

# 2004 MASTER PLAN



Bow, N.H.

**Bow, New Hampshire**

## ACKNOWLEDGEMENTS

The Planning Board would like to express their sincere appreciation and gratitude to the following people who assisted with the 2004 Bow Master Plan. Their participation in this process was critical and helped community leaders better understand the values, goals, and needs of the community. Without their help, this Plan would not have been possible.

### **Master Plan Steering Committee**

#### **Planning Board**

Steve Buckley and Gil Rogers

#### **Conservation Commission**

Nancy Rheinhardt

#### **Board of Selectmen**

Isabel Sinclair

#### **Budget Committee**

Sara Swenson

#### **Business Development Commission**

Rick Hiland

#### **Zoning Board of Adjustment**

Rob Mack

#### **Historical Commission**

Beth Titus

#### **Bow School Board**

Pansy Bloomfield

#### **At-Large Citizens**

Craig Ott and Louise Knee

### **Bow Planning Board**

Arthur Cunningham, Chair  
Richard Weed, Vice Chair  
Stephen Buckley, Secretary  
Leon Kenison, Selectmen's Rep.  
Doug Barnard, Member  
Donald Lane, Member

John McAllister, Member  
Sandy Crystall, Alternate  
Thomas Hartley, Alternate  
Rick Minard, Alternate  
Gil Rogers, Alternate  
John Wallace, Alternate

## Chapter Subcommittee Participants

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Eric Anderson	Tim Locke
Mike Audley	Margarette Lougee
Carol Bailey	Gary Lynn
Pansy Bloomfield	Rob Mack
Joe Brigham	Ignatious MacLellan
Steve Buckley	Jack McAllister
Chuck Christy	Mike Moyers
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Nancy Knapp	Bryan Westover
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Mike Labreck	Peter Winship
Don Lane	Phil Wolf

We would like to thank the staff at the Central New Hampshire Regional Planning Commission for all their hard work and assistance in the Master Plan process.

We would also like to thank local Bow Artist Kerry B. Buckley for providing the artwork for the Master Plan cover.

For those we failed to mention, we sincerely appreciate your efforts and contributions.

# CHAPTER I INTRODUCTION

A Master Plan is a living document that articulates the vision, desires, and concerns of a community. The Plan provides recommendations on ways to maintain or improve the features of a community. This Plan is intended to serve as a blueprint for all future activities of Bow. This includes future economic development efforts; amendments to land use regulations; environmental and historic preservation efforts; the development of a variety of housing stock options, and the expansion of community facilities and services for the next five to ten years.

This Master Plan is Bow's vision for the first quarter of the twenty-first century and beyond. It outlines what we are all about and where we want to go as a community in central New Hampshire. The Plan describes us today, and forecasts where we are heading. Most importantly, it defines what we will need to do over the next several years as we work together to shape the future of the Town of Bow. What you now have in your hands is the result of the collective efforts of those who made significant contributions of time, energy, and ideas. The new "Master Plan of the Town of Bow" is now ready for implementation.

## **WHAT IS A MASTER PLAN**

A Master Plan is intended to be the device that influences the making, interpretation, and implementation of regulations and procedures that give shape and direction to the community. A Master Plan is required by law (RSA 674:2); but unlike other "master devices," it has no force of law and no way to generate the resources that may be required for implementation. An updated Master Plan is required prior to adopting a Zoning Ordinance, a Capital Improvements Program, a Growth Management Ordinance, or an Impact Fee Ordinance. The Master Plan can be a powerful tool to shape a community by giving direction to appointed and elected officials. However, the true power of the document is derived from the citizenry, as they will ultimately be the voice that approves the staffing, funding, regulatory alternatives and strategies identified by this Plan.

## **BOW'S MASTER PLAN PROCESS**

In the Fall of 2001, the Bow Planning Board and the Central New Hampshire Regional Planning Commission (CNHRPC) entered into an agreement to conduct an update of the Town's 1992 Master Plan and to develop a land use build-out analysis. The follow is an abridged timeline for the Master Plan process.

### **Steering Committee Organization – Winter 2002**

The Planning Board felt that a Steering Committee should be designed to oversee the development of the Master Plan. The Committee was created to be a cross-representation of the community. The Committee was comprised of 12 members that represent various Town Boards and Commissions, including the Planning Board, Conservation Commission, Board of

Selectmen, Budget Committee, Business Development Commission, Recreation Commission, Zoning Board of Adjustment, Historical Commission, School Board, and two At-Large citizens.

The specific roles of the Steering Committee are to have individual members chair the various Chapter Subcommittees, to review and approve the Chapters once the Subcommittees are done, and to present the Chapters to the Planning Board for their review and approval.

### **Build-out Analysis – Spring 2002**

The Planning Board was interested in knowing how much more development potential there was in town, under current zoning and land use constraints, as part of the Master Plan process.

The first step in the build-out analysis was to merge the tax maps together with the Town Assessor's database. This database contains information related to a parcel's land use, zoning, and present building location. In addition to the parcel information, other data used in the analysis include the National Wetlands Inventory, Federal Emergency Management Agency (FEMA) Flood Insurance Rate maps that delineate the 100-year floodplain, utility easements as found in the tax maps, and information related to conservation lands from Town and Central NH Regional Planning Commission files. After the local data were linked to the digital map, maps were produced that portrayed zoning and existing land use at the parcel level.

Next, an initial review of "built-out" parcels was produced using lot size and underlying zoning. A better way to describe this analysis would be the identification of those parcels that cannot be further subdivided according to existing zoning. With those initial results, areas that likely will not be developed due to their ownership or use (Town lands, schools, Pages Corner State Forest, Merrimack Station Power Plant and adjacent lands, land along Class VI Roads), as well as wetlands, areas in the 100-year floodplain, and utility easements also were classified as "built-out".

The final step in identifying the built-out lands, was to estimate the number of potential residential lots in the Residential, Rural and Civic Zoning Districts and the developable commercial/industrial acreage in the I-1, I-2, Commercial, Institutional and Business Development Districts.

The results of the build-out analysis were presented to the Town at the Community Visioning Session and can be seen in Chapter III Current Land Use.

### **Community Visioning Session - May 18, 2002**

In order to gather community input and involvement in the Master Plan, the Steering Committee organized a Community Visioning Session that was held on Saturday May 18, 2002 at the High School. The purpose of the Session was to introduce the Master Plan concept to Town residents, present previous research and studies as background information, highlight the results of the build-out analysis, and gather feedback to be used in the development of the different chapters.

There was a concerted effort to use and present existing data, maps, studies, and reports so as not to duplicate efforts that have already been undertaken. The Goals and Objectives of the 1992 Bow Master Plan were reviewed and the progress for each was noted (**Appendix A**). In addition to

the 1992 Master Plan, over 20 other data sources were reviewed and summarized for Visioning Session participants (**Appendix B**).

One of the greatest benefits of holding the Visioning Session was being able to have break-out sessions on topics that corresponded to the proposed Master Plan Chapters. Each of the sessions asked participants to state the “strength,” “weakness,” “threat,” and “opportunity” they felt were present for each topic. The results of the sessions (**Appendix C**) were used to help shape the content of each Master Plan Chapter.

### **Community Survey - September 2002**

In September 2002, 3,321 community surveys, which were designed by the Steering Committee, were sent out to Bow residents (2,598) and non-residents (723) and 1,127 surveys were returned for an impressive 34% response rate. The survey results, which can be found in **Appendix D**, were used by the Chapter Subcommittees as a basis for the recommendations contained in the various Chapters.

### **Master Plan Chapter Work - Fall 2002 – Fall 2003**

Once the Visioning Session and the Community Survey were completed, the next step was to start work on the individual Chapters with the Subcommittees. A member of the Steering Committee chaired each Subcommittee with CNHRPC staff acting as the staff resource. Participation in the Subcommittee was open to all members of the Community.

## **OVERALL MASTER PLAN GOALS**

Contained within each Chapter is the collective catalogue of our hopes and dreams for our town-what we want to achieve in our growing and vital town. Ideas to help us strive toward this vision have been laid out for all to see and work towards. Just as those who have gone before us, we can seize this opportunity to move and shape our little bit of the world and to make it a better place for us, our children and our grandchildren. Herein lies a living document, one that will help us focus on the important issues in our Town.

Some of the recommendations contained within the individual Chapters can be seen below. The Implementation Chapter collects and classifies each recommendation as a “regulatory” or “non-regulatory” recommendation, the responsible party for implementation, the estimated cost to the Town of Bow for implementation, and a proposed timeframe for implementation to occur. The format is intended to facilitate accountability for implementation and hopefully assist in the next Master Plan update.

### **Economic Development Chapter**

The Plan proposes to continue the Town's recent efforts to expand commercial and industrial activities in the southern area of town, east of I-93. The Plan expects water and sewer development and other regulatory changes to encourage high quality development and, therefore, a higher tax base.

## **Housing Chapter**

The Plan leaves in place the Town's basic zoning map, which allows 2-acre lots across most of town. To help mitigate the impact of more housing, the Plan proposes that all larger developments conform to "conservation subdivision" guidelines to protect more of the natural buffer around the new homes and encourage the houses to be built in more compact groupings. The Plan also calls on the Town to develop and adopt a system of Transferable Development Rights which would allow for denser development in exchange for preserving much larger lots, in particular, such lots that would help the Town achieve the conservation and preservation goals identified in this document.

The Plan makes other recommendations to encourage the availability of more diverse types of housing in Bow. One recommendation would allow homeowners to add accessory apartments to their homes; another would make it easier for multi-family homes to be built in areas with water and sewer; another would encourage continued development of housing for older residents. The goal of these recommendations is to ensure that people of all incomes and ages can find a place to call home in Bow.

## **Transportation Chapter**

The Plan recognizes that Bow is a town that evolved from a rural community primarily accessed by automobiles. Increased development, community activity and modern lifestyles have brought about a need for safer and more efficient automobile travel as well as alternative transportation modes such as walking and biking. The Plan lays out a schedule to modernize town road standards, within the context of a rural community vision, to provide roadway widths that encourage appropriate travel speeds and to add paved shoulders for dual pedestrian and bicycle usage. Enhancement to existing roads would occur in conjunction with regularly programmed road improvements, be they Town, State or developer funded.

## **Conservation, Preservation, and Open Space Chapter**

The Plan includes recommendations to create a park with expanded access to the Merrimack River and to maintain and expand the network of trails throughout Town. It lays out a series of steps intended to protect ground water, habitat, and overall environmental quality.

## **Future Land Use Chapter**

One of the goals under the "Vision for Future Land Use" section was to "preserve and increase the acreage of conservation lands in Bow and yet encourage the most productive kinds of commercial development." Three (3) build-out scenarios were run to assist in the preparation of future land use goals. These scenarios were (1) full build-out under current zoning, (2) all residential lots 20 acres or more to be developed as POS-RD subdivisions with a 20% density bonus, and (3) an assumption that some parcels west of I-93, including some under conservation easement, would be rezoned to the Business Development District.

Scenario (2) resulted in a recommendation in the Implementation Chapter reflecting that scenario. Relative to scenario (3), the Master Plan does not call for rezoning conservation land for commercial purposes, regardless of the fact that it is a Phase II recommendation of the plan prepared by the Business Development Commission in 2000. However the expansion issue may need to be reconsidered during future issues of the Master Plan.

## **CONCLUSION**

As this Master Plan was being written, it became evident that Bow is at a crossroads. With incremental growth creeping from southern portions of the State and the City of Concord continuing to evolve and expand as a regional source of employment, Bow will continue to grow and face new challenges and issues. Those who contributed to this plan did their best to plan for such changes and to suggest appropriate strategies that will accommodate reasonable growth while maintaining the rural atmosphere. It is the resolve of the Planning Board to faithfully and aggressively pursue the recommendations included in this document.

The Master Plan is a document that outlines the kind of town Bow is now and the kind of town it would like to be, keeping in mind its importance as a community in central New Hampshire. It describes us today, forecasts where we are heading, and defines what we need to do over the next several years. Most importantly, we can see what we can achieve and, by committing it to paper for all to see, what our plan is for the future. It is to be a living document helping us to focus on the important issues of our times. We need each and every community member's efforts to bring fruition to the recommendations in this document.





## CHAPTER II DEMOGRAPHICS

### INTRODUCTION

It would be difficult to plan for the future of the Town without some statistics regarding who lives in or does business in Bow, and who is likely to move in or out of Bow in the future. The United States Census can provide us with a lot of information in this area. It is important to note, however, that the Census only gives us a snapshot of what has occurred in the past. We need to understand the changes that the town has experienced in past years in order to think about what may happen in the future and plan accordingly.

The future population projections prepared by the New Hampshire Office of Energy and Planning are somewhat general in nature and should be looked at as an estimate. According to the population projections prepared by the Office of Energy and Planning, Bow has already exceeded the projections for the year 2015. While it does include several variables, it does not take into account current zoning or planning practices of a particular community nor its current attractiveness to potential residents. Nevertheless, this information, as well as other sources, can be used as a starting point.

This Chapter not only looks at demographics for the Town of Bow, but also demographics for abutting communities, the county, and the State. This allows for the comparison and analysis of information for Bow as well as the abutting communities.

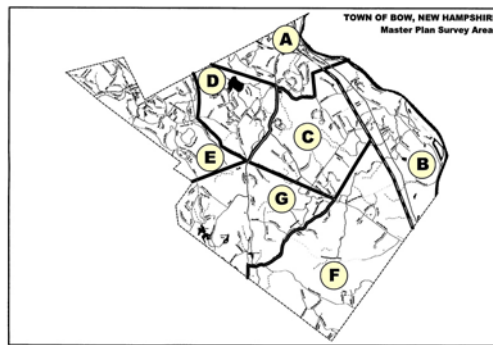
### COMMUNITY SURVEY RESULTS

In September 2002, 3,321 Community Surveys were mailed out; 2,598 to Bow residents and businesses and 723 to non-resident landowners. There were 1,127 surveys returned, which resulted in a 34% response rate. The following questions from the Community Survey relate to the Demographics Chapter.

<b>Are you a:</b>	<b>#</b>	<b>%</b>
Legal resident of the Town of Bow	1,058	93.9%
Business	24	2.1%
Legal resident of another NH city/town	17	1.5%
Legal resident of another state	7	0.6%
NA	21	1.9%
<b>Total</b>	<b>1,127</b>	<b>100%</b>

**What general area do you consider yourself a resident of?**

Map Area	#	%
A	147	13.9%
B	36	3.4%
C	194	18.3%
D	129	12.2%
E	234	22.1%
F	136	12.9%
G	161	15.2%
NA	21	2.0%
<b>Total</b>	<b>1,058</b>	<b>100%</b>



**Do you reside in Bow:**

	#	%
Year-Round	1,046	98.9%
Seasonally	10	0.9%
NA	2	0.2%
<b>Total</b>	<b>1,058</b>	<b>100%</b>

**How long have you lived in Bow?**

Time	#	%
Less than 5 years	202	19.1%
5-10 years	190	18.0%
11-20 years	238	22.5%
Over 20 years	287	27.1%
NA	141	13.2%
<b>Total</b>	<b>1,058</b>	<b>100%</b>

**How much longer do you plan on living in Bow?**

<b>Time</b>	<b>#</b>	<b>%</b>
Less than 5 years	86	8.1%
5-10 years	188	17.8%
11-20 years	262	24.8%
Over 20 years	343	32.4%
NA	179	17.0%
<b>Total</b>	<b>1,058</b>	<b>100%</b>

**What type of housing do you live in?**

<b>Type of Home</b>	<b>#</b>	<b>%</b>
Single family home, on less than 1 acre	56	5.3%
Single family home, on 1-5 acres	869	82.1%
Single family home, on 5+ acres	111	10.5%
Two-family home	6	0.6%
Multi-family/apartment	5	0.5%
Other	4	0.4%
NA	7	0.7%
<b>Total</b>	<b>1,058</b>	<b>100%</b>

**Are you a:**

	<b>#</b>	<b>%</b>
Homeowner	1,044	98.7%
Renter	5	0.5%
Other	2	0.2%
NA	7	0.8%
<b>Total</b>	<b>1,058</b>	<b>100%</b>

**How many individuals are in your household?**

<b>Individuals</b>	<b># of Responses</b>	<b>%</b>
One	76	7.2%
Two	372	35.2%
Three	162	15.3%
Four	290	27.4%
Five	103	9.7%
Six	41	3.9%
Seven	7	0.7%
Eight	2	0.2%
Nine	1	0.1%
Ten	0	0.0%
Eleven	1	0.1%
NA	1	0.1%
Total households	1,058	100%
Total population	3,321	-

**Please indicate the number of children for each age group in your household.**

<b>Number of Children</b>	<b>Number of children under the age of 5 years old in Bow households</b>	<b>Number of children 5-10 years old in Bow households</b>	<b>Number of children 11-13 years old in Bow households</b>	<b>Number of children 14-17 years old in Bow households</b>
One	96	137	165	165
Two	39	91	23	63
Three	3	11	0	4
Four	0	1	0	0
Total Households	138	240	188	232
Total Children	183	356	211	303

**If your children are cared for outside of your home, in what town are they cared for?**

<b>Town</b>	<b># of Responses</b>	<b>%</b>
Concord	20	39.2%
Bow	16	31.4%
Hooksett	4	7.8%
Manchester	3	5.9%
Bow/Concord	3	5.9%
Pembroke	2	4.0%
Chichester	2	4.0%
Contoocook	1	2.0%
Goffstown	1	2.0%
Total Households	51	100%

**How many children in your household (pre-K through grade 12) attend school in Bow?  
What are their ages?**

<b>Number of Children</b>	<b># of Households</b>	<b>% of Households</b>
One	170	40.3%
Two	184	43.6%
Three	52	12.3%
Four	12	2.8%
Five	3	0.7%
Six	1	0.2%
Total households	422	100%
Total children in Bow school system	763	-

<b>What are their ages?</b>	<b>#</b>	<b>%</b>
Two	4	0.5%
Three	4	0.5%
Four	22	2.9%
Five	13	1.7%
Six	50	6.6%
Seven	50	6.6%
Eight	44	5.8%
Nine	72	9.4%
Ten	62	8.1%
Eleven	59	7.7%
Twelve	69	9.0%
Thirteen	55	7.2%
Fourteen	69	9.0%
Fifteen	62	8.1%
Sixteen	56	7.3%
Seventeen	63	8.3%
Eighteen	5	0.7%
Nineteen	1	0.1%
NA	3	0.4%
Total Children	763	100%

**How many children in your household (pre-K through grade 12) attend school outside of Bow? What are their ages?**

<b>Number of Children</b>	<b># of Households</b>	<b>% of Households</b>
One	51	68.9%
Two	16	21.6%
Three	5	6.8%
Four	2	2.7%
Total households	74	100%
Total children not in Bow school system	106	-

<b>What are their ages?</b>	<b>#</b>	<b>%</b>
Two	1	0.9%
Three	6	5.7%
Four	8	7.5%
Five	11	10.4%
Six	6	5.7%
Seven	2	1.9%
Eight	2	1.9%
Nine	10	9.4%
Ten	9	8.5%
Eleven	4	3.8%
Twelve	4	3.8%
Thirteen	12	11.3%
Fourteen	4	3.8%
Fifteen	5	4.7%
Sixteen	5	4.7%
Seventeen	10	9.4%
Eighteen	4	3.8%
Nineteen	3	2.8%
Total	106	100%

**Please indicate the number of adults in your household by age group.**

<b>Number of Adults</b>	<b>18-25 years old</b>	<b>26-35 years old</b>	<b>36-49 years old</b>	<b>50-64 years old</b>	<b>65-79 years old</b>	<b>80 years old and older</b>
<b>1</b>	85	72	179	152	99	31
<b>2</b>	46	68	369	209	84	2
<b>3</b>	4	0	3	0	0	0
<b>4</b>	25	0	0	0	0	0
<b>Total Households</b>	160	140	551	361	183	33
<b>Total Population</b>	289	208	926	570	267	37

**Please indicate the number of employed persons in your household  
(Age 16 years and older).**

Total number of employed persons (16 years old and older) = 1,289

Total number of households responding = 1,127

Full-Time			Part-Time		
Where Employed	# Employed	% Employed	Where Employed	# Employed	% Employed
Concord	495	40.7%	Concord	140	43.1%
Bow	252	20.7%	Bow	66	20.3%
Manchester	198	16.3%	Other NH Towns	48	14.8%
Other NH Towns	76	6.3%	Manchester	31	9.5%
Hooksett	45	3.7%	New Hampshire	18	5.5%
Massachusetts	30	2.5%	Hooksett	9	3.8%
New Hampshire	29	2.4%	Other States	7	2.2%
Merrimack	17	1.4%	New England	4	1.2%
Bedford	14	1.2%	Other	2	0.6%
Goffstown	12	1.0%			
Amherst	12	1.0%			
Pembroke	11	0.9%			
Hopkinton	11	0.9%			
Derry	10	0.8%			
Other States	4	0.3%			

**Please indicate the type of employment and number of people employed in your household for each person age 16 years and older.**

Type of Employment	People employed
Professional	280
Health Care	223
Retired	191
Government	159
Education	157
Self-Employed	157
Other	156
Retail	97
Manufacturing	89
Finance	86
Computers/Hi-Tech	80
Construction	57
Non-Profit	32
Unemployed	21
Real Estate	18
Agriculture/Forestry	2



**Please indicate the highest level of education for each adult  
(Age 18 years and older) in your household.**

<b>Level of Education</b>	<b>Number of Adults</b>
High school or less	98
High School graduate/GED	311
Certificate Program	76
College (no degree)	302
Associate's Degree	211
Bachelor's Degree	396
Master's Degree	312
Doctorate Degree	117

## **POPULATION CHARACTERISTICS**

### **Historical Population Trends**

Changes in the population of any community are influenced by a variety of factors, ranging from changes in the local economic base to national events, such as wars and recessions. From 1790 to 2000, Bow had seen a growth in population of 6,570 people. As can be seen in the following chart, this growth was not at a consistent rate and was subject to fluctuation.

**Bow Historical Population, 1790-2000**

<b>Year</b>	<b>Population</b>	<b># Change</b>	<b>% Change</b>
<b>1790</b>	568	0	---
<b>1800</b>	719	151	26.6
<b>1810</b>	729	10	1.4
<b>1820</b>	935	206	28.3
<b>1830</b>	1,065	130	13.9
<b>1840</b>	1,001	-64	-6.0
<b>1850</b>	1,055	54	5.4
<b>1860</b>	909	-146	-13.8
<b>1870</b>	745	-164	-18.0
<b>1880</b>	734	-11	-1.5
<b>1890</b>	725	-9	-1.2
<b>1900</b>	617	-108	-14.9
<b>1910</b>	676	59	9.6
<b>1920</b>	568	-108	-16.0
<b>1930</b>	780	212	37.3
<b>1940</b>	942	162	20.8
<b>1950</b>	1,062	120	12.7
<b>1960</b>	1,340	278	26.2
<b>1970</b>	2,479	1,139	85.0
<b>1980</b>	4,015	1,536	62.0
<b>1990</b>	5,500	1,485	37.0
<b>2000</b>	7,138	1,638	29.8

Source: US Census, NH Office of Energy and Planning, CNHRPC

## Regional Population Trends

As can be seen below, during the period of 1970 through 2000, Bow experienced a population increase of 195.1%. Since 1970, the population has increased by 4,719 people, with the largest increase occurring between 1990 and 2000.

### Population Trends for Bow and Abutting Communities, 1970-2000

Town	1970 Population	1980 Population	1990 Population	2000 Population	# Growth 1970-2000	Percent Growth 1970-2000
<b>Bow</b>	2,419	4,015	5,500	7,138	4,719	195.1 %
<b>Concord</b>	30,022	30,400	36,006	40,687	10,665	35.0 %
<b>Dunbarton</b>	825	1,174	1,759	2,226	1,401	169.8 %
<b>Hooksett</b>	5,564	7,303	9,002	11,721	6,157	110.7 %
<b>Hopkinton</b>	3,007	3,861	4,806	5,399	2,392	79.0 %
<b>Pembroke</b>	4,261	4,861	6,561	6,897	2,636	61.9 %

Source: 1970 Census, 1980 Census, 1990 Census, and 2000 Census

## Population Projections

By predicting future population changes, a town can better plan for what may happen in the future. As noted in the Community Facilities Chapter of this Plan, predicting future population growth is crucial for planning the expansion of community services and facilities. It is important to note that, any projection scheme is dependent on assumptions. Basic assumptions include: that there will be no major war, civil strife or major natural catastrophes and that there will be an adequate supply of energy at a reasonable price.

These local projections are highly dependent on the limits set by the county totals. The county projections are roughly based on long-term trends that occurred during the 1960-2000 period. The local projections are based on a community's historical share of its' respective county's growth. The principal assumption with this method is that trends of a community's population change, relative to the parent county will remain about the same in the future. However, there are limits and exceptions to this assumption.

The basic trends in shares of county population change were established using 1960, 1970, 1980, 1990 and 2000 population totals. The municipal share of total county population was calculated for each of these years. Then a test was applied. Towns that gained or lost shares in all decades or since 1980 were deemed, "consistent."

For consistent places, the numeric change as a percent of the county's population was calculated. This change was applied to the 2000 county share. This rendered a 2005-projected share for each consistent community. The same amount of change in county share was also applied to 2010. Thus, the 2005 and 2010 projected county shares are the result of trends established by the 40-year (since 1960) or 20-year (since 1980) trends.

However, for the 2015 county shares, the rate of historic change is diminished; only one third of the change is applied. This 2015 county share was then held constant and used for the remaining

two periods. The resulting sets of shares, for consistent places, are necessarily subject to further alteration. This is because shares for inconsistent places must be entered and then all shares must be forced to sum to 100% of projected county totals.

Municipalities could be classified, “inconsistent” for one of two reasons. A municipality could be have exhibited an inconsistent trend in the 1960 to 2000 period. Second, a municipality may have exhibited a consistent trend but, based on judgement supplied by OSP or a regional planning commission, were treated as inconsistent places. In most cases a regional planning commission supplied an updated rationale for modifying the “consistent trend”. In other cases, it was obvious that the consistent trend was unlikely to continue into the future.

The following table shows projections formulated by the NH Office of Energy and Planning. This table provides interesting information, but Bow should consider other criteria when projecting population, such as the effects of the Growth Management Ordinance currently in place; the availability of water and sewer for development and how it affects the time frame for such; and other factors that may influence the attractiveness of Bow as a destination for residential growth.

**NH OSP Population Projections for Bow and Abutting Communities, 2005-2025**

<b>Town</b>	<b>2000 Actual</b>	<b>2005 Projected</b>	<b>2010 Projected</b>	<b>2015 Projected</b>	<b>2020 Projected</b>	<b>2025 Projected</b>	<b>2000-2025 Projected Increase</b>
<b>Bow</b>	7,138	7,890	8,720	9,590	10,450	11,300	58.3%
<b>Concord</b>	40,687	42,780	45,230	47,550	49,870	52,050	27.9%
<b>Dunbarton</b>	2,226	2,420	2,580	2,750	2,920	3,100	39.3%
<b>Hooksett</b>	11,721	12,960	14,270	15,560	16,840	18,020	53.7%
<b>Hopkinton</b>	5,399	5,720	6,080	6,440	6,800	7,180	33.0%
<b>Pembroke</b>	6,897	7,290	7,750	8,210	8,670	9,150	32.7%

Source: 2003 Population Projections, NH Office of Energy and Planning, and 2000 Census

These population projections can also be compared to the results of the build-out analysis, which was completed as part of this Master Plan. The results of this analysis provide an interesting and important look into the future of the Town. In the residential zoning districts, there is the potential for 1,727 to 1,975 new residential developments to occur. The build-out of the town would have a serious impact on the town’s population. See the Current and Future Land Use Chapter for more information on the build-out analysis.

### Population Densities

One common measure of community character and sense of place is population density (persons per square mile). Population density can give a measure of the “feel” of a community – whether it feels urban, suburban, or rural. Understanding how Bow compares to its near neighbors can help to identify common goals in regional development. It can also help the Planning Board determine permit issuance and zoning requirements to promote the desired “feel.” These density figures are based on the total land area, including unbuildable land, roads, and permanently protected areas.

#### Population per Square Mile for Bow and Abutting Communities, 1970 - 2000

Town	Land Area (Sq. Miles)	Persons per Square Mile 1970	Persons per Square Mile 1980	Persons per Square Mile 1990	Persons per Square Mile 2000
<b>Bow</b>	28.6	85	140	192	250
<b>Concord</b>	67.2	447	452	536	606
<b>Dunbarton</b>	31.3	26	37	56	71
<b>Hooksett</b>	37.1	149.9	196.7	242.5	315.8
<b>Hopkinton</b>	45.1	67	86	107	120
<b>Pembroke</b>	22.8	187	213	288	302

Source: 1970, 1980, 1990 and 2000 Censuses

As noted above, Bow had 250 persons per square mile in 2000, which is in the middle range, when compared to abutting communities.

### Age Characteristics

The key when adequately planning for Bow's future needs is knowing not only the number of people living in Bow, but also the age characteristics of the residents.

#### Households with Children and Older Adults

By knowing the number of households with children, under the age of 18, and adults, over the age of 65, the community can better plan for the needs and wants of the residents.

#### Households with Children, 2000

Town	Households with People Under 18 Years of Age, 2000		Households with No People Under 18 Years of Age, 2000	
	Count	Percentage	Count	Percentage
<b>Bow</b>	1,177	51.1 %	1,127	48.9 %
<b>Concord</b>	5,26	32.4 %	11,013	67.6 %
<b>Dunbarton</b>	342	42.0 %	472	58.0 %
<b>Hooksett</b>	1,588	38.3 %	2,559	61.7 %
<b>Hopkinton</b>	764	36.7 %	1,320	63.3 %
<b>Pembroke</b>	1,049	39.4 %	1,612	60.6 %
<b>Merrimack Co.</b>	18,677	36.0 %	33,166	64.0 %
<b>New Hampshire</b>	167,367	35.3 %	304,459	64.7 %

Source: 2000 Census

As can be seen above, a little over half of all households in Bow have people under the age of 18, implying an increased demand for educational, recreational, and youth oriented needs. This is the highest percentage, as compared to abutting communities and is higher than the county and the state.

#### Households with Older Adults, 2000

Town	Households with People 65 Years Old or Older, 2000		Households with No People 65 Years Old or Older, 2000	
	Count	Percentage	Count	Percentage
<b>Bow</b>	411	17.8 %	1,893	82.2 %
<b>Concord</b>	3,606	22.1 %	12,675	77.9 %
<b>Dunbarton</b>	110	13.5 %	704	86.5 %
<b>Hooksett</b>	771	18.6 %	3,376	81.4 %
<b>Hopkinton</b>	523	25.1%	1,561	74.9 %
<b>Pembroke</b>	506	19.0 %	2,155	81.0 %
<b>Merrimack County</b>	11,309	21.8%	40,534	78.2%
<b>New Hampshire</b>	168,371	35.5%	303,455	64.5%

Source: 2000 Census

As can be seen in the table above, 82.2% of Bow's households have no people over the age of 65, implying a fairly young community. This is fairly consistent with abutting communities and the county, but higher than the state percentage of households.

Population by Age Group

Understanding population trends by age group can help communities allocate resources for public infrastructure and services to meet the needs of the population. As can be seen below, the age group in Bow with the largest number of people is the 35-44 year age group, which is consistent with county and state figures.

**Bow Population by Age Group, 2000**

Age Group	Bow 2000 Population	Group as % of Bow 2000 Population	Group as % of County 2000 Population	Group as % of State 2000 Population
Under 5 Years	449	6.3	6.0	6.1
5 to 9 Years	667	9.3	7.1	7.2
10 to 14 Years	786	11.0	7.6	7.5
15 to 19 Years	573	8.0	7.1	7.0
20 to 24 Years	167	2.3	5.3	5.6
25 to 34 Years	506	7.1	12.4	13.0
35 to 44 Years	1,445	20.2	18.1	17.9
45 to 54 Years	1,310	18.4	15.3	14.8
55 to 59 Years	411	5.8	5.0	5.1
60 to 64 Years	221	3.1	3.7	3.8
65 to 74 Years	382	5.4	6.2	6.4
Over 75 Years	221	3.0	6.2	5.7
<b>Total</b>	<b>7,138</b>	<b>100 %</b>	<b>100%</b>	<b>100%</b>

Source: 2000 US Census

It is interesting to note that although the total population of Bow is 7,138, those in the taxpaying group (over 24 years of age) only number 4,496.

**EMPLOYMENT, EDUCATION, AND COMMUTING CHARACTERISTICS OF RESIDENTS**

**Labor Force, Employment, and Unemployment**

The labor force of a community is defined as the number of people who are over the age of 16, regardless of their employment status. In 1990, the population of Bow was 5,500 people, with a labor force of 2,864 people, constituting 52.1% of the population, which was higher than the county (50.5%) but not the state (56.4%). In 2000, the population of Bow was 7,138 people, with a labor force of 4,313 people, which is approximately 60.4 % of the population -- higher than the state (55.3%) and county (56.1%). As can be seen below, the changes in labor force, employment, and the unemployment rate for Bow are comparable with the surrounding communities.

## 1990-2001 Labor Force, Employment, and Unemployment

<b>Bow</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
Labor Force	2,864	3,278	3,330	3,455	3,762	3,841	3,800	3,933	4,120	4,147	4,313	4,345
Employment	2,778	3,154	3,204	3,347	3,685	3,781	3,728	3,855	4,043	4,082	4,235	4,243
% Unemployment	3.0 %	3.8 %	3.8 %	3.1 %	2.0 %	1.6 %	1.9 %	2.0 %	1.9 %	1.6 %	1.8 %	2.3 %
<b>Concord</b>												
Labor Force	17,372	19,367	19,181	19,352	20,479	20,895	20,631	20,928	21,365	21,501	22,331	22,459
Employment	16,432	18,003	17,942	18,452	19,833	20,340	20,057	20,421	20,876	21,076	21,872	21,910
% Unemployment	5.4 %	7.0 %	6.5 %	4.7 %	3.2 %	2.7 %	2.8 %	2.4 %	2.3 %	2.0 %	2.1 %	2.4 %
<b>Dunbarton</b>												
Labor Force	922	1,023	1,033	903	889	892	893	1,215	1,297	1,316	1,364	1,373
Employment	898	985	987	860	851	873	861	1,194	1,270	1,283	1,331	1,333
% Unemployment	2.6 %	3.7 %	4.5 %	4.8 %	4.3 %	2.1 %	2.6 %	1.7 %	2.1 %	2.5 %	2.4 %	2.9 %
<b>Hooksett</b>												
Labor Force	5,392	5,152	5,029	5,171	5,162	5,307	5,138	5,332	5,456	5,555	5,761	5,819
Employment	5,108	4,788	4,669	4,884	4,955	5,083	4,969	5,187	5,326	5,427	5,608	5,634
% Unemployment	5.3 %	7.1 %	7.2 %	5.6 %	4.0 %	4.2 %	3.3 %	2.7 %	2.4 %	2.3 %	2.7 %	3.2 %
<b>Hopkinton</b>												
Labor Force	2,333	2,585	2,557	2,626	2,842	2,895	2,869	2,818	2,911	2,979	3,075	3,057
Employment	2,235	2,468	2,445	2,546	2,772	2,844	2,805	2,774	2,847	2,911	2,997	2,988
% Unemployment	4.2 %	4.5 %	4.4 %	3.0 %	2.5 %	1.8 %	2.2 %	1.6 %	2.2 %	2.3 %	2.5 %	2.3 %
<b>Pembroke</b>												
Labor Force	3,687	4,122	4,128	4,192	4,341	4,395	4,351	4,192	4,265	4,305	4,473	4,490
Employment	3,412	3,758	3,794	3,936	4,194	4,283	4,223	4,081	4,164	4,204	4,363	4,370
% Unemployment	7.5 %	8.8 %	8.1 %	6.1 %	3.8 %	2.5 %	2.9 %	2.6 %	2.4 %	2.3 %	2.5 %	2.7 %

Source: NH Department of Employment Security, 2002

### Occupations

The chart below outlines what types of occupations the residents of Bow were engaged in during the year 2000. The numbers below do not necessarily represent the types of occupations available in the Town of Bow, but the occupations of its residents. In 2000, the highest percentage of the Bow work force was employed in the management, professional, and related occupations. On the other hand, the lowest percentages of people were employed in farming, fishing, and forestry occupations, which is consistent with county and state figures.



### Occupations of Employed Bow Residents, 2000

Occupations of Employed Bow Residents	Number Bow Residents Employed	% Bow Residents Employed	% County Residents Employed	% State Residents Employed
Management, professional, and related occupations	1,921	51.7 %	36.0%	35.8%
Service occupations	259	7.0 %	12.7%	13.0%
Sales and office occupations	1,028	27.7 %	27.9%	26.6%
Farming, fishing, and forestry occupations	21	0.5 %	0.4%	0.4%
Construction, extraction, and maintenance occupations	212	5.7 %	10.0%	9.4%
Production, transportation, and material moving occupations	276	7.4 %	13.1%	14.8%
Total Employed Persons over 16 years old	3,717	100 %	NA	NA

Sources: 2000 Census

### School Enrollment

School records show that the school enrollment in Bow has grown from 810 students 30 years ago to 1,182 students ten years ago, to 1,511 students five years ago. The current enrollment for the 2002-2003 school year is 1,820 students. These are relative increases of 145% in the last 30 years, 52% in the last ten years, and 17% in the last five years. While the rate of growth in the school age population seems to have slowed somewhat recently, Bow's attractiveness to families with children is long-standing. It is important to consider the ratio of school age children to overall population when planning for the creation or expansion of services.

### Bow School Enrollment by Level of School Type, 2000

	Population 3 years and over	Nursery School, Preschool	Kindergarten	Grade 1-4	Grade 5-8	Grade 9-12	College, undergraduate	Graduate or Professional School	Not enrolled in School
<b>Public School</b>	-	108	60	642	544	544	112	48	-
<b>Private School</b>	-	122	19	16	31	28	30	43	-
<b>Total</b>	6,939	230	79	658	575	572	142	91	4,592
<b>% Total</b>	100%	3.3%	1.1%	9.5%	8.3%	8.2%	2.0%	1.3%	66.2%

Source: 2000 Census

### 2002 Bow School District Enrollment

Bow Elementary School		Bow Middle School		Bow High School	
Preschool	14	5 <sup>th</sup> Grade	154	9 <sup>th</sup> Grade	161
Kindergarten	73	6 <sup>th</sup> Grade	131	10 <sup>th</sup> Grade	148
1 <sup>st</sup> Grade	118	7 <sup>th</sup> Grade	164	11 <sup>th</sup> Grade	143
2 <sup>nd</sup> Grade	118	8 <sup>th</sup> Grade	153	12 <sup>th</sup> Grade	163
3 <sup>rd</sup> Grade	115				
4 <sup>th</sup> Grade	163				
<b>Total</b>	<b>601</b>	<b>Total</b>	<b>602</b>	<b>Total</b>	<b>615</b>
<b>Total Bow School District Enrollment</b>			<b>1,818</b>		

Source: SAU #67 Office of the Superintendent, 11/02

### Education Levels of Residents

In 2000, 94.6% of the total population in Bow had a high school degree or higher and 45.4% had a bachelor's degree or higher. These figures are significantly higher than most abutting towns, with the exception of Hopkinton. For more detail regarding the educational levels of Bow and abutting communities, please refer to the table below.

### Educational Levels of Persons 25 Years and Older, 2000

	Bow	Concord	Dunbarton	Hooksett	Hopkinton	Pembroke	State
Some HS, no Diploma	248	3,185	86	856	178	583	103,754
	5.5 %	11.4 %	5.6 %	11.4 %	4.8 %	12.9 %	12.6 %
HS Diploma	945	7,845	385	2,182	775	1,562	247,723
	20.7 %	28.1 %	24.9 %	29.2 %	20.7 %	34.5 %	30.1 %
Some College	873	6,151	335	1,390	684	933	164,634
	19.2 %	22.0 %	21.7 %	18.6 %	18.3 %	20.6 %	20.0 %
Associate's Degree	420	2,182	152	858	342	481	71,772
	9.2 %	7.8 %	9.8 %	11.5 %	9.2 %	10.6 %	8.7 %
Bachelor's Degree	1,378	5,090	372	1,520	1,008	689	153,873
	30.2 %	18.2 %	24.1 %	20.3 %	27.0 %	15.2 %	18.7 %
Graduate or Professional Degree	692	3,487	215	678	749	275	82,230
	15.2 %	12.5 %	13.9 %	9.1 %	20.0 %	6.1 %	10.0 %
% of Population with HS Degree or Higher	94.6 %	88.6 %	94.4 %	88.6 %	95.2 %	87.1 %	87.4 %
% of Population with Bachelor Degree or Higher	45.4 %	30.7 %	38.0 %	29.4 %	47.0 %	21.3 %	28.7 %

Source: 2000 Census

## **INCOME CHARACTERISTICS OF RESIDENTS**

The income characteristics of households, families, and individuals mirror the economic conditions within a community. In fact, income and poverty levels of a community can help a municipality determine the types of social services that it may need.

### **Per Capita Income**

As can be seen below, In 2000 Bow had the second highest per capita income, when compared to abutting communities. From 1980 to 2000, Bow has the 2<sup>nd</sup> lowest percent change in per capita income, as compared to abutting communities, but a larger percentage change than the county or the state.

#### **Per Capita Income, 1980-2000**

<b>Town</b>	<b>1980 Per Capita Income</b>	<b>1990 Per Capita Income</b>	<b>1996 Per Capita Income</b>	<b>2000 Per Capita Income</b>	<b>% Change 1980-2000</b>
Bow	\$8,751	\$19,752	\$24,092	\$29,557	237.8 %
Concord	\$7,119	\$16,761	\$18,129	\$21,976	308.7 %
Dunbarton	\$7,494	\$17,805	\$21,422	\$27,892	272.2 %
Hooksett	\$6,849	\$18,872	\$22,985	\$24,629	259.6 %
Hopkinton	\$9,018	\$23,872	\$31,761	\$30,753	241.0 %
Pembroke	\$7,226	\$15,811	\$19,165	\$20,800	187.8 %
Merrimack County	\$9,915	\$20,703	\$25,733	\$23,844	140.5%
New Hampshire	\$9,601	\$20,713	\$26,522	\$23,208	141.7%

Source: 1980, 1990, and 2000 Censuses, NH Department of Revenue Administration, 2002

### Median Household and Family Income

Household income is the total income of people living in one household. Family income is the total income of all family members who consider themselves members of one household. Median household income is usually lower than median family income because it takes into account households consisting of one person, whereas median family income is based on two or more people. Median income is the middle figure in a series from lowest to highest. As can be seen below, Bow has the highest median household and family income, when compared to abutting communities, the county, and the state.

#### Median Household Income 1980-2000

Towns	Median Household Income 1980	Median Household Income 1990	Median Household Income 2000	Median Household Income Percent Change 1980-1990	Median Household Income Percent Change 1990-2000	Median Household Income Percent Change 1980-2000
Bow	\$25,915	\$54,633	\$79,329	110.8 %	45.2 %	206.1 %
Concord	\$15,933	\$32,733	\$42,447	105.4 %	29.7 %	166.4 %
Dunbarton	\$19,500	\$44,250	\$65,081	126.9 %	47.0 %	233.8 %
Hooksett	\$18,624	\$42,175	\$61,491	126.4 %	45.8 %	230.2 %
Hopkinton	\$20,427	\$46,810	\$59,583	129.2 %	27.3 %	191.7 %
Pembroke	\$18,463	\$39,059	\$49,494	111.5 %	26.7 %	168.1 %
Merrimack County	\$16,717	\$35,801	\$48,522	114.2%	35.5%	190.3%
New Hampshire	\$17,013	\$50,575	\$48,021	197.3%	-5.0%	182.3%

Source: 1990 Census, 2000 Census, NH Department of Employment Security, 2001

### Median Family Income 1980-2000

Towns	Median Family Income 1980	Median Family Income 1990	Median Family Income 2000	Median Family Income % Change 1980-1990	Median Family Income % Change 1990-2000	Median Family Income % Change 1980-2000
<b>Bow</b>	\$26,670	\$46,855	\$83,567	75.7 %	78.4 %	213.3 %
Concord	\$19,676	\$39,531	\$52,418	100.9 %	32.6 %	166.4 %
Dunbarton	\$21,528	\$47,130	\$67,448	118.9 %	43.1 %	213.2 %
Hooksett	\$20,195	\$46,426	\$68,673	129.9 %	47.9 %	240.0 %
Hopkinton	\$22,009	\$52,407	\$69,737	138.1 %	33.1 %	216.9 %
Pembroke	\$21,348	\$44,983	\$57,106	110.7 %	27.0 %	167.5 %
Merrimack County	\$19,395	\$41,018	\$56,842	111.5%	38.6%	193.1%
New Hampshire	\$23,554	\$49,088	\$71,661	108.4%	46.0%	204.2%

Source: 1990 Census, 2000 Census, NH Department of Employment Security, 2001

### Poverty

The Census Bureau uses a set of income thresholds that vary by family size and composition to define poverty levels. If a family's total income is less than the Census Bureau's threshold, then that family, and every individual in it is considered below poverty level. The poverty thresholds are updated annually for inflation using the Consumer Price Index. The following table contains the poverty thresholds from 1980-2000 that the Census Bureau used for its calculations.

### Poverty Thresholds, 1980-2000

1980		1990		2000	
Individual Person	\$4,190	Individual Person	\$6,652	Individual Person	\$8,794
2-Person Family	\$5,363	2-Person Family	\$8,509	2-Person Family	\$11,239
3-Person Family	\$6,565	3-Person Family	\$10,419	3-Person Family	\$13,738
4-Person Family	\$8,414	4-Person Family	\$13,359	4-Person Family	\$17,603
5-Person Family	\$9,966	5-Person Family	\$15,792	5-Person Family	\$20,819
6-Person Family	\$11,267	6-Person Family	\$17,839	6-Person Family	\$23,528
7-Person Family	\$12,761	7-Person Family	\$20,241	7-Person Family	\$26,701
8-Person Family	\$14,199	8-Person Family	\$22,582	8-Person Family	\$29,701
9+ Person Family	\$16,896	9+ Person Family	\$26,848	9+ Person Family	\$35,060

Source: US Census Bureau, 2001

By looking at the table below, you can see that Bow had, in 2000, the second lowest percentage of families in poverty than any other abutting town. Furthermore, in 2000 Bow was tied with Hopkinton for the lowest percent of persons below the poverty level.

**Poverty Data for Bow and Abutting Communities, 1980-2000**

<b>Town</b>	<b>% of Families Below Poverty Level 1980</b>	<b>% of Families Below Poverty Level 1990</b>	<b>% of Families Below Poverty Level 2000</b>	<b>% of Persons Below Poverty Level 1980</b>	<b>% of Persons Below Poverty Level 1990</b>	<b>% of Persons Below Poverty Level 2000</b>
<b>Bow</b>	0.0 %	0.8 %	2.0 %	0.87 %	1.6 %	1.8 %
Concord	5.1 %	4.2 %	6.2 %	4.2 %	6.7 %	8.0 %
Dunbarton	4.4 %	4.2 %	2.3 %	2.7 %	5.1 %	2.8 %
Hooksett	4.1%	1.6 %	3.2 %	4.5%	2.8 %	4.0 %
Hopkinton	6.6 %	1.3 %	0.7 %	8.8 %	2.3 %	1.8 %
Pembroke	1.8 %	1.8 %	3.0 %	1.3 %	2.8 %	5.4 %
Merrimack County	NA	NA	4.1%	NA	5.5%	5.9%
New Hampshire	NA	NA	4.3%	NA	6.4%	6.5%

Source: 1980-2000 Censuses

**BOW EMPLOYERS**

Understanding historic trends in the local economic base can help the community better develop sound economic development strategies for the future. One key trend is the change in the size *and* type of the local employment base. Local employment data (i.e. the number and types of jobs in the community) are collected by various government agencies, including the Census Bureau and the New Hampshire Office of Employment Security. Using a classification system, the number of employment positions for each business in the community can be identified and tracked over time.

The data are derived from the federal-state cooperative effort known as covered employment (ES-202). The data are prepared as a result of the administration of the State Unemployment Insurance (UI) and Unemployment Compensation for Federal Employees (UCFE) programs. These programs require most employers to report quarterly the employment and wages of workers covered by UI and UCFE. Those businesses not covered by UI are not included in the data presented here.

To protect the confidentiality of individual employers, data are not disclosed in the following cases: (1) if there are fewer than three establishments in an industry group, and/or (2) if one establishment in an employment group in a given geographic area accounts for more than 80 percent of either employment or total wages.

Employment is defined as the numbers of employees on payrolls of employers covered by UI during the pay period, which includes the 12th day of the month. This includes full time, part

time, and temporary workers, both hourly and salaried. Employees who were not on the payroll during the pay period including the 12th day of the month are not counted.

The term “firm” usually indicates a single physical business location. However, an employer operating two or more physical establishments in a single town may be shown as one “firm.”

Average Weekly Wage is defined as the dollars paid (including bonuses, incentive pay, etc.) to all employees (both hourly and salaried) during the year, divided by the annual average number of employees, then divided by 52 (weeks) to obtain an average weekly figure.

In Bow from 1991-2001, there has been an increase in the number of employers and number of employees in most employment categories. Private Transportation and Public Utilities has seen a decrease in both employers and employees over the last ten years. Private Services have seen the largest increase in the number of employers (from 30 to 81) and Private Construction has seen the largest increase in the number of employees (from 31 to 260). The average weekly wage for most employment sectors has also increased. For more detail, please refer to the following table.

**TRENDS IN THE BOW EMPLOYMENT BASE, 1991-2000**

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Private Finance, Insurance, and Real Estate</b>										
# Employers	NA	NA	NA	NA	3	4	NA	NA	9	11
# Employees	NA	NA	NA	NA	9	9	NA	NA	38	35
Average Weekly Wage	NA	NA	NA	NA	\$495	\$555	NA	NA	\$742	\$1,255
<b>Private Services</b>										
# Employers	30	36	42	54	60	62	74	81	73	81
# Employees	203	237	266	314	226	28	326	370	350	334
Average Weekly Wage	\$572	\$532	\$556	\$556	\$495	\$551	\$571	\$514	\$530	\$650
<b>Private Transportation and Public Utilities</b>										
# Employers	6	5	3	NA	NA	4	5	4	4	4
# Employees	21	22	13	NA	NA	11	14	16	12	10
Average Weekly Wage	\$518	\$415	\$598	NA	NA	\$1,323	\$1,095	\$1,208	\$1,342	\$1,493
<b>Private Mining</b>										
# Employers	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
# Employees	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Average Weekly Wage	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Private Construction</b>										
# Employers	12	29	27	28	31	17	33	18	21	20
# Employees	31	285	296	305	345	161	418	223	245	260
Average Weekly Wage	\$380	\$601	\$610	\$633	\$682	\$622	\$707	\$655	\$705	\$827
<b>Private Retail Trade</b>										
# Employers	10	7	12	10	15	15	12	13	9	9
# Employees	191	193	252	225	353	353	449	414	280	279
Average Weekly Wage	\$492	\$494	\$510	\$546	\$406	\$441	\$589	\$632	\$978	\$994
<b>Private Manufacturing</b>										
# Employers	4	4	4	7	6	5	6	5	5	4
# Employees	38	37	37	75	102	99	101	102	110	120
Average Weekly Wage	\$422	\$512	\$474	\$512	\$514	\$476	\$447	\$515	\$506	\$512
<b>Federal Government</b>										
# Employers	2	2	2	3	3	3	3	1	1	1
# Employees	35	41	40	40	44	47	45	42	35	33
Average Weekly Wage	\$448	\$560	\$606	\$421	\$402	\$397	\$322	\$313	\$361	\$404
<b>NH State Government</b>										
# Employers	NA	1	1	1	1	1	1	1	NA	NA
# Employees	NA	32	31	30	28	29	37	19	NA	NA
Average Weekly Wage	NA	\$892	\$894	\$911	\$901	\$911	\$868	\$914	NA	NA
<b>Local Government</b>										
# Employers	5	5	6	6	6	6	6	6	6	6
# Employees	247	224	278	295	296	294	326	372	393	430
Average Weekly Wage	\$377	\$456	\$387	\$394	\$415	\$441	\$477	\$512	\$537	\$533

Source: NH Department of Employment Security, 2002



## Wage Comparisons

To gain a better understanding of the type and quality of the jobs located in Bow we can compare wages paid by employers in Bow to those in the surrounding communities. Although the figures below show average annual weekly wages for people who work within the Town of Bow, they do not represent the average weekly wage of a Bow resident. See the table below for more detail.

### Average Annual Weekly Wage - Private Sector and Government, 2000

	Bow	Concord	Dunbarton	Hooksett	Hopkinton	Pembroke
<b>Private Sector</b>						
# Employers	165	1,733	NA	352	98	105
# Employees	1,242	27,529	NA	3,781	769	887
Avg. Weekly Wage	\$794	\$610	NA	\$568	\$618	\$661
<b>Government</b>						
# Employers	7	271	NA	21	8	10
# Employees	232	3,758	NA	164	271	201
Avg. Weekly Wage	\$312	\$674	NA	\$655	\$616	\$720

Source: NH Department of Employment Security, 2001

Indicated above are the weekly wages for people in Bow working in the Private Sector are much higher than the wages in abutting towns. However, the average weekly wage for Bow government employees is much lower than that of abutting communities.

## TAX CHARACTERISTICS

An examination of the tax rate helps businesses gauge the economic attractiveness of a community. Effective April 1, 1999, New Hampshire's property tax system included a state education property tax that is assessed and collected by local municipalities. The state education property tax was enacted in response to the NH Supreme Court's ruling in the *Claremont* case. The court ruled that it is the state's responsibility to fund an adequate education. It also ruled that property taxes used for the support of an adequate education need to be proportional throughout the state and not vary based upon the property wealth of a particular community.

The Legislature enacted a provision that requires each municipality to administer a statewide education property tax by assessing an amount equal to \$6.60 per \$1,000 (or \$5.80 per \$1,000 of value beginning with the April 1, 2002 tax year) of the total equalized value of all non-utility property in the community. However, because the taxes levied upon each individual property are based upon the local assessed value, not an equalized value, the state education property tax rate appearing on the tax bill is not necessarily \$6.60.

Property taxes are based upon the local assessed valuation of all taxable property within the town, as of April 1 of each year. When a town conducts a revaluation, property is physically

reviewed and then valued based upon the sales prices of other comparable properties or by other means. The intent of a revaluation is to assess all property at its "full and true" value, often referred to as "market" value. A revaluation insures that property within the town is assessed proportionally so that property owners bear their share of the property tax burden based upon the "value" of their property.

Towns and cities do not conduct reevaluations every year. Therefore, as a result of fluctuations in the real estate market, some towns are assessing property above full value, and other towns are assessing property below full value. Assessing property above or below full value is not cause for concern, as long as the assessments are proportional within the town: that is, as long as all property in town is assessed at approximately the same percent of market value. Bow conducted a reassessment of all property in 2002.

However, when dealing with property values statewide, these varying local assessment levels between towns create an imbalance. This imbalance between towns must be adjusted in order for a statewide property tax to be proportional. The process to accomplish this is called "equalization."

Each year the state Department of Revenue Administration equalizes the property values for every city and town. Equalization is an adjustment of the town's local assessed values, either upward or downward, in order to approximate the full value of the town's property. Adjustments are not made to any individual properties. Rather, the total value of all property in town is adjusted based upon the comparison of recent property sales with local property assessments. For example, if the comparison of recent sales indicates that on the average, the town is assessing property at 90% of market value, then the total local assessed value of the town would be increased by 10% in order to approximate the town's full value. If the comparison indicates that, on the average, the town is assessing at 105% of market value, then the total local assessed value would be decreased by 5%.

The purpose for equalizing local assessed property values is to provide a "level playing field." Once property values have been equalized, public taxes and state revenues shared by towns and cities may be fairly apportioned among them. This includes state education property taxes and county taxes.

Each town is responsible for raising an amount equal to \$6.60 per \$1,000 of the town's total equalized valuation. This amount represents the town's share of the statewide cost of an adequate education. However, in order for the town to raise this amount, the rate must be restated. This is due to the fact that property taxes are billed based upon the local assessed value of property, not the equalized value.

The difference between a community's local assessed value and its equalized value is the primary reason for a state education property tax rate different than \$6.60. Several other factors that influence this rate include the exemptions that your town provides to elderly residents, payments your town receives in lieu of property taxes, and any new construction that has taken place since last year.

As can be seen below, the tax rate for Bow has decreased over the past six years from a total \$23.43 per \$1,000 per assessed value to \$23.15 per \$1,000 assessed value, with the highest jump in rates between the year 2000 and 2001.

**Breakdown of Equalized Bow Tax Rates, 1997-2002**

<b>Year</b>	<b>Municipal Tax</b>	<b>Local Education</b>	<b>State Education</b>	<b>County Tax</b>	<b>Total Tax</b>
1997	4.42	17.31		1.70	23.43
1998	4.33	18.52		1.82	24.67
1999	4.25	10.54	7.81	1.80	24.40
2000	2.78	12.21	7.47	2.23	24.69
2001	4.75	13.53	8.27	2.54	29.09
2002	4.72	10.84	5.49	2.10	23.15

Source: NH Division of Revenue Administration, 2001

**Tax Rates of Bow and Abutting Communities, 2002**

<b>Town</b>	<b>Total Tax Rate</b>
Bow	\$23.15
Concord	\$27.28
Dunbarton	\$24.78
Hooksett	\$25.20
Hopkinton	\$27.59
Pembroke	40.32

Source: NH Department of Revenue Administration, 2002

**CONCLUSION**

The history of Bow’s population changes is interesting. Looking at the Bow Historical Population table, we can see how Bow’s population from 1790 to 1960 cycled up and down as the town changed from a farming community to a residential community for manufacturing plants in other towns. The decade from 1960-1970 saw almost a doubling of the population – the Baby Boom. Since that time, from 1970-2000, the town has grown at a fairly steady rate, adding about 1,500 people per decade.

Bow has grown more than the abutting communities, and also added a larger share of school age students. More than half of the households in Bow have children under the age of 18. More than half of employed people in Bow work in management, professional or other related occupations. It has the highest percentage of people who have earned Bachelor’s Degrees (as compared to abutting communities as well as the state average), and also those who have earned graduate and post-graduate or professional degrees. It has the second highest per capita income of the abutting communities, and the highest median income. It has one of the lowest percentages of families in poverty.

The Bow employer base has increased since 1991, indicating some success of the town with respect to attracting commercial enterprise to Bow and increasing the business tax base. Bow's tax rate has increased over the years so it is no longer the lowest of the abutting towns. This is due in large part to the aging of the PSNH Merrimack Station power plant and the subsequent reduction in tax revenues from PSNH. The growth of the town's residential tax base has also reduced the relative effect of PSNH's contribution.

According to the statistics shown in this chapter, Bow is an affluent, well-educated, young community with lots of children. According to the population projections prepared by the Office of Energy and Planning, Bow has already exceeded the projections for the year 2015.



## **CHAPTER III CURRENT LAND USE**

### **INTRODUCTION**

This Chapter is to be used as a history lesson of land development in Bow, where the town has come from and where it is currently. The build-out analysis is a project based on that history – where the town will be in 5, 10, 15, or 20 years if the regulations do not change. The results of the analysis provide an interesting and important look at the Town’s future. In the Residential Zoning Districts, there is a potential for 1,975 additional single-family lots in the full build-out and 1,727 additional single-family lots excluding lots along difficult to improve Class VI roads. The projected number of single-family lots has the potential to increase Bow’s population by 5,354 to 6,122 people at full build-out. For commercial and industrial land development, the majority of developable acreage can be found in the Business Development District and the General Industrial zones.

The Future Land Use Chapter tackles the tough question of “What will the Town look like if changes are made today in the land development patterns, if historical trends do not continue?” Both Chapters are necessary in the Master Plan, one to tell people where the Town is and one to say where it could be going.

Increased population growth, evolving housing needs, as well as changing social and economic trends discussed throughout the Master Plan have had a direct impact on the landscape of the community. Land is a finite resource and thoughtful use of land is a critical issue for all communities. How a community uses its land base has a direct impact on aesthetics, community character, transportation infrastructure, housing affordability, as well as the tax base.

Bow's historic development pattern was determined long before there were any land use regulations in the State or Town. Development occurred in those areas with good drainage, access to a water supply, transportation, and waterpower. Most of Bow’s current development is being driven by the economic expansion of southern New Hampshire. This pressure is being felt primarily in the areas of housing and community infrastructure, as Bow is viewed as an attractive bedroom community to the Concord and Manchester areas.

The purpose of this Chapter is to identify and explore land use trends in Bow in the areas of housing, economic development, environmental protection, and land use needs of the community. According to the Community Survey, residents feel that the rural atmosphere is the most desirable feature of Bow. This Chapter reviews the land development patterns in Bow and the abutting communities since 1992 (when the last master plan was completed), describes the different Zoning Districts, and gives an overview of the other Zoning Ordinances that impact land development. The current land use section also includes the methodology and results for the build-out analysis that was conducted using current Zoning and Land Use Regulations.

## **CURRENT LAND USE TYPES**

The existing land use pattern in Bow is typical of many communities in New Hampshire; commercial land uses are located along heavily traveled regional roadways while the majority of residential development is located in the back lands of the community. Please see the **Current Land Use Map** for more detailed information. The following table is a summary of the current composition of land uses in Bow.

### **Summary of Acreage Developed by Land Use Category**

<b>Category</b>	<b>Area (Acres)*</b>	<b>Percent of Total Land</b>
Residential Land	8,160	45.3%
Conservation Land	3,560	19.7%
Public / Institutional Land	3,457	19.2%
Undeveloped Land	1,600	8.9%
Industrial Land	942	5.2%
Commercial Land	317	1.8%
<b>Total</b>	<b>18,030</b>	<b>100%</b>

Source: CNHRPC Geographic Information System (GIS), 2003

\* Estimates based on GIS mapping for 2003 Master Plan

#### **Residential Land**

Residential land uses are scattered throughout the community, with development influenced by Concord and Manchester. In total, residential land uses occupy nearly 45.3% of the community's land area.

#### **Conservation Land**

Conservation lands include land that has been permanently set aside for conservation and prohibits development. Such land can include Town forests, lands owned by private conservation organizations, as well as properties subject to conservation easements. Occupying nearly 19.7% of the community's total land area, the majority of conservation lands are town owned.

#### **Public/Institutional Land**

In total, public and institutional land uses occupy approximately 19.2% of the community's land area. Examples of such uses include the schools, Municipal Building, Police and Fire stations, Library, and local churches and cemeteries.

#### **Undeveloped Land**

Undeveloped lands, which are lands that are neither developed nor protected from development, comprise 8.9% of the Town's entire land area. Some of these areas are located on land with steeper slopes, limited road access, or other development constraints that make them more difficult to develop. Land classified as undeveloped includes forested areas, fields, and agricultural lands.

### **Industrial Land**

This use occupies slightly more than 5.2% of the community's total land area. Industrial uses can be thought of as any land use where raw materials are processed, modified, or assembled to create a finished or value-added product. Industrial uses can include the excavation of materials and lands classified as utilities.

### **Commercial Land**

This land use occupies less than 1.8% of Bow's total land area. Commercial uses involve the sale or trade of goods and services, which can include restaurants, convenience stores, warehouses, as well as gas stations.

## **DEVELOPMENT PATTERNS, 1992-2002**

Research and analysis of development patterns is important to help Bow better plan for future development. Development patterns make people aware of the changes taking place within a Town, as well as in abutting communities. By looking at how many subdivisions and site plans were approved, certificates of occupancy issued, and land placed in and taken out of Current Use during the past ten years, the Town is able to accurately report trends.

### **Subdivision Activity**

During the period of 1992 through 2002, a total of 95 subdivisions were approved in Bow. Of that total, 61 were considered major subdivision consisting of three or more lots. The largest development consisted of 37 new lots in 1995 in the development know as Birchwood Hills off Brown Hill Road. The table below compares the number of subdivisions in Bow to the number of subdivisions in abutting communities.

**Number of New Lots Created, 1992-2002**

	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>Total</b>
<b>Bow</b>	27	61	70	23	21	58	40	74	44	47*	40	<b>505</b>
Concord	9	33	32	22	14	28	88	57	58	220	121	682
Dunbarton	15	10	19	13	23	NA	13	13	5	23	21	155
Hooksett	NA	NA	64	134	128	115	13	163	103	15	7**	742
Hopkinton	6	12	15	9	2	3	16	13	24	3	17	120
Pembroke	2	NA	10	40	10	NA	2	9	36	35	59	203

Source: Annual Town Reports, CNHRPC Development Trends Report, and Town Staff, 2003

\* White Rock Senior Living Development created 1 new lot with 192 units

\*\* Includes only the amount of new lots for the fiscal year

The location of land subdivided in Bow since 1992 can be seen on the **1992-2002 Subdivision Location Map**.



### Non-residential Site Plan Activity

From 1992-2002, the Town of Bow approved 103 Site Plans. These included a change of use from a commercial or industrial use to another, as well as approvals for new commercial or industrial operations. The table below shows the comparison to abutting communities.

**Number of Site Plans Approved, 1992-2002**

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total
<b>Bow</b>	4	5	2	3	1	17	6	7	33	15	10	<b>103</b>
Concord	26	19	32	28	15	34	42	43	40	62	36	377
Dunbarton	1	2	4	3	1	0	0	0	1	0	0	12
Hooksett	NA	NA	36	18	39	24	29	20	37	27	22	252
Hopkinton	9	13	15	7	14	18	8	7	3	8	16	118
Pembroke	3	3	7	8	3	5	9	12	13	5	13	81

Source: Annual Town Reports, CNHRPC Development Trends Report, and Town Staff, 2003

### Certificate of Occupancy

During the period of 1992 through 2002, Bow issued 541 certificates of occupancy and/or building permits for new residential construction. As compared to abutting communities, this was in the middle to high range.

**Number of New Residential Certificates of Occupancy/Building Permits Issued, 1992-2002**

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total
<b>Bow</b>	35	48	51	63	89	54	47	32	35	30	57	<b>541</b>
Concord	80	60	72	65	95	67	65	284	112	125	91	1,116
Dunbarton	11	16	9	18	24	36	25	28	36	17	30	250
Hooksett	33	47	43	48	71	122	140	70	83	125	281	1,063
Hopkinton	16	19	23	15	38	44	52	39	23	18	25	312
Pembroke	7	8	15	4	12	9	6	31	27	40	40	199

Source: Annual Town Reports, CNHRPC Development Trends Report, and Town Staff, 2003  
NHOSP 1999 Current Estimates and Trends in NH Housing Supply

### Current Use

Current Use is one of the easiest and most popular methods of preserving undeveloped land, forests, and agricultural fields. Current Use is a preferential tax program (RSA 79-A) in which the land is taxed on its potential to generate income in its existing or current use. Bow residents have continually participated in this program, as can be seen by the figures below.

**Current Use Acreage for the Town of Bow  
1992-2002**

<b>Year</b>	<b>Land in Current Use (acres)</b>	<b># of Owners Granted Current Use</b>
1992	NA	NA
1993	NA	NA
1994	5,122	101
1995	5,386	110
1996	5,331	116
1997	5,446	109
1998	5,724	112
1999	5,122	109
2000	5,113	120
2001	5,044	107
2002	5,181	114

Source: Town Staff, 2003; Town Reports

**CURRENT ZONING REGULATIONS**

The power to regulate private property is one of the most important powers allocated to local government. Used properly, zoning can be a powerful tool to improve the aesthetics of a community, protect the natural environment, and enhance the quality of life. Used improperly, zoning can serve special interests, diminish the natural environment, and increase disparities between socioeconomic classes.

**1992-2002 Zoning Changes**

In 1925, the New Hampshire State Legislature, using a United States Department of Commerce Model Standard Act, granted municipalities the ability to adopt zoning. Bow first adopted Zoning in 1955 and the Ordinances have been amended periodically since then. The following is a summary of the Zoning changes that have taken place since 1992.

March 10, 1992

An amendment was adopted by petition to remove as an allowed use by Special Exception “hospital, nursing home and elderly housing, clinic and health maintenance or center.”

As of March 2003, hospitals, clinics, and medical/dental offices are not allowed in residential districts. Elderly housing is a permitted use in residential districts. Residential care facilities, which includes nursing homes, sheltered care facilities, and board and care homes, are permitted by Special Exception in residential districts.

#### March 9, 1993

Two warrant articles were adopted. The first changed from Residential to Commercial two parcels of land (Block 1, Lot 49 on Valley Road and Lot 114 - the interchange of I-89 and I-93). The second added supplemental regulations for day care facilities.

As of March 2003, both amendments remain in effect.

#### March 8, 1994

Seven of eight warrant articles were adopted. The changes included a detailed definition of home occupation (which was replaced in the comprehensive revision of 1998); regulations for driveways and prohibitions on shared driveways (which were modified for non-residential districts in 2000 – Planned Business Subdivisions); the addition of storage and repair of heavy motorized equipment as an allowed use in the I-2 district (the comprehensive revision of 1998 expanded motor vehicle repair to the C and I-1 districts); permitting day care facilities in the Civic, Institutional, and C districts (child care is now an allowed use in the CV, IN, and BD districts and permitted by Special Exception in C, I-1, I-2 districts); increasing the height limit in the I-2 district from 40 feet to 100 feet (later amended to require a Special Exception for buildings between 40 feet and 100 feet) and increasing lot coverage from 40% to a maximum of 60% (replaced in 2000 with provisions for maximum impervious surfaces); prohibiting wells within 50 feet of road rights-of-way (increased to 75 feet in 2002); and regulations for recreational vehicles in flood plains.

#### March 14, 1995

Eight articles were proposed and adopted. Furthermore, a definition for “change of use” was added. The definition for gasoline stations was expanded to include sale of diesel fuel (the comprehensive revision of 1998 substituted “fuel station”). Accessory buildings and uses were added to golf courses, country clubs, and tennis land uses (all of which were reorganized in the comprehensive revision of 1998). Other amendments added screening requirements, adjusted the sign code, expanded administration and enforcement to refer to other regulations, added provisions for sexually oriented businesses, and referenced other permits.

#### March 12, 1996

Two articles were proposed and adopted. The Planned Open Space - Residential Development (POS-RD) provisions were added and the zoning on Lot 91 in Block 1 (the old Bow Mills store) was changed from R to C.

#### March 11, 1997

Two articles were proposed and adopted. The Growth Management Ordinance was submitted by petition and adopted with the support of the Planning Board. The zoning was changed on Lot 91, Block 1 (Valley Road property behind the old Bow Mills Store) from R to C.

#### March 10, 1998

The comprehensive revisions prepared by Woodward and Mayberry with modifications were adopted. Five additional warrant articles further amended the ordinance to expand the Aquifer Protection district from Route 3A to the Merrimack River; to eliminate the grandfathered status for lots with less than 101 feet of frontage on a Class V street; to require a special exception and

site plan review for heliports and air strips; to establish supplemental development standards for keeping horses, cattle, other livestock, and similar animals; and to improve the Growth Management Ordinance.

#### March 9, 1999

Six amendments were proposed and adopted. The Growth Management Ordinance was amended and re-enacted and numerous corrections to other sections of the ordinance were made due to the comprehensive revisions that took place in 1998. Lot size requirements were reduced for elderly housing; parking requirements were moved to site plan regulations; residential care facilities, cemeteries, and laboratory / research facilities were permitted in R and RU districts; a broader mix of uses were permitted in the non-residential districts; agricultural uses were permitted in non-residential districts; and the wetlands and aquifer protection overlay districts were corrected and strengthened following the comprehensive revision.

#### March 14, 2000

All eight articles proposed by the Planning Board were adopted. One petitioned article (to change the zoning on Lot 108, Block 1 located at 2 Old Hill Road from R to C) that was not supported by the Planning Board was disapproved. The articles adopted included the interim growth management ordinance, which prohibited for one year all residential subdivisions and site plans except those for affordable housing and elderly housing. The Growth Management Ordinance was re-enacted and updated. Lot coverage provisions were replaced with limitations on impervious surfaces. Also adopted were provisions for planned business subdivisions; a clarification that non-elderly units in an elderly housing development must meet dimensional standards; a clarification of wetland buffers for septic systems and for prime wetlands; authorization for the Planning Board to create procedures for administrative Conditional Use Permits; and authorization for equitable waivers of dimensional requirements.

#### March 13, 2001

Five articles were proposed and adopted. The impact fee ordinance, which authorized the Planning Board to prepare and adopt impact fee methodologies, and the business development district were adopted. The Growth Management Ordinance was updated and re-enacted with an amendment to reduce the building permit limitation to 2% from 2.5% of existing units. The updated floodplain map was adopted and the flood plain ordinance was brought into compliance with National Flood Insurance Program requirements. A series of other amendments included limitations on the storage of unregistered vehicles; a definition of habitable floor area; additional information requirements for wireless communication facilities; authorization for the Planning Board to reduce setbacks for structures designed to utilize rail lines and spurs; and an increase in buffers for small wetlands (less than 1/4-acre) that are vernal pools.

#### March 12, 2002

Two articles were proposed and adopted. The transitional exemptions in the impact fee ordinance were removed. The second amendment included permitting planned business subdivisions in the Business Development District; updating and re-enacting the Growth Management Ordinance; authorizing the Planning Board to regulate small-scale, pre-development excavations; updating the definition of hardship for variances; clarifications of provisions for multiple principal structures on a single lot, of 75-foot buffers for streams, and

section 7.05 for multi-family and elderly housing; adding manufactured housing subdivisions as a permitted use in the RU district; restricting the use of boats and recreational vehicles (RV) for living quarters; adding the position of zoning administrator to the Ordinance; and to increase the setback for wells to 75 feet.

### March 11, 2003

Four articles were proposed and adopted. The first article updated and re-enacted the Growth Management Ordinance. The second article required that POS-RD buffers be marked; moved consideration of variances to the wetland ordinance to the Planning Board, required that signs be placed on wetland buffers, and replaced the wetland buffers and permitted uses sections with tables; and authorized the Planning Board to regulate high risk activities in the aquifer protection district. The sign regulations in the BDD were applied to all non-residential districts. Notice requirements for ZBA hearings and penalties for zoning violations were increased.

Today (2004), Bow relies on eight primary Zoning Districts to regulate land use within the community. The following is a summary of current Zoning Districts and their allowed land uses. The location of these Districts can also be seen on the **Current Zoning Map**.

### **Rural District (RU)**

The Rural District is designed to accommodate a range of residential uses at low density in a rural environment where sewer service is not available or anticipated, as indicated in the Master Plan. Agriculture, forestry, recreation, and other low intensity uses are permissible in the RU District.

The following are permitted uses in the Rural District: single-family residential; duplex or two-family residential; housing for the elderly; manufactured housing subdivision; planned open space residential development; home-based day care; publicly owned recreation facility; agriculture; horticulture; livestock; silviculture operations; home occupations; accessory structures and facilities; grazing, care, raising, and/or keeping of livestock for personal use; storage and use of a registered boat, recreational vehicle, camping trailer, or motor vehicle; farm or roadside stand; and signs.

The following are permitted uses, requiring a Special Exception<sup>1</sup>, in the Rural District: multi-family housing; boarding or rooming houses; churches; public or private schools; residential care facility; municipal and public works facilities; cemeteries; essential public utilities and appurtenances; commercial outdoor recreation facility; campgrounds or youth camps; golf courses; removal and excavation of earth materials; planing mill or sawmill; commercial greenhouses including wholesale and retail sales; condominium conversion; cottage industry; storage of equipment/surplus associated with an off-premise occupation; accessory dwelling units; and child day care center.

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<sup>1</sup> Special Exception – A use which may be approved by the Zoning Board of Adjustment in districts where the use is specifically authorized by the Ordinance, and where the Zoning Board of Adjustment finds that such use can be developed in accordance with the provisions of Article 13. “Appeals to the Zoning Board of Adjustment” of the Bow Zoning Ordinance.

The following are permitted uses, requiring a Conditional Use Permit<sup>2</sup>, in the Rural District: manufactured housing park; minor/pre-development excavation of earth materials; laboratory or research facility; and stables and equestrian facilities.

The minimum lot size for the Rural District is two buildable acres<sup>3</sup> with a minimum lot frontage of 200 feet. The minimum setback yard requirements are as follows: 35 feet for the front yard and 20 feet for both the rear and side yards. The maximum lot coverage cannot exceed 30%. The maximum number of stories allowed is 2 ½ (35 feet in height).

### **Residential District (R)**

The Residential District is designed to accommodate a range of residential uses at low densities in areas where sewer service is available or the extension of such is anticipated at some future time.

The following are permitted uses in the Residential District: single family residential; duplex or two-family residential; housing for the elderly; planned open space residential development; home based day care; publicly owned recreation facility; livestock; silviculture operations; home occupation; accessory structures and facilities; grazing, care, raising, and/or keeping livestock for personal use; storage and use of a registered boat, recreational vehicle, camping trailer, or motor vehicle; farm or roadside stand; and signs.

The following are permitted uses, requiring a Special Exception, in the Residential District: multi-family residential; boarding or rooming house; churches; public or private schools; residential care facility; municipal and public works facilities; cemeteries; essential utilities and appurtenances; commercial outdoor recreational facilities; golf courses; agricultural; horticultural; stables and equestrian facilities; commercial greenhouses including wholesale and retail operations; condominium conversion; cottage industry; storage of equipment/surplus associated with an off-premise occupation; accessory dwelling unit; and child day care center.

The following are permitted uses, requiring a Conditional Use Permit, in the Residential District: minor/pre-development excavation of earth materials; and laboratory or research facility.

The minimum lot size for the Residential District is two buildable acres with a minimum lot frontage of 200 feet. The minimum setback yard requirements are as follows: 35 feet for the front yard and 20 feet for both the rear and side yards. The maximum lot coverage cannot exceed 30%. The maximum number of stories allowed is 2 ½ (35 feet in height).

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<sup>2</sup> Conditional Use Permit – The Planning Board has the authority to administer or grant such permits.

<sup>3</sup> Buildable land includes the total land area of a lot except: (1) land lying with slopes in excess of 33% or ledge which is exposed or lying within f feet of the soil surface; (2) wetlands; (3) land which is subject to an easement or right-of-way of a third party; (4) land necessary for the protection of aquifers which may serve as future sources of drinking water for the town; (5) land of such character that it cannot be safely used for building purposes because of danger to health or peril from fire, flood or other hazard or the use of which would tend to increase the danger to health, life or property or aggravate the flood hazard; (6) land subject to periodic flooding, poor drainage or other hazardous conditions; (7) land with unsuitable soil or inadequate capacity for individual sanitary sewerage disposal systems unless improvements will be connected to a common sewer system; or (8) land included in the Floodplain District or shown to be bog, marsh, swamp area, area of high water table or any similar situation.

### **Civic District (CV)**

The Civic District is intended to define a town center which will accommodate institutional office uses together with small retail and service uses in an area where sewer service is available or the extension of such is anticipated at some future time.

The following are permitted uses in the Civic District: housing for the elderly; residential care facility; child day care center; libraries and museums; municipal and public works facilities; essential public utilities and appurtenances; publicly owned recreation facilities; general, professional, business, financial, or government offices; medical, dental, or health care offices; banks; retail sales and rental of goods and merchandise with less than 6,000 square feet of floor area; personal and business services; commercial kennels; restaurants within a fully enclosed structure; livestock; silviculture operations; home occupation; cottage industry; accessory structures and facilities; grazing, care, raising, and/or keeping of livestock for personal use; storage and use of a registered boat, recreational vehicle, camping trailer, or motor vehicle; signs; and child day care center.

The following are permitted uses, requiring a Special Exception, in the Civic District: churches; public or private schools; social, fraternal clubs and lodges; cemeteries; movie theater or concert hall; retail sales and rental of goods and merchandise with no floor area limit; hotels, motels, and inns; auction and auction houses; restaurants with service outside; car wash and truck wash; heliport and airstrip; agriculture; horticulture; condominium conversion; accessory dwelling units; drive in or drive through; and dwelling unit for resident caretaker or security personnel.

The following are permitted uses, requiring a Conditional Use Permit, in the Civic District: minor/pre-development excavation of earth materials.

The minimum lot size for the Civic District is one buildable acre with a minimum lot frontage of 200 feet. The minimum setback yard requirements are as follows: 35 feet for the front yard and 20 feet for both the rear and side yards. The maximum lot coverage cannot exceed 60%. The maximum number of stories allowed is three (40 feet in height).

### **Institutional District (IN)**

The Institutional District is designed to accommodate office and institutional uses in an area where sewer service is available.

The following are permitted uses in the Institutional District: hospitals; residential care facility; child day care center; libraries and museums; municipal and public works facilities; essential public utilities and appurtenances; publicly owned recreation facility; general professional, business, financial, or government offices; retail sales and rental of goods and merchandise with less than 6,000 square feet of floor area; personal and business services; commercial kennels; mortuary or funeral homes; restaurants within a fully enclosed structure; livestock; silviculture operations; home occupations; cottage industry; accessory structure and facilities; grazing, care, raising, and/or keeping of livestock for personal use; storage and use of a registered boat, recreational vehicle, camping trailer, or motor vehicle; signs; and child day care centers.

The following are permitted uses, requiring a Special Exception, in the Institutional District: churches; public or private schools; adult day care facility; social, fraternal clubs and lodges; cemeteries; movie theater or concert hall; retail sales and rental of goods and merchandise with no floor area limit; hotels, motels, and inns; auction and auction houses; restaurant with service outside; car wash and truck wash; heliport and airstrip; agriculture; horticulture; condominium conversion; drive in or drive through; and dwelling unit for residential caretaker or security personnel

The following are permitted uses, requiring a Conditional Use Permit, in the Institutional District: minor/pre-development excavation of earth materials.

