

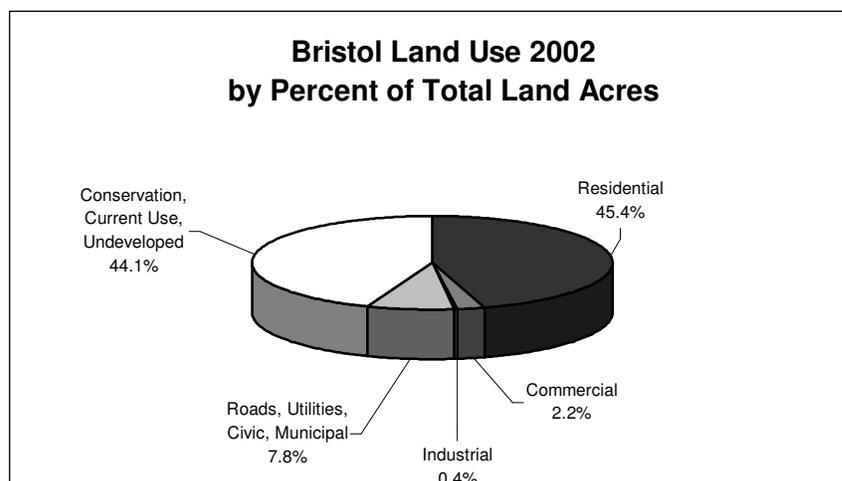
## Chapter II: Land Use

### I. Introduction

The manner in which land is put to use in Bristol has an impact on the landscape as well as the quality of life for those who live in, and those who visit the community. The citizens of the town of Bristol continue to hold in high regard the protection of Bristol's scenic beauty and natural resources. Past and future land use decisions have lasting consequences. The objective of this chapter is to provide guidance for future land use decisions by discussing how to best manage growth and by outlining appropriate locations for desirable development that will enhance the community.

### II. Present Land Use and Land Cover

The Town of Bristol is comprised of a total of 14,062 acres of which, 3,323 acres are water, representing 24% of the total acreage. The remaining 10,739 acres are land. Land use is defined as the principal use of a parcel or set of contiguous parcels. Developed land includes land that is used for residential, commercial, and industrial purposes, as well as land that has been improved with roads, public utilities, civic and municipal uses. Development in Bristol is comprised predominately of residential uses. Residential uses account for 46% of the land area in Bristol, commercial uses represent 2% and industrial uses less than one percent of the land area in Bristol.

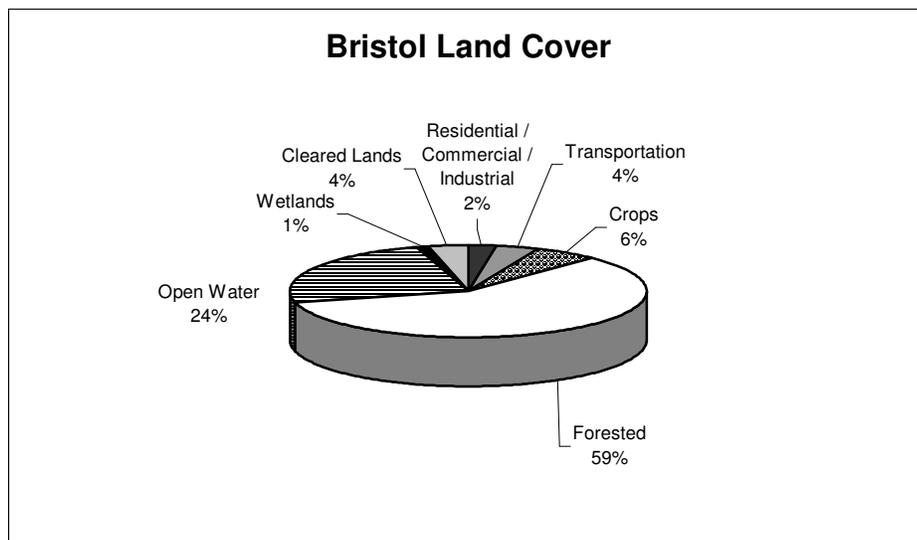


Based on tax assessor data, Bristol has a combined total of 4,741 acres of undeveloped land and conservation land. The majority of the undeveloped land (73%) is in current use. While the purpose of current use is to protect open space, it is not a measure that permanently restricts future

development. Under this program, future development of open space in current use is subject to penalties based on the market value of the portion of the land that is developed. Protected conservation land represents the second largest portion of undeveloped land (16%). Protected conservation land has some measure of permanent restriction on future development. The remaining undeveloped land (11%) has no current use or developmental restrictions.

In addition to the undeveloped lands in Bristol, there are large parcels of land partially developed for residential and commercial uses, which are also in current use. For example, there exist 85 residential parcels averaging 35 acres in size that have current use restrictions on the land. Of the total 4,876 residential acres, more than half (53%) have current use on some portion of the land.

