

Population and Housing

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1. Introduction

This chapter examines changes that have taken place to the town of Gray's population and housing over the last several decades. The first half of the chapter presents an overview of historic population trends and offers several alternative growth projections for the town over the next 20 years. The historical population analysis includes a comparison of Gray to all other municipalities within the county in order to provide a regional perspective for growth within the town. The population analysis also reviews changes in the town's household structure in terms of size and income as well as changes within the overall age structure of the community.

The second half of the chapter focuses on the growth and changing composition of the town's housing stock. This includes an analysis that examines total housing growth, the make-up of the housing supply, the assessed value of the housing stock, and changes in the cost of housing. Information is also presented regarding Gray's rate of housing growth in comparison to the broader housing region of Cumberland County.

2. Summary of Major Findings and Conclusions

- Gray's population has increased by approximately 3,880 people, or 75%, over the last 30 years. The period between 1990 and 2000 was the slowest decade of growth during this 30 year time period.

- The rate of population growth has slowed for all municipalities in Cumberland County over the last 30 years. However, Gray has had one of the consistently higher rates of growth when compared to other towns and cities in the region.
- The average age of Gray's residents has increased from 30.8 in 1980 to 37.4 in 2000. This has resulted in an increase in the number of residents age 35 years and above, particularly in the 45 to 54 age group, and a decrease in the 18 to 34 age category. The number of children in the 5 to 17 age group has increased over the last two decades but at a fairly flat rate. The number of children under the age of 5 has declined over the last decade.
- The number of households in Gray has increased at a faster rate than the population over the last two decades due to a decrease in the average household size from 2.84 to 2.57 residents per household.
- Changes in household income over the last decade resulted in a considerable movement of households shifting into the middle-upper and upper income brackets. In addition, Gray's average household income has been consistently higher than that of the county and the state.
- The total number of housing units in Gray has increased by approximately 900 units which represents a 40% growth rate over the last 20 years. The majority of this housing growth was comprised of single family units which accounted for over 65% of the growth.
- There was some significant growth in the multi-family housing category which increased by approximately 240 units between 1980 and 2000. Three quarters of this increase occurred between 1980 and 1990 and all of the multi-family units constructed during the 90s were duplexes.
- Over the last 20 years the town has issued on average, between 63 and 70 residential building permits annually. Between 1990 and 2000, Gray had the seventh highest rate of residential building permits issued annually of all municipalities in Cumberland County.
- The average sale price of a single family home in Gray increased by 33% between 1992 and 2000. However, this was one of the lowest rates of increase for all communities in Cumberland County suggesting that Gray is still relatively affordable in comparison to the regional housing market.
- A review of homes sales over the last several years in Gray found that the average sale price of a single family home was approximately \$169,000 in 2001. However, about 42% of the units sold between 1998 and 2001 sold for less than \$125,000 which indicates that there is a reasonable opportunity for lower income households to purchase a single family home in Gray.

3. Population

3.1 Local Population Trends

A review of population growth in Gray over the last several decades reveals some interesting trends. Like many towns in the southeast portion of the state Gray experienced a significant increase in population during the period between 1970 and 2000. The total population of the town increased by 3,881 people, an increase of almost 75%, over that time period. This change is illustrated in Figure 1-1.

Examining this total change in population for each of the three individual decades shows that Gray experienced more rapid growth during the 70s and 80s with a reduced rate of growth during the 90s. Table 1-1 presents the change in total population for these three time periods. As the data shows the number of additional residents added during the 70s and 80s was fairly consistent, ranging between 1,405 and 1,560 respectively. The decade of the 70s saw the town’s fastest rate of growth but the 80s represents the largest actual gain in total population for all three decades. However, the rate of increase declined between the 70s and the 80s from approximately 48% to 36%; a fact which is partially attributable to the increase in the town’s total base population.

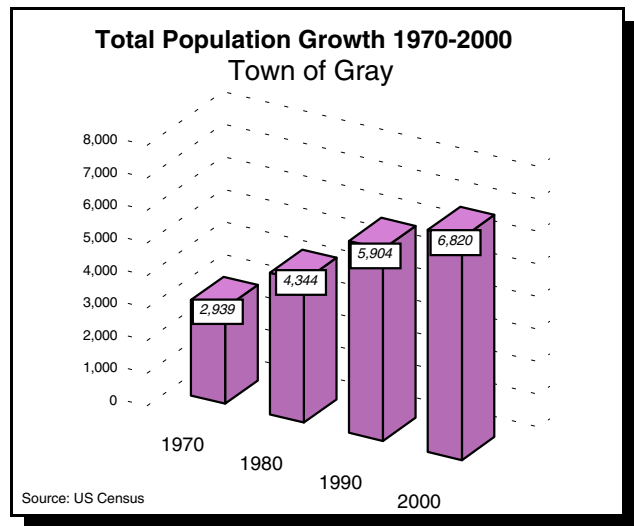


Figure 1-1

The most recent decade, between 1990 and 2000, saw a considerable decline for the town in terms of the total population gain as well as the rate of growth. According to U.S. Census data the town added 916 residents which is approximately 500 less than the previous decade. Furthermore, the rate of growth during the 90s was just over 15%, which is less than half the rate of increase experienced during the 80s.

Year	Total Population	Years	Pop Change	% Change
1970	2,939	—	—	—
1980	4,344	1970-80	1,405	47.8%
1990	5,904	1980-90	1,560	35.9%
2000	6,820	1990-00	916	15.5%

Source: U.S. Census Bureau

The two primary components that comprise total population growth are natural increase and net migration. Natural increase represents the difference between the number of resident births and

deaths. Net migration is the difference between the number of people that have moved into town versus the number that have moved out. Table 1-2 illustrates how these two elements factored into the town’s population growth between 1970 and 2000.

What the data in Table 1-2 suggests is that natural increase has become a larger component of the town’s growth over the last 30 years. This is a trend which is generally expected to occur as the base population of the community increases and new households begin to establish families. There was a particularly noticeable jump in the natural increase as a percent of total growth between 1980 and 1990. This is illustrated by the fact that net migration, as a percent of total population increase, declined from approximately 80% to 68% between the 70s and 80s even though total population growth was greater during the 80s. The town’s natural increase went from 274 in the 70s to 493 in the 80s, an increase of almost 80%.

	<i>Births</i>	<i>Deaths</i>	<i>Natural Increase</i>	
1970-80	612	338	274	
1980-90	867	374	493	
1990-00	856	423	433	
	<i>Population Change</i>	<i>Natural Increase</i>	<i>Net Migration</i>	<i>Net Migration as % of Pop Change</i>
1970-80	1,405	274	1,131	80.5%
1980-90	1,560	493	1,067	68.4%
1990-00	916	433	483	52.7%

Source: Maine Dept. of Human Services and U.S. Census Bureau

Between 1990 and 2000, this scenario changed considerably. The number of births declined slightly from the previous decade, while the number of deaths increased resulting in an overall decline in the town’s rate of natural increase. Concurrently, the amount of net migration dropped to half the level of the previous decade which resulted in an overall decline in the town’s rate of growth. Regional and national trends of lower birth rates, an aging population and smaller household sizes suggests that the town’s rate of natural increase as a component of total growth would not be expected to surpass current levels barring any unexpected shifts in the makeup of the total population.

Other characteristics of the town’s population are illustrated in Figure 1-2 and Table 1-3 which illustrate changes in the age distribution of residents between 1980 and 2000. The data shows that Gray’s population is reflecting a national trend which involves an overall increase in the average age of residents. Between 1980 and 2000, the average of residents in Gray went from 30.8 to 37.4, an increase of approximately 7 years.

A closer examination of specific age cohorts within the population reveals the underlying basis for this overall aging trend. As shown in Figure 1-2 and Table 1-3 the largest consistent gains between 1980 and 2000 occurred in the 35-44 and 45-54 age groups. During this time period those cohorts went from approximately 21% of the total population in 1980 to 36% of in 2000. A notable increase also occurred in the 55-64 age group between 1990 and 2000 which had a total increase of almost 32% for the decade. However, as a percentage of the total population this cohort increased by one

percent (7.2% to 8.2%).

Conversely, there have been significant decreases in the younger age cohorts of the population. For example, the 18-24 and 25-34 age groups combined declined from approximately 29% of the total population in 1980 to approximately 21% in 2000. In addition, the Under 5 age group declined from 7.3% to 5.6% during that same time period. All three of these cohorts experienced a decline not only as a percentage of total population, but in actual numbers of people as well over the last ten years.

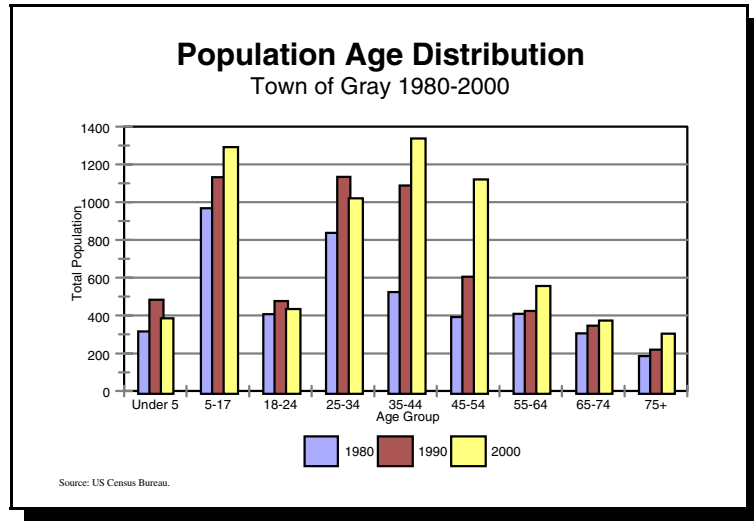


Figure 1-2

The only younger age cohort that has not decreased substantially over the last two decades is the 5-17 age group. Although this cohort did decline from approximately 22% to 19% of the total population between 1980 and 2000, it did increase in actual numbers adding approximately 160 people during each of the two decades.

	Total Persons			% of Total			Change		% Change	
	1980	1990	2000	1980	1990	2000	80-90	90-00	80-90	90-00
Under 5	317	483	385	7.3%	8.2%	5.6%	166	-98	52.4%	-20.3%
5-17	968	1,131	1,291	22.3%	19.2%	18.9%	163	160	16.8%	14.1%
18-24	407	476	433	9.4%	8.1%	6.3%	69	-43	17.0%	-9.0%
25-34	837	1,134	1,020	19.3%	19.2%	15.0%	297	-114	35.5%	-10.1%
35-44	524	1,088	1,337	12.1%	18.4%	19.6%	564	249	107.6%	22.9%
45-54	391	604	1,120	9.0%	10.2%	16.4%	213	516	54.5%	85.4%
55-64	409	423	557	9.4%	7.2%	8.2%	14	134	3.4%	31.7%
65-74	305	346	373	7.0%	5.9%	5.5%	41	27	13.4%	7.8%
75+	186	219	304	4.3%	3.7%	4.5%	33	85	17.7%	38.8%
Total	4,344	5,904	6,820	100.0%	100.0%	100.0%	1,560	916	35.9%	15.5%
Median Age	30.8	32.9	37.4							

Source: US Census Bureau

3.2 Regional Population Trends

The preceding section discussed changes in Gray's population base over the last several decades. The town's growth, however, is not just a local phenomenon but is influenced by factors occurring at broader geographic levels within the county, the state, and New England as well. Over the last two decades the rate of Maine's population growth has declined significantly. Between 1970 and 1980 the state experienced a net gain of approximately 132,000 people, an increase of 13.4%. From that point, the state's downward trend in population growth spanned the next two decades reaching its lowest growth rate of 3.8% between 1990 and 2000, a net gain of only 46,995 people, according to the decennial census. This data is illustrated in Table 1-4.

Much of the state's population growth over the last 30 years has occurred within southern and coastal counties. Between 1970 and 1980, Cumberland County accounted for approximately 25% of the state's net population growth. Between 1980 and 1990 the County's population gain, which totaled 22,477, had increased to almost 50% of the state's total growth for the decade.

Overall, the County's population gain for each of the three decades remained fairly constant, ranging between 22,000 and 28,000, with the largest increase during the 80s. Although the total growth remained steady for each of the decades between 1970 and 2000, the manner in which this growth was distributed throughout the County varied. Figure 1-3 illustrates the percentage growth rates for Cumberland County municipalities for each of the last three decades. This chart, combined with the data in Table 1-4, illustrates a number of characteristics about Gray's population growth and its relationship to county-wide growth trends.

From a regional perspective Figure 1-3 shows that the rate of growth for all communities has declined over this three decade period. During the 70s, the growth rate for almost half of all municipalities in Cumberland County exceeded 40%. However, during the 80s and 90s only three towns exceeded that level.

During the 70s the rate of growth fluctuated widely with half a dozen communities posting modest population gains of less than 10% (or losing population) while an equal number had growth rates ranging from 50% to 90%. The fastest growing towns tended to be rural, non-coastal communities which suggest an out-migration from the County's urban areas that was perhaps also indicative of a demand for lower cost land and housing. If all municipalities in the County are divided into three relatively equal groups Gray's population growth during that period placed it at the top of the second tier.

A similar growth pattern was noted during the 80s with higher growth rates being especially focused in the northern reaches of the County in the towns surrounding Sebago Lake. The overall rate of growth slowed in all communities during this decade which is partially attributable to the fact that new growth was being added to a larger population base. No municipalities experienced a loss of population during the 80s. This decade was the town's largest growth period in absolute terms

