# Chapter IV: Population and Housing

#### I. Introduction

An understanding of population trends and other demographics is essential for a Master Plan. The number of persons, general characteristics of the population, and the trends of these demographics assist in determining the impact these may have on the need for housing and services. This information can also lead to a better understanding of land use changes in Bristol and how the effects of growth and development will impact the community in the future.

## II. Population

Bristol had a 19.6% increase in population between 1990 and 2000. The population in Bristol in 1990 was 2,537. In the year 2000, the population had increased to 3,033. While Bristol may still be considered a small town, the percent population increase experienced between 1990 and 2000 (19.6%) is higher than the average in the Lakes Region and New Hampshire. The percent population increase for the Lakes Region between 1990 and 2000 was 15.8%. For New Hampshire, the percent population increase was 11.4%.

3,500 2,500 2,000 1,600 1,478 1,428 1,610 1,632 1,586 1,470 1,670 1,000 1,

Chart I: Population 1900-2000

Source: U.S. Census, 1900-2000

Since 1900, Bristol has experienced both increases and decreases in population. The greatest increase occurred between 1970 and 1980. In 1970, there were 1,670 persons living in Bristol. In 1980, the number of persons increased to 2,198, which is an increase of 31.6%. Between 1980

and 1990, Bristol also experienced an increase in population. In 1990, there were 2,537 persons living in Bristol, which is a 15.4% increase from 1980.

Table I: Population and Change 1900-2000

Year	Population	Change	Change (%)
1900	1,600	-	•
1910	1,478	-122	-7.6%
1920	1,428	-50	-3.4%
1930	1,610	182	12.7%
1940	1,632	22	1.4%
1950	1,586	-46	-2.8%
1960	1,470	-116	-7.3%
1970	1,670	200	13.6%
1980	2,198	528	31.6%
1990	2,537	339	15.4%
2000	3,033	496	19.6%

Source: U.S. Census, 1900-2000

As noted in *Table II*, population growth patterns in Bristol and the communities abutting Bristol have been greater than the average percent change in growth experienced in the state as a whole over the past decade. Bristol and all abutting communities with the exception of Alexandria have also experienced rates of growth greater than the Lakes Region as a whole. New Hampton (21.4%), Bridgewater (22.4%) and Hill (21.9%) had larger percent increases in population compared to Bristol. Alexandria (11.7%) and Hebron (18.9%) had smaller percent increases in population compared to Bristol. Bristol has added to the community an average of nearly 50 persons per year between 1990-2000.

Table II: Area Population 1990-2000

	1990	2000	Change	Change (%)
Bristol	2,537	3,033	496	19.6%
New Hampton	1,606	1,950	344	21.4%
Alexandria	1,190	1,329	139	11.7%
Bridgewater	796	974	178	22.4%
Hebron	386	459	73	18.9%
Hill	814	992	178	21.9%
Lakes Region	92,418	107,032	14,614	15.8%
New Hampshire	1,109,252	1,235,786	126,534	11.4%

Source: U.S. Census, 1990 and 2000

## **III. Population Projections**

Two sources were used to calculate population projections: Lakes Region Planning Commission (LRPC) and the Office of State Planning (OSP). LRPC's population projections are based on a linear regression of Bristol's population from 1960 to 2000. The OSP calculates population projections based on a regression analysis, which also uses county population data, births, deaths, survival, and fertility rates. Both models have the limitations of being based on recent trends, which can change and ultimately impact the accuracy of the future projections.

As shown in *Charts II and III*, the LRPC's and OSP's projected populations for Bristol to the year 2010 are not significantly different. LRPC projects an increase of 479 people to a population of 3,512; OSP projects an increase of 352 people to a population of 3,385. The difference between the projected population figures increases for the years beyond 2010 (*see Table III*).

5,000 4.074 3,875 3,676 4,000 3,512 3,033 2,537 3,000 2.198 1,670 2,000 1.470 1,000 0 1960 1970 1980 1990 2000 2010 2015 2020 2025

Chart II: LRPC Population Projections 2010-2025

Source: LRPC Regression Analysis

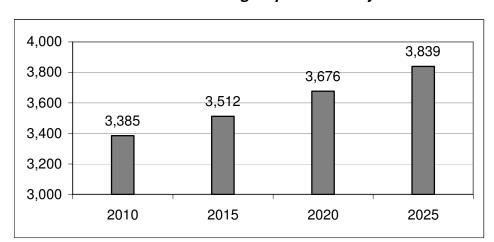


Chart III: Office of State Planning Population Projections 2010-2025

Source: OSP, Draft Population Projections, March 2003

Table III: LRPC and OSP Population Projections Comparison

Year	LRPC	OSP	Difference
2010	3,432	3,385	47
2015	3,631	3,512	119
2020	3,830	3,676	154
2025	4,029	3,839	190

Source: OSP, Population Projections, March 2003 and LRPC Regression Analysis

Like many other Lakes Region communities, Bristol experiences seasonal increases in population, particularly in the summer months. This influx of additional people has an impact on both the demand for services, as well as providing an increase in economic activity that supports area businesses. The increased demand for services is experienced mainly in the provision of police, fire, sewer and water, solid waste disposal, and recreational services. The seasonal population change is generally associated with a minimal impact on the town's most costly public service, education.