While land use indicates the primary use for a parcel, land cover describes what is on the ground. Based on 2000 Landsat satellite imagery, land cover for Bristol has been categorized (see *Land Cover Map*). The satellite images do not provide sufficient detail to show all individual buildings, but provide a general idea of the areas of concentrated development in the community. Bristol is predominately forested (59%), with open water covering the second largest percentage (24%) of the community. More than 800 acres are comprised of crops and pastures, which represent 6% of the total area in Bristol.



### III. General Development Trends

Bristol's present land use pattern provides sharp contrast between the urban type development found in the village area and a strongly rural pattern throughout the remainder of the town, with the exception of the

land area along the margins of Newfound Lake where development patterns are denser.

The Bristol urban area, characteristic of the 19<sup>th</sup> Century industrial community, reflects both topography and early historic factors which generally dictated the community's shape. The town's basic existence depended upon waterpower of the Newfound River for manufacturing purposes. Because transportation was a limiting factor in the 19<sup>th</sup> Century, it was necessary for manufacturing towns, such as early Bristol, to develop at relatively high density. Homes, both multi-family and single-family, were built within easy walking distance of the mills. The commercial elements, stores and services for the community, then developed at a central location to serve the surrounding population.

Today the same is true; commercial uses and public services are largely centered in the 20 acres that comprise the downtown commercial district. The potential for additional business development in the downtown is largely limited to the redevelopment of existing buildings, as there are virtually no vacant lots available for new development. There are, however, a number of commercial spaces currently available in the downtown area, and new businesses should be encouraged to utilize and improve those spaces rather than opting for new construction outside the village center. Once the downtown commercial district is fully utilized, the focus of new commercial development will likely occur in the Lake District, Corridor Commercial and Village Commercial Zones. The types of commercial uses permitted in each of these three districts vary according to the proximity to services and residential neighborhoods.

#### **IV. Land Use and Zoning**

Properly applied, zoning can help achieve the goal of retaining the rural character of the town stated in the Vision section. A review of Bristol's zoning districts by the types of land uses located in each district can provide an understanding of the potential for future development. Each zoning district in the community has a unique purpose and character. The seven districts are: 1) Corridor Commercial, 2) Downtown Commercial, 3) Industrial, 4) Lake District, 5) Rural, 6) Village Commercial, and 7) Village Residential. Parcel-based land use by zoning districts indicates the current supply of land that is available to accommodate the future growth of specific land uses. It can also indicate how effective or ineffective land use regulations have been in guiding the types of development that the community desires. Based on tax assessor data, land use has been mapped on a parcel by parcel basis (see *Land Use Map*). Descriptions of each of the seven districts established by the Town of Bristol Zoning Ordinance are listed below (see also *Zoning Districts Map*).

The *Downtown Commercial District* is the traditional center of the community and the heart of the Bristol's commercial development. The district is comprised of a mix of residential and commercial uses which are serviced by public sewer and water, and are located in close proximity to major public services such as police, fire, town offices, etc. Given the limited supply of undeveloped land in this district, the shape of its future will be largely dependent on additional private and municipal investments that support redevelopment and infrastructure improvements. The Downtown Chapter of the master plan details the community's vision for this vital enterprise zone.

Downtown Commercial District	Acres
Residential	5.57
Civic	1.17
Commercial	7.31
Undeveloped Land	0.24
Municipal	0.42
Roads/Easements	5.28
<b>Total</b>	<b>19.99</b>

The *Corridor Commercial District* is along the northerly side of Route 104 east, the primary gateway to Bristol. This zone is currently comprised of a mix of uses, residential representing the greatest percentage of the developed land. The Corridor Commercial Zone has been controversial since its creation in 1996. While high traffic counts on Route 104 east make commercial development attractive there, this tends to conflict with the goal of retaining rural character contained in the Vision section. In addition, the fact that the south side of Route 104 east is in the Rural Zone creates an inherent conflict between land owners on opposite sides of the road. The current zoning along Route 104 east should be reviewed to see if a way can be found to satisfy the both the need for commercial space and the desire to retain the rural character of this gateway to Bristol. For example, it might be possible to change the zoning east of R.P. Williams to allow for nodal commercial development, with much of the Corridor Commercial District reverting back to Rural designation. This would contribute to better traffic patterns and once again help to promote future development near the more urban area with greater concentrations of services and population.