**Table 1-4
Population Change 1970 - 2000
Cumberland County Municipalities and the State of Maine**

	1970	1980	1990	2000	Total Change			% Change			Change 70-00	
					70-80	80-90	90-00	70-80	80-90	90-00	Total	%
<i>Baldwin</i>	878	1,140	1,219	1,290	262	79	71	29.8%	6.9%	5.8%	412	46.9%
<i>Bridgton</i>	2,967	3,528	4,307	4,883	561	779	576	18.9%	22.1%	13.4%	1,916	64.6%
<i>Brunswick</i>	16,195	17,366	20,920	21,172	1,171	3,554	252	7.2%	20.5%	1.2%	4,977	30.7%
<i>Cape Elizabeth</i>	7,873	7,838	8,908	9,068	(35)	1,070	160	-0.4%	13.7%	1.8%	1,195	15.2%
<i>Casco</i>	1,256	2,243	3,004	3,469	987	761	465	78.6%	33.9%	15.5%	2,213	176.2%
<i>Cumberland</i>	4,096	5,284	6,103	7,159	1,188	819	1,056	29.0%	15.5%	17.3%	3,063	74.8%
<i>Falmouth</i>	6,291	6,853	7,681	10,310	562	828	2,629	8.9%	12.1%	34.2%	4,019	63.9%
<i>Freeport</i>	4,781	5,863	6,974	7,800	1,082	1,111	826	22.6%	18.9%	11.8%	3,019	63.1%
<i>Gorham</i>	7,839	10,101	11,720	14,141	2,262	1,619	2,421	28.9%	16.0%	20.7%	6,302	80.4%
<i>Gray</i>	2,939	4,344	5,904	6,820	1,405	1,560	916	47.8%	35.9%	15.5%	3,881	132.1%
<i>Harpswell</i>	2,552	3,796	4,993	5,239	1,244	1,197	246	48.7%	31.5%	4.9%	2,687	105.3%
<i>Harrison</i>	1,045	1,667	1,951	2,315	622	284	364	59.5%	17.0%	18.7%	1,270	121.5%
<i>Naples</i>	956	1,833	2,860	3,274	877	1,027	414	91.7%	56.0%	14.5%	2,318	242.5%
<i>New Gloucester</i>	2,811	3,180	3,878	4,803	369	698	925	13.1%	21.9%	23.9%	1,992	70.9%
<i>North Yarmouth</i>	1,383	1,919	1,996	3,210	536	77	1,214	38.8%	4.0%	60.8%	1,827	132.1%
<i>Portland</i>	65,116	61,572	63,106	64,249	(3,544)	1,534	1,143	-5.4%	2.5%	1.8%	(867)	-1.3%
<i>Pownal</i>	800	1,189	1,213	1,491	389	24	278	48.6%	2.0%	22.9%	691	86.4%
<i>Raymond</i>	1,328	2,251	3,410	4,299	923	1,159	889	69.5%	51.5%	26.1%	2,971	223.7%
<i>Scarborough</i>	7,845	11,347	12,504	16,970	3,502	1,157	4,466	44.6%	10.2%	35.7%	9,125	116.3%
<i>Sebago</i>	708	974	1,257	1,433	266	283	176	37.6%	29.1%	14.0%	725	102.4%
<i>South Portland</i>	23,267	22,715	24,098	23,324	(552)	1,383	(774)	-2.4%	6.1%	-3.2%	57	0.2%
<i>Standish</i>	3,122	5,946	7,532	9,285	2,824	1,586	1,753	90.5%	26.7%	23.3%	6,163	197.4%
<i>Westbrook</i>	14,444	14,976	16,208	16,142	532	1,232	(66)	3.7%	8.2%	-0.4%	1,698	11.8%
<i>Windham</i>	6,593	11,282	13,020	14,904	4,689	1,738	1,884	71.1%	15.4%	14.5%	8,311	126.1%
<i>Yarmouth</i>	4,854	6,585	8,085	8,360	1,731	1,500	275	35.7%	22.8%	3.4%	3,506	72.2%
<i>Cumberland County</i>	192,528	215,789	243,135	265,612	23,261	27,346	22,477	12.1%	12.7%	9.2%	73,084	38.0%
<i>State of Maine</i>	992,048	1,124,660	1,227,928	1,274,923	132,612	103,268	46,995	13.4%	9.2%	3.8%	282,875	28.5%

Source: US Census Bureau

Note: Shading denotes Gray and its adjoining communities

(1,560 additional residents) which resulted in Gray having the third fastest rate of growth within the County.

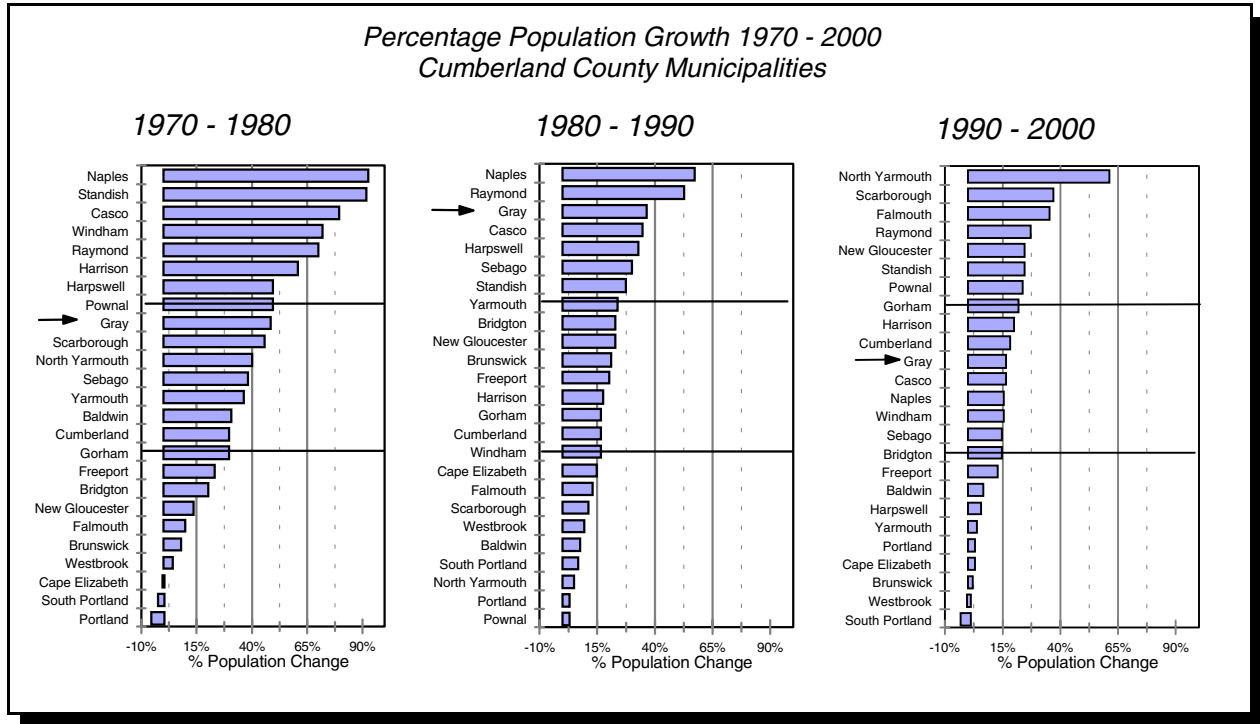


Figure 1-3

Population counts for the 90s indicate that a slight shift has occurred in how the rates of population growth were distributed throughout the County. The data for this time period illustrates slightly higher growth rates for communities in the central portion of the County. Growth in these areas, which can be characterized as the Greater Portland area, suggests that the economic expansion that occurred in Portland and South Portland helped drive population and housing growth in adjoining municipalities. Gray’s growth rate for this decade was the lowest within the 30 year time period, although it still placed relatively high in the second tier towns within the County.

From an overall perspective, Gray experienced a net population increase of 3,881 people between 1970 and 2000. This represents a growth rate of 132.1% which was the fifth fastest growth rate for all municipalities in Cumberland County.

3.3 Population Projections

The potential long-term population growth of a town such as Gray is subject to many regional and national influences such as economic and income growth, the condition of the Stock Market, tax treatment of mortgages and second homes, interest rates, real estate cycles, etc. Projections of

growth at the local level that do not consider these broader factors are typically less reliable since they tend to rely only upon historical patterns of development within the community. Therefore, the population projections for Gray that are presented in this section have been derived based on a model that was designed to project growth at the state and county levels in Maine.

The countywide projection was prepared by Professor Charles Colgan of the Center for Business and Economic Research (CBER) at the University of Southern Maine. The projections were derived through use of a model developed by Regional Economic Models Inc. (REMI), a private firm located in Amherst, Massachusetts, which is widely used throughout the Country to conduct regional economic forecasting and analysis. This model uses statewide data for employment and economic growth as well as current population estimates prepared by the U.S. Census Bureau.

