

# *Tomorrow's Beech Mountain*

**2020-2035**

## Beech Mountain Comprehensive Plan



A Comprehensive Plan for the Future  
Growth and Development of the  
Town of Beech Mountain, North Carolina  
2020-2035



## Town of Beech Mountain Comprehensive Plan 2020-2035

Beech Mountain, North Carolina

Prepared for the citizens and stakeholders of Beech Mountain

### Elected Officials:

#### Beech Mountain Town Council

*Renee Castiglione, Mayor*

*Barry Kaufman, Vice Mayor*

*Weidner Abernethy*

*Carl Marquardt*

*Wendel Saur*

### Prepared by:

#### Beech Mountain Planning Board

*Pete Chamberlin, Chairman*

*John Hoffman, Vice-Chairman*

*Joseph Antonell*

*Robert Cavagnaro*

*Peter Patton*

*Sandy Carr*

### Town of Beech Mountain Staff

*Tim Holloman, Town Manager*

#### Planning Department

*Preston Yates, Town Planner*

*Rachel McCoy, Planning Intern*

*Elisa MacGoun, Planning Intern*

### Sub-Committee Members

*Tim Barnett, Police Chief*

*Daniel Davis, Public Utilities Superintendent*

*Kate Gavenus, TDA Director*

*Riley Hatch, Special Projects Coordinator*

*Robert Heaton, Public Works Director*

*John Merritt, Chief Building Official*

*Bob Pudney, Fire Chief*

*Sean Royall, Parks and Recreation Director*

Special thanks to the entire Beech Mountain Community for their valuable input and participation in developing this plan.





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## CHAPTER 1

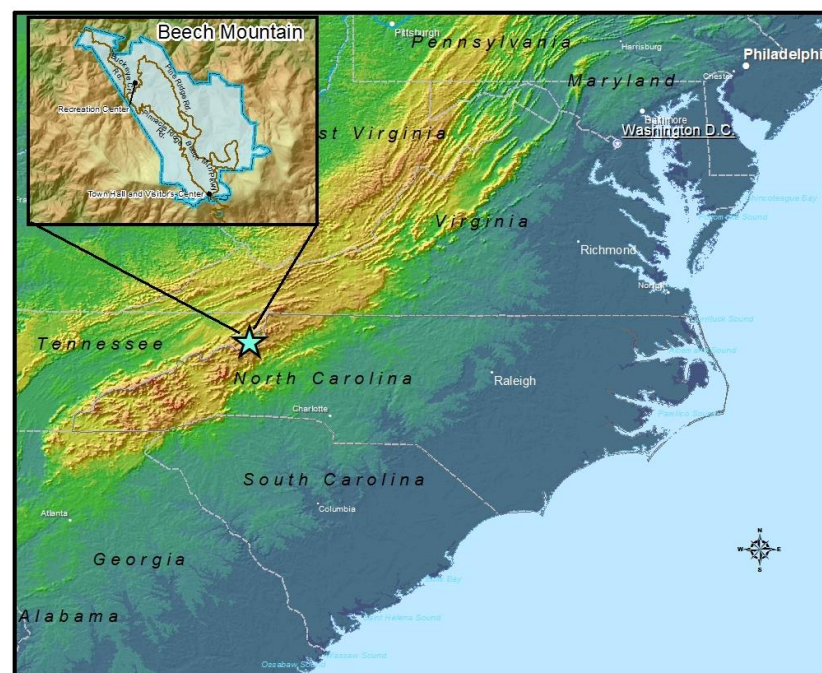
### Introduction

### Overview of Beech Mountain

With an elevation of 5,506 feet above sea level, Beech Mountain is the highest incorporated town in eastern America. From this vantage point the inspiring landscapes of the High Country region of northwestern North Carolina lay themselves out, offering the viewer a breathtaking indulgence of an endless skyline, and the peace and tranquility of miles and miles of Appalachian Mountain scenery.

This awe-inspiring landscape has drawn residents, tourists, and visitors to this mountaintop haven for years. The peace and tranquility here, the cool summers at the high elevation, the all-season outdoor recreation amenities including skiing and snowboarding, golfing, tennis, and hiking and biking, and a close-knit, small town atmosphere give Beech Mountain a unique quality of life unlike anywhere else.

As a tourism and resort home destination, Beech Mountain draws thousands of visitors every year with its cool summer climate and its skiing and recreational opportunities. The town has approximately 2500 dwellings and its population during peak ski and summer times often



swells to nearly 10,000, but it is a year-round home to only 300-400 people. Though its population is quite small, the town occupies a relatively large physical area extending from just east of the Tennessee border to the town of Banner Elk on the South and East, occupying a portion of both Avery and Watauga counties. In fact, in terms of area Beech Mountain is as large as the nearby town of Boone, NC, although Boone's population greatly surpasses that of Beech Mountain. In terms of a long term strategic location, the town is well situated for its recreation driven focus by being equidistant from the outdoor recreation headquarters of Boone, and the developing water recreation opportunities provided by nearby Watauga Lake. It is also within a few hours' drive of larger cities such as Charlotte and Winston Salem in North Carolina and the Tri-Cities area of East Tennessee. Nevertheless, the town is for all current purposes "off the beaten track," a characteristic



that provides many challenges for its economy that is almost completely dependent on tourism, recreation, and real estate.



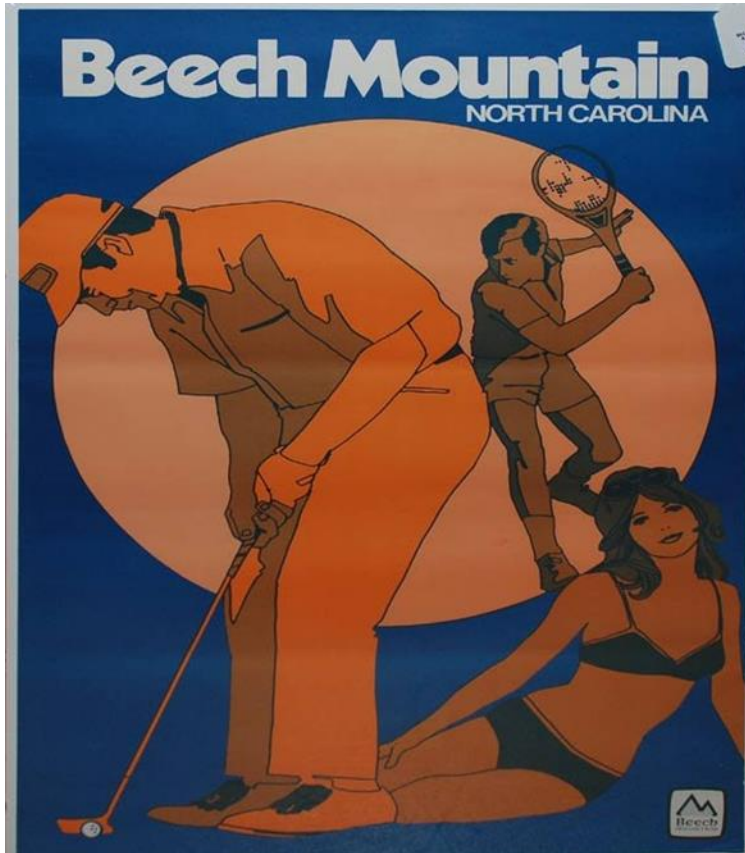
## History of the Town

Beech Mountain began as a private resort development. In 1965 two brothers, Grover and Harry Robbins of Blowing Rock, North Carolina, along with 35 original investors, organized Appalachian Developments, Inc. The Robbins brothers had already restored the now famous Tweetsie Railroad and had built Hound Ears Lodge and Club. Appalachian Developments was organized to create a year-round resort community near Banner Elk, North Carolina. The new community was to be centered in Beech Mountain. Plans included complete water and sewer facilities, a distinctive architectural charm, and an environment protected from uncontrolled development. The community was to be developed as an ideal second home area for families and would include a full range of both summer and winter sports, a day camp for young people, and a nursery for children. The long range plans for the community called for approximately 7,000 separate residential lots, numerous condominium and motel construction lots, two 18-hole golf courses, two ski areas and probably two or more tennis and swimming complexes.

Between 1965 and 1967, most of the Appalachian Developments' efforts were devoted to planning the community and acquiring land. During this time the company also purchases 3,000 acres of land just outside Banner Elk, North Carolina, about five miles from Beech Mountain. In 1967, after obtaining beach front property in St. Croix, U.S. Virgin Islands, Appalachian Developments, Inc. became Carolina Caribbean Corporation. During the next several years, in addition to the Beech Mountain and Virgin Island projects, Carolina Caribbean completed an airport on the 3,000 acres Appalachian Developments had purchased near Banner Elk. In 1968, Carolina Caribbean purchased the Land Harbors development in Avery County, North Carolina. This development consisted of a 9-hole golf course, a 75-acre lake, and several tennis courts. In addition, 50' x 80' lots were sold to provide the purchaser with permanent sites for recreational vehicle hook-ups.



Some lots were also sold for single family home development. In 1971 and 1972, land was purchased by Carolina Caribbean on the coast of North Carolina near Calabash, and Carolina Shores was developed consisting of a golf course and marina. In 1974 the Corporation purchased land on the coast of South Carolina and developed Little Rivers Mobile Home Park.



Initially the development of Beech Mountain went rather smoothly. Roads, water and sewer systems, street lights, the ski slopes, and

village located near the slopes that included a private club, shops, and an ice skating rink were developed. From the early seventies to the early eighties, the mountain became home to the "Land of Oz" theme park, a Wizard of Oz themed park which was an impressive production in the pre-Disney era. By 1973, however, Carolina Caribbean began to experience problems related to inflation, slow development of the property, poor winters for skiing, and a slowdown in the construction of the golf course and other recreational facilities. In 1974, the Corporation became overextended due to attempts to undertake too many development projects simultaneously causing it to sharply curtail road construction and lot development on Beech Mountain. Because the Corporation had incurred substantial secured and unsecured indebtedness, it filed for corporate bankruptcy on February 28, 1975. After a 10-month review, a court-appointed trustee recommended to the Federal Bankruptcy Court that the Corporation be liquidated.



1 Photo of cast from the "Land of Oz" theme park, circa 1975

Carolina Caribbean collected assessments from property owners to finance road maintenance, recreation areas, and other community



services. During the early 1970's, as the Corporation began to experience financial difficulties the Property Owners' Association (POA) which had been formed in July 1970, assumed increasing responsibility for both the collection of assessments and the provision of community services including road maintenance, fire and police protection, maintenance of recreation areas, and the collection of garbage.

In February 1975, when the Corporation filed for bankruptcy, the POA assumed total responsibility for the collection of assessments and provisions of all community services. During this time the POA began to experience difficulty collecting certain assessments to finance those services not used by everyone.

Many original purchasers had been led to believe by the Corporation that they would never have to pay assessments for the maintenance of the recreational facilities. Others accepted the road assessment but would not accept the assessment for the maintenance of the recreation areas.

In late 1977, the water and sewer utility systems were purchased from the courts by the POA through its wholly owned subsidiary, the Beech Mountain Utility Company. In November 1978, a Sanitary District was established as a result of action instituted by the POA. The district included approximately 4,000 acres encompassing all of the developed area within the Beech Mountain development including most of the completed roads, all recorded, surveyed and platted lots, the ski area, and the Land of Oz. The district purchased the water and sewer utilities from the POA in 1980. The district contracted with the POA for the maintenance and operation of the utility system which included the installed water collection, treatment (two Plants), storage and distribution system, and the installed sewer collection and treatment (two plants) system. The district levied a tax that is collected by both Watauga and Avery Counties since the district lies in both counties. On November 6, 1979, the district's voters approved a \$700,000 sewer bond issue and a \$1,750,000 water bond issue in order to purchase the

water and sewer utility system from the POA and to institute both short and long-range programs to increase the capacity of existing water and sewer systems to handle a 20-year population growth.

Because of the problems associated with the collection of assessments from property owners the POA decided to seek incorporation in order to utilize the municipal taxing authority to financially support the continued provision of services. An incorporation bill was introduced into and ratified by the North Carolina General Assembly, and on May 1, 1981, the Town of Beech Mountain was formed. The boundaries of the new town coincided with the sanitary district boundary and thus include approximately 4,000 acres.



## Beech Mountain Today

Beech Mountain is governed by a Council- Manager form of local government. The Town Council is composed of a five-member board including the position of mayor. Elections are held biennially in which the Town's voting residents elect their representatives for the governance of the Town. Council members are elected for a two-year or four-year term, with the two candidates receiving the most votes receiving four-year terms and the next candidate receiving a two-year term. The elections are non-partisan and the mayor is elected by the sitting Council. An appointed Town Manager is the Town Council's representative for handling the day-to-day administration of government operations. The Town currently employs a total of 54 persons and provides residents services through the following departments:

- Water and Sewer
- Public Works and Sanitation
- Recreation
- Tax
- Finance
- Administration
- Fire Protection (with Beech Mountain Volunteer Fire Department)
- Police Protection
- Planning and Inspection







## CHAPTER 2

### Vision

#### What is a Vision Statement?

A vision statement is a declaration and affirmation of what citizens, leaders, and stakeholders want the community to become in the future. Effective vision statements provide a compelling description of the state and function of a Town once it has implemented its plan. This vision is both the “anchor” and the motivation of the plan, providing a very attractive image toward which the Town is attracted and guided by the strategic plan. This vision encompasses the communities’ aspirations and values as developed in public meetings held by the Planning Board in Summer, 2011. The Town’s Vision was reviewed and affirmed in the Summer of 2018 through a series of public meetings and a resident survey.

#### Beech Mountain Vision Statement

##### In 2035...

Beech Mountain thrives as a unique four-season resort community serving residents and tourists with quality recreational opportunities, attractions, services and the splendor of a true mountain experience.

Visitors are drawn to Eastern America’s Highest Town for its climate, its natural and built beauty, and its renowned recreational amenities, invigorating the Town’s economy. While visitors enthusiastically appraise their time spent in Beech Mountain, residents (both year-round and seasonal) truly enjoy the special experience and charm of a town that has grown in quality but has consistently maintained its most prized resource- its natural environment.

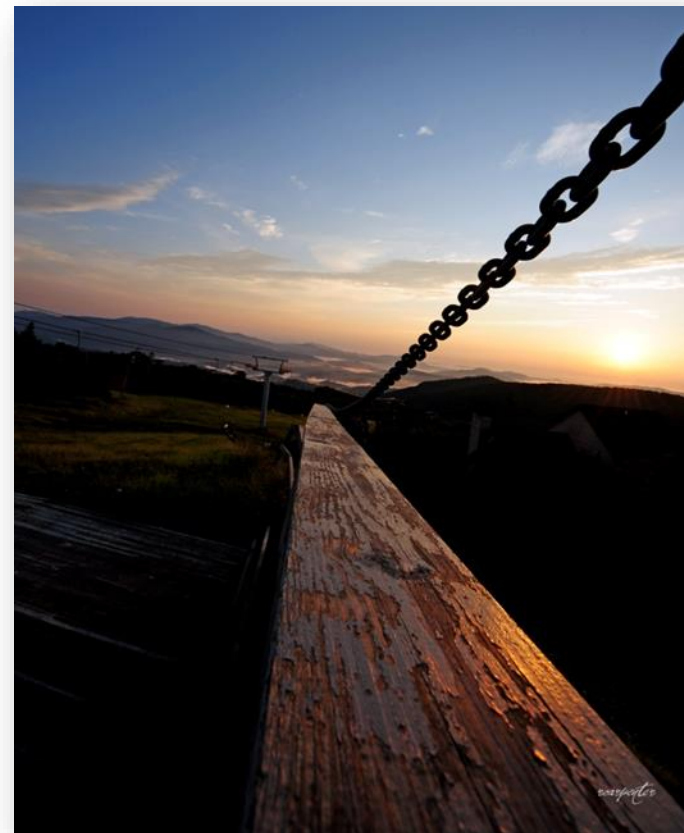


Figure 1: Photo Credit - Renee Carpenter



*The Town seeks to attain and retain this Vision by committing itself to the following general principles:*

- Town leadership encourages participation in and **promotes recreational amenities and attractions**. The Town recognizes recreation as crucial to the economy of the town and critical to the wellbeing of its residents. The Town further recognizes the benefits of a healthy and active lifestyle for visitors and residents alike.
- The Town **supports Managed Growth**, providing for orderly progress. In doing so, the Town has maintained and retained its sense of place and its identity as a unique resort community. New development is design conscious and of high quality—enhancing and accentuating the existing favorable qualities of the Town. Simultaneously, an emphasis is placed on improving those features that detract from the Town’s character.
- **The Town is committed to the safety and welfare of its residents and visitors**. Essential services such as police and fire protection are well funded and capable, ensuring that the community remains safe, clean, and welcoming.
- The Town seeks to **maintain a synergistic relationship** with Beech Mountain Resort, Beech Mountain Club and other town businesses.
- **The Town is committed to protecting the environment and ecology of the area**. Based on a well-founded appreciation for the natural environment on which its success as a resort destination rests, Beech Mountain restricts to a minimum any artificial growth which would destroy that which nature has provided. The Town emphasizes its natural surroundings of

forestland, wildlife and natural streams, and grows in a manner that stresses compatibility with nature.

- **Proper planning, maintenance, and scheduled improvements for Town infrastructure** have resulted in a system of roads, water, and sewer that is top notch. Town leadership is dedicated to committing the financial resources necessary to ensure that infrastructure meets current and future demands placed upon it by housing, accommodations and commercial business.
- As a good steward of public property, **the Town leverages public property and assets to better serve the community**. By capitalizing on existing facilities and to providing more and better facilities when and where needed, the Town enables its departments to flourish in their functions of serving the needs of the community.





## CHAPTER 3

### Community Participation and the Planning Process

For a town of its size, Beech Mountain has an extremely high level of community participation in town governance and in directing the future of the community. Many residents serve on boards or committees and volunteer in town projects and programs. All of this is a reflection of the high amount of pride that our residents take in their town.

Key to the implementation of this plan is the ownership of it by our public stakeholders, and therefore, their participation in the process has been critical.

### Realizing the Need

In 2011, Town Staff along with members of the Planning Board came to the realization of the need for a comprehensive and cohesive

document to streamline the direction of their actions. Rather than planning in an ad-hoc manner focusing reactively on fixing zoning problems as they arose, it was determined that it was important to take a more proactive role in determining the Town's future. It was also realized that the Town's current plan (The 1981 Plan) was an out of date and out of touch document, that had been rarely consulted since its drafting. In fact, the document was so obscure that the common reaction from persons involved in the planning process was a puzzled and shocked reaction: *"You mean there's a plan?"*

### The Planning Process

The initial phases of the Plan came together through a Visioning process accomplished at public meetings held in the Fall of 2011 and Spring of 2012 guided by the Town's Planning Board. The outcome of these meetings was the conceptualization of a vision for the Town twenty years in the future.

During the visioning process, it was determined that it would be critical to proactively seek the input of the public and key stakeholders in the Town. This was done primarily through surveys that were distributed widely to the community. The recommendations of this plan are also a reflection of input gleaned from several public meetings and from discussions with various town staff members.

### Public Surveys

Two surveys were sent to town residents seeking their input on a direction for the future. One was directly targeted towards comprehensive planning topics, asking questions to measure the population's attitudes towards growth and development, to determine their feelings about possible infrastructure initiatives, and to rank various elements of town services in terms of their importance, and thereby determine how they felt that the town should focus its efforts. This survey was provided via email to over 1000 Beech Mountain



residents, visitors, and stakeholders. It was also made available on the Town's website and in hard copy at several key locations throughout town. (See the Appendix for a copy of this survey and a breakdown of the results.)

Another more general survey was sent out to town residents by former Town Councilmember Alan Holcombe that solicited input regarding people's likes and dislikes about Beech Mountain. The survey was simple, but in its simplicity, it was effective, allowing for open ended, qualitative responses regarding the state of the Town and its services, and the directions in which it needed to improve. It was distributed via email to over 500 residents and property owners.

### Recreation Surveys and Forums

With recreation and recreational tourism such critical elements of life in Beech Mountain, extra focus was spent on gathering input from the public on these topics. Separate surveys were created and circulated that sought to identify what the public desired from recreational amenities on Beech Mountain. Also Recreation Planning Forums were held to give the public an opportunity to voice their opinions on November 22, December 20, and January 24, 2011.

### Public Meetings

The next phase of the plan was to develop a strategy to achieve the goal set out in the vision statement. The Planning Board of the Town of Beech Mountain was the lead agency responsible for the development of the plan, and the planning process largely took place at Planning Board meetings. These public meetings are held monthly in Town Hall and are always open to the public. The discussions at these meetings centered on making Beech Mountain a better place in the future. Planning Board members, members of the public, and town staff used maps, graphics, and an interactive process to discuss ideas and plans for land use, transportation, recreation, and other topics.

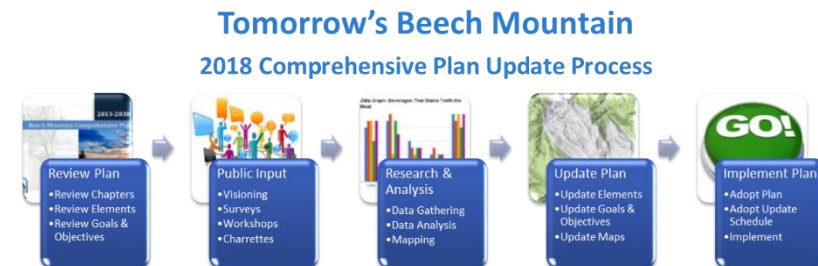
### Format of the Plan

The Plan is outcome focused, beginning with an overarching vision statement for the town, then transferring the vision's principles into *Goals (G)* for each subject. Goals are then expanded upon and made more tangible by identifying *Policies (P)* and *Strategies (S)* that support their realization. Policies and Strategies are specific, measurable, achievable, realistic, and if possible, time-bound. *A numbering system (i.e. "Policy R.G1.P2:") has been applied to the Goals, Policies, and Strategies in this plan to easily identify them in future references.*

Examples of strategies include ordinance amendments, capital improvements, and town-run programs. While many methods of achieving the Town's goals were considered, methods that encouraged the desired outcome without placing mandates on residents were preferred (i.e. incentives rather than penalties). Finally, where practical, performance measures were identified to help maintain progress toward the stated vision.

### Updating the Plan

In 2018, the Town undertook an effort to update the Comprehensive Plan. As part of the update process, additional public involvement strategies were undertaken.



## Website

The Town's website acted as the central repository and gateway for public engagement. All other public engagement activities will direct back to the website for additional information and public participation. A dedicated web page was developed to serve as the gateway for the comprehensive plan update and link to the other various public engagement outlets.

The Town's website was updated regularly to provide information and opportunities for input to the residents. Additionally, all public meetings and workshops were listed on the announcements page and added to the Towns' homepage.

## Public Meetings and Workshops

Meetings and workshops can be a great opportunity for various stakeholders to share ideas in a multi-directional and group setting. However, because many people may be disinclined to attend public meetings and workshops, a variety of formats and venues were pursued. Public meetings were loosely structured, in order to encourage participation and engagement. Also, the venue was moved between Town Hall and Buckeye Lake Recreation Center. A series of public meetings and workshops were held for the general public, as well as with specific stakeholder groups, such as business owners/operators.

## Resident and Stakeholder Surveys

Research suggests that surveys are key in reaching residents and stakeholders that are generally less involved in local government. According to one source, approximately 80-85% of survey respondents have not attended a local government meeting or watched a local government broadcast in the last year. As such, surveys were an integral part of the public engagement strategy for this Plan. Surveys

were developed and distributed through SurveyMonkey® and printed for distribution to those who prefer to write their survey responses.



## Social Media Posts

The Town currently maintains a Facebook and Twitter account, which was utilized to further engage the residents and patrons of the Town. Posts directed those following the Town back to the dedicated web page(s) for information and input. Social media was not monitored, in any measurable fashion to gauge public opinion or to gather public input. Those wishing to provide input were directed to the survey or other opportunities for input.







## CHAPTER 4

### Existing Conditions, Trends, and Projections

#### Demographics

To plan for the future of Beech Mountain, it is critical to know about the Town's population. First and foremost is the straightforward question of growth. How much growth will the Town see? How many people will we have to accommodate? But other questions about our population also carry great weight. What kinds of people make Beech Mountain their home or vacation destination? What kind of housing, recreation, and employment choices do they make? It is important to understand who our population is and how their characteristics will change over the coming decades. The answers to questions such as these will set the background for our Town's plans for the future.

More than just a mechanism to support planning for growth, demographics are also important to consider because many of the decisions that the Town makes, consciously or unconsciously, can make a drastic impact on the level of growth that the town will see in the future. It is important to remember that other scenarios than those presented are possible. By planning to increase density the town could experience levels of growth even greater than in the build-out scenario. By concentrating that density in specific locations and modifying land

use controls to allow for compact development, such density could theoretically be achieved without compromising open spaces and environmental characteristics. On the other hand, the Town could drastically limit growth by imposing more severe land usage restrictions and regulations as an alternative means to protecting the town's character and environment.

## Current Population Statistics

### Baseline Figures

The figures below provide a snapshot of basic and critical current population figures for Beech Mountain:

**322** - Number of full-time residents (2017 US Census Population Estimates prepared by the North Carolina Office of State Budget & Management)

Approximately **5179** - Estimated number of seasonal or second home residents (Beech Mtn. est. based on 2.24 persons per housing unit)

**2312** - Number of Housing Units (2010 US Census plus Town Building records)

- For seasonal, recreational, occasional use: **2074**
- Full time occupied: **154**

**5422** - Number of Parcels of Land (2018 Avery and Watauga County Tax Data)



## Demographic Projections for Beech Mountain

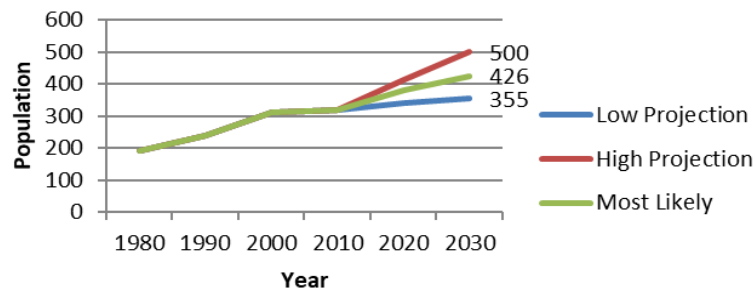
As a vacation resort community, Beech Mountain has relatively few full-time residents. But full-time residents only portray a fraction of the picture of Beech Mountain's true population. Beech Mountain's unique situation as a resort community demands that demographic trends for Beech Mountain be analyzed in different ways and that different factors be taken into account. Because Census figures focus on year-round residents, analyzing housing and building trends is one method of accounting for the fact that the majority of homes on Beech Mountain are second homes or vacation homes.

For purposes of forecasting growth, two factors are focused upon in this analysis:

- Population and its contributing factors
- Construction trends

### Town of Beech Mountain, Projected Full Time Resident Population Growth

Source: Census 1980, 1990, 2000, 2010 Summary File 1, prepared by the U.S. Census Bureau (<http://factfinder.census.gov>); Projections by Town of Beech Mtn. based on a linear trend line



## Projected Growth Scenario

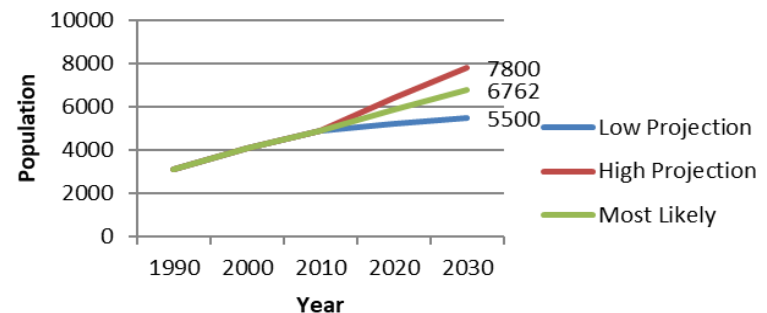
This scenario forecasts as closely as possible the growth that Beech Mountain will encounter over the coming decades. It takes into account current growth rates and projects them into the future. The following charts illustrate that *Beech Mountain will likely have approximately 425 full time and nearly 7000 part time residents by 2030.*

Many factors were considered in developing these estimates, and these considerations will likely determine whether the actual population change over this period errs towards high-growth or low-growth projection. Considerations support a conclusion that steady, robust growth will resume in Beech Mountain in the future include:

- Retirement age baby boomers (people born between 1946-1964). Much of the land and housing in Beech Mountain is

### Town of Beech Mountain, Projected Seasonal Resident Population Growth

Source: Estimated by Town of Beech Mtn. based on current figure of 2.24 persons per housing unit and a linear trend of housing units per decade



owned by people who are planning to one day “retire to the mountains”

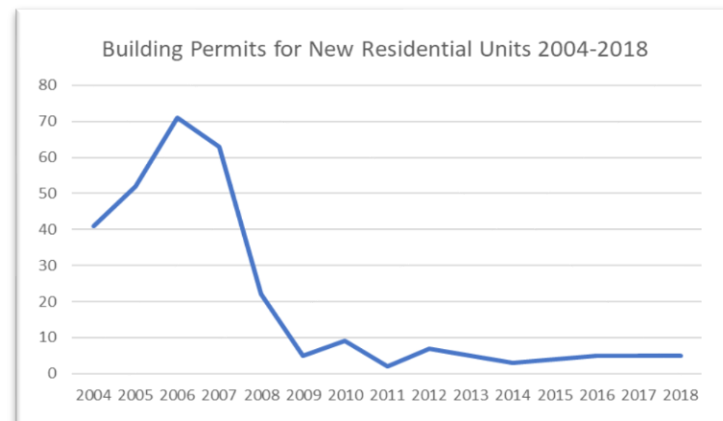
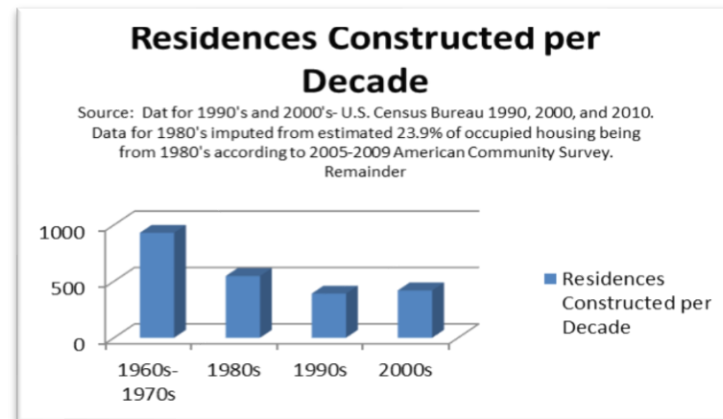
- Rise in number of independently wealthy individuals
- Advent of internet and telecommuting allows individuals to live where they desire, rather than being tied to a work location
- Continued growth in nearby major cities (Charlotte, Piedmont Triad, Tri- Cities, Triangle) and in the State of North Carolina as a whole
- Land and Housing competitively priced for the High Country area of North Carolina

However, there are several factors and trends that will serve to limit Beech Mountain’s population growth in the future, including:

- Aging of current population. The age structure of Beech Mountain’s residents is very top-heavy, meaning there is a disproportionate number of individuals at the high end of the age spectrum, without a sufficient number of persons in younger age categories to replace them.
- The baby boomer generation has already peaked. The average baby boomer has passed retirement age.
- Competing developments, such as Eagle’s Nest, Diamond Ridge, Linville Ridge, etc. that may offer better infrastructure and amenities as the middle class diminishes.

One of the largest factors to consider in this analysis is the long-term impact of the economic recession beginning in 2006. Although recent figures show a sharp decline in the construction of new homes, it is reasonable to predict that the overall growth trend will continue in the future. Even with downturns in the economy and its related impacts on construction, the decade of 2000-2010 taken as a whole echoed the pattern of growth that the Town has experienced since its inception. The first chart below illustrates the sharp curtailing in construction at

the latter half of the 2000’s, but the second chart documents the overall high and consistent level of development that has occurred here over the last 40 years.





## Chapter 5: Land Use

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### LU: Background

### LU: Current Zoning and Land Use Map

### LU.G: Land Use Goals, Policies and Strategies

#### Goal LU.G1: Encourage Land Use that Maintains the Quaint Mountain- Town Character of Beech Mountain

**LU.G1.P1:** Follow Smart Growth Principles

**LU.G1.S1:** Develop smart growth strategies for Beech Mountain

**LU.G1.S2:** Continue to update the Permitted Use table in ordinance code

**LU.G1.S3:** Revise and Improve the Town's Subdivision Regulations

#### Goal LU.G2: Conserve Beech Mountain's Natural Resources and Open Space

**LU.G2.P1:** New development will continue to be built in a manner that respects natural resources and wildlife habitat

**LU.G2.S1:** Review and continue to improve ordinances that govern construction practices

**LU.G2.P2:** Develop a Land Use Conservation Plan

**LU.G2.S2:** Prioritize Land Parcels for Conservation

**LU.G2.P3:** Encourage Private-Funded Land Conservation by Local Residents

#### Goal LU.G3: Focus Development toward Existing Commercial and Residential Areas

**LU.G3.P1:** Infill and redevelopment will occur in appropriate areas as designated by the town

**LU.G3.S1:** Identify infill opportunities and encourage development in these locations through development incentives

**LU.G3.S2:** Target public investment to preferred infill and redevelopment areas

#### Goal LU.G4: Prioritize Recreational Land Use

**LU.G4.P1:** Enhance and connect the existing Beech Mountain trail system

**LU.G4.S1:** Update the Beech Mountain trail map and maintain a plan for linkages and destinations

**LU.G4.S2:** Encourage or require trail dedication in new development

**LU.G4.P2:** Acquire Land for Recreational Use

#### Goal LU.G5: Develop a Plan for the Future Land Use of Westerly Hills and Buckeye Hills West

### LU: Discussion and Conclusion



## Background

Planning for the usage of land is the core concept of community planning and is the basis for all of the other sections of this plan. When a town has a vision for the future use of the land, it becomes important to create guidelines for development. Any other plans should work on installing the necessary physical, legal, and administrative infrastructure to ensure development follows the land use plan.