Corridor Commercial District	Acres
Residential w/ Current Use Restrictions	13.4
Residential	41.5
Commercial	10.8
Commercial w/ Current Use Restrictions	11.7
Current Use Land	26.8
Undeveloped Land	8.0
Municipal	19.7
Roads/Easements	40.6
<b>Total</b>	<b>172.6</b>

The *Lake District* is a particularly sensitive area given the proximity to

Lake District	Acres
Residential w/ Current Use Restrictions	126.9
Residential	550.2
Civic	0.9
Commercial	74.2
Conservation Land	110.4
Current Use Land	85.1
Undeveloped Land	86.7
Municipal	18.6
Roads/Easements	109.5
<b>Total</b>	<b>1162.6</b>

Newfound Lake. The district is largely developed with permanent and seasonal dwellings. The shorefront of Newfound Lake is highly valued for recreational uses. Areas of concern include accommodating competing uses such as swimming and boating and the concern to maintain water quality. Commercial development in the district generally reflects water-

related uses. Limited availability of public sewer and water increase the need for adequate private sewage disposal. Future development that addresses proper storm water management, vegetated buffers and limitations on impervious surfaces is held in high regard in the Lake District.

The *Village Commercial District* provides an extension to the downtown

Village Commercial	Acres
Residential w/ Current Use Restrictions	16.1
Residential	84.6
Civic	1.1
Commercial	37.8
Conservation Land	12.6
Current Use Land	2.7
Undeveloped Land	13.3
Municipal	18.2
Roads/Easements	26.4
Utilities	3.2
<b>Total</b>	<b>216.1</b>

commercial district on Lake Street and portions of Pleasant Street. A mix of commercial, residential, and municipal uses exist, with the potential for additional in-fill development. Commercial development promoted in the district is largely services related. The majority of the village district is located in the Newfound River drainage basin. Grading requirements, street layouts, and

vegetative buffers should be consciously employed to minimize the impacts of development on river water quality.

The *Village Residential District* is made up of residential neighborhoods

Village Residential	Acres
Residential w/ Current Use Restrictions	59.9
Residential	441.7
Civic	65.7
Commercial	13.3
Conservation Land	9.1
Current Use Land	138.3
Undeveloped Land	76.2
Municipal	32.5
Roads/Easements	69.1
<b>Total</b>	<b>905.9</b>

centered around commercial areas, schools and fire and police protection. There are limited permitted and special exception uses beyond residential development. About 24 percent of the district is comprised of undeveloped and current use land leaving open the possibility of further residential development.

The *Rural District* includes low to medium density rural living, open space

Rural District	Acres
Residential w/ Current Use Restrictions	2225.9
Residential	1147.8
Civic	114.8
Commercial	8.3
Commercial w/ Current Use Restrictions	54.7
Conservation Land	646.9
Current Use Land	3135.3
Undeveloped Land	324.1
Municipal	58.2
Roads/Easements	193.4
<b>Total</b>	<b>7909.5</b>

and provides for the protection of environmentally sensitive areas such as wetlands, floodplains, poor soils and steep slopes. The district currently contains a relatively high amount of current use and conservation lands. Zoning permits a variety of housing alternatives and only requires a one-acre lot for a dwelling with private water and sewer.

A large portion of the *Industrial District* is currently made up residential use

Industrial District	Acres
Residential w/ Current Use Restrictions	146.6
Residential	15.8
Commercial	22.2
Current Use Land	61.3
Industrial	39.9
Undeveloped Land	3.9
Municipal	21.2
Roads/Easements	23.8
Utilities	26.7
<b>Total</b>	<b>361.5</b>

parcels. Zoning allows for the establishment of industrial plants that are not noxious, offensive or detrimental to the environment, the town or the abutters. Industrial uses can be the least compatible with residential uses. Because of the existence of residential development in this zone great care needs to be taken in minimizing the adverse impacts of development. It

appears that the greatest potential for future industrial development is through conversion of current use land associated with residential uses.

## V. Development Constraints

Future land use development in Bristol is limited in a number of ways. A variety of physical constraints to development are found in the town including, steep slopes, wetlands, and floodplains.

*Steep Slopes*- The slope of the land can pose numerous development problems related to storm water run-off, soil erosion, and sewage disposal. The *Steep Slopes Map* identifies areas with 15-25% slopes and those areas with slopes greater than 25%. The map contains general information for planning purposes which is not specific to individual building sites in the community. The steepest slopes are generally located in areas within the community with the highest elevations, Roundtop, Sugar Hill, Hemp Hill, Bristol Peak, and Peaked Hill. The highways and roads network indicates that general settlement patterns have occurred in areas that are not associated with steep slopes.

Areas with a 15-25% slope have significant restrictions and poor capability to support development. Areas in which slope exceeds 25% have been designated as a critical resource and it is not recommended that these areas be utilized for building purposes (*1984 Bristol Master Plan*). Slopes of 25% or greater represent approximately 13.5 percent of the town's total land area. Building on slopes is addressed in the zoning ordinance in three districts. The Rural district, where slopes are referred to as environmentally sensitive areas, the Flood zone where adequate drainage and structure protection from flood waters is of concern, and in the Pemigewasset Overlay District where construction is prohibited on slopes exceeding 15% grade.