The CBER model was prepared in February of 2000. A major issue in these forecasts, as noted by Colgan, is the rate of migration into Maine. In-migration to Maine was very slow in the 1990s and it is not at all clear how long this trend will continue. The county forecasts used here assume that the more rapid in-migration, particularly to coastal regions, will continue at about the pace of the latter part of the 1990s through the decade 2000-2010. After that in-migration to all regions is assumed to accelerate in order to provide some population growth to fuel economic growth. This is particularly important given Maine's low birth rate, which is likely to continue. It is important to understand these assumptions since they directly affect population forecasts.

In order to project Gray's population based on the countywide model the relationship between historical growth rates for the town and county were examined. The data in Table 1-5 illustrates the change in total population for Gray and Cumberland County between 1970 and 2000. The table also illustrates the town's population as a percentage of the county's for each of the four years.

The first part of the table presents a comparison of

Total Population - Census				
	1970	1980	1990	2000
Gray	2,939	4,344	5,904	6,820
<i>Town as % of County Pop</i>	1.53%	2.01%	2.43%	2.57%
Cumberland County	192,528	215,789	243,135	265,612
Projections - Total Population				
Gray	2005	2010	2015	2020
<i>10 Year Trend (90-00)</i>	7,272	7,804	8,328	8,857
<i>20 Year Trend (80-00)</i>	7,473	8,216	8,968	9,739
<i>30 Year Trend (70-00)</i>	7,559	8,402	9,262	10,149
Cumberland County	275,750	288,273	299,928	311,154
% Change of Projected Growth				
Gray	00-05	05-10	10-15	15-20
<i>10 Year Trend (90-00)</i>	6.63%	7.30%	6.72%	6.35%
<i>20 Year Trend (80-00)</i>	9.57%	9.94%	9.15%	8.60%
<i>30 Year Trend (70-00)</i>	10.83%	11.16%	10.24%	9.57%
Cumberland County	3.82%	4.54%	4.04%	3.74%

Source: US Census Bureau, Charles Colgan, USM and RKG Associates, Inc.

historical census counts for the town and county over the last 30 years. What is shown is that Gray’s population, as a percent of the county’s, has increased from 1.53% in 1970 to 2.57% as of 2000. This represents an increase of 68% over that time period. However, although the town’s percentage of total county population has increased, the rate of increase has been slowly diminishing over this 30 year time period.

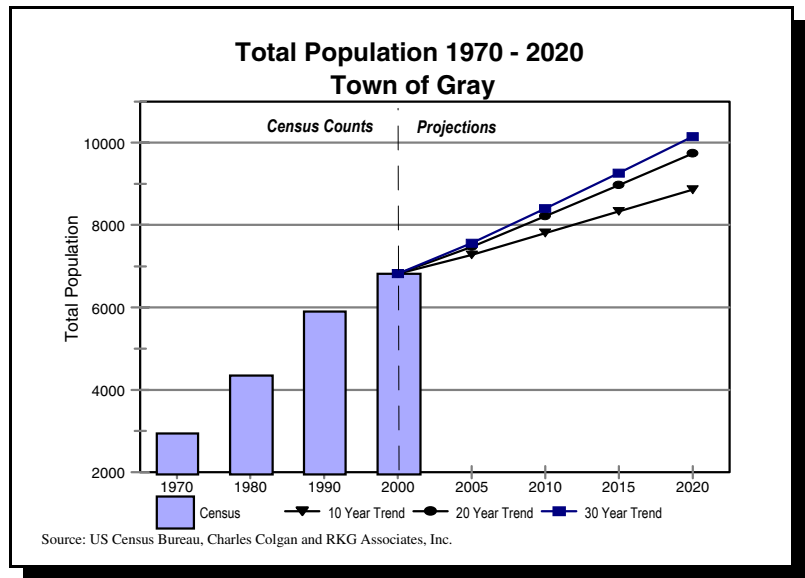


Figure 1-4

Based on these historical conditions several alternative scenarios have been developed

for projected growth over the next 20 years. These are presented in Table 1-5 and Figure 1-4. The three scenarios include a 10 year trend (based on growth between 1990 and 2000), a 20 year trend (based on growth between 1980 and 2000) and a 30 year trend (based on growth between 1970 and 2000). Based on these three scenarios Gray’s population is expected to range between 8,857 and 10,149 by the year 2020. In comparison, projections prepared by the Greater Portland Council of Governments, which were completed in 1998, estimate that the town’s 2020 population will be 9,149.

As can be seen by the “straight-line” nature of these long-term forecasts, they do not attempt to represent changes in the business cycle, and thus they do not illustrate any recessions that will occur during the projection period. During this 20 year time frame, some periods may show significantly slower or even negative growth, but these will be offset by periods of recovery. On average over the decades, the forecasts should reflect long-term trends.

3.4 Household and Income Characteristics

Changes described in the preceding section regarding the town’s population growth have affected the characteristics and composition of households within the community as well. It is important to have an understanding of these characteristics since households, and their corresponding housing units, represent some of the fundamental components used to support comprehensive planning initiatives.

Population growth and the changing age distribution of residents has had a corresponding impact of household growth and household size. From a general perspective, the increase in the overall age

of the town’s population has resulted in a decrease in the average household size from 2.83 in 1980 to 2.57 in 2000, as illustrated in Table 1-6.

The decrease in household size, combined with continued population growth, has also resulted in the formation of new households at a rate which exceeds overall population growth. For example, between 1980 and 1990, total population increased by almost 36% while total households grew by almost 43%. Although there was less disparity between 1990 and 2000, household growth still exceeded population growth with rates of 23% and 15.5% respectively, during that decade.

Table 1-6
Change in Population and Household Characteristics 1980 - 2000
Town of Gray, Cumberland County and the State of Maine

Town of Gray	1980	1990	2000	Change 80-90	% Change 90-00
Population	4,344	5,904	6,820	35.9%	15.5%
Group Qtrs. Pop	87	27	35	-69.0%	29.6%
Total Households	1,503	2,144	2,637	42.6%	23.0%
Avg. Household Size	2.83	2.74	2.57	-3.2%	-6.2%
Median HH Income*					
Gray	\$16,467	\$37,592	\$50,862	128.3%	35.3%
County	\$15,360	\$32,318	\$45,600	110.4%	41.1%
State	\$13,826	\$27,896	\$35,299	101.8%	26.5%
Per Capita Income*					
Gray	\$5,865	\$14,719	\$22,835	152.5	55.5
County	\$6,694	\$15,817	\$24,259	136.3	53.4
State	\$5,769	\$12,954	\$18,347	124.5	41.6

*Income figures for 2000 are estimates from Claritas, Inc.
Source: US Census Bureau and Claritas, Inc.

Table 1-6 also summarizes the changes in household and per capita income for the town, county, and the state, between 1980 and 2000. Income figures for 2000 are estimates provided by Claritas, Inc., a private data firm. The data illustrates that Gray’s average household income has remained consistently higher than that of the county and the state for the three time periods considered. However, while the town’s per capita income levels have been higher than the state’s on average, they have remained below the county’s average. This suggests that the town’s average household size has continued to exceed that of the county thus, household income is being distributed amongst more people which reduces the per capita average.

