



Hampstead Community Comprehensive Plan



Chapter 2: **Demographics & Projections**

❖ Census and Other Data

Demographics are a description of the population characteristics of an area. A demographic study over time helps us identify trends that show how the population is changing. A clear understanding of these trends and the characteristics of the current population is necessary to better understand the community's needs. These demographics also allow us to determine certain needs in the population that should be included in the planning process. A community's current and projected characteristics can help establish the types of facilities that may be needed in the future.

The following data were compiled using U.S. Census Bureau information. A census of the United States' population is taken every 10 years. Each household in the country receives a questionnaire. One out of every 10 households receives a longer, more detailed survