

TOWN OF BARTLETT
Planning Board
56 Town Hall Road
Intervale, New Hampshire 03845

MASTER PLAN

INTRODUCTION

The town's original Master Plan was adopted on January 14, 1985. The citizens of the town, recognizing the need for land use controls, adopted a zoning ordinance based on that plan on August 27, 1985. Both the Master Plan and the zoning ordinance (with amendments) have served the town well over the subsequent 30 years. It was effective in maintaining green space while promoting controlled growth, and limited development of uses not compatible with the rural character of Bartlett. The Grand Summit Resort is an excellent example of commercial development that was a direct result of zoning enabled by the original Master Plan.

New state laws, coupled with the need to address changes in the developmental landscape unforeseen by the original plan, necessitated comprehensive update to the Master Plan to move Bartlett into the 21st century. The updated plan adopted in 2002 built on the previous Plan and remained true to its intent and vision while incorporating the lessons of 17 years of experience with zoning and land use planning in the town. The 2002 Master Plan guided the town as it addressed challenges and opportunities not envisioned in the 1985 plan. It supported several significant revisions to the regulations governing development in the town, including the adoption of a Ridgeline and Hillside Zoning Overlay District, a Telecommunications Ordinance, and Site Plan Review Regulations for larger commercial developments.

This update is not intended as a comprehensive revision of the 2002 Plan, which for the most part remains relevant. It amends the background information to reflect current conditions, and revises the challenges and recommendations to reflect changes that have taken place over the past 13 years. However, the update remains true to the vision that has effectively guided the town for over a quarter of a century.

The Land Use Map on file in the Town Hall is an integral and important part of this plan. It includes topographic and soil-type data for the town of Bartlett. This is the minimum data the Planning Board concluded to be of value for general planning purposes, recognizing it is of limited value for specific application. It can however, provide a broad or general indication of potential problem areas leading to directed engineering studies where appropriate.

Ancillary documents on file at Town Hall and available for use in conjunction with this plan are:

- Town of Bartlett Zoning Ordinance and Maps
- Subdivision Regulations
- Site Plan Review Regulations
- Street Regulations
- Floodplain Development Ordinance and Maps
- Telecommunications Ordinance
- Excavation of Gravel Pit Ordinance
- Lower Bartlett Water Precinct Ordinance
- Kearsarge Lighting Precinct Zoning Ordinance

I. PURPOSE, OBJECTIVES AND PLANNING PERIOD

A. PURPOSE

This Master Plan has been designed to provide guidance to town planners, managers and citizens for the development of the town of Bartlett. All aspects of development were considered with particular emphasis on future needs for health, safety, order, preservation of the town's character, conservation and management of natural resources, convenience, prosperity, and efficiency and economy in the process of development, while respecting and protecting individual rights. Background, philosophy and statistics have been provided to reinforce the final recommendations contained herein. This plan is not intended to be a detailed description of land use but rather a tool to aid in planning for land use and other issues of town importance.

B. OBJECTIVES

The Master Plan is intended to: conserve natural and cultural resources; promote a sustainable economic base through development of compatible uses; assure access to adequate essential services and recreational facilities for all citizens; and preserve the traditional character of the Town.

C. PLANNING PERIOD

The Master Plan will be reviewed and updated every 5 years or as often as deemed necessary by the Planning Board to address issues that may arise.

II. BACKGROUND

A. THE GEOGRAPHY OF BARTLETT

The historical pattern of development in Bartlett has, to a greater extent than many other towns in the state, been governed by its geographical landscape. Three factors have been prominent: 1) the broad flat plain along the Saco River, 2) the adjacent White Mountains, and 3) the town's location at the southern end of two of the major passages through the mountains (Crawford and Pinkham Notches), as well as Bear Notch which connects the valley to the Pemigewasset and ultimately Merrimack River valleys.

About 30% of Bartlett consists of relatively flat land (less than 10% slope), primarily the alluvial plain of the Saco River. These lands provided both access and easily tilled land for early settlers, and to this day the great majority of both roads and development lie in this area. Major roads leading away from the river followed narrower but still flat valleys of major tributaries, such as Jericho Road up the Rocky Branch, Town Hall Road up the East Branch, and the Jackson/Shelburne Road (now state Route 16) up the Ellis River. The only exceptions to this pattern were Bear Notch Road (providing access to the Swift River Valley and Passaconaway), and Dundee and Thorn Hill Roads (providing access to the upper portion of Jackson).

The Saco River valley also provided a natural transportation corridor from the Portsmouth/Portland seacoast area to the agricultural lands of the upper Connecticut River valley and eventually to the Lake Champlain Valley and southern Canada. The road over Crawford Notch to the "Upper Coos" (now U.S. Route 302) was in place by the Revolutionary War, and the railroad constructed in the 1870s. Similarly, the passage up the Ellis River and over Pinkham

Notch provided natural access to the towns of the Androscoggin River valley, with the first road established by 1800.

The steep slopes and rocky soils of the White Mountains adjacent to the river valleys have always been a limiting factor in the expansion of the town. In many areas (particularly at the western end of town and along West Side Road) steep slopes lie close to the river, significantly limiting development. Other areas in the valley contain gentler lower slopes and flat lands that have been more amenable to development and allow a greater variety of uses. The floodplain of the Saco River has also been a significant constraint on development. Nearly one-quarter of the town outside of the White Mountain National Forest consists of slopes over 25%, which have serious limitations for road building, agricultural use and home site development. Some of these slopes were cleared for pasture, and for much of its early history Bartlett exhibited the “farm and field” character of most New England towns. However, because of the difficult terrain, a higher proportion of Bartlett remained continuously forested than in towns south of the mountains. After the Civil War farms throughout New England began to be abandoned as people sought out the more productive lands of the Midwest, and previously open hillsides returned to forest. With the establishment of the White Mountain National Forest in 1911, many of these lands passed into federal ownership, and 62% of the town now lies within the National Forest. While this has helped to preserve both natural resource values and the scenic character of the town, it increases pressure on the remaining lands available for development and increases the need for careful planning.

In recent decades, with the increased demand for both primary and second home development, roads and housing are being extended into lower slope areas that had been previously undeveloped. Examples of this pattern include Glen Ledge, Linderhof, Rolling Ridge, Stillings Grant and Attitash Woods. However, this development has been relatively concentrated, with the result that the loss of forest cover in town has been quite low compared to many other rapidly-developing towns.

The factors that have governed the town's development for the past 200 years (the presence of two major transportation corridors and the limited amount of physically suitable land) will continue to dominate commercial and residential development into the next century. Maintaining the traditional character of the town (such as open space in the Saco River Valley) in the face of these dominant factors will be one of the primary challenges facing town planners.

B. POPULATION

Population data, and projections of future population growth, are the very heart of community planning, as they provide the basis for estimating the need for additional housing, supporting infrastructure and public services. Available data on Bartlett's population reflect the changes that have taken place in the town, as well as the challenges facing it in the first decades of the next century.

Bartlett's population remained relatively stable during the 30 years from 1940 to 1970 (Table 1). The town experienced a period of significant growth between 1970 and 1990, with the population more than doubling over that time. However, over the last two decades the population growth rate has slowed, with very little change from 2000 to 2010. The 2010 population of 2,788 ranks it 113th out of the state's 259 cities, towns and unincorporated places. In addition, Bartlett contains a large non-resident population that has been estimated to range from 50 to 125 percent of the resident population depending on the season.

The stable town population between 1940 and 1970 did not reflect the increasing population across larger jurisdictions (Figure 1). From 1970 to 2000 both the town and Carroll County grew at a faster rate than the state or nation, though from 2000 to 2010 Bartlett's population growth was once again slower than the larger jurisdictions. The large fluctuations in growth rate make projecting the future difficult. However, an earlier State Planning Office projection that Bartlett will continue to grow at faster rate than the state as a whole, increasing to an estimated 3,560 people in 2020, now appears overly optimistic.

Table 1. Town resident population (U.S. Census).

Year	Population	% increase/year
1940	1154	-
1950	1074	-0.5
1960	1013	-0.5
1970	1098	0.4
1980	1566	3.6
1990	2269	3.8
2000	2705	1.7
2010	2788	0.3
2013	2798 (est.)	0.1

Bartlett's 2010 population density of about 37 people per square mile was lower than the county-wide average of 48 people per square mile and well below the statewide average of 147, indicating the relatively rural nature of the town. However, the population is concentrated on the 33% of the town that lies outside of the White Mountain National Forest. The population density of that portion of the town available for settlement is about 112 people per square mile.

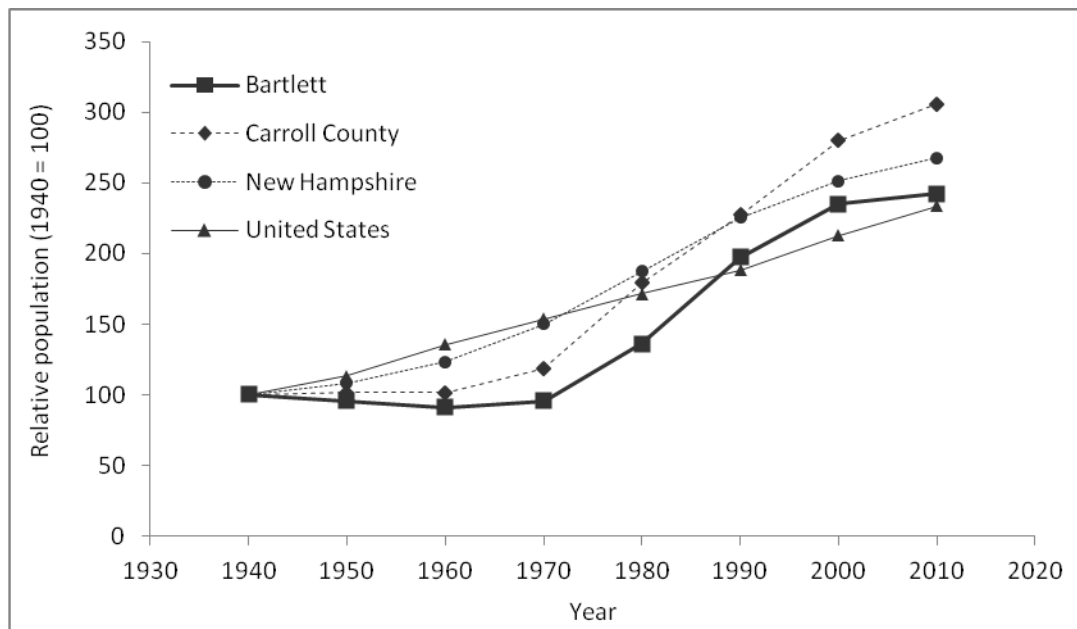


Figure 1. Population growth 1940-2010.

The 1985 plan stated that “there is no sound economic reason for Bartlett's population to grow.” However, despite the slower growth over the recent decade, the potential remains for future population growth, as indicated by the following factors and trends:

- The continued economic expansion of Carroll County and the Mount Washington Valley. The State Planning Office projected that Carroll County would be the third fastest growing county in the state between 2000 and 2020; it was actually the second-fastest growing county between 2000 and 2010. Significant retail expansion continues in Conway. This expansion will require additional workers to move to the valley, many of whom will live in towns surrounding Conway.
- The continued attraction of the region for tourism and seasonal vacation homes. Recreational use of the White Mountain National Forest has increased much more rapidly than predicted in the mid-1980s. Many of the region's tourist attractions (Attitash Ski Area, Story Land, Great Glen, and the Conway Scenic Railroad) have expanded their operations, and other new attractions (Bear Notch Ski Touring Center and the Appalachian Mountain Club's Highland Center at Crawford Notch) have opened to meet increasing recreational demand. There is little reason to expect this trend to abate.
- Improvements to the region's transportation infrastructure, which have made access to the southern end of Bartlett easier and to some degree removed the impression of the Mount Washington Valley as a traffic nightmare.
- Bartlett's relatively low tax rate compared to most other towns in the area.
- The high quality of Bartlett's school. The quality of the local school system is one of the primary factors determining where families with children choose to live.
- The increasing importance of "quality of life" as a factor in where people chose to locate, combined with the increasing ability of many people (due to the revolution in electronic communication) to choose where they live without the constraints of being near their work location.

Though the town's population is unlikely to increase at the rate that it did from 1970 to 1990, there is no reason to think that the slow growth of the past decade will continue over the long term. A renewal of rapid population growth could have a significant impact on both the character of the town and its ability to provide services if not carefully planned for.

C. CURRENT STATUS OF DEVELOPMENT

1. VALUATION. The town's assessment database for 2014 lists 5,299 parcels, with about 95% of the property being taxable (Table 2). (About two-thirds of the tax-exempt property is National Forest land.) The town's development is dominated by residential uses, which represented about 85% of the town's total valuation.

Table 2. Distribution of 2014 assessment valuation by category.

Use	Number of parcels	% of Valuation
Residential	4,961	84.8
Commercial/Industrial	227	10.0
Current Use	16	0.0
Exempt (non-taxable)	95	5.2
Total	5,299	

2. RESIDENTIAL. Single-family homes and condominium units accounted for about 85% of residential valuation in the town in 2014. U.S. Census Bureau data listed 4,115 housing units in town in 2010, an increase of nearly 15% over the 2000 census (Table 3). Less than one-third of the housing units were listed as "occupied" and nearly two-thirds were described as "for seasonal or occasional use", indicating the high level of vacation or second home ownership in the town. Since most of these units are suitable for permanent year-round use, the town is

capable of supporting a significant increase in permanent population without additional housing construction if economic conditions lead in this direction.

Table 3. Housing units (U.S. Census)

Year	Housing units
1970	725
1980	N/A
1990	3,407
2000	3,589
2010	4,115

From 1970 to 1990 the number of housing units in town more than quadrupled, matching the pattern of (but greatly exceeding the rate of) population growth. This was a period of intensive development of vacation properties, particularly condominiums. Between 1990 and 2010, the rate of increase in housing units (21%) nearly matched the rate of population growth (23%).

One type of housing that is in short supply in Bartlett is rental housing (represented primarily by apartments and boarding houses) that is affordable to the people (such as single persons and young or low-income families) who make up much of the work force of the valley's tourist-related and retail businesses. These people may be unable to afford the higher rents or purchase prices of single-family homes or condominiums. In the 2010 census, less than 9% of the housing units were occupied by renters or for rent. Providing affordable housing for the valley's increasing work force is one of the major challenges facing not only Bartlett but towns throughout the region.

3. COMMERCIAL. In 2014 commercial and industrial uses accounted for 10% of assessed valuation in town (Table 2). With the exception of two large recreational complexes (Attitash/Bear Peak Ski Area and Story Land), commercial activity primarily consists of small businesses. The last major commercial development was the construction of the Grand Summit Hotel and Conference Center over twenty years ago, though smaller-scale commercial development has continued at a slow but regular pace.

In 2000 about 48% of the commercial valuation was associated with recreational or tourism-related businesses. In addition to Attitash and Storyland, this includes motels, inns, restaurants, museums, etc. Another 12% of valuation was in retail properties and another 12% in service-related business. (The remaining 28% was in parking lots, outbuildings and land, which could not be divided between these other categories.) This indicates the importance of the recreation and tourism industry to the town. It is likely that other measures of economic activity (such as employment, wages, or business receipts) would show a similar domination by this sector of the economy.

4. INDUSTRIAL. In 2000 Industrial uses accounted for only 1.6% of the assessed valuation in town, and over 85% of this was associated with New Hampshire Electric Cooperative infrastructure. The situation has not changed significantly since then. The Limmer & Son Boot making, Moat Mountain Brewery, Ragged Mountain Equipment, and a small machine shop in the industrial zone on West Side Road are the only significant manufacturing facilities in town. The prospects for future industrial growth in Bartlett are slim. The town is relatively far removed from large population and communication centers like Boston and New York, and the lack of freight rail service and the traffic problems of the valley make transportation difficult.

5. OTHER. Two other categories of commercial activity that are likely to be increasingly important to Bartlett's economic future are worthy of mention:

Home-based businesses include a wide range of low-intensity, generally single-proprietor businesses operated out of residences. Home-based businesses employing less than 3 people are allowed in town residential districts. Though there is no data on the extent of this type of activity in town, it undoubtedly provides a significant source of primary or secondary income for many town residents. The current provisions in the zoning ordinance have been successful in allowing this type of activity while limiting impacts to neighboring residences.

Technology-based and other "new economy" businesses include a wide range of businesses outside of the traditional commercial sectors (retail sales, lodging and restaurants, light manufacturing, basic services, etc.). They are businesses whose primary product is information rather than material goods, including such things as scientific or technological research and development, Internet-based businesses, and education or training facilities. Such businesses are attractive because they have relatively low environmental impact and may provide relatively high-paying job opportunities. Not surprisingly, many towns are competing to attract these types of businesses. They are not currently a major factor in Bartlett's economy, but may become increasingly important in the future. Though the town is unlikely to become a major high-tech center, it may prove attractive to entrepreneurs who value the scenic and recreational amenities that can be found in the area. An important factor in promoting this type of activity will be ensuring that the zoning ordinance does not create obstacles for these types of businesses, which may not always fit into the existing categories of allowed uses. In March of 2000 the zoning ordinance was amended to allow "Research Facilities" and "Multi-function Research, Education and/or Cultural Facilities", though additional changes may be warranted. A second important factor in attracting these businesses is the presence of a modern communications infrastructure.

D. INVENTORY OF TOWN FACILITIES, ORGANIZATIONS, AND ACTIVITIES

Between the original Master Plan and the 2002 update, there were some notable changes in the areas covered by this section. These included the construction of a new modern fire station in Glen and the establishment of Fire Chief as a full-time salaried position, the closing of the town landfill and opening of a transfer station in cooperation with Jackson, the acquisition by the town of the old Bartlett Hotel property, improvements to the town's road system (including the installation of the town's first traffic light at the Glen intersection) and the creation of the Bartlett Recreation Department. Many of these changes were the inevitable result of Bartlett's continuing growth and the resulting increased demands on town services and facilities. As stated in the 1997 Selectmen's Report, "Bartlett is changing its identity from a sleepy New England hamlet to an ever-bustling, fast-paced community." While there have been fewer significant changes since 2002, the town still faces the continuing challenge of providing an adequate level of town services, facilities and opportunities to its expanding (and changing) population without losing the basic social and physical character of the town.

1. EDUCATION. Elementary and middle school education (grades K-8) is provided by the Josiah Bartlett School in Bartlett Village. The school also takes students from Hart's Location (grades K-8) and Jackson (grades 7-8) on a tuition basis. The current building was constructed in 1932, expanded in 1956, and extensively renovated in 1979/80 (adding a multi-purpose room) and 1989/90 (adding new classrooms, a library, teacher's room, community room, greenhouse and general office space, bringing the occupancy of the building to 450 students). More recently, the technology program at the school has been improved, including the wiring of all classrooms for networked computer workstations and the purchase of computers for student use. Well-funded and coordinated on-going maintenance has kept the facility in excellent condition. The school won many prestigious awards in 1998 and 1999, including the New Hampshire School

of Excellence Award for Elementary Education (EDIE) and a National Blue Ribbon Award of Distinction from the US Department of Education. Most Bartlett high school students are tuitioned to Kennett High School in Conway.

Since 1985, the number of students enrolled at the Josiah Bartlett School (Grades 1-8) has ranged from 168 to 327 (including a few students from Jackson and Hart's Location), and the number of Bartlett students attending Kennett from 75 to 146 (Figure 2) (this does not include Bartlett students attending other schools). Enrollment at Josiah Bartlett has declined significantly following a population "bulge" from the mid-1990s to the early 2000s and is expected to fall below 150 students in a few years. The school also offers kindergarten; enrollment at this level has also declined from about 30 students per year in the early 2000s to about 15 students per year since 2010.

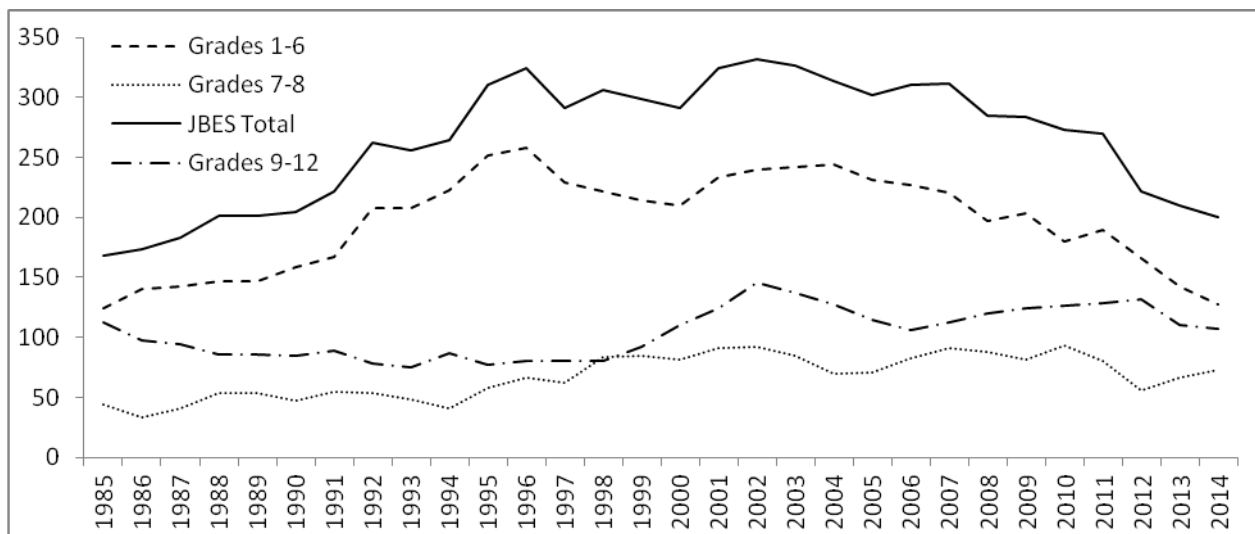


Figure 2. Josiah Bartlett School enrollment 1985-2000. (Grades 1-6 figures include Hart's Location students; grades 7-8 include Jackson and Hart's Location students.)

2. LIBRARY. Since 1959 the town's Public Library has been located in a dedicated space within the Josiah Bartlett School. The Town and School District share funding and the facility serves both constituencies. The library is staffed by a full-time school librarian, a school library assistant, a public librarian and a public library assistant. The library is overseen by both an elected Board of Trustees and the school administration, who work closely with the staff to coordinate and plan activities and acquire funding to meet the needs of the library. A contractual agreement between the school and the library has existed since 1985.

In 2011 the library collection consisted of 23,000 books, audio books and visual materials. Circulation at this time is over 13,000 materials. The library has a fully automated circulation and catalogue system and has access to materials from other libraries throughout the state through the interlibrary loan system. It also has three public computers with Internet access in addition to WiFi. The school owns a number of computers which are available for student and public library patrons. The library offers many programs throughout the year for both children and adults, including summer reading programs with morning story hours and informational adult programs designed to create interest in the library and the resources it offers.

While the facility is adequate (though not ideal) to meet the library's current needs, space is becoming a limiting factor as the library expands both its collection and services. The library is rapidly outgrowing the space for adult usage. Public library services are limited during the

school year because of the increased demands on the facility by the school. The Board of Trustees is undertaking planning for the future of the library. With the significant decline in the student population of the school, the Board has determined that the library will expand into unused space in the school.

3. FIRE DEPARTMENT. The town maintains two fire stations, one in Bartlett Village and one in Glen. In 1997 a new modern fire station was opened in Glen that includes sleeping, kitchen, shower and restroom facilities; classrooms; a hose tower; and ample parking. The Village station has no sanitary facilities at this time. The department owns eight firefighting vehicles as well as one on loan from NH Department of Resources and Economic Development to assist with forest fire suppression. The firefighting apparatus includes one two-man cab front line engine, a modern four-man cab front line engine, a 75' aerial, two tankers, one utility vehicle, one support vehicle that tows the DRED trailer, a modern command vehicle and the DRED vehicle on loan. While the number of vehicles is probably adequate to meet current needs, the age of some of the apparatus is a concern.

The town established the Fire Chief as a full-time paid position in 1989. Each station is staffed by a Deputy Chief, a Captain, two Lieutenants and on-call firefighters. With the exception of the Chief, all personnel are on call fire fighters who are paid an hourly wage for firefighting and training. Recruitment and retention of fire fighters has been and will remain a concern. Recruitment is difficult given the financial and family obligations of the working people of the town. The department averaged over 30 on call members from 1985 through 1989, but this declined steadily until 1992. Fifteen new members were recruited in 1993, of which only four are still members. The membership has declined steadily since that time to only 21 by 2000. The Department currently has a roster of 22. Over the same period the demands on the Department have continued to increase, from an average of 94 calls a year from 1986-1991 to 149 a year from 1992-1998, 195 a year from 1999-2003, 279 a year from 2004-2007 and 344 a year since 2008.

Availability of manpower is still a major concern of the department, especially at the Bartlett Village station. With the increase in call volume the availability of adequate manpower is moving from being a day time issue to a night time issue as well. This is particularly true during the work week when the on-call members need to report to work at their regular occupation the next morning. Many do not respond during the overnight hours due to their obligation to their full-time employer. Maintaining the ability of the department to respond to the increasing need for its services while retaining its primarily on-call character will remain the major challenge for the Department. To address this challenge it is time to explore local communities working together on major equipment purchases and sharing manpower. This approach would help save taxpayer dollars while maintaining an acceptable level of fire protection.

4. AMBULANCE SERVICE. The Bartlett-Jackson Ambulance Service has been in operation since 1982. It is housed in the new Glen fire station, addressing one of the major needs identified in the last master plan. The service has been a major benefit to the town, providing excellent emergency medical service and transport at minimal expense to the town. In many years the service is able to cover its costs through the revenues it receives, though the poor payment schedule for Medicare and Medicaid is a concern as payments can fall short of payments per call. In most years since 2005 town appropriations have been necessary to meet unreimbursed expenses.

A new ambulance was purchased in 2002 and again in 2009. Other equipment is routinely updated and new equipment added in response to advances in medical technology. The enactment of the E911 system in 2005 has enhanced the efficiency of emergency response.

Demand for the service continues to increase. After averaging around 125 calls per year in the early 1980s and 200 calls per year in the early 1990s, the service answered well over 300 calls per year in the late 1990s, over 400 calls in the 2000s and over 500 calls since 2010. About three-quarters of all calls are from Bartlett. The service continues to operate with on-call members who are paid a stipend for time worked. After operating with about 15 members throughout the 1980s and about 20-25 members in the early 2000s, the service's roster has increased to about 30 in recent years. As with the fire department, attracting and retaining an on-call work force sufficient to meet the ever-increasing demand for its services will continue to be an on-going challenge.

5. POLICE DEPARTMENT. The police department consists of a Chief, three full-time officers, four part-time officers, and a secretary. The department maintains four cruisers and associated communications equipment. Because of the heavy use these vehicles receive, their periodic replacement is a relatively continual, though predictable, expense for the town. Likewise, portable radios and cruiser radios require updating and ongoing maintenance. Office computers require maintenance and replacement on a continual basis, and to keep up with technology.

The police department is located in the town hall, and the space and facilities have remained relatively unchanged for decades, and are inadequate in both office and storage space. The primary facility needs are:

- A private interview space.
- Increased office space for report writing.
- Detainee custodial space.
- Upgraded furniture and accessories.
- A locker/changing room for officers.
- Updated evidence processing and storage facilities.
- Garage or carport for police vehicles.

In the absence of a new facility, the best option for improving police department facilities is to continue upgrading the space that we have. However, this is not a long-term solution to the needs of a 21st century police department, and we have outgrown our current space.

Long term retention of police personnel has been an ongoing issue over the years, as there is little room for advancement in a small town department. As demands on police have increased, all of law enforcement has seen a decline in qualified police officer candidates nationwide. We anticipate that this will continue to be a challenge in the future. Training for officers and updating equipment are ongoing challenges.

6. HIGHWAY DEPARTMENT. The Highway Department is headed by the road agent and includes three additional full-time and one part-time employee. Major equipment consists of a loader, a backhoe, a grader, a chipper, six trucks, a 12-ton trailer with ramps, a vibratory roller, a mower, and accessory snow removal and sanding equipment. On-going policy has been to replace one truck each year, and other equipment as needed.

The department is responsible for maintaining about 45 miles of road, more than double the amount in 1970 and triple the amount in 1940. The additional mileage has been accumulated as the town has grown and new roads built off of the primary roads that have been in place for many decades (and in some cases centuries). Most new roads are initially privately owned and maintained, but may eventually be transferred to town ownership. The inventory of town-maintained roads continues to creep upward, and there remain a significant number of existing

private roads that could come under town responsibility in the future. Many of these roads were constructed before the enactment of the town street regulations, on steeper slopes and substandard roadbed materials, and thus may require higher per-mile costs for plowing and maintenance.

The Department has undertaken a significant effort to upgrade and repair town roads, many of which had fallen into poor condition. Major improvement and restoration projects have been completed on many roads, and this effort is likely to continue at a moderate pace consistent with the ability of the town to fund it without major increases in the tax burden.

The major challenges facing the Highway Department are ensuring that new roads are constructed according to town specifications (as they may eventually become town-maintained roads), continuing the on-going road improvement effort, and dealing with the ever-expanding inventory of town roads. In addition, the environmental concerns associated with road construction and maintenance, such as erosion control and impacts of winter salt usage, requires increased technical considerations. The department may be approaching its limit in terms of maintaining the current road system (both plowing and repair) with its existing resources. The department would like to hire another full-time employee, as the scope of the department's work has changed over the past few years but the work force has not.

7. RECREATION OPPORTUNITIES. The town is blessed with a natural landscape that provides exceptional opportunities for outdoor recreation. The White Mountain National Forest provides an extensive network of hiking trails and camping opportunities, and the Saco River provides opportunities for canoeing and kayaking. Attitash-Bear Peak and Bear Notch Ski Touring Center provide developed downhill and cross-country skiing, and there is a well-developed snowmobile trail network accessible from Bartlett Village. Areas for improving or enhancing these opportunities include development of a recreation path for walking, cycling and cross country skiing from Bartlett Village to Glen and Intervale and eventually east to North Conway and west to Hart's Location. This continuous linear parkway would serve to link many of the currently existing walking, mountain biking and cross country ski trails. It would provide access to Saco River recreation, local businesses, the school and the library. The recreation path would provide a scenic and safe transportation route for residents and visitors as an alternative to walking or cycling the narrow shoulders of Routes 302 and 16.

In-town recreational facilities are provided primarily at the Bartlett Elementary School, which has a softball and soccer field and a basketball/volleyball court. The town has use of a baseball field at the west end of Bartlett Village and in 1991 purchased the town beach along the Saco River off of River Street.

For many years organized recreational programs were conducted by the Bartlett Athletic and Recreation Association (BARA), which was formed in 1979. Though BARA provided a valuable service to the town, over time the increasing demand for such programs outpaced the ability of this volunteer-led organization to develop and oversee them. In 2000 the town, in partnership with the Bartlett School District, established the Bartlett Recreation Department (BRD), which is overseen by a full-time paid director. The BRD is responsible for providing youth sports and after school enrichment programs, teen programs, adult recreation and educational programs, and a summer day camp for children in grades 1-6. The Department also organizes town celebrations such as the 4th of July parade and the Christmas tree lighting. The level of participation in BRD programs are very high, serving over 60% of the students at the Josiah Bartlett elementary school. There is a strong community need for additional programming to meet the needs of adult recreational sports, teen activities, and seniors.

The 1985 Master Plan stated: “With the continued growth in development and the rapid diminution of land resources, it has become increasingly important for the town to place a high priority on the identification and acquisition of land suitable for such recreational purposes as ball fields, picnic areas, swimming areas, playgrounds or community centers.” With the exception of the town beach, no such areas have been purchased by the town.

8. PRESERVATION OF NATURAL RESOURCES. The town's natural resources – its mountains, rivers, forests, fields and wetlands – are the basis for both the town's quality of life and much of its economic activity (primarily recreation and tourism but also forest management, wood products and limited farming). Nearly 65% of the town's land base is publicly-owned (primarily the White Mountain National Forest but also the state-owned Cathedral Ledge and Humphrey Ledge State Parks and Merriman State Forest) and not open to development. This ownership pattern ensures that large parts of the town will remain in an undeveloped and relatively natural condition.

Issues related to the protection of natural resources outside of federal or state ownership fall to the Conservation Commission. The commission, which consists of five members, holds monthly meetings and reviews and comments on wetland and dredge and fill permits. The commission can draw on the expertise of various state agencies such as the Department of Environmental Services and the Wetlands Board. The volunteer Saco River Local Advisory Committee, acting under the provisions of the New Hampshire Rivers Protection Act, reviews and comments on issues that might affect the Saco River. The Committee is not active at this time and is currently seeking board members.

Two significant pieces of state legislation are designed to help towns maintain open space lands. The Current Use taxation program, enacted in 1973, allows land to be taxed according to its current use rather than potential development value. It enables landowners to maintain farm and forestland open and productive without the pressure of high tax burdens. The New Hampshire Land and Community Heritage Investment Program (LCHIP), established in 2000, provides a permanent source of matching funds from the state to help finance locally-based projects to conserve important natural, cultural and historic resources. In addition, since 2000 the Upper Saco Valley Land Trust has provided organizational capacity to promote and develop land protection projects within the Mount Washington Valley. Both of these programs can help the town protect important natural and cultural resources through either land purchase or conservation easements.

The Upper Saco Valley Land Trust recently completed a comprehensive natural resource inventory for the eleven towns that make up its service region. A copy of the inventory is available at the Bartlett Town Library. The inventory identified three high-scoring “focus areas” in town: the upper Saco River valley (between Route 302 and WMNF lands upstream of Glen), the lower Saco River valley (between West Side Road and Route 16/302 downstream of Glen) and the Thorn Mountain area (generally between Thorn Hill Road and Town Hall Road). The Conservation Commission will work closely with USVLT to help town planners and citizens identify those areas and resources that are most deserving of conservation.

Because of the large amount of land already in conservation ownership, the land base available for development is more restricted than in other towns of similar size. Future conservation of natural resources and open space must be done in a way that does not unduly constrain opportunities for commercial and residential development. However, recent studies have demonstrated that maintaining open space is a net economic gain for towns, as these lands require very little in the way of town services.

9. CIVIC AFFAIRS. This category includes any organized activity performing non-official community-associated functions. There is no single “civic association” in the town. Community activities are usually organized on an ad-hoc basis to address specific needs. These include such things as benefit suppers, fund drives, patriotic observances, etc. The success of these impromptu functions is largely due to the civic pride and responsibility of a small group of actively-involved citizens. An example is the group that organized to develop a village park at the site of the former Bartlett Hotel. Completed in 2006, the park, complete with gazebo and landscaping, is open to the public and during the summer months hosts weekly open-air concerts.

Two groups have been functioning on a continuing basis for several years. The Attitash/Bartlett Aspirations Committee raises money for post-secondary educational scholarships for Bartlett students. Each year recipients are chosen to receive funds toward their continuing education. The Bartlett/Jackson Food Pantry is a volunteer organization supported by the Congregational Churches of Bartlett and Jackson. Members volunteer to work to distribute food to the needy of the area. The food products are stored in the Glen Community Baptist Church.

10. CULTURAL AFFAIRS. There is no formal town sanctioned organization that is involved in or responsible for the promotion of cultural activity in Bartlett. The Ladies Aide, Veterans of Foreign Wars, Congregational, Baptist and Catholic Churches, the elementary school and the public library have all been involved individually and at times collectively in what can loosely be termed cultural activity.

After more than one hundred years of serving the needs of Bartlett parishioners, St. Joseph's Catholic Church is closed. A new larger Catholic church has been built in North Conway to serve the valley community. The church building, which is the oldest Catholic Church in the valley, has been sold to the elementary school.

The 300-seat Theater in the Woods in Intervale, owned and operated by the Believe in Books Literacy Foundation, provides children's events, theater, and concerts. Major sources of cultural activity such as art shows, theatre, and musical performances are also available in the Mount Washington Valley and beyond from many sources within a 75-mile radius. The town itself may not be actively promoting cultural pursuits, but those citizens so inclined can avail themselves of an ever-expanding mix of cultural events within easy commuting distance. In addition, in recent years political candidates for both state and national offices have chosen Bartlett as a venue to present their platforms to the public. The elementary school or larger commercial properties such as the Grand Summit have adequate space to host these kinds of events.

11. HISTORIC SITE PRESERVATION AND DOCUMENTATION OF TOWN HISTORY. Prior to 2004 there was no town Historical Society. The bulk of the work gathering and preserving documents, photographs and other town memorabilia had been done by the librarian and the library trustees. This effort resulted in the Bartlett Bicentennial program and the publishing of two books on town history. However, in 2004 a group of long-time residents formally created the Bartlett Historical Society. The goals of the society are to encourage programs promoting genealogical research, family history, the history of railroading and the mapping of cemeteries. Since that time the society has grown substantially and continues to gather historical data, genealogies, memorabilia and items of historic value and to provide programs of local or historical interest. The society recently oversaw the restoration of a rare historic snow roller and its placement in Precinct Park in Bartlett Village. More information can be found on the society's web site at www.bartletthistory.org.

In 2015 the Bartlett Roundhouse in Bartlett Village was listed on the National Register of Historic Places. The non-profit Bartlett Roundhouse Preservation Society is working to restore and preserve this historic structure.

The historic Catholic Church in Bartlett Village, now owned by the school district, will be leased to the Bartlett Historical Society.

12. HOUSING. The availability of affordable housing is a significant concern, not only in Bartlett and the Mount Washington valley but throughout New Hampshire. The 2012 report *Housing Matters in Mt. Washington Valley* by the MWV Housing Coalition stated:

The recent turmoil in the housing market has not reduced housing prices to affordable levels for Mt. Washington Valley's working families. While price declines have led to an erosion of equity for many existing homeowners, potential first-time buyers have remained priced out of the market. Not only does the affordability gap persist in the residential market, it also persists in the rental market...

The problem of workforce housing not only impacts those in need of housing, it also impacts the broader community. Mt. Washington Valley business report that the mismatch in affordability is having a negative effect on business expansion, workforce recruitment and employee retention.

Despite the economic downturn that began in 2008, the median selling price of a home in the region increased 68% between 2000 and 2010, and the median gross rental cost increased 54%. Over the same period the Consumer Price Index rose 28% and average household income in the Mount Washington Valley rose only 21%.

Using the widely accepted definition of affordable housing¹, a family would need a weekly income of about \$728 (equivalent a full-time wage of \$18.20/hour or about \$38,000/year) to afford the median gross rent in Carroll County in 2010 (\$870/month). Many of the jobs in the valley's tourist and service industries pay less than this; the average weekly wage in the valley is about \$553/week. The MWVHC report estimated that 53% of renter households and 35% of owner households in the valley are overburdened with housing costs.

The lack of affordable housing impacts the town in several ways, including lower quality of life for town residents and increased costs for public assistance to low-income families. As the town is not in a position to directly supply housing, the major way in which it can affect housing supply is through zoning. In 2008 the state passed the Workforce Housing Law, which stated, "*In every municipality that exercises the power to adopt land use ordinances and regulations, such ordinances and regulations shall provide reasonable and realistic opportunities for the development of workforce housing, including rental multi-family housing.*" A review of Bartlett's zoning ordinance conducted with the guidance of the New Hampshire Municipal Association found that the ordinance is in compliance with this law. Multi-family housing units are allowed in all zoning districts and the soil-based minimum land areas are not exclusionary. In addition, in 2011 the Zoning Ordinance was amended to allow smaller "accessory apartments" to be added to single-family dwellings. However, the town provides no specific incentives for affordable housing.

13. TRANSPORTATION. The major river corridors in town (the Saco and Ellis) have served as the primary transportation corridors connecting Bartlett to outside areas for two centuries. Early roads were augmented by railroads, and for nearly a century the Maine Central Railroad (opened in 1875) provided the primary link to the outside world. For much of its history Bartlett

¹ Affordable housing is generally defined as housing that costs an owner or renter no more than 30% of their income.

was characterized as a “railroad town”, serving as a major support center for the railroad operations through Crawford Notch. However, passenger service ended in 1958 and freight service in 1975. Since that time Bartlett has been almost totally dependent on highways for its transportation needs.

The town is served by two major highways – U.S. Route 302 and State Route 16. Responsibility for the maintenance of these highways (as well as for Bear Notch Road) falls under Division 3 of the state Department of Transportation. There have been ongoing improvements to these highways to improve safety and traffic flow, most notably the reconstruction of the Route 302/16 intersection in Glen, including rebuilding the Ellis River Bridge and the installation of the town's first traffic light.

Significant highway projects have taken place on both sides of town. Road projects in Conway (including the construction of a local access road parallel to Route 16/302 and improvements to Route 16 through North Conway and the commercial “strip”) have been effective in relieving serious congestion on the Route 16/302 corridor. The southern portion of the Conway bypass project (around Conway Village) was included in the state's 10-year Highway Transportation Plan in 2008, though it is not clear when or if construction will take place. The middle and northern sections of the bypass (which would have terminated on Route 16/302 south of Intervale) were excluded from the plan and it is unclear if they will be reconsidered in the future. However, by shunting large amounts of traffic around Conway and into the southern end of Bartlett, these projects have the potential to create significant new bottlenecks (and increase development pressures) in the Intervale and Glen areas.

The state has also made major improvements to Route 302 between Hart's Location and Crawford Notch. These improvements have speeded up the flow of traffic along this stretch of highway, and have led to higher-speed traffic entering the western end of Bartlett Village. While no plans have been proposed, these improvements could increase pressure to extend these improvements to the Glen/Bartlett Village stretch of the highway. These types of improvements (especially widening the highway and increasing speed limits through Bartlett Village) would create severe adverse impacts on the aesthetic and social character of the town.

While currently there are no major congestion points in the town, increasing traffic counts combined with the relief of traffic congestion in Conway and the improvements to Route 302 could lead to increased congestion and traffic stagnation at both the Route 16/302 intersection in Glen and the Route 302/Bear Notch Road intersection in Bartlett Village. Resolving these potential congestion points is part of the planning process and accomplished through the State's ten-year Transportation Improvement Plan. Our access to participation in this program is through the North Country Council and its Transportation Committee. Historically, Bartlett has had little participation in this process. It is critical that the town participate in highway planning in order to ensure that the town's rural character is not sacrificed to highway improvement programs, and that consideration is given to ensuring safe passage of pedestrians and cyclists along highways.

Access to other forms of transportation is very limited. The state purchased the Maine Central tracks in 1994 and leased them to the Conway Scenic Railroad which conducts summertime tourist operations. The state has planned to rehabilitate the facilities in the Bartlett yard, however funding has not materialized. There are no current plans to re-establish passenger or freight rail service to the area. However, the fact that rail lines are still in place, and that passenger rail service to portions of northern New England is being re-established, holds out hope that regular rail service to the Mount Washington Valley could again become a reality in

the future. Such service would have many benefits, including relief of traffic congestion, improved air quality and revitalization of rail-oriented town centers.

Since, the early 1960s, air transportation in the valley has been provided through the Eastern Slope Regional Airport in Fryeburg (replacing the North Conway airport, which closed in the late 1980s). The airport is administered cooperatively by the region's towns, with funding provided through voluntary town appropriations. In recent years Bartlett has been a solid supporter of the airport. Though no regular commercial service is provided, the airport provides a facility for personal, business and charter air travel services. The airport is a valuable resource to the valley's towns, but ensuring reliable long-term funding, as well as providing modern facilities and equipment, remains a significant challenge.

Limited commercial bus service is provided by Concord Coach Lines, which runs one bus a day in each direction between Berlin and Logan Airport in Boston (stopping in Jackson and Conway but not Bartlett).

14. EMERGENCY MANAGEMENT. The most likely emergency situations requiring town response are weather-related emergencies such as flood or severe wind, snow or ice storms, or man-made catastrophes such as explosions, contaminant spills or release of toxic gases from truck accidents. The town has a state- and federally-certified All Hazards Mitigation Plan, and a state-certified Emergency Operations Plan. The town also has a volunteer Emergency Management Director who is authorized to implement either plan when directed by the Board of Selectmen. Department heads (the Fire Chief, the Police Chief and the Road Agent) as well as others are National Incident Management Systems certified. The Glen Fire Station is the designated shelter, and the Josiah Bartlett Elementary School has a generator and is designated the back-up shelter in an emergency. On August 29, 2011 the Emergency Operations Plan was implemented due to floods caused by Tropical Storm Irene.

15. TOWN OWNED LAND. The town maintains permanent ownership of 13 properties totaling about 155 acres. These include:

Town hall and garage on Town Hall Road	3 acres
Glen Fire Station on Route 302	0.23 acres
Bartlett Village Fire Station	0.22 acres
Josiah Bartlett Elementary School	30 acres
Hodgkins Park (formerly Railroad Square)	1.65 acres
Town beach on River Street	0.7 acres
Intervale Cemetery on Route 16A	1.2 acres
Glen Cemetery on Route 302	4.44 acres
Bartlett Hotel site	0.59 acres
Old Stillings Farm on Allen Road (2 lots)	40.36 acres
Whit Duprey land on East Branch Road	50 acres
Morrell family gift on Route 302	23 acres
Saco River beach property	

In addition, the town jointly owns the 160-acre site of the Bartlett-Jackson transfer station with the town of Jackson; the majority of this land is in Jackson.

16. TRANSFER STATION. The transfer station, owned and operated cooperatively with Jackson, opened in 1990. The station provides a centralized location for the collection of municipal solid waste, construction debris, burnable material (which is burned on site) and recyclables. During the first 15 years of operation the cost of solid waste disposal was a significant expense for the

town, representing between 15 and 18% of the total town (non-school) budget. However, the station has made significant advances in recycling. Disposal costs have been reduced to about 7% of the town budget and revenues from recycling cover a significant portion of the station's operating budget. Since 2005 no allocations from the town's general fund to the operating budget have been necessary.

The town currently is able to recycle aluminum, mixed paper, corrugated cardboard, scrap metal, mixed plastic and tin, glass, electronics and tires. The ability to recycle materials is limited by the available markets, which are not consistently strong or stable. The town should continue to invest in equipment that increases the ability of the town to recycle waste material for both economic and environmental purposes.

17. COMMUNICATIONS INFRASTRUCTURE. For many decades communications meant telephone. While the nature of the service changed over the years, the basic infrastructure needs (wires strung along poles in conjunction with electrical service) did not. Television and radio have also been available, but these services created no local infrastructure needs. However, since the original master plan was written, issues of communications infrastructure have changed greatly and are likely to continue to change as communications technology develops at an ever-increasing pace. Access to modern communications systems is increasingly seen as a basic necessity for both businesses and individuals, and increased speed and capacity in the town's communications infrastructure is needed.

Cable television arrived in the 1980s and widespread Internet access in the 1990s. Although Internet access has advanced from standard telephone connection to high-speed cable and dedicated telephone connections, these technologies still utilize the existing infrastructure of wires on poles. Future developments (including more widely-available high-speed internet access or communication based on fiber-optic cable) may require some adjustment to existing infrastructure but are unlikely to move away from poles along roadsides.

The more significant change involves the development of wireless communication. This includes not only cellular telephones but also pagers and wireless Internet access. These systems require an entirely new infrastructure – ground-based antennae located on towers spaced at intervals of a few miles¹¹. The visual impact of these towers, which may exceed 100 feet in height, is the major concern to local communities. This concern is especially critical in Bartlett, whose scenic quality is a major component of the local economy and quality of life. The town adopted a Telecommunications Ordinance in 2002, which allows for this technology while providing guidance on minimizing the visual impact. To date it has been effective in providing cell phone service to much of the town with little visual intrusion.

18. WATER AND SEWER. Water service in town is provided by a variety of sources. Two major water precincts provide centralized water delivery to the more heavily settled parts of the town. The Lower Bartlett Water Precinct provides franchise water service to the Intervale/Glen area, including the Glen Ledge/Linderhof/Thorn Hill Road/Dundee Road area and extending west on Route 302 to Attitash. The LBWP water is derived from groundwater wells along the west side of Route 302/16 in Intervale. The Bartlett Village Water Precinct provides water to the Bartlett Village area as well as down Route 302. Water is derived from a surface water source located in the Bartlett Experimental Forest. This supply is inadequate as the precinct has problems supplying sufficient volume at times of low stream flow. In addition, federal Clean Water Act requirements are leading to greater use of groundwater as opposed to surface water supplies.

¹¹ While wireless communication may eventually migrate to satellite-based systems, recent attempts to establish such systems have not been widely accepted and ground-based antennae are likely to be required for the near future.

The precinct does have access through an easement to a large groundwater supply in the Stillings Grant area.

Many of the developments established since 1970 provide water through local privately-owned water systems. Residences and businesses that are not tied into one of the water precincts or private water systems provide water through individual wells located on the property.

The primary water quality issue facing the town is harmful minerals derived from the acidic bedrock (such as fluoride, copper, and radon). More stringent federal standards on the allowable levels of these contaminants may lead to requirements for water treatment from public and private systems. The expense of providing this treatment may provide an on-going incentive toward consolidation of water systems. The state Department of Environmental Services is also promoting the consolidation of water systems, as it reduces expenses associated with testing and inspection. It is likely that in the future, water supply to all but outlying areas will be provided by a smaller number of systems servicing larger numbers of users.

There is currently no centralized sewer system in town. All sewage treatment is provided by on-site septic systems. The Conway septic system currently extends into the Intervale region of Bartlett and could expand further. A proposal for the development of a sewer system in partnership between the town and the Attitash Ski Area was voted down in 1992. The development of an independent sewer system serving Bartlett is currently beyond the financial capacity of the town.

The provision of centralized water and/or sewer service has major implications for development in town. Lot sizes are currently based on requirements for adequate septic disposal and adequate distance between leachfield and wells. Many potentially beneficial land uses (such as establishment of commercial uses on small lots in Bartlett Village) is currently constrained by lack of septic capacity. Unlike state subdivision regulations, Bartlett zoning provides no adjustment to the minimum land area required for a lot based on centralized water or sewer service, and a recent zoning amendment clarified this to be the case. However, these services could reduce lot size requirements and allow for more concentrated development. It makes lots that are currently unbuildable due to their small size buildable. In the long term, it may make possible the establishment of zoning and development regulations that could benefit the town but are currently not feasible. As centralized water service and potentially sewer service (at least in Intervale) expands, adjustments to planning and zoning could be considered to address the new opportunities such services create.

III. LAND USE

A. INTRODUCTION

The term "land use" refers to the mixture of uses made of a specific geographical area. It addresses questions such as where do people live, what kinds of homes do they live in, where do they work and do business, what kinds of roads do they drive over, and what kinds of restrictions are placed on different uses in different areas. Land use planning that guides the nature and location of different activities in a community is essential to maintaining an environmentally attractive, well ordered, peaceful, safe and healthful community.

The town of Bartlett and the Mount Washington Valley are blessed with a natural environment which is unparalleled in its beauty and splendor. In 1972, in recognition of the need to protect the environment and to establish minimum controls over development, the town created a Planning Board and a set of subdivision regulations to provide a set of regulatory criteria for

governing the subdivision of land and the construction of housing developments. Over the past 40 years these regulations have been refined. In addition, regulations governing road construction were adopted by the Board of Selectmen. These regulations generally worked well, and it is safe to say that for the most part the landscape of the town has fared well during a period of steady and fairly heavy growth.

In 1984, the town meeting voted to adopt a zoning ordinance to expand controls over land use and further regulate the development of the town's landscape and the protection of the environment. A Master Plan Survey conducted in 1984 indicated that a large majority of Bartlett citizens were concerned with a single major issue: the protection of the environment and the town's "way of life". The Zoning Ordinance was adopted on August 25, 1985. It has been amended several times since then to address issues and proposed uses not covered by the original ordinance. In addition, the Lower Bartlett Water Precinct (LBWP) has adopted its own zoning ordinance, covering the area from just north of the Conway town line to the East Branch of the Saco River.

The existing zoning ordinance has served the town well. However, the town is faced by potential new challenges. The expansion of residential development into more difficult topography has the potential to create adverse impacts on the scenic and environmental character of the town. The improvement of the valley's transportation system may put increasing pressure on the town's commercial district, especially the area between Intervale and Glen. In addition, the town will need to position itself to take advantage of appropriate commercial opportunities created by the newly-emerging "information economy" and the ever-increasing demand for recreational opportunities by visitors to the valley. How the town addresses these and other challenges will go a long way to determining how well the town is able to adapt to future conditions while still maintaining its traditional character and quality of life.

B. ZONING

The existing zoning ordinance divides the town into several zones (Table 4). Each of these zones has its own permitted uses and restrictions.

In general, the commercial zone consists of lots fronting on Routes 16 and 302, the industrial zone is a single area on the west side of West Side Road by the Conway town line, the Residential B zone consists of land along both sides of West Side Road, and the Residential A zone consists of all land not placed in one of the other zones. The Ridgeline and Hillside Overlay District adopted in 2001 lies over portions of the Residential and Commercial zones and provides additional guidance for development with the purpose of protecting the scenic character of upper slopes and ridgelines. Detailed descriptions of the zoning districts can be found in the town Zoning Ordinance and official zoning maps.

Table 4. Town zoning districts.

Zone	% of town
Commercial	8.3
Industrial	0.4
Residential A	24.4
Residential B	2.2
Ridgeline and Hillside Overlay District	17 (approximate)
National Forest ¹²	64.7

¹² Includes state-owned conservation land (Cathedral Ledge and Humphrey Ledge State Parks and Merriman State Forest).

C. EXISTING LAND USE

Two sources of information were used to derive a picture of land use in the town:

Town appraisal database. The town maintains a database of all properties for tax assessment purposes, which includes the acreage of each property.

National Land Cover (NLC) data. This data is derived from the classification of satellite imagery. It provides a spatially detailed picture of broad categories of land use (forest, agriculture, wetlands, developed, etc.), though the ability to identify detailed categories of development is limited. Data is available from 2001 and 2011.

The major categories of taxable land use from the town appraisal database² have been remarkably stable over the past 20 years (Fig. 3), other than a slight decrease in land in current use. (The noticeable jump in residential acreage in 2011 is an artifact of the reappraisal conducted at that time.) This is consistent with the relatively stable town population (Table 1) and indicates that the town has not seen major changes in land use over this period.

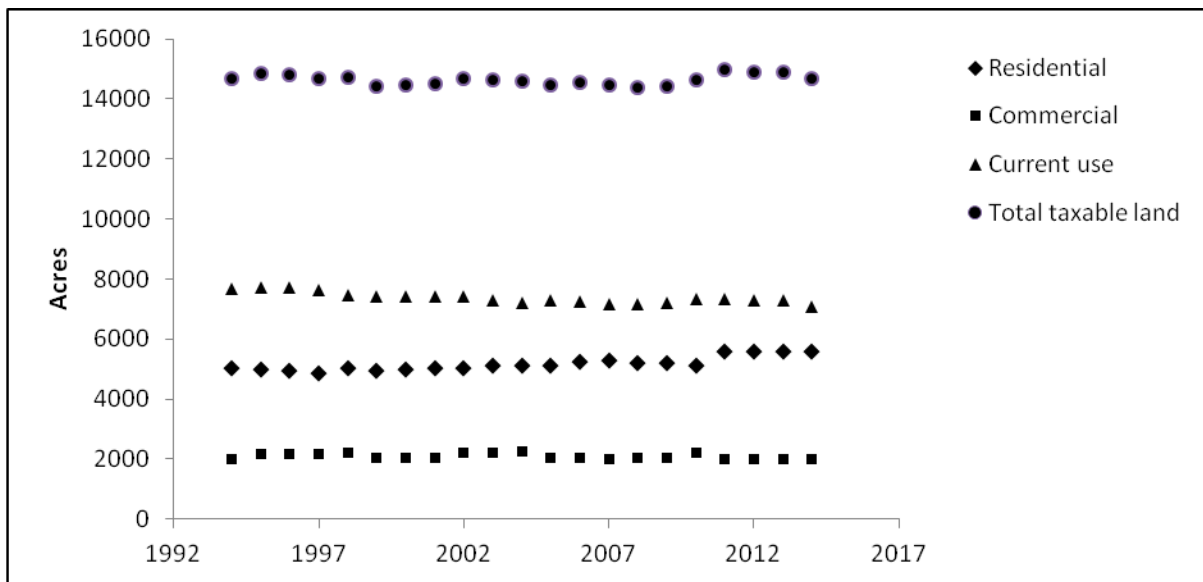


Figure 3. Distribution of taxable land.

A similar result is provided by the National Land Cover Data (Table 5), which also shows that land use in the town was very stable from 2001 to 2011. About 4.8% of the town was classified as developed (including roads) in 2011, or about 15% of the town outside of the national forest. The most notable change between 2001 and 2011 was the conversion of a small part of forestland to grassland and shrubland. The great majority of this change was from the clearing of the ski slopes at Bear Peak. The loss of larger areas of land for development has been minimal, with only a few areas evident in the NLCD data or on aerial photos (including an expansion of Storyland, the construction of Lucy Hardware and residential development at Stillings Grant, Beechwoods at Intervale and Pear Forest). While additional development has taken place, it is mostly in scattered small areas that are below the resolution of the NLCD data.

² Figures taken from Inventory of Town Valuation in annual town reports.

Table 5. Extent of general land uses (percent of total town land area).

Source:	Assessment database 2014	NLCD 2001	NLCD 2011
Land use			
Developed			
Residential	11.9		
Commercial	4.1		
Total Developed*	16.0	4.7	4.8
Other	3.4**		
Undeveloped	80.7†	95.3	95.2
Agriculture		1.0	1.0
Forest		90.4	89.2
Grassland/shrub		1.9	3.0
Wetland/water		1.7	1.7
Barren		0.3	0.3

*Including roads in the NLC data but not the assessment database.

** Includes both developed and undeveloped tax-exempt land, including utility infrastructure, condominium common land and government land (other than state and national parks and forests).

†Current use land plus state and national parks and forests. This does not include the undeveloped portion of larger parcels classified as residential or commercial.

These two sources use different approaches and are not directly comparable. The most notable difference is in the distribution of developed to undeveloped land, which is much higher in the assessment database. The database classifies an entire parcel based on the primary use even if only part of the parcel is developed (unless the undeveloped land is enrolled in current use). A forested 20-acre lot with a single family home will show up as entirely developed in the assessment database, which thus significantly overestimates the actual extent of developed land. In contrast, the NLC data underestimates the extent of developed land, as the resolution is not sufficient to include all development, particularly residential development in forested areas. (Thus the aforementioned 20-acre lot will show up as mostly if not entirely undeveloped.) The true extent of developed land in town lies somewhere between these two extremes.

D. SOILS

Soil characteristics are one of the primary factors governing the extent and location of development in town. Because Bartlett has no municipal sewage treatment and many homes draw water from individual wells, the town has adopted soil-based zoning, ensuring that any development has adequate land area to allow for the installation of individual septic systems while protecting local water supply sources. Depending on the soil conditions, a minimum lot size of 0.7 to 1.3 acres is generally required for the development of single-family homes. Information on the soils in town is provided by county-level soil surveys developed by the federal government’s Natural Resource Conservation Service¹⁵. Current soil survey data for Carroll County is available online from the NRCS Web Soil Survey. Information on soil types includes the degree of limitation to the installation of septic systems due to a variety of factors: hydrologic conditions (frequent flooding or seasonally high water tables), steep slopes, excessive stoniness or ledge, or low permeability.

¹⁵ Diers, R.W. and Vieira, F.J. 1977. Soil Survey of Carroll County, New Hampshire. USDA Soil Conservation Service and Forest Service and New Hampshire Agricultural Experiment Station, Durham, NH.

This information shows the significant constraints that soil conditions create on future development in town. Seventy-seven percent of the land area in town (outside of the White Mountain National Forest) consists of soils with severe limitations on the installation of septic systems. Many factors contribute to these limitations:

- 19% of land area has severe limitations due to hydrologic conditions.
- 39% of land area has severe limitations due to steep slopes.
- 66% of land area has severe limitations due to excessive stoniness or ledge.
- 30% of land area has severe limitations due to low permeability.

These limitations have not totally precluded development, as they can be overcome with proper engineering of septic systems. In addition, the county-level soil mapping is at a relatively coarse scale, with individual soil mapping units covering tens or even hundreds of acres. Within any mapping unit there may be a high degree of variability, including areas well-suited for development. Many of the soils most suited for development have already been developed. In the future development is increasingly likely to take place on soils with greater limitations to septic installation. This makes it imperative that future development proposals be based on accurate and detailed soils information. For this reason, the town's Subdivision Regulations require a more detailed High Intensity Soil Survey unless waived by the Planning Board.

E. FLOODPLAIN

About 5.5% of the town lies within the 100-year floodplain of the Saco River and its tributaries. The floodplain includes about 20% of the town's commercial zoning district and about 12% of the town's residential zoning districts. Development within the floodplain is not prohibited, but is governed by a town Floodplain Ordinance adopted in 1979. The ordinance has been updated as necessary to ensure compliance with the National Flood Insurance Program.

In 2002 about 7.5% of the floodplain area was in developed uses (not counting outdoor recreational development), almost all residential. Most if not all of this development predated the establishment of the town's floodplain ordinance. Significant additional development is unlikely to take place within the floodplain because of the restrictions of the floodplain ordinance and the septic capacity limitations of the soils. Nearly 80% of the soils in the floodplain are rated as having hydrologic conditions (frequent flooding or high water tables) that severely limit the installation of septic systems. The flooding created by Hurricane Irene provided a strong lesson in the need to properly control floodplain development.

F. FOREST MANAGEMENT

Timber harvesting has always been an important component of the economy of Bartlett, reaching its peak during the days of the early logging railroads in the late 19th and early 20th centuries. Though harvesting will never return to the levels it saw when the original old-growth forests were being liquidated, it remains a source of both income to private landowners and tax revenue to the town. Since 2002 the town collected an average of about \$8,000 per year in timber yield taxes.

Of the undeveloped land in town, over 70% is in the White Mountain National Forest and state parks and forests. Timber harvesting is restricted on about two-thirds of this land due to operational constraints, ecological considerations, or high scenic or recreational value. However, in 2000 there was nearly 10,000 acres of undeveloped privately-owned forest land in town, much of which may be suitable for timber management. Over half of this was in lots

larger than 50 acres, which is generally considered the minimum size tract for which long-term forest management may be economically viable.

IV. VISION, CHALLENGES AND RECOMMENDATIONS

A. VISION

As it moves into the 21st century, development in Bartlett will be guided by the vision the town's citizens have for its future. To a great degree, how Bartlett evolves in the coming decades will be the result of guidance provided by this Master Plan and subsequent decisions derived from it. We see a town that:

- Maintains the physical and cultural characteristics of a small New England town.
- Promotes the village character of Bartlett Village, Glen and Intervale by integrating commercial, residential and social activities so that these areas serve as centers for community life.
- Protects the outstanding natural landscape that is a key component of the town's character and economy.
- Allows for appropriate commercial and recreational development, while ensuring that the rate of growth and the location and design of such development do not detract from the town's character.
- Enhances and expands the existing recreational trail system to become a center for family-oriented four-season outdoor recreation.
- Provides a high level of services to town residents within the constraints of the available tax base.
- Seeks innovative solutions to zoning, transportation, housing and other issues.

B. CHALLENGES

Challenges fall into two categories – general and specific. General challenges are all-encompassing issues involving the balance between competing values. Specific challenges are those that affect defined areas of town development, facilities, or services.

General challenges

- Balancing community well-being with individual property rights.
- Balancing protection of natural and scenic resources with economic development.
- Maintaining the rural, small-town character of Bartlett in the face of population growth and on-going residential and commercial development.
- Balancing the provision of town facilities and services with the available economic resources (the "tax base").

Specific challenges

- Dealing with pressures to the southern end of town created by road improvements in Conway.
- Guiding commercial development (including allowed uses and building design) without unduly restricting economic opportunities.
- Allowing for new (and currently unforeseen) types of economic activity without opening the door to inappropriate uses.
- Minimizing unsightly strip development.
- Discouraging "sprawl" in currently undeveloped areas.

- Maintaining the character of village areas (especially Bartlett Village).
- Maintaining and improving the ever-expanding inventory of town roads.
- Protecting town character and providing safe routes for pedestrians and cyclists in the face of pressure for highway improvements.
- Providing for appropriate development of utilities (e.g., telecommunications towers).
- Encouraging development of affordable housing.
- Protecting open space, especially in the more heavily developed valley bottom (e.g., Saco River shoreline, agricultural fields).
- Identifying and protecting historically significant buildings.
- Maintaining and expanding opportunities for non-motorized recreation (e.g., cross-country skiing, bicycling, walking trails) and appropriate motorized recreation (e.g. snowmobiling) as well as local facilities (playgrounds, ball fields, beaches, etc.) in the face of loss of available land to development.
- Providing adequate facilities for town departments (e.g., police department, library).
- Ensuring commercial development is compatible with the traditional architectural character of the town.
- Limiting the adverse environmental and aesthetic impacts of development on steep slopes.
- Encouraging citizen involvement in volunteer organizations (especially the volunteer fire department).
- Enacting appropriate regulations (e.g. noise and/or lighting) to protect quality of life without unduly burdening citizens or businesses.

C. PROGRESS SINCE LAST MASTER PLAN UPDATE

A number of the Recommendations included in the 2002 Master Plan update have been adopted, including:

- *Consider implementing building size limits for all types of commercial development.* In 2006 the Zoning Ordinance was amended to establish a maximum footprint of 25,000 square feet for any individual building (commercial or residential).
- *Consider implementing site plan review to ensure that commercial architecture is appropriate for the character of the town.* In 2004 the Zoning Ordinance was amended to give the Planning Board site plan review authority for commercial developments where the total footprint of all buildings is over 5,000 square feet. The Board adopted Site Plan Review Regulations in 2006.
- *Review zoning provisions to ensure they do not create barriers to the construction of housing that is affordable to local workers.* In response to the state's 2008 Workforce Housing Law, the Board reviewed the Zoning Ordinance and determined that as written it did not place unreasonable restrictions on development and was in compliance with the law. In addition, in 2011 the Zoning Ordinance was amended to allow smaller "accessory apartments" to be added to single-family dwellings.
- *Consider using publicly available information to conduct a natural resource inventory of the town to identify natural features or areas of high scenic or ecological value.* Bartlett was included in a region-wide natural resource inventory completed by the Upper Saco Valley Land Trust in 2011.
- *Consider adding a town web site.* The town now maintains a web site at www.townofbartlettnh.org.

D. RECOMMENDATIONS

The following are changes to the town's Zoning Ordinance and other actions that the Planning Board believes could help the town address the vision and challenges outlined above. It must

be stressed that these are only ideas that the Board believes should be considered by the town. No changes to the Zoning Ordinance may be made without discussion and approval by town residents.

Commercial development

- Consider refining commercial zoning to better define which types of uses are appropriate for different areas within the town.
- Consider providing incentives within the zoning ordinance to encourage clustered commercial development, shared driveways and parking lots, and increased greenspace.
- Consider implementing mixed-use "village district" zoning in Bartlett Village, Glen and Intervale to promote integration of small-scale commercial and residential uses.
- Consider developing architectural guidelines to ensure that the design of commercial development is compatible with the traditional character of the town.
- Consider providing opportunity for the development of new gravel pits in town.

Residential development

- Consider requiring multi-lot subdivisions to have an overall long-term development plan to ensure appropriate layout of infrastructure and limit unplanned "piecemeal" development.
- Consider recommending large multi-unit residential developments to provide recreational facilities.
- Investigate ways in which affordable housing can be integrated into large multi-unit or multi-lot developments.
- Consider adopting regulations to limit the adverse impacts of development on steep slopes.

Transportation

- Maintain active participation in all phases of state highway planning to ensure that improvements to the Route 16 and 302 corridors are compatible with the town's vision.
- Consider the construction of a bypass around Bartlett Village as an alternative to the upgrade of Route 302 to a high-speed or multi-lane corridor through the village (if proposed).
- Consider developing a plan for the future use of the Bartlett rail yard as a commercial or transportation center area.
- Continue to support the Eastern Slope Regional Airport.
- Work with state officials to ensure that rail corridors to and within Bartlett remain available for potential future railroad use.
- Consider developing guidelines for the transfer of private roads to the town to ensure that the growth in the town road system does not outpace the town's ability to maintain it.

Recreation

- Continue to support the Bartlett Recreation Department and seek to increase the number of both programs and participants.
- Work with state highway department to ensure that any improvements to Routes 16 or 302 make provisions for bicycle lanes.
- Work with the Mount Washington Valley Trails Association and other interests to expand opportunities for family-oriented non-motorized recreation (hiking, bicycling, cross-country skiing, snowshoeing, etc.) by promoting the development of an integrated multi-use recreational trail system. Work with other towns in the valley to create a linked valley-wide

trail network. Work with landowners, state agencies, and land trusts to secure permanent rights of access to this trail system.

- Develop a map of the town's recreational trail system including scenic, natural, cultural and historic features.
- Consider opportunities for additional motorized winter recreation (snowmobiling) in appropriate corridors.
- Seek opportunities for town purchase of properties of high recreational value, including sites for athletic fields, beaches and river access. Consider establishing a capital reserve fund for this purpose, allowing the town to quickly respond to opportunities as they arise.

Town facilities and infrastructure

- Improve police department facilities.
- Develop and implement a plan for the long-term future of the town library.
- Consider additional investment in equipment necessary for the town transfer station to take better advantage of opportunities to recycle waste materials.
- Consider investigating the costs and benefits of installing centralized sewage treatment or connecting to an available system.
- Seek opportunities for town purchase of high potential properties for future use as open space, expanding town facilities (e.g. fire department, police department, town road crew, town hall, etc.) or for protection of existing natural areas. Consider establishing a capital reserve fund for this purpose, allowing the town to quickly respond to opportunities as they arise.
- Consider restructuring sections of town roads where two lane traffic is challenged or visibility is limited. This could be done to improve safe passage for general traffic as well as school bus and emergency vehicle traffic.

Cultural and historic resources

- Consider conducting an inventory of town buildings and features of cultural historic interest.
- Work with the state's Historic Preservation Office to determine how best to conserve sites and buildings worthy of long-term preservation.

Natural Resources

- Support the state's Current Use tax program.
- Consider implementing zoning provisions that provide incentives for maintaining open space during large commercial and residential development projects (beyond existing open space requirements).
- Work with state resource agencies, land trusts and private organizations to promote conservation and proper management of privately-owned agricultural and forest lands.

Other

- Consider developing an ordinance to control excessive noise levels within the town.
- Consider seeking voter authorization to develop a capital improvement plan.
- Consider using the services and expertise of regional planning organizations.
- Find ways to stimulate volunteerism and public input on planning issues.