboro, Vermont labor market area. The following graph shows the average annual unemployment rate between 1990 and 2012 for Hinsdale, the surrounding labor market areas (see labor market area map in Introduction section), and the United States. The unemployment rate in Hinsdale over the last twenty years has followed the regional trend with a peak in the early 1990’s, following a national recession, followed by a fairly steady declining rate until 2001 (Graph 8). An eight month national recession beginning in March of 2001, according to the National Bureau of Economic Research, resulted in increasing unemployment rates in all nearby labor market areas. A brief recovery was followed by a 2007 recession, which lasted 18 months. In 2012, Hinsdale had an unemployment rate higher than the Brattleboro, VT and Keene, NH market areas, and comparable to the Greenfield, MA market area.

**Graph 8**  
**Average Annual Unemployment Rate**  
**By Labor Market Area (LMA) 1990-2000**

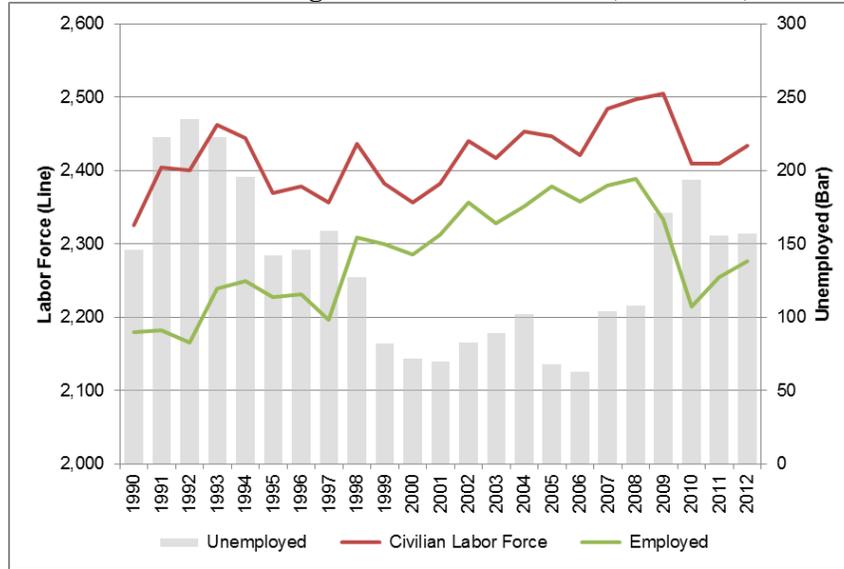


Source: NH Employment Security and US Bureau of Labor Statistics

The next graph that demonstrates the Hinsdale working population is Graph 9 which shows the Hinsdale average annual labor force between 1990 to 2012. It shows both the number of unemployed (shown as vertical bars) and the number of Hinsdale residents in the labor force (shown as lines). The *Civilian Labor Force* is defined as all of the residents that meet the following criteria: those who have jobs or are seeking jobs; at least 16 years old; are not in the military; and are not institutionalized such as prison, hospital, or nursing home. *Employed* is defined as all residents who worked at least one hour for a wage, or were self-employed, or worked at least 15 hours of unpaid labor at a family business, during the week of the 12<sup>th</sup> of the month of reporting. *Unemployment* is defined as those residents who were not working but were able, available, and

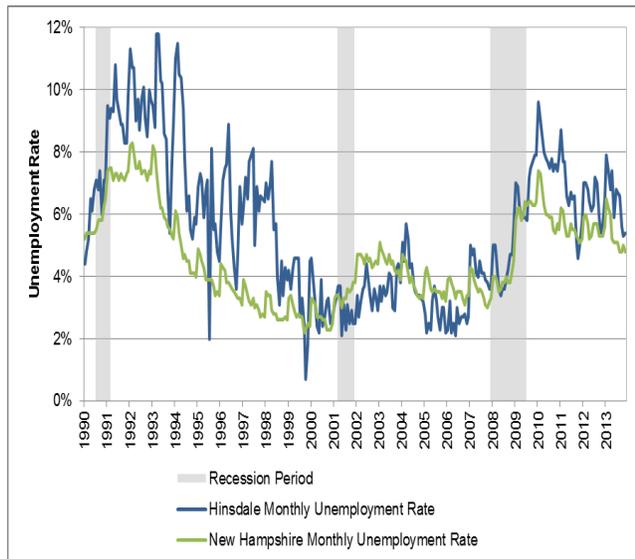
actively looking for work during the week including the 12<sup>th</sup> of the month. It also includes those who were waiting to be called back from a layoff and those who were waiting to begin a new job within 30 days of the report.

**Graph 9**  
**Hinsdale Average Annual Labor Force (1990-2012)**



Source: NH Employment Security and US Bureau of Labor Statistics

**Graph 10**  
**Hinsdale and New Hampshire Unemployment Rate\* (1990-2013)**



Source: NH Employment Security and US Bureau of Labor Statistics

\* Based on monthly averages

The information shown on Graph 10 provides a closer look at Hinsdale and New Hampshire unemployment rates annually from 1990 to 2013. The figures for both the town and the state show a fairly consistent increase in the unemployment rate since January of 2000 with a slight dip between 2004 to 2005 which leveled off until 2008. Another dip occurred in 2013 and will hopefully continue to decline. The nation experienced three recessions between 1990 and 2013, which are shown as the vertical bars. The intersection of the lines and the bars show how the State and Town responded to those recessions.

## Land Valuation and Taxation

### Land Valuation

Municipal property taxes are levied as a percentage of the assessed value of buildings and land in the community. Between 2000 and 2012, the total valuation in Hinsdale rose 131% to over \$357 million. In terms of total municipal valuation per acre of land, Hinsdale's relatively high figure of \$27,103 is due to the compact overall size of the town and unusually high electric utility valuation, which makes up more than one-third of the electric utility valuation of all electric valuation in Cheshire County (Tables 7 & 8).

Looking at a breakdown of valuation by use, the majority of Hinsdale's valuation comes from residential properties, about 15% from commercial and industrial properties, less than 1% from properties in current use, and nearly 33% from utilities. The relatively high percentage of utility valuation is primarily the result of the assessment of the Vernon Dam and of the large number of electric facilities carrying power from Vermont Yankee in Vernon, VT through Hinsdale and into the rest of the region.

**Table 7**  
**Hinsdale Valuation by Land Use – 2012**

	Amount	% of Gross
<b>Land</b>		
Current Use	\$828,024.00	0.2%
Residential Land	\$51,399,060.00	14.4%
Commercial/Industrial Land	\$16,312,240.00	4.6%
<b>Buildings</b>		
Residential Buildings	\$119,873,463.00	33.5%
Manufactured Housing	\$17,200,500.00	4.8%
Commercial/Industrial Buildings	\$35,988,486.00	10.1%
<b>Utilities</b>		
Electric Utilities	\$115,720,300.00	32.4%
<b>Gross Valuation</b>	<b>\$357,322,073.00</b>	<b>100.0%</b>

Source: NH Department of Revenue Administration

**Table 8**  
**Regional Property Valuation Statistics – 2012**

	Hinsdale	Chesterfield	Keene	Swanzy	Winchester
<b>Gross Valuation</b>	\$357,322,073	\$566,339,284	\$1,862,355,431	\$588,323,021	\$283,170,346
<b>Residential (% of Gross)</b>	52.7%	90.7%	61.6%	82.3%	80.0%
<b>Commercial &amp; Industrial (% of Gross)</b>	14.6%	8.0%	35.6%	14.4%	16.0%
<b>Utilities (% of Gross)</b>	32.4%	0.9%	2.6%	2.9%	3.4%
<b>Current Use (% of Gross)</b>	0.2%	0.3%	0.1%	0.4%	0.6%
<b>Gross Valuation / Acre</b>	\$27,103	\$19,406	\$78,014	\$20,428	\$8,045

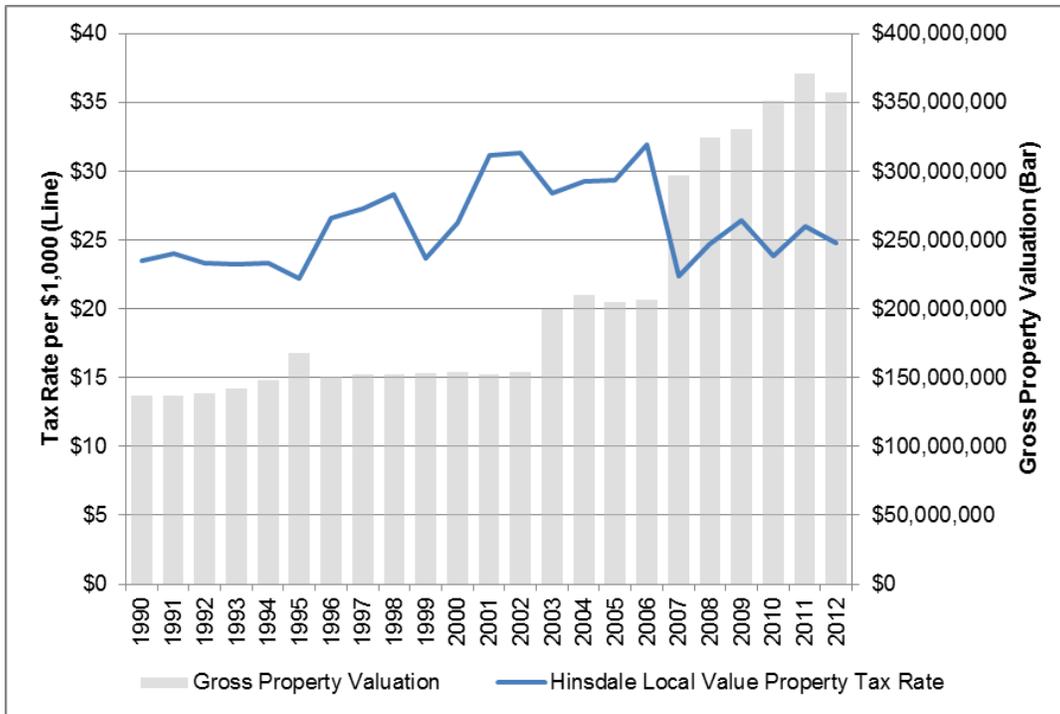
Source: New Hampshire Department of Revenue Administration

**Taxes**

In order to levy a fair and proportional statewide property tax and county tax, the imbalance created by varying municipal assessments must be resolved. This process, called "equalization", involves the adjustment of a town's local assessed value, either upward or downward, in order to approximate the full value of the town's property.<sup>6</sup> The equalized tax rates can then be better compared from town to town.

Between 1990 and 2012, Hinsdale's local tax rate averaged \$26.41 per \$1,000 of assessed value. Throughout the same time period, gross valuation increased tremendously, from nearly \$150 million as recently as 2002, up to over \$350 million in 2012. A visual depiction of this is shown in Graph 11 with the tax rate represented by the line, and the gross property valuations represented by the vertical bars.

**Graph 11**  
**Hinsdale Local Property Tax Rate and Gross Property Valuation (1990-2012)**



Source: New Hampshire Employment Security

Table 9 shows that Hinsdale's 2012 equalized tax rate of \$26.11 is on par with the Cheshire County rate of \$26.67. Looking at municipal tax rates statewide, Hinsdale's is ranked 176 out of 228 (with 1 representing the lowest equalized tax rate in the State).

<sup>6</sup> "Explanation of State Education Property Tax Rate Shown on Your Tax Bill", NH Department of Revenue Administration, 2001

**Table 9**  
**2012 Tax Rate Comparison** (per \$1,000 of assessed value)

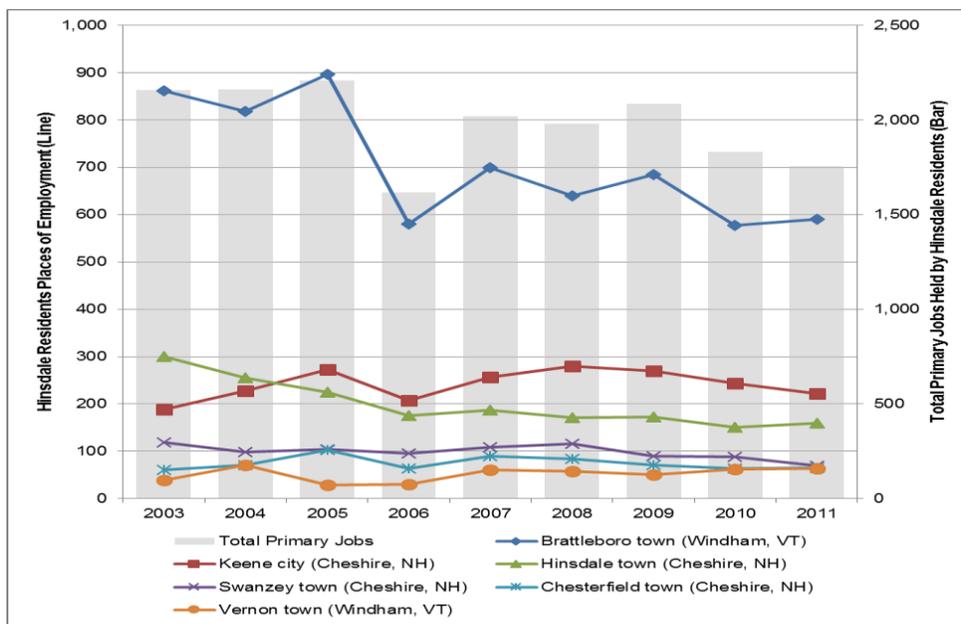
	Hinsdale	Chesterfield	Keene	Swanzy	Winchester	Cheshire County
<b>Municipal Tax Rate</b>	\$5.91	\$3.38	\$12.15	\$5.30	\$6.98	\$7.14
<b>Local Ed. Tax Rate</b>	\$13.51	\$8.14	\$13.54	\$13.19	\$15.09	\$12.22
<b>State Ed. Tax Rate</b>	\$2.34	\$2.38	\$2.47	\$2.41	\$2.41	\$2.33
<b>County Tax Rate</b>	\$3.03	\$2.82	\$3.24	\$3.06	\$3.44	\$3.20
<b>Total Tax Rate</b>	\$24.79	\$16.72	\$31.40	\$23.96	\$27.92	\$24.88
<b>Equalization Ratio</b>	100.0	116.2	106.4	111.6	108.4	107.9
<b>Equalized Tax Rate</b>	\$26.11	\$19.31	\$33.03	\$26.43	\$30.13	\$26.67
<b>State Ranking</b>	175	75	221	181	211	N/A

Source: New Hampshire Department of Revenue

**Business Profile - Commuting Patterns**

Between 2003 and 2011, the total primary jobs held by Hinsdale residents dropped from a high of 2,210 in 2005 to the current level of 1,754 (Graph 12). Of those 1,754 residents of Hinsdale who were employed in 2011, nearly 91% (1,595) commuted into another town for work (Tables 10 and 11). Since the US Census Bureau began releasing these data annually, there was a sharp decline between 2005 to 2006 in Hinsdale workers employed in Brattleboro, Vermont, which employed 591 workers. Keene, the second most common destination, employed 222 workers. Over the same time period, the number of Hinsdale residents working in town fell below 200.

**Graph 12**  
**Places of Work for Hinsdale Residents (2003-2011)**



Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics, Primary jobs only. Public and private-sector jobs, one job per worker.

Table 10 shows the regional commuter activity for the New Hampshire towns within Hinsdale's primary employment area including the number of workers leaving Hinsdale, workers coming in to Hinsdale for jobs and average commuting times. Table 11 shows the same information for the Vermont towns within Hinsdale's primary employment area. The average commuting times for residents in each of the towns shown in these tables is relatively consistent with an average daily commute (of residents to get to work) of 19 minutes. Two exceptions to this include Brattleboro, VT with an average daily commute of 16.5 minutes and Winchester with an average daily commute of 23.9 minutes.

**Table 10**  
**2011 Regional Commuter Activity to Primary Jobs (New Hampshire)**

	Hinsdale	Chesterfield	Swanzy	Winchester
<b>Residents Employed</b>	1,754	1,589	3,114	1,801
<b>Jobs in Town</b>	571	985	1,791	684
<b>Working &amp; living in Town</b>	159 (27.8%)	105 (10.7%)	347 (19.4%)	226 (12.5%)
Commuting out of:				
Residents commuting out	1,595	1,484	2,767	1,575
Commuting rate - out	90.9%	93.4%	88.9%	87.5%
Most common commute to	Brattleboro (591)	Keene (515)	Keene (1,314)	Keene (495)
2nd most common commute to	Keene (222)	Brattleboro (159)	Concord (92)	Brattleboro (128)
3rd most common Commute to	Swanzy (69)	Swanzy (61)	Lebanon (82)	Swanzy (126)
Commuting into:				
Non-residents commuting in	412	880	1,444	458
Commuting rate - in	72.2%	89.3%	80.6%	67.0%
Most common commute from	Brattleboro (52)	Keene (113)	Keene (315)	Keene (76)
2nd most common commute from	Winchester (35)	Brattleboro (88)	Winchester (126)	Swanzy (45)
3rd most common commute from	Keene (32)	Swanzy (79)	Hinsdale (69)	Hinsdale (42)
Mean travel time to work (min.)	19.6	18.1	19.7	23.9

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter) Primary jobs only. Public and private-sector jobs, one job per worker. A primary job is the highest paying job for an individual worker.

\*Mean travel time to work from U.S. Census Bureau American Community Survey (ACS) 5-Year Estimates 2008-2012

**Table 11**  
**2011 Regional Commuter Activity to Primary Jobs (Vermont)**

	<b>Vernon</b>	<b>Brattleboro</b>
Residents Employed (Primary Jobs)	980	5,337
Jobs in Town	865	9,946
Working & living in Town	97 (9.9%)	2,804 (52.5%)
<b>Commuting Out of:</b>		
Residents commuting - out of Town	883	2,533
Commuting rate - out	90.1%	47.5%
Most common commute to:	Brattleboro (464)	Keene (178)
2nd most common commute to:	Guilford (54)	Guilford (151)
3rd most common Commute to:	Keene (24)	Westminster (123)
<b>Commuting Into:</b>		
Non-residents commuting – into Town	768	7,142
Commuting rate	88.8%	71.8%
Most common commute from:	Brattleboro (116)	Hinsdale (591)
2nd most common commute from:	Guilford (90)	Vernon (464)
3rd most common commute from:	Hinsdale (63)	Guilford (415)
Mean travel time to work (minutes)	19.9	16.5

*Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter) Primary Jobs Only.*

## Utilities and Municipal Service

### Utilities - Water and Sewer

There are two water systems serving Hinsdale - the Village system and the North system (see water and sewer map on the following pages). The Village system serves the traditional village area and was constructed in 1910. The system has two 250,000 gallon storage tanks supplied by two wells. The Village system comprises 8.5 miles of water main with 412 connections serving 655 residents and 23 non-residential buildings in the village.

The North system serves areas north of the village and was constructed in 1956. The system has two storage tanks: one 250,000 gallon storage tank, and one 475,000 gallon storage tank, and are supplied by two wells. The North system comprises 13 miles of water main with 471 connections serving 745 residents and 13 non-residential buildings.

Municipal sewer service exists only in the village and is served by Hinsdale's wastewater treatment plant. The treatment plant was constructed in 1979 and has a design flow of 0.3 million gallons per day. The system consists of two pumping stations and serves approximately 575 units. The Hinsdale Water Department continues to work with the Town Engineers on infrastructure improvements.

### Utilities – Electric

As most of the electricity coming into the Monadnock Region is either generated at or routed through Vermont Yankee in Vernon, VT, Hinsdale is in a very favorable location for accessing power supplies for commercial and industrial growth. Electricity from high-voltage transmission lines is transformed to appropriate voltages at the Chestnut Hill substation on Old Chesterfield Road. From the substation, electricity is routed to residences, businesses and industries throughout Hinsdale.

In terms of industrial and manufacturing development, the availability of three-phase power is a necessity. Three-phase power is made up of three single phases of electricity synchronized and offset by 120 degrees. The benefit of three phase power is that, at any given instant, one of the three phases is nearing a peak to provide even power output for high power motors and industrial applications. See map titled *Utility Infrastructure* showing the availability of three-phase power. The Town is encouraged to work with Public Service of New Hampshire (PSNH) for additional information and to coordinate potential for new or expanded areas of development.

### **Utilities - Telecommunications**

To stay competitive in today's digital economy, Hinsdale needs access to high-speed/capacity/capacity internet, also known as broadband. Broadband is in 2014 what electricity was to New Hampshire in the 1930's - a necessity. In a relatively short time period, access to high capacity and reliable broadband has become integral to economic growth and improved quality of life. Many of today's businesses require or prefer high-speed/capacity internet access to conduct their daily business. This includes a portion of the population that have home-based businesses or work partially from home – also known as telecommuters who may rely on high-speed/capacity connections to conduct their business.

The total economic impact of broadband in New Hampshire was estimated at \$634 million in 2010, and in 2011, 11,000 net new jobs were created as a result of expanded broadband.<sup>7</sup> Broadband and economic development are connected in that, as we progress into the future, both are needed for each to be successful.

The use of broadband for economic development improves the ability to retain and recruit businesses, increases business profitability, attracts highly skilled workers, improves the efficiency of municipal services, enhances access to healthcare, and contributes to stronger educational attainment. All are key ingredients to a successful economic development strategy.

As a rural area with low population density and mountainous, forested terrain, the development of high-performing, affordable broadband has been slow in coming to Hinsdale. As of September 2013, there are six providers of broadband in Town, including mobile wireless providers such as AT&T Mobility LLC, Sprint, U.S. Cellular, and Verizon Wireless. The primary fixed wireline broadband providers include FairPoint Communication, Inc., which utilizes DSL technology, and Comcast, which utilizes cable technology.

Since the late 1990s, there have been a number of initiatives within the Southwest Region of New Hampshire focused on improving the availability of broadband in the Region. These include Monadnock Connect, which attempted to aggregate business demand for high-speed/capacity internet access and other telecommunication service in the region, and most recently, the NH Broadband Mapping and Planning Project (NHBMPP). The NHBMPP is a multi-year project, which is aimed at better understanding where broadband exists and how it can be more widely available in the future. In the spring of 2014, the Southwest Region Planning Commission (SWRPC) developed the Southwest New Hampshire Broadband Plan as part of its involvement with the NHBMPP. This Plan identifies regional strategies for improving access to and utilization of high-quality broadband.

---

<sup>7</sup> R. Crandall and H. Singer. "The Economic Impact of Broadband Investment." *National Cable and Telecommunications Association*, 2010.

**Transportation Infrastructure**

There is an important relationship between the level of transportation access available and the type and scale of economic development that can be accommodated. A vacant site just off an interstate exit would attract a much different business than a vacant site on a town road. One of the advantages that Hinsdale has to offer businesses is its relative proximity to Interstate 91 in Vermont. From I-91 exit 1 in Brattleboro, it is only four miles to Route 119 Roadside Commercial District and Monument Road, and only 8 miles to downtown Hinsdale. To help improve connections between Brattleboro and Hinsdale, the Vermont and New Hampshire Departments of Transportation are currently working with town officials and community members to design a new Route 119 bridge over the Connecticut River. This new bridge will minimize any current capacity restrictions and improve access for trucks across the river.

**Table 12  
Proximity to Surrounding  
Towns and Cities**

Driving Distance from Hinsdale	Miles
Brattleboro, VT	8
Greenfield, MA	18
Keene, NH	20
Nashua, NH	65
Manchester, NH	76
Boston, MA	96

*Source: Google Maps*

Other than the minor peak hour congestion found on Route 119 into Brattleboro, the remainder of the State and Town roads in Hinsdale appear free of any capacity restrictions that could interfere with economic development. However, to preserve this roadway capacity, future development along State roads in Hinsdale should include discussions about access management to minimize the number of driveways and to provide internal connectivity between developments.

Rail service, both passenger and freight, is also available in Brattleboro. Passenger service is provided through Amtrak’s Vermonter service which makes one stop northbound and one stop southbound in Brattleboro daily. Nearby passenger rail service may be seen as an asset to certain businesses that rely on reliable, fast transportation access. Freight rail service is operated by New England Central Railroad and has two northbound and two southbound trains moving through Brattleboro daily. The State of New Hampshire owns the right of way of an abandoned short line rail in Hinsdale, called the Fort Hill Branch, which could connect into the New England Central Railroad after some major infrastructure repairs and development. Town of Hinsdale is working with the Southwest Region Planning Commission and other stakeholders to examine the long term benefit/cost of reviving this short line area in a separate planning effort.

Since late 2012, Hinsdale has purchased public transportation service connecting Hinsdale to Brattleboro, VT from the Vermont based transit provider, “The Current”. Transit service is designed to accommodate typical commuting hours and includes 5 round trips to Hinsdale Monday through Saturday. The Hinsdale-Brattleboro route is conveniently connected to a number of other bus routes in Vermont as well as the Amtrak Vermonter service.

**Tax Increment Finance Districts - An Overview<sup>8</sup>**

The establishment of a Tax Increment Finance district (TIF) is a creative way to finance infrastructure improvements, foster economic development, and generate tax revenue without burdening the individual taxpayers. The Town of Hinsdale demonstrated support for economic growth by establishing a TIF district in 2003 in the Monument Street area.

A Tax Increment Finance district is an important community development tool that can be used to finance community improvements such as roads, water and sewer service, and green space without burdening the municipal tax base. The increased tax revenues generated by new or expanded businesses locating within the

<sup>8</sup> Excerpts from “Tax Increment Finance Districts for Jaffrey, NH”, Town of Jaffrey, 1999

identified TIF district are captured and used to finance the predetermined infrastructure improvements. Taxpayers in the community are not charged an extra tax for these improvements. Once the improvements have been paid for, the additional tax revenues generated by increased valuations on properties within the TIF district flow into the Town's general fund.

To create a TIF district, a community must:

- ◆ Adopt the provisions of RSA 162-K<sup>9</sup>, Municipal Economic Development and Revitalization Districts;
- ◆ Conduct a public hearing per RSA 162-K:4;
- ◆ Establish a development program and tax increment financing plan for the district(s)
- ◆ Provide the County Commissioners and School Board with the opportunity to meet with the governing body (Selectmen), inform them of any fiscal and/or economic impacts and apprise them that they may present their recommendations at the public hearing;
- ◆ Create an advisory board for each district to advise the governing body and district administrator.

A TIF operates in the following manner:

1. The community designates a particular area(s) as a TIF district;
2. A development plan is prepared for the district which outlines the public improvements required for the district as part of the revitalization efforts;
3. A financial plan for the public improvements in the district is prepared which includes:
  - a. Total current assessed value (original assessed value) for the district prior to improvements;
  - b. The district's captured assessed value (difference between assessed value before and after improvements);
  - c. How the captured assessed value will be used to finance the district improvements (including the issuance of bonds).

## Municipal Policy Analysis

An important element of economic development planning is ensuring that current municipal policies and regulations can support the policies, goals and actions recommended in this plan. Accordingly, the directions outlined in the 2002 Master Plan, which have guided policy decisions in the town to this point, and the Zoning Ordinance, which was last amended on March 13, 2012 were examined relative to the policies and goals recommended in this plan. In addition to ensuring compliance with the existing policy framework, the analysis also examines the policies and regulations in the surrounding towns to ensure that Hinsdale is prepared to compete regionally for new businesses.

The limitations placed on smaller or start-up businesses and industries by the required four-acre minimum lot size in industrial zones might be addressed by reducing the minimum lot size to one acre. For many small businesses a four-acre minimum lot size may be seen as financially prohibitive and as more space than they need to operate and could lead them to look elsewhere for sites. A smaller minimum lot size is consistent with neighboring towns (Table 13) and would encourage smaller industrial businesses to locate in Hinsdale where they can establish themselves and eventually grow into larger companies.

<sup>9</sup> For the full text of RSA 162-K, visit: <http://www.gencourt.state.nh.us/rsa/html/indexes/162-K.html>

**Table 13  
Building Requirements for Hinsdale and Surrounding Towns**

District	Maximum Height	Minimum Lot Size (sq. ft.)	Minimum Lot Frontage	Minimum Front Setback	Minimum Side /Rear Setbacks	Building Coverage (Maximum)
<b>Hinsdale</b>						
Business	35	5,000	41	0	Party walls	100
Roadside Commercial	35	43,560	100	35	15	30
Industrial	35	174,240	150			
<b>Keene</b>						
Commerce	35	15,000	50	20	20	---
Industrial	35	N/A	50	20	15/20	---
<b>Chesterfield</b>						
Village	---	2 acres	200	50	20	10
Commercial/Industrial	---	2acres	200	50	30	50
Office, Retail & Service	---	2acres	200	75	30	20
<b>Winchester</b>						
Highway Commercial	---	5 acres	500	50	25	---
Central Business	---	10,000	75	10	10	---
Commercial	---	20,000	150	20	10	---
Commercial/Industrial Special Use	---	5 acres	500	100	50	---
<b>Swansey</b>						
Business	---	1 acre	125	75	20	---
Industrial Park	---	2 acre	200	50	20	---
<b>Brattleboro</b>						
Village Center	35	6,000	60	10-25	10/20	60
Commercial	60	15,000	100	varies	20/30	90
Industrial	60	22,000	75	25	25/50	75

Source: Town Zoning Ordinances as of May 2014

The permitted uses in Hinsdale's business and industrial zones are shown in Table 14.

**Table 14  
Uses Permitted in Hinsdale's Business, Roadside Commercial, and Industrial Districts**

<b>Business (B) District</b>	<b>Roadside Commercial (RC) District</b>	<b>Industrial (I) District</b>
Any use permitted in the Residential District, except manufactured housing	Any use permitted in the Business District, excluding any new single family housing	Any uses allowed in the Roadside Commercial and Business Districts except Residential District uses
Hotel, inn, tourist court, motel, including such retail business within these permitted uses as are conducted for the convenience of the residents thereof	Commercial greenhouse or nursery	Manufacture, production, fabrication, packaging, processing, assembly and/or repair of goods
Restaurant, cafeteria, bakery and confectionery shop	Building trade	Machinery & transportation equipment, farm implement and contractor's equipment sales, service and repair
Business & professional offices	Drive-in restaurant	Public utility
Retail business establishment	Veterinary hospital	Warehouse, wholesale, distribution and/or service
Bank or financial institution	Lumber yard	Freight or trucking terminal
Personal service shop or service establishment	Office/business complex	Contractor's yard
Indoor theatre and private club	Processing/packaging	Public garage
Gasoline service station, commercial parking lot	Storage facility	Car wash
Clinic or hospital	Shopping Center	Parking lot
Convalescent home/ nursing home Tilling of soil and the growing & harvesting of crops & horticultural commodities, but not including general farming such as: dairying, livestock, and poultry raising and other agricultural enterprises or uses	Excavation of natural materials is permitted in this district in accordance with RSA 155E, New Hampshire State Statutes and with the approval of the Hinsdale Planning Board	Other uses, upon the findings by the Hinsdale Planning Board, that such use is of the same general character as those permitted and which will not be detrimental to the other uses within the district or the adjoining land area
Medical/dental complex	Adult-oriented businesses	Personal Wireless Service Facilities
Funeral establishment, mortuary		
Printing, publishing establishment		
Research, design & testing lab		
Child Day care agency		
Accessory uses which are clearly incidental to the uses permitted herein		
Other uses upon findings by the HPB that are of the same general character as those permitted		
Town or State facility		

Source: Hinsdale Zoning Ordinance

**Goals and Objectives**

Specific goals and objectives related to this section are located in the Land Use Section.

## Chapter 5 - Conservation & Preservation

**Hinsdale's Natural Resources**  
**Water Resources**  
**Wildlife & Wildlife Habitat**  
**Agricultural Resources**  
**Forest Resources**  
**Conservation Land**  
**Conservation Commission**



*Photo by Dorianne Almann*

### Recommendations

The Conservation and Preservation section of the Master Plan uses the environmental criteria of topography, soils, and water resources to evaluate the town's land area and its potential for various types of development. Although natural features can often enhance a particular development site, they just as often pose significant barriers to development; this can be seen by examining locations where existing development has occurred. It is true that transportation routes are another factor in the location of development; however, to a great degree, the natural features of the land also determine the location of roads and the former railroads.

This section enables the Planning Board to address areas of the town that are most suitable for development and evaluate the existing limitations of the land that would need to be accommodated. Environmental limitations may include steep slopes, seasonally wet soils, wetlands, floodplains, shallow bedrock, and aquifers.