Much of the process in planning for land development is in determining the best manner of accommodating the town's anticipated growth. As identified in Chapter Four (Demographics), Beech Mountain anticipates at least some growth in the coming years. The decisions made in regard to land usage can encourage, dissuade, guide, or control growth and development. The vision for the future of Beech Mountain identified that the Town wants to encourage growth when it is reasonable, in order to invigorate the economy and meet community needs. However, the town also wants to ensure that it protects its natural environment and does not destroy the characteristics that draw people to the mountain. It will be important for Beech Mountain to find the right balance between these two ideologies to become the town that it wants to be.

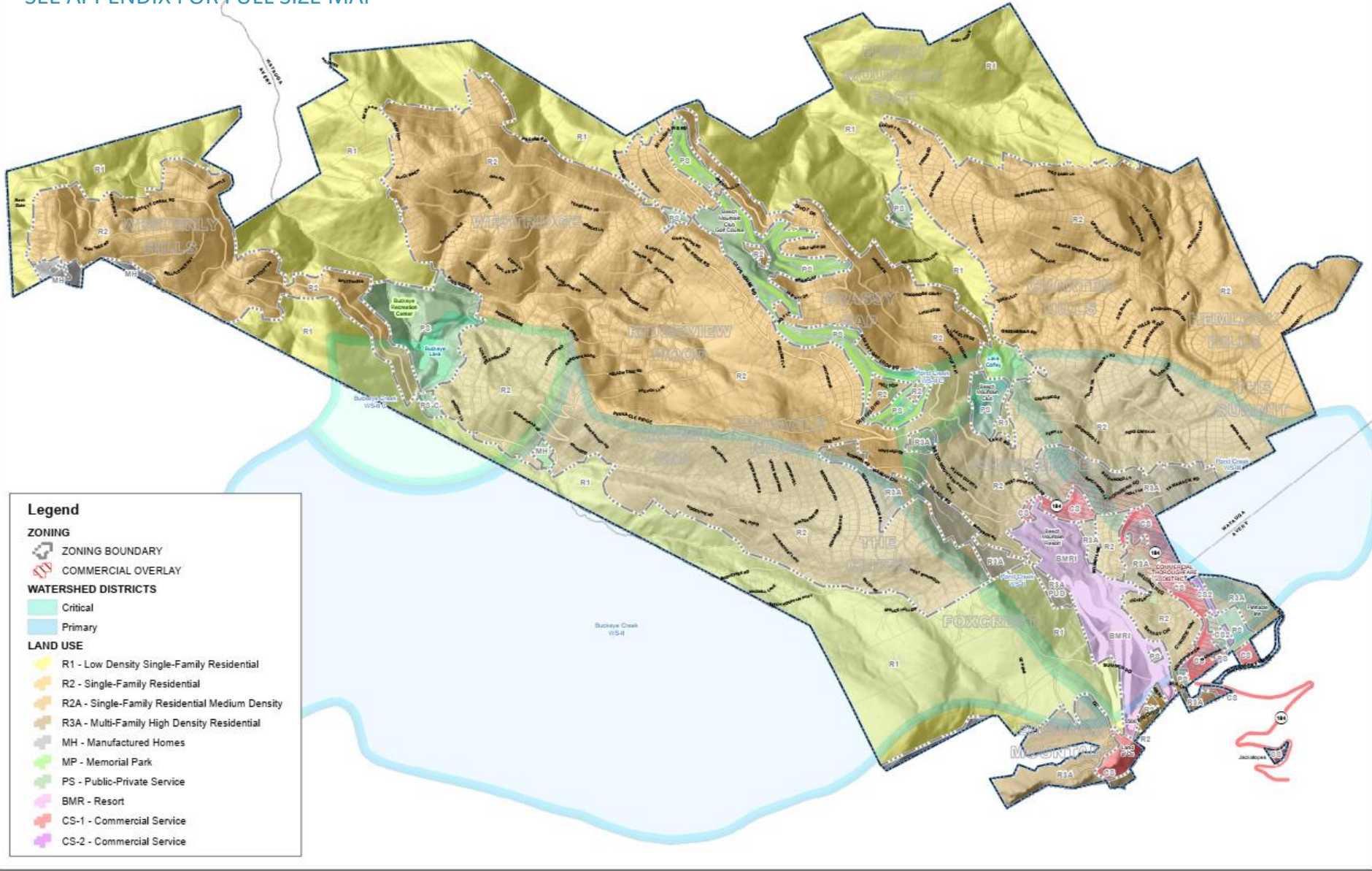
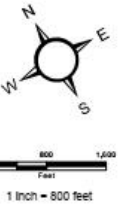
To accommodate the future residents and property owners of Beech Mountain, it is important to understand their choices and preferences with regard to land usage. A recent report by the *Urban Land Institute* identified that communities like Beech Mountain are desirable precisely because they provide such a refuge and a counterpoint to the urban environments in which an increasing percentage of our nation's population live. It is reasonable to assume that just as more and more people decide to make their primary residence in an urban setting, there will be a reciprocal trend towards

refuges in second homes and vacation areas with large open areas, plenty of space, and a rural atmosphere. Our land use practices should be tailored to fit these forecasted demands.

But altering land use policies in Beech Mountain is not an easy task given its pre-existing ownership patterns and cadastral layout. Beech Mountain is comprised of over 5,000 subdivided lots. These lots, being generally one third to one half acre in size, are neither ideal for compact development that preserves open space nor large enough to foster a true low-density rural land use pattern. Though many of these lots are vacant and unused, their owners nevertheless hold varying expectations about their potential. Some entertain hopes of one day building their dream home in the mountains, while others hold the land for other purposes (such as Beech Mountain Club membership) and would gladly see it dedicated to better use if their purposes were otherwise achieved. Working with landowners of vacant lots and incentivizing conservation is key to preservation of our open space.



SEE APPENDIX FOR FULL SIZE MAP



### Legend

#### ZONING

- ZONING BOUNDARY
- COMMERCIAL OVERLAY

#### WATERSHED DISTRICTS

- Critical
- Primary

#### LAND USE

- R1 - Low Density Single-Family Residential
- R2 - Single-Family Residential
- R2A - Single-Family Residential Medium Density
- R3A - Multi-Family High Density Residential
- MH - Manufactured Homes
- MP - Memorial Park
- PS - Public-Private Service
- BMR - Resort
- CS-1 - Commercial Service
- CS-2 - Commercial Service

## TOWN OF BEECH MOUNTAIN ZONING AND LAND USE MAP

Source: Beech Mountain GIS

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Eastern America's  
Highest Town



## Land Use: Goals and Objectives

### Goal LU.G1: Encourage Land Use that Maintains the Quaint Mountain-Town Feel of Beech Mountain

In the Comprehensive Planning Survey, stakeholders clearly expressed that the laid-back pace of the community and the natural surroundings are of utmost importance to life on Beech Mountain. It will be a major goal throughout this plan to preserve the small-town character of Beech Mountain. Our land use patterns have a major influence on the way of life in Beech Mountain.

#### Policy LU.G1.P1: Follow Smart Growth Principles

It is a goal of the Beech Mountain community to ensure that growth we experience is well thought-out, well located, and appropriate for Beech Mountain. The land use plan should accommodate growth while also preserving the natural beauty and resources that make Beech Mountain unique. By following Smart Growth principles, Beech Mountain can develop a plan to make it possible to continue development, maintain the character of the town, and strengthen the community.

Strategy LU.G1.S1: Develop Smart Growth Strategies for Beech Mountain:

- Consider infill development options to focus new development toward the established commercial centers along Beech Mountain Parkway.
- Encourage redevelopment and renewal of dilapidated properties as an alternative to new construction.
- New commercial and residential developments should utilize construction practices such as LEED that minimize harm to the environment.
- Develop an attractive town center that is host to a variety of shops restaurants and businesses, encouraging development in the core of town, rather than on the periphery.
- Allow for mixed use residential and commercial development in commercial zone

#### Smart Growth Principles

*As promoted by the Smart Growth Network*

1. mix land uses.
2. take advantage of compact building design.
3. create a range of housing opportunities and choices.
4. create walkable communities.
5. Foster distinctive, attractive communities with a strong sense of place.
6. preserve open space, farmland, natural beauty, and critical environmental areas.
7. strengthen and direct development towards existing communities.
8. provide a variety of transportation choices.
9. make development decisions fair, predictable, and cost effective.
10. encourage community and stakeholder collaboration in development decisions



Strategy LU.G1.S2: Continue to update the Permitted Use Table in the zoning ordinance

It is important that the Permitted Use Table be forward thinking and identify and set standards for emerging land usages before they occupy land.

Strategy LU.G1.S3: Revise and improve the Town's subdivision regulations

Although the vast majority of Beech Mountain was subdivided into residential lots prior to its incorporation as a Town, there are still a precious few large undeveloped tracts within its boundaries. The town needs to ensure that if these areas are subdivided, they are done so only in a way that is beneficial to the community. Beech Mountain already has plenty of vacant, buildable lots. If a new area is to be subdivided it should, it should be held to the highest standards of quality, and ideally should provide amenities and facilities that are not already present. The Town's subdivision ordinance should be reconsidered with this in mind, considering the possible inclusion of requirements for open space, trails, and recreation amenities.

## Goal LU.G2: Conserve Beech Mountain's Natural Resources and Open Space

Beech Mountain is home to majestic views, clean air, and large tracts of open land that surround its residential neighborhoods. The beautiful natural surroundings are an important aspect of life for residents and help draw visitors to the area. These natural resources define our community, and their preservation is a top priority when considering future land use.

Policy LU.G2.P1: New development will continue to be built in a manner that respects natural resources and wildlife habitat.

Beech Mountain's land use code contains ordinances that regulate the construction practices and site location of new development; these ordinances ensure builders follow best management practices around environmentally sensitive areas.

Effective Ordinances include:

- *Watershed Buffers* – 30-foot buffer along banks of perennial water courses
- *Water Supply Watershed Management* -- limits land cover in high quality water supply areas
- *Soil Erosion and Sediment Regulations* – sets a standard for management of erosion during and after construction
- *Tree Regulations* – limits the removal of trees from private and public property within the Town
- *Subdivision Ordinance* – limits minimum lot size and other requirements for new lots.



Strategy LU.G2.S1: Continually improve ordinances that govern construction and development regulation.

In order to properly regulate development and construction, any town needs a clear and concise set of ordinances. Revising sections of the ordinance code will help strengthen their meaning, clarify vagueness, and prevent violations due to misunderstanding or contradiction.

Policy LU.G2.P2: The Town will develop a Land Use Conservation Plan.

The town will create a new land use map based on current zoning and lot layout. Land conservation is vital to the local environment but also provides amenities for residents and supports the tourism industry on which much of Beech Mountain relies. The creation of a new land use map will highlight areas where development is appropriate and integrate conservation areas where appropriate.

Strategy LU.G2.S2: Prioritize land parcels for conservation

In order to effectively conserve land, the town will first create a plan that targets lots that are most appropriate for conservation. High priority parcels will include but are not limited to: environmentally sensitive areas, lots along trails, unbuildable lots, lots without utilities and clusters of vacant lots.

Policy LU.G2.P3: The Town will encourage private-funded land conservation by local residents.

Conservation of Beech Mountain's land is not relegated to public endeavors only. Private citizens can make huge strides towards preserving the Mountains natural areas as well, and there are various ways that the Town can help encourage them. One method could be through neighborhood cluster workshops encouraged or hosted by the Town that could gather neighborhood support and local buying power to purchase empty lots dedicated to environmental conservation. The goal of these workshops would be to educate residents on tax benefits for land conservation and educate the public on opportunities to work with non-profit land conservation organizations. Green-spaces and wildlife habitat are vital to the character and economic health of Beech Mountain and the town encourages local residents to become personally involved in their preservation.



### Goal LU.G3: Focus Development toward Existing Commercial and Residential Areas

As Beech Mountain's population grows, it will become increasingly important to focus growth toward existing commercial and residential neighborhoods. By focusing development, the town can reduce the town's infrastructure and utility costs. A town center surrounded by dense residential neighborhoods can help to develop a stronger sense of community and support local business. Furthermore, focusing growth that occurs in central locations preserves the rural and untouched land on the fringes of Beech Mountain.

Policy LU.G3.P1: Redevelopment and infill development will occur in appropriate areas

Support increased density of land uses in appropriate neighborhoods and commercial areas. Prime redevelopment examples are vacant or dilapidated lots within existing neighborhoods and commercial areas, especially along Beech Mountain Parkway.

- Beech Mountain Parkway commercial areas and surrounding neighborhoods
- Base of Beech Mountain Resort
- Neighborhoods: Clusters, Charter Hills, Mariah

Strategy LU.G3.S1: Identify infill opportunities and encourage development in these locations through development incentives

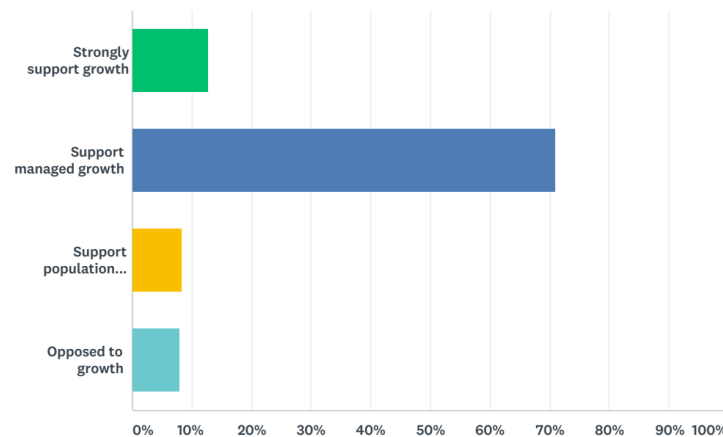
The town will conduct a study to identify specific redevelopment and infill development opportunities. Development incentives could include reducing or waiving construction permit fees, expedited review/permitting, or exemption from certain zoning ordinances.

Strategy LU.G3.S2: Target public investments to preferred infill and redevelopment areas

Beech Mountain will target infrastructure improvements to preferred infill development and redevelopment areas. These improvements may include street improvements, utility upgrades, and pedestrian amenities such as sidewalks, benches, and lighting. Focusing development saves the town money when providing infrastructure for commercial and residential uses.

#### Q8 What is your overall perspective towards residential growth and development on Beech Mountain?

Answered: 554 Skipped: 6



## Goal LU.G4: Prioritize Recreation Among Land Uses

The importance of the outdoors and the natural environment in Beech Mountain cannot be overemphasized. One of the ways the outdoors is brought into the lives of Beech Mountain's residents and visitors is through recreation activities. By improving our outdoor recreational opportunities, we can improve the quality of life for residents and visitors. Acquiring and preserving space for recreational activities (including open space for passive recreation) should be a high priority for the Town.

### Policy LU.G4.P1: Enhance and connect the existing Beech Mountain Trail System

Beech Mountain has a substantial trail system that provides recreational opportunities for residents and visitors of all ages. Trails vary in character and difficulty from wide gravel paths to steep and rocky traverses. The trails offer a chance to enjoy the beautiful and unique ecology of Beech Mountain. By enhancing the trail system and increasing its interconnectedness, Beech Mountain can better access to more routes and functional uses for its residents and visitors.

#### Strategy LU.G4.S1: Update the Beech Mountain trail map and maintain a plan for linkages and destinations

Beech Mountain will evaluate and update the current trail system along with possible destinations, linkages, problems and opportunities along the trails. By prioritizing the issues, the town can develop a plan to provide a more complete trail system that makes our mountain's beauty accessible to all Beech Mountain residents.

#### Strategy LU.G4.S2: Encourage or Require Trail Dedication in new developments

Based on the proposed trail plan, the town will require new trails to be dedicated and constructed by developers and/or landowners when the trails have the current or potential ability to provide a needed linkage between the new developments and key destinations.  
[Adopt official Trails Master Plan – develop ordinance for dedication/construction of trail linkages]

### Policy LU.G4.P2: Acquire Land for Recreational Purposes

Recognizing the importance of recreation on the quality of life in Beech Mountain, the Town should adopt and adhere to a policy of acquiring property for recreation purposes when possible.

Strategy LU.G4.S3: Set aside funds in the Capital Improvement Plan and in the Town's annual budget for the acquisition of land. Use recreation or conservation prioritize parcels for acquisition and be proactive in negotiations to secure these.

## Goal LU.G5: Develop a Plan for the Future Land Use of "Buckeye Hills West" and "Westerly Hills"

To the north and west of Buckeye Lake lie vast expanses of uninhabited, vacant residential lots-- the "Westerly Hills" and "Buckeye Hills West" subdivisions. These areas, taken together with the surrounding large tracts, comprise over 500 acres. Though these areas are vacant, they are far from untouched. Rough graded dirt roads abound and crisscross the landscape, providing access to where prior speculation has subdivided the land into roughly 375 lots in diverse private ownership. Because of their remoteness and the impracticality of development on them, these lots can generally be



acquired for low cost. The fate of these areas presents Beech Mountain with some of its greatest opportunities and some of its greatest challenges regarding land use in the coming decades.

This land holds the potential for many possible uses:

- Sufficient infrastructure investments such as road improvements and water, sewer, and electrical utility extensions could allow these tracts to one day serve the medium density residential purposes to which they were once dedicated.
- If the typical  $\frac{1}{3}$  to  $\frac{1}{2}$  acre lots were conglomerated into larger parcels, they could support low-density residential use, with little or no infrastructure requirements. Inventive town policies and strategies could potentially encourage the recombination of land here to sizes that are marketable and usable.
- The lots have tremendous potential for both active and passive recreation uses. They could serve as anything from a nature preserve to a campground to a mountain biking terrain park.
- The area could support some other type of land use not yet entertained or envisioned.
- Explore potential for Transfer of Development Rights

Future research should analyze the benefits of these and other potential uses and put this issue forth for public input and decision making. It is clear that the Town should develop a policy towards the development of these areas and employ appropriate strategies consistent with that policy. Failing to undertake any stance on these areas will either result in the land continuing to be underutilized or being eventually developed in a sporadic and inconsistent fashion.

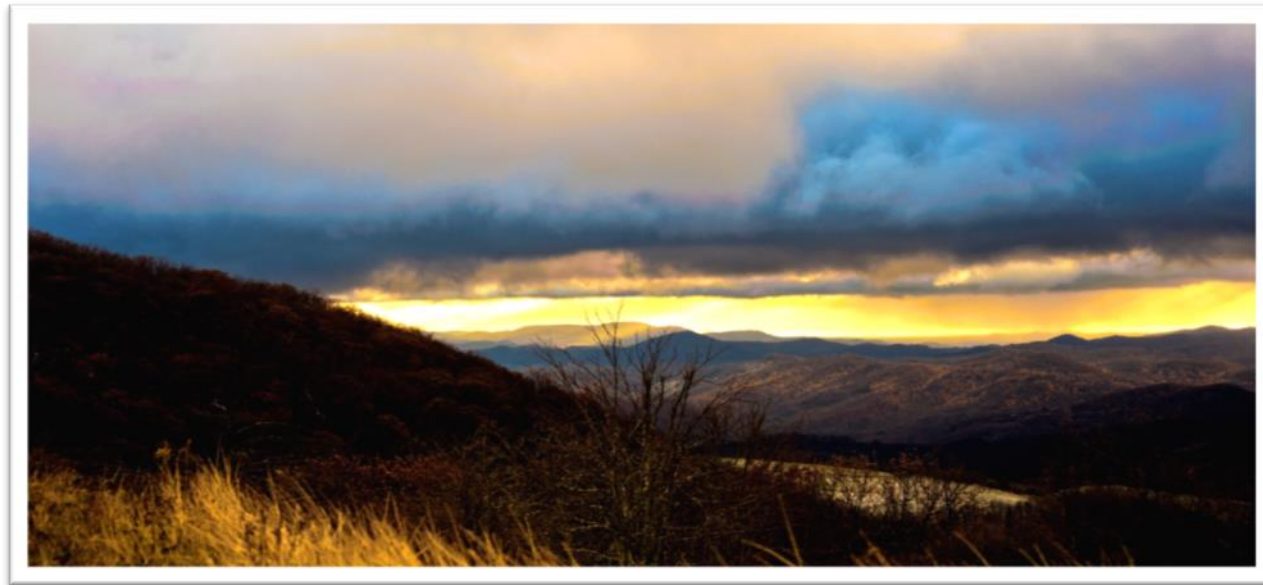


## Land Use: Discussion and Conclusion

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This plan has laid out several strategies and policies by which the Town can continue to grow, but grow *smarter* and grow *better*. These policies include adapting “smart growth principles” that have been successful in other municipalities to the unique characteristics of Beech Mountain. They focus on conserving and protecting our open spaces and prioritizing recreational land use through methods like encouraging infill development. They also include being proactive regarding the utilization and development of Beech Mountain’s large vacant subdivisions in the Westerly Hills and Buckeye Hills West areas, and a pledge to see those areas developed according to an adopted policy, rather than see them developed incongruently and without direction.

Once the rest of Beech Mountain’s land is subdivided and developed, there won’t be any more of it. Therefore, we need to ensure that further development is the right kind of development and that it is done right. Once again, the road for the success of Beech Mountain lies in the balance between the competing interests of development versus conservation. It is critical to the Town’s future to plan for both the right amount and right type of growth that will preserve the characteristics that make Beech Mountain special.



## Chapter 6: Community Design, Image, and Character



### CD: Background

#### CD.G: Community Design Goals, Policies and Strategies

Goal CD.G1: Preserve, protect, and continually enhance the friendly small town resort “Character” of Beech Mountain

**CD.G1.P1:** Improve and strengthen our community regulations, including our Zoning Ordinance

**Strategy CD.G1.P1.S1:** Maintain and continually review the Town’s development and zoning regulations.

**CD.G1.P2:** Create and Utilize Community Design Regulations/ Guidelines to maintain and improve the appearance and functionality and character of the built environment

**Strategy CD.G1.P2.S1:** Utilize Alternative Zoning methods to ensure that development in our Commercial Districts is aesthetically pleasing and functionally appealing

**Strategy CD.G1.P2.S2:** Review and improve Architectural Standards for new development in the commercial district

**CD.G1.P3:** Restore or replace the decaying and aging structures in Beech Mountain

**Strategy CD.G1.P3.S1:** Diligently and equitably enforce condemnation proceedings when necessary

**Strategy CD.G1.P3.S2:** The Town should take steps to see that housing problems are addressed before they reach the level of condemnation.

**Strategy CD.G1.P3.S3:** Develop Rehabilitation Programs and Incentives for decaying structures

**Strategy CD.G1.P3.S4:** Continue to judiciously enforce building codes.

**CD.G1.P4:** Ensure that the Town of Beech Mountain leads by example in matters involving Community Design and Appearance

**Strategy CD.G1.P4.S1:** Consider aesthetics as a vital component of all Capital Improvement Projects

**Strategy CD.G1.P4.S2:** Create Small Area Plans to best utilize town properties in ways that enhance community character

### CD: Discussion and Conclusion

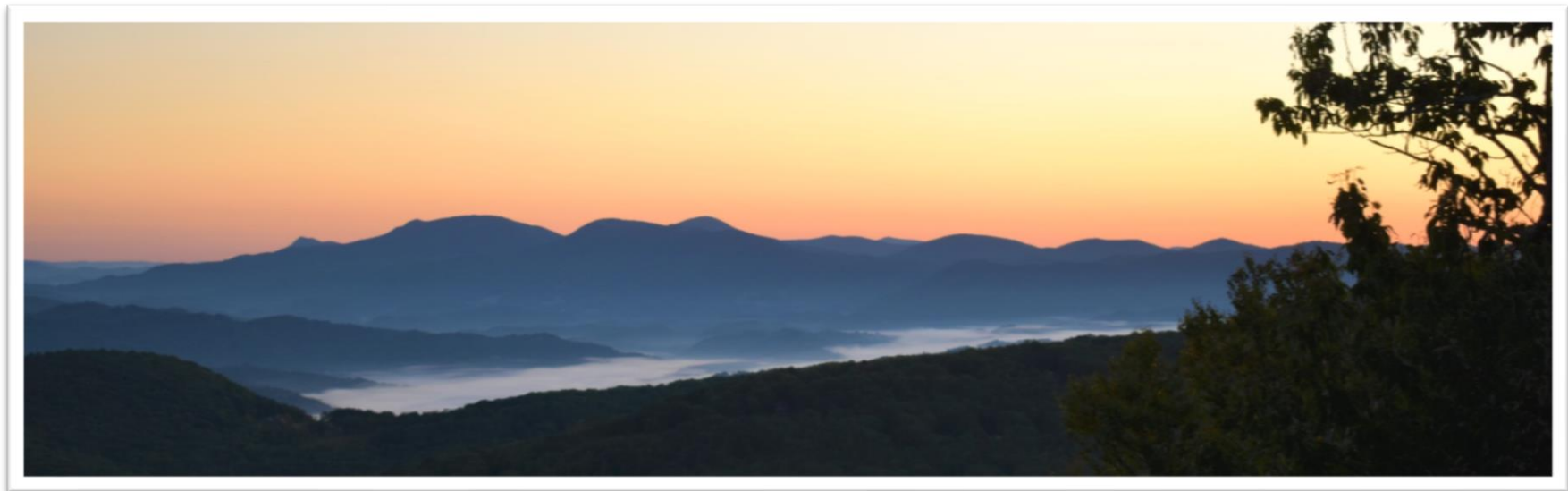


## Background

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**B**eech Mountain has a style and a feel like nowhere else. In response to the question in the Comprehensive Planning Survey of what drew people to Beech Mountain, the answers were harmonious in their reference to our Town's inherent qualities. The responses echoed with praises of our small town's friendly atmosphere, our laid-back way of life, and the rural and recreational character of the area. Beech Mountain is blessed with an innate charm and warmth that few other locales can match. In planning for the future of Beech Mountain, it is important to grasp this intangible "character" and define it, protect it, cherish it, and expand upon it. Doing so is key to keeping Beech Mountain special.

There is a broad spectrum of efforts and activities that can fall under the heading of Community Design, Image, and Character. They all share the commonality of striving to preserve and develop Beech Mountain's appeal and its charm. These include zoning ordinances and regulations designed to ensure that property owners can continue to live side by side harmoniously. They can also include efforts to keep the visual and aesthetic appearance of the town in harmony with its nature and character. It also means preservation of landmarks of historic, natural, or environmental importance. Further, our efforts also need to focus on putting our finger on just what the "personality" of our Town is and taking efforts to expand upon that. This chapter will explore the efforts that the Town must undertake to maintain its image and special character into the future.



## Community Design, Image and Character: Goals and Objectives & Recommended Strategies and Policies

### Goal CD.G1: Preserve, protect, and continually enhance the friendly small town resort “Character” of Beech Mountain

The protection and maintenance of our town’s unique character can be achieved through multiple means. The town can use policies and programs that encourage desired actions or recommend desired outcomes. The town can also use rules and regulations to mandate certain outcomes. This section focuses on the rules and regulations that the town uses to protect private property values and rights of our citizens to peacefully enjoy their homes—and thus ensure that Beech Mountain’s character is not lost.

Policy CD.G1.P1: Improve and strengthen our community regulations, including our Zoning Ordinance

The primary set of laws that provide for community harmony and appearance is the Town of Beech Mountain’s Zoning Ordinance. An old adage says that “good fences make good neighbors.” A saying that is more appropriate for today’s world might be that “Good zoning ordinances make good neighbors.” To continue to have tranquility and harmony in this resort community, the zoning ordinance must be strengthened and improved.



Strategy CD.G1.P1.S1: Maintain and continually review the Town’s development and zoning regulations.

Our Zoning Ordinance sometimes produces unwanted results due to the problems outlined above. Often, following the letter of the law results in restricting things that the Town is not really trying to restrict. Likewise, it also often falls short of mandating the things that the Town really desires. It is clear that our Zoning Ordinance needs a major overhaul.

One possible avenue to approach this issue is through the **creation and adoption of a Unified Development Ordinance or “UDO.”** UDO’s have the benefit of combining regulations that are typically in separate sections of the code (for example zoning, subdivision, erosion control, etc.) under one all-inclusive umbrella. If done well, UDOs can simplify regulations as compared with traditional ordinances and can also present benefits in streamlining enforcement procedures. The biggest benefit for Beech Mountain, however,



may be that the adoption of a UDO would provide an ideal opportunity to reconsider our ordinances as a whole and to ensure that the entire document is congruent with this Comprehensive Plan.

Policy CD.G1.P2: Create and Utilize Community Design Regulations/ Guidelines to maintain and improve the appearance and functionality and character of the built environment

One of the primary reasons Beech Mountain's zoning codes and ordinances exist is to support the Town's goals of being an attractive and inviting town. Yet our ordinances for the most part fail to directly address this goal. Like most traditional zoning ordinances, Beech Mountain's ordinance generally focuses on separating what are deemed "incompatible" land uses (to mixed effect). But it has not necessarily been helpful in improving the physical appearance of the town or ensuring that a certain type of land use in a certain area takes into account the form and functionality desired by the town.

Beech Mountain is not alone in this regard. There has been a growing acknowledgement of the deficiencies of traditional "Euclidean" zoning many communities around the country. As a result, new types of "alternative zoning" have emerged largely as a rebuttal to these deficiencies. When our zoning ordinances are updated and amended as discussed above, the new versions should incorporate some of the best practices afforded by these new zoning techniques to ensure that the character of the built environment is protected and accentuated.

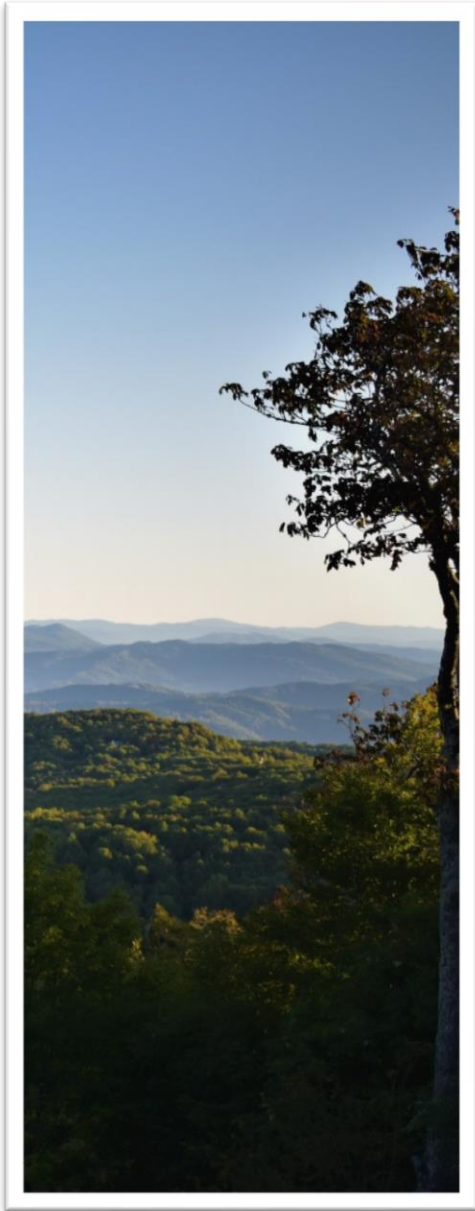
Strategy CD.G1.P2.S1: Utilize Alternative Zoning methods to ensure that development in our Commercial Districts is aesthetically pleasing and functionally appealing

It is recommended that the zoning for Beech Mountain's business districts (an area generally comprised of the corridor along Beech Mountain Parkway from the Town Limits near Town Hall to the Ski area), be altered to take advantage of the benefits of form based codes and other alternative zoning measures. Some specific recommendations that these codes could incorporate include:

**Landscaping Requirements and Buffers.** Typical "strip development" with its abundance of pavement and concrete and its lack of trees is incompatible with our pristine surroundings and should be avoided. Landscaping requirements and buffers could be used to ensure that the commercial districts on Beech Mountain do not lose our "mountain" feel. Furthermore, landscaping using common elements and a common theme throughout the commercial district would provide a sense of continuity and uniformity to the area. It would provide visual reminders of the unique and special place we are in and serve to "tie together" the beautification theme that the Town is striving for.

It is recommended that the Town develop a list of species for planting (should be all native species and should be substantially similar to those planted along the Town Streetscape) and that the town require developers to plant a certain number of trees or shrubs along its road frontage for every set number of square feet within the setback adjacent to a street. These street trees would provide visual interest, continuity and scale to the corridor as well as a





buffer for less attractive features such as parking areas. In addition, a shrub hedge or low masonry wall may be appropriate and could be encouraged, particularly where a parking lot is adjacent to the street.

The Town could also consider requirements for screening of unsightly land uses. Loading and service areas, utility facilities and other necessary, but often unsightly, elements of a development could be required to be screened by vegetation from adjacent public streets, parks, sidewalks, etc.

**Public Space.** Mandate that property in the commercial district be set aside along the right of way frontage for pedestrian walkways and landscape areas.

**Relax controls on usage** in the Commercial District, and instead focus more on the form that the built environment will take.

**Utilize maximum front setbacks** (“build-to lines”) along the right of way rather than traditional minimum setbacks. This would ensure that every building fronted on the public road, which would help to provide a visual “frame” for the development. It would also cause businesses to locate their parking in the rear. People would then see the buildings rather than their parking lots and would feel invited into a public atmosphere rather than feeling pushed out.

**Develop “view corridors” in which no structures or plantings could obscure views**

View corridors could be implemented by a set of rules that consider the visual impacts of development. A similar set of regulations has been implemented in Banner Elk, where any development that can be seen from the major transportation corridors (Highways 184 and 194) must incorporate plans for landscape buffering and screening to obscure their visual prevalence. Such a plan in Beech Mountain would protect prominent vistas from major corridors or overlooks.

Strategy CD.G1.P2.S2: Review and improve Architectural Standards for new development in the commercial district

One of the characteristics that makes Beech Mountain unique is the broad variety of building styles found here. Yet if the Town’s ordinances are to change focus from how a property is used to the form that the use takes, it is necessary to establish a set of minimal architectural guidelines to achieve some of the elements that are deemed desirable and to prohibit some of



the elements that would be unwanted. Our goal should not be to so rigidly control the form of the physical environment so as to stifle the flexibility of design. Rather, development should be encouraged to respect patterns that have previously been established and create a visible harmony with its context. Therefore, it is important that any set of standards that are developed be minimal, and address only certain areas, general in nature, that are universally held to be beneficial to the community.

**Design Guidelines Handbook** – If the Town pursues these policies, it should also provide an illustrated set of design guidelines to guide builders and developers through the requirements and to better ensure the desired results. While it is only proposed that rules regarding architectural standards be applied to commercial districts, such a guideline could also be distributed to residential builders to recommend and suggest best practices.

#### Policy CD.G1.P3: Restore or replace the decaying and aging structures in Beech Mountain

While Beech Mountain is the location of some of the High Country's finest homes, it is also faced with a high number of substandard homes and homes that have been allowed to decay. There are many reasons for this unfortunate fact. One outstanding cause is the simple truth that second homes can be easy to neglect, especially in times of economic hardship. But other factors have also conspired to degrade some of Beech Mountain's housing. Many of Beech Mountain's homes were built in the 1960's and 1970's before there was adequate regulation of building codes and practices. Many of these same homes were sold to retirement age buyers when they were built. Forty years later, the retirees who purchased many of the homes have passed away and left them to their children who may have little interest in or ability to care for a vacation home. Regardless of the underlying causes, it is clear that maintaining and improving upon some of our more neglected housing is one of the biggest challenges to the preservation of Beech Mountain's character.

##### Strategy CD.G1.P3.S1: Diligently and equitably enforce condemnation proceedings when necessary

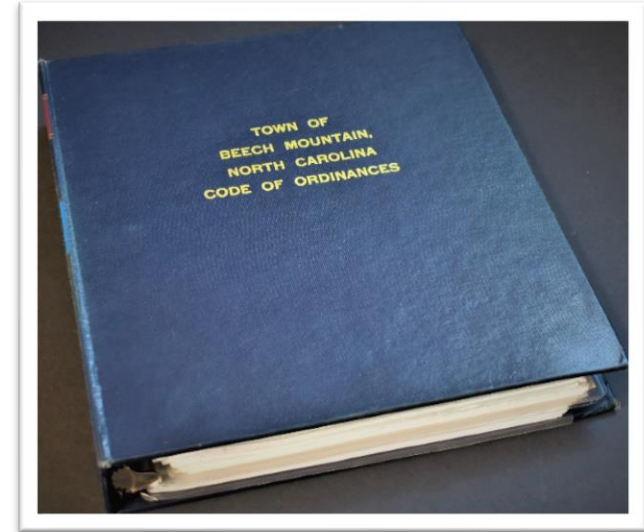
One of the primary methods for addressing the worst of the blighted housing situations is through enforcement of condemnation procedures. This process is enforced on a basis of public safety and can be utilized in situations where structures have dilapidated to the point that they pose a danger to inhabitants or to the community. Beech Mountain should continue to maintain a running list of properties that meet these criteria and pursue the enforcement of these laws.

##### Strategy CD.G1.P3.S2: The Town should take steps to see that housing problems are addressed before they reach the level of condemnation.

Condemnation is obviously a "last resort" type of measure. The Town, the property owner, and the neighborhood all lose when structures are dilapidated to the point of condemnation. Beech Mountain's Code of Ordinances also contains provisions regarding "Minimum Housing" criteria- which are a set of requirements for essential components of housing to ensure that it is habitable. This set of regulations provides for penalties and enforcement to ensure that these criteria are met, but the action does not necessarily reach the level of severity of condemnation. These regulations should be re-written, strengthened, and more ardently enforced to reflect a Town policy of "Fix it or Sell it" with regard to derelict housing.



A re-vamped Minimum Housing Code program could include features such as a graduated penalty system. For example, the first penalty could be \$50, but if the issue is not addressed within a set amount of time subsequent penalties would be incrementally higher -- possibly up to thousands of dollars. To ensure that such a system was administered fairly, it would be beneficial to incorporate “checks and balances” such as the involvement of oversight committees. The ordinance could be set up such that before proceeding past the \$50 fine, the situation would need to be reviewed by a committee or board (possibly the Planning Board or perhaps the Town Council). Higher penalties would only be issued with committee approval. The result of such a system would be that it would become more expensive to keep a home in disrepair than to fix it. Owners who have absolutely no desire to repair their home would realize that their best option would be to sell the home and allow someone to buy it who would take better care of it. In the worst-case scenario, the Town would acquire a lien on the property due to unpaid fees, could foreclose upon the property, and sell it to another party who would presumably take better care of it.



Strategy CD.G1.P3.S3: Develop Rehabilitation Programs and Incentives for decaying structures  
Condemnation and Minimum Housing Code actions approach derelict housing from a punitive perspective—that is, they require people to take certain actions “or else”. Beech Mountain has the opportunity to be forward thinking in order to develop programs and strategies that address these issues from a more positive perspective and encourage intervention and rehabilitation of structures voluntarily, long before they reach a critical level of decay or dilapidation. A starting point might simply be to ensure that homeowners are notified when problems with their homes are detected. Another possibility might be a program to inform owners of dilapidated properties of programs available through the Federal Government, such as HUD 203(k) loans.

However, Beech Mountain’s residents, often second homeowners, will not under most circumstances qualify for Federal programs that tend to be need or income based. Therefore, Beech Mountain may desire to take steps on its own towards a solution. Such a program could involve reduced permit fees for homeowners who voluntarily undertake repair work to basic elements of a structure’s integrity. Going a step further, Beech Mountain may even desire to initiate its own lending program in which property owners could borrow the money necessary to do certain improvements accepted by the Town. The Town could develop the criteria for such loans such as requiring the applicant to prove a hardship in order to qualify.

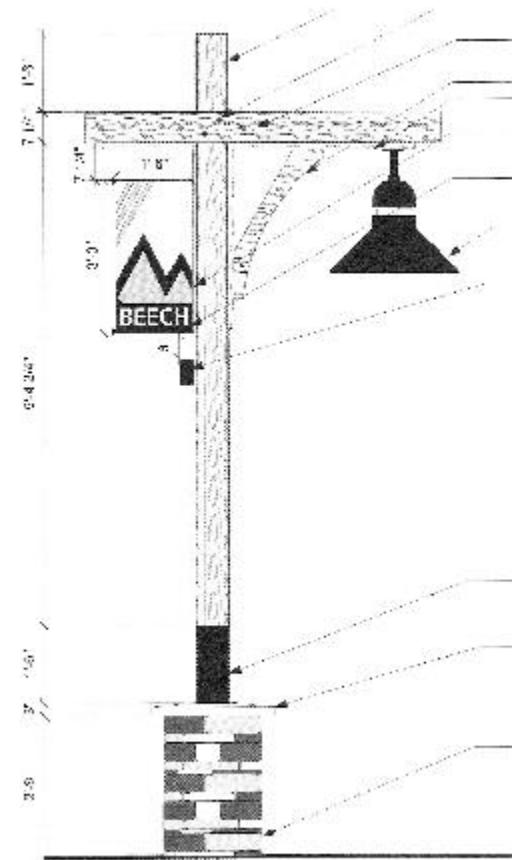


One of the best methods to prevent the dilapidation of homes is to ensure that they are built safely and sturdily in the first place. This is especially important in Beech Mountain due to the extreme nature of our physical climate with its high winds, freezing temperatures, heavy snows, and driving rains-- and the abuse that these elements can render upon buildings. Beech Mountain must continue to provide top-notch inspection services to ensure that new homes and renovation or repair projects are accomplished in accordance with the NC State Building Code and are safe, strong, and durable.

Taking the steps recommended in this chapter to improve the aesthetic appearance of Beech Mountain will not always be easy. Often these requirements will be burdensome or tedious. Often, they will be expensive. But *the Town should lead by example in this arena*. Towns by their nature generally own many prominent buildings and properties, and the appearance of these focal points is a great starting point for improving the appearance of the community. The Town itself should be a shining example in matters regarding Community Design and Appearance and should be a positive force in preserving and enhancing the Town's charm and character and bringing this plan's visions to reality.

Whenever undertaking Capital Improvement Projects of any kind, be it the construction or renovation of structures or parks or even the management of vacant Town owned properties, the Town should make the aesthetics an important part of the decision-making process. The necessities of functionality and cost restraints often dominate the planning and design process for public projects. However, a little extra cost and effort can often accomplish the same goals in a way that adds to rather than detracts from the character of the community. The town should perceive every public project as an opportunity to improve the appearance of Beech Mountain.

The Town should be forward thinking in conceptualizing creative ways to maximize the potential of lands that it owns or manages to beneficially affect the character of the community. The creation of conceptual small area plans for prominent Town properties is an outstanding way to begin visualizing positive changes in the landscape. The Town has undertaken several of these plans in recent



years that have been implemented to varying degrees. All of these plans have had positive impacts on the Town's appearance. They include the plans on the following pages:

- The "Bark Park" area that was conceived and built in 2011-12 developed an effective way to utilize an open piece of Town property to fulfill a recreational need. The park has been very well utilized and has employed landscaping and design in a manner that is beautiful as well as functional.
- The Streetscape Plan created in 2011 began the dialogue regarding pedestrian connectivity through the main business area of Beech Mountain Beech Mountain Parkway as well as beautification of the "Gateway" to Beech Mountain. While full realization of this plan has not yet been accomplished, significant strides have been made towards making Beech Mountain pedestrian accessible.
- The Buckeye Lake Recreational Use Plan adopted in 2013 provides the framework for using the Town's drinking water reservoir for recreational purposes. The plan highlights several projects that will increase the utilization and enjoyment of this beautiful and scenic area.

#### Further Opportunities for Small Area Plans

In the coming decade, the Town will likely be presented with an opportunity to create such a small area plan that could have a major impact on the character of the community. As the current Public Works Department relocates to new facilities, public land will become available in a prime, central setting along Beech Mountain Parkway. This location would be the ideal setting for a pedestrian accessible Center-Town public park. Such a park holds immense potential to draw people to our commercial district and to invigorate our economy. For an example of such a park that has been enormously successful, see the vibrant public space in the center of Blowing Rock, NC.

Other areas for which such design plans should be created include:

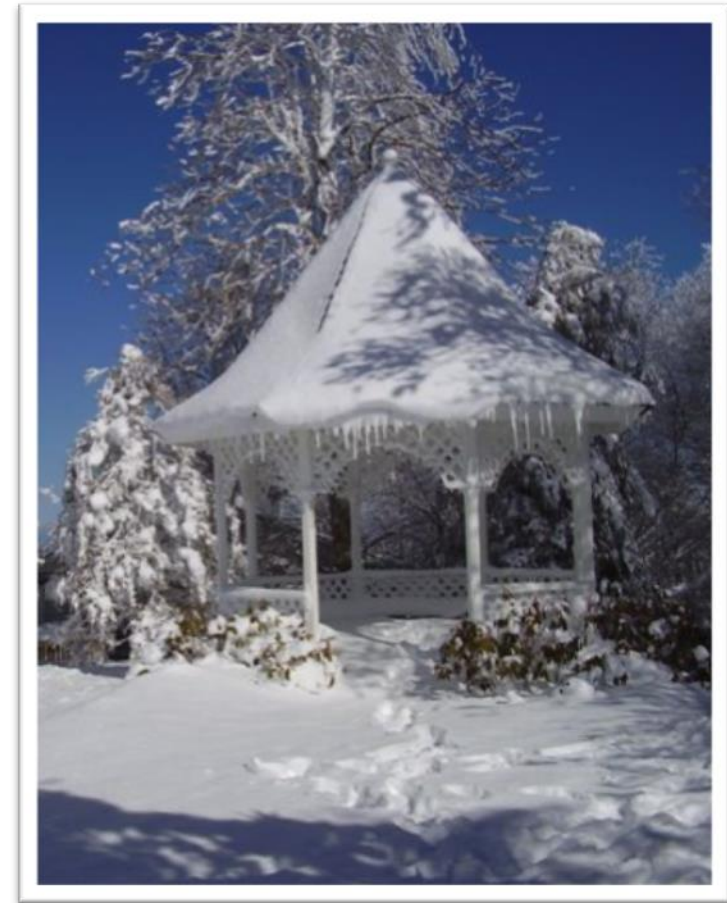
- The "Parkway Overlook" area and the Perry Park Trail Trailhead
- Buckeye Recreation Center/ Recreation Area, especially improving the parking situation
- Streetscape areas in the commercial area near the entrance to Beech Mountain Resort
- Switchback landscaping areas along major roads
- Sled Hill improvements



## Community Design, Image, and Character: Discussion and Conclusion

Beech Mountain has a special character and charm that makes this community so appealing. These intangible but persistent qualities have drawn people to “Eastern America’s Highest Town” since its inception and they must be protected and preserved. This chapter has discussed ways to maintain and improve the character and charm of Beech Mountain. Methods that have been discussed include initiatives such as strengthening and improving our zoning regulations, diligently and equitably enforcing minimum housing standards and creating small area plans that visualize and conceptualize improvements for Town owned or managed property. Enacting policies and programs to improve the aesthetics and character of the community is not always easy. Though such programs hold the potential to pay dividends in the long term they are not always popular at the beginning-- especially with the people who are cited in violation of such stipulations. Furthermore, if accomplished in an overly aggressive manner, such policies can be seen as intrusive overregulation, and can be a deterrent to positive change. These negative feelings are only exacerbated when the actions required of a violator are costly. Other difficulties arise in the enforcement of these regulations. Zoning regulations are notoriously difficult to enforce, requiring substantial tact on the part of staff, and requiring substantial staff time. Even a perfectly conceived and written idea will fail if it cannot be effectively put into practice. For these reasons the Town should approach these areas cautiously, fully securing the “buy in” of citizens and stakeholders before embarking on these policies.

Nevertheless, it is clear that Beech Mountain is a special place whose values are cherished by those fortunate enough to live and visit here. Results of the Comprehensive Survey indicated that Beech Mountain’s population strongly supports regulation of aesthetic issues and the strengthening of community regulations such as the zoning ordinance regardless of the potential drawbacks to such programs. The people of Beech Mountain have entrusted the Town to protect its character, and when possible, make it even better.



## Chapter 7: Transportation



T: Background

T: Beech Mountain Roads Map

T.G: Transportation Goals, Policies, and Strategies

**Goal T.G1:** Provide a top level of service on our transportation network within Beech Mountain

**T.G1.P1:** Improve roads in a manner that enables efficient use of resources

**T.G1.P1.S1:** Continue to implement gravel/ pavement maintenance schedule

**T.G1.P1.S2:** Look for ways to improve connectivity between major destinations

**T.G1.P1.S3:** Continue to monitor the State's approach towards accepting existing municipal roads

**Goal T.G2:** Ensure that Beech Mountain is accessible

**T.G2.P1:** Support and undertake measures that make it easier to get to and from Beech Mountain

**T.G2.P1.S1:** Support measures such as NCDOT plans that would enhance major arteries that lead in the direction of Beech Mountain

**T.G2.P1.S2:** Improve accessibility of Beech Mountain by improving Buckeye Creek Road

**T.G2.P1.S3:** Create/ Improve other access routes

**Goal T.G3:** Provide for increased safety of our transportation infrastructure

**T.G3.S1:** Continue to pursue / enforce Right of Way clearance

**T.G3.S2:** Improve communication for problem notification

**T.G3.S3:** Continue and improve the effective snow removal program

**T.G3.S4:** Continue to implement driveway and curb-cut regulations and consider modernizing Beech Mountain's Driveway Entrance Manual

**T.G3.S5:** Continue to implement the signage upgrade plan

**T.G3.S6:** Emplace guard rails at steep drop-offs

**T.G3.S7:** Consider emplacing low-impact speed regulation devices at various locations

**Goal T.G4:** Increase transportation modes and options

**T.G4.P1:** Provide for alternative methods of travel where practical

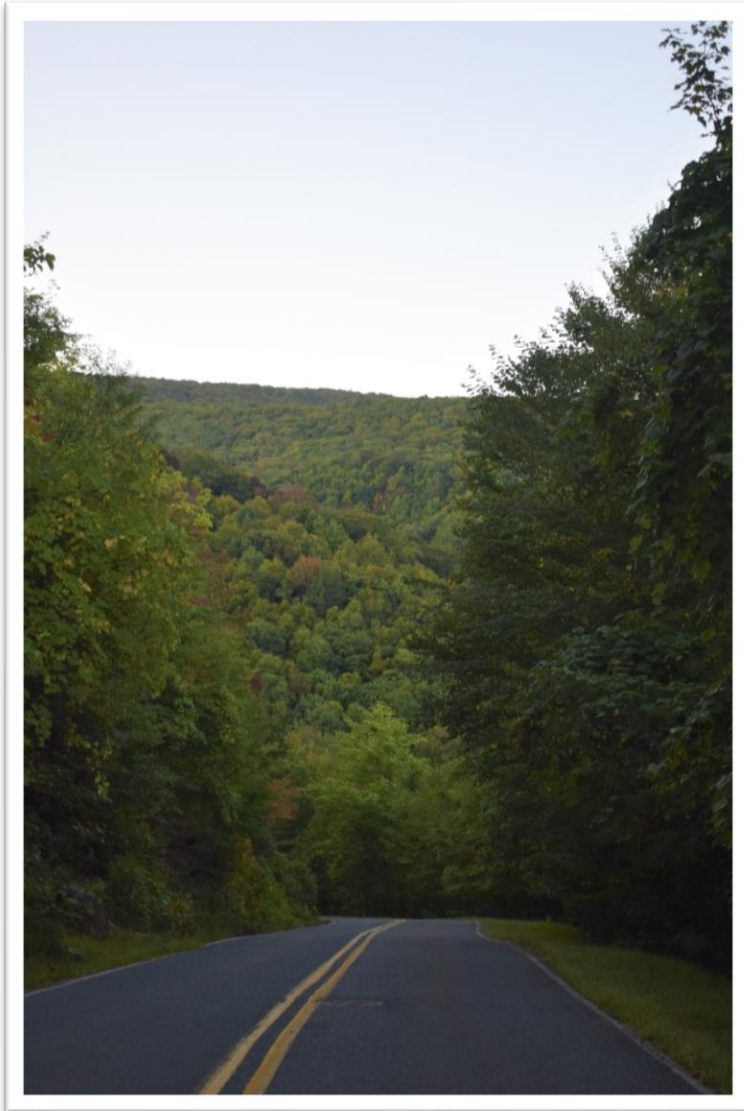
**T.G4.P1.S1:** Increase pedestrian amenities

**T.G4.P1.S2:** Develop a plan to make golf carts a viable means of transportation for some locations on the mountain

**T.G4.P1.S3:** Plan for bike lane improvements when repaving roads

T: Discussion and Conclusion





## Background

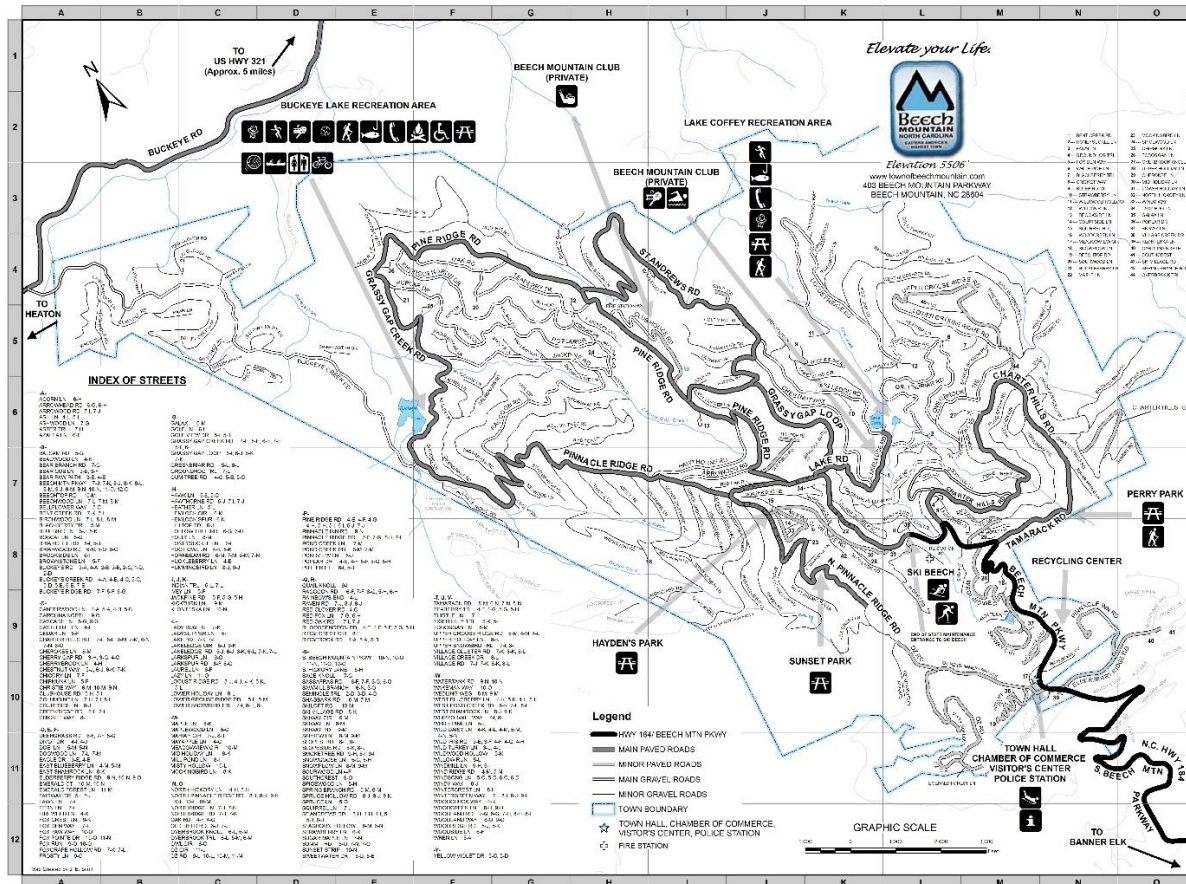
**T**ransportation in Beech Mountain presents an extremely unique set of challenges and opportunities. Unlike most cities and towns, addressing congestion and traffic flow are not major concerns here. While Beech Mountain may be, to a large extent, immune from the major traffic concerns facing other areas, there are an abundant set of different problems with which Beech Mountain is faced. From dealing with our extreme terrain and weather, to maintaining and managing a vast network of paved and unpaved roads, the challenges here rival those of anywhere else.

Safe, convenient, and efficient transportation have major impacts on the overall quality of life of an area. They also form one of the most essential and fundamental functions of the Town. While there can be much debate over the long-term importance of such Town functions as zoning regulation or aesthetic or economic policies or programs, there is little dispute that without maintaining its road infrastructure, the Town would decline.



# Beech Mountain Roads Map

SEE APPENDIX FOR FULL SIZE MAP



## ROAD STATISTICS

65.62 MILES OF MAINTAINED ROADS

- 45.23 miles stone or gravel
- 20.39 miles hard surfaced

198 ROADS

.2 miles of road per capita

\*Highest ratio in the State of North Carolina!!

For comparison:

BLOWING ROCK- .024 mi. per capita

BANNER ELK- .011 mi. per capita

ASHEVILLE- .004 mi. per capita

BOONE- .002 mi. per capita

Source: NCDOT Powell Bill Data 2011

Beech Mountain receives only \$1669.32 per mile of maintained road in State Powell Bill funding. For comparison, Boone receives \$9783.05 per mile.

Requires approximately 8,000 tons of ABC gravel for road stabilization per year



## Transportation Goals, Policies, and Strategies

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### Goal T.G1: Provide a top level of service on our transportation infrastructure within Beech Mountain

Maintaining our Town's roads in a high state of usability and functionality is a top priority. The following policies and programs aim to achieve this goal.

#### Policy T.G1.P1: Improve Roads in a manner that enables the efficient use of resources

Providing paved roads encourages development, and Beech Mountain has been no exception to this general rule. Early development under the Carolina Caribbean Corporation was centered around Beech Mountain Parkway, then the Town's only paved route. The paving of Pine Ridge/ Pinnacle Ridge Roads in the early 2000's led to the expansion of the Town in that direction and opened up a whole new flurry of development of new residences in the Westridge and Laurel Gap neighborhoods of Beech Mountain.

When considering future infrastructure projects on Beech Mountain, the town should consider where it wants growth to occur (See Land Use, Chapter 5). Rather than pave outlying roads in the hopes of encouraging new development, consideration should be given to encouraging more infill development for the efficient use of infrastructure resources. Paving the roads in the areas of town that are currently developed would be more efficient because there is already heavy use and demand on these roads. These roads would also be easier to maintain because they are closer in and they are contiguous to other paved roads. Consideration should also be given to the ability to create paved linkages and connections from existing paved routes.

#### Strategy T.G1.P1.S1: Continue to implement gravel and pavement maintenance schedule

The Beech Mountain Public Works Department has currently implemented a gravelling and paving rotation program. It is the goal of the program to ensure that every gravel road surface is maintained at least once every 3-5 years and more highly traveled roads are maintained even more often. Regarding paved roads, the program tries to ensure they are resurfaced approximately every 20 years. Again, more traveled roads and those in greatest disrepair may receive attention more often. In addition to scheduled maintenance, roads in disrepair receive patching, grading, and repair as needed.

This program could be improved by utilizing more advanced analysis techniques to make sure that efforts and funds address the correct roads at the right times. Such analysis could be based on many factors including usage, condition, cost, etc.

#### Strategy T.G1.P1.S2: Look for ways to improve multi-modal connectivity between major destinations

Beech Mountain's sinuous and winding roads can be difficult to navigate. It can take quite a long time to get to a place that is actually geographically very close. Where possible, Beech Mountain should pursue initiatives that will help increase connectivity and decrease travel times.



Strategy T.G1.P1.S3: Continue to monitor the State’s approach to acceptance of existing municipal roads into the NCDOT’s maintenance program.

In certain circumstances, State maintenance of certain larger roads within Beech Mountain could serve to improve the efficiency of Town services. Giving maintenance responsibilities to some of Beech Mountain’s larger roads to the State would allow the Town to more effectively utilize resources on maintenance of neighborhood streets and would lower costs to citizens. However, the increased efficiency that may be achieved must be balanced against the consequences of the loss of Town control over such roads and the Town’s ability to provide more individualized and flexible services to our residents. Currently, NCDOT policy is not favorable to accepting existing municipal roads into their system. Nevertheless, the Town should continue to monitor the State’s approach to accepting roads into their maintenance system and should consider the benefits of turning roads over to the State if the opportunity arises.

### Goal T.G2: Ensure that Beech Mountain is accessible

A quality transportation network means not only the ability to get around in Beech Mountain, but the ability to get here in the first place, and the ability to get from here to somewhere else.

Policy T.G2.P1: Support and undertake measures that make it easier to get to and from Beech Mountain

Beech Mountain is located approximately 40 minutes from the regional center of Boone and approximately 10 minutes up a steep mountain road from Banner Elk, the nearest source for many daily necessities (See chart below for travel times to/ from selected places). Beech Mountain is also nearly two hours from any major airport. While by no means isolated, it is hard to argue that Beech Mountain is not remote. And while distance and freedom from larger cities and their issues provides some of the charm of Beech Mountain, it also causes many difficulties for our businesses and residents. It is extremely rare that anyone “stumbles upon” Beech Mountain while in the area. Contrarily, to get here, you must have meant to come here. And no one passes through Beech Mountain on the way to anywhere else. While it is not possible to overcome some of these geographic constraints, it is possible to advocate for projects and policies that would mitigate some of the problems.

Strategy T.G2.S1: Support measures such as NCDOT plans that would enhance major arteries that lead in the direction of Beech Mountain

The NCDOT is currently undertaking a project to improve NC Highway 105 that would greatly increase the ease of accessibility from Boone and points beyond. As opportunities arise, the Town should support and advocate for such measures, including the improvement of US Highway 184 and US Highway 321. *However, the town should be an advocate for improving these roads in a way that places a high importance on maintaining the character of the landscape and improves roads in the least invasive manner possible.*



Strategy T.G2.S2: Improve the accessibility of Beech Mountain by improving Buckeye Creek Road

Many of Beech Mountain's residents are not even aware that there is a way to get to Beech Mountain other than Hwy. 184/ Beech Mountain Parkway. Buckeye Creek Road provides another entrance to town from the north. Known as the "back gate" this was once a gated entrance. Today it provides open access to the town over a 2 mile stretch of gravel road through an uninhabited area of Town. Though this route might seem remote, it is actually very convenient and functional (see the adjacent chart for comparative travel times from Buckeye Recreation Center to the regional center of Boone and other destinations).

Perhaps more important than its convenience is the role that this route might play in an emergency. Imagine a large forest fire of the magnitude of those experienced in the Western United States travelling quickly up Beech Mountain from the Banner Elk area and you will quickly appreciate the importance of a second exit to the Town. This road should receive high priority on the improvement list because it is important as a relief valve or evacuation route in the event of an emergency.

Strategy T.G2.S3: Create/ Improve other access routes

Besides Buckeye Creek Road, there are other routes that do, or potentially could, provide alternative egress routes from Beech Mountain. These routes, in general, are in poor states of development and usability. Quite often they traverse private property. Nevertheless, the Town should, as a matter of policy, encourage that these avenues be improved to a minimal level of usability. These routes needn't be main arteries into or out of town. They should instead be thought of as safety routes that would assist people in evacuation scenarios. They also may serve to relieve some traffic if Beech Mountain grows to build-out capacity in the future. At the next revision cycle of Watauga and Avery County's Comprehensive Transportation Plans, advocate for the NCDOT to acknowledge these routes and include them in the respective county's transportation improvement plans. If possible, the Town should also negotiate with private landowners regarding town improvements to these routes.

### FUNCTIONAL CONVENIENCE OF THE "BACK GATE"

From Buckeye Rec. Center to Boone:

Via Buckeye Creek Road= **39 minutes**

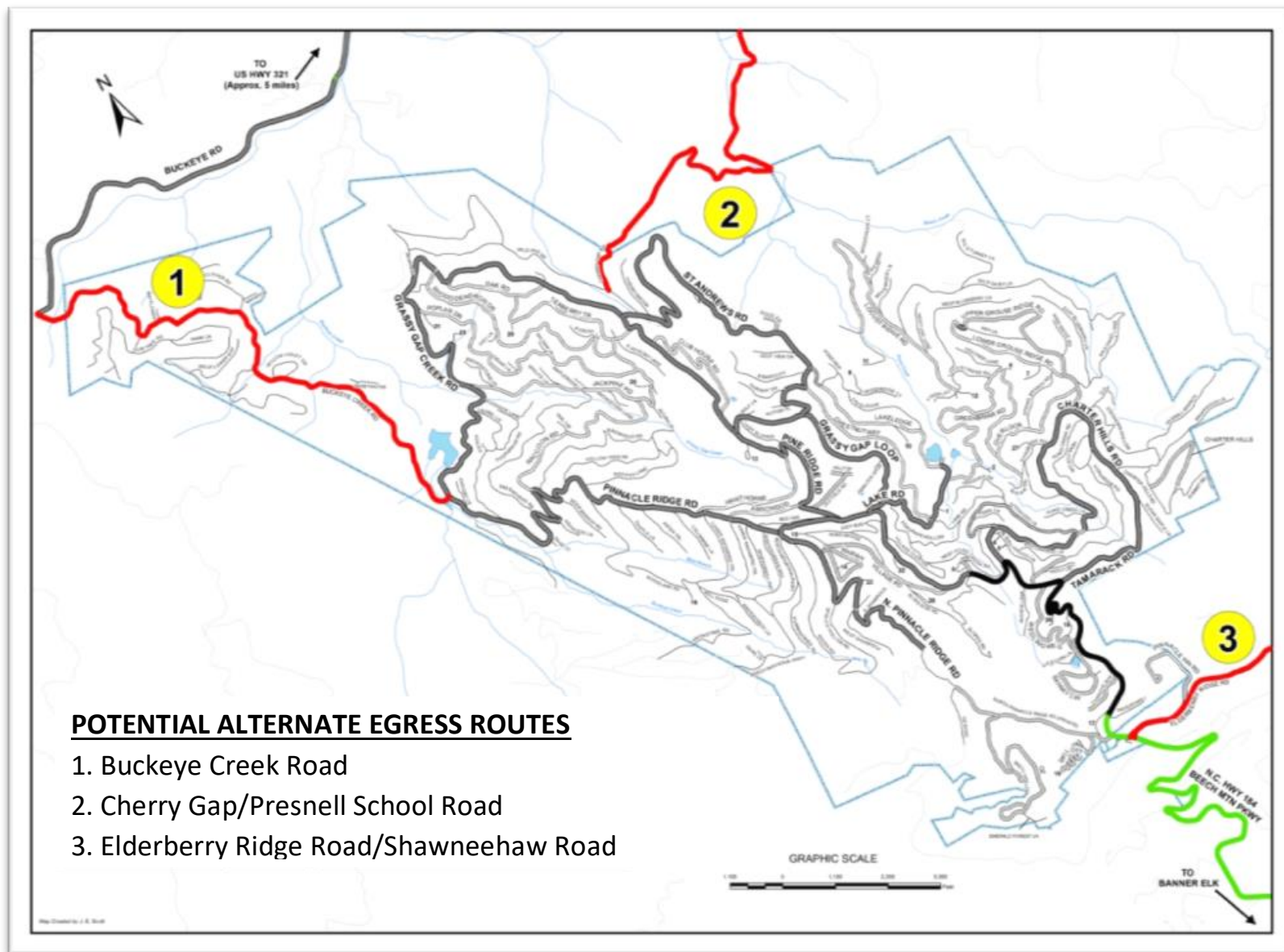
Via Beech Mtn Pkwy/ Banner Elk= **55 minutes**

From Town Hall to Boone:

Via Buckeye Creek Road= **54 minutes**

Via Beech Mtn Pkwy/ Banner Elk= **38 minutes**





### Goal T.G3: Provide for Increased Safety for our transportation infrastructure

Although it is important to create an efficient and functional transportation network, safety should always be of highest importance. Whenever feasible, the Town should support measures and programs to increase the safety of our transportation network. The following strategies are some of the ways the town can help promote the safety of our transportation network:

#### Strategy T.G3.S1: Continue to pursue and enforce Right of Way clearance

Many dangerous traffic situations are due to poor line-of-sight on our curvy and undulating roads. The town should also continue to clear vegetation from road right of ways, especially at intersections and other areas of limited visibility. The Town also should vigilantly prohibit encroachments into the right of way by landscaping, parking, etc.

#### Strategy T.G3.S2: Improve communication for problem notification

Citizens or visitors often know about problems with roads before the town. The town should consider ways that make it easy for that information to be quickly relayed to maintenance personnel. One means may be to implement an on-line problem “drop box” where citizens can quickly and easily report troubles with the transportation network such as potholes, drainage problems, snow removal issues, etc.

#### Strategy T.G3.S3: Continue and improve the effective snow removal program

Snow and ice on the roads can pose some of the greatest challenges to motorist safety. The Public Works Department strives to provide excellent service in clearing the roads and is quick to plow and chat our roads as soon as snow and ice fall. The town is equipped with the machinery for placing rock dust (chat) on snowy roads. Chat is the best method for providing traction on our large number of gravel roads, but is not as effective as road salt on paved roads. In the future, the town may consider acquiring the infrastructure necessary to salt our paved roads as well as chat on the gravel roads.

#### Strategy T.G3.S4: Continue to implement driveway and curb-cut regulations and consider modernizing and updating the Beech Mountain Manual on Driveway Regulations

Beech Mountain requires permits to connect driveways to town roads. The standards for permit approval include safety precautions such as the assurance that water drainage (and ice) from a driveway will not drain into the road. Beech Mountain’s manual on Driveway Entrance Regulations, however, is outdated and needs improvement. The manual could incorporate other standards that would ensure adequate sight distance from driveways as well as other safety improvements found in more modern driveway manuals. Also, the Town should discuss the driveway regulations’ restriction against driveways accessing multiple properties and determine if that policy should be continued.

#### Strategy T.G3.S5: Continue to implement the Town’s road signage upgrade plan

Visible and adequate signage can significantly contribute to safer roads. In 2011 the Town developed a plan to upgrade our signage to meet Federal standards for retro-reflectivity and night visibility. A major facet of this plan is the use of GIS technology to keep better



records regarding the location and condition of our signs. This data could be used to better monitor the signs and to implement replacement programs.

Strategy T.G3.S6: Identify steep drop offs and emplace guard rails

There are several places on our roads where the shoulder drops off precipitously from the edge of the road. These locations should be identified, and guard rails emplaced to help prevent serious accidents.

Strategy T.G3.S7: Consider emplacing low impact (or no impact) methods of regulating speed at various locations throughout town

Beech Mountain has a town-wide speed limit of 25 mph, which is adequate to promote safety on our roads. However, there are several locations where the design of the road, its grade, lack of curves, etc. contribute to a situation where it is easy to exceed the speed limit without intending to do so. The Town should consider methods of better regulating speed at these locations by using devices or techniques such as “rumble strips,” flashing lights on speed limit signs, or painting of the roadway, among others. Because past experience has shown “speed bumps” to be impractical solutions for Beech Mountain, the type of device used should be one that would accomplish its objective of limiting vehicle speed and ensuring public safety while also minimizing impact on vehicles, snow plows, and emergency equipment.

## Goal T.G4: Increase Transportation Options and Modes

Beech Mountain was originally designed and planned with the automobile in mind. The road layout and the density of the development were meant for people to drive to their homes and their destinations. Overcoming this intrinsic pattern would be difficult if not impossible. This study realizes that the personal automobile, at least for the foreseeable future, will remain the paramount mode of transportation in Beech Mountain. Nevertheless, times have changed since Beech Mountain was conceived in the 1960’s. Gas is no longer cheap, and society has begun to realize the negative environmental impacts of an automobile centric society. Furthermore, there is much evidence that people enjoy an increased quality of life when alternate means of transportation are made available to them. Although travel to Beech Mountain will always require a car to get here, there is potential for other means of travel to access destinations on the mountain once you are here. Short trips to visit friends on the mountain, trips to the Club, and trips to the general store or our restaurants all could possibly be made by alternate means.

Policy T.G4.P1: Provide for alternative methods of travel where practical

Strategy T.G4.S1: Increase pedestrian amenities

The ability to walk to nearby destinations dramatically increases quality of life in a locale. The benefits of developing a walkable community are enormous and include health and wellness and increased property values. Furthermore, studies over the past ten years by organizations such as the Urban Land Institute have indicated multiple economic benefits to businesses of walkable areas. This is especially true of pedestrian friendly tourist areas, where tourists are attracted to smaller, human scale retail centers that successfully mix commercialism with relaxation. There is just something about walking to a



destination rather than driving that is liberating and relaxing- connotations that are well suited to Beech Mountain's Resort nature.

In 2009, the Town of Beech Mountain developed and adopted a streetscape improvement plan that calls for pedestrian pathways from the commercial "gateway" of Beech Mountain located near Town Hall to the "Parkway Overlook" near the Beech Alpen Inn, and then from there to Beech Mountain Resort (Ski Beech). These trails would provide much needed pedestrian accessibility throughout Beech's commercial district. A secondary goal of the plan was to create a connection from Beech's commercial district to its trail system, via a path to Perry Park and Upper Pond Creek Trail. This plan is included herein as Reference C.

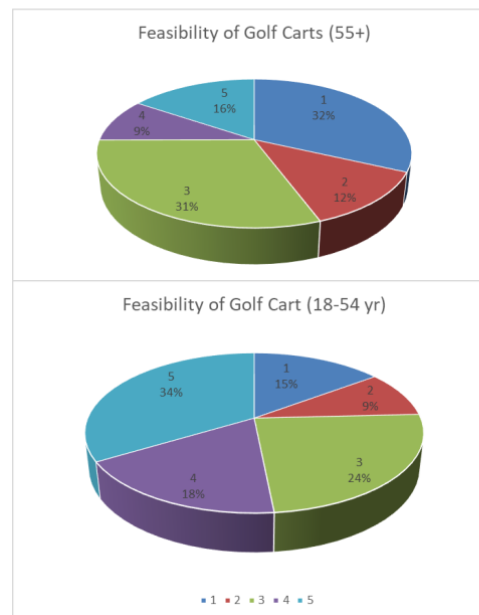
As the town's pedestrian transportation plans are closely intertwined with its recreational trails program, also see the trails program in the Recreation chapter of this plan.

Strategy T.G4.S2: Monitor and review the use of golf carts a viable means of transportation for some locations on the mountain and maintain a strategic plan

Golf Cart communities have been extremely successful in various locations in the United States, especially in resort communities. Peach Tree City, GA provides an excellent example of a municipality that has thrived as a resort/ retirement/ second home destination due to its golf cart infrastructure. Residents and visitors cherish the ability to travel in the open and outdoor feel of the carts rather than embark on an automobile trip for every small necessity.

While there are convincing arguments either way as to whether such a program is desirable here, there is consensus that there is at least some potential for golf cart transportation in

## Feasibility of Golf Carts



- 44% of respondents 55 and older rated their position towards increasing the feasibility of golf carts as "opposed" to "very opposed"
- On the other hand, 52% of respondents 18-54 rated their position towards increasing the feasibility of golf carts as "supportive" to "very supportive"
- Both groups had a large group of neutral respondents of 31% and 24% respectively

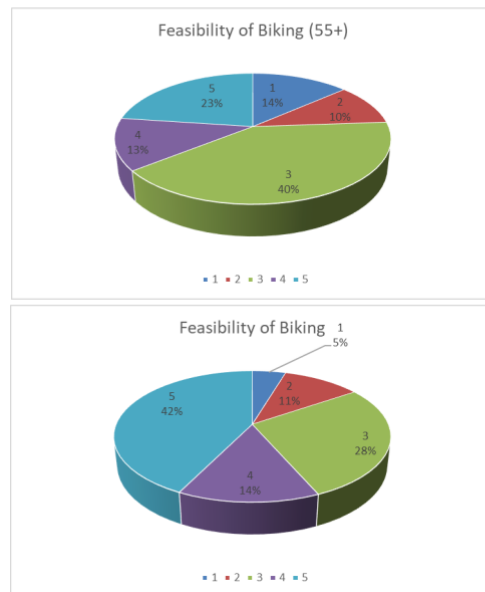


Beech Mountain. However, for such a plan is to succeed, safety must be the highest priority. While the town-wide 25 mph speed limit necessitated by our curvy mountain roads mean that many golf carts can nearly keep up with automobile traffic, it is nevertheless clear that many areas of the mountain are not amenable to the mix of vehicle types on our roads. For these areas and for areas between destinations that could expect high levels of golf cart traffic, the plan should devise alternative golf cart only routes if possible.

#### Strategy T.G4.S3: Plan for bike lane improvements when repaving roads

Beech Mountain's steep climbs are well known as the training location for champion cyclists. Lees McRae College in the adjacent town of Banner Elk is home to a National Championship caliber cycling team. Many cyclists venture to this area to follow in their tire tracks and train on our challenging hills. For their safety, we should plan for extra width for bike lane improvements along roads that constitute major bike routes. Also, the Town should advocate for bike lane improvements in NCDOT plans for Beech Mountain Parkway and Hwy. 184. For more info on biking in Beech Mountain, see [www.bikebeechmountain.com](http://www.bikebeechmountain.com).

## Feasibility of Biking



- 40% of respondents 55 and older indicated they were neutral on the issue of increasing the feasibility of biking
- Whereas 56% of respondents 18-54 rated increasing the feasibility of biking as “supportive” to “very supportive”
- Another 28% of respondents 18-54 indicated they were neutral on the issue



## T: Discussion and Conclusion

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As has been mentioned, Beech Mountain faces a unique set of challenges regarding its transportation networks. The following discussion attempts to identify many of these challenges and propose methods to mitigate their impact.

- The Natural Environment

Many of these challenges are intrinsic to the proposition of having a town located atop one of the highest mountains in eastern America. Our terrain has necessitated sharp curves and steep inclines in many portions of Beech Mountain. Successfully maintaining our roads and paths is a constant battle against these factors.

- Underlying Utilities Infrastructure

Beneath Beech Mountain's roads lies the town's aging water and sewer system. Much of the water and sewer system will need to be upgraded in the coming decades. To pave and improve certain sections of road now would be counterproductive as they would likely be destroyed when utility work commences. To address this potential conflict, it is critical that road improvement schedules and utility improvement schedules be synchronized. This should ideally produce a situation in which, when all other factors are equal, the utilities underlying roads that have a high ranking on the paving priority list should be replaced first. Likewise, the paving priority list should give precedence to those roads that either currently have adequate utilities infrastructure, or those that have utilities infrastructure that is scheduled to be replaced soon.

- Difficulty Acquiring Right of Way

Beech Mountain's property ownership and development patterns have rendered it difficult to accomplish projects such as bike lanes or sidewalks or road widening. The roads simply were not designed with adequate width to accommodate these items. In many locations, the road was not built to accommodate more than one car width at a time. This often results in a dangerous situation where one car has to pull over so that another can pass. The town should identify these areas and determine which areas merit acquisition of right of way.

- Specific Problem Areas

Certain areas of Beech Mountain Special present specific problems that should be addressed uniquely, such as parking and winter access to the Skiloft/Beechtop areas. The town should develop a list of these problem areas and special project plans should be developed to address them.

## Conclusion

Maintaining the Town of Beech Mountain's extensive Transportation network is a critical service to its citizens and visitors. Both literally and figuratively, our roads provide our lifeline to the world. Although we face unique challenges and obstacles, the Town of Beech Mountain will continue to serve the users of its transportation network with the highest level of dedication. This plan aims to ensure that the Town's efforts are not in vain, and that our labor addresses issues in a manner that has been forethought and is deliberate with an eye to the future.



## Chapter 8: Water and Sewer

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WS: Background

WS: Current Water System Infrastructure Map and Data

WS.G: Water and Sewer Goals, Policies and Strategies

**Goal WS1:** Adequate Water and Sewer Capacity for our Town's Future

**WS.G1.P1:** Promote conservation of Water Resources

**WS.G1.P2:** Replace undersized water lines

**WS.G1.P3:** Expand capacity of water and sewer treatment facilities

**Goal WS.G2:** Superior Water Quality

**WS.G2.P1:** Protect the Town's watersheds and watercourses

**WS.G2.P2:** Where feasible, utilize BMP's to better manage stormwater

**WS.G2.P3:** Systematically and incrementally replace water and sewer line infrastructure

**Goal WS.G3:** Efficiency in the Delivery of Services

**WS.G3.P1:** Reduce amount of water unaccounted for

**WS.G3.P2:** Reduce the amount of inflow and infiltration

**WS.G3.P3:** Capitalize on GIS technology to understand our infrastructure

**WS.G3.P4:** Utilize effective long-term budgeting tools to prepare for the costs of improvements to the utility systems

WS: Discussion and Conclusion



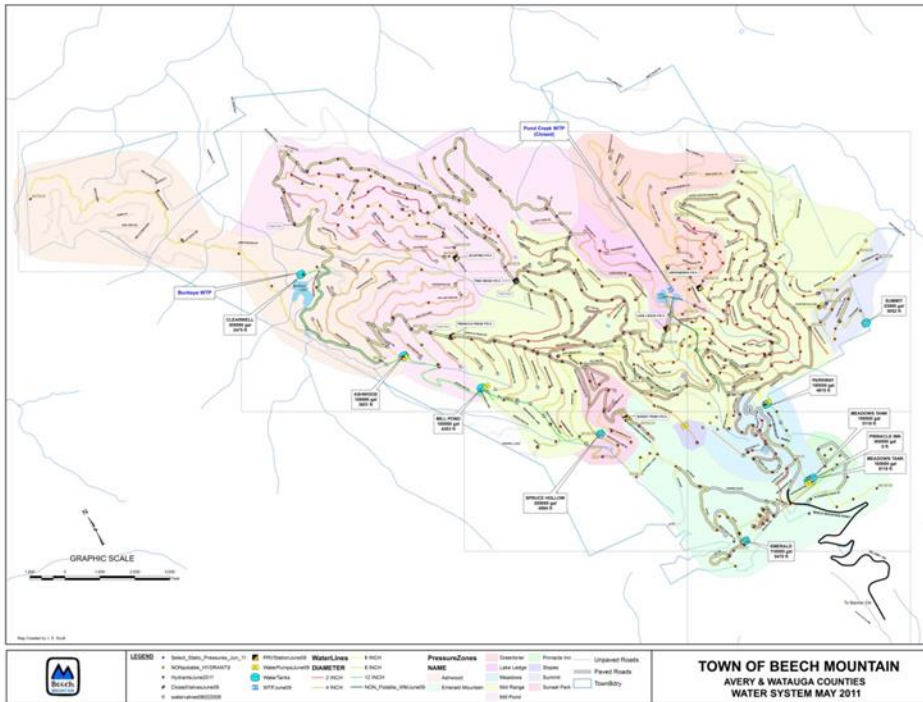
## Background

It has been said that water will be the oil of the next century. Like oil, the availability of clean, potable water is finite, and our growing population will stretch the available sources to their maximum capacity. However, unlike oil, water is an essential, indispensable element of human existence for which we cannot find a substitute. It is no exaggeration to say that without a functional water and sewer system, the Town of Beech Mountain would cease to exist. Our utilities systems, so easily taken for granted, are what have made the idea of a thriving town atop one of North Carolina's highest mountains a reality as opposed to an impossible dream.

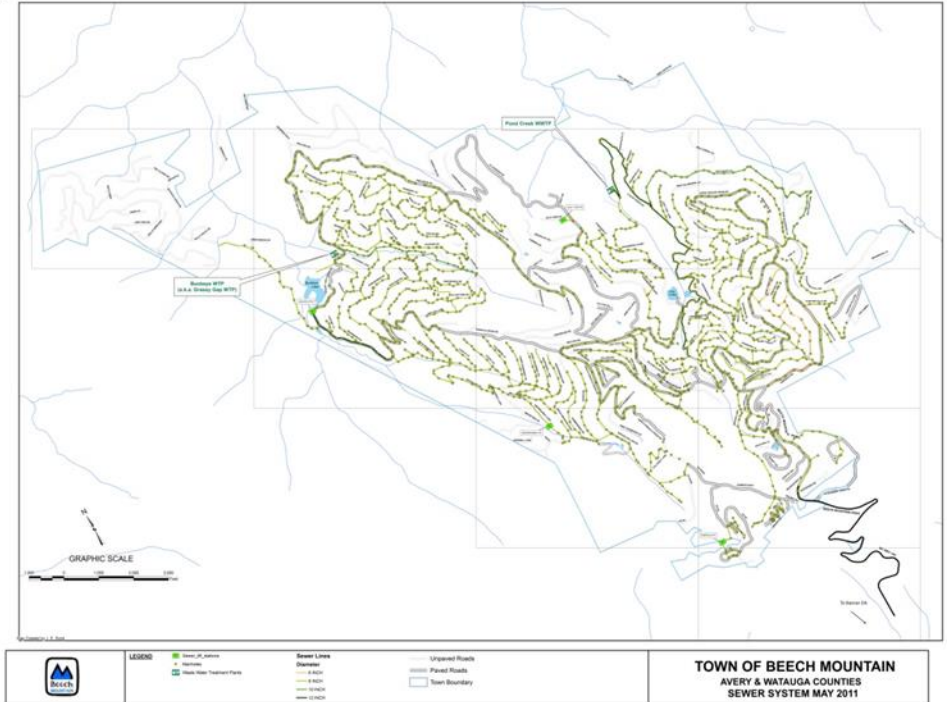
The continued modernization and improvement of our water system is therefore clearly one of the Town's highest priorities for the future and is a fundamental building block without which no other element of this plan has meaning. However, the engineering analysis and calculations required to recommend specific actions necessary and procedures to follow is beyond the scope of this plan. This work has been performed in the existing Beech Mountain Water and Sewer Study prepared by Rothrock Engineering in 2011 and earlier studies. The purpose of this section of the plan, therefore, is not to supersede or supplant any of that analysis, but rather to incorporate that study's goals and findings into a more general document, comprehensible by the layperson. It is also to look at the water and sewer system and the specific projects recommended by the engineering study from a planning perspective – to focus on specific projects and future plans



## Beech Mountain Water and Sewer Systems



Water System



Sewer System

### System Statistics

- 68.5 MILES OF WATER LINE/55.16 MILES OF SEWER LINE
- 361 HYDRANTS
- 9 WATER TANKS
- ESTIMATED 500+ VALVES
- APPROXIMATELY 1700 MANHOLES
- 6 MAJOR WATER PUMP STATIONS/4 SEWER LIFT STATIONS/5 PRESSURE REDUCING STATIONS



## Water and Sewer: Goals, Objectives & Recommended Strategies and Policies

### Goal WS1: Adequate Water and Sewer Capacity for our Town's Future

Buckeye Lake Reservoir has three levels of water intakes, at 6 ½ feet, 13 ½ feet, and 23 ½ feet below full pond. During a moderate drought in the Summer of 2010, water level at its lowest was a mere 18" above the bottom intake. This amounted to a water supply reserve of less than 20 days at the current rates of withdrawal. This experience made obvious the peril that a similar or worse drought could impose, especially when considered in light of potential increases in demand in coming years. It is clear that action is needed to ensure that both our water and sewer systems have the capacity to meet the demands that future growth will place upon them.

The Town's goals in the area of providing for these basic necessities are simple and straightforward:

- To provide Capacity for water and sewer that will be adequate for our Town's future,
- To ensure that the quality of these resources is high, and
- To ensure that these resources are provided with the highest level of efficiency possible.

### Policy WS.G1.P1: Promote conservation of Water Resources

An effective way to ensure that our water and sewer capacities are adequate is to conserve and be more judicious in our use of resources.

#### ***Continue and strengthen our mandatory conservation measures during drought***

Better education regarding conservation practices, better dissemination of conservation requirements, and better enforcement of requirements are three ways to help the system be more effective.

#### ***Billing structure***

Ensure that the Town's billing structure remains organized in such a way that conservation is rewarded, and overuse is penalized.

#### ***Other conservation methods***

The town could also take measures to encourage environmental conservation practices. We can promote and encourage the use of water conservation technology such as rain barrels, low flush volume toilets, and low volume shower heads. To encourage the use of these items during construction, the Town could leverage building permit fee reductions.



### Policy WS.G1.P2: Replace undersized waterlines

The adequacy of water issue can also be approached from a fire fighting and public safety context. The town has several areas where the primary water lines are 2 inches in diameter. Modern practices no longer use 2-inch water pipe for utility applications because they generally do not provide ideal flow rates for firefighting.

As the town pursues strategies of replacing its water lines these lines should receive weighted priority.

### Policy WS.G1.P3: Continue Focus on Expanding Capacity of Water and Sewer Treatment Plants

Finally, expanding the capacity of our water and sewer treatment facilities will be a major step towards ensuring our services are adequate to meet needs.

A June 2009 study predicted that the water plant's demand would exceed capacity in 2012. While that has not yet occurred, it is still clear that additional capacity must be developed. As the Town develops and grows, it is clear that they must move ahead with preparation and planning to increase plant capacity in some manner.

Likewise, the Grassy Gap Waste Water Treatment Plant will exceed its useful life expectancy in 2024 and when replaced should be sized to meet future demand.



## Goal WS.G2: Superior Water Quality

It is the goal of the town to provide water that is as pristine as our mountain surroundings.

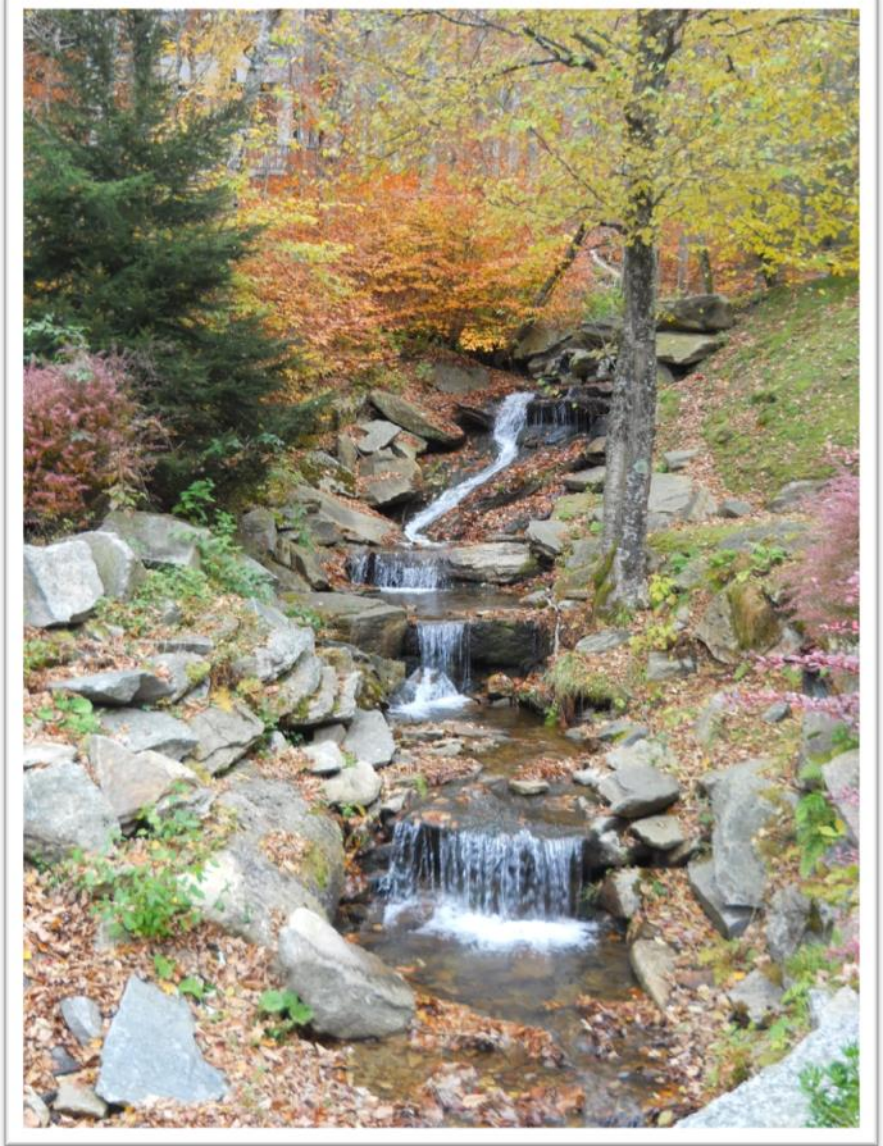
### Policy WS.G2.P1: Protect the Town's watersheds and watercourses

One of the best ways to maintain the town's exceptional water quality is to protect and improve the quality of the water before it even enters the system. This method requires the least amount of construction and infrastructure costs and also benefits wildlife and the environment.

One method of protecting our streams and lakes is through enforcement of the town's watershed protection program as mandated by the North Carolina Department of Environment and Natural Resources. Under this program, there are various watershed classifications within the Town, and sets of rules apply to each based upon the proximity to the reservoir.

Within the Watershed Overlay Districts, land use is intended to remain undeveloped. Single Family uses are intended to be limited to one per acre (in the WS-II districts) and one per two acres (in the WS-II C district). All other uses are to be limited to a maximum of 6%- 12% built upon area.

Although at first glance this program seems highly restrictive, there is one large exception that makes it have relatively low impact within Beech Mountain's town limits. This exception is that platted lots existing at the time of the enactment of the watershed laws (1993) are exempt from the regulations if used for single family purposes. Almost all of the area within the Town of Beech Mountain that lies in a watershed district was divided into platted lots prior to 1993 and is zoned for single family usage. However, a large percentage of the watersheds lie outside the town's jurisdiction, and these areas contain the largest amount



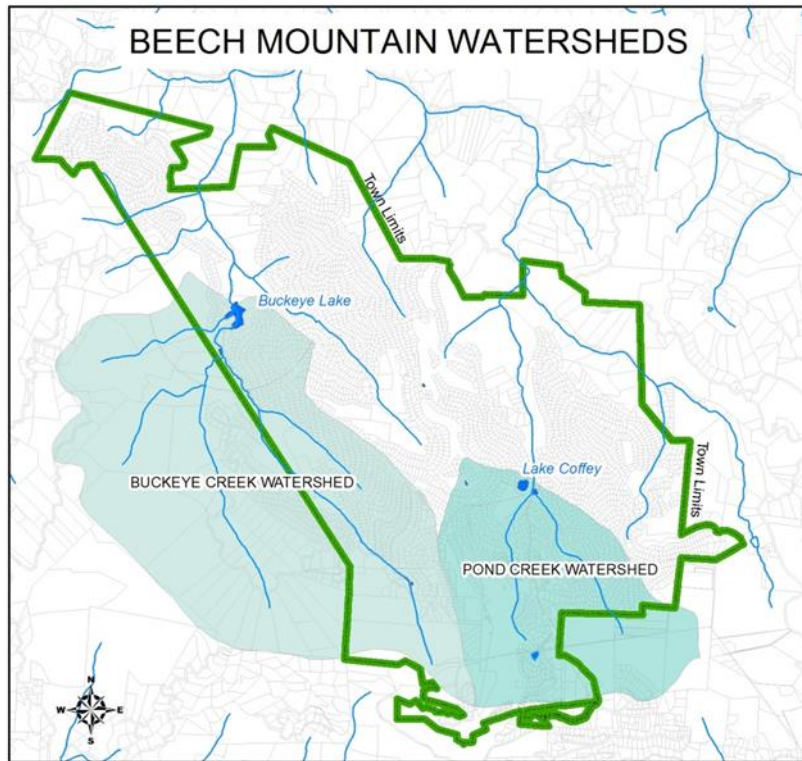
developable land to which the Watershed Act's regulations would apply. Although these areas are not within the town's regulatory purview, the Town should be vigilant to ensure that standards are upheld in these outlying areas that directly affect the Town's water source.

Another benefit of the watershed rules to the town is that they also grant the town the more general power to prohibit any activities,

situations, or structures that pose a threat to water quality, such as inadequate on-site sewage systems or improper disposal of garbage or junk.

The town also enforces state laws regarding setbacks and buffers from streams. Currently our ordinances specify that, "no new development activities may occur within 30' of a perennial watercourse indicated on the most recent versions of USGS 1:24,000 (7.5 minute) scale topographic maps or as determined by Town of Beech Mountain studies." There are actually few "perennial" watercourses within the town, because at our high elevation we are at the source waters for streams, and our watercourses tend to have flows that are often seasonal or intermittent. Beech Mountain should, as the ordinance stipulates, undertake our own studies to determine more accurately which streams actually do make a large influence on our water quality and need to be protected.

A final way of protecting our water sources is to identify areas of significant erosion or other pollution and to undertake streambank or shoreline stabilization and restoration. The town should conduct studies to determine if there are any areas here that would benefit from these processes.



**Policy WS.G2.P2:** Where feasible, the Town should utilize Best Management Practices (BMP's) to better manage Stormwater. One of the most significant sources of pollution in water sources comes directly from the stormwater that washes into them from our streets, parking lots, and other impervious surfaces.

In 2007 the town received a Clean Water Management Trust Fund grant to perform a stormwater inventory and basin study for the town. The study did not extend to the entire town but was confined to a specific identified target area with known stormwater issues.



Products of the study included a GIS database of stormwater data and recommendations to retrofit several sites with Best Management Practices. The study recognized that in improved stormwater management there was potential to significantly enhance the water quality of our streams.

It is recommended that future work expand the scope of this study to include more of the Town. It is also recommended that the town seek sources of funding to implement some of the study's other recommendations, including upsizing several conveyances and culverts, and possibly constructing a stormwater wetland.

**Policy WS.G2.P3:** Systematically and incrementally work toward the replacement of the town's entire water line and sewer line infrastructure.

It is difficult to get clean water out of a rusty, dirty old pipe. Our aging network of water and sewer lines bring problems with efficiency and quality as well as the issues with water leakage and flow rate mentioned above. It should be a long-term goal of the town to work toward the eventual replacement of all of the water and sewer pipes in our system. This far reaching goal should be approached piece by piece, little by little, in a systematic fashion wherein the situations identified as worst are replaced first. The Rothrock study laid out the steps to take in this regard.

### Goal WS.G3: Efficiency in the Delivery of Services

The Town not only needs to provide utility services of adequate quantity and high quality, but it needs to do so in a manner that is economically efficient.

**Policy WS.G3.P1:** Continue to work towards reducing non-revenue water

Non-revenue water (NRW) is water that is produced at the water plant but is not "accounted for" in the utility billing. This NRW is derived from a number of sources, including: inaccuracies in metering, system loss, leakage, billing adjustments, as well as other sources.

The Rothrock Water and Sewer Study revealed a staggering amount of water unaccounted for in the Beech Mountain Utilities System. In 2010, the Town treated 119,663,000 gallons of water, but only billed for 39,631,000 gallons. That means roughly 67% of the water that was pumped into our system was unaccounted for. Addressing this issue has been a priority for the Town over the past several years, which has resulted in significant reduction of NRW.

The study found that the unaccounted-for water is mostly the result of *systematic* leaks that exist system wide. In other words, this is not a matter of simply locating and fixing a few major leaks, but rather it is the result of the accumulation of hundreds or even thousands of small leaks throughout the entire system. The water system is becoming quite aged- being originally constructed in the 1960s- and it is estimated that at least some leakage is present at nearly every tap and coupling.

It was also estimated that one of the largest sources of this problem was not actually water loss at all, but rather inaccurate or non-functioning water meters. The town has already taken a major step towards correcting this by undertaking a major project of replacing every meter in the



town with new “radio read” meters in 2011. Early results have shown a significantly improved accountability for water use and a reduction in work-hours required for meter reading.

#### Policy WS.G3.P2: Reduce amount of Inflow and Infiltration

Mirroring the problem of unaccounted- for water, *inflow and infiltration* are major obstacles to our sewer system being able to handle and process the amount of sewage it receives. Inflow and infiltration is the problem of water seepage into the sewer system, increasing the volume of water that must be treated at the town’s plants.

Many manholes inspected during the water and sewer study showed severe disrepair and age, while it was evident that many others were of substandard construction in the first place. Many manholes had gaping holes in their sidewalls or were lacking any semblance of a seal at the connection between the manhole and the pipe entrance.

The town needs to continue with plans to incrementally replace the sewer lines and manholes system-wide, beginning with those in the worst condition or in the areas with the most severe problems.

#### Policy WS.G3.P3: Capitalize upon GIS technology to efficiently manage Town infrastructure

Geographic Information Systems (GIS) are a technology that allows for the mapping and analysis of Geographic Information. In a GIS, attributes about data can be stored in databases that accompany the spatially mapped feature. This allows GIS to be used as a functional and complete record keeping system for system infrastructure. But much more than just a computer map or a digital record keeping system, GIS also enables that data to be robustly analyzed by considering its spatial characteristics and other attributes. GIS can answer questions like “Where are the oldest sections of pipe?”, “What structures are currently located within 50’ of Buckeye Creek?” or “What manholes are located in the TR-280 Sewer Basin?”. It also allows data of various themes to be layered upon each other to make more complicated analysis.

The benefits of GIS are tremendous. It enables easy access to information on the town’s water and sewer assets, that in turn allow us to make better decisions regarding the maintenance and improvement of the system. It enables efficient delivery of utility services by helping the town determine where to focus its efforts.