The minimum lot size for the Institutional District is one buildable acre with a minimum lot frontage of 200 feet. The minimum yard requirements are as follows: 35 feet for the front yard and 20 feet for both the rear and side yards. The maximum lot coverage cannot exceed 60%. The maximum number of stories allowed is three (40 feet in height).

### **Commercial District (C)**

The Commercial District is designed to allow a broad range of commercial uses including retail, service, offices, restaurants, recreational, institutional, and transportation-related uses in areas along arterial roads where sewer service is available or the extension of such is anticipated at some future time.

The following are permitted uses in the Commercial District: hospitals; residential care facilities; social, fraternal clubs, lodges; municipal and public works facilities; essential public utilities and appurtenances; publicly owned recreation facilities; commercial outdoor recreational facility; indoor commercial recreational facility; movie theater or concert hall; golf courses; general professional, business, financial, or government offices; medical, dental, or health care offices; banks; retail sales and rental of goods and merchandise; personal and business services; hotels, motels, and inns; animal hospital; mortuary or funeral homes; auction and auction houses; restaurants; motor vehicle sales and rental up to 13,000 pounds GVW (gross vehicle weight); sales and installation of vehicle parts and accessories; motor vehicle repairs and maintenance; gasoline sales; car wash and truck wash; bus or train station; marina; sales of construction equipment and/or materials up to 15,000 square feet with no outdoor display or storage; laboratory or research facility; livestock; silviculture operations; commercial greenhouses including wholesale and retail sales; home occupation; cottage industry; accessory structures and facilities; grazing, care, raising, and/or keeping livestock for personal use; accessory dwelling units; storage and use of a registered boat, recreational vehicle, camping trailer, or motor vehicle; dwelling unit for resident caretaker or security personnel; farm or roadside stand; signs; and child day care center.

The following are permitted uses, requiring a Special Exception, in the Commercial District: churches; public or private schools; child day care center; adult day care center; libraries and museums; cemeteries; campgrounds or youth camps; commercial kennels; mini-storage; motor vehicle sales and rental; motor or rail freight terminal; sales or rental of recreational vehicles, camping trailers, or boats, including servicing and repair; heliport and airstrip; manufacturing, processing, repairing, and assembling goods and merchandise; warehousing and storage of non-



flammable, non-explosive goods; sales of construction equipment and/or materials with outdoor display or storage; agriculture; horticulture; stables and equestrian facilities; condominium conversion; radio or television tower or antenna or personal wireless service facility; storage of equipment/surplus associated with an off-premise occupation; and drive in or drive through.

The following are permitted uses, requiring a Conditional Use Permit, in the Commercial District: minor/pre-development excavation of earth materials.

The minimum lot size for the Commercial District is two buildable acres with a minimum lot frontage of 200 feet. The minimum setback yard requirements are as follows: 35 feet for the front yard and 20 feet for both the rear and side yards. The maximum lot coverage cannot exceed 80%. The maximum number of stories allowed is 2 ½ (35 feet).

### **Limited Industrial District (I-1)**

The Limited Industrial District is intended to accommodate office and industrial uses in areas where sewer service is available or the extension of such is anticipated at some future time.

The following are permitted uses in the Limited Industrial District: hospitals; residential care facilities; libraries and museums; social, fraternal clubs and lodges; municipal and public works facilities; essential public utilities and appurtenances; home based day care; publicly owned recreation facilities; commercial outdoor recreation facilities; indoor commercial recreation facilities; movie theater or concert hall; golf course; general professional, business, financial, or governmental offices; medical, dental, or health care offices; banks; retail sales and rental of goods and merchandise; personal and business services; hotels, motels, and inns; animal hospitals; auction and auction houses; mini-storage; restaurants within a fully enclosed structure; motor vehicle repair and maintenance; gasoline sales; car and truck wash; motor or freight terminal; bus or train station; marina; manufacturing, processing, repairing, and assembling goods and merchandise; warehouse and storage of non-flammable, non-explosive goods; sales of construction equipment and/or materials up to 15,000 square feet with no outdoor display or storage; laboratory or research facility; livestock; silviculture operations; commercial greenhouses including wholesale and retail sales; home occupation; cottage industry; accessory structures and facilities; grazing, care, raising, and/or keeping of livestock for personal use; storage and use of a registered boat, recreational vehicle, camping trailer, or motor vehicle; dwelling unit for resident caretaker or security personnel; farm or roadside stand; signs; and child day care center.

The following are permitted uses, requiring a Special Exception, in the Limited Industrial District: churches; public or private schools; child day care center; adult day care facility; cemeteries; campgrounds or youth camps; commercial kennels; restaurants with service outside; motor vehicle sales and rental; sales and installation of vehicle parts and accessories; sales or rental of recreational vehicles, camping trailers, or boats including servicing and repairs; heliport and airstrip; bulk storage of fuels, chemicals, or flammable materials; materials recycling center; removal and excavation of earth materials; processing of earth materials; agriculture; horticulture; stables and equestrian facilities; condominium conversion; radio or television tower or antenna or personal wireless service facility; storage of equipment/surplus associated with an off-premise occupation; accessory dwelling units; and drive in or drive through.

The following are permitted uses, requiring a Conditional Use Permit, in the Limited Industrial District: minor/pre-development excavation of earth materials.

The minimum lot size for the Limited Industrial District is five buildable acres with a minimum lot frontage of 300 feet. The minimum setback yard requirements are as follows: 50 feet for the front yard and 30 feet for both the rear and side yards. The maximum lot coverage cannot exceed 80%. The maximum number of stories allowed is three (40 feet).

### **General Industrial District (I-2)**

The General Industrial District is designed to include offices and industrial uses, and some limited commercial uses, in an area in which the extension of sewer service is anticipated at some future time.

The following are permitted uses in the General Industrial District: hospitals; residential care facility; libraries and museums; social, fraternal clubs and lodges; municipal and public works facilities; essential public utilities and appurtenances; home based day care; publicly owned recreation facility; commercial outdoor recreational facility; indoor commercial recreation facility; movie theater or concert hall; golf course; general professional, business, financial, or governmental offices; medical, dental, or health care offices; banks; retail sales and rental of goods and merchandise; personal and business services; hotels, motels, and inns; animal hospitals; mortuary or funeral homes; auction and auction houses; mini-storage; restaurants; motor vehicle sales and rental up to 13,000 pounds gross vehicle weight (GVW); sales and installation of vehicle parts and accessories; motor vehicle repairs and maintenance; gasoline sales; car wash and truck wash; motor or rail freight terminal; bus or train station; marina; manufacturing, processing, repairing, and assembling goods and merchandise; warehouse and storage of non-flammable, non-explosive goods; sales of construction equipment and/or materials with outdoor display and storage; contractor's yard or tradesman's shop; laboratory or research facility; livestock; silviculture operations; commercial greenhouses including wholesale and retail sales; home occupation; cottage industry; accessory structures and facilities; grazing, care, raising, and/or keeping of livestock for personal use; storage and use of a registered boat, recreational vehicle, camping trailer, or motor vehicle; dwelling unit for resident caretaker or security personnel; farm or roadside stand; signs; and child day care center.

The following are permitted uses, requiring a Special Exception, in the General Industrial District: churches; public or private schools; child day care center; adult day care facility; cemeteries; campgrounds or youth camps; commercial kennel; motor vehicle sales and rental; sales or rental of recreational vehicles, camping trailers, or boats including servicing and repairs; heliport and airstrip; bulk storage of fuels, chemicals, or flammable material; materials recycling center; removal and excavation of earth materials; processing of earth materials; planing mill or sawmill; junk yard; agriculture; horticulture; stables and equestrian facilities; condominium conversion; radio or television tower or antenna or personal wireless service facility; storage of equipment/surplus associated with an off-premise occupation; accessory dwelling units; and drive in or drive through.

The following are permitted uses, requiring a Conditional Use Permit, in the General Industrial District: minor/pre-development excavation of earth materials; and sexually oriented business.

The minimum lot size for the General Industrial District is two buildable acres with a minimum lot frontage of 200 feet. The minimum setback yard requirements are as follows: 50 feet for the front yard and 30 feet for both the rear and side yards. The maximum lot coverage cannot exceed 80%. The maximum number of stories allowed is three (40 feet in height).

### **Business Development District (BD)**

The purpose of the Business Development District is to attract environmentally acceptable commercial, industrial, recreational, and institutional uses to the District; to encourage diversity in the community tax base through appropriate flexibility in land use and land use development; to optimize financial return on public infrastructure investments and expenditures, including municipal sewer, municipal water supply, and public highways; to minimize adverse traffic impacts on Route 3A, future interstate highway interchanges, and surrounding local streets and roadways; and to preserve valuable historical, cultural, and natural features within the District and to minimize adverse environmental impacts to water and air, while reducing light and noise pollution, flooding, clear cutting of vegetation, and the blocking of scenic views.

The following are permitted uses in the Business Development District: public or private schools; hospitals; residential care facility; child day care center; adult day care center; libraries and museums; social, fraternal clubs and lodges; municipal and public works facilities; essential public utilities and appurtenances; publicly owned recreation facility; commercial outdoor or indoor recreational facility; movie theater or concert hall; general professional, business, financial, or government offices; medical, dental, or health care offices; banks; retail sales and rental of goods and merchandise; personal and business services; hotels, motels, and inns; animal hospitals; auction and auction houses; restaurants; motor or rail freight terminals; bus or train stations; marinas; manufacturing, processing, repairing, and assembling goods and merchandise; warehousing and storage of non-flammable materials, non-explosive goods; sales of construction equipment and/or materials up to 13,000 square feet with no outdoor display or storage; laboratory or research facilities; silviculture operations; home occupations; signs; and child day care centers.

The following are permitted uses, requiring a Special Exception, in the Business Development District: churches; commercial kennels; mortuary or funeral home; heliports and airstrips; bulk storage of fuels, chemicals, or flammable materials; removal and excavation of earth materials; planing mills or sawmills; contractor's yard or tradesman's shops; commercial greenhouses including wholesale and retail sales; condominium conversion; radio or television towers or antennas or personal wireless service facilities; drive in or drive through; and dwelling units for resident caretakers or security personnel.

The following are permitted uses, requiring a Conditional Use Permit, in the Business Development District: minor/predevelopment excavation of earth materials.

The minimum lot size for the Business Development District is two acres on local roads and three acres on Route 3A. Minimum lot frontage on Route 3A is 300 feet, 100 feet on local roads with municipal water and sewer, and 150 feet on local roads without municipal water and/or sewer. The minimum setback yard requirements are as follows: for every one foot in building height there must be one foot of front setback and 0.75 feet in the side and rear setbacks. The

maximum impervious coverage cannot exceed 80% of the gross lot area on Route 3A or on local roads with municipal water and sewer or 60% of gross lot area on Route 3A or local roads without municipal water and/or sewer. The maximum building height is 55 feet on Route 3A and local roads with municipal water and sewer and 35 feet on Route 3A and local roads without municipal water and/or sewer.

The following is a list of all of the Zoning Districts in Bow and the approximate area of land located in each. The location of these Districts can also be seen on the **Current Zoning Map**.

### Acreage in Each Zoning District

Zoning District	Acres*	Percent of Total Land Area
Rural (RU)	13,420	74.4%
Residential (R)	2,330	12.9%
Business Development District (BD)	850	4.7%
General Industrial (I-2)	805	4.5%
Commercial (C)	360	2.0%
Institutional (IN)	130	0.7%
Civic (CV)	75	0.4%
Limited Industrial ((I-1)	60	0.3%
<b>Total</b>	<b>18,030</b>	<b>100%</b>

Source: CNHRPC Geographic Information System (GIS), 2003

\* Estimates based on GIS maps for 2003 Master Plan

### Other Current Zoning Ordinance Provisions

In addition to the eight Zoning Districts, Bow has adopted numerous other Land Use Regulations that influence and help shape the land use patterns in Town. Some of these Zoning Ordinances are specific to a District, while others can be applied to the entire Town, when certain criteria are met. The following is a summary of these other current Zoning Ordinance provisions.

#### Growth Management Ordinance

The purpose of this Ordinance is to regulate and control the timing of development in accordance with the objectives of both the Master Plan and the Capital Improvements Program, which are adopted by the Bow Planning Board. The number of building permits for new dwelling units that are issued in a calendar year by the Town of Bow is limited to an amount that is two percent (2%) of the total dwelling units in Bow as of December 31<sup>st</sup> of the prior year. This Ordinance was originally adopted in 1997.

The Town issues building permits for new dwelling units on a “first come-first served basis,” with the following conditions: 25% of the permits issued shall be awarded to landowners whose building is intended to be their primary residence; no single entity shall be awarded more than five permits during a calendar year, however the Planning Board may approve the issuance of additional permits if the applicant has proposed measures that will mitigate the impact of additional lots; and Affordable housing and elderly housing is exempt from the provisions of the

Growth Management Ordinance. If at the end of the year there is a surplus of un-issued building permits for new dwelling units, the surplus shall be carried over one year.

### Impact Fee Ordinance

The Planning Board has developed and the Town adopted in 2001, a methodology and fees for the assessment of impact fees for the Bow School District. On the basis of this methodology, new and expanded residential development in Bow is assessed an impact fee that represents its proportional share of demand on the capacity of the School District. Any person who seeks a building permit for new or expanded development is required to pay an impact fee. The school impact fee can be waived for qualified elderly housing developments.

### **Overlay Zoning Districts**

Overlay Districts are superimposed upon the Base Zoning Districts, which were listed above, so that the regulations pertaining to the Overlay Districts shall be *in addition* to the regulations of the Base Districts. The land within the town may be used if and to the extent that such use is permitted in the applicable Base and Overlay Districts.