This section also identifies the areas of town that deserve special protection due to the environmental function of the land, for example, a specific wetland area that provides flood water storage during times of heavy rain. In addition, this section notes specific areas the town may wish to conserve for future community use due to their aesthetic or historic qualities. Not all open spaces need to be steep slopes or wetlands. Some areas may be prime lands set aside for future school sites, parks, intensive farming operations, wildlife habitat or other limited low intensity land uses that add value to the overall community.

### Hinsdale's Setting

Hinsdale has a total land area of 14,497 acres. The topography of Hinsdale is dominated by steep valleys running in a southwestern direction from the northeast corner of Town. The Town's defining features are the River Valleys which the Ashuelot and Connecticut Rivers flow through. Hinsdale borders Pisgah State Park to its east and Wantastiquet State Park to its north.

Topography is an important consideration when assessing the development potential of land. Soil conditions are directly related to topography, with slope and drainage features having a determining influence. While slope is only one of many factors influencing the soil type of a particular site, it is the primary component of topography. The following discussion defines slope and addresses the influence slope has on the development potential of land.

## Hinsdale's Natural Resources

### Soils

Soils information is an important consideration in land use planning since the various characteristics of soils (such as steepness, wetness, flood susceptibility, etc.) have such an impact on land use opportunities.

### Steep Slopes

Generally speaking, the steeper the land the greater the possibility for erosion and sedimentation, and the more problems can be encountered in siting wells and septic systems. Steepness is measured in terms of slope, which is defined as the change in elevation (vertical distance) over horizontal distance; the more abrupt the change in elevation, the steeper the slope. Slope is measured and expressed as a percentage that represents the relationship between elevation and horizontal distance.

Typical categories that might be seen on a slope map are 0-8%, 9-15%, 16-24%, and over 25%. Land in the 0-8% slope category is generally preferred for all types of development. Gradual slopes are most favorable for building roads and public water and sewer facilities can be installed at the least cost to the community. Also, excavations for most structures can be done at a minimal cost and the erosion associated with such work can be reduced easily on-site. The exceptions to this would be wetland areas and floodplains because they occur primarily in the 0-5% slope range. An examination should be made as to the environmental function of such wetland and floodplain areas, as well as the risks that might be inherent in development before such lands are utilized for building sites.

As slopes increase to 8-15%, the land is more suited to less intensive forms of development. Carefully placed residential dwellings and some agricultural uses (orchards and field crops) may be suitable for this terrain. As development approaches a 15% gradient, it requires more careful consideration for all types of development. Once a slope exceeds a 15% gradient, all forms of development are considered unsuitable, although it is really at the 25% slope and above that development becomes very problematic. Areas having 25 percent or greater slope have benefits as conservation areas for low intensity recreational uses and wildlife habitats. Also, their disturbance can create serious erosion problems, washing out topsoil and even roadways downhill. Forestry practices on such slopes must be confined to low-impact operations, with proper erosion controls in place. Other important controls for forestry uses include minimal basal area cutting, and skid roads designed for steep slope harvesting.

When developing steep terrain, the potential for environmental damage increases as the slope gradient increases. Overly steep slopes consisting of sands and gravels left after the excavation of an area will quickly gully and erode. Erosion control barriers should be in place at the time of excavation and prompt re-seeding and re-grading should take place afterwards. Surface water run-off rates and erosion factors increase as the slope steepness increases. This will cause sedimentation of the surface waters down slope and will clog stream channels and rivers if no erosion controls are in place.

### Hydric Soils

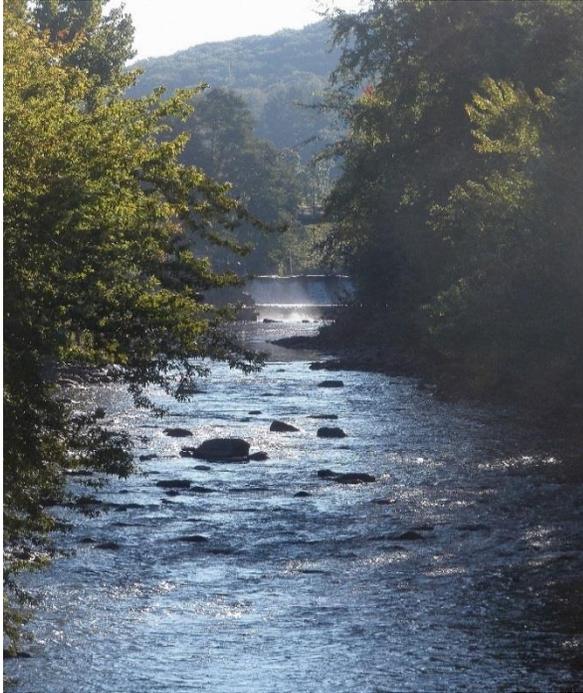
Hydric soils are defined as those soils that are permanently or seasonally saturated by water, as found in wetlands. They are aerobic which is essential for plant life and other organisms to survive there. In Hinsdale, 351.4 acres, or 2.4% of total area, has been identified as hydric soils.

### Agricultural Soils

Prime farmland soils have many desirable qualities. Characteristics of these soils include a moderate pH, fine textured particles, infrequent flooding during growing season, deep to bedrock depth, gentle slopes and few surface stones. In New Hampshire, the best agricultural soils comprise only 6.6% of the state's total land area.

In terms of farm acres, that amounts to approximately 380,000 acres statewide. Protection through conservation is an effective way to ensure that these lands will remain for future generations. Currently, only about 11% of prime farmland soils statewide are protected, according to the Society for the Protection of New Hampshire Forest (SPNHF).

According to the Cheshire County Soil Survey, there are 1,129.3 acres of prime farmland soils, or 7.8% of total land area in Hinsdale.



*Photo by Dorianne Almann*

### **Forest Soils**

Forest soil fertility depends on a combination of organic matter, minerals, water and aeration. Levels of mineral nutrients are derived from rocks within the soil which have a direct influence on the soil productivity for trees and other plants. Soil compaction, or lack thereof, can also influence the fertility of the soils. Compacted soils prevent the proper aeration and water permeability. Likewise, soils that have little or no ground cover or shallow bedrock have potential to cause erosion and a loss of nutrients due to run-off which can diminish soil productivity for tree growth. Best management practices should be utilized to help to prevent soil compaction and erosion.

### **Water Resources**

Water is a vital resource in southwest New Hampshire. Clean, high quality water resources are needed to help preserve ecosystems and support wildlife habitats. Rivers and streams also serve as important wildlife travel corridors. Lakes serve as resting places for migratory birds. Water is essential to many human activities.

Recreational activities like fishing, swimming, and boating rely on the region's surficial water resources. Residents in the southwest region rely on the region's water resources for their drinking water.

### **Lakes & Ponds**

Southwest New Hampshire has abundant surficial water resources. There is an estimated 6,149 miles of shoreline in the southwest region<sup>10</sup>. Water bodies cover an estimated 21,791 acres (3%) of land in the southwest region<sup>11</sup>. Hinsdale has 319.1 acres (or 2.2% of total area) of lakes and ponds.

### **Rivers & Streams**

There are six Designated Rivers in the region. These include the Ashuelot River, Cold River, Connecticut River, Contoocook River and North Branch Rivers, Piscataquog River, and the Souhegan River. Hinsdale is fortunate to have two of these Designated Rivers flow through town, the Connecticut River and the Ashuelot River. A Designated River is managed and protected for its outstanding natural and cultural resources in accordance with RSA 483, The Rivers Management & Protection Act<sup>12</sup>. These rivers are designated through a nomination process which is supported by local municipal officials and riverfront communities and approved by Governor and Council. After it has been approved, a Local Advisory Committee is formed of volunteers

<sup>10</sup> *NH Granit Database 2014*

<sup>11</sup> *NH Granit Database 2014*

<sup>12</sup> New Hampshire Department of Environmental Services, Designated Rivers accessed 1/3/2014 from <http://des.nh.gov/organization/divisions/water/wmb/rivers/designriv.htm>

who develop and implement a River Management Plan<sup>13</sup>. The Local Advisory Committee also reviews and comments on all applications pertaining to the DES Alteration of Terrain Program, the Wetlands Program and the Shoreland Program that require a state or federal permit before the permitting programs can issue the permit<sup>14</sup>. Hinsdale has approximately 60.4 miles of rivers and streams.

### **Floodplains**

Floodplains are land areas that are susceptible to flooding. These areas actually have two parts: the floodway and floodway fringe. The floodway includes the channel and an additional area that often carries excess flow. The floodway fringe (more commonly known as the 100-year floodplain or the Special Flood Hazard Area) is a broader area over which floodwater may spread, but where the flow velocity is slower. This is an important distinction for land use planning, since some uses can safely occur in the Special Flood Hazard Area, but not in the floodway.

The Federal Emergency Management Agency (FEMA) has mapped the floodplains for all relevant municipalities; the boundaries of the floodplains were computed at cross sections interpolated between cross sections, based on hydraulic information and past experience of flooding. Flood Insurance Rate Maps define the 100-year floodplain (meaning there is a 1 out of 100 chance of flooding in any given year; over long periods of time, base floods will occur on the average once every 100 years), and an area of 500-year floodplain (a 1 out of 500 chance of flooding in any given year).

The Flood Insurance Rate Maps for Hinsdale became effective April 15, 1981, and the town then entered into the National Flood Insurance Program, which permits homeowners who live in the floodplain to purchase insurance for their property. However, in order for landowners to be able to purchase this insurance, the town needed to adopt a Floodplain Management Ordinance, which it has done. This Ordinance requires the town to keep track of all development in the Special Flood Hazard Areas (SFHA) and ensure that if any new construction or substantial improvements to a home are proposed for the SFHA, the lowest enclosed floor must be at or above the base flood elevation.

The purposes of this requirement are to minimize the potential for flood damage, to avoid damage-prone uses in the floodplains, and to reduce development pressure in flood hazard areas. Communities that do not maintain and/or enforce their floodplain regulations may be suspended from the insurance program, which could have serious consequences for any affected landowners if their mortgage holders wished to cancel the mortgage. For these reasons, it is very important for the town to keep the floodplain management ordinance up to date by amending it as necessary, and to monitor all development within these areas.

Hinsdale has 2,339.6 acres of floodplains, or 16.1% of the total land area. These areas are primarily located on the western boundary of the Town along the Connecticut River, and also along the Ashuelot River. These soils are prone to flooding primarily in the late winter and early spring months. They are characteristically fine, sandy, and sometimes loamy. Rivers and streams are responsible for the deposition of these sediments during times of high water. Oftentimes these soils are rich in nutrients and suitable for agricultural activities.

### **Wetlands**

The definition of a wetland in New Hampshire is listed in RSA 482-A which states, “Wetlands means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal conditions does support, a prevalence of vegetation typically adapted for life in saturated soil conditions”. It also provides 12 primary wetlands functions, which include: flood storage, groundwater

<sup>13</sup> New Hampshire Department of Environmental Services, Rivers Management Protection Program: Overview accessed 1/3/2014 from <http://des.nh.gov/organization/divisions/water/wmb/rivers/categories/overview.htm>

<sup>14</sup> New Hampshire Department of Environmental Services “Are You Planning on Working in a Designated River Corridor?”

recharge, sediment trapping, nutrient trapping/retention/transformation, wildlife habitat, fish and aquatic life habitat, ecological integrity, scenic quality, educational potential, recreation, shoreline anchoring, and noteworthiness. Wetlands generally include swamps, marshes, bogs, vernal pools, and similar areas.

Since the wetlands provide such important functions for the environment, protection of the wetlands should be a priority. The NH Department of Environmental Services (NHDES) estimates that more than 80% of the pollutants in surface water and wetland areas is attributed to runoff from storm water. Therefore, providing a sufficient buffer to filter storm water before it enters these areas is a key step to maintaining the water quality. An effective method of protection is the use of best management practices which are often simple measures and can be relatively inexpensive.

There are an estimated 200,000 acres of combined inland and tidal wetlands in the state of New Hampshire. Hinsdale has approximately 432 acres of wetlands which is 3% of Hinsdale’s total area. The types of wetlands in the Southwest Region of New Hampshire include *Emergent wetlands* (marshes, meadows, and fens), *Scrub-Shrub wetlands* (bogs), and *Forested wetlands* (predominantly Red Maple Swamp). Unique wetland features provide various functions. *Vernal Pools* are small pools that are high functioning for a short period of time in the spring. These serve as a rich food supply and breeding grounds for many types of amphibians. The true importance of these areas can be misunderstood and therefore unprotected thereby endangering a vital part of the ecosystem. Organized events such as the spring “Salamander Crossings” around the region have helped raise an awareness of the areas and the value of protecting them. *Riparian* areas are another sensitive and important part of wetlands that function as habitat areas for wildlife. These include the vegetated areas along stream banks and other water bodies. In addition to serving as wildlife habitat areas and corridors, they provide bank stabilization, moderate stream flow, and provide shade along the water’s edge.

Table 1 provides a breakdown of acreage and the percent of total land that each resource has in Hinsdale.

**Table 1**  
**Hinsdale’s Natural Resources**

	Acres	Percent of Total Land		Acres	Percent of Total Land
USDA Hydric Soils	351.4	2.4%	Prime Farmland Soils	1,129.3	7.8%
Steep Slopes	4,473.3	30.9%	Farmland of Local Importance	3,241.1	22.4%
Conservation Land	1,778.5	12.3%	Farmland of Statewide Importance	584.1	4.0%
Stratified Drift Aquifers	4,695.3	32.4%	100-Year Flood Zones	2,339.6	16.1%
National Wetlands Inventory	432.0	3.0%	Rivers and Streams	60.4 (miles)	
Lakes & Ponds	319.1	2.2%			
Total Town Area (land and water acres combined)					14,497.3

Source: NH Granit Database 2014

### Wildlife & Wildlife Habitat

The vast majority of high-quality wildlife habitat in Southwest New Hampshire is not conserved. Only 5.8% of wildlife habitat is held in conservation (Table 2). Hinsdale has a higher than average percentage in the region with 9.9% of conserved wildlife habitat.

**Table 2**  
**Conserved Wildlife Habitat in Southwest New Hampshire**

Municipality	Total Acres*	Wildlife Habitat Acres Conserved	% Wildlife Habitat Conserved	Municipality	Total Acres	Wildlife Habitat Acres Conserved	% Wildlife Habitat Conserved
Alstead	25,211	433	1.7%	Nelson	14,898	913	6.1%
Antrim	23,368	1,609	6.9%	Peterborough	24,592	676	2.8%
Chesterfield	30,428	4,197	13.8%	Richmond	24,152	1,037	4.3%
Dublin	18,553	175	0.9%	Rindge	25,469	270	1.1%
Fitzwilliam	23,060	271	1.2%	Roxbury	7,845	284	3.6%
Francestown	19,442	476	2.4%	Sharon	10,022	120	1.2%
Gilsum	10,682	337	3.2%	Stoddard	33,950	5,466	16.1%
Hancock	20,004	1,795	9.0%	Sullivan	11,985	785	6.5%
Harrisville	12,946	165	1.3%	Surry	10,241	1,918	18.7%
<b>Hinsdale</b>	<b>14,497</b>	<b>1,436</b>	<b>9.9%</b>	Swanzy	29,012	439	1.5%
Jaffrey	25,709	264	1.0%	Troy	11,274	3	0.0%
Keene	23,867	1,206	5.1%	Walpole	23,470	418	1.8%
Langdon	10,446	493	4.7%	Westmoreland	23,578	267	1.1%
Marlborough	13,212	20	0.2%	Winchester	35,556	6,477	18.2%
Marlow	16,922	596	3.5%	Windsor	5,451	905	16.6%
<b>SWRPC Total</b>	<b>579,839</b>	<b>33,446</b>	<b>5.8%</b>				

Source: NH Wildlife Action Plan 2010: Wildlife Habitat Ranked by Ecological Condition, 2010;

\*Total land and water acres

Although Hinsdale has a higher than average rate of conserved wildlife habitat areas compared to the other communities in the region, only 18.8% of the highest priority areas (Tier 1) are conserved. Development in these areas is likely to displace wildlife into areas that may be detrimental to both the wildlife and residents. Table 3 shows a breakdown of the three tiers of habitat areas and the amount of conserved land in each tier.

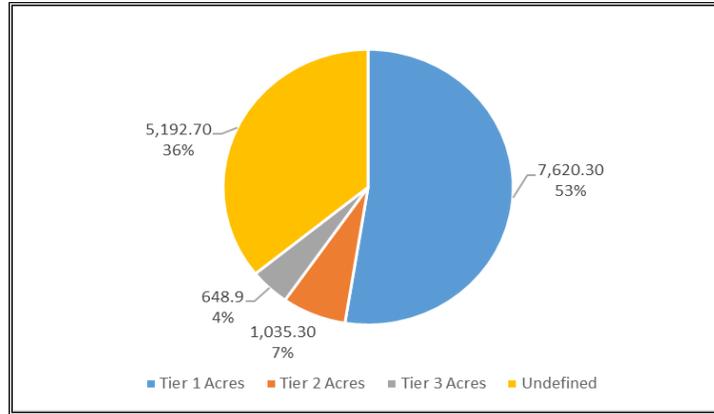
**Table 3**  
**Hinsdale Wildlife Habitat Area**

Total Acres	Land Acres	Tier 1 Acres	Tier 1 Conserved Acres	Tier 2 Acres	Tier 2 Conserved Acres	Tier 3 Acres	Tier 3 Conserved Acres
14,497	13,085	7,620.3	1,432.0	1,035.3	14.0	648.9	16.4

Source: NH Wildlife Action Plan 2010: Wildlife Habitat Ranked by Ecological Condition, 2010

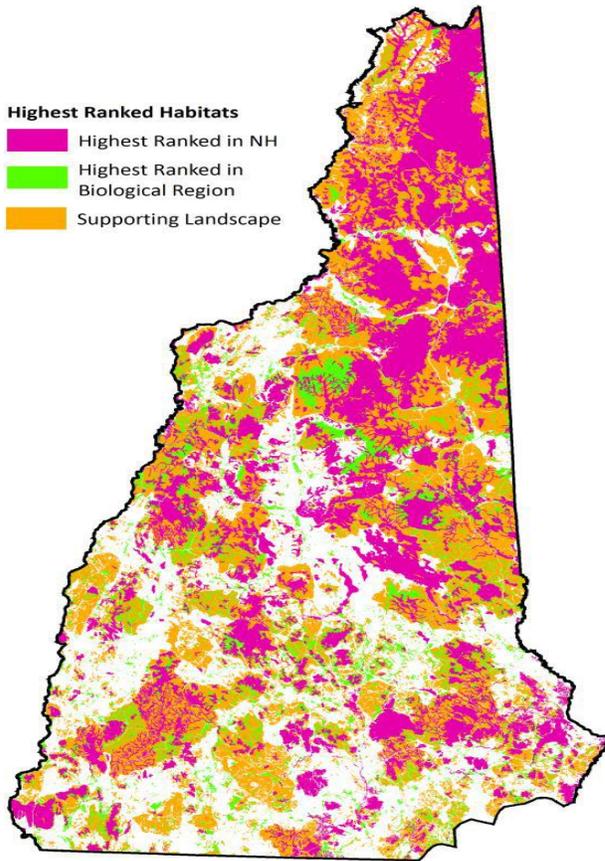
A visual representation of Hinsdale’s wildlife habitat areas is shown in Graph 1. The *undefined area* on the graph is land that has not been identified in the NH Wildlife Action Plan as meeting the criteria of wildlife habitat areas.

**Graph 1**  
**Hinsdale Wildlife Habitat Acres in Tiers**



Source: NH Wildlife Action Plan 2010: Wildlife Habitat Ranked by Ecological Condition, 2010

The map of New Hampshire’s Highest Ranked Wildlife Habitat areas shows that a significant proportion of the Regions’ highest quality wildlife habitat is in Hinsdale.



Source: NH Wildlife Action Plan

### New Hampshire’s Highest Ranked Habitats

The loss of wildlife habitat is primarily due to the conversion of land uses such as commercial and residential development and farming. As development continues, wildlife faces challenges for survival and safe corridors to travel forcing them into more densely populated areas and roadways. An additional threat comes from non-native plant species moving aggressively into the area monopolizing light, nutrients, water and space to the detriment of the native plants. This change in the ecosystem can affect the food and nesting sources of many wildlife species. With the loss of adequate habitat, there is an even greater concern for the federally and state listed endangered species and the species of special concern.

## Hinsdale's Threatened, Endangered &amp; Species of Concern

	Threatened	Endangered	Special Concern
<b>Plants</b>			
American climbing fern		X	
butterfly milkweed		X	
Canada shore quillwort		X	
crested sedge		X	
** Downy False Foxglove		X	
** flat-stem pondweed		X	
** grass-leaved mud-plantain	X		
Great St. John's-wort		X	
*** Hairy-fruited Sedge		X	
Houghton's Umbrella Sedge		X	
Incurved Umbrella Sedge		X	
** Large Whorled Pogonia		X	
large-fruited sanicle	X		
*** Lesser Clearweed	---	---	---
*** long-leaved pondweed	X		
long-spined sandbur		X	
Marsh Horsetail		X	
** meadow garlic		X	
narrow-leaved glade fern		X	
northern horsebalm		X	
Perfoliate Bellwort		X	
* pygmy-weed		X	
running groundsel		X	
Sandbar Willow		X	
* Showy Goldenrod		X	
showy orchid	X		
small-headed rush		X	
smooth rockcress		X	
upright false bindweed		X	
Virginia stickseed		X	
wild chives		X	
<b>Birds &amp; Mammals</b>			
*** Small Footed Bat		X	
** Bald Eagle	X		
Cerulean Warbler			X
<b>Amphibians</b>			
** Marbled Salamander		X	
<b>Dragonflies &amp; Damselflies</b>			
** Big Bluet	---	---	---
** Blue-fronted Dancer	---	---	---
** Citrine Forktail	---	---	---
*** Rapids Clubtail			X
** Riverine Clubtail			X
Skillet Clubtail			X
** Tule Bluet	---	---	---
<b>Mollusks</b>			
Dwarf Wedge Mussel		X	

Quality of rare species population \* = High \*\* = Very High \*\*\* = Extremely High  
 --- = rare plant or exemplary natural community not threatened, endangered, or of concern  
 Source: NH Natural Heritage Bureau July 2013

## Agricultural Resources

Farming in New Hampshire is a vital part of our landscape and heritage. The state and region have seen many changes in recent years. According to the New Hampshire Farm Viability Task Force Report entitled *Cultivating Success on NH Farms*, the trend in agriculture has been shifting from larger commercial farms to smaller farms that have the “direct to consumer” sales market. Likewise, a trend in the consumer has been to buy fresh farm products from the local market through farm stands, farmer’s markets, and in food co-operatives. Additionally, crops such as strawberries, blueberries, apples and other fruit trees have become a favorite pastime for the pick- your-own market. These trends show that the farmers have been responding to the consumers wants and needs in a way that brings about community connections.

Prime farmland has been, and will continue to be, a desirable potential for development because of the suitability characteristics it possesses. The lack of site clearing, fertile soils for healthy lawns, and suitable soils for septic systems render these lands an easy target for development of residential and commercial uses.

There are 1,129.3 acres of prime farmland (or 8.2% of total land), 584.1 (or 4.0% of total land area) of farmland of statewide importance, and 3,241.1 (or 22.4% of total land area) of farmland of local importance in Hinsdale. *Prime farmland* is farmland that is considered to possess the highest quality soils for the production of crops and grazing. *Farmland of statewide importance* is farmland that is not prime, but is considered to be farmland of statewide importance for the production of food, feed, fiber, forage and oilseed crops. *Farmland of local importance* is farmland that is not prime, or of statewide importance, but that which has local significance for the production of food, feed, fiber, and forage.

## Forest Resources

Forest lands have played a significant role in creating an identity for the state of New Hampshire as well as the Southwest Region. Forests have been a character defining feature and an economic asset for tourism. Hinsdale has approximately 10,000 acres of forested lands, according to the 2006 National Land Cover Database (NLCD).

Forest types can vary predominantly due to soil types and conditions, and exposure to climate. Appalachian oak-pine forest systems are found in southwestern New Hampshire. These are usually found in areas below 900 ft. in elevation. Natural communities of this system are generally along the Connecticut River watershed. The dominant forest types of this system are mesic Appalachian oak-hickory forests (in dry to mesic soils), and dry Appalachian oak forests (in dry soils). Other types that are present in dry-mesic conditions are oak-mountain laurel forests and semi-rich oak-sugar maple forests. In weakly enriched soils, the semi-rich oak-sugar maple forest is present, and in shallow rocky till areas, the pitch pine-Appalachian oak-heath forest and chestnut oak forest/woodland is interspersed with dry Appalachian oak forest.

Preservation of forests in New Hampshire and in the southwest region helps to maintain the rural character and is essential to maintaining a healthy ecosystem. Challenges in this effort include loss of un-fragmented forested areas due to development, invasive insects and exotic diseases, climate change, and unmanaged forest practices. Benefits to maintaining and protecting forests are many, including: economic benefits such as tourism, employment, and timber harvesting; protection of wildlife habitats; maintaining important functions within the ecosystem; and recreational and aesthetic values.

## Conservation Land

The Town of Hinsdale has over 300 acres of open space: approximately 220 acres of recreational and 85 acres for water conservation. Additional land will be needed as Hinsdale continues to grow, especially land in North

Hinsdale since a majority of residential growth is located in this vicinity. The need for open space should not be seen as an expendable luxury or as an effort to stop development. It is an essential component in the quality of life, economic vitality, and appearance of Hinsdale. Open space is needed to provide wildlife habitat, storm water detention, flood storage, groundwater recharge, and to provide the capacity for future public facilities such as schools, cemeteries, and parks.

Fragmentation is a challenge in providing quality conservation tracts of land. Working across borders with neighboring communities to develop an overall conservation plan takes some coordination. The benefits however, are many. Providing these un-fragmented areas helps to provide a greenbelt for wildlife migration, breeding & nesting, and safety from highways. Disconnected conservation land, be it within local administrative borders or across state lines, can be problematic for wildlife corridors. When land is placed in conservation in disorganized pieces it could precipitate development on land in an area where a particular wildlife habitat has emerged.

The changing demographics can also be a challenge in the decision to put land in conservation versus selling the land for development. As the population ages, younger generations sometimes may not have the same connections to the landscape as past generations and may be more willing to sell their share of the land. In addition to the choice of placing land in conservation, is the challenge in funding that is needed for the fees associated with the land transaction and legal documents.

Land stewardship is an important part of having successful conservation land. Good land stewardship includes an annual monitoring of the land to check for violations, unauthorized and undesirable use of the land, and discussions with the landowner. While 99% of conservation land in the Region is considered “permanent”, land stewardship needs to be omnipresent as such lands could be taken out of permanent status and turned into another land use by eminent domain or other clauses. One of the challenges to providing sufficient land stewardship is the funding to keep it going.

### **Conservation Commission**

In April of 1990, the Town of Hinsdale appointed a Conservation Commission. Through continuing support from the efforts of the Conservation Commission, conservation priorities that are important to the town can be achieved with continuing citizen volunteer efforts. Allocation of additional resources, including town funds for the purchase of land and/or conservation easements, is needed. A continuing commitment is crucial so that the town has the financial ability to act quickly in coordination with future state and federal efforts, including the Trust for New Hampshire Lands.

Since it is important for the Conservation Commission to have an overview of all conservation efforts taking place in the Town of Hinsdale, the Conservation Commission should maintain a record of efforts by private landowners to preserve and conserve historic, cultural and/or natural resources. Landowners should be encouraged to provide information concerning their private conservation or development efforts, such as conservation easements or development restrictions, to the Conservation Commission. This could be on a confidential basis, if desired, to permit the Conservation Commission to facilitate a coherent and comprehensive plan for preservation of ecologically or historically significant areas of Hinsdale.

Awareness should be encouraged among town officials, employees and the public through the use of current technological advances. Information should be accessible electronically to interested persons and a path provided for communicating with a designated town authority regarding conservation matters. The town should encourage landowners who are interested in selling their land to contact the town so that it can evaluate the possible purchase of the land or development rights. The town should become more proactive in seeking the cooperation, donation of land and/or development rights from its landowners. All future revisions of the

Master Plan should include a list of specific conservation priorities, and specific natural and or historical areas, which are important to the people of Hinsdale and which deserve special protection and preservation efforts.

### **Conservation Recommendations**

A. Maintain Hinsdale's system of Class VI roads and range ways through:

1. Compilation of inventory and map of trails, roads and range ways of Hinsdale.
2. Working with local and regional non-governmental organizations to develop, maintain, and encourage the responsible use of local trails and access.

B. Encourage evolving education and collaboration efforts with Hinsdale schools and the local community.

1. Identifying and documenting vernal pools and other essential natural resources.
2. Identify and manage invasive species.
3. Land management efforts and reducing environmental impacts.

C. Champion community ownership and responsibility for protection and maintenance of areas both aesthetically and ecologically important to the Town. These include:

1. Organizing and supporting local community cleanup efforts.
2. Sponsoring river-monitoring activities with the Ashuelot River Local Advisory Committee and others.
3. Working with state and local partners to provide permanent public access to bodies of water such as the Ashuelot and Connecticut rivers.

D. Evaluate methods of assessing additional fees that would contribute to the fund in Hinsdale for the acquisition of conservation land and/or development rights. Such methods may include a transfer tax, impact fees, subdivision fees, etc.

E. Encourage the preservation and management of agricultural Town and private lands to mitigate the risk of food and water resource isolation due to catastrophic events.

F. Encourage Current Land Use practices to support sustainable hunting, fishing, and recreational tourism and to provide economic and ecological resiliency.

G. Reexamine the existing zoning and subdivision rules and regulations with the goal of:

1. Directing development away from cleared fields and prime agricultural land to those areas that cannot be put to agricultural use;
2. Encouraging the continuation of agricultural uses of agricultural land.

H. The Town should consider adoption of innovative land use techniques as identified in RSA 674:21, such as Conservation Subdivisions, to encourage preservation of high quality open space in the development of subdivisions.

I. Review the zoning ordinances and subdivision regulations so that development in areas of potential public water supplies and in areas adjacent to wetlands and rivers can be carefully regulated. Particular attention should be given to adequate setback requirements in anticipation of the continuing erosion of the riverbanks.

J. Combine efforts of the Planning Board, Zoning Board, and Conservation Commission to review, update, and apply the Aquifer Protection Plan, and to establish a timetable to accomplish this.

K. Review the zoning ordinances and subdivision regulations to encourage, through the subdivision process, the provision of permanent public access to public bodies of water, such as the Ashuelot and Connecticut Rivers.

**Goals and Objectives**

Specific goals and objectives related to this section are located in the Land Use Section.

## Chapter 6 - Construction Materials

### Introduction

#### The Soils Survey

#### Construction Materials in Hinsdale

#### Groundwater Identification

#### Excavation Operations in Hinsdale

#### Opportunities in Hinsdale for Excavation

#### Conclusion

### Introduction

The primary source for identifying sand and gravel resources is the Soil Survey of Cheshire County, which was completed in 1984<sup>15</sup> by the USDA Soil Conservation Service (SCS). The document includes a table entitled “Construction Materials” that lists four types of material by soil category; these are roadfill, sand, gravel, and topsoil.

This section addresses Hinsdale's opportunities for earth excavation as defined by RSA 155-E. Amendments made to this law in 1989 and 1991 made it incumbent on towns to ensure that their zoning ordinances provide for excavation. Otherwise “excavation shall be deemed to be a use allowed by special exception as provided in RSA 674:33 V, in any non-residential area of the municipality, and the zoning board of adjustment shall grant such a special exception upon a finding by the board that: the excavation would not diminish property values or unreasonably change the character of the neighborhood, will not unreasonably accelerate the deterioration of highways or create safety hazards in the use thereof, will not create any nuisance or create any health or safety hazards, and it must comply with such other special exception criteria as may be set in applicable local ordinances.”<sup>16</sup>

### The Soil Survey

Soil categories are identified in the Soil Survey of Cheshire County by number and letter; the number represents the composition of the soil, and the letter designates the steepness - “A” being the flattest and “E” the steepest. Note that the maps developed for this report show the soil unit boundaries but not the identifying number and letter, as the scale of the maps would render this information illegible. The complete designation is, however, provided in the following tables.

The classifications used to designate the construction materials are based on a number of factors, including observed performance of the soil, soil properties, and site features that affect the removal of the material and its use as a construction material.

<sup>15</sup> Soil Survey of Cheshire County, New Hampshire, US Department of Agriculture, Soil Conservation Service, 1984. (The SCS is now the Natural Resource Conservation Service.)

<sup>16</sup> RSA 155-E: 4, III.

## Description of Materials

### Roadfill

Roadfill is defined by the Survey as soil material that is excavated in one place and used in road embankments in another place. Only soils suitable for low embankments (under six feet) were rated by the Survey.

Roadfill is rated as being “good”, “fair” or “poor”. “Good” soils are those that are comprised of significant amounts of sand or gravel or both, and slopes of 15% or less. “Fair” soils have in excess of 35% silt and clay-sized particles, and slopes of 15-25%. “Poor” soils contain many stones, or slopes of more than 25%.

### Topsoil

Topsoil is defined in the Survey as material used to cover an area in order to establish and maintain vegetation. For the purposes of the Survey, only the upper 40 inches of soil were evaluated for its use as topsoil.

Topsoil is also rated as being “good”, “fair” or “poor”. Soils rated as “good” contain no stones or cobbles, have little or no gravel, and slopes of less than 8%. “Fair” soils are sandy, have considerable amounts of gravel or stone, or slopes of 8-15%. “Poor” soils are comprised of a lot of sand or clay, have a large amount of gravel or stone, and slopes of more than 15%.

### Sand and Gravel

Sand and gravel are defined in the Survey as natural aggregates suitable for commercial use with a minimum of processing. The Survey evaluated only the probability of finding materials in quantities large enough as to be suitable for removal.

The properties used to evaluate sand and gravel soils include the thickness of the material, the size of the grain, and the content of rock fragment. A soil rated as “probable” has either a layer of clean sand or gravel, or a layer of sand or gravel with up to 12% silty fines. In addition, the material must be at least three feet thick and have less than 50% large stones by weight.

## Construction Materials in Hinsdale

The four types of construction materials found in Hinsdale are described below. “Good”, “fair” and “poor” roadfill and topsoil are identified; for sand and gravel, both the “probable” and the “improbable” soil units are identified. The source for all four tables is the Cheshire County Soil Survey of 1984 (SCS).

Note that the survey assumes that all of the land area in Hinsdale is comprised of some amount of these four soil types. Therefore, when roadfill, for example, is calculated, the total of the “good”, “fair”, and “poor” roadfill soils equals the total land area of the town, based on the SCS study. Using the cumulative areas of the various soil types, Hinsdale has 13,256 acres of land area, and 1,242 acres of surface water.

### Roadfill

Roadfill materials in Hinsdale are primarily of the “poor” classification, with smaller areas of “good” and “fair” identified. About 60 percent of the land area in Hinsdale or 8,021 acres is of the “poor” classification for roadfill material, which is primarily located in North Hinsdale and along the eastern border of the Town. Areas of good and fair roadfill soils range in size from several large concentrations to numerous smaller pockets distributed primarily in the central section of town and in the western portion of town along the Connecticut River. There are approximately 3,253 acres or 25 percent of the land area in Hinsdale containing “good” roadfill material, and approximately 1,585 acres or 12 percent of the land area containing “fair” roadfill material.

**Topsoil**

Approximately 11,657 acres or 88 percent of the soils in Hinsdale are rated as “poor” for topsoil material. The presence of “good” topsoil material in Hinsdale is practically nonexistent. Less than one percent of the total land area in Hinsdale contains this material, small pockets of which are found along the eastern border of the Connecticut River. Approximately 743 acres or about 6 percent of the total land area is rated as “fair” topsoil, with scattered pockets distributed evenly throughout town.

**Sand**

The probable location of sandy soils in Hinsdale can be found in North Hinsdale and along the eastern border of the town. The location of sandy soils follows the same pattern as that for “good” roadfill material. There are approximately 4,283 acres or 32 percent of the total land area in Hinsdale in which there is a high probability of finding sandy materials in quantities large enough as to be suitable for removal.

**Gravel**

Gravel deposits in Hinsdale follow almost the same disbursement pattern as the sand, but there are far fewer acres deemed probable for the presence of this material, approximately 797 acres or 6 percent of the total land area. There is a large concentration of this material located in North Hinsdale.

The table below presents the calculated acreages for all four construction material types. Based on the SCS information, Hinsdale has more sand and roadfill material than gravel or topsoil. Good - fair topsoil is virtually non-existent in town. Sand is much more in abundance than gravel, with each estimated at 32 and 6 percent of the land area, respectively.

**Table 1  
Construction Materials by Type and Acreage**

<b>CONSTRUCTION MATERIAL</b>	<b>AREA (in acres)</b>	<b>% OF TOTAL LAND AREA</b>
<b>Roadfill</b>		
Good	3,253	25%
Fair	1,585	12%
Poor	8,021	61%
<b>Topsoil</b>		
Good	110	1%
Fair	743	6%
Poor	11,657	88%
<b>Sand</b>		
Probable	4,283	32%
Improbable	8,973	68%
<b>Gravel</b>		
Probable	797	6%
Improbable	12,459	94%
<b>Total Land Area – 13,256 Acres</b>		

*Sources: Soil Survey of Cheshire County, US Department of Agriculture, 1984*

## Groundwater Identification

To further refine the identification of sand and gravel deposits in town, aquifer delineation studies are examined and compared to the SCS soil survey. Aquifer studies identify soils known as stratified drift, typically composed of sand and gravel that was deposited on valley floors by glaciers.

Maps depicting stratified drift aquifers at the local and regional levels are based on the results of a statewide aquifer-mapping project by the NH Department of Environmental Services in cooperation with the US Geological Survey, begun in 1985.

Hinsdale lies within portions of three major watersheds: the Walpole-Hinsdale Tributaries to the north and west, the Lower Ashuelot River to the east, and the Winchester Tributaries to the south. These watersheds are part of the Connecticut River Basin. Detailed aquifer maps for Hinsdale identify a fairly large stratified drift aquifer deposit along most of the western and central portions of town, underlying areas that are considered probable for sand and gravel and “good” roadfill material.

**Table 2**  
**Excavation Operations in Hinsdale**

Name	Location	Acreage	Zoning District	Status of Operation
Wayne Corse	205 Meetinghouse Road map 30 lot 70	19.14	RA	Active
Tim Halliday	Brattleboro Road, map 19 lot 19	11.5	RA/RC	Active
Town of Hinsdale	Meetinghouse Road, map 30 lot 69	12.78	RA	Inactive
Burnett Butler	Meetinghouse Road, Map 30 lot 57	30.40	RA	Inactive

### Active Gravel Pits

Wayne Corse - Corse Excavating LLC, map 30 lot 70, 205 Meetinghouse Rd. This is an existing gravel pit containing 19.14 acres. Excavation at this site began in 1920, and present excavation will be limited to the lot boundaries. Mr. Corse has reclaimed half the pit and has the existing eight acres due to be fully reclaimed.

Tim Halliday- Halliday Realty, map 19 lot 19, L/O Brattleboro Rd. Lot is both RA and RC and totals 190.7 acres. The area devoted to gravel excavation is 11.5 acres.

### Inactive Gravel Pits

Hinsdale- the Town of Hinsdale owns a 12.78 acre parcel of land on Meetinghouse Road, tax map 30, lot 69, which is used for municipal construction purposes.

Burnett Butler is the owner of a gravel pit located on Meetinghouse Road, tax map 30, lot 57, containing 30.40 acres. Excavation at this site began in July, 1977.

## Opportunities in Hinsdale for Excavation

The Town of Hinsdale is zoned into the following five districts: Rural Agricultural District, Residential District, Business District, Roadside Commercial District, and Industrial District. As described in the Introduction, RSA 155-E now requires that a local zoning ordinance must address excavations in some manner, i.e., that opportunities for some of these resources must be allowed in at least some, but not necessarily all, areas in town. If this is not the case, excavations shall be considered to be a special exception use in any

“non-residential area” of town, upon a finding by the zoning board of adjustment of the following four criteria (all four must be met). The excavation:

- Will not cause a diminution in area property values or unreasonably change the character of the neighborhood;
- Will not unreasonably accelerate the deterioration of highways or create safety hazards in the use of the highways;
- Will not create any nuisance or create health or safety hazards; and
- The excavation complies with any other special exception set forth in the local zoning ordinance.

The law also allows towns that have adopted a Water Resource Management and Protection Plan to include in their local excavation regulations provisions that are aimed at protecting water resources. Hinsdale’s Zoning Ordinance allows for the excavation of natural materials in accordance with RSA 155–E with the approval of the Hinsdale Planning Board in the Rural Agricultural, Roadside Commercial, and Industrial Districts.

### **Conclusion**

Hinsdale appears to have sufficient resources of roadfill and sand construction materials located throughout town. There is a limited amount of good or fair topsoil in town; 88 percent of the town is rated as having poor topsoil. The locations of the two active excavation sites in Hinsdale are consistent with the location of “good” roadfill and sand and gravel materials as indicated by the Soil Survey of Cheshire County.

As mentioned previously, Hinsdale does not have a set of excavation regulations, although it permits excavation in the Rural Agricultural, Roadside Commercial, and Industrial Districts with Planning Board approval. The Planning Board may want to revisit the issue of developing a local set of excavation regulations to better control their location and operation. A set of well-drafted excavation regulations could meet the needs of pit operators, and at the same time protect the environment, abutters, and other residents of Hinsdale from any negative impacts of excavation operations.

## Chapter 7 – Traffic and Transportation

### Introduction

### Linkages to Other Chapters

### Roadway Network, Classifications, & Conditions

### Roadway Improvements & Planned Projects

### Transportation Planning Principles & Concepts

### Moving Forward

### Resources

### Recommendations



Photo by Kathryn Lynch

### Introduction

Transportation is an essential planning consideration that has far reaching impacts on the development Hinsdale. The careful planning of road and other transportation-related infrastructure will help determine where development will occur and the type of land uses it will attract. Transportation planning is not just for vehicular traffic, but should include and encourage all modes of transportation such as transit, pedestrian and bicycle users. In addition, freight transportation should be considered.

### Linkages of Transportation to Other Chapters

Transportation planning considerations factor into a number of other parts of Hinsdale's Master Plan. It is important to recognize the interconnectedness to guide the growth and development of the town.

**A. Land Use:** Transportation connects origins to destinations and helps people access goods, services and each other. Roads will, in large part, be the basis for the development patterns of the future. Road design, functionality and placement will determine the types of land uses that will be able to occur on a parcel of land. For example, a collector road will attract a mix of uses including retail, professional offices, and residential, whereas a local road will typically provide safe access to residential development. Roads will in large part be the basis for the development patterns of a town. Transportation considerations should be included within the goals of the Land Use Chapter.

**B. Economic Development:** The ability to provide access to businesses will enhance the success of the towns' ability to attract businesses. Direct access to major roads and parking availability are key elements to attract and retain uses that depend on drive-by traffic. Planning for nodal development, or interspersing centers of development between roads with little development, allows communities to plan for multiple economic and cultural activity centers that are separated by roadways designed for moving traffic. Freight transportation, or the movement of goods, is another important economic development and transportation consideration.

**C. Housing/Population/Demographics:** The *pattern* of residential development will be determined, in part, by the roads that service them. Roadway classifications also have an effect on the *density* of development that can occur. Local roads can serve residential neighborhoods and multi-family developments safely without concerns of heavy through traffic. The use of access management also provides safe transportation to denser developments. Road design standards such as width, grade, and speed are factors to consider when choosing to live in certain types of residential development. Higher density housing or low income housing may benefit

by an offering of bicycle, pedestrian or transit improvements in order to maximize space and increase the affordability of the neighborhood.

**D. Natural Resources - Environmental:** The careful consideration of locating roads away from sensitive areas such as streams and wildlife habitats is critical to the protection of our natural resources. Avoiding these areas will not only protect the wildlife that depend on large unfragmented areas, but will also add to the safety of roadway users. The use of Low Impact Development methods (LIDs) will help to reduce the length of roads, thereby reducing the amount of impervious surface. This will protect the water quality of our water bodies and will also allow for groundwater recharge. Transportation has a major impact on air quality and should be planned to reduce vehicle miles traveled whenever practical.

**E. Hazard Mitigation:** Maintaining access to primary and secondary evacuation routes in Hinsdale is an important life safety issue. Proper culvert size and installation for all road/stream crossings must be a priority for hazard mitigation in the event of heavy storm events. Bridge maintenance, erosion control, and storm water management are also important considerations to maintain safe roadway infrastructure. Considerations such as these should be added into the Hazard Mitigation Plan and included as priority actions items. An inventory of road/stream crossings should be updated annually, and erosion control methods used along roads with steep slopes to prevent washouts and erosion.

## Roadway Network, Classifications, and Conditions

Hinsdale's transportation infrastructure comprises 47.3 miles of maintained roadway: 17.4 miles of State-owned roads (Class I & II), 30.3 miles of locally-owned roads (Class V). There are also 2.9 miles of unmaintained roads (Class VI), and 9.2 miles of private roads (not owned or maintained by the Town. The road network includes 13 bridges and culverts. Hinsdale has over 12 miles of State-owned, designated rail trail on the former Ashuelot and Fort Hill rail road lines: the Ashuelot rail trail connects Northfield, MA with downtown Hinsdale and follows the Ashuelot River 24 miles to Keene where it connects with the Cheshire rail trail; the Fort Hill rail trail on the banks of the Connecticut River is about 9 miles long from the Ashuelot River rail trail near the Massachusetts state line to Brattleboro, VT by way of an iron rail road bridge. See *Traffic Counter & Roadway Classification Map*.

### Road Classifications and Conditions

Hinsdale's roads are managed under a series of classifications. Road systems are grouped and classified for several reasons. Some important reasons to classify roads include:

- Designing appropriate capacity, safety measures and design speed for roads;
- Guiding investment priorities for roads;
- Providing a framework for a road maintenance program; and
- Guiding land use related regulations and access management standards with frontage on the roadway system.

Broadly, roadways in New Hampshire are classified for planning purposes into two types: State Highway Classification and Federal Functional Classification. *State highway classification* refers to the state's system of defining state and town responsibilities for road construction and maintenance. *Federal functional classification* is the system by which streets and highways are grouped into classes according to the type of service they are intended to provide. Basic to this process is the understanding that individual roads or streets do not serve travel independently: rather, travel involves movement through a series of roadways in a logical manner by defining the function any particular road or street can play in serving traffic flow through a highway network.

### State (Administrative) Classification

All public roads in New Hampshire are classified in one of seven categories per NH RSA 229:5. Highways under state maintenance and control include Classes I, II, III and III (a). Classes IV, V, and VI highways are under the jurisdiction of municipalities. This system is familiar to most local officials and is used in the allocation of State highway block grants to towns. Hinsdale's state classified road mileage as of January 2001 is shown in the table below and following map. A table presenting classified road mileage for all Southwest Region towns is included at the end of this chapter for reference and comparison. Roadway classification and mileage information is gathered and managed by Southwest Region Planning Commission under contract with the NH DOT, through consultation with municipal Road Agents and by approval of Boards and Selectmen. The following provides a description of various administrative classes:

Class I: Trunk Line Highways

Class II: State Aid Highways

Class III: State Recreational Roads

Class III(a): State Boating Access Roads

Class IV: Town Roads with Urban Compact

Class V: Town Roads

Class VI: Unmaintained Highways

Of these seven road classifications, Hinsdale roads fall into four. The definition of these classifications, and the roads that fall within each category are described below. These can also be found in Table 1 and the map entitled *Traffic Counters and Roadway Classifications Map*, August 2014.

Class I: Trunk Line Highways - These belong to the primary state highway system. NH DOT assumes full control and responsibility for construction, reconstruction and maintenance of these roads. The State of New Hampshire owns and maintains six miles of Class I Highways in Hinsdale.

Class II: State Aid Highways - These consist of highways that belong to the secondary state highway system. All sections improved to state standards are maintained and reconstructed by NH DOT. Other Class II highways, not improved to DOT's standards, are maintained by the Town and are eligible to be improved to DOT standards with the use of state aid funds as those funds become available. The same applies to bridges on Class II highways. The State of New Hampshire owns 11.43 miles of Class II Highway in Hinsdale. Examples of Class II Highways include NH 63 and NH 119.

Class III: Recreational Roads – Recreational Roads are those roads leading to and within state reservations designated by the State Legislature. NH DOT assumes full control for construction, reconstruction and maintenance of these roads. There are no Class III designated recreational roads within the Hinsdale town boundaries.

Class III(a): Boating Access Roads- boating access highways from any existing highway to any public water in New Hampshire. There are no Class IIIa. designated boat access roads in Hinsdale.

Class IV: Urban Compact Section Highways – These are all highways within the compact sections of towns and cities of 7,500 residents or more. The municipality assumes full responsibility for construction and maintenance of these roads. There are no Class IV urban compact highways within Hinsdale.

Class V: Town Roads - These consist of all regularly maintained roads that are not in the state system, which the town has the duty to construct and maintain. These roads may be paved or graveled. There are 30.3 miles of Class V roads that Hinsdale maintains.

**Class VI: Unmaintained Highways** - These are all other existing public ways, including highways, that are not maintained by the town and have not been for five or more consecutive years. While subdivision of land is usually restricted on Class VI roads, the potential for development exists if the roads are upgraded to a Class V status, either by the landowner or the town. There are 2.92 miles of Class VI roads in Hinsdale.

As frontage along Class V roads becomes less available and the centers of town villages reach capacity, there is mounting pressure to develop on Class VI roads. Class VI roads are an important component of a town’s transportation infrastructure as they personify the community’s rural character and can provide a variety of recreational opportunities. The town should evaluate and make recommendations for future status of Class VI roadways and develop a Class VI road policy.

**Table 1  
Administrative Classification of Hinsdale Roadways**

Road Class	Miles
Class I: Trunk Line / Primary State Aid Highways	6.00
Class II: Secondary State Aid Highways	11.43
Class III: Recreational Roads	0.00
State Miles	17.43
Class IV: Urban Compact Section Highways	0.00
Class V: Town Roads and Streets	30.30
Class VI: Unmaintained Roadways	2.92
Town Miles	33.22
Other (Includes Private)	
Other Miles	9.18
<b>Total Miles of Roadway</b>	<b>59.83</b>

*Source: NH DOT 2014*

**Federal Functional Classification**

The Federal Functional Classification system reflects the role of the road in a regional and statewide road network. Functional classifications can be used by local, state and federal governments, but the federal functional classification is most commonly cited in transportation planning. It is a method of grouping roads by the service they provide and is very useful for planning purposes. Functionality, at its most basic level, is divided into three road types: arterials, collectors and local roads. By identifying the function of the road, decisions can be made as to the road design and speed. A road that functions as a means to move traffic from one town to another town has different needs than a road that provides access within a residential neighborhood. They will require different road widths, speeds, signs and construction standards. A road that has truck traffic is constructed differently to handle heavier, larger, and wider vehicles and greater traffic volumes than those serving neighborhoods. Access and turning maneuvers are also different depending on the functional classification. Therefore, identifying the function of the road is an essential part of planning. It is important to balance all three types of roadways in order to ensure an efficient (and in the long-term less costly) transportation system. Reducing road widths will not only be less costly to construct, but they will also be less costly to maintain, and reduce the amount of impervious surface, which is beneficial to the environment.

**Major Arterial Roads** - Roads providing the highest level of mobility (conveying high traffic volume at high speed for long distances) with little emphasis on access to individual properties are classified as *arterials*. These arterials are controlled access highways and interstates. Major arterial highways are designed to carry the largest percentage of traffic entering and leaving a region as well as the greatest amount of traffic traveling through the region. There are no major arterial roads within the Town boundaries.

Minor Arterial Roads - Similar to the major arterial roads, these are designed to carry traffic through the region. Minor arterials have limited access and faster speeds than collector and local roads. Hinsdale does not have any minor arterial roads.

Collector Roads (major & minor) - The collector system provides more direct land access than do the arterials. Collector streets may enter residential areas, business districts, and industrial areas. A major collector is designed to move medium traffic volumes at low speeds between or within communities and to funnel traffic to and from residential and commercial areas to an arterial system. A minor collector has lower traffic volumes and provides alternative routes to major collectors. NH routes 63 and 119 are both classified as Major Collectors, collecting traffic from the local roads and providing connections to surrounding towns and major highways in New Hampshire, Vermont, and Massachusetts, (e.g. NH 10, VT 5, I-91, and MA 10).

Local Roads - The local street system includes all other streets not classified in one of the higher systems. The primary function of these roads is to provide direct access to individual properties. This system offers the lowest level of mobility. Through-traffic is usually deliberately discouraged. The highways and roads in Hinsdale are classified as either Major Collectors or Local Roads.

**Roadway Usage and Conditions**

Roadway usage and conditions have an effect on our everyday enjoyment, or frustrations, of traveling through town. As the population increases within the state and region, so will the amount of traffic. Careful planning of our roadways, including alternative routes will give users options to get to their destinations. A heavily travelled road during peak hours or a road with poor maintenance can be avoided, thus making our travel experience more desirable.

Table 2 shows the Average Daily Traffic Counts that have been done over an eight year period. This is an important factor in planning the location of future land uses as well as access points. The changes in traffic counts can be attributed to a variety of factors including but not limited to new subdivisions, new businesses opening, closing of businesses and road construction.

**Table 2  
Average Daily Traffic Counts 2006-2013**

Counter Location	Counter Number	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2006-2013	Average Volume
NH 119 - south of Pierce Rd	(82)219011	5100			5300			7300		43.1%	5900
NH 63/NH 119 - west of Church St.	(82)219012	2800			3400			3200		14.3%	3133
NH 119 at Winchester TL	(62)219052		2800			2800			2700	-3.6%	2766
NH 63 at Chesterfield TL	(82)219053		1400			1200			1200	-14.3%	1266
NH 63 at Mass. SL	(82)219054		1200			1200			1200	0%	1200
NH 119 at VT SL	(82)219055		7100			9700			8100	14.1%	8300
NH 119- north of Prospect St.	(82)219056		4600			5000			5000	8.7%	4867
NH 63- south of Tower Hill Rd.	(82)219057		1300			1200			1400	7.7%	1300
NH 63- .5 mi. north of NH 119	(82)219059	2100			1500			1300		-38.1%	1633
Oxbow Rd. north of Monument Rd.	(82)219060	320			350			250		-21.9%	306
Depot St. over Ashuelot River	(82)219061	470			420			300		-36.2%	397

Source: NHDOT Bureau of Traffic March 6, 2014

The largest increase in traffic volume between 2006 and 2013 was a significant change from 5,100 to 7,300 (43.1% increase) vehicles per day at the NH 119 (south of Pierce Road) traffic counter location. The shift in traffic volume predominantly occurred between 2009 and 2012. The change is likely due to the closing of a large retail store in one location and reopening in another.

Two locations showed a significant decrease in traffic volume: the traffic counter location on NH 63 slightly north of NH 119 showed a decrease in daily traffic volume from 2,100 in 2006 to 1,300 by 2012 (a 38.1% decrease); and the counter location on Depot Street over the Ashuelot River from 470 to 300 daily trips (36.2% decrease) during the same time period. See *Traffic Counters and Roadway Classifications Map*.

**Table 3  
Common Commuting Locations\***

According to the 2010 census, Hinsdale has an estimated 1,754 working residents that account for 43% of the town population. Of these working residents, 159 commuted to work in town and 1,595 traveled to work outside of Town. The top commuting locations for Hinsdale residents are listed in Table 3.

Hinsdale workers commuting to:		Workers Commuting to Hinsdale:	
Destination	Number of Residents	Commuting From	Number of Residents
Brattleboro, VT	591	Brattleboro, VT	52
Keene	222	Winchester	35
Swanzey	69	Keene	32

*Source: US Census, 2010 \*For additional information, see the Economic Development Chapter*

**Roadway Improvements & Planned Projects**

The spending of State and Federal money on State maintained roadways is scheduled by the New Hampshire Department of Transportation's 10-year Transportation Improvement Program. The table below shows projects completed since 2008 and projects planned out to 2014.

**Table 4  
New Hampshire Roadway Improvement Projects**

Project	Year	Status	Funding	Funding Notes
NH 63	2008	Complete	\$973,000	Replace/repair 1,300' of road
Monument Road	2014	Planning	Planning	Restructure
NH 119/CT River	2014	Planning	Planning	Replace 2 bridges/ sidewalk repair

*Source: NH DOT 2014*

Local Maintenance and Condition of Roads: Knowing the history of road repairs and the condition of those roads that may be in need of repair can assist the Town in budgeting and prioritizing. It may also be useful as supportive information when seeking funding opportunities to help offset the costs. Annual discussions with the Road Agent should occur to update the chart below.

**Road Improvements Completed**

The most recent road improvements done by the Town, include the following:

- Chip Seal 2009: School St., Hancock St., Pleasant St., Highland Ave., Cottage St., Spring St.
- Chip Seal 2010: Plain Rd., Church St., Rubeor Dr., Cream Pot Hill
- Shim 2009: School St., Hancock St., Monument Rd. (portions)
- Shim 2010: Plain Rd., Rubeor Dr.
- Shim 2012: Monument Rd. (portions), Plain Rd. (from Monument Rd. to dirt)
- Shim 2013: Monument Rd. (portions)

1” Overlay 2009: Glen St.

1” Overlay 2012: Charles St., Oak Hill Rd.

1” Overlay 2013: Tower Hill Rd.

Catch Basins, Grates, Neon Fencing 2009 & 2010: High St., Highland Ave., Spring St., Pleasant St., Hancock St.

Road Rebuilt: The last section of Old Chesterfield Road was completed in 2008

**Roadside Drainage**

Road drainage can be a serious and costly problem if the method of storm water removal is not adequate to meet the needs of the volume. Over the past ten years, the town has seen several road washouts. Culverts on Monument Road, Oxbow Road, and the dirt section of Plain Road have experienced problems in the past handling the increased flows during the spring thaw. In 2009 to 2010, an 84” metal culvert was replaced with a 12’ wide concrete box culvert on Plain Road/ Oak Hill Road., and approximately 1000’ up stream on Oxbow Road a 118” x 80” elliptical metal culvert was replaced with a 12’ wide concrete box culvert. These improvements have alleviated problems that were repeat issues.

The NH DOT maintains the culverts on NH 119 and NH 63 on a regular basis. Natural springs on NH 63 have caused drainage problems and have undermined the road. Options should be explored to determine potential solutions.

**Registered Vehicles**

Since 1980, the number of registered motor vehicles in Hinsdale has been increasing at a faster pace than both the population and the number of households. In 1980 there were on average 0.88 vehicles per person and 2.4 vehicles per household. By 2000 the numbers had climbed to 1.23 vehicles for every person in Hinsdale - more than one car per person, and more than three vehicles per household.

**Table 5  
Population, Households and Registered Vehicles 1980 - 2010**

	Population	Households	Registered Vehicles	Vehicles/ Person	Vehicles/ Household
1980	3,631	1,326	3,197	0.88	2.41
1990	3,936	1,560	4,345	1.10	2.79
2000	4,082	1,622	5,029	1.23	3.10
2010	4,046	1,827	5,154	1.27	2.82

Source: US Census Bureau, Hinsdale Town Clerk

**Areas of Concern**

Vehicle accidents are an occurrence that we all want to avoid. However, without careful planning of roadways and intersections, there may be an increase of accidents at a given location. Accident reports obtained from the Police Department are an effective way to identify areas that are in need of correction. Factors such as sightline visibility at intersections and driveways, poor drainage, excessive speed, sun glare and icing are some of the key reasons for traffic accidents. Many of these can be avoided with good design. It is more efficient and cost effective to identify potential conflicting points prior to construction than to retrofit a problem. It is also easier for drivers as they don’t need to adjust to the change.

Projects involving heavy traffic should be required to submit a traffic study by a licensed engineer to the Planning Board. A traffic study will identify the projected level of service (LOS) at intersections and the entrance to the property during peak hours of traffic. The Planning Board may require a peer review, or third-party review, to check the accuracy of the traffic study. The peer review may also result in potential alternatives such as a more suitable driveway location, intersection improvements, pedestrian enhancements, or other safety measures.

The Safety Map indicates accidents that have occurred in Hinsdale between 2002 to 2012 according to the NH DOT. The Areas of Concern are depicted by the red circle. These areas indicate that at least six accidents have occurred with the circle area over the 10 year period. These are particular intersections, hidden driveways, curves or hills in the roadway or other obstruction that raises concern for vehicular and/or pedestrian safety. Table 6 provides additional information on these areas of concern. See *Transportation Safety Map*.

**Table 6**  
**Areas of Concern**

Location	Safety Concern/ Obstruction
NH 119 at NH/VT state line	Volume, bridge
NH 119 south of Monument Road	Volume, many access points
NH 119 between Prospect St. and Plain Rd.	Poor sight lines, change in speed limit
NH 119/63 Town Center	Speed
NH 63 near Old Chesterfield Rd (N)	Poor sight line
Meetinghouse Rd & Middle Ox Bow Rd.	Poor sight line, grade

Source: NH DOT 2014

A Road Safety Audit for these areas may be considered as a means to reduce these potential hazardous areas. A Road Safety Audit is a formal proactive safety performance examination of a road or intersection by a multi-disciplinary audit team. It is a qualitative assessment that reports on potential safety issues and identifies opportunities for improved safety options. The Road Safety Audit team is made up of town employees, such as Police Chief, Road Agent, Emergency Management Director, Fire Chief, and members of the community. Consideration should also be given to identifying other potential team members that may offer unique and valuable input such as a school bus driver whose bus route is in the study area or a nearby crossing guard.

### **Bridges**

NH RSA 234:2 defines a *bridge* as a structure on a public highway that has a clear span of 10 feet or more, measured along the highway's center line, spanning a water course or other opening or obstruction. It includes the substructure, superstructure, deck and approaches. This definition is important to help the town and state in determining the maintenance and funding responsibility.

Bridges are inspected bi-annually by the NH Department of Transportation and given a classification according to the condition of the bridge. The annual report also includes culverts that are beneath the road. These classifications are defined as:

Not Deficient - Bridges that are in good condition and which do not need repairs, just scheduled maintenance.

Structurally Deficient - A bridge which no longer meets current standards for load carrying capacity and structural integrity due to its deteriorated condition.

Functionally Obsolete - A bridge, due to the changing need of the transportation system, which no longer meets current standards for deck geometry, load carrying capacity, vertical or horizontal clearances, or alignment of the approaches to the bridge.

Red List - Bridges that require more frequent inspections due to known deficiencies, poor structural conditions, weight restrictions, or the type of construction (such as a replacement bridge installed on a temporary basis).

Not Applicable - These are not bridges; they are culverts.

There are 13 bridges in Hinsdale. Table 7 provides a list of bridges with information that may be useful in planning for the Capital Improvements Program (CIP).

Of the 13 bridges in Hinsdale, six were listed as being in good condition, none listed as structurally deficient, two listed as functionally obsolete, none as red listed, and the remaining five are culverts.

**Table 7  
Hinsdale Bridges**

Location	Bridge No.	Owner	Year Built/Rebuilt	Condition
NH 119 over Connecticut River	041/040	NHDOT	1920/1988	Functionally Obsolete
NH 119 over Connecticut River	042/044	NHDOT	1920/1988	Functionally Obsolete
Oxbow Rd. over Ash Swamp Brook	080/067	Hinsdale	2009	Not Deficient
Monument Rd. over Ash Swamp Brook	085/064	Hinsdale	2009	Not Deficient
Old Chesterfield Rd. over Brook	099/115	Hinsdale	2003	Not Applicable
NH 119 over Ash Swamp Brook	106/070	NHDOT	1958	Not Applicable
NH 63 over Kilburn Brook	110/118	NHDOT	1937/2000	Not Applicable
NH 63 over Kilburn Brook	114/118	NHDOT	1937	Not Applicable
NH 63 over Kilburn Brook	118/118	NHDOT	1936	Not Deficient
NH 119 over Kilburn Brook	128/122	NHDOT	1900/1984	Not Applicable
NH 119 over Canal	128/127	NHDOT	1953	Not Deficient
NH 63 over Ashuelot	132/113	NHDOT	1940/1992	Not Deficient
Depot Rd over Ashuelot River	132/119	Hinsdale	1978	Not Deficient

Source: NH DOT Bridge Report 2013

NH RSA 234:23 imposes a requirement on towns to inspect all bridges along town roads, every two years. This inspection and corresponding classification is a useful planning tool for budgeting of those bridges in need of repairs or replacement. Priority should be given to bridges that are located in the primary and secondary evacuations routes in the event of emergencies. A list of funding opportunities can be found at the end of this chapter.

## Transportation Planning Principles and Concepts

### Multimodal

Multimodal transportation includes a variety of ways of moving people and goods. It encompasses a broader range of transportation modes other than vehicular. Multimodal transportation includes:

Pedestrian: Planning for pedestrian traffic involves providing areas and amenities that allow pedestrians to get to their destination by walking. Providing sidewalks, crosswalks, and pathways is the way to accomplish this

form of transportation. Adding amenities, such as benches and shade trees will help to encourage walking. Another point of consideration for this mode is connectivity from one location to another. The proximity and safety between locations will be a deciding factor for some users. Sidewalks that don't connect pose a safety risk for pedestrians, especially those with physical challenges and strollers. It forces them to walk in the roadway or walk across unpaved and uneven terrain. Curb cuts should be provided at the end of each sidewalk and driveway entrances.

**Bicycle:** As people become more health conscious and environmentally aware, this form of transportation is more attractive. The rising cost of fuel also contributes to this decision. Providing bicycle lanes along the roadways is an important and responsible part of transportation planning. This includes clearly established bike lanes, pavement markings, and signage. Planning for the safe passage of bicycle users also includes bike friendly drainage grates and an awareness of other potential hazards. Similar to the needs of pedestrians, connectivity between locations is important for the local bikers that are just trying to get to areas within town. Making sure that pathways and bike lanes connect to the local destinations will help to avoid conflicts between bikes and vehicles. Bike racks should be required for sites that tend to attract bicycle users.

**Carpooling:** Ride sharing to work and events is a form of transportation that should be encouraged. While most of us enjoy the freedom of getting to our destinations in our own vehicle, and at our own convenience, there are other options that can be utilized in an effort to be environmentally sensitive and budget wise. A role that the town can play to help facilitate this is to establish commuter lots. Providing a ride-share board will also establish a way for interested commuters to make connections with other commuters that are travelling to a similar destination.

**Public Transportation:** Amtrak rail service is available in Brattleboro with daily service to Burlington, VT and New York City. Interstate bus service is available on Vermont Transit Lines with daily stops in Brattleboro, VT and Keene, NH. Local bus service is available for travel between Hinsdale and Brattleboro via the Brattleboro Blue Line. Bus stops are located throughout Hinsdale with weekday service from 6:10 a.m. to 5:45 p.m. and Saturday service from 7:50 a.m. to 6:20 p.m. Specific schedule information can be found at: [http://crtransit.org/schedules/Brattleboro\\_Blue.pdf](http://crtransit.org/schedules/Brattleboro_Blue.pdf)

**Trails:** The rail trails are a unique feature in Hinsdale's transportation system. The former rail road corridors were purchased during the 1990's by the State (using State and Federal funds) for the purposes of preserving the corridors for future transportation needs. Until they are needed for a more intensive use, e.g. roads or rail roads - neither of which are planned at this time, they are available for use as recreational trails and to be promoted as alternative, off-highway bicycle routes due to the long distance connections they provide cyclists. The rail trails are managed by the NH Trails Bureau of the NH Department of Resources and Economic Development in cooperation with local trails groups, principally, snow mobile clubs. There are many other recreational trails in Hinsdale, some public, most informal. These will be addressed in the parts of the Master Plan dealing with recreation.

### **Complete Streets**

Complete Streets is an overall approach to planning, improving and maintaining the street right-of-way for all potential users of the roadway. It takes into consideration all modes of transportation. It is an understanding that people have a variety of needs and at varying levels of abilities. Complete Streets encompasses a broader way of viewing transportation corridors beyond the travelled portion of the roadway. By understanding these needs and abilities, streets can be planned in a way that is safe and convenient for all users. Providing safe crosswalks, ramps, benches, and shade trees help to encourage walking, which in turn includes benefits such as healthier lifestyles, social interaction, reduction in localized automobile trips, and improved environmental quality. This adds to the social capital of the community and helps to define the distinct character of the community. It provides options for residents and visitors to access shopping, health care, school, and

employment. The additional pedestrian traffic can have economic benefits for local businesses as well. Inclusion of landscape improvements may also result in an increase of adjacent property values.

The town should consider adopting a Complete Street Policy. Along with adopting this policy, other ordinances should be reviewed for barriers that make a walkable/bikeable community difficult to implement. A review should also be done to provide economic opportunities for businesses along these areas such as outdoor patio areas.

Components of Complete Street Policies include:

- Addition of sidewalks and bicycle lanes;
- Intersection improvements to include crosswalks and signalization for pedestrians and bicyclists;
- Installation of raised or textured crosswalks in locations that have higher pedestrian traffic;
- Streetscape amenities such as benches, street lights, shade trees;
- Sidewalk bump-outs for creating locations for trees and benches, and to add traffic calming principles;
- Bus service, bus stops and shelters

### **Access Management**

Managing how traffic moves between the highway and adjacent properties is an effective means of preserving the capacity and safety of the existing roadways, enabling capacity expansions, and avoiding the need for extensive new investments in road capacity while supporting municipal and private development goals. This approach to transportation management is known as Access Management.

Access management is a planning mechanism to improve the safe usage of the roads for motorists, cyclists, and pedestrians. It includes careful planning for the location, spacing, design and operations of driveways and commercial accessways onto the road. Encouraging interconnections between properties helps to limit the number of access points onto the road and thereby reduces the number of conflict points. This is especially useful in retail centers, and in residential areas that have sight-line limitations due to road design. RSA 236:13 establishes requirements for driveway permits.

NH DOT manages access points to and from any segment of a state highway by one of three means:

1. **Limited access** - The most restrictive, by state statute (RSA 230:44) is “*designed for through traffic, and over, from or to which [abutters] or other persons have no right or easement or only a limited right or easement of access, light, air, or view...*” This requires a finding by the NH Governor and Council that the denial of access and required property acquisition is in the public interest. Limited access is used almost exclusively on new major arterial roads.
2. **Controlled access** - Predetermined points of access are negotiated between NH DOT and property owners. NH DOT purchases frontage for the remainder of property to delimit access points. Very large properties may only be permitted one or two points of access and required to provide internal circulation. Controlled access is acquired by the State as part of most new road construction or major reconstruction of existing roads.
3. All other access is managed through the State driveway permitting process – principal criterion for permitting driveways is safety as a function of visibility, posted speed and functional classification with conventional distances of 400 feet between driveways permitted on rural roads and 200 feet on urban roads. Determinations for permitting are carried out by NH DOT Maintenance District personnel following application to NHDOT by property owners or developers.

Currently the only level of access control on NH 119 and NH 63 is through the state driveway permitting process, with the exception of approximately 4 miles of controlled access on NH 119 beginning at the Vermont border and heading south.

Balancing the need for safe access to properties with the need for mobility also requires special attention to land use decisions adjacent to the roadway and the physical layout of access between land use and the highway. This can be achieved through inclusion of access management strategies in local zoning and site standards which regulate distances between driveways, corner lot access, promoting shared driveways, inter-connections between developments, location of off-street parking relative to the driveway, etc. To better support local efforts to manage access on state highways, the NH DOT has developed a model Memorandum of Understanding which formalize the State's willingness to coordinate the NH DOT driveway permitting with local land use and access management standards and goals.

### **Traffic Calming**

Many communities in New Hampshire have a concern about the speed of traffic through the Town center. The lack of state highway bypasses leave communities with a heavy flow of drive-through traffic. While this traffic may be beneficial for local businesses, it often creates traffic from additional motor vehicles that have out-of-town destinations. In an effort to slow traffic down, it may be necessary to use traffic calming techniques in these areas. Traffic calming measures are designed to alter the behavior of drivers and improve safe conditions for pedestrians and cyclists. Below is a list of traffic calming methods that may be utilized in appropriate areas of town as necessary.

Raised, textured or colored crosswalks- raised crosswalks is a physical approach to slowing speeds; textured or colored crosswalks are visual approaches to slowing speeds.

Raised median strip/island- this method narrows the road and limits turning across traffic.

Signalization and signage- traffic signals with pedestrian features provide safety for pedestrians; signage can also be an effective method for reducing speed and providing safe pedestrian passage.

Roundabouts- these can be used to reduce speeds and allow a flow of traffic, thereby reducing negative effects of pollution that occurs with idling vehicles at traffic lights.

Reduce road width- narrowing the road width generally slows the speed of vehicles, however, it also reduces the safe zone for cyclists.

### **Moving Forward**

#### **Future of Transportation Modes/Changing Technologies**

Planning for the future involves a great deal of insight to the trends within the region, state, country, and even worldwide. The changing technologies will undoubtedly bring about changes to the way we look at our modes of transportation. With the rising cost of gasoline, and the increased environmental awareness, the movement towards alternative fuel sources is stronger than ever. With these changes, we may be faced with finding creative ways of making adjustments to accommodate them. Although the change is inevitable, it will be a gradual process. Fortunately, with careful planning, we can make the necessary shift to the future. It is anticipated that changes to roadway standards, parking areas, refueling/repowering stations, and more will require us to change the way we currently think about transportation.

### **Resources**

#### **State and Regional Transportation Plans**

State and regional plans provide important information that should be considered as an aid to the town for planning. They can be useful in preparation for Capital Improvement Programs, site plan and subdivision reviews, multimodal planning, and other uses as well. Below is a list of Regional and State Transportation Plans and links to information. It is beneficial to provide local input to these studies as they are updated.

#### **Useful Resources, Links, Programs, Funding Opportunities**

The list below provides a variety of state and federal programs with potential funding opportunities. These resources cover a range of transportation projects including, but not limited to: road and intersection improvements, bridge & culvert projects, sidewalks and other pedestrian safety enhancements, etc.

State Aid Bridge (SAB)  
State Aid Highway (SAH)  
Block Grant Aid (BGA)  
Federal Bridge Aid (MOBRR)  
Highway Safety Improvement Program (HSIP)  
Transportation Enhancement (TE)  
Safe Routes to School (SRTS)  
Scenic Byways (SB)  
FEMA

### **Recommendations**

The following recommendations should be considered and included within the appropriate chapters of this Master Plan. Modifications to existing ordinances and regulations should be considered as a means of implementing these recommendations where appropriate or new ones should be developed.

- Apply Complete Street principles including median islands and curb extensions along NH 119 through the downtown area.
- Support pedestrians and bicyclists by providing bike lanes, sidewalks, crosswalks, and other safety enhancements. Add bike racks and benches to encourage these non-vehicular transportation choices.
- Examine the long-term feasibility of returning Fort Hill Branch Railroad back into operation as an economic opportunity.
- Advocate with the Town of Chesterfield to improve NH 63 including pavement conditions and storm water infrastructure.
- Maintain communications across state lines with the Town of Brattleboro to ensure unfettered ability to access I-91.
- Advocate for and encourage alternative modes of transportation within town and within the subregional area of Hinsdale.

**Goals and Objectives:** Specific goals and objectives related to this section are located in the Land Use Section.

## Chapter 8 - Land Use Plan

### Existing Land Use

#### Analysis of Development Capability

- Present Land Use Districts
- Rural Agricultural District
- Residential District
- Business District
- Roadside Commercial District
- Commercial/Industrial District
- Flood Plain District
- Wellhead/Aquifer Protection District

#### Future Land Use Policies

#### Administration and Implementation

- Goals and Objectives
- Community Facilities
- Recreation
- Traffic and Transportation
- Economic Development
- Conservation and Preservation
- Housing
- Land Use



*Photo by James MacDonell*

---

### Existing Land Use

The Land Use Plan of Hinsdale's Master Plan describes existing land uses as well as future land use plans. The accompanying maps will illustrate the various existing uses and zoning districts. Included are recommendations for future land uses and goals, policies and objectives for future land use.

Hinsdale has predominantly been a rural mill town. The Ashuelot River, which is located adjacent to the downtown area, made an ideal location for several paper mills which utilized the river for power generating purposes. The residential area settled near and around the mill locations, thus allowing easy access to places of work. The community soon included churches, small businesses, meeting halls and schools.

Early recreation activities included hunting in hundreds of acres of forest land, fishing in the many ponds, brooks and rivers, social activities in public and civic buildings, and outdoor sports, such as town baseball, played in farm fields and small recreation areas.

Agriculture has also been a major land use in town. Hinsdale is bordered on the west by the Connecticut River and the rich soil along the banks was excellent for farming.

Eventually, a railroad line was built to service Hinsdale and surrounding towns. Town roads were extended and new bridges were built to accommodate automobile travel. Gradually, a community developed in the northern section of town, with homes, churches and schools.

According to New Hampshire Department of Revenue (NH DRA) assessing records current to April 1, 2013, there were 12,693 acres and 1,808 parcels in Hinsdale. Residential uses comprise the majority of parcels in

Town and accounted for 5,462 acres, or about 43% of all land. Single-family residential uses outnumbered two- and multi-family properties 10-to-1. See Table 1.

Commercial uses included 58 properties totaling approximately 249 acres, with the largest lots located on Route 119, the most heavily trafficked portion of Hinsdale at over 9,000 vehicles daily. Likewise, the largest industrial properties were located off Route 119 and accounted for about 406 acres. Agricultural uses included a total of 28 properties and 763 acres, primarily in the vicinity of Route 63 south of the Ashuelot River.

The utility category, which accounted for land utilized for the purpose of generating or transmitting electricity, totaled 36 parcels and 275 acres, primarily along the Connecticut River. These properties were valued at almost \$90,000,000.

Roads accounted for a relatively small portion of the Town. According to New Hampshire Department of Transportation (NH DOT), Hinsdale contains 17.4 miles of State-owned roads (Class I & II), 30.3 miles of locally-owned roads (Class V), 2.9 miles of unmaintained roads (Class VI), and 9.2 miles of private roads.

**Table 1  
Distribution of Land Uses (2013)**

Land Use	Number of Parcels	Acreage of Parcels	% Total Acreage	Value of Parcels
Residential	1,280	5,462	42.8%	\$186,513,790
Single-Family	1,182	4,986	39.1%	\$161,581,629
Two-Family	52	43	0.3%	\$7,433,600
Multi-Family	46	433	3.4%	\$17,498,561
Commercial	58	249	2.0%	\$34,412,321
Industrial	16	406	3.2%	\$6,916,149
Agriculture	28	763	6.0%	\$261,682
Institutional	12	104	0.8%	\$3,443,056
Utilities	36	275	2.6%	\$88,990,800
Exempt Municipal	59	329	2.6%	\$18,977,700
Exempt State	37	1,454	11.4%	\$1,686,800
Undeveloped, Forested, and Vacant	281	3,651	28.6%	\$5,181,219
<b>Total</b>	<b>1,808</b>	<b>12,693</b>	<b>100%</b>	<b>\$346,383,517</b>

Source: NH Department of Revenue 2013

### Analysis of Development Capability

An essential element in the creation of a Land Use Plan is consideration of actual physical characteristics of the land and the extent to which these characteristics affect the land's ability to accommodate future development.

One of the most practical methods for undertaking such an analysis entails use of the National Cooperative Soil Survey of Hinsdale prepared by the U.S.D.A.'s Soil Conservation Service and the Cheshire County Conservation District. This Soil Survey provides a wealth of information as to the actual characteristics of Hinsdale's land as they pertain to its ability to safely support new development.

Using a recently developed system of categorizing and rating soils for their development potential, the Soil Conservation Service and the Southwest Region Planning Commission developed a series of maps indicating those areas that can most successfully accommodate new development as well as those areas that pose considerable constraints to development. In addition, these maps illustrate areas of land well suited to agriculture. Of course, much of this prime agricultural land also has a very high potential for other types of development, making it vulnerable to conversion for other uses. These maps are available for inspection at the Town Hall.

Through thoughtful and intelligent planning and land use controls, the town can direct new growth onto areas which are best suited to each type of land use. Knowledge of what areas of town can best support development will help the town plan for roads, utilities and infrastructure for other municipal services.

### **Present Land Districts**

**Residential District (R)** The Residential District encompasses the more highly developed sections of town, and provides the transitional area between the outlying Rural Agricultural District and the more densely developed Business and Industrial Districts. The Residential District areas are characterized by smaller lots, less open space and more concentrated and diversified land uses than in the Rural Agricultural District. Residential uses, located in the center of town along the Ashuelot River and Route 119, are thickly settled. Homes are mostly single-family on smaller parcels of land. Multi-family residences are generally larger, older homes that have been converted to fit the current needs. New homes were built in the late 1960s near the two public schools. Most homes in this area are serviced by town water and sewer. Additional residential growth is located in the Monument /Meetinghouse Roads and Plain Road area in North Hinsdale.

**Rural Agricultural District (RA)** This district is designed to accommodate residential uses in what is commonly recognized as being a rural environment. The property included within this district does not have sewer available. Agriculture and other low density uses are also permitted. This district is considered to be a future growth area for the Town and new uses should be carefully considered. Located in the rural areas of town, they consist of several large farms, mobile home parks, and single family homes on larger parcels of land. Some of this area is serviced by town water. This is also the location of most of the undeveloped land within the Town.