Changes in the town’s household income levels are further examined in Figure 1-5. This chart depicts change in income between 1990 and 2000 in terms of seven income groupings. This data, which has not

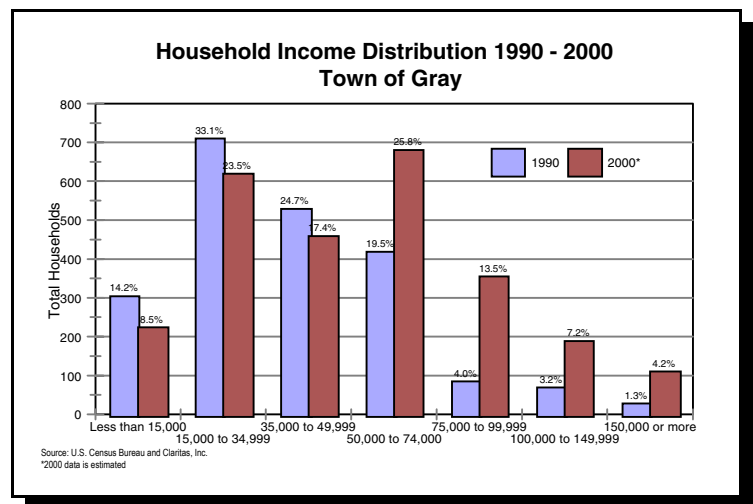


Figure 1-5

been adjusted for inflation, suggests that there has been considerable movement of the town's households into the middle-upper and upper income brackets as of 2000, as estimated by Claritas, Inc. This is evident in the income brackets of \$75,000 and above where the number of households has increased by over 250%, an estimated 472 households. Despite these gains the total number of households in Gray with incomes below \$15,000, which represents approximately one-third of the county's average household income, is estimated to be 8.5% of all households, as illustrated in Table 1-7. This percentage, which represents about 200 households in the community, has declined by approximately 26% since 1990. More than half of the households with incomes below \$15,000 were headed by householders who were 65 years of age or older.

Table 1-7
Households with Income Less Than \$15,000 in 1990 and 2000
Town of Gray

1990				
HH Income	# of HH	% Total HH	HH Aged 65 & Older	% Total HH
< \$5000	45	2.1%	27	1.3%
\$5000-9999	122	5.7%	74	3.5%
\$10000-14999	137	6.4%	81	3.8%
Total <\$15000	304	14.2%	182	8.5%
Total HH	2,144	100.0%	2,144	100.0%
2000*				
HH Income	# of HH	% Total HH	HH Aged 65 & Older	% Total HH
< \$5000	34	1.3%	26	1.0%
\$5000-9999	76	2.9%	50	1.9%
\$10000-14999	113	4.3%	66	2.5%
Total <\$15000	224	8.5%	142	5.4%
Total HH	2,637	100.0%	2,637	100.0%

Source: U.S. Census Bureau and Claritas, Inc.
*2000 Data is estimated

4. Housing

4.1 Characteristics of the Housing Supply

Gray's housing supply has grown considerably over the last two decades. Based on data from the U.S. Census Bureau, the total number of housing units in the town, both year-round and seasonal, has expanded by 911 units, an increase of almost 40% between 1980 and 2000. As illustrated in Table 1-8, the 80s was the decade of greater housing expansion with 545 total units added to the housing stock. Single family detached units experienced the largest increase during that time (299 units) although they decreased as a percentage of total housing from 83.8% to 78.2%. Multi-family dwellings, which includes structures containing two or more units, also increased by a considerable amount (182 units) and increased from 6.5% to 11.6% of the total housing supply during this time. As of 1990, Gray's percentage of multi-family housing was higher than the average for Cumberland County municipalities which was only 8%. The remaining housing types in Gray, which include mobile homes and single family attached units (also referred to as condominiums), increased by relatively small amounts during the 80s; a combined total increase of 64 units.

A portion of the town's housing supply is comprised of seasonal dwellings. These homes are predominantly located around Little Sebago and the town's other lakes, and are occupied for only a portion of the year. In 1980, the Census identified 715 seasonal dwellings in Gray. Due to a

change in the definition of seasonal housing between the 1980 and 1990 census enumerations the total count of seasonal dwellings was reduced to 549 units in 1990. Some of this decline may also be attributable to the conversion of some dwellings to year-round use, but there is no way to determine exactly how many fall into this category.

	Count of Units			Change		% Change	
	1980	1990	2000*	80-90	90-00	80-90	90-00
Year-Round and Seasonal Units							
Single Family							
Detached	1,919	2,218	2,514	299	296	15.6%	13.3%
Attached	11	39	42	28	3	254.5%	6.7%
Multi-Family	148	330	391	182	61	123.0%	18.4%
Mobile Homes	213	249	256	36	7	16.9%	2.9%
Total Year-Round and Seasonal Units	2,291	2,836	3,202	545	366	23.8%	12.9%
Total Year-Round Units	1,576	2,287	2,651	711	364	45.1%	15.9%
Seasonal Units**	715	549	551	(166)	2	-23.2%	0.4%
Year-Round and Seasonal Units as % of Total Housing							
	% of Total Housing			Change			
	1980	1990	2000*	80-90	90-00		
Single Family							
Detached	83.8%	78.2%	78.5%	-5.6	0.3		
Attached	0.5%	1.4%	1.3%	0.9	-0.1		
Multi-Family	6.5%	11.6%	12.2%	5.2	0.6		
Mobile Homes	9.3%	8.8%	8.0%	-0.5	-0.8		
Total Year-Round and Seasonal Units	100.0%	100.0%	100.0%				
Seasonal Units**	31.2%	19.4%	17.2%				

*The total number of housing units are based on the 2000 Census enumerations. The housing units by type (i.e. single family, multi-family, mobile homes) have been estimated by RKG Associates, Inc. based on town assessment records.

** The definition of seasonal housing changed between the 1980 and 1990 Census which accounts for some of the decrease in total seasonal units during that time period. The other factor affecting this decrease was the conversion of seasonal units to year-round use. Total seasonal units for 1980 and 1990 are based on census enumerations, while the 2000 estimate is based on Assessor's records.

Source: US Census Bureau, Gray Assessor's Office, and RKG Associates, Inc.

Between 1990 and 2000, Gray saw an addition of 366 total dwellings to the town's housing stock, according to census information. This represents an increase of 12.9% versus 23.8% during the previous decade. The total number of dwelling units in 2000 (3,202) is the count provided by the U.S. Census. However, the number of dwellings by type (i.e. single family, multi-family, etc.) have been estimated based on the town's assessment records because the Census Bureau has not yet released this detailed information. The total count of dwellings in the town's assessment records as of 2000 was 3,267, a difference of only 2% from the census enumeration. Therefore, the data

provided in Table 1-8 are expected to be fairly representative of forthcoming census data.

The majority of new housing constructed in Gray during the 90s was single family detached units. This type of housing increased by approximately 13%, which represents an additional 296 units. The number of multi-family units also increased by a significant percentage (18.4%) although the total number of units added was only 61. Based on a review of building permit information for the town all of the additional multi-family housing constructed during the 90s were duplex type units.

The percentage of owner-occupied versus renter-occupied dwellings changed slightly between 1990 and 2000. In 1990, 19.9% (427 units) of the town’s housing were used as rental units versus 80.1% (1,717 units) which were owner-occupied. As of 2000, 21.1% (557 units) of the housing stock was classified as rental units while 78.9% (2,080 units) were identified as owner-occupied. As of 2000, the vacancy rate for year-round housing in Gray was 3.1% indicating that only 84 units were vacant when the census was taken.

The age of Gray’s housing stock is illustrated in Table 1-9. This type of data can provide an indication of potential deficiencies in the quality and safety of dwelling units. Older units may have been constructed to lesser standards from the perspective of building codes and life safety requirements which can be a particular concern with regard to multi-family and mobile home units. As the data in the table shows a large portion of the Gray’s housing stock is fairly new having been constructed within the last 40 years. Based on this census information approximately 65% of the town’s housing stock was built after 1960. Approximately 20% was built between 1940 and 1960 and 14.5% was built prior to 1940. Based on available census data, it is estimated that as much as 60% to 70% of the town’s mobile homes were built prior to 1976 which is when national standards were established for the construction of these structures. The units built before this time tend to be older trailers, versus single or double-wide units now being used, that lack insulation, are fire safety risks, and are often found to be in deteriorating condition. The town presently regulates home construction by means of the 1999 BOCA building code which was adopted in January 2001. Prior to that the town relied solely on the Life Safety Code 101 for the regulation of home construction.