Seasonal population estimates are based on the ability to house visitors within the community. A total of 772 housing units, or nearly 38% of Bristol's housing stock, are classified by the U.S. Census Bureau as being used for seasonal, recreational, or occasional use. Based on estimates using Bristol's average household size of 2.47 persons and the number of seasonal housing units, the population in Bristol has the potential to increase seasonally by approximately 63% or 1906 persons. These estimates assume that all seasonal units are occupied at the same time, but does not include the seasonal population increases experienced due to summer camps, lodging establishments, and accommodations available at campgrounds. These additional sources of housing seasonal population, support conventional wisdom that suggests Bristol's population doubles in size in the summer time. Given the magnitude of the change, this estimate indicates the need to address seasonal population changes when considering future community plans.

#### IV. Population Density

As a result of the population increases over time, the number of persons per square mile in Bristol has also increased. In 1980, the number of persons per square mile was 127.1. In the year 2000, the number of persons per square mile was 175.3.

Table IV: Persons per Square Mile

Square Miles	1980	1990	2000
17.3	127.1	146.6	175.3

Source: U.S. Census, 1990 and 2000

Table V indicates that compared to the surrounding towns, Bristol has the highest number of persons per square mile. Bristol's population density is well above the Lakes Region population density as a whole, due to the fact that Bristol is a relatively small community in terms of area, with moderately sized population. A related point that is discussed in more detail in the land use chapter is the availability of suitable land for building. Bristol's potential for future development will likely be limited to land available in close proximity to land that is already developed. This is due to the prevalence of steep slopes and other building constraints. This means that population per square mile will likely increase based on forecasts for future population growth, and that the developed areas in Bristol will become more densely developed.

Table V: Population per Square Mile for Surrounding Towns

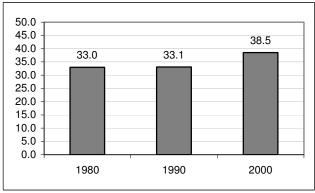
	Population 2000	Square Miles	Persons per Square Mile
Bristol	3,033	17.3	175.3
New Hampton	1,950	36.7	53.1
Alexandria	1,329	43	30.9
Bridgewater	1,955	21.3	45.7
Hebron	459	16.8	27.3
Hill	992	26.7	37.2
Lakes Region	107,032	1,208.60	88.6

Source: U.S. Census, 2000

## V. Age

The median age in Bristol has increased from 33.1 in 1990 to 38.5 in 2000. The median age in 2000 in Bristol was higher than the median age in Grafton County and New Hampshire. However, this gradual increase in the median age is consistent with state and national trends.

Chart IV: Median Age 1980-2000



Source: U.S. Census, 1980-2000

The increase in the median age in Bristol is reflective of the change in the age distribution. The number of persons less than 10 years old decreased 4.3% between 1990 and 2000. Conversely, the number of older persons increased. In 1990, the number of persons 60 years and older was 451. In 2000, the number of persons 60 years and older increased to 574 or a 27.3% increase. Similarly, in 1990, the number of persons 65 years and older was 333. In 2000, the number of persons 65 years and older was 430 or an increase of 29.1%.

The size of the school-aged population (ages 5 through 17) directly affects the town's single largest fiscal expenditure, education. Current trends including the decline in persons in the population less than 10 years old, and the gradual increase in the median age of the population, indicate that the percentage of school aged children will not increase significantly, and in fact may decline. Projections developed by the Newfound Regional School District support this conclusion.

Table VII: Age Distribution 1990-2000

Age Group	Number of Persons		Number of Persons		Change	Change (%)
	1990	%	2000	%	1990- 2000	1990- 2000
< 10						
Years	399	15.7%	382	12.6%	-17	-4.3%
10-19						
Years	352	13.9%	435	14.3%	83	23.6%
20-59						
Years	1,335	52.6%	1,642	54.1%	307	23.0%
60+ Years	451	17.8%	574	18.9%	123	27.3%
65+ Years	333	13.1%	430	14.2%	97	29.1%

Source: U.S. Census, 1990-2000

## VI. Housing

According to Census 2000 the number of total housing units in Bristol increased from 1,747 in 1980 to 2,250 in 1990. Between 1990 and 2000, the number of housing units decreased to 2,073 or a decrease of 7.9%. The census defines a housing unit as a, house, apartment, group of rooms or a single room occupied or intended for occupancy as separate living quarters. Several notable changes occurred during the 1990 to 2000 time period:

- The number of occupied housing units increased from 44% of the total housing stock in 1990 to 59% of the total housing stock in 2000.
- Seasonal units, which comprise more than 90% of the unoccupied category of housing units, declined by 314 units. The number of seasonal units decreased from 52% of the total housing stock in 1990 to 37% of the total housing stock in 2000.
- A total of 135 permits were issued for new housing construction.