### Wetlands Conservation District

The purpose of the Wetlands Conservation District is to protect and regulate the use of wetlands and buffer areas in the Town of Bow. This District is intended to:

- Control the development of structure and land uses within the District that would contribute to the pollution of surface waters and groundwater;
- Prevent the destruction of wetlands which provide flood protection, groundwater recharge, pollution abatement, and the enhancement of stream flow during dry periods;
- Prevent unnecessary or excessive expenses to the Town to provide and maintain essential services and utilities which arise because of unwise use of water resources;
- Encourage those uses which can be appropriately and safely located in the District;
- Protect potential water supplies and existing aquifers and their recharge areas;
- Preserve and enhance those aesthetic values associated with this area;
- Protect wildlife habitats and maintain ecological balances; and
- Protect unique and unusual natural areas

### Floodplain District

The Floodplain District was established to reduce the hazards of floods upon public health, safety, and welfare; to protect areas from flooding caused by land development; to protect the public from financial burden for flood control and relief; and to protect the capacity of floodplain areas to absorb, transmit, and store runoff. See the **Surface Water Resources Map** in the Conservation, Preservation, and Open Space Chapter for the location of this District.

### Aquifer Protection District

The Aquifer Protection District was established to preserve and maintain the existing and potential groundwater supplies, aquifers, and groundwater recharge areas of the Town, and protect them from adverse development or land-use practices; to preserve and protect sources of drinking water supply for the public health and safety; and to conserve natural resources.

## **Special Development Standards**

The following regulations are specific standards that are set out to help guide development within Bow.

### Planned Open Space Residential Development (POS-RD)

The Planned Open Space Residential Development allows for an alternative pattern of land development without an overall increase in density. This Ordinance allows the Town to encourage the development of dwelling units designed and constructed in a manner that is harmonious with the ecological and natural visual qualities of the Town.

The purpose of this Ordinance is to help facilitate the economical and efficient provision of public services; promoting open space conservation; protecting natural and scenic attributes of the land; maintaining controls for the development of affordable housing; preserving open space while providing greater flexibility in the design or residential subdivisions; and encourage diversity and originality in lot layout and individual building design to achieve a harmonious relationship between development and the land.

### Manufactured Housing Parks and Subdivisions

The purpose of this Ordinance is to provide the opportunity to and the guidance for the development of manufactured housing parks and subdivisions within select residentially zoned areas of Town.

### Accessory Dwelling Units

The purpose of this Ordinance is to allow the construction of dwelling units within single-family dwellings for the express purpose of enabling a person or persons related to the owner by blood, marriage, or adoption to reside in the same dwelling but in separate living quarters.

### Elderly, Duplex, and Multi-Family Dwellings

The purpose of this Ordinance is to allow the development of elderly, duplex, and multi family dwellings within certain areas of Bow.

### Home Occupations

The purpose of establishing conditions and criteria for home based businesses/occupations is to ensure that any and all such uses of an operation in the residential structure remain subordinate to the principal use of the property as a residence. Home Occupations are allowed by Special Exception in the R and RU Districts. A Home Occupation is not permitted if it would have a significant adverse impact on the surrounding neighborhood.

### Cottage Industry

The purpose of this Ordinance is to allow a home business to exist that has a more intensive use of the site, non-family member employees, customer traffic, exterior advertising, and an exterior appearance that deviates from a traditional home business. Cottage Industries are allowed by Special Exception and must preserve the residential/rural character of the neighborhood.

### Day Care Centers

This Ordinance applies to all day care centers and home based day care providers within the Town of Bow. It sets standards for safety and operation as a Home Business or Cottage Industry.

### Grazing, Care, Raising, or Keeping of Livestock

The purpose of the Ordinance is to establish minimum area requirements for various species, pasture and enclosure area conditions, and best management practices that must be followed. Livestock includes horses, cattle, goats, pigs, sheep, llamas, poultry, ostriches, emus, and other similar animals.

### Planned Business Subdivisions

The purpose of this Ordinance is to facilitate the development of planned business subdivisions through innovative zoning and land use regulations. The subdivision is to benefit the Town through creative design, higher utilization of business development properties, increased diversity of desired services, reduced public service costs, improved aesthetics, reduced environmental impacts, and greater taxable land value.

### Campgrounds

The purpose of this Ordinance is to provide lodging to itinerant or temporary visitors. Recreational vehicles, travel trailers, or tents can remain on any campground site for up to 90 days. Manufactured housing is not permitted in any campground.

### Animal Hospital or Commercial Kennel

This Ordinance sets the buffer, setback, and screening standards for the operation of such a business.

### Radio/TV Tower or Antenna and Personal Wireless Service Facility

The purpose of this Ordinance is to set guidelines for the location, process, and approval of new or expanded radio, TV Tower, and Personal Wireless Service Facilities (PWSF).

### Outdoor Storage of Boat, Recreational Vehicle, Camping Trailer, or Motor Vehicles

The purpose of this Ordinance is to specify the location, number, and use of boats, recreational vehicles, camping trailers, and motor vehicles that are stored outside.

### Sexually Oriented Businesses

The purpose and intent of this Ordinance is to establish reasonable and uniform regulations to prevent the concentration of sexually oriented businesses within the Town of Bow; to promote the health, safety, and general welfare of the citizens of the Town Bow; and utilize the regulations to prevent problems of blight and deterioration. The provisions of the Ordinance do not have the purpose or effect of:

- Imposing limitations or restrictions on the content on any communicative materials;
- Restricting or denying access by adults to sexually oriented materials protected by the First Amendment;
- Denying access by the distributors and exhibitors of sexually oriented entertainment to their intended market; or
- Condoning or legitimizing the distribution of obscene material.

### Industrial and Utility Uses

The purpose of this Ordinance is to specify the uses, fuel storage, and performance requirement for industrial and utility uses.

### Planing Mills, Sawmills and Similar Uses

The purpose of this Ordinance is to establish minimum operating standards and land development standards for the operation of planing mills, sawmills, and similar uses throughout Town.

### Laboratory and Research Centers, Corporate Office Headquarters, or Data Processing Centers

The purpose of this Ordinance is to establish standards for the development of laboratory and research centers, corporate office headquarters, and/or data processing centers in the Rural and Residential Zoning Districts.

### Excavation of Earth Materials

The purpose of this Ordinance is to regulate the excavation of earthen materials through the setting of operational standards and reclamation standards for each site.

### Accessory Buildings

The purpose of this Ordinance is to regulate the location of accessory structures, including farm produce stands.

### Screening Standards

The purpose of this Ordinance is to outline the types of screening required for various development activities. Screening is considered to be a visual shielding or obscuring of one abutting or nearby structure or use from another by fencing, walls, berms, or densely planted vegetation.

### Sign Regulations

The purpose of the sign regulations is to:

- Encourage the effective use of signs as a means of communication;
- Maintain and enhance the aesthetic environment of the Town while retaining the Town's ability to attract and encourage economic development and growth;
- Improve traffic safety;
- Minimize possible adverse effects of signs on nearby public and private property; and
- Enable fair and consistent enforcement of these sign regulations.

### Off-Street Parking Regulations

The purpose of this Ordinance is to outline the applicability for off-street parking for all new development and for changes or expansions of existing uses and buildings, both residential and commercial developments.

### Heliports and Airstrips

The purpose of this Ordinance is to set out the requirements under which an individual or business may develop a heliport or airstrip within the Town of Bow for personal or business use.



## **BUILD-OUT ANALYSIS – CURRENT LAND USE**

With the initiation of the 2003 Bow Master Plan, the Planning Board decided to work with the Central NH Regional Planning Commission to complete an analysis of future land build-out based upon current Zoning Ordinance and Land Use Regulations.

The goal of the project was to determine the number of potential single-family residential lots, as well as the amount of developable commercial and industrial acreage, within Bow under current land development regulations and within the natural constraints of the land. Hence, a build-out analysis is a process by which land use regulations and physical land constraints are analyzed to see how many lots/areas can be developed under those conditions until there is no more developable land remaining – the town would be “built-out.”

The development of this analysis gives the Planning Board a tool that can be used to evaluate current land development standards, as well as model recommended changes made during the Master Plan process. It also gives other Town Departments and the School Department the information necessary for their future planning. The maps for the Build-Out Analysis can be seen at the end of this Chapter.

### **The Build-Out Process**

The Town entered into an agreement during Summer 2001 with Cartographic Associates, Inc. to develop digital parcel maps. While the main emphasis of the project was to prepare individual tax maps, a composite tax map of the entire community also was created. Following the completion of these maps, the first step in the build-out analysis was to merge the geographic information on the maps with information from the Town’s assessor’s database. This database contains information related to land use, zoning, and specific information on buildings located on individual pieces of land. All of this data were necessary to complete the analysis.

In addition to the parcel information, other data used in the analysis include the National Wetlands Inventory, Federal Emergency Management Agency (FEMA) Flood Insurance Rate maps that delineate the 100-year floodplain, utility easements as found in the tax maps, information related to conservation lands from Town and Planning Commission files, and 1998 digital orthoquad (DOQ) aerial photos.

After all the local data was linked to the digital map, maps were produced that portrayed zoning and existing land use to the parcel level. See the **Current Zoning Map** and the **Current Land Use Map** for more information.

Next, an initial review of “built-out” parcels was produced using lot size and underlying zoning. A better way to describe this analysis would be to say that it identified parcels that cannot be further subdivided according to current zoning. See the **Built-Out Map** for more information.

With those initial results, areas that are unlikely to be developed due to their ownership or use were classified as “built-out.” Such areas included town-owned lands, schools, Pages Corner State Forest, Merrimack Station power plant and adjacent lands, as well as identified wetlands, areas in the 100-year flood plain, and utility easements.

After identifying the built-out lands, the next step was to estimate the number of potential single-family residential lots in the Residential, Rural and Civic Zoning Districts and the developable commercial/industrial acreage in the Limited Industrial, General Industrial, Commercial, Institutional and Business Development Districts. Several assumptions were developed to complete these calculations. First, all built-out parcels were taken out of the analysis. Following this step, all parcels or sections of parcels not constrained by identified wetlands, 100-year floodplain (for residential lots only) and utility easements were identified. This generated a base land area in which to work with.

As the minimum lot size in a particular zone determines the number of potential single-family residential lots and commercial/industrial acreage that can be developed, a simple calculation was performed to determine the gross developable area by parcel. For areas in the commercial and industrial zones, the calculated developable area was then checked against current land use and those parcels that are effectively built-out.

For all lots in residential zones with developable area of five acres or more, this number was then multiplied by a factor of 0.75 to give the estimate a measure of reality, as it would be expected that design issues and required rights-of-way in a larger subdivision will often result in a lesser overall number of lots created than the total acreage would imply. This factor was based upon a review of the last ten major subdivisions in Bow. The number was not factored in for smaller lots as there are fewer design issues in minor subdivisions as well as the ability of a landowner to have multiple principal uses on a single lot (Article 5.10 of the Zoning Ordinance). Finally, the number of potential residential lots was reduced by one if a residence already exists on that lot.

### **Results of the Build-Out Analysis**

Following the completion of the initial estimates of future single-family residential lots and commercial/industrial acreage, the results were presented to the Planning Board and a review was undertaken by representatives of the Planning Board, Board of Selectmen, and Town staff.

During this review, the larger areas of developable land were reviewed on a lot by lot basis and the initial results compared with past subdivision proposals or local information regarding constraints, such as steep slopes or access problems. Several estimates were modified during this review, but only based upon specific knowledge of the parcel in question. Otherwise, the estimates remained the same.

In addition, a number of Class VI roads that are considered unlikely to be improved in the near future were identified to allow for both a short-term (next ten years) and full build-out analysis to be completed. Lots with sole access to these roads were then highlighted.

The results of the analysis provide an interesting and important look at the Town’s future. In the Residential Zoning Districts, there is a potential for 1,975 additional lots in the full build-out and 1,727 additional lots when not including lots along difficult to improve Class VI roads. For commercial and industrial land development, the majority of developable acreage can be found in the Business Development District and the General Industrial zones. See the table below and the **Current Land Use Build-Out Analysis Map** for more information.

Zoning District	Existing Lots		Build-Out Analysis		
			Residential Lots*		Commercial / Industrial Acres
	Lots w/Bldgs.	Total	Full Build-Out	Without Certain Class VI Road Improvements **	
<b>Residential</b>	754	829	164	145	
<b>Rural</b>	1,626	1,888	1,619	1,390	
<b>Commercial</b>	57	78			73.5
<b>Limited industrial (I-1)</b>	21	26			16.5
<b>General Industrial (I-2)</b>	71	113			275.2
<b>Institutional</b>	17	19			26.9
<b>Civic</b>	4	5	192	192	
<b>Business Dev. District</b>	33	50			347.2
<b>Total</b>	<b>2,583</b>	<b>3,008</b>	<b>1,975</b>	<b>1,727</b>	<b>739.3</b>

\*Only looks at single-family residential units. Does not take into account multi-family developments

\*\* Identified as Class VI Roads not likely to be improved in next ten years

Source: 2002 CNHRPC Build-Out Analysis

## CONCLUSION

This Chapter describes how the land in Bow is currently being used and the historic development patterns that brought the town to this point. It also shows, through the use of the build-out analysis, what Bow’s future may look like if its current planning and zoning regulations remain in place without change. At this point in time, the more easily developed land in Bow is nearing depletion and the land still available is more difficult to develop and/or will have more of an impact upon the town. This development impact may be visual, environmental, historical, or fiscal, all of which merit the attention of the Planning Board and Zoning Boards. How these lands are to be used will impact all aspects of town life, for town services, schools, conservation, commercial, and residential growth. The Town is currently in a position to make decisions on future land use that will impact the development, feel, and character of the Town. The following Chapters in the Master Plan contain recommended changes to the land development regulations in an effort to help guide the future land use of the Town, while acknowledging the past and present.