**Table 1-9
Total Housing Units by Year Built
Town of Gray**

Year Built	Total Units	% Total
1990 to March 2000	366	11.4%
1980 to March 1990	678	21.2%
1970 to 1979	662	20.7%
1960 to 1969	373	11.6%
1950 to 1959	440	13.7%
1940 to 1949	219	6.8%
1939 or earlier	464	14.5%
	3,202	100.0%

Source: U.S. Census Bureau

4.2 Residential Building Trends

Expansion of the municipal housing supply in response to population growth often occurs in cyclical fashion. These cycles are reflections of various factors both within the community and in the broader

regional area of influence. The number of housing starts, which are identified by building permits issued by the town, are affected by a number of elements including regional economic growth levels, real estate prices, interest rates, land ownership variables, and the regulatory climate within a community.

Figure 1-6 illustrates the number of residential building permits that have been issued in Gray between 1980 and 2000. During this 20 year time period the town issued, according to the records of the municipal building inspection department, a total of 1,488 permits. In Figure 1-6 mobile homes are combined with single family detached units and condominiums are included in the multi-family category. The number of building permits does not necessarily coincide with the total housing units identified within the town by the decennial census. This is due to a number of factors such as the fact that building permits do not represent a completed structure, only the right to build, which can take six months to a year or more before it becomes an occupiable dwelling. In addition, some building permits may represent the replacement of an existing structure or conversion to year-round use which would not increase the total number of units in the town.

The graph's undulating pattern provides a representation of the economic and market conditions that occurred during that time period. The 1980s, which began during a recessionary period in the nation's economy, was followed by a *boom* during the mid-80s and *bust* at the end of the decade, which trailed into the early 90s. Development activity began to rebound during the mid-90s and continued to grow at a steady pace through the end of the decade. Although there have been wide

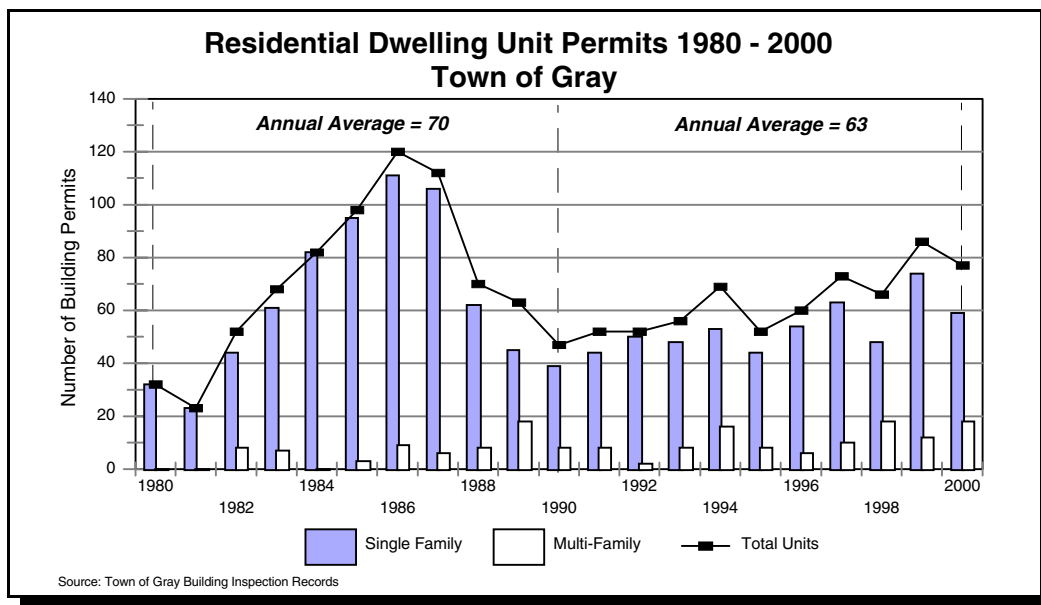


Figure 1-6

annual fluctuations in the total number of permits issued over the these two decades the 10 year averages have remained fairly consistent. Between 1980 and 1990, the town issued an average of

70 permits per year and from 1990 to 2000, the average number issued was 63.

From a regional perspective the number of building permits issued between 1990 and 1999 in Gray was the seventh highest of all municipalities in Cumberland County. This data is illustrated in Figure 1-7. It is interesting to note that the 11 municipalities that issued the greatest number of total permits (which include South Portland to Scarborough on the chart) are the towns that form a first and second tier ring around the Portland urban area. The only exception was the town of Brunswick which represents an urbanized area unto itself. This regional development pattern provides a solid indication of how the economic expansion that occurred in and around Portland over the past decade has stimulated the need for additional housing in towns that are within easy commuting distance of the employment centers.

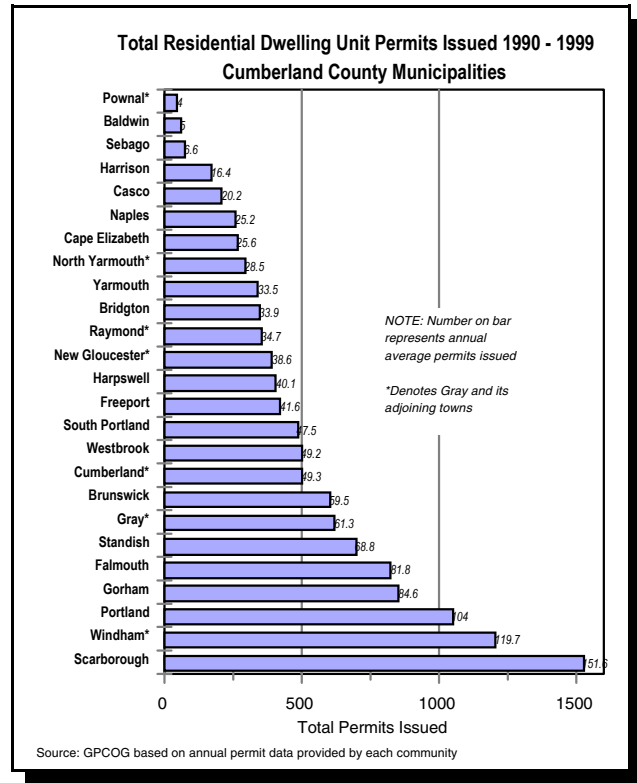


Figure 1-7

4.3 Housing Values

This portion of the chapter provides a review of housing values and home sales prices which is based primarily on information gleaned from the town’s assessment records. This analysis provides an indication of a municipality’s housing market with regard to tax base support, the growth in value over time, and how sales prices are trending.