Beech Mountain originally had a GIS system developed by a consultant engineering firm in 2001, but without a staff member who knew how to operate and update the GIS, and without anyone who was familiar with how to use its data, the system was not kept up to date. In 2011, the Town took a major step towards keeping its system accurate by purchasing a sub-meter Global Positioning System (GPS) to utilize for collecting data.

Beech Mountain recognizes the potential of its GIS. The town needs to ensure that qualified personnel are retained that understand how to use the technology and that can explain it to others. Furthermore, the data in the GIS needs to be better disseminated among various entities who need to know about our utilities systems, such as the staff of various departments and the towns governing decision makers.



**Policy WS.G3.P4:** Continue to utilize effective long-term budgeting tools to prepare for the costs of necessary improvements to the utility system

To undertake the major infrastructure improvements that our system needs will be expensive. The town will continue to prepare and adhere to multiple year financing tools such as Capital Improvement Plans to accurately forecast and prepare for future expenditures.

**Strategy WS.G3.P4.S1:** Continue to focus on projects in the 5-year Capital Improvements Plan

The Capital Improvements Plan should guide capital improvement projects throughout the course of the period of the plan. Although there will certainly be projects that come up from time to time, it is important that the CIP be a guiding document for project planning and implementation.

## Discussion and Conclusion

It will be no small matter to ensure that our water and sewer infrastructure is sufficient for our town's future, but the undertaking is essential to the success of the town. The town has received a number of excellent guidelines and recommendations for improvement of the water and sewer systems provided through various technical engineering studies. The town should continue to follow the recommendations of the study, especially those deemed of critical importance.



## Chapter 9: Public Safety

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### Background

### Public Safety Goals, Policies, and Strategies

#### Goal PS.G1: Operational Capability

**Policy PS.G1.P1:** Ensure Emergency Services Depts are adequately staffed

**Policy PS.G1.P2:** Ensure Emergency Services Depts receive the best training available to help them accomplish their missions

**Policy PS.G1.P3:** Ensure Emergency Services Depts are provided the equipment and resources they need

#### Goal PS.G2: Be a safer community by Avoiding and Mitigating Hazards

**Policy PS.G2.P1:** Avoid/ Mitigate Natural Hazards

**Policy PS.G2.P2:** Avoid/ Mitigate Man-made Hazards

#### Goal PS.G3: The Town shall be Prepared for Emergencies by creating Emergency Response Plans and Procedures

**Policy PS.G3.P1:** The Town will address the emergencies and hazards herein identified through an orderly, systematic approach

### Discussion and Conclusion



## Background

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One of the most fundamental and critical goals of a town is to keep its citizens safe. Some of the ways that a government entity can accomplish this goal are through 1) Operational Capability (providing adequate staff and equipment to carry out mitigation activities and emergency response); 2) Hazard Avoidance (Taking precautionary steps ahead of time to reduce the risk of a hazard and reduce the impact of an event should it occur); and 3) Emergency Response- (Planning ahead of time to develop strategies and a course of action should an event occur). Beech Mountain participates with Watauga County in the development and maintenance of a county-wide Hazard Mitigation Plan and has formally adopted this plan. The intent of the Beech Mountain Comprehensive Plan in this regard is to, where appropriate, supplement the county-wide plan with more detailed planning and information specifically for Beech Mountain as well as recommend the development of more detailed planning processes and documents where the level of detail exceeds the scope of a Comprehensive Plan. Such detailed plans shall be incorporated to this document as appendices as they are developed.



## Goal PS.G1: provide sufficient Operational Capability to respond to emergencies in Beech Mountain

This goal is about continuing to ensure that the Town of Beech Mountain has the manpower and equipment necessary to react to emergencies and to keep the Town of Beech Mountain safe. The main areas in which the Town provides this capability that will be discussed are Police and Fire Services.

### Police Services

The town's police department is assigned to protect and serve the citizens of Beech Mountain. In our small town, the Beech Mountain Police Department provides services and personalized assistance that most larger jurisdictions are unable to provide. Given that a large percentage of our homes are seasonal in nature, a strong and effective police department is essential to protect people's investments while they are away. Also, our Police Department provides needed services to our large elderly population by conducting house checks. Beech Mountain Police Department's services are well tailored to the needs of our community and to ensuring that Beech Mountain remains a tranquil and safe environment for living, visiting and recreating.

The officers of the Beech Mountain Police Department have considerable experience, with many officers having served for longer than ten years. To meet the requirements posed by certain large events or emergencies, the department also participates in several mutual aid agreements with surrounding jurisdictions which enable it to scale up in personnel as needed.

The department also operates a dispatch center that provides Emergency 9-1-1 services to the residents of Beech Mountain and also to the surrounding areas. The dispatch center functions as a communications center to coordinate emergency service efforts and enables rapid and effective deployment of resources to aid in emergencies, providing better and quicker help to the citizens of Beech Mountain in times of need.

The current leadership of the Beech Mountain Police Department has identified that one of its major long-term objectives is the development of personnel. While they realize the need to "keep up with the times" technologically, they see no glaring needs at least for the immediate future. But in terms of personnel, they have realized challenges that lay ahead. As the police department moves forward, it will be necessary to ensure that new officers are adequately trained and experienced to replace officers that are nearing retirement.

### Fire Services

The Beech Mountain Volunteer Fire Department has a long and proud history of protecting the properties of Beech Mountain. The Department was formed in 1972 by a group of local residents with a vision of providing Fire Protection to our friends and neighbors. This commitment continues today.

Although the Fire Department is a separate entity from the town, it has recently worked with the Town of Beech Mountain in creating what can be considered a "combination" department, with the addition of a full time paid staff member as well as the sharing of operational expenses.

The mission of the organization is: ***"To provide the highest level of life and property safety through the extension of Fire Prevention, Fire Suppression, Emergency Medical Response and Public Education consistent with the prudent utilization of funds and community resources."***

In addition to the Fire Department's ability to respond under all conditions, it is also actively engaged in the community with Fire and Life Safety as one of its primary goals. The Beech Mountain Volunteer Fire Department provides the residents and visitors with a full range of programs and services.



Recognizing that fire prevention is one of the keys to a safe community, the Beech Mountain Volunteer Fire Department continues to implement a Public Education campaign encouraging the proper use of fireplaces, heaters, smoke alarms and carbon monoxide detectors.

### Services Other than Police or Fire/ EMT

Other related emergency services provided by the town include clearing trees from roads for emergency access, evacuating citizens in time of danger, operating shelters when needed, searching for lost people and assisting with EMS and rescue squad when requested.

Currently, no EMS station is located in Beech Mountain. When required, EMS services are provided by Avery County Medics, the nearest station being located at Banner Elk. Many of Beech Mountain's firefighters have had Emergency Medical Technician (EMT) training, and several have extensive medical experience.

**Policy PS.G1.P1:** Ensure our emergency services/ public safety departments are adequately staffed

#### Strategy PS.G1.P1.S1

Increase recruiting efforts and network to increase the number of fire and EMT volunteers to ensure response times are not increased with the growth of town. Continue to recruit outside of Beech Mountain's corporate boundaries to attract volunteers from a larger pool of potential members. Continue and strengthen the Town's policy of encouraging employees to participate as volunteers in emergency services programs. Continue the incentives the Town provides to volunteers.

#### Strategy PS.G1.P1.S2

Regularly evaluate the required human resources for Public Safety Services to ensure adequate personnel are available for response. Recruit full-time paid emergency service personnel with significant additional population growth. Additional personnel (and respondents to emergencies in general) greatly improve ISO ratings.

#### Strategy PS.G1.P1.S3

Explore options for increasing public safety staff to allow a minimum of two full-time staff members to be on duty at all times. As the town continues to grow, hire additional personnel as necessary to maintain the current level of service.

**Policy PS.G1.P2:** Ensure our departments receive the best training available to enable them to accomplish their missions.

#### Strategy PS.G1.P2.S1: Establish a career Training Officer

**Policy PS.G1.P3:** Ensure our emergency services are provided with the equipment and resources to accomplish their missions.

#### Strategy PS.G1.P3.S1

Establish a joint Police and Fire Headquarters. Further develop a facilities plan for emergency services/ public safety departments to identify needs related to future growth as well as to maintain current facilities. *Consider the emplacement of substations in locations dictated by growth.*



#### Strategy PS.G1.S5

Continue to ensure adequate water supply for fire- fighting capability throughout Beech Mountain. This involves continuing the ongoing project of monitoring hydrants and replacing defective ones. Also, install new hydrants where they are necessary. Ensure all water lines are large enough and pressurized enough to provided adequate flow to all hydrants.

#### Strategy PS.G1.S6

Continue current capital improvement plan strategy for replacing emergency service vehicles and other equipment on a regular basis.

#### Strategy PS.G1.S7

Continue implementation of communication improvements and interoperability. As communication technology rapidly evolves, multiple means of communication as well as consolidation of emergency services communication platforms should be discussed. The town should encourage use of new technologies and efficiencies for our future communication needs. Planning and budgeting for future communication systems is critical to the operational capability of our public safety and emergency services entities.

### Goal PS.G2: be a safer community by Avoiding and Mitigating Hazards

The purpose of this section is to put forth precautionary steps ahead of time to reduce the risk of a hazard and reduce the impact of an event should it occur.

#### Identification of Dangers

One of the first steps in this process is to identify and prioritize the hazards that could potentially threaten Beech Mountain. These hazards can be both natural or human-caused. Using the Watauga County Hazard Mitigation Plan as a guideline, we have identified the following as potential natural hazards that could threaten Beech Mountain. We have also included human-caused hazards that may potentially pose dangers to Beech Mountain.

#### Policy PS.G2.P1: Avoid/ Mitigate Natural Hazards

The Watauga County Hazard Mitigation Plan and the High Country Regional Hazard Mitigation Plan go into much more depth on the causes of the Natural Hazards that affect our region, major historical occurrences of these events, and also the probability of future occurrences. In the next section, we intend to discuss how some of these hazards pose special threats to the Town of Beech Mountain.

#### Hurricanes and Severe Storms

The strong winds and heavy rains that accompany hurricanes that hit our Atlantic Seaboard can often penetrate well into the interior of the continent. Although Beech Mountain is hundreds of miles from the nearest ocean, it nevertheless is at risk from the impacts of hurricanes as well as other severe storms. According to the National Hurricane Center's historical storm track records, 15 hurricane or tropical storm tracks have passed within 75 miles of the High Country region since 1850. Other severe thunderstorms are much more common, and can bring comparable amounts of damage, especially from the associated high winds. At Beech Mountain's elevation, the risk of dangerously high winds is even greater.



#### **Strategy PS.G2.P1.S1**

Continue to strictly enforce the North Carolina State Building Code's regulations for construction in high wind zones.

#### **Strategy PS.G2.P1.S2**

Maintain appropriate riparian buffers and continue policies to promote green space. These policies have the effect of naturally filtering and channeling water to avoid flood conditions.

#### **Strategy PS.G2.P1.S3**

Acquire unbuildable properties from willing landowners through N.C. Clean Water Management Trust Fund to develop as a park or greenway.

### **Blizzards and Winter Storms**

Beech Mountain is at an especially high risk for blizzards and winter storms. Our high altitude brings lower temperatures than surrounding areas and often brings us snow when surrounding areas receive none. In fact, Beech Mountain averages nearly 85 inches of snowfall per year (according to the National Weather Reporting station data). Nearby Boone by comparison receives only approximately 40 inches. Recent winters have brought even more snow than usual, with a record 137.6 inches falling on Beech Mountain during winter 2009-2010. Snow of this capacity brings multiple dangers that warrant consideration such as treacherous driving conditions that can cause car accidents and serious injuries. Beech Mountain's steep, winding roads can be impassable for days, making it difficult or impossible to get off of the mountain. In these conditions, people can be isolated and "snowed in" for long periods of time without adequate food, water, or other supplies. Snow and ice also often are accompanied by power outages, which can be extremely dangerous for those who depend on electricity to heat their home during the frigid temperatures. Finally, snow and ice can be a hindrance to emergency services, making it more difficult to respond to fires, medical emergencies, etc.

#### **Strategy PS.G2.P1.S5**

Continue and strengthen our road clearing program

### **Drought**

As previously discussed, Beech Mountain is in need of expanding the capacity of its raw water supply. The consequences of a drought upon our water supply were drastically evident in the summer of 2010, when dry periods resulted in our water supply being considerably reduced. Without the acquisition of a more plentiful water supply severe drought could pose a major obstacle to the town continuing to function.

#### **Strategy PS.G2.P1.S6**

Secure a more abundant source of water for the Town's raw water intake.

#### **Strategy PS.G2.P1.S7**

Continue the Town's mandatory water shortage conservation regulations program.



#### **Strategy PS.G2.P1.S8**

Educate people about the importance of conservation.

#### **Strategy PS.G2.P1.S9**

Encourage people to use natural landscaping that has low water requirements.

### **Landslides**

Landslides are the gravity-driven downward and outward movement of slope-forming soil, rock, and vegetation. Landslides may be triggered by both natural and human-caused changes in the environment, including heavy rain, rapid snow melt, steepening of slopes due to construction or erosion, earthquakes, volcanic eruptions, and changes in groundwater levels. The North Carolina Geological Survey recently conducted an in-depth study of slope stability and landslide hazards for Watauga County which identified Beech Mountain's steepest slopes as unstable or in the high threshold for instability.

Landslides can cause extreme damage to homes and property and pose a special risk to properties located on steep slopes. Many of Beech Mountain's homes have been built on extremely steep slopes.

#### **Strategy PS.G2.P1.S10**

Consider developing a steep slopes overlay that would restrict development on the most dangerous steep slopes.

#### **Strategy PS.G2.P1.S11**

Ensure the Towns culverts and storm drainage systems are well functioning. This will help to ensure soil is well drained and does not become saturated and ripe for landslide events.

#### **Strategy PS.G2.P1.S12**

Continue to enforce Erosion Control regulations, especially the requirement for ground cover, in order prevent soil situations that are prone to landslides.

### **Flooding**

Flooding can pose a great risk to human life as well as cause considerable property damage. Although there are no FEMA recognized flood zones within the Town of Beech Mountain (according to the latest Flood Insurance Rate Maps), there are several locations that nevertheless could be inundated during or after severe rain events.

#### **Strategy PS.G2.P1.S13**

Beech Mountain should continue to correct, divert, and mitigate flood prone areas with specificity and devise corrective response plans for floods in these areas so as to eliminate the hazard.



## Road wash-outs

Closely tied to flooding and landslides are the hazards associated with road wash outs. Severe flooding or landslide events can block or destroy road passageways in ways that could impede transportation for indeterminable periods of time.

### **Strategy PS.G2.P1.S14**

Educate citizens about the dangers of crossing inundated roadways. People should be aware that even what appears to be a small amount of swift flowing water can sweep away a vehicle or a person.

### **Strategy PS.G2.P1.S15**

As mentioned in Strategy T.G2.S3, the Town should pursue alternate access routes for emergency purposes. A landslide or flood blocking Beech Mountain Parkway could be very problematic if alternative access routes were not available.

## Earthquakes

It is a little-known fact that Beech Mountain lies within an area identified as being at risk for earthquakes. While FEMA classifies the western North Carolina mountains as being in Seismic Design Category B (defined as areas that could experience moderate shaking), the North Carolina State Building Code identifies Watauga and Avery counties as being within Seismic Design Category C (areas that could experience strong shaking). Coupled with our steep slopes and rocky soils, strong shaking could result in considerable damage.

### **Strategy PS.G2.P1.S16**

Ensure that new construction meets the appropriate North Carolina State Building Code standards for seismic design.

### **Strategy PS.G2.P1.S17**

Educate citizens of actions to take during an earthquake event.

## Tree Damage

Our Town's beautiful forests are one of the reasons that people love Beech Mountain. However, these trees can pose considerable hazards to people and property. Ice storms in particular load trees with tremendous weight, to which they often succumb.

### **Strategy PS.G2.S18**

Evaluate Town Tree regulations to ensure that cutting trees to promote safety is allowed.

### **Strategy PS.G2.S19**

Promote the removal of diseased and damaged trees. Ensure that property owners are aware of the danger they pose.

## Policy PS.G2.P2: Avoid/ Mitigate Human-Caused Hazards or Dangers

## Wildfire

Wildfires are a natural occurrence in woodland areas, and their occurrence is actually healthy for the ecosystem in many ways. However, when human settlement has encroached into forested areas, wildfires can have devastating results. Beech Mountain is highly vulnerable to wildfires for several



reasons. First, we are a town that is almost totally situated in the dangerous “urban-woodland interface” where wildfires are most dangerous. Second, fires travel faster up mountain slopes. Third, settlement in this area for the past half of a century has prevented natural wildfires from burning up fuel sources. Beech Mountain has abundant sources of fuel that could be ignited during an outbreak. Finally, the dry conditions posed by recent droughts have the area primed for the outbreak of fire.

**Strategy PS.G2.P2.S1**

Put out information to the public that informs them of fire risk conditions. Beech Mountain Volunteer Fire Department currently participates in the “Firewise” program to educate the public on the danger of fires and best methods for fire prevention.

**Strategy PS.G2.P2.S2**

Create fire breaks in sections of high-risk forest.

**Strategy PS.G2.P2.S3**

Perform wildfire training exercises and ensure fire department members have wildfire training.

**Strategy PS.G2.P2.S4**

Encourage homeowners to clear brush from around their homes.

**Strategy PS.G2.P2.S5**

Promote the use of fire-resistant landscaping and building materials.

## Property Theft

Beech Mountain is a very safe community. However, crime is a possibility even here. There are several reasons why property theft is one form of crime that poses a special threat to Beech Mountain. Beech Mountain is home to many high-end homes that are vacant for much of the year. Often, these homes are located in isolated areas that are remote from neighbors or other concerned citizens. For these reasons it is important to address theft as a potential threat to the community and to take proactive steps to prevent it just as other natural or man-made hazards.

**Strategy PS.G2.P2.S7**

Implement neighborhood watch programs.

**Strategy PS.G2.P2.S8**

Encourage the use of home security systems.

**Strategy PS.G2.P2.S9**

Maintain the Town’s address numbering standards and ensure 911 addresses are visible from the road.



## Automobile Accidents

Statistics would most likely show that the greatest danger posed to the residents and visitors of Beech Mountain is that of automobile accidents. Many factors combine to make driving on our roads hazardous. Our roads are steep and curvy, and require lots of situational awareness to traverse safely. Brakes often go out on our steep hills, leaving vehicles without a way to stop without a collision. Our shoulders often have steep and treacherous drop-offs. Besides all this, the weather and the elements conspire to make conditions even worse. Snow and ice in the winter cause vehicles to lose traction. Poor visibility from fog and clouds is common at this altitude. Any efforts to mitigate these hazards would be well deserved.

### Strategy PS.G2.P2.S10

Continue the town's signage upgrade program, which will replace current road signs with high visibility/ high reflectivity signs.

### Strategy PS.G2.P2.S11

Develop a plan for creating new GIS layer to map roads or areas of a road that retain water that could lead to loss of control of automobiles. Correspondingly, keeping drains cleaned or constructing more drains in town areas in order to have a greater capacity to carry water off roads.

## Structure Fire

As discussed above, wildfires are a threat in Beech Mountain. If a large wildfire was to occur, it is likely that it would threaten many of Beech Mountain's structures. Furthermore, the age of some of Beech Mountain's homes also puts them at high risk for structure fires. The town could take several measures to avoid structure fires or mitigate their impact should they occur.

### Strategy PS.G2.P2.S12

Perform routine fire inspections of commercial structures as provided for in the NC State Fire Code.

### Strategy PS.G2.P2.S13

Continue the Beech Mountain Volunteer Fire Department's "Firewise" education program to teach homeowners important measures they can take to keep their houses safe, such as testing fire alarms and discussing actions during a fire.

## Power Failure/ Fuel Shortage

Our modern society is heavily dependent upon fuel and electricity for our everyday activities. Fuel and electricity are also crucial to our ability to provide emergency services and to react to threats. Unfortunately, our supply of electric and fuel are finite, and can sometimes be interrupted. It is critical as we progress into the future to have a plan in place that details how to respond to severe reductions or complete absence of fuel and power availability.

### Strategy PS.G2.P2.S14

Watauga County is currently in the process of developing a fuel and electric shortage plan that details how the county will react to a crises and how limited supplies of fuel and power will be allocated in an emergency. Beech Mountain should support and participate in that plan's recommendations.



#### Strategy PS.G2.P2.S15

Look for possibilities for alternative energy sources. Ensure our laws and regulations do not unduly prevent the use of suitable alternative energy techniques.

#### Strategy PS.G2.P2.S16

Bury power lines when feasible.

#### Strategy PS.G2.P2.S17

Encourage the planting of appropriate vegetation only under or near power transmission lines.

### Goal PS.G3: The Town shall be prepared for emergencies by updating, monitoring, and improving Emergency Response Plans and Procedures

Despite the best efforts to avoid hazards and to mitigate their impact, crises can and will occur. The final goal identified for the Town as it relates to Public Safety is to be prepared for emergencies when they do strike.

Policy PS.G3.P1: The Town will address the emergencies and hazards herein identified through an orderly, systematic approach

In approaching the hazards and challenges with which Beech Mountain is faced, the Town should proceed with a well laid out process to methodically and efficiently prepare ourselves for these challenges. This process should include three phases for dealing with each hazard:

**Planning and Preparation, Response, and Recovery.**

1. **Planning and Preparation-** This document has intended to lay the groundwork for the planning and preparation phase of hazard response. It has identified the hazards with which we contend and has set forth some initial recommendations that the Town should consider to handle them. Following through on these recommendations is the next step towards completion of this phase. Of course, once completed, the Planning and Preparation for hazard response should be continually re-evaluated to determine if circumstances have changed or if the plans can be improved.
2. **Response-** The response phase is when the “rubber meets the road” – when the responding agencies take physical steps to react to a threat or danger. The Town currently has working response plans for various situations. These plans should likewise be monitored and evaluated and improved when appropriate.
3. **Recovery-** This is the phase of an emergency that is least thought about and therefore it is a phase that response agencies are often unprepared for. This phase involves salvage, repair, clean-up, and general assistance that goes on after an initial threat has been eliminated. This process is often very difficult and time consuming and can be fraught with many unforeseen issues and challenges. The Town has not conducted any planning to this point regarding procedures for Recovery operations and should do so in the near future.



#### Strategy PS.G3.P1.S1

Develop a thorough Emergency Evacuation Plan for the Town of Beech Mountain. Such a plan should be developed in the near future. This plan should take into account the difficulties of evacuating people over our spread-out jurisdiction and account for the fact that there are only two ways into and out of the town. This plan should also have a mechanism to check to ensure no one is left behind. This plan should be flexible in scale, such that it would succeed when there are 500 people on the mountain or when there are 10,000.

A portion of the evacuation plan should cover the emergency medical evacuation of critically injured persons. In this regard, the Town should maintain sites identified as area helicopter landing zones for use in emergencies. It is especially crucial that this be done because of Beech Mountain's remote location from major hospitals and delay in advanced life support transport services.

#### Strategy PS.G3.P1.S2

Develop our capabilities to communicate to citizens in an emergency. Continue the "Reverse 911" program and look into other ways to communicate emergency information, especially of the need to evacuate. Consider cooperating with the Beech Mountain Club to use its golf course evacuation siren in situations of an extreme emergency, along with fire sirens at the local fire stations.

#### Strategy PS.G3.P1.S3

Maintain Buckeye Recreation Center as a Level II Red Cross Shelter and monitor for opportunities to improve.

#### Strategy PS.G3.P1.S4

Continue to refine the Fire Response Plans for each of Beech Mountain's major commercial structures and multi-family complexes. As of 2018, the Fire Department has completed an initial Fire "Pre-Plan" for all commercial buildings. This process should be continued and built upon to improve both these plans and their usefulness during response actions. Specifically, future work should encourage the use of technology to better capture and communicate this information to "on site" personnel during an emergency.

#### Strategy PS.G3.P1.S5

Develop a program to deliver essential supplies to people stranded in winter storms.

#### Strategy PS.G3.P1.S6

Create maps with hazard overlays to identify areas most susceptible to hazards.

## Conclusion:

It is hoped that this chapter provides a roadmap to ensuring that the Town of Beech Mountain continues to provide excellent services in the realm of public safety. With operational capability, steps taken to mitigate hazards, and emergency response plans created, the Town should be well prepared to handle foreseeable crises and protect the safety and welfare of its citizens and visitors.



## Chapter 10: Economic Development and Tourism

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### TE: Background

#### TE.G1: Invigorate the Economy in Beech Mountain and thrive as a mountain destination



##### Policy TE.G1.P1: Provide Assistance and Encouragement to Realize Economic Potential

Strategy TE.G1.P1.S1: Use Community Beautification Projects as a catalyst to spur economic vitality

Strategy TE.G1.P1.S2: Use Recreation Programs as a means to spur economic vitality

Strategy TE.G1.P1.S3: Utilize architectural design standards for new construction in Commercial districts as a means to spur economic vitality.

Strategy TE.G1.P1.S4: Use Pedestrian Walkability Projects as a means to spur economic vitality

Strategy TE.G1.S5: Leverage incentives such as permit fees , taxes, and utilities to reward businesses who are renovating or expanding and to attract new businesses of the type and character that the town desires.

##### Policy TE.G1.P2: Be Receptive to New Economic Opportunities

Strategy TE.G1.P2S1: Identify New Economic Opportunities

Strategy TE.G1.P2.S2: Consider hiring a firm to do an extensive market analysis for the Town, and to identify specific steps to bring their recommendations to fruition.

Strategy TE.G1.P2.S3: Look for opportunities to expand our tourism pull beyond the winter season.

##### Policy TE.G1.P3: Effectively Market and Capitalize on our Assets

Strategy TE.G1.P3.S1: Continue and expand upon our marketing and branding efforts.

Strategy TE.G1.P3.S2: Capitalize on Regional Attractions

Strategy TE.G1.P3.S3: Target regional audiences.

### TE: Discussion and Conclusion



## Background

Beech Mountain's unique economic situation is a reflection of its demographics (reviewed in Chapter 4). With its small number of full-time residents, most of whom are retirement age, Beech Mountain lacks true "industry" in the traditional sense. However, there are many economic opportunities here.

Beech Mountain's beautiful scenery, majestic views, and its natural setting contribute to its great potential as a tourism destination and make tourism the foundational component of its economy. Closely intertwined with tourism is recreation, which is also a major economic driver for the community. When Beech's tourism and recreation draw people to the mountain, many of them decide to stay. The construction industry for permanent and second homes as well as home maintenance and home improvement are several business types that have found a niche in Beech Mountain. Other businesses that Beech Mountain supports also have close ties to tourism and recreation, such as the real estate and rental market, restaurants, and hotels and inns.

Sustaining a strong economy is important to the town and depends on a number of factors including the quality of the environment, the quality of life for the residents, and the quality of visitor experience. This section examines opportunities for economic growth while considering the unique constraints and opportunities of the town.



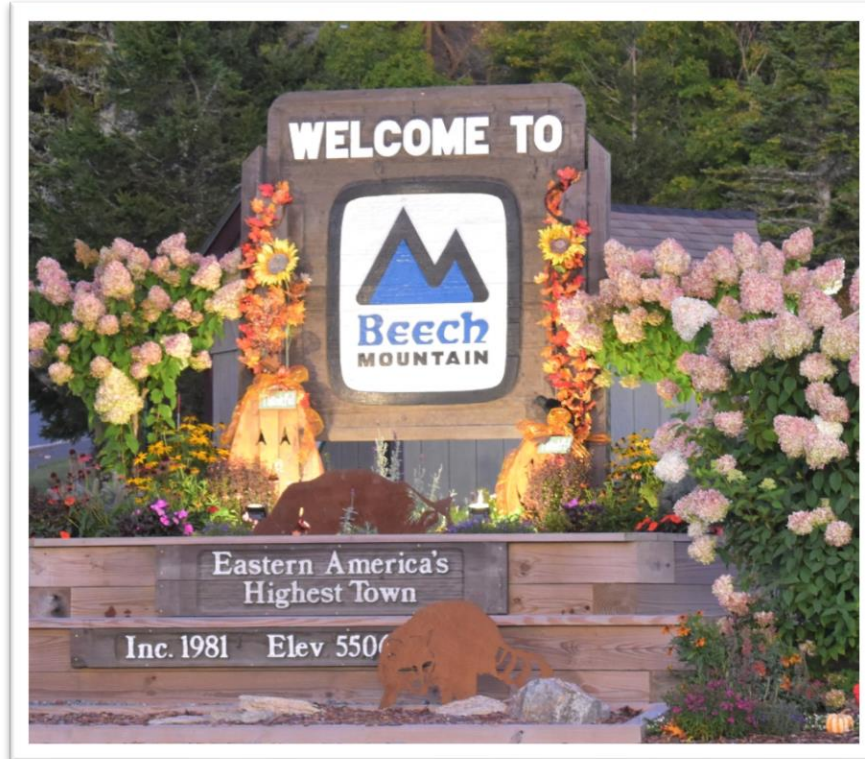
### Our Economy

The Town's economy is heavily reliant upon Tourism and Seasonal Residency. With less than 400 full-time residents and no major industry outside of tourism and service-related industries, the Town experiences significant seasonal fluctuations in the local economy. Businesses within the Town see periods of intense patronage and periods of extremely low patronage throughout the year. These seasonal fluctuations can present real challenges to the local economy.

### Major Entities that Focus on Economic Development

The Chamber of Commerce and the Tourism Development Authority (TDA) are significant entities in Beech Mountain that work alongside the Town in promoting economic development and tourism. It is incumbent on the Town to ensure a synergistic relationship with the Chamber and TDA along with the relationships with the major economic entities to provide for a prosperous Town.





### **Beech Mountain Chamber of Commerce**

The Chamber of Commerce is a non-governmental organization that consists of businesses in Beech Mountain who choose to join. The Chamber's goal is to further the interests of its member businesses, which it accomplishes through the sponsorship of events and the promotion of the availability of goods & services provided by Chamber members. The Chamber also provides members with opportunities for networking with other Chamber members so that the Chamber membership will grow, and their businesses will prosper.

### **Beech Mountain Tourism Development Authority**

The Beech Mountain Town Council created a Tourism Development Authority in April of 2002 for the purpose of advertising and promoting travel and tourism in the Town of Beech Mountain. The Authority studies the tourism industry of the Town of Beech Mountain and seeks the most effective means of enhancing and promoting that industry. To this end, the TDA recommends any plans, actions, or programs which will serve to enhance and improve the tourism industry of the Town of Beech Mountain. The TDA is delegated by the Town powers which include the authority to make tourism-related expenditures that, in judgment of the Authority, are designed to increase the use of lodging facilities, recreational facilities, and business establishments in the Town or to attract tourists or business travelers to the Town. They also

can recommend how to spend tourism and resident-related capital expenditures, expenditures required to improve and add to the recreational facilities located on Beech Mountain, and expenditures to maintain the attractiveness of the Town and its green areas.

Much of the TDA's efforts are spent in marketing and promoting travel and tourism. Like the Chamber of Commerce, the TDA also engages in and sponsors events and promotional activities that attract tourists and travel to the area.

Unlike the Chamber of Commerce, the Tourism Development Authority is a branch of the local government, and its interest is to invigorate the economy because a thriving economy is good for the Town and its people, not specifically for its businesses.



## TE.G1: Invigorate the Economy in Beech Mountain and thrive as a mountain destination

### Policy TE.G1.P1: Provide Assistance and Encouragement to help Realize Economic Potential

#### Help existing Businesses Thrive

The survey that was distributed to gather initial feedback for this plan asked several questions pertaining to economic opportunities, and the feedback that was received was very insightful.

First, the survey indicated that the people of Beech Mountain have a strong affiliation with our town's existing businesses. The invigoration of Beech Mountain's economy should start with the businesses that are already here. We should realize the hard work and efforts that our business leaders have poured into this community over the last 40 years, and look for ways to help them succeed. The following strategies include ways to help old and new businesses alike.

#### Strategy TE.G1.P1.S1: Use Community Beautification Projects as a catalyst to spur economic vitality

One way for the Town to help existing businesses thrive is to continue to focus on and care for the aesthetics of the town through our public beautification programs. These programs support the economy in a myriad of ways.

Tourism is heavily influenced by community appearance. People are drawn to beautiful places and seek to return to beautiful places. A well planned, executed, and maintained streetscape will help to make Beech an attractive spot for visitors—helping our local businesses.

The real estate and construction industries are also influenced by community appearance. Almost any measure of “quality of life” is improved by parks, open space, recreation, and aesthetics. Homebuyers today who are seeking quality of life value open space and recreation. In providing an abundance of these items, Beech Mountain will be helping our real estate and construction industries to succeed.

Public efforts towards beautification also are a catalyst to private efforts. If the Town takes care of its realm, property owners are more likely to take care of theirs.



Strategy TE.G1.P1.S2: Use Recreation Programs as a means to spur economic vitality

The Town's recreation programs are another way that we help the tourism business, and another item that can be leveraged to further promote economic growth. Vacationers and visitors go to places where there are fun things to do, and our recreation programs are a draw for the community. Beech may be able to capitalize further on some of the unique recreation amenities offered at our high altitude, such as winter sports. Expanded skiing offerings- such as cross-country skiing- are an example.

The Town- operated free sledding hill is another great example of how recreation programs can be an economic boost for the community. The sled hill takes advantage of our colder-than-surrounding-area temperatures and offers sledding when other places can't even produce snow. The result is that the sled hill draws visitors from surrounding local areas such as Banner Elk and Boone, who then eat at our restaurants and shop at our General Store.

A similar effort that has been undertaken is the creation of the "Bark Park" – the dog park located near the top of the mountain. This park has been a successful summer-time counterpart to the sled hill, drawing visitors and their pets to our commercial district to utilize our recreation amenities.

Further efforts in this area could include the creation of town parks and greenways that bring people to our commercial entities.