Great care should be taken in interpreting and drawing conclusions based on the 2000 Census housing data for the town of Bristol. Though a significant decline in total housing units was experienced based on the Census 2000 data, it is not apparent that these changes truly reflect actual events. In fact, local trends in housing development indicate that Census 1990 and 2000 total housing data may indeed be faulty. Though Census data go through extensive checks for accuracy, variation in recording criteria and methods have been noted. A portion of the decline in total housing units may be explained by differences between how vacancies were reported between the 1990 and 2000 Census surveys.

Perhaps the most significant of these changes in terms of fiscal impacts is the decrease in seasonal housing as a percentage of the total housing stock. As mentioned in a previous section the demand for services associated with seasonal housing units is typically lower than those demanded by year round residential housing.

Table VIII: Number of Housing Units, 1980-2000\*

				Change		Change
			Change	(%)	Change	(%)
1980	1990	2000	1980-1990	1980-1990	1990-2000	1990-2000
1,747	2,250	2,073	503	28.8%	-177	-7.9%

Source: U.S. Census, 1980-2000

3000 2500 2000 1,747 2,250 2,073 1500 1000 500 1980 1990 2000

Chart V: All Housing Units 1980-2000

Source: U.S. Census, 1980-2000

## VII. Seasonal Housing

The number of seasonal housing units increased from 721 in 1980 to 1,086 in 1990. Between 1990 and 2000, the number of seasonal housing units decreased 28.9% to 772. This decrease may be in part due to the conversion of seasonal housing to year-round housing.

Table IX: Seasonal Housing Units 1980-2000

				Change		Change
			Change	(%)	Change	(%)
1980	1990	2000	1980-1990	1980-1990	1990-2000	1990-2000
721	1,086	772	365	50.6%	-314	-28.9%

Source: U.S. Census, 1980-2000

# VIII. Owner and Renter Occupied Housing Units

The number of owner and renter occupied housing units increased between 1990 and 2000. In 1990 there were 655 owner occupied housing units and 339 renter occupied housing units. In 2000, there were 820 owner occupied units or an increase of 25.2%. There were 399 renter occupied units in 2000, or an increase of 17.7%.

Table X: Owner and Renter Occupied Housing Units 1990-2000

			Change	Change (%)
	1990	2000	1990-2000	1990-2000
Owner Occupied	655	820	165	25.2%
Renter Occupied	339	399	60	17.7%
Total	994	1219	225	22.6%

Source: U.S. Census, 1990-2000

900 800 820 700 600 655 500 Owner 399 Renter 400 339 300 200 100 0 1990 2000

Chart VII: Owner and Renter Occupied Housing Units 1990-2000

Source: U.S. Census, 1990-2000

# IX. Age of Housing

There were an equal number of houses built in Bristol before 1963 as those built after 1963. The number of houses built before 1939 is 613 or almost 30% of the housing. The number of houses built since 1995 is 60 or 3% of the total housing in Bristol. In comparison the percent housing built in New Hampshire since 1995 is 7.1% of the total housing stock. The percent of housing built before 1939 is not unusually high as compared to other municipalities in the Lakes Region. Conversely, the percent of housing built since 1995 is the lowest in the Lakes Region.

Table XI: Age of Housing

Median Year	# Built Before	% Built Before	# Built Since	% Built Since
Built	1939	1939	1995	1995
1963	613	29.5%	60	2.9%

Source: U.S. Census, 1990-2000

#### X. Conclusions

Bristol's population increased by 496 people or 19.6% between 1990 and 2000. Population increase is higher than the population increases experienced in the Lakes Region and New Hampshire. Both the Lakes Region Planning Commission and the Office of State Planning project further population increases in future years. As Bristol's population has increased, the persons 60 years of age or older have been the fastest growing segment of the population.

Bristol residency has increased as witnessed by the change in the number of occupied housing units between 1990 and 2000. A combined increase of 225 owner and renter occupied units was experienced, while the number of seasonal housing units decreased 314 units during the same period of time. These changes are indicative of the conversion of seasonal housing to permanent housing units. The resultant changes in the composition of the seasonal and permanent resident population may have an impact on the types and quantities of public services demanded.

Though the community has experienced a decline in the number of seasonal housing units, the town of Bristol has the potential to experience significant seasonal population fluctuations. Nearly 40 percent of the Bristol's housing stock is seasonal in nature. Like other Lakes Region communities the seasonal component of the population provides particular challenges as well as advantages. Given the availability of area natural resources in general and accessibility of Newfound Lake in particular, it is likely that this component of the population will continue to provide seasonal diversity in the population. The availability of land to support future population expansion is discussed in more detail in the Land Use Chapter of this Master Plan.