Table 1-10 presents a summary of total assessed value by type of structure in Gray as of 2002. The values represent gross property values with no exceptions applied. The “Adjusted Total” column reflects the assessed value adjusted up to current market values. This adjustment is based on recent sales of residential properties within the town which indicate that assessment values are at approximately 80% of current market value.¹

Given the fact that single family homes represent 79% of the total housing stock it is not surprising that single family properties (single family detached and seasonal dwellings) account for over 88%

¹The 80% equalization factor used in this analysis is based on current estimates by the town’s Assessor. This percentage does not represent a final calculation for submittal to the state and therefore, is subject to revision.

of the total value of all residential properties in Gray. Of that total, year-round units represent 74.3% (approximately \$271 million in total adjusted value) with seasonal dwellings accounting for almost 14% (approximately \$51 million). For seasonal housing, the majority of the value is found in the land assessment, which totals approximately \$24.7 million, as opposed to the building values, which have a comparative value of \$15.8 million. This is due to the fact that seasonal homes are generally located on waterfront locations which are valued higher than non-waterfront locations. This is also reflective of the fact that seasonal homes in Gray tend to be more *cottage* or *camp-style* structures as opposed to luxury style structures found in more resort oriented locations.

Duplexes, which represent 5.7% of the total housing value, are the third largest value for all housing

**Table 1-10
Assessed Value of Residential Properties by Type of Property
Town of Gray - 2002**

	Total Assessed Value			Adjusted Total Value*	% Total Value
	<i>Land</i>	<i>Building</i>	<i>Total</i>		
Single Family Detached	\$69,493,300	\$147,153,100	\$216,646,400	\$270,808,000	74.3%
Condominium	495,800	1,954,100	2,449,900	3,062,375	0.8%
Duplex	4,266,200	12,326,500	16,592,700	20,740,875	5.7%
Multi-Family	809,900	3,873,900	4,683,800	5,854,750	1.6%
Mobile Homes	4,921,000	5,587,800	10,508,800	13,136,000	3.6%
Seasonal Dwellings	24,715,100	15,832,400	40,547,500	50,684,375	13.9%
TOTAL	\$104,701,300	\$186,727,800	\$291,429,100	\$364,286,375	100.0%

	Average Assessed Value Per Property			Adjusted Average Value*
	<i>Land</i>	<i>Building</i>	<i>Total</i>	
Single Family Detached	\$33,480	\$70,951	\$104,432	\$130,540
Condominium	11,804	46,526	58,330	72,913
Duplex	29,220	84,428	113,648	142,060
Multi-Family	36,813	176,086	212,900	266,125
Mobile Homes	18,782	21,327	40,109	50,136
Seasonal Dwellings	\$47,437	\$30,388	\$77,826	\$97,283

* This column represents assessed values equalized to 100% of estimated market value.
Source: Assessment Records, Town of Gray

types within the community, with a total of approximately \$21 million in total equalized assessed value. Mobile homes represent the next largest category of housing value with \$13.1 million in adjusted value (3.6% of total value) with condominiums and multi-family structures having a combined value of approximately \$8.8 million (4.4% of total value).

Table 1-10 also presents the average assessed values of residential properties in Gray based on current assessment data. These values have also been adjusted to estimated current market values using an 80% equalization factor. As mentioned previously, this adjustment factor is based on a

comparison of the sale price of properties to their actual assessed value. It is a ratio that is based on the sale of all residential property types within the community.

A review of recent homes sales reveals more detail about the current housing market. Table 1-11 presents the average sales prices in town, by type of residential structure, between 1998 and 2001. From an overall perspective the data indicates that the town has a moderately active home sales market which has averaged a total of 141 sales annually, which represents 4.4% of the total housing stock, for this four year period. The vast majority of these sales have been single family homes. During this time period the average sale price of a single family home has increased over 38% to approximately \$169,000 in 2001. This figure is almost 30% higher than the average adjusted assessment value (\$130,540) shown in Table 1-10, which suggests that the price of single family homes may be increasing at a somewhat faster than other types of residential properties in the town.

Type of Structure	1998		1999		2000		2001		1998-2001	
	# Sales	Sales Price	# Sales	Sales Price	# Sales	Sales Price	# Sales	Sales Price	Change	% Change
Single Family	101	\$122,081	116	\$132,471	104	\$154,095	110	\$169,064	\$46,983	38.5%
Condominium	4	\$54,150	3	\$44,300	4	\$70,149	7	\$80,076	\$25,926	47.9%
Duplex	8	\$116,397	8	\$127,287	3	\$127,333	11	\$140,127	\$23,730	20.4%
3 Units	0	—	0	—	1	\$130,000	0	—	—	—
4 Units	0	—	1	\$101,500	1	\$185,000	0	—	—	—
9+ Units	2	\$445,000	0	—	0	—	0	—	—	—
Mobile Home	6	\$66,336	7	\$47,357	12	\$37,149	11	\$45,118	(\$21,218)	-32.0%
Seasonal Dwellings	13	\$77,107	17	\$121,723	12	\$123,535	4	\$121,225	\$44,118	57.2%
TOTAL	134	—	152	—	137	—	143	—		

Source: Assessment Records, Town of Gray

The remainder of the town’s housing market was relatively minor in terms of total sales activity. The combined categories of condominiums, duplexes and mobile homes averaged only 21 sales per year over the last four years. Average sales prices for condominiums and duplexes did increase notably between 1998 and 2001, with increases of 47.9% and 20.4%, respectively. However, both types of units remain relatively affordable in relation to the average price of single family homes. Mobile homes also represent an affordable component of the town’s housing market with an average sale price of approximately \$45,000 in 2001.

The average sale price of seasonal houses has increased by over 57% since 1998, to approximately \$121,000 in 2001. However, the price of these units has remained fairly constant over the last several years.

In order to evaluate Gray’s housing market within a broader context, data was reviewed from the Multiple Listing Service (MLS) for the period of 1992 to 2000. Table 1-12 presents a comparison of average sales prices for homes within the Cumberland County region. This data represents predominantly single family home sales, however, it may also include some condominium or mobile homes which would tend to reduce the values somewhat.

This sales data indicates that the average price of a home in Gray increased by almost 33% over this eight year period. However, the majority of municipalities within the county experienced increases in average sale prices that exceeded Gray’s. In addition, Gray’s average sale price of \$130,717 in 2000 ranked the town the eight lowest within the county suggesting the Gray is a relatively affordable sub-market within Cumberland County.

	1992	1996	1998	2000	YR 2000 Rank	Change 92-00	% Change 92-00
Naples	\$129,008	\$118,109	\$95,757	\$132,783	9	\$3,775	2.9%
Westbrook	\$104,909	\$92,383	\$95,461	\$114,204	1	\$9,296	8.9%
Bridgton	\$107,786	\$76,173	\$100,286	\$117,555	3	\$9,769	9.1%
Standish	\$105,335	\$96,125	\$127,298	\$127,900	5	\$22,565	21.4%
Harrison	\$98,250	\$116,236	\$107,812	\$124,758	4	\$26,508	27.0%
New Gloucester	\$90,353	\$85,588	\$105,299	\$115,707	2	\$25,355	28.1%
Windham	\$102,285	\$106,673	\$111,857	\$133,814	10	\$31,528	30.8%
Gray	\$98,432	\$97,880	\$114,930	\$130,717	8	\$32,286	32.8%
Brunswick	\$120,616	\$128,447	\$140,165	\$161,891	14	\$41,275	34.2%
South Portland	\$96,300	\$98,448	\$103,454	\$129,870	7	\$33,570	34.9%
North Yarmouth	\$132,447	\$132,389	\$163,475	\$180,283	15	\$47,835	36.1%
Yarmouth	\$170,121	\$174,604	\$204,341	\$235,819	20	\$65,699	38.6%
Casco	\$92,298	\$111,673	\$104,339	\$128,520	6	\$36,222	39.2%
Gorham	\$108,619	\$125,344	\$129,434	\$151,920	12	\$43,301	39.9%
Cumberland	\$196,246	\$204,390	\$215,809	\$274,643	22	\$78,397	39.9%
Portland	\$102,215	\$102,715	\$118,346	\$146,414	11	\$44,199	43.2%
Raymond	\$127,765	\$138,211	\$134,345	\$190,384	17	\$62,619	49.0%
Pownal	\$101,333	\$132,300	\$96,400	\$158,200	13	\$56,867	56.1%
Scarborough	\$131,616	\$138,423	\$164,503	\$206,837	18	\$75,221	57.2%
Falmouth	\$175,037	\$189,584	\$216,186	\$280,131	23	\$105,094	60.0%
Cape Elizabeth	\$163,679	\$200,576	\$212,133	\$271,655	21	\$107,975	66.0%
Harpwell	\$189,658	\$206,782	\$221,471	\$316,151	24	\$126,493	66.7%
Freeport	\$124,240	\$145,920	\$174,463	\$212,708	19	\$88,468	71.2%
Sebago	\$93,947	\$137,349	\$114,000	\$188,089	16	\$94,141	100.2%