*Hydric Soils (Wetlands)*- Wetland soils which include swamps, marshes, bogs and very poorly drained soils represent a relatively small portion (2%) of the land area in Bristol as shown on the *Hydric Soils Map*. Wetland areas have limited development potential, but are valued in their natural state for the rare, unique, and unusual natural species, both flora and fauna that they provide. The zoning ordinance addresses special requirements for development occurring in and around wetland soils.

*Floodplain*- The floodplain possess special developmental concerns, including 1) a high probability of property damage during flooding; 2) the restriction of periodic water storage resulting in potentially greater flooding; and 3) the increased likelihood of erosion and sedimentation. Because of these concern development in the floodplain is subject to guidelines contained in the Floodplain Ordinance.

The absence of community services such as water and sewer can limit commercial and industrial development. Additionally, the zoning ordinance provides the opportunity to influence future land use objectives. Existing regulatory measures that support planning policy objectives include the Pemigewasset Overlay District, the Wetlands Conservation Overlay District, the Floodplain Zoning Ordinance, and the individual districts throughout the community. The Visioning Chapter and other chapters of the master plan have identified opportunities to discuss additional planning tools and further adjust the regulatory process. These ideals are addressed in the recommendation section of this chapter.

*Aquifers* - Those areas which have a significant potential to yield groundwater are referred to as aquifers. An aquifer is a soil deposit, or sometimes a porous rock formation, that contains a recoverable volume of groundwater. Ease of recoverability is one of the most important aspects of an aquifer as it relates to development potential. Aquifers a susceptible to pollution due to the ease and speed of water transmission through the soil. Septic tank effluent and landfill leaching are two potential sources of aquifer pollution. In addition, development which involves extensive

amounts of impervious material cover can reduce the productivity of aquifer areas.

Refer to Map 1: (Aquifers) of Chapter V. The town of Bristol has three significant accessed sources of ground water that are used for the public water supply. There are two well sites on West Shore Road adjacent to the Fowler River, one of which is located on conservation land. Also there is a Town well site on Danforth Brook. In addition there are stratified drift aquifers along portions of Routes 104 (East and West), Smith River Road, Route 3A North and for approximately one mile north of Profile Falls along Route 3A South. Stratified drift aquifers are glacial fluvial sediments of sand and gravels deposited in floors of river valleys (e.g. the Pemigewasset, Smith and Newfound Rivers) and along valley sides during the glacial period. Ground water is stored and transmitted within these deposits. Aquifer recharge is via precipitation and contributes to the future water supply. It should be noted that surface water flow from adjacent upland areas can add to the recharge and, when contaminated, have potential to adversely affect stratified drift aquifers. Note: Transmissivity is the rate at which water is transmitted (passes through) through an aquifer and is expressed in feet squared per day.

*Agricultural Lands of Significance*- Agricultural soils represent a unique and scarce resource since they are both highly productive and exist in such limited areas of the region that once they are used for most other purposes, they cannot be replaced. Agricultural soils are classified by their productive capacity to produce food, feed, forage, fiber, and oilseed. The USDA Natural Resource Conservation Service (NRCS) makes the distinction between local soils of significance (good), soils statewide (better) and prime farmland soils (best). Prime farmland soils are most highly valued because of their potential for the greatest agricultural yields and have increased significance when associated with current agricultural use. Care should be taken to consider agricultural lands of significance in the development proposals as well as in conservation land acquisitions. The *Farmland Classification Map* details agricultural lands of significance in Bristol.

## **VI. Future Land Use Considerations**

Land under current use status represents a significant portion of the undeveloped land in Bristol. While the development of current use land is more costly than comparable land not in current use due to tax liabilities, current use status does not ensure that development will not occur. A review of Tax Collector reports between 1992 to 2001 indicate a generally progressive increase in the amount of revenue the town has collected in land use change tax. This tax is associated with land previously in current use that has been developed. An inventory and assessment of current use

lands in the community would provide an understanding of the significant resources in current use in the community. Those resources, such as agricultural soils, that the community values highly may warrant additional conservation measures in order to ensure that they remain undeveloped.

Continued coordination is needed to ensure that an appropriate level of public services is available to all residents in Bristol as the community continues to grow. This coordination can be achieved through continual updates to the town's Capital Improvements Plan. The Planning Board's understanding and tracking of development trends in the community provides the basis for the needed updates.

While Bristol has experienced decades of growth, the town's land use regulations and policies have guided orderly development. Perhaps the most significant area of opportunity for future development improvements is Bristol's downtown and the adjacent commercial districts. Though limited land is available for future development in the downtown core, public and private improvements to the existing structures and amenities in the downtown will have a lasting impact on the community, and carry over to other areas in the community.