**Business District (BA)** The Business District is intended to provide compact areas for commercial and business uses. In addition, provision is made for areas to allow controlled development of business uses related to the road and highway network. Business uses are primarily located on Route 119 in the center of town. Development consists of both business and residential uses. One small hydro-electric generating plant is located in the center of town using the Ashuelot River for generating power.

**Roadside Commercial (RC)** The Roadside Commercial District is designed to recognize the distinction between the type of business uses that are generally located in a central Business District and those that serve the automobile oriented public. The Roadside Commercial District must have access to a good highway network to serve its primary market, the traveling public. This district also provides a location for those uses requiring larger land areas or generating greater traffic than can be accommodated in the Business District.

**Commercial/Industrial District (CI)** This district is intended to provide compact areas within which the industrial community may function. There is a 411 acre Commercial/Industrial District located on Monument Road.

**Floodplain District** The Floodplain District includes all land within the Special Flood Hazard area and which is designated as Zone A and AE on the Flood Insurance Rate Map. It is characterized as land in the flood plain within the Town of Hinsdale, subject to a one percent or greater chance of flooding in any given year. Flood hazard areas exist along the Ashuelot River and the Connecticut River, and along several brooks located throughout town.

**Wellhead/Aquifer Protection District** The Hinsdale Wellhead/Aquifer Protection District is an overlay district which is superimposed over the existing underlying zoning. Included within its boundaries are all the Wellhead Protection Areas for municipal water supply wells. The purpose of this district is to preserve, maintain, and protect groundwater supply areas and to protect surface waters that are fed by groundwater. Major aquifers are located off Glen Street, off Meetinghouse Road and off Monument Road.

### **Future Land Use Policies**

The Land Use Plan for the Town of Hinsdale was developed to provide a planning guide for future land use. The following general policies, therefore, were put forth to guide recommendations of the plan and future land use decisions.

- Promote a balanced pattern of development for housing, agriculture, recreation, business, and industry.
- Enhance economic opportunities by providing infrastructure to support the needs of businesses.
- Find a balance that will provide for fair housing opportunities to all citizens over a broad range of incomes.
- Ensure that development occurs at a rate consistent with the capability of the land to support it and the Town's ability to provide services.
- Balance new development with protection of Hinsdale's sensitive and significant resources.
- Discourage development on environmentally sensitive and fragile lands, such as wetlands, steep slopes and floodplains.
- Recognize the importance of historic resources that give Hinsdale much of its character.
- Provide for preservation of Hinsdale's agricultural, forest, wildlife and water resources.

## Administration and Implementation

The Land Use Plan envisions a comprehensive program for the Town of Hinsdale to direct development of the Town in an orderly, thoughtful manner. Unless, however, the proposed goals and objectives are adopted and implemented, the Plan will not accomplish this purpose.

The term "administration" refers to those activities that direct and manage the Town's municipal affairs. Hinsdale is administered by a five-member Board of Selectmen. The Town Meeting is the legislative body of the Town, and the Selectmen represent the executive, or administrative, arm of that body. In addition to the Selectmen, other local boards participate in municipal government, i.e., the Planning Board, Board of Adjustment, Conservation Commission and other appointed entities. This form of government relies heavily on volunteer officials serving in a wide range of capacities. Some of these functions relate directly to the goals and objectives of this Master Plan, others less so.

Implementation of the goals and objectives can be accomplished in a number of ways; some items require no more than official endorsement by the Selectmen. Others, however, require amendments to the zoning ordinance and/or the Site Plan Review Regulations in order to be realized.

### HOUSING

**Goal:** To continue to provide areas in Hinsdale to allow for a diversity of housing opportunities while striving to enhance the visual and aesthetic qualities of both existing and proposed housing.

**Objectives:**

1. Support the preservation and maintenance of the existing and future housing stock through public and private actions.

**Actions:**

Encourage the private sector to remove or rehabilitate all substandard housing.

2. Ensure the housing stock and residential development opportunities support the needs of residents and Hinsdale's economic development goals.

**Actions:**

- a. Continue to support development of adequate elderly housing.
- b. Conduct a housing inventory to develop a better understanding of existing housing conditions to support local workforce needs (i.e., number of single- and multi-family houses, age and condition of houses, real estate market, number of rental units and number of homes for sale).
- c. Conduct a market analysis to determine the type(s) of housing in demand and potential locations for housing development.
- d. Consider revising local land use regulations and building codes to address potential barriers to housing diversity and affordability such as: the allowance of different types of housing including accessory dwelling units or the conversion of existing structures into apartments or condominiums; rehabilitation of older and historic homes and buildings;

locating housing in proximity to other nonresidential uses such as professional offices, retail businesses, schools, etc.; energy efficient design, construction or rehabilitation of homes; alternative site patterns for new development (e.g., conservation subdivisions).

**COMMUNITY FACILITIES**

**Goal:** To maintain and enhance the quality of the community facilities and municipal services in Hinsdale in a manner compatible with the Town’s financial resources.

**Objectives:**

1. The town should annually update and maintain the Capital Improvements Plan to help identify and schedule major improvements of the town municipal assets.

**Action:**

Continue annual reviews to meet the Town’s needs.

2. Continue buying and/or sharing of equipment, materials and/or services with other towns, as feasible.

**Action:**

Coordinate Hinsdale’s needs with the needs of other towns.

3. Anticipate the demands that new growth will place on Town services and facilities, and plan accordingly.

**Action:**

Evaluate the needs based on demographic updates, building permits, and recent development.

4. Maintain and continually upgrade and improve the quality of education in Hinsdale at all levels.

**Actions:**

- a. Re-examine the feasibility of consolidating with the Town of Winchester.
- b. Encourage interaction between the School Board, staff, parents, and the community.

5. Relocate the Fire Station and the Emergency Operations Center.

**Action:**

Determine the current and future needs for the Hinsdale Fire Department and Emergency Operations Center.

6. Relocate the old Town Hall to Main Street.

7. Support Community Gardens throughout the town.

**RECREATION**

**Goal:** To enhance the quality of life for residents of Hinsdale and visitors through recreation.

**Objectives:**

1. Provide a range of year-round recreational opportunities for users of all ages and mobility levels to enjoy.

**Actions:**

- a. Perform a periodic inventory of existing and potential recreational areas and programs to determine specific locations and populations that are underserved.
  - b. Prepare a periodic inventory of the condition of facilities and equipment used for each recreational area and program.
  - c. Continue to maintain the Branch Trail and Rail Trail for public use.
  - d. Provide adequate trailhead signs and parking locations for public recreation.
  - e. Provide sufficient parking for and public access to water resources for boating and swimming.
  - f. Provide outreach and education on the location and type of activity for the recreational areas. Use methods such as signage, brochures, website, etc.
2. Preserve open space and plan to acquire land for future recreational purposes.

**Actions:**

- a. Encourage public access onto conservation easements when possible.
- b. Prepare a plan of recreational needs and potential recreational areas throughout the town to consider in future proposals.
- c. Explore options to develop recreational opportunities on town owned land formerly known as the Podlenski property.

**ECONOMIC DEVELOPMENT**

**Goal:** Promote a stable economic environment for existing businesses and encourage the development of new businesses as a way to protect and enhance the quality of life in Hinsdale.

**Objectives:**

1. Ensure proper land allocation and municipal land use regulations to support economic development in Hinsdale.

**Actions:**

- a. Periodically perform a regulatory review of all land use regulations and application procedures to encourage development of new businesses and expansion of existing ones.

- b. Periodically review zoning regulations and land uses in neighboring towns (i.e., Brattleboro, Chesterfield, Keene, Swanzey and Winchester). Confirm that Hinsdale's industrial/commercial zones can accommodate the same businesses as the towns with which Hinsdale competes with for new businesses and industries.
  - c. Evaluate parcels town-wide to identify sites suitable for future industrial and/or commercial development. Consider any rezoning and infrastructure needs that support and enhance the suitability for new development in the identified sites.
  - d. Examine parcels adjacent to NH 63 south of town for potential retail/commercial/industrial development.
2. Ensure that adequate public and private infrastructure are in place to support economic growth and development in Hinsdale.

**Actions:**

- a. Examine existing water and sewer network, and 3-phase power to determine capacity limitations.
  - b. Provide infrastructure improvements in the industrial area.
  - c. Support initiatives such as the New Hampshire Broadband Mapping and Planning Project to bring inexpensive broadband internet service to all towns in the Monadnock Region.
  - d. Use Tax Increment Finance (TIF) districts to fund identified infrastructure expansion and improvements.
3. Create and maintain a business-friendly environment.

**Actions:**

- a. Work with Board of Selectmen, Planning Board, and HCIDC to determine which type(s) of businesses should be most aggressively recruited.
  - b. Develop and implement a marketing strategy to promote Hinsdale to attract new visitors and businesses.
  - c. Update the Town's website to promote a "business friendly" environment with links to information on business development in Hinsdale.
  - d. Schedule regular meetings between business owners and town officials to discuss relevant issues ( such as Business Owners Breakfast or Luncheon).
4. Support efforts to strengthen the vibrancy of downtown Hinsdale.

**Actions:**

- a. Continue to focus community efforts on improving the Ashuelot riverfront as part of the Community Center. Seek funding opportunities to further this effort.
- b. Continue support of the Farmer's Market.
- c. Develop a downtown parking plan to accommodate build-out scenario and examine winter residential parking capacity.
- d. Consider applying for NH Main Street designation.
- e. Develop and adopt site and architectural standards for commercial and industrial buildings to ensure quality and attractive appearance.
- f. Consider local adoption of NH RSA 79-E to provide tax relief for eligible

- community revitalization projects, such as rehabilitation of under-utilized buildings.
- g. Seek funding opportunities to provide streetscape enhancements and pedestrian friendly amenities.
5. Increase educational opportunities for Hinsdale residents to promote a more educated work force.

**Actions:**

- a. Develop partnerships between the Hinsdale High School and local businesses to develop training programs to build appropriate skills for employment in the local economy.
  - b. Work with regional educational institutions to encourage technical training and re-training opportunities.
6. Ensure the housing stock and residential development opportunities in Hinsdale support the economic development goals.

**Actions:**

- a. Conduct a housing inventory to develop a better understanding of existing housing conditions to support local workforce needs (i.e., number of single- and multi-family houses, age and condition of houses, real estate market, number of rental units, and number of homes for sale).
- b. Conduct a market analysis to determine the type(s) of housing in demand and potential locations for housing development.

## CONSERVATION AND PRESERVATION

**Goal:** Balance new development with protection of the Town's sensitive and significant natural, cultural and historic resources, year round recreational opportunities, and preservation of the Town's identity.

**Objectives:**

1. Preserve and protect agricultural lands, environmentally sensitive lands and historic structures to enhance the open space and retain the town characteristics.

**Action:**

Evaluate methods of assessing additional fees that would contribute to the fund in Hinsdale for the acquisition of conservation land and/or development rights. Such methods may include a transfer tax, impact fees, subdivision fees, and the like.

2. Encourage preservation and management of agricultural Town and private lands to mitigate the risk of food and water resource isolation due to catastrophic events.

**Action:**

Re-examine the existing zoning and subdivision rules and regulations with the goal of:

- Encouraging continuation of agricultural uses of agricultural land; and
- Directing development away from cleared fields and prime agricultural land to those areas that cannot be put to agricultural use.

3. Establish conservation areas and open spaces throughout the town.

**Action:**

Consider adoption of innovative land use techniques as identified in RSA 674:21, such as Conservation Subdivisions, to encourage preservation of high quality open space in the development of subdivisions.

4. Protect the scenic elements and ecological qualities of the natural environment, viewsheds and valuable water resources throughout the Town. Above ground and underground water resources are a vital asset worthy of protection from all forms of pollution.

**Actions:**

- a. Encourage evolving education and collaboration efforts with Hinsdale schools and the local community on topics including, but not limited to:
    - Identifying and documenting vernal pools and other essential natural resources;
    - Identification and management of invasive plants and insects; and
    - Land management efforts and reducing environmental impacts.
  - b. Review the zoning ordinances and subdivision regulations so that development in areas of potential public water supplies and in areas adjacent to wetlands and rivers can be carefully regulated. Particular attention should be given to adequate setback requirements in anticipation of the continuing erosion of the riverbanks.
  - c. Combine efforts of the Planning Board, Zoning Board and Conservation Commission to review, update and apply the Aquifer Protection Plan and establish a timetable to accomplish this.
5. Retain and improve access to open space and environmental areas for public use.

**Actions:**

- a. Review zoning ordinances and subdivision regulations to encourage, through the subdivision process, the provision of permanent public access to public bodies of water, such as the Ashuelot and Connecticut Rivers.
  - b. Work with state and local partners to provide permanent public access to bodies of water such as the Ashuelot and Connecticut rivers.
  - c. Organize and support local community cleanup efforts.
  - d. Sponsor river-monitoring activities with the Ashuelot River Local Advisory Committee and others.
  - e. Encourage Current Land Use practices to support sustainable hunting, fishing and recreational tourism and to provide economic and ecological resiliency.
6. Maintain Hinsdale's system of Class VI roads and range ways.

**Actions:**

- a. Compile an inventory and map of trails, roads and range ways of Hinsdale.
- b. Work with local and regional non-governmental organizations to develop, maintain and encourage the responsible use of local trails and access.

**CONSTRUCTION MATERIAL**

**Goal:** To identify existing or potential sources of construction materials within the town boundaries.

**Objectives:**

1. Any extraction of potential resources should be done in a manner that respects the environment, abutting land uses, and the neighborhood in which the operation takes place and can provide full reclamation.

**Action:**

Adopt an Earth Excavation Ordinance to set the standards and guidelines.

**TRAFFIC AND TRANSPORTATION**

**Goal:** To maintain a convenient transportation network and allow for the safe movement of goods and people throughout Hinsdale while protecting the aesthetic and scenic qualities of town roads.

**Objectives:**

1. Develop a transportation system/network that supports and maintains all roads and thoroughfares.

**Actions:**

- a. Advocate for improvement of state road conditions, upgrade of culverts, and erosion control/bank stabilization within Hinsdale. Coordinate with the Town of Chesterfield for improvements and maintenance related to NH 63.
  - b. Continue to advocate for the construction of the new single span bridge over the Connecticut River and connecting New Hampshire to Vermont.
2. Establish standards of construction, maintenance and improvements that balance the need for safety on the highways with residents' concern for maintaining a rural atmosphere.

**Actions:**

- a. Implement Complete Streets techniques within the Town center to provide visual indicators to reduce speed.
- b. Revise road and storm water management standards to meet changing needs and keep pace with current technology.
- c. Adopt access management standards for review of new driveways and curb cuts.

3. Advocate for and encourage alternative modes of transportation within town and within the subregional area of Hinsdale.

**Actions:**

- a. Work with the Town of Brattleboro, NHDOT and VT DOT on a pedestrian/bicycle connectivity using the Charles Dana Bridge and the Anna Hunt Marsh Bridge.
- b. Examine the long-term feasibility of returning Fort Hill Branch Railroad back into operation.
- c. Continue to support the operation of Connecticut River Valley Transit bus service.

**LAND USE**

**Goal:** To promote a balanced pattern of development for housing, agriculture, recreation, business and industry.

**Objectives:**

1. Ensure that development occurs at a rate consistent with the capability of the land to support it and the Town's ability to provide services.

**Action:**

Consider local adoption of NH RSA 79-E to provide tax relief for eligible community revitalization projects, such as rehabilitation of under-utilized buildings.

2. Balance new development with protection of Hinsdale's sensitive and significant resources.

**Actions:**

- a. Identify opportunities to repurpose or redevelop vacant lots and abandoned buildings located in or near the downtown area to support workforce and rental housing options and mixed-use development.
- b. Consider the development and use of innovative land use techniques in accordance with RSA 674:21 in certain areas of a community in place of conventional zoning.

The Hinsdale Planning Board hereby certifies that the preceding document adopted on December 16, 2014, is the true Master Plan of the Town of Hinsdale, New Hampshire and was prepared and adopted in accordance with the provisions of RSA 674:2-4, 675:6, and 675:7.

William Nebelski, Chairman	_____
Clare Hudon Vice, Chairman	_____
Dorianne Almann, Secretary	_____
Morris Klein	_____
Dwight Smith	_____
Stefan Zielonko	_____
George Benedict, Alternate	_____
James MacDonell, Alternate	_____
Joan Morel, Selectman's Representative	_____

Certified on *(add date)*