Source: Maine State Housing Authority based on Multiple Listing Service data

4.4 Affordable Housing

The availability of affordable housing is an issue that has received a considerable amount of attention over the last decade in Maine. It can be very difficult for a community to balance the needs of providing affordable housing options for residents of all income levels while simultaneously attempting to manage growth at an appropriate level. However, housing markets are very dynamic entities in that there are many factors affecting supply and demand, especially within a regional or multi-regional area. For example, due to the mobility of the workforce and the willingness of people

to commute considerable distances to their jobs, employment growth in the cities of Portland and South Portland can create a demand/shortage of affordable housing within a much broader geographic area than just those two cities. Therefore, an assessment of the need for additional affordable housing units should be conducted at the regional level in order to evaluate each municipalities fair share of the overall need.

The Maine State Housing Authority (MSHA) recently released a report titled *The State of Maine's Housing 1999* in which it detailed changes in the housing market over the last decade and a half and the ensuing need of residents with regard to housing affordability among other issues. Based on MSHA's review of the changing demographics of the State as a whole, it was concluded that the following overall housing trends could be expected in the future.

- *Weak demand for small starter homes and apartments and mobile homes (due to fewer young people)*
- *Strong demand for larger homes, move-up homes, and renovations (due to more middle-aged people)*
- *Strong demand for home-based services that enable seniors to “age in place” (due to more old people)*
- *Strong demand for alternative forms of assisted living – at a variety of price points – for seniors (due to more very old people)*

The report also concluded that housing affordability had actually improved during the early to mid-90s due to the fact that inflation was down, interest rates had declined to their lowest levels in 25 years and housing prices were flat. However, these positive conditions were short-lived and ultimately unable to overcome the shortfall of affordable housing that was created in the 80s. In addition, the report concluded that increases in income levels in Maine over the last 13 years have not kept pace with increases in housing prices, thereby exacerbating the affordability issue.

From a rental housing perspective, the findings of the MSHA study concluded that there are 1,880 senior households and 4,740 families in the Portland housing market that are in need of rental assistance. Senior households present a particular challenge because those that fall into the “very old” category of 75+ years of age may often be in need of assisted living facilities versus just a standard rental unit.

Affordable housing can be divided into two broad categories which include subsidized housing and market rate housing. Subsidized housing are those units for which the sale price or rental rate is financially subsidized by a governmental agency or other housing related organization. Subsidized units are either tenant based, meaning that the subsidy moves with the tenant, or project based, meaning that the subsidy remains with a specific housing unit. Gray currently has a total of 61 subsidized housing units within the town. Of that total, 17 (9 senior and 8 family) are tenant based, Section 8 vouchers which are subsidized by the Department of Housing and Urban Development (HUD). These vouchers are administered through the York-Cumberland Housing Development

Corporation, an organization that provides support for affordable housing in Cumberland County communities that do not have their own housing authority.

Gray also has 44 project based, subsidized housing units which are located in two developments, Apple Tree Village (20 units) and Meadowview (24 units). All of these units are limited to use by senior or disabled tenants. Both projects are fully occupied with an estimated waiting list period of one to two years.

The determination of a household’s affordability index is based a comparison of household income to the median household income within a given housing market. Households with the greatest potential need of requiring financial support for housing are those that are below 80% of the area’s median family income level and paying more than 30% of gross income towards housing costs. According to income information compiled by MSHA, which is based on Claritas estimates for 2001, there are 1,772 households in Gray which have an annual income that is below 80% of the town-wide median family income of \$58,697. Approximately 33% of these households are renter-occupied and 67% are owner-occupied. Of these households, it is estimated that almost 40% are headed by someone over the age of 65.

There is no information available at this time that would indicate if these low income households are paying more than 30% of their gross income for housing. However, a review of housing values within the community provides some insight into the potential pool of market based, affordably priced housing. Based on typical financing terms for purchasing a home it is estimated that a household making 80% of the median could afford to buy a house priced below \$175,000 while those making 50% of the median could afford a house below \$100,000.

Table 1-13 presents a summary of home sales in Gray between 1998 and 2001 within various price ranges. A comparison of this sales data to the affordability limits discussed above indicates that approximately 84% (442 dwellings) of all homes sold during this time (those below \$175,000) could have been purchased by households making 80% of the median income in Gray. For those households making 50% of the median, approximately 26% (137 dwellings) of all homes sold would have been considered affordably priced.

<i>Sale Price</i>	<i>Single Family</i>	<i>Duplex</i>	<i>Condo</i>	<i>Mobile Home</i>	<i>Total</i>	<i>% Total</i>
<\$75,000	16	0	14	38	68	12.9%
\$75,000 - 99,000	56	5	4	4	69	13.0%
\$100,000 - 124,999	110	15	1	0	126	23.8%
\$125,000 - 174,999	164	15	0	0	179	33.8%
>\$175,000	85	2	0	0	87	16.4%
<i>Total</i>	<i>431</i>	<i>37</i>	<i>19</i>	<i>42</i>	<i>529</i>	<i>100.0%</i>

Source: Assessor's Records, Town of Gray

5. Implications for the Future

This chapter of the comprehensive plan has presented an overview and analysis of historical changes that have occurred in the town's population and housing over the last several decades. The discussion revealed a series of changes and emerging trends that will potentially affect Gray in a number of ways during the coming years.

Population data indicates that regional growth in Cumberland County, as well as in the state as a whole, has begun to slow in comparison to the previous decades of the 1970s and 1980s. Growth projections for the next 10 years suggest that this trend is expected to continue barring the absence of any major economic stimulus which is not presently expected within the existing planning horizon.

Gray's population has also undergone a similar slowing in terms of the overall growth rate, as well as the actual increase in the number of additional residents. Since Gray's future population growth is immanently tied to that of Cumberland County it is expected that the town will experience a similar reduced rate of growth over the next 10 years, in comparison to that which occurred during the 70s and 80s. In essence, the town is expected to garner a decreasing percentage of a slower regional population growth. This is a trend which the town should monitor closely over the course of the decade in order to adjust, as necessary, municipal programs and activities.

Other population trends that will affect municipal development in the future are the general aging of the population and a declining household size. Both of these factors will affect the type of services that the town may have to consider providing as well as the type of housing alternatives that may be needed to accommodate changing demographics within the community.

The rate of housing growth in the town also slowed over the last decade although a significant number of units were still constructed during this time period. The majority of new housing units were single family dwellings although a notable number of duplexes were also added to the inventory. The average cost of a single family home rose by approximately 33% over the last decade, but Gray's housing market still remains relatively affordable from a regional perspective. However, the town may need to re-evaluate its policies and regulations with regard to housing in order to determine if a variety of suitable housing will be available for residents of various ages and income levels in the future.