It is also critically important to recognize the influence and actively engage with the Beech Mountain Club and the Beech Mountain Resort. They offer multiple activities and events cited in the comprehensive planning survey as some of the greatest contributing factors to the exceptional quality of life here. The availability of these offerings makes vacationing to Beech Mountain more appealing than other similar destinations. The Beech Mountain Club and Beech Mountain Resort are large forces towards drawing new residents and second home owners to Beech Mountain, and their appeal should be further leveraged to invigorate our economy.



Beech Mountain Club, Beech Mountain Resort and the Town have partnered on many joint public improvement projects. Further partnerships are highly desirable and will provide mutual benefits of economic development to all.



Strategy TE.G1.P1.S3: Utilize architectural design standards for new construction in Commercial districts as a means to spur economic vitality.

While design standards for new commercial and public buildings could be seen as a deterrent to business, if done properly they could also serve to help bolster business. Ensuring that all new buildings are beautiful, inviting, and attractive will improve the visitor experience and will help to bring more attention and business to the mountain as a whole. Furthermore, design standards will help to ensure that the businesses that locate here are the type of businesses that the town desires.





Strategy TE.G1.P1.S4: Use Pedestrian Walkability Projects as a means to spur economic vitality

The Town recently created a walking trail that leads from the Pinnacle Inn (Beech Mountain's largest multi-family/ rental property) to the Town's commercial entities on Beech Mountain Parkway. The usage of this trail has exceeded expectations, with visitors to the Pinnacle Inn regularly using it to walk down to get dinner or to buy groceries or other necessities. The ability for people to walk to pick up these items, enjoying the climate and vistas of Beech Mountain along the way, has encouraged them to spend their money on the mountain rather than elsewhere. If these visitors had had to get into their cars for these trips (as they did prior to the construction of the trail) they would be much more likely to drive to Banner Elk, Linville, or Boone for their shopping.

The Town should capitalize on this success by following through with the existing streetscape and pedestrian walkway plan that depicts pedestrian interconnection between commercial entities and all of Beech Mountain's Inns and Hotels, as well as the ski resort and its ski village shops.

Strategy TE.G1.S5: Leverage incentives such as permit fees , taxes, and utilities to reward businesses who are renovating or expanding and to attract new businesses of the type and character that the town desires.

In order to encourage new development and redevelopment of existing commercial properties, the Town will investigate opportunities to leverage incentives in the commercial corridor.

Town incentives may allow these establishments to improve their appeal and attraction without breaking their budgets.

## Policy TE.G1.P2: Be Receptive to New Economic Opportunities

To have a vibrant economy, a community must be open and welcoming to potential new markets and opportunities.

Strategy TE.G1.P2.S1: Identify New Economic Opportunities

The first step in being a community that is receptive to economic opportunities is to identify the opportunities for growth that exist.

The following provides more detailed information about businesses that could be a component of the local economy in the future and



how each might be connected to the concept of Beech Mountain as a recreational and natural heritage community. But economic opportunities are not just in the form of new businesses. Opportunities for economic growth also lie in invigorating and capitalizing on existing businesses.

Beech Mountain's unique situation is not for just any business. Many types of business simply would not survive given Beech's demographics. Many other businesses simply would not be compatible with the Town's character- which, according to the results of our survey, is very important to our stakeholders. However, there are opportunities for the right kind of businesses, especially those with a recreational or tourism focus, to thrive in Beech Mountain.

One question in the survey asked respondents to identify the types of businesses that they felt would be successful in Beech Mountain. The results provide a wonderful window into some opportunities that may flourish here. Recommended opportunities included:

- *A microbrewery, bakery or other specialty "niche" industries of small scale that could sell their products here in a bar or restaurant type environment as well as market them for retail elsewhere.* Such products could capitalize on the theme of being born in "Eastern America's Highest Town." Such marketing would also benefit the town as advertising.
- *Embrace working from home and telecommuting.* With modern technology, people are less and less tied to a particular location by their work. The result is that these people are not geographically constrained by work and can live wherever they want. Beech Mountain needs to set itself up to be the place that these people want to locate.
- *Recreation Businesses.* Beech Mountain would be an ideal place for operations that lead recreational tours such as biking, fishing, hiking, climbing or rafting. It would also be a good location for recreation retail stores such as bike shops or trail outfitters. Existing ski rental businesses could expand their businesses to serve these markets in the off season.
- *The Arts.* Beech Mountain and its beautiful natural environment provides a promising location for artists and craftsmen to draw inspiration. These businesses are well suited to the character of the town and also tend to be the type of operation that can draw visitors from surrounding areas. For such a business to be successful, it would likely need to have the backing of a well-established artist, as Beech doesn't currently have the retail demographics to support up-and-coming artists. Particular types of artists to consider include painters, pottery, furniture and rustic craftsmen, quilting, and other similar businesses. The possibility also exists to support performing arts such as storytelling or theatre. We need to look no further than Jonesborough, TN (storytelling) or Abingdon, VA (theatre) for examples of small towns within our region that have used the arts to revitalize their economies. One way the town could encourage these types of businesses is by conducting recurring open-air markets and expanding upon the current "Crafts on the Green" event that is held annually.
- *Pursue Partnerships with Regional Colleges and Universities.* The proximity to Lees McRae College, Appalachian State University, East Tennessee State University opens many possibilities for economic growth that have not yet been explored. As an example, Lees McRae has an outstanding performing arts/ theatre program that could be recruited for outdoor summer performances. Lees McRae also has a unique wildlife education program whose students could work at a Beech Mountain "extension" to develop their skills in caring for wildlife.
- *Spas.* People come to Beech Mountain to relax, and a high-end spa would be an ideal amenity to help them relax to the fullest. Exceptional high-end spas can also bring in people from outside the community, rather than only catering to Beech



Mountain residents and visitors. A model of a successful spa of this type is the Westglow Spa in Blowing Rock. A rebuilt or renovated building at the location of the former “Kat’s” building would provide visitors with expansive vistas and a memorable experience.

- *Conference Center.* When industries have to come together for conferences and conventions, they often decide that they may as well do so in a resort/ vacation environment. Eastern Americas Highest Town would be an ideal spot if there was an attractive and accommodating conference center available.
- Other businesses that might be considered include: Pet care/ Pet Boarding, a gas station (with electric vehicle plug-ins), a farmers market, a delivery service, campgrounds, coffee shops, software development establishment, a daycare/ school, elder care facilities and night life attractions.

Strategy TE.G1.P2.S2: Consider hiring a firm to do an extensive market analysis for the Town, and to identify specific steps to bring their recommendations to fruition.

While the foregoing has identified some potential growth areas, the services of a qualified professional economic development consultant may be beneficial in the future to refine this analysis and provide concrete steps for implementation. The town needs an overall economic development strategy that is based on a long-term vision, and to engage in dialogue with developers and businessmen/women to attract small businesses that are desired within Beech Mountain.

Strategy TE.G1.P2.S3: Look for opportunities to expand our tourism.

One obvious need for the town’s economy is to identify and be receptive to opportunities to expand our tourist draw beyond the winter ski season.

### Mountain Biking.

Mountain Biking may offer the most potential to provide a viable off-season attraction for Beech Mountain. The “Emerald Outback” biking trails have created lots of interest in the area by the biking community. With almost the entire network of trails having elevations of greater than 5,000’, our trails offer terrain and views that are simply unsurpassed. Beech Mountain Resort has hosted the USA Cycling Gravity National Championships and College National Championships for downhill mountain biking. These events were very well attended and have exposed many to Beech Mountain’s potential as a biking destination. Currently, the Resort has their mountain biking trails open to the public, with their chair lifts operational and equipped with hardware for carrying Mountain Bikes to the top from May to October.



The Town should help Beech Mountain Resort continue to promote and develop their mountain biking programs and interconnect those programs with our town hiking and biking trails, especially the Emerald Outback Trail Park.





Capitalize on existing assets, festivals, and events such as the Kite Festival, the Oz Phenomenon, the 4th of July Celebration, the Overlook Barn, and future activities. Competitive recreation events, such as road races and trail runs, are also important, as they bring a target audience to the mountain to participate in the event and simultaneously exposes them to the recreational offerings of the mountain -- hopefully leading them to return.

Research and consider year-round attractions.

The Town should work with Beech Mountain Resort, Beech Mountain Club, and other businesses to promote and develop year-round attractions and amenities.

### Policy TE.G1.P3: Effectively Market and Capitalize on our Existing Assets

All of the economic potential in Beech Mountain hinges upon letting people know about the great things that are here. The importance of marketing for Beech Mountain cannot be understated, nor can the potential results of effective marketing. When people contemplate a vacation or a second home in the southern Appalachians, we want to be at the top of their list. When people, freed from the need to work at a bricks and mortar office by advances in technology, are looking to live where they want to be rather than where they have to be, we want them to look to Beech Mountain. When people are looking for an escape from the hustle and bustle of city life, we want to be the refuge they seek.

Beech Mountain is currently aggressively marketing itself to garner its share of the tourism market in the region. Current marketing practices are spearheaded by the Tourism Development Authority (TDA). The TDA has focused their marketing efforts on branding Beech Mountain as an outdoor recreation destination as well as a peaceful getaway and accentuating our unique climate and our status as “Eastern America’s

Highest Town.” Some of their specific marketing initiatives include:

- Staffing and maintaining the Visitor Center adjacent to Town Hall and the sled hill.
- Maintaining a visitor information website targeted to people planning vacations.
- Advertising in select magazines and news outlets that reach the outdoor recreationist market.
- Creation of a database of photos showcasing events, attractions, restaurants, lodging, and scenery. This can be utilized in brochures, on websites, and distributed to media requesting images to accompany content.
- Utilization of websites that attract people planning their vacations, including banner advertising, and content advertising.
- Utilization of social media outlets to broadcast images, video, and messages to a growing fan base, and introduce more people to Beech Mountain via their friends, who people trust to give advice on vacation areas.
- Outdoor advertising in driving markets of Atlanta and Charlotte



- Disseminating information about Beech Mountain to local and regional news outlet- including news about events, new parks & trails, and information about BMR opening and upgrades.
- Organization of media tours to invite writers to come and experience aspects of Beech Mountain attractions, restaurants, and lodging.

Strategy TE.G1.P3.S1: Continue and expand upon our marketing and branding efforts.

With so much of our economy being dependent upon “getting the word out,” Beech Mountain needs to ensure that doing so remains a major priority. The Town should investigate opportunities to provide a central location or portal for dissemination of all Beech Mountain activities, events, and entertainment.



Strategy TE.G1.P3.S2: Capitalize on Regional Attractions

Beech Mountain’s marketing tends to focus on local events and attractions within the Town itself. While there is plenty to do here in Beech Mountain, the town may benefit from accentuating its proximity to some of the larger attractions of the area. Grandfather Mountain, the Blue Ridge Parkway, the Appalachian Trail, Tweetsie Railroad, and other major attractions are within an easy drive. Staying in Beech Mountain offers more than only the events within our own boundaries.

Strategy TE.G1.P3.S3: Target regional audiences.

Beech Mountain has strong historical ties as a vacation spot for Floridians and others in the South. But recent developments have brought more local and regional attention to Beech Mountain. For example, a recent feature in “Our State” magazine has gone a long way in indirectly marketing Beech Mountain’s offerings to a statewide audience. With the increasing cost of transportation, and the declining amount of disposable income for average families, it is projected that a larger and larger percentage of Beech Mountain’s visitors will come from

markets that lie within a day’s drive. Specifically, Beech Mountain has a pull for markets such as the metropolitan centers of Charlotte, Atlanta, Charleston, and Greenville, and other areas that cannot drive to West Virginia’s ski resorts as quickly as they can reach western North Carolina. While south Florida will always provide a major component of Beech Mountain’s visitors, it is recommended that future efforts focus on regional markets.



## TE: Discussion and Conclusion

Though Beech Mountain's commercial entities are limited, the town does have economic potential, much of which depends on our position as a vacation and second home destination. The Town should continue to be bold, and to think "outside the box" to consider economic possibilities. With boldness and hard work, Beech Mountain will further establish itself as a small but vibrant commercial center in the years ahead.



Photo Credit: Amy Morrison



## Chapter 11: Parks, Recreation, and Trails



### R: Background

### R: Recreation Goals, Policies, and Strategies

Goal R.G1: Beech Mountain becomes a well-known and praised recreation destination- locally, regionally, and even nationally

Policy R.G1.P1: Effectively market our recreation offerings

Policy R.G1.P2: Foster and Cultivate Partnerships with major Private entities

Goal R.G2: Beech Mountain will offer recreational programs and services that are unparalleled

Policy R.G2.P1: Strive to offer the best programming and activities that are fun, safe, fulfilling, and rewarding.

Policy R.G2.P2: Beech Mountain will have recreation programs that reflect our community's character and values.

Policy R.G2.P3: Focus on the Quality of programs rather than Quantity

Goal R.G3: Beech Mountain's recreational facilities (indoor and outdoor) stay second to none in terms of quality, maintenance, availability, friendliness

Policy R.G3.P1: Consider human resources/ staff requirements of successful recreation endeavors

Policy R.G3.P2: Our programs remain conscious of aesthetics and the importance of beautification of the community

Policy R.G3.P3: Where possible, recreation programs help to conserve the natural environment and remain compatible with the environment at all times

Policy R.G3.P4: Look for opportunities to improve upon existing facilities and amenities

Policy R.G3.P5: Consider new facilities when appropriate

Goal R.G4: Beech Mountain will encourage participation in recreation programs

Policy R.G4.P1: Effectively communicate about recreation opportunities

Policy R.G4.P2: Market to area residents out of town limits

Policy R.G4.P3: Offer a variety of recreational programs and amenities that serve groups of diverse abilities and interests, including consideration of expanding non-athletic recreational opportunities.

Policy R.G4.P4: Stress health benefits of recreation

Goal R.G5: Beech Mountain will have an interconnected trail network that links parks, neighborhoods, and communities

Goal R.G6: Beech Mountain will strive to provide the highest quality recreational opportunities while working within limits of the Town budget.

Policy R.G6.P1: Concentrate on improving and maintaining existing facilities first

Policy R.G6.P2: Pursue External Funding opportunities

### R: Discussion and Conclusion



## Background

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### Importance of Recreation

Throughout history, parks, trails and open spaces have provided a structure and an aesthetic identity to communities while providing diverse recreational opportunities. While it is difficult to place a precise dollar value on parks and open space, they provide a variety of benefits that contribute to a livable and healthy town and help foster growth and development of the tourism industry for a resort community such as Beech Mountain. Since its inception with the development of the ski resort and the golf club, Beech Mountain has continued to be a recreation-based community. As such, it is difficult to overstate the importance of recreation to the Town and community.

### Purpose of Plan

The purposes of this plan are many, but they all serve one overarching goal: to ensure that Beech Mountain's efforts are aligned towards making our recreational programs and amenities the best they can be. This plan will help us to ensure that our work is all in the same direction, towards a single, unified goal and vision. Such unified and carefully forethought effort will lead to a higher quality recreation system than spontaneous, disjointed efforts would ever amount to. The plan allows us to evaluate existing programs, parks, facilities, and services, and better serve taxpayers by better aligning recreation demands with supply. It allows us a centralized forum to capture and put forth the key priorities identified by residents, guests, and stakeholders, and it also provides us an environment to discuss the challenges and obstacles that we face in achieving our goals. Based on these inputs, **this plan is a crafted framework and roadmap for the town to use in evaluating and developing improved and enhanced services.**

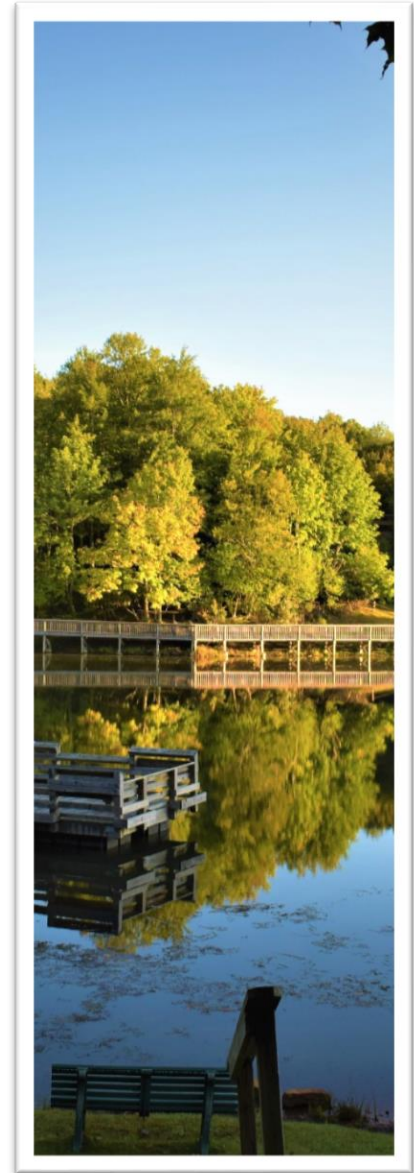
### Methodology/ Surveys/ Results

The goals and recommendations for this plan were taken directly from the citizens and stakeholders of Beech Mountain as the plan is for them. An ongoing recreational survey was carried out from 2009 to 2012 to gather feedback and input regarding recreation initiatives. Also, in the fall and winter of 2011-12 several public forums were held to solicit input on the direction of the Parks and Recreation Department. An ongoing recreational survey was carried out in 2016 to gather feedback and input regarding recreation initiatives. Additionally, in 2017-18 a Recreation Master Plan was developed incorporating results of the surveys and the goals and policies of this plan. Finally, as part of the Comprehensive Plan update, surveys were conducted, and public forums were held in 2018. The recommendations contained in this plan are a result of the compilation of survey responses, input from town committees (especially the Recreation Committee and Planning Board), and from comments received regarding draft versions of the plan that were widely circulated to receive feedback.



Some of the observations and conclusions that can be made from the survey results are as follows:

- **Overall, the respondents were supportive of our Parks and Recreation Department**, citing the top-notch facilities and program offerings as strengths. However, it must be kept in mind that the subset of the population who responded to the surveys was generally people who participated in recreational activities. The survey does not necessarily adequately reflect the opinions of Beech Mountain residents or visitors who do not use our recreational amenities and thus were less likely to participate in the survey or forums.
- **The recreation department is the hub for a close-knit community atmosphere on Beech Mountain.** Recreation Dept. activities bring people together. Survey and forum respondents praised the friendliness of the Recreation Department staff and volunteers and community collaboration as some of the positives about the department.
- **The single most common recommendation received in both the survey and the forums was to “concentrate on making existing facilities the best they can be,” presumably rather than undertaking the creation of new facilities.** Financial considerations in general were a major theme in survey and forum responses. Many respondents cited the low cost of using the public recreation facilities as a plus. Many other respondents were leery of the tax dollars that are spent to fund recreation facilities and amenities. Most respondents said they were willing to pay increased user fees to defray some of the cost of recreation programs.
- **Utilization is a key concern.** It seems to be the general consensus that Beech Mountain offers great programs and amenities, but that as a general rule they could be utilized more. One of the fundamental issues seems to be the question of how to reach out to people and get them to use our facilities.
- **Connectivity, especially pedestrian mobility, was a large concern of respondents.** Respondents saw the need to better link together Beech Mountain’s trails and walkways to connect parks, neighborhoods, and communities. Accordingly, hiking and walking were cited as some of the activities that respondents participated in most often.
- **Respondents cared about the natural environment of Beech Mountain**, and they want our recreation amenities to accentuate and protect it accordingly. Respondents believe that recreation amenities should not only be useful, but also further beautification efforts because outdoor recreation is predominant on Beech Mountain.
- **Many respondents identified possibilities for new, expanded, or improved facilities.** However, these ideas should be balanced against the concerns regarding the importance of focusing on existing facilities.



## Inventory of Existing Facilities

### Buckeye Recreation Center

The prize asset of Beech Mountain's recreational offerings is Buckeye Recreation Center. Completed in 2006, Buckeye Recreation Center is Beech Mountain's state of the art recreation facility established for the Town's citizens and guests. It is an approximately 23,000 square foot facility with various top-notch amenities including:

## Buckeye Recreation Center



### Basketball Court/Gymnasium

Buckeye Recreation Center boasts a state-of-the-art gymnasium that offers basketball, volleyball, ping pong, air hockey, bad mitten, indoor walking track and more.



### Multi-Purpose Room

Buckeye's multi-purpose room is available for rental and is an ideal location for parties, meetings, reunions, etc.



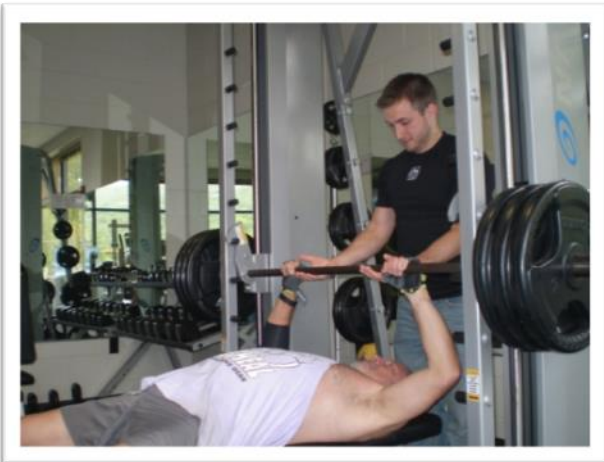
### Indoor Tennis courts

With the only indoor tennis court on Beech Mountain, Buckeye is the perfect place to come enjoy a game, even in the cold of winter. Ball machine and complementary rackets are available.



### Fitness Room

In the fitness room you will find free weights, cardio, Nautilus equipment and an ideal location to get a great workout.



### Kids Playroom

The kid's playroom offers a fun and stimulating environment with soft play equipment for children ages seven and under.



### Lobby

The lobby offers such complimentary services to the community and its guests such as satellite television, wireless internet, games, puzzles and a lending library.



### Outdoor Tennis Courts

Buckeye Recreation Center has two outdoor, paved tennis courts available on a first come-first serve basis. Complimentary loaner rackets are available.



### Walking Track

With gorgeous panoramic views, the walking track circumnavigates Buckeye Recreation and connects directly to Falls Trail.



### Softball Field

The softball field can also claim expansive mountain views and is perfect for a fun family pick-up game or group get together.



### Picnic Area

The picnic area overlooks beautiful Buckeye Lake and is available on a first come-first serve basis through the recreation center.



### Kitchen

Buckeye offers a full catering kitchen with the rental of the multi-purpose room, making it a perfect location for events.



### Children's Playground

The playground at Buckeye is the only public playground of its kind on Beech Mountain. Comparable to a low ropes course it can provide hours of fun for all ages.





### Buckeye Lake

Buckeye Lake is the town's municipal drinking water reservoir, which has also been classified to allow recreational use. It is a beautiful 6.5-acre mountain lake surrounded by over 60 acres of land. Buckeye Lake offers the following amenities:

- Picnic Shelter
- Restrooms
- Fishing Areas and Access Trails
- Campfire Area
- Canoes/Paddle Boats

### Lake Coffey

Lake Coffey is a small mountain lake nestled near the Beech Mountain Club facilities off of Lakeledge Road. It is also one of Beech Mountain's signature neighborhood parks. Lake Coffey is a great place to fish as it is stocked regularly with mountain trout. Lake Coffey Park is also a great place for exercise with its ¼ mile walking track circumnavigating the lake and its outdoor basketball court. It is also a popular hiking trail head, as it serves as the junction for Beech Mountain's premier Upper and Lower Pond Creek Trails. Lake Coffey is also the home to the free annual Kiddo Fishing Derby. Lake Coffey offers the following amenities:

- Fishing and Fishing Pier
- Walking Track
- Basketball Court



## Bark Park

Beech Mountain boasts one of the most beautiful dog parks in the High Country. With its panoramic views, large and small dog play areas, walking path and covered picnic shelter, it is one of the premiere recreational areas on Beech Mountain.



## Beech Community Sledding Hill

Beech Mountain is home to the High Country's only free, publicly maintained and groomed (complete with artificial snow making) community sledding hill. The sledding hill park is open (weather permitting) throughout much of the winter. Located atop Beech Mountain near the Town Hall and Chamber of Commerce/Visitors Center, this is a wonderful winter park complete with holiday music and ample outdoor winter recreational opportunity. The sledding hill is for children under 12 years of age or younger.



## Neighborhood Parks

In addition to these larger parks and facilities, Beech Mountain has numerous neighborhood parks that are located throughout the residential areas and roadways on Beech Mountain. These areas are a great place to stop and have lunch, read a book, or just sit and enjoy the view.

- Hayden's Park
- Sunset Park
- Perry Park
- Fireman's Park
- Parkway Overlook

Perry Park



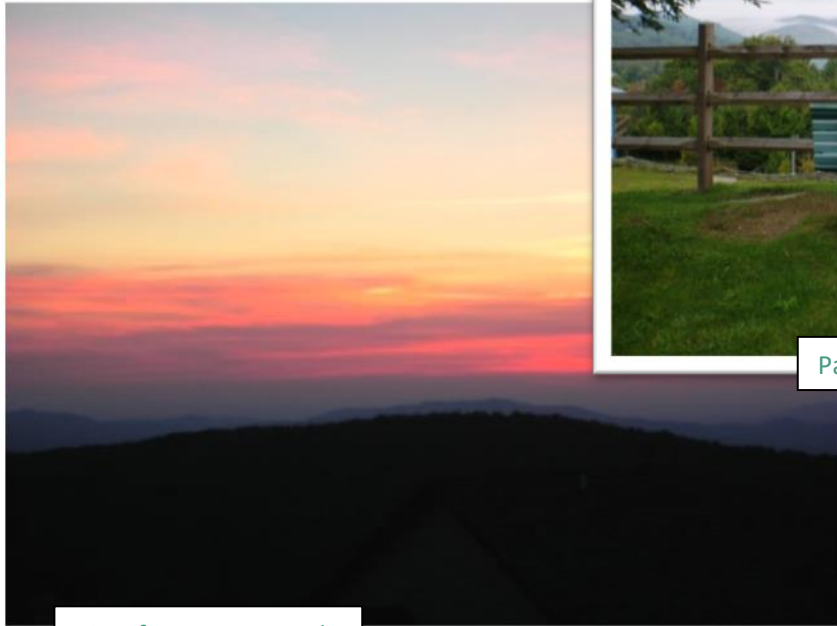
Parkway Overlook



Hayden's Park



View from Sunset Park



## Town Hiking Trails

The Town of Beech Mountain maintains over 30 miles of hiking trails, which have become a tremendous recreational asset. The trails include:

### Falls Trail

Falls trail is a very popular trail due to its ease of access from Buckeye Recreation Center. It is a roughly 1.25-mile loop that includes terrain that once served as a railroad for the logging industry in the first half of the 20th century. The slope is easy to moderate, making this a very family friendly hike. Along the trail is a beautiful natural waterfall near the convergence of Grassy Gap Creek and Buckeye Creek.

### Grassy Gap Creek Trail

Grassy Gap Creek Trail is an important connection between many of the Town's other hiking trails and the Buckeye Recreation Area. The trail follows the path of Grassy Gap Creek from Hawthorne Road to Pine Ridge Road near the Recreation Center.

### Lower Pond Creek Trail

Lower Pond Creek Trail connects with Upper Pond Creek at Lake Coffey. This is a single track strenuous hiking trail that follows Pond Creek to Locust Ridge Road. Lower Pond Creek is one mile, but the terrain is steep. On the trail one can see water cascading over rocks and many small and large waterfalls. The trail is strenuous but well worth the effort.

### Upper Pond Creek Trail

Upper Pond Creek has been designated as a nature trail. Different stations are located along the trail with interesting information regarding the ecosystem, flora and fauna

### Wild Iris Loop Trail

Best described as an easy family friendly woodland trail, Wild Iris Trail is two miles in length with only a moderate elevation change along the way. Beginning at Cherry Gap, the trail heads north toward Bear Paw Path. At Bear Paw the trail loops back around making its way to connect again at the one-mile point.

### Sassafras Trail

This trail is a leisurely walk through the woods on a gravel roadway built 40 years ago as part of the Beech Mountain Resort by Carolina Caribbean. To date no development has occurred over this one-mile beautiful, wooded pathway with almost an even grade all the way through to Jackpine, a distance of one mile.

Other prominent trails include:

*Red Fox/ Arrowhead Loop Trail*

*Smoketree Trail*

*Westerly Hills Trail*



# The EMERALD OUTBACK

## *Emerald Outback*

Among all the Town's hiking trails, the "Emerald Outback" deserves special discussion. Began in 2011 as a public-private partnership between the Town and a local landowner/ development company (Emerald Opportunities, Inc.), a gorgeous, flowing network of multiuse trails have been developed. The trails are situated between 4,700 and 5,000 feet in elevation, giving them astounding views of the Elk River Valley and unique terrain and vegetation that is unlike any other in the area. The trails have been extremely successful and have drawn hikers and mountain bikers to Beech Mountain from the local region and beyond.



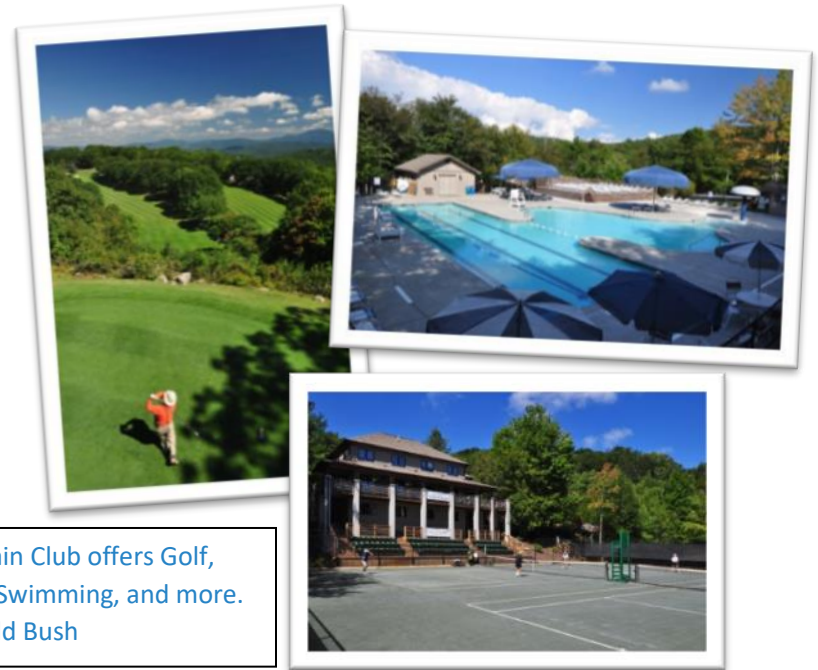
## Other Recreational Facilities

### Beech Mountain Club

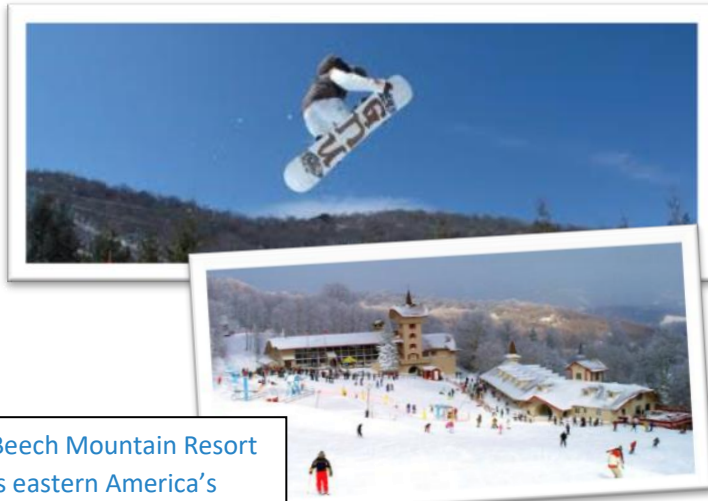
Beech Mountain Club is a private membership club providing a rich diversity of comforts and activities set against the scenic, mile-high backdrop of the North Carolina, Tennessee and Virginia mountains. Members and their guests can spend their days playing an 18-hole championship golf course or enjoying premium quality tennis facilities; swim in an outdoor heated pool; take a guided trip or hike; workout in the wellness center; or relax and dine in the clubhouse or one of the more casual seasonal cafes.

#### Amenities:

- 5 New Pickleball Courts
- Fitness Classroom
- 10 Tennis Courts
- Outdoor Pavilion
- Fire Pit
- Summer Camp
- Bocce Ball



The Beech Mountain Club offers Golf, Tennis, Pickleball, Swimming, and more.  
—Photo Credit: Todd Bush



Beech Mountain Resort is eastern America's highest ski resort

### Beech Mountain Resort

Beech Mountain Resort opened in 1967 and is the highest ski area in Eastern America. It contains over 95 skiable acres, with a vertical rise of 830 feet. The ski mountain has 17 trails, two terrain parks, and ice skating for skiers, ice skaters, and snowboarders of diverse ability and tastes. It also has four restaurants, two sport shops, and a full rental facility. At a peak elevation of 5506' feet it is Eastern America's Highest Ski Resort and often has more and better snow than other resorts in the region.

#### Additional Amenities:

- Snow Tubing
- Brewery
- 5506' Skybar



## Evaluation of Recreation Facilities and Programs

The Town of Beech Mountain's Parks and Recreation Department has a plethora of state-of-the-art facilities, beautiful natural resources and amenities to offer its community members and guests. One of the best ways for those community members and guests to utilize those assets is through participation in the program offerings of the department.

These program offerings can be categorized into community and educational programs, major events, summers camps, volunteer programs and fundraisers to improve upon existing facilities and amenities. In striving to make every aspect of recreation on Beech Mountain the best that it can possibly be, the department is in a constant state of improvement and evaluation. The program offerings, facilities and amenities are truly assets to the community but can always be made better and improved upon.

### Goal R.G1: Beech Mountain becomes a well-known and praised recreation destination- locally, regionally, and even nationally

Recreation in a resort town such as Beech Mountain is for more than just leisure, pastime or amusement. It is also more than personal development and growth or health and fitness. It is also one of the primary economic drivers for the community. Recreation is one of the main engines that bring income to our community by drawing tourists and visitors, some of whom decide to stay and become seasonal or full-time residents.

Because of the economic impacts of recreation on Beech Mountain, it is important that they be well known and well praised. It is our vision that Beech Mountain can become acclaimed locally, regionally, and even nationally for our recreation offerings.

#### **The quality of our recreational experience is its own best advertisement.**

The first, the simplest, and the most direct way to gain acclaim and recognition for Beech Mountain's recreational amenities is for them to simply be the best. While such a goal may be vague and broad sweeping, it is incorporated into this plan as a policy statement that Beech Mountain will strive to offer the best in recreational offerings that it possibly can, given the restraints and obstacles involved. The rest of this Chapter will focus on the details of what being the "best" means and how to achieve it.

#### Policy R.G1.P1: Effectively market our recreational amenities

As good as Beech Mountain's recreational amenities may be, the town will never achieve its goal of becoming a preeminent recreation destination without effectively marketing its offerings and letting the world know about our special mountain.



**Strategy R.G1.P1.S1:** Coordinate Marketing efforts with the Beech Mountain Chamber of Commerce, the Tourism Development Authority, and the major private recreational entities on Beech Mountain.

Beech's main entities can accomplish so much more together than they could separately. The town should endeavor to pull together all available resources to develop a combined, unified recreation marketing strategy that "synergizes" the strengths of all of our major entities.

**Strategy R.G1.P1.S2:** Utilize the internet, "Facebook," "Twitter" and other emerging social media outlets to promote Beech Mountain.

Social media outlets have grown tremendously over the past few years and are projected to continue to expand in the future. Beech Mountain will need to capitalize on these ubiquitous forums to reach out to new generations of visitors and recreation tourists.

**Strategy R.G1.P1.S3:** Improve support for Town residents

Although tourism is an important driver for the prosperity of Beech Mountain, effort should be made to provide a maximum level of service to Town residents.

**Policy R.G1.P2:** Foster and cultivate effective partnerships and close relationships with the major private recreation entities on Beech Mountain

Some of Beech Mountain's biggest recreational attractions are offered by the Town's two large private recreational entities: The Beech Mountain Club and the Beech Mountain Resort. Cooperation and partnership with these entities will allow Beech Mountain's total recreation effort to be synergized with their offerings and will vastly multiply the effectiveness of each of the entities.

## **Goal R.G2:** Beech Mountain will offer recreational programs and services that are unparalleled

In striving to offer the best in recreation, there are two components that must be considered: 1) *recreational services and programs* and 2) *recreational facilities*. This section will focus on how to refine our recreational *programs and services* so that they will be unparalleled in quality.

**Policy R.G2.P1:** Beech Mountain will strive to offer the best programming and activities that are fun, safe, fulfilling, and rewarding

What makes Recreation activities high-quality? This is a difficult question because the answer is highly subjective, and each individual's answer may be slightly different. Nevertheless, some basic elements seem to be universally acknowledged as key factors. Beech Mountain's recreational opportunities should always meet these four criteria:

- Fun
- Safe
- Rewarding
- Fulfilling



Recreational offerings that meet these criteria emphasize participation for enjoyment, self-understanding, self-discipline, team work, and sportsmanship. Programming such as this will help youth and adults reach their full potential and will enhance the quality of life for all of Beech Mountain's residents and visitors and will thereby help us achieve our goal of being widely recognized for our excellence in recreation.

**Policy R.G2.P2:** Beech Mountain will have recreation programs that reflect our community's character and values

All of its residents and visitors know that Beech Mountain is an incredible place. Its natural environment is magnificent, and its people are close-knit and friendly in a way that is uncommon in our modern society. We hold that these values themselves are solid building blocks for any endeavor. If our recreation programs are geared towards and abide by these fundamental values, they will amalgamate with those values.

**Strategy R.G2.S1:** Programs retain their focus on the outdoors.

One of the tenets of Beech Mountain's "character" is our focus on and appreciation of the outdoors. The Parks and Recreation Department should concentrate its efforts on programs and services that get people outside enjoying our mountain.

**Policy R.G2.P3:** Focus on the quality of programming rather than the quantity

In the department's endeavors to have a successful recreation program, it seems that there is a tendency to try to offer more programs and more services in order to entice more participation. However, the amount of programming offered can sometimes stretch the staff too thin. And more programming hasn't always resulted in better programming. In the future, the staff should focus on those programs and services for which there is the highest demand and strive to make those the best they can be. As usage increases, the demand for more programming will also increase and more programming can be offered.



**Goal R.G3:** Beech Mountain's recreational facilities (indoor and outdoor) stay second to none in terms of quality, maintenance, availability and friendliness

**Policy R.G3.P1:** Beech Mountain will consider human resources/ staff requirements for successful recreation endeavors

In the past, Beech Mountain has undertaken recreation and recreation related projects without fully considering the cost of the projects in terms of manpower. For example, the addition of the streetscape walking paths and "Bark Park" have added significant demands to existing town staff in terms of mowing, landscaping, and trail maintenance. Future additional facilities should take into account the manpower and staffing requirements that they will create. For our facilities to remain "top notch" they must be expertly maintained and operated.



Also, one of the strengths that has been recognized in our Recreation Programs is the friendliness of our staff and their willingness to help. Beech Mountain should seek to establish continuity in terms of recreation personnel so that established relationships between recreation users and recreation staff is maintained.

**Policy R.G3.P2:** Our programs remain conscious of aesthetics and the importance of beautification of the community

As mentioned previously, recreation amenities in a resort town such as Beech Mountain are for more than amusement alone. Our recreation amenities can also be ways to accentuate the beauty of the town. Our recreation amenities should be valued not only for how they function but also for how they look. An example of a successful employment of this principle is in the children's playground at Buckeye Recreation Center, with its rustic style that fits well with the image of Beech Mountain. The playground is enjoyed not only for its usefulness, but it is also pleasant and attractive, which may be reasons that it is one of the more popular amenities at Buckeye.

To further this goal, it is recommended that all recreation structures should conform to a set of design standards for town buildings. They will in this way contribute to a pervasive theme and create uniformity throughout the town. This also carries the added benefit that buildings will instantly be recognized as recreational offerings...

Respondents to the surveys and forums also suggested that a similar policy for recreation signs be employed. Disparate colors and styles of signage for trails, parks, etc. were confusing and difficult to recognize.

**Policy R.G3.P3:** Where possible, recreation endeavors help to conserve the natural environment and remain compatible with the environment at all times

Congruent with our focus on the outdoors and our image as an outdoor destination, Beech Mountain's recreation facilities should aim to preserve the natural environment that brings it such distinction. This can be done by ensuring that environmental ethics are employed in all of the department's projects and activities. For example, trail maintenance and construction can aim to minimize erosion. New facilities, when created, can avoid locating in sensitive areas or habitats. One of the most powerful ways this can be done is through the acquisition of land for passive recreation, for which support was indicated in the surveys and forums.

**Policy R.G3.P4:** Look for opportunities to improve upon existing facilities and amenities

In terms of delivering excellent Recreation facilities, Beech Mountain is off to a great start. The existing facilities of the mountain's recreation infrastructure are wonderful, but extra effort and attention to their maintenance and upgrades and improvements where necessary could bring them to another level. The following items have been identified through the survey responses, forum feedback, and discussions with town staff as some of the bigger items that need improvement. It is recommended that the town pursue these improvements as budgeting and manpower allows:



### **Picnic Shelter Facilities at Lake Coffey**

A picnic shelter facility would be well suited and often used at the popular Lake Coffey recreation area.

### **Sheltered, Outdoor Cooking Facility at BRC**

Buckeye Recreation Center is often used to cater large events. It has been noted that an outdoor cooking facility would be useful for preparing food for these events. The indoor kitchen is inadequate for preparing large meals for events.

### **Overnight Camping Facilities**

Camping is an activity that fits well with Beech Mountain's rustic image and could bring visitors to our mountain. While a larger private campground could be successful here, there is also potential for camping of smaller scale on town-maintained property. There is little doubt that such a facility would be successful.

### **Covered Shelter/Amphitheater**

A covered shelter or amphitheater would be well suited for outdoor performances, especially those that reflect our mountain heritage, such as bluegrass music. Similar facilities have been extremely successful in nearby Banner Elk and other local communities.

### **Outdoor Experiential Recreation Facilities such as a Low and High Ropes Course, Climbing Wall, or Zip Line**

The addition of this type of feature to our present capabilities would poise the Town and the Recreation Center to be marketed as a destination location for corporations, schools and clubs for retreats, reunions, camps, team & trust building courses as well as motivational and education programs. Such amenities could make Beech Mountain an even more desirable destination for groups and in the process raise revenues for the Recreational facility and the town.

## **Goal R.G4: Beech Mountain will encourage participation in recreation programs**

In striving to serve its constituents to the fullest extent possible, Beech Mountain will be a community that goes the extra mile to encourage participation and seek to increase utilization of recreation facilities in order to foster healthy and active lifestyles for its people. One of the foremost objectives of the Recreation Department in coming years should be to increase usage of our facilities.

Several of the following recommendations focus on marketing. In contrast to the marketing efforts described under Goal R.G1, the marketing described here is geared more towards getting the people who are already in the area to participate, rather than marketing to attract new people to Beech Mountain, which is discussed in Goal R.G1.



**Policy R.G4.P1:** Effectively communicate the availability of upcoming recreation opportunities

One of the best ways to increase usage of our facilities is to keep people informed about what is going on. Survey respondents indicated that receiving emails from the Recreation Center was an effective reminder and encouragement to attend Recreation Center activities. The Recreation Department's Program Guides are also very popular and effective means of getting interest and attendance at our programs.

**Policy R.G4.P2:** Market activities and programs to out-of-town residents

There is no public recreation facility in Watauga County that is comparable to Buckeye Recreation Center. The Recreation Center could capitalize upon that fact and sequester users beyond Beech Mountain's town limits. It is easily foreseeable that many residents of areas such as Vilas, Bethel, Cove Creek, and Boone would use Buckeye's facilities if they were aware of what was offered. Many people in these areas are probably unaware that Buckeye exists, and many more probably do not know how to access the Recreation Center and Buckeye Recreation Center via U.S. 321 and Buckeye Creek Road.

A method of increasing usage in the surrounding communities would be to offer Buckeye as a location for local school functions or events, as well as local youth sporting events such as church basketball leagues, etc.

**Policy R.G4.P3:** Offer a variety of recreational programs and amenities that serve groups of diverse abilities and interests, including consideration of expanding non-athletic recreational opportunities.

In order to obtain interest from a broad group of participants, Beech Mountain will continue to offer programs for various age groups and for people with various interests and abilities, when possible.

**Policy R.G4.P4:** Stress the health and fitness benefits of recreation

Public Recreation exists to better the lives of the people whom the government entity serves. People's lives are bettered by recreation in many ways, including better health and fitness for participants. The importance of healthy living and exercising regularly are becoming more widely recognized all the time. As more and more people realize their needs to be fit, the Recreation Department should position itself as a means to better health.

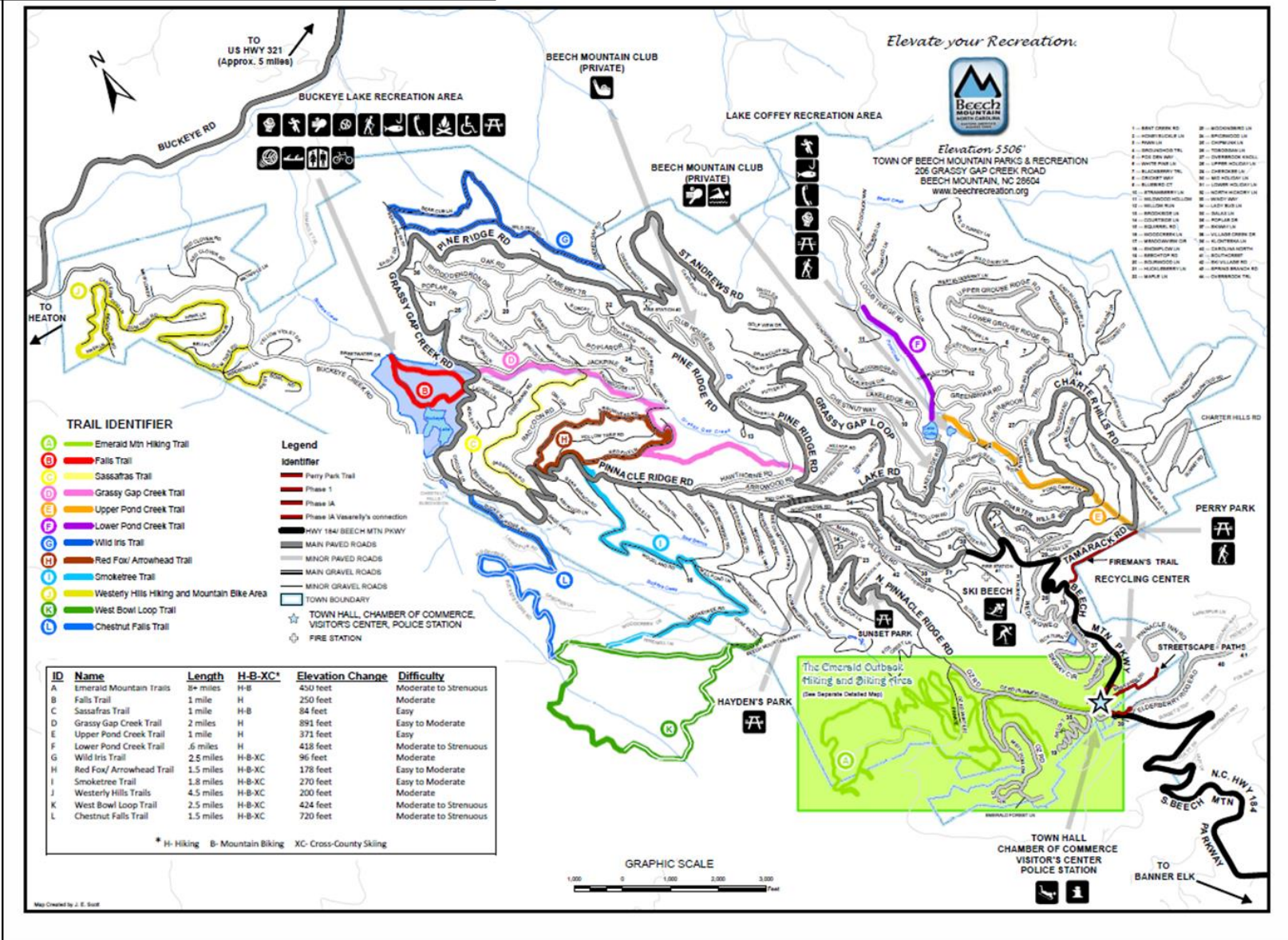


**Goal R.G5:** Beech Mountain will have an interconnected trail network that links parks, neighborhoods, and communities



As previously noted, connectivity, especially pedestrian mobility, was a large concern of Beech Mountain stakeholders as reflected in surveys and forums. Respondents saw the need to better link together Beech Mountain's parks and facilities to connect parks, neighborhoods, and communities. Beech Mountain's trail system is an important part of the total pedestrian mobility. Beech Mountain should pursue development of trails, paths, and walkways that interconnect its various amenities and key locations.

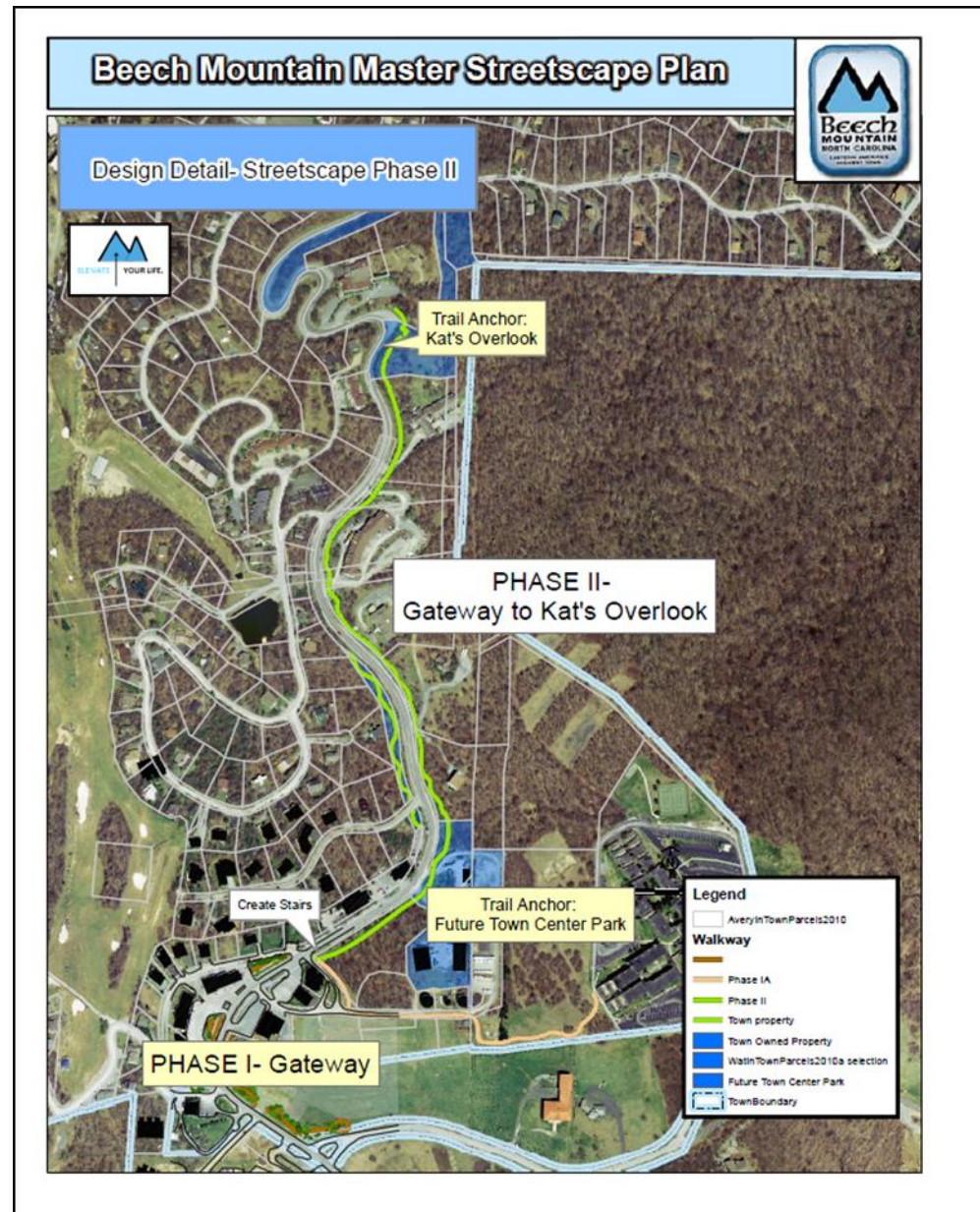
## BEECH MOUNTAIN'S CURRENT TRAIL SYSTEM



The Town's current trail system is depicted on the map on the previous page. The trail network, as well as the recreational amenities as a whole, are largely separate and individual entities. To tie this network together, several needed linkages are as follows:

### Phase II of the Streetscape Improvements

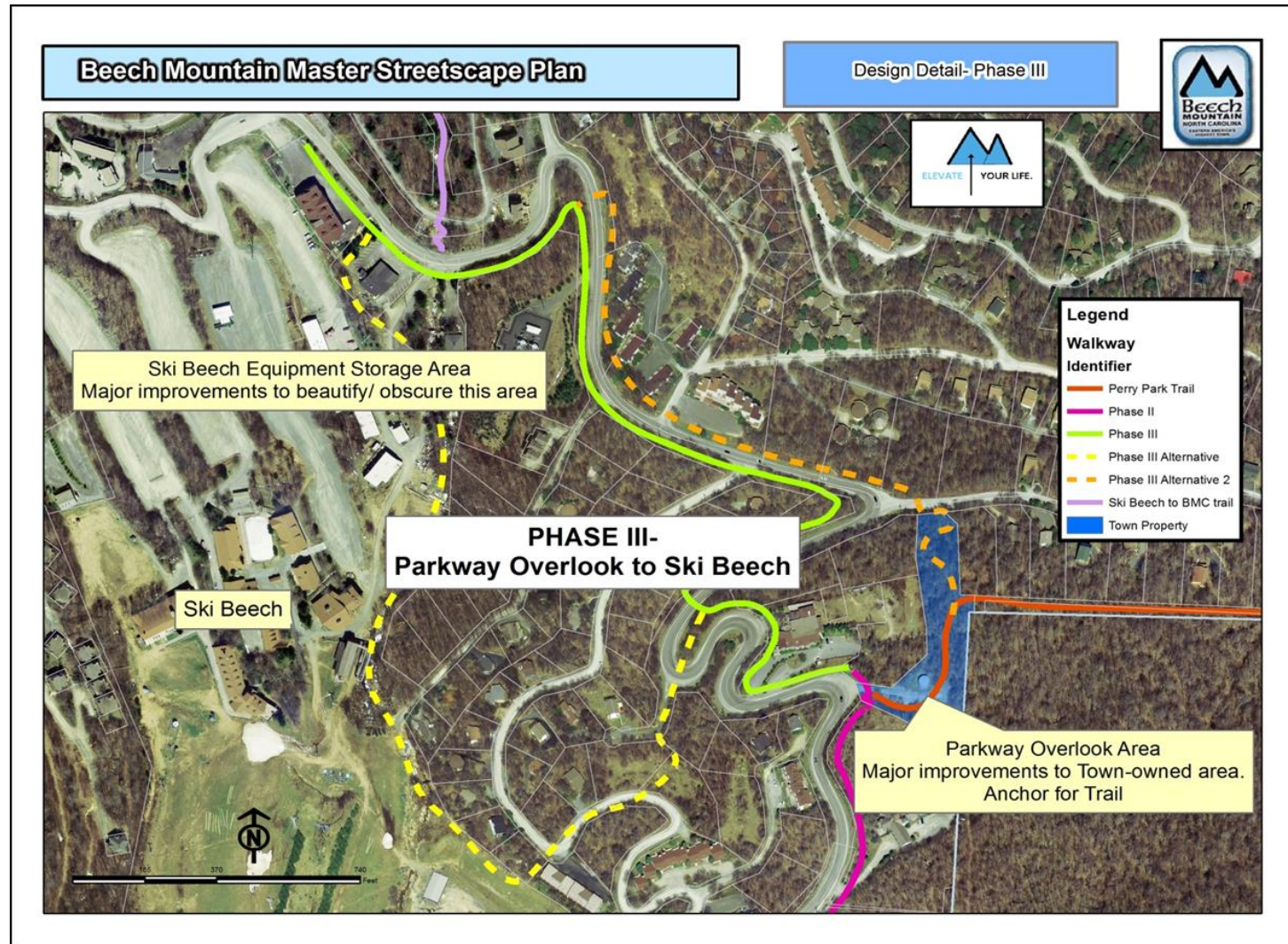
Possibly the single most important linkage in our trail/ pedestrian system is the creation of a linkage that allows pedestrian mobility up and down Beech Mountain Parkway from Town Hall to the Parkway overlook. Such a connection would provide access to the Town's main commercial entities as well as connect to the hiking trail network via "Fireman's Trail" from the overlook to Perry Park.



### Phase III of Streetscape Improvements.

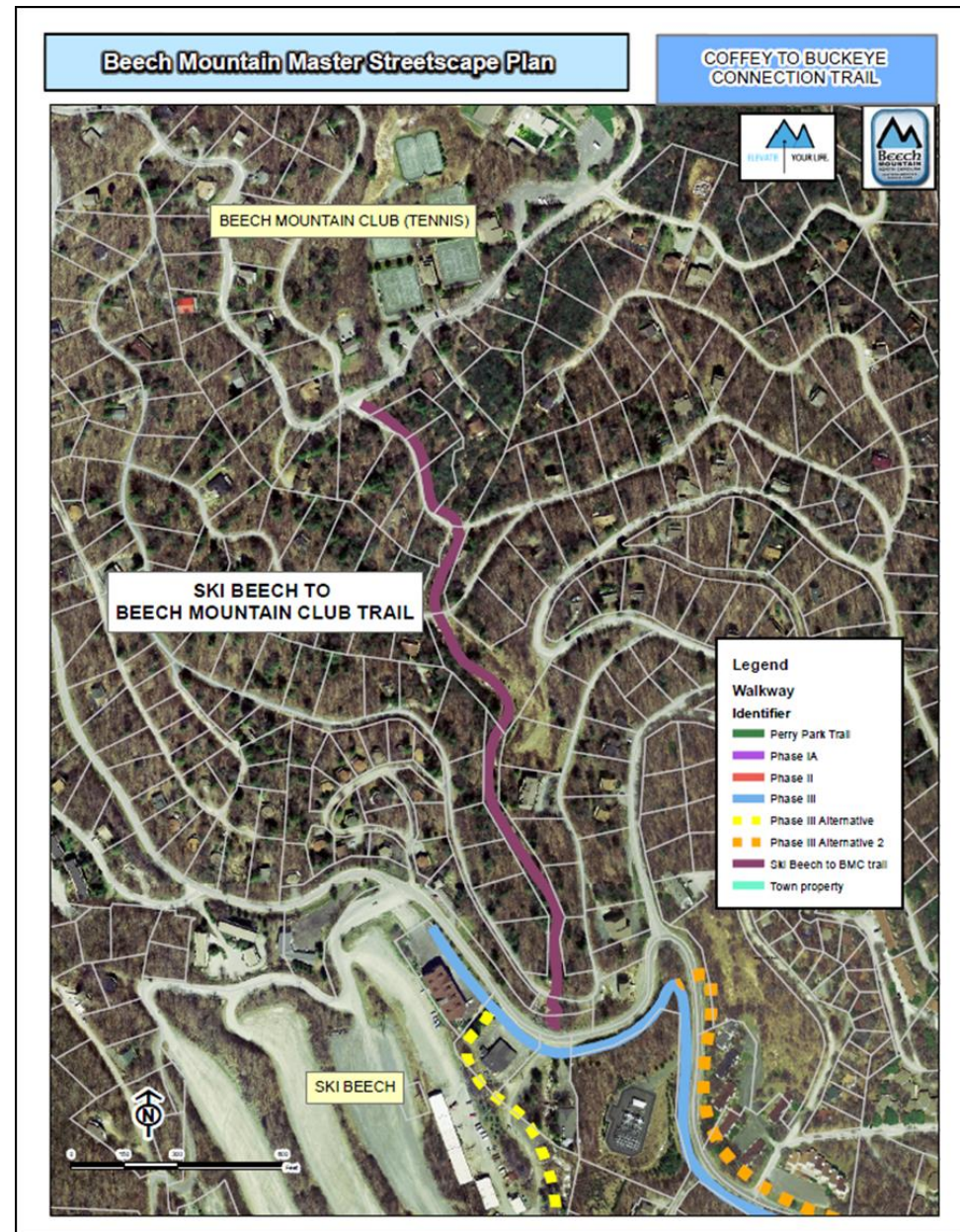
Continuation of the path to the other commercial hub of Beech Mountain at the ski resort is another critical section of necessary path. This section is faced with several sharp road switchbacks and difficult terrain, and therefore multiple routes have been suggested.

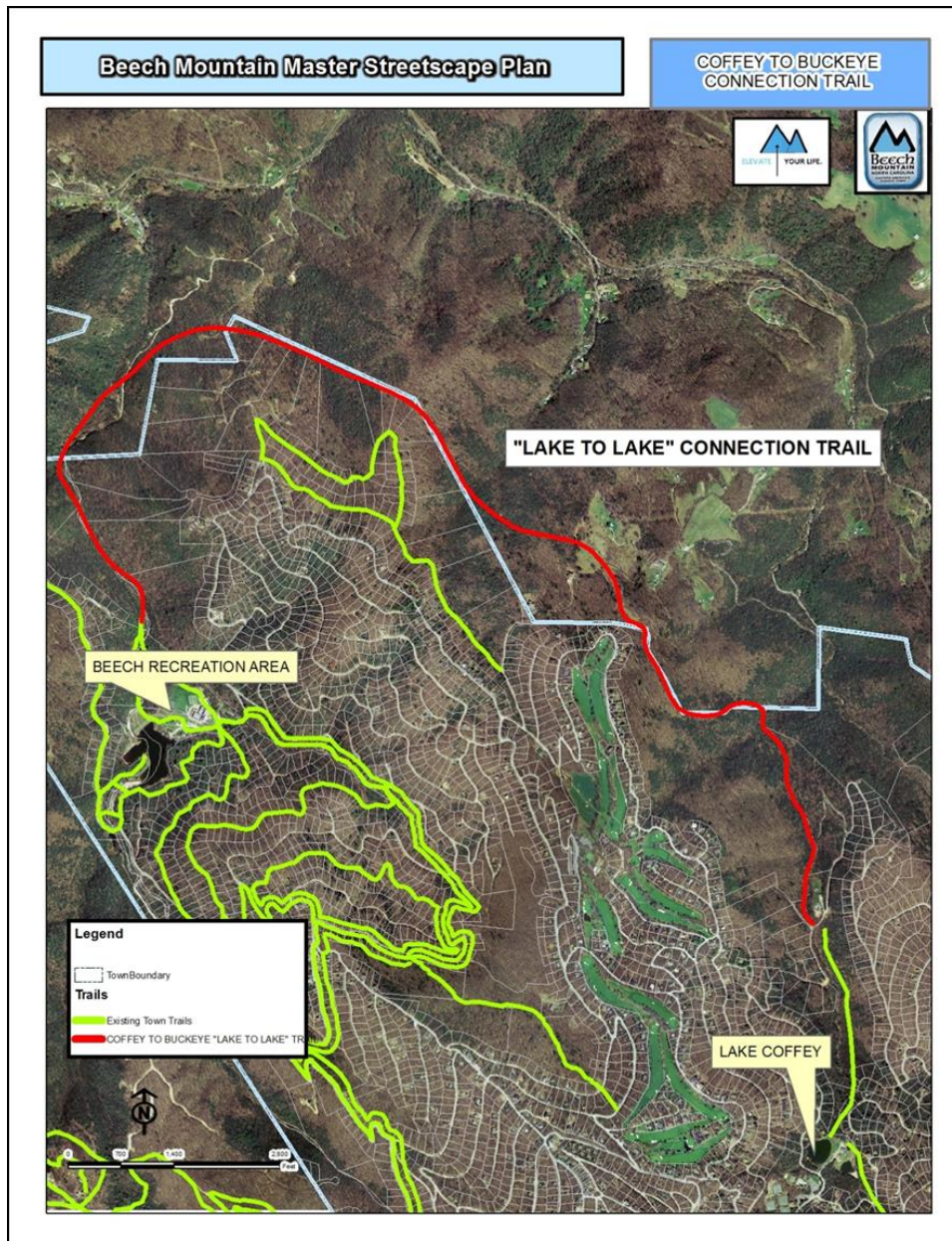
Regardless of which route is eventually pursued (maybe several of these routes could be built), it is clear that this is an important linkage in the pedestrian network.



### Beech Mountain Resort to Beech Mountain Club Trail

This trail would provide important connectivity between Beech Mountain Resort and the neighboring commercial establishments and Beech Mountain Club's tennis complex off of Lakeledge Road.





### "Lake to Lake" Trail

This trail would connect Buckeye Lake and Lake Coffey, two of Beech Mountain's most important recreational sites. In doing so, the trail would also tie together the trail networks at the top of the mountain (Streetscape, Fireman's Trail, Upper and Lower Pond Creek Trails) with the network of trails near Buckeye (Falls Trail, Grassy Gap Creek Trail, etc.). This would result in a interconnected trail scheme that could theoretically be hiked from start to finish without having to exit the system.



### **West Bowl Connector Trail**

Similar to the Lake to Lake Trail, this connection from the Emerald Outback to the West Bowl would provide a needed linkage between the trail networks at the top of the mountain and those around Buckeye. One section of this trail was recently completed in 2012 through funding from the Adopt- A- Trail Program, and further grants have been submitted through the Recreational Trails Program of the North Carolina Department of Environment and Natural Resources to obtain funding to complete the connection.

### **Trail Connections to out of Town locations (Banner Elk, Appalachian Trail)**

Beyond Beech Mountain's Town Limits, it is important to consider how our trail network fits in with the growing number of regional trails in the area. Several linkages in particular would be useful:

- 1) Proposals have been made to link Beech Mountain, Banner Elk, and Sugar Mountain by a continuous hiking trail. Such a trail would carry many benefits and would be heavily used.
- 2) A trail connecting Beech Mountain to the Appalachian Trail holds much promise, and would have many economic as well as recreational benefits. Such an offshoot of the Appalachian Trail would open up Beech's trails to day hikes from the AT. Long distance hikers on the AT could take the diversion to come and rest from the trails for several days at our inns and hotels. Appalachian Trail hikers are often vocal advertisers of their journeys, and trail logs and blogs could spread the word about the friendly and fun town with a focus on outdoor recreation on Beech Mountain.



**Goal R.G6:** Beech Mountain will strive to provide the highest quality recreational opportunities while working within limits of the Town budget.

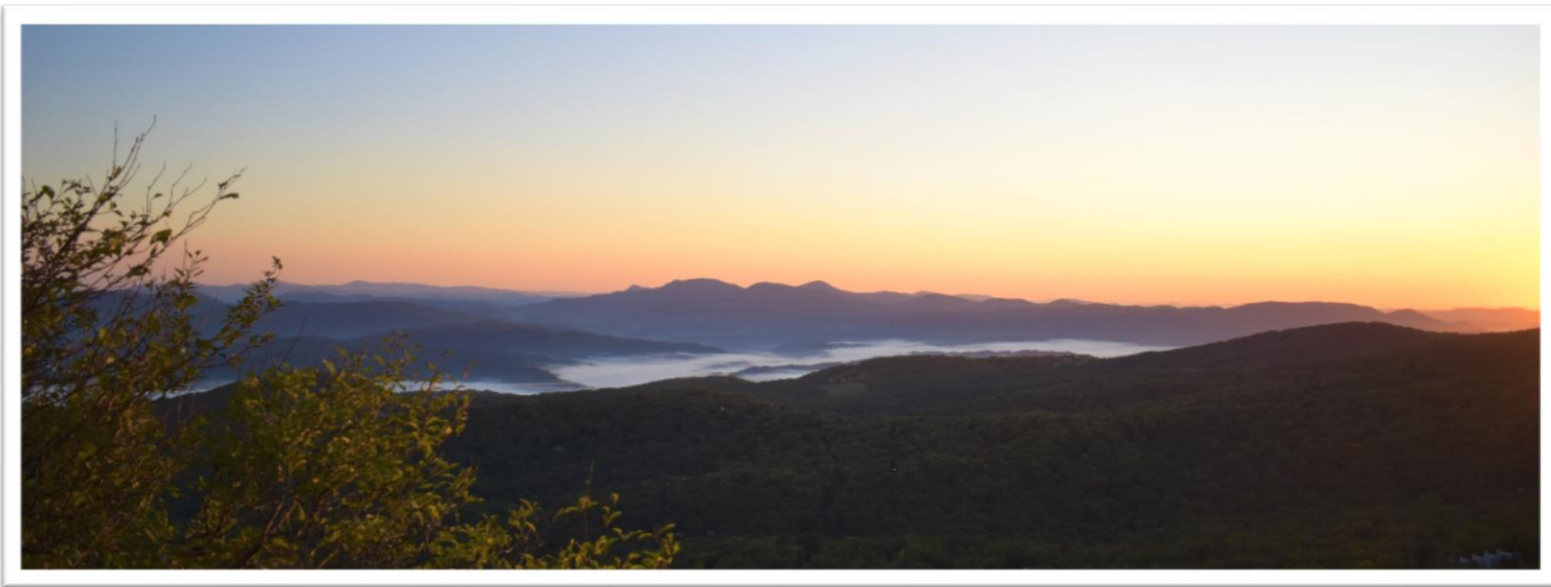
The Town of Beech Mountain recognizes that recreation is much more important than just an “extra”- it is an essential and critical component of the services provided to our residents and visitors. Therefore, recreation development in Beech Mountain will move forward wisely and prudently, but it will continue to move forward.

**Policy R.G6:P1:** Concentrate on improving and maintaining existing facilities first

One of the best ways to be wise with spending on recreation is to focus on our existing facilities and infrastructure before further extending our obligations. The respondents to the recreation survey and forums were clear in their support of this policy. Concentrating on existing facilities, however, does not mean that no more money will be spent on recreation. In fact, concentrating on existing facilities in many cases may mean the expenditure of additional money to properly staff, maintain, and care for our recreational entities. Beech Mountain should be good stewards of the abundant recreation assets it has by ensuring they are in top condition.

**Policy R.G6.P2:** Capitalize on opportunities for external funding

A second way to ensure that Beech Mountain’s recreation endeavors are fiscally responsible is to search out grants and funding opportunities to accomplish necessary initiatives. Aggressively searching and pursuing these opportunities could result in improved recreation facilities while minimizing burdens on taxpayers.

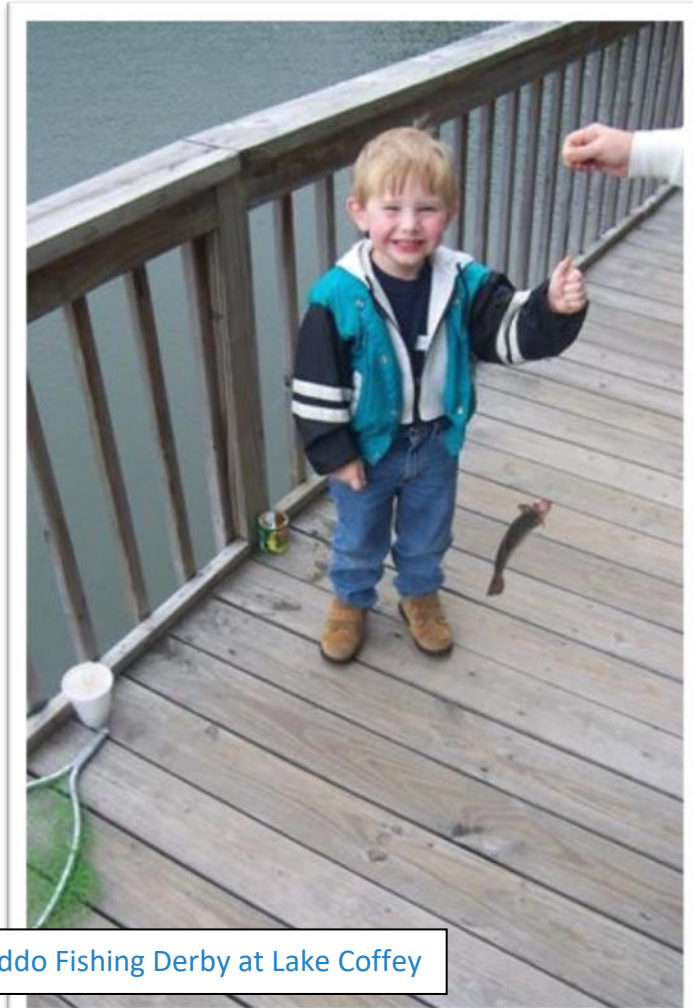


## R: Discussion and Conclusion

Beech Mountain is a resort-based community and thus the importance of recreation is invaluable. Some of the primary reasons that community members choose to live on Beech Mountain- and guests choose to visit- are the recreational opportunities that the town has to offer. The breathtaking views, unparalleled facilities, extremely pleasant summer temperatures, enriching programs and amazing and supportive community members collectively make up the draw to the mountain.

The importance of the continuation of positive direction for the recreational opportunities on Beech Mountain cannot be stressed enough. If the Town of Beech Mountain is going to continue to be competitive as a resort destination in the mountains of North Carolina, the amenities that it has to offer must be second to none in both the private and public sectors. There is an imperative need to meet the collective goals of this plan and for the town to improve on its assets and capitalize on opportunities to improve in the future.

Recreation is a vital part of healthy living. Beech Mountain is an ideal location to recreate both indoors and out and should continue to strive to be the best that it can possible be for its community members, visitors and guests.



Kiddo Fishing Derby at Lake Coffey

## Chapter 12: Environmental Sustainability

### ES: Introduction

### ES: Sustainability Goals, Strategies, and Policies

**Goal ES.G1:** Conserve natural surroundings and open space

**Strategy ES.G1.P1:** Develop a plan for land conservation

**Strategy ES.G1.S1:** Prioritize land parcels for conservation

**Strategy ES.G1.S2:** Allocate funds to acquire land from private owners

**Strategy ES.G1.S3:** Investigate programs for the purchase or transfer of development rights

**Strategy ES.G1.S4:** Serve as a catalyst for cooperation between community groups and land trusts

**Goal ES.G2:** Protect Beech Mountain's natural streams and water supply

**Strategy ES.G2.S1:** Update the watershed overlay districts and buffer zones

**Strategy ES.G2.S2:** Promote water conservation in the community

**Strategy ES.G2.S3:** Continue to maintain and improve the town's water utilities

**Goal ES.G3:** Limit future development of geologically unstable areas and steep slopes

**Strategy ES.G3.S1:** Identify and create a steep slope overlay district

**Strategy ES.G3.S2:** Require stronger design standards for building and tree removal in the steep slope district

**Goal ES.G4:** Maintain the health and beauty of Beech Mountain's urban forest

**Strategy ES.G4.S1:** Revise tree ordinance

**Strategy ES.G4.S2:** Follow recommendations of forest master plan studies conducted in 2009

**Goal ES.G5:** Promote sustainable building practices and the use of renewable energies

**Strategy ES.G5.S1:** Provide leadership in sustainable building practices

**Strategy ES.G5.S2:** Promote the use of sustainable technology

**Strategy ES.G5.S3:** Provide incentives for private development that meets recognized standards for sustainability such as LEED, Energystar, etc.



### ES: Discussion and Conclusion



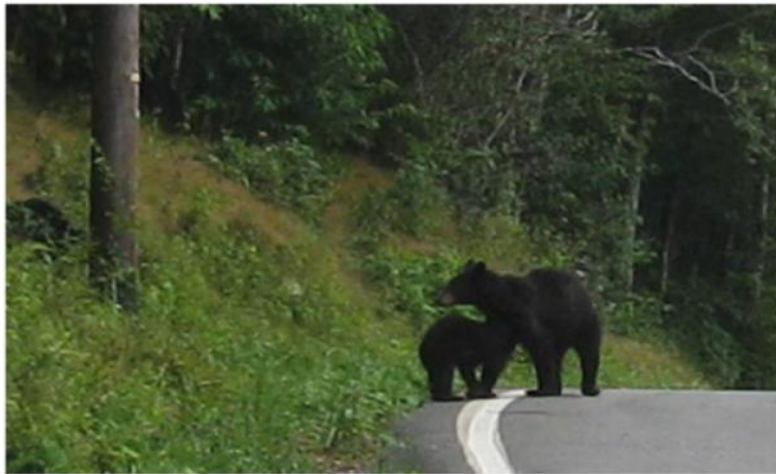
## Background

The Town of Beech Mountain is nestled high in the North Carolina Mountains amongst dense forests, streams and wildlife. The beautiful natural surroundings are an important part of life for Beech Mountain residents and visitors. Additionally, the mountain environment is home to essential natural resources that support both wildlife and the town. The close relationship between the built and the natural environments on Beech Mountain means that any development in the town directly impacts these vital natural resources. The quality of this relationship can be measured, managed, and improved through sustainable development practices. Sustainable development works toward the beneficial integration of the natural and built environment. This chapter will explain the town's goals, proposed policies, and recommended strategies to help ensure that Beech Mountain can continue to be a community that is aligned with nature well into the future.

## Goal ES.G1: Conserve natural surroundings and Open Space

### Policy ES.G1.P1: The Town will Develop a Plan to Conserve Open Space.

Beech Mountain's natural environment and open space are important resources to the town, the community, and the abundant wildlife that live on the mountain. The town's surroundings are the underpinning for the tourism industry on the mountain. In order to conserve and protect these resources, the town will develop a plan that lays steps necessary for conservation. Having a plan of action will allow the town to conserve land in a way that benefits both the community and natural environment.



### Strategy ES.G1.S1: Prioritize land parcels for conservation

The land conservation plan should have an analysis that targets lots that are most appropriate for conservation. High priority parcels will include but are not limited to: environmentally sensitive areas, lots along trails, steep slopes, unbuildable lots, lots without utilities, and clusters of vacant lots.

### Strategy ES.G1.S2: Allocate funds to acquire land from private owners

The proposed plan will include an adjustment of the town's annual budget to allow for a small land acquisition fund. This funding would provide capital for the town to purchase land for conservation purposes. Land acquisition will be gradual, setting a long-term goal to conserve open space for future generations.



**Strategy ES.G1.S3:** Investigate programs for the purchase or transfer of development rights for conservation.

Property ownership can be conceptualized as a bundle of rights. These rights can be separated from one another and transferred between parties without the original owner losing ownership of the property. This severability of rights allows for a unique opportunity for Beech Mountain's land owners who hold their land for reasons other than prospective development.

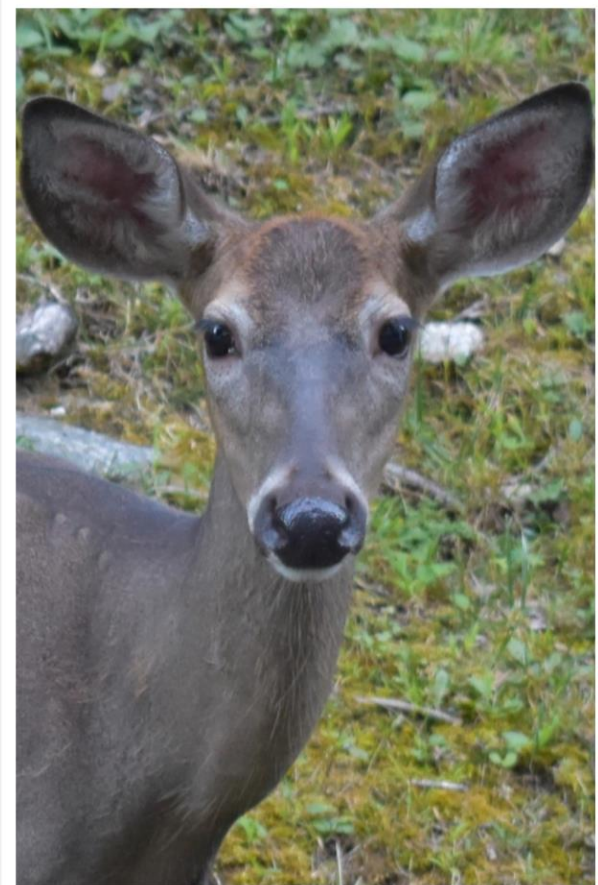
Beech Mountain Club membership requires land ownership on the mountain with current club dues paid. Some property owners have kept their undeveloped land for membership purposes. Keeping membership current increases the property value for future development and sale. In order to acquire Club Membership, residents who own property without club membership can buy vacant lots with current membership. Since many of these owners are not holding the land with an expectation of future development, an excellent opportunity for conservation on these lots exists.

While purchase of development rights or granting them to conservation organizations may be one option, the Transfer of Development Rights (TDR) may be another. These programs allow owners of high priority conservation land to trade their development rights for the development rights of a parcel in a neighborhood where the town is encouraging growth. Currently, North Carolina law is not receptive to these kinds of programs, but these laws are constantly changing, and TDR may be an option in the future.

**Strategy ES.G1.S4:** Serve as a catalyst for cooperation between community groups and land trusts.

A *Conservation Easement* is an agreement between the land owner and an organization that protects the undeveloped property from future development. The private owner retains ownership of the property but is unable to build. There are many options for conservation, and by working with land trusts such as the High Country Conservancy property owners can make an educated decision regarding their property. Incentives for this type of conservation include tax breaks for landowners who donate land or agree to these easements. The Town could encourage this type of conservation by:

- Sending letters to educate high priority land owners about conservation options and benefits
- Inviting local Land Trusts to host community workshops to promote conservation and education



## Goal ES.G2: Protect Beech Mountain's streams and water supply

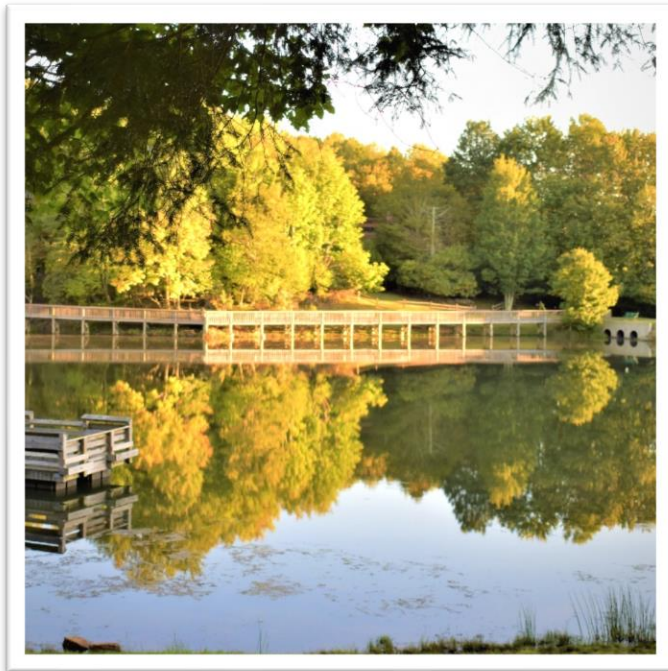
Water quality and availability are persistent issues in any mountain community. The relatively small water supply watershed on the mountain means that maintaining stream quality directly impacts the quality of drinking water. The Town's drinking water reservoir, Buckeye lake, has been threatened by drought several times over the past few years. The numerous streams also provide ecological and recreational assets. Conserving the water supply requires the cooperation of the community, developers and the town to ensure the availability of clean water on the mountain.

### Strategy ES.G2.S1: Improve watershed overlay district and buffer zones regulations

Water Supply overlay districts serve the purpose of maintaining a predominately undeveloped land use pattern. They restrict land uses and require developers to follow stricter building and construction practices. The current watershed overlay districts on Beech Mountain include:

- Buckeye Creek water supply watershed WS-II and WS-II critical area.
- Pond Creek water supply watershed WS-II critical area.

This plan recommends that Beech Mountain consider increasing the required riparian buffer distance for all-natural waterways. The current watershed buffer ordinance requires a distance of 30 feet between any structure and watercourse.



### Strategy ES.G2.S2: Promote water conservation within the community

During summer months, when the population is at its highest, the mountain's water supply is heavily stressed, and in the past, summertime droughts have brought the water supply to a dangerously low level. In April 2010, the Town of Beech Mountain developed a water shortage response plan that defines 5 levels of water shortage and details a plan for response in each successive stage. To encourage more judicious use of water, the Town should structure its utility billing in such a way that excessive use of water is penalized.

### Strategy ES.G2.S3: Continue to maintain and improve the town's water utilities

In 2011, Rothrock Engineering conducted a Water and Sewer study for the Town of Beech Mountain. While significant steps to improve this situation have already been made, the study estimated that Beech Mountain's water system has an estimated water loss of 59.19%- Currently, the approximate unaccounted for water is 47%, which includes hydrant flushing, leaks, and other unbilled uses of water. It is recommended that the town continue to repair and replace damaged components in a planned, appropriate manner. This is a large-scale project that will be completed over an extended time period and will follow Rothrock Engineering's utility improvement plan.



## Goal ES.G3: Limit the future development of geologically unstable areas and steep slopes

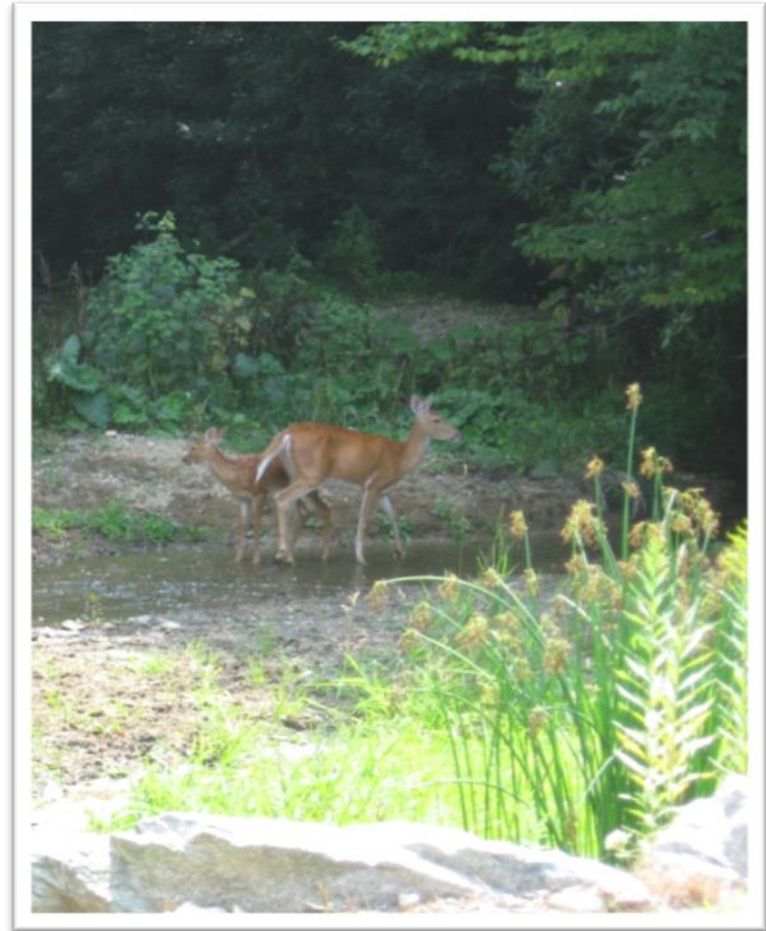
Landslides are an increasing threat across the High Country and development on steep mountainsides increases the susceptibility for a major landslide event. Despite the steep terrain on Beech Mountain, the current zoning code contains no restrictions for building on steep slopes. The North Carolina Geological Survey recently conducted an in-depth study of slope stability and landslide hazards for Watauga County. The product maps indexed the hazard level for potential landslides in the county. Many of Beech Mountain's steepest slopes were labeled as unstable or in the high threshold for instability. Without any guidelines or regulations for building on steep slopes, Beech Mountain could fall victim to a major landslide event.

**Strategy ES.G3.S1:** Identify hazardous slopes and create a steep slope overlay district

- Map areas with slope over 30% and areas that the NCGS identified as having high or moderate slide hazard
- Produce a steep slope overlay district that would enforce stronger regulations for building design and erosion control.

**Strategy ES.G3.S2:** Require stronger design standards for construction and erosion control in the steep slope district

- Provide guidelines for best development practices when building on slopes
- Require Geotechnical analysis for identified high-hazard areas
- Minimize site disturbance



## Goal ES.G4: Maintain the health and beauty of Beech Mountain's forest

The beauty of the Beech Mountain's forest supports economic sustainability and healthy property values. Our forest also provides food and cover for Beech Mountain's prolific wildlife. The healthy forest cover prevents erosion on steep slopes and helps maintain good water quality. Our trees provide privacy, serenity and improved quality of life for the town's residents.

To protect this wonderful asset the Town of Beech Mountain has taken multiple actions such as enacting a tree protection ordinance and becoming a "Tree City, USA". Nevertheless, there is much work to be done to maintain the health and beauty of Beech Mountain's forest.



### Strategy ES.G4.S1: Revise tree ordinance

The years since Beech Mountain's tree ordinance has been in affect have provided great insight into the administration of such an ordinance. Over this time period, more appeals to the Board of Adjustment have been sought over tree cutting violations than any other issue. Though there are many ardent supporters of the tree ordinance in its current form, there is much evidence that it could be improved.

One criticism of the tree ordinance is that it actually has some adverse ecological impacts. Restriction of tree cutting has created a dense canopy that can result in loss of species variety. It can also affect the natural life cycle replenishment of a forest when the canopy chokes out the undergrowth and prevents small trees from maturing. Finally, excessively dense forests can present increased fire danger.

If the Tree Ordinance is to be revised, major factors to consider in its redevelopment should be:

- Finding ways to protect the forest without overtaxing staff requirements
- Protecting trees without overburdening property owners
- Ensuring ecological stability of the forest
- Encourage planting and replanting of native species trees
- Encourage homeowners to engage in healthy forest practices

### Strategy ES.G4.S2: Follow recommendations of the Urban and Community Forest Master Plan

One way the Town can lead the way in promoting forest health is to take good care of its own trees. To this end, the Town had a Community Forestry Plan prepared in August 2009 by Hunter's Tree Service. The study included an overview of tree numbers, locations, variety, and the health of each species in the Town's public parks and lands. Its recommendations include:

- Tree species for future plantings- selection based on elevation
- Close interaction with a consulting forester whose work is focused on Beech Mountain's urban forest
- Further canopy analysis
- Recommended courses of treatment and care for nearly every tree on Town Property



## Goal ES.G5: Promote sustainable building practices

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Sustainable building practices and energy efficient building design are becoming more common as technology improves. By taking advantage of this trend, the Town of Beech Mountain can encourage developers to use sustainable building methods in order to produce more efficient homes. The US Green Building Council estimates that the slight increase in building costs that incorporates green building design are absorbed into lower utility bills and decreased maintenance costs in a relatively short period of time. Beech Mountain's cold winters make it a prime example of a location where efficient building design can have a very large impact.

### Strategy ES.G5.S1: Provide Leadership for sustainable building practices

Leading by example is a good way encourage sustainable building practices.

- Incorporating sustainable building practices in the towns buildings and new development
- Where possible, retrofit sustainable technologies on town-owned buildings
- Encourage energy efficient building site design, such as south-facing roofs and LEED construction technology

### Strategy ES.G5.S2: Promote the use of sustainable technology

- Remove regulation prohibiting green technologies
- Waive or reduce permit fees for the installation of sustainable technologies

**Strategy ES.G5.S3:** Provide incentives for private development that meets recognized standards for sustainability such as LEED, Energystar, etc.

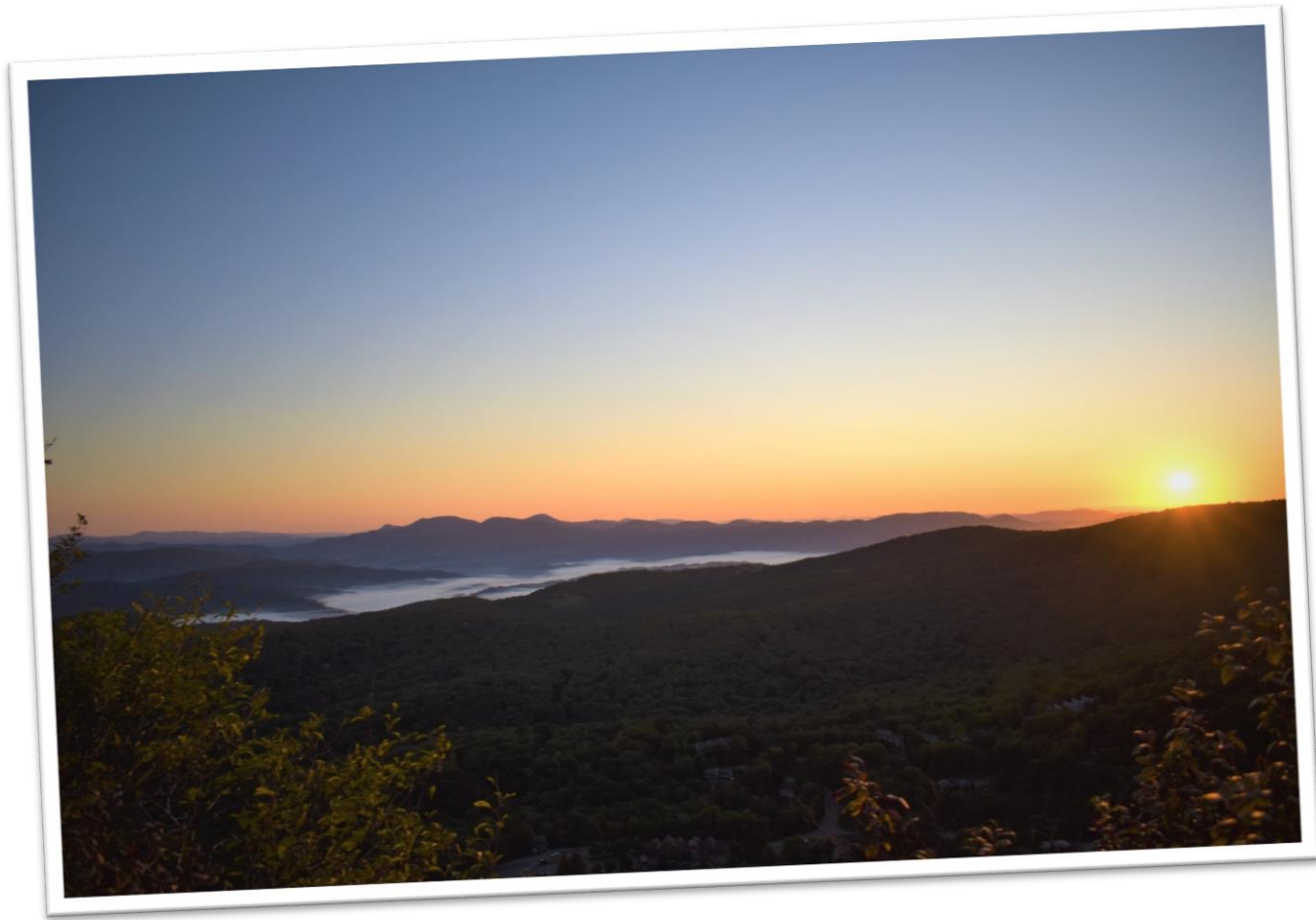
- Leverage Building Permit Fees
- Waive or reduce permit fees for the installation of sustainable technologies



## ES: Discussion and Conclusion

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It is imperative that we take steps now to ensure that future generations can enjoy the natural surroundings that make Beech Mountain special. This chapter has outlined strategies to utilize and manage our land, our water and our resources in ways that conserve and protect them for those who come behind us.



## Chapter 13: Implementation

### Implementation

It is intended that this document become an indispensable reference for future decisions in the Town of Beech Mountain. It should be a living and breathing document, being consistently referred to. Its contents should be debated and discussed, and when needed, revised. It is suggested that a comprehensive revision of this plan be performed every 5-7 years in order to ensure that new developments, issues, and concerns are addressed-- as well as to make certain that the goals and recommendations of this plan are still aligned with the sentiments of Beech Mountain's citizens and stakeholders.

The Town should initiate projects to undertake the recommendations contained herein as soon as they become reasonable and practical. Obviously, some of the recommendations in this plan are intended for nearer-term completion than others. In a twenty-year plan, some of the recommendations made may seem totally unrealistic today but may become achievable in the coming two decades. It is nevertheless critical to start discussing and thinking about these items now, to be forward thinking and proactive in addressing them, rather than reactive. This is the purpose of planning. As the maxim says, "failing to plan is planning to fail."

It is hoped that this plan has provided an opportunity and a forum for the Town to look out into the future and to realistically and practically identify the challenges and opportunities that are coming. With these challenges and opportunities in mind, the Town has created this vision for the future and hopefully should be prepared to see its realization.

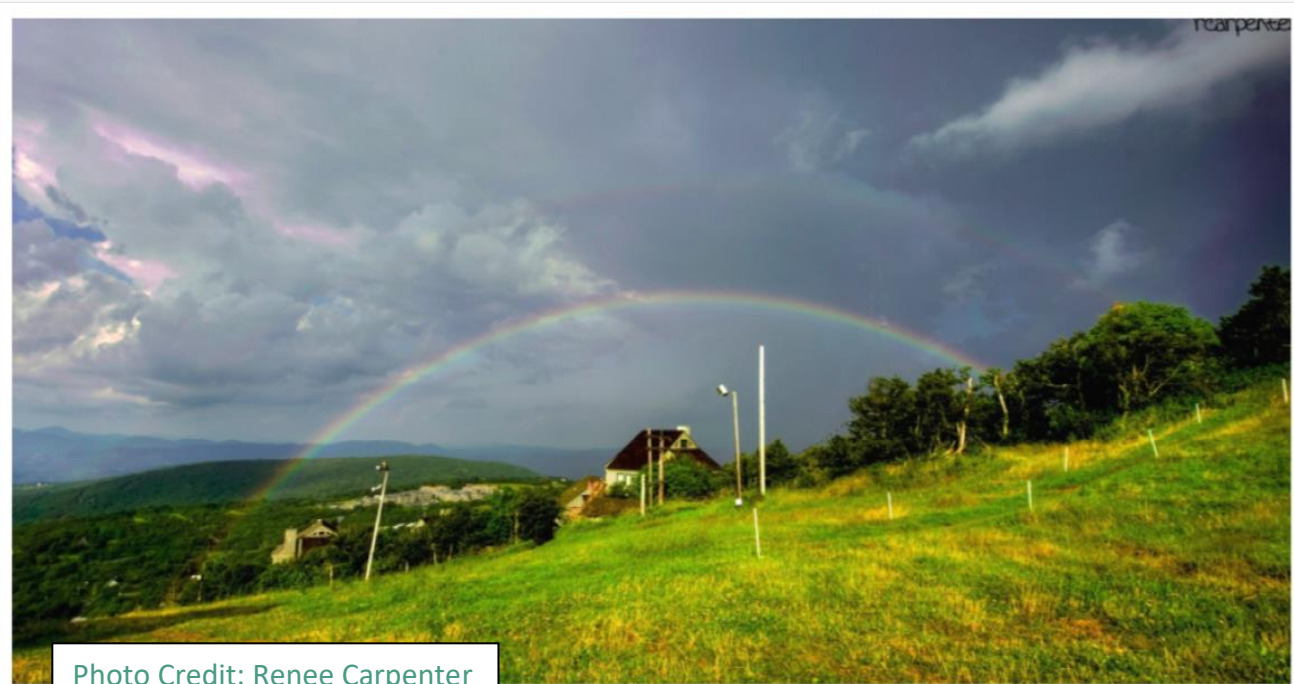


Photo Credit: Renee Carpenter



**Goal IM.G1: The Comprehensive Plan Shall be the guiding policy document for the Town.**

The overall goal of the Comprehensive Plan is to provide an all-inclusive vision, which should guide and influence the overall direction of the Town

**Policy IM.G1.P1: The Comprehensive Plan shall be the preeminent plan for the Town**

All other plans developed and undertaken by the Town, should be developed in conformance and consistency with the Comprehensive Plan. Any small-area plans or other development related plans should reference the goals, policies, and strategies of the Comprehensive Plan.

**Policy IM.G1.P2: The Comprehensive Plan shall be reviewed and updated regularly.**

It is recommended that under the current growth rate for the Town that this plan be updated every five to seven years. It is also recommended that significant changes in the Town's growth rate or pattern of growth may constitute the need to update this plan sooner. This plan should be reviewed whenever significant policy changes are considered.

**Policy IM.G1.P3: The Comprehensive Plan shall be closely aligned with Zoning regulations.**

According to North Carolina General Statutes §160A-383, "Zoning regulations shall be made in accordance with a Comprehensive Plan". With any zoning amendment or rezoning, the Comprehensive Plan shall be the guiding policy document. Should a zoning amendment be found inconsistent with this Plan the Town should concurrently amend this Plan with the adoption of the zoning amendment or should reconsider the zoning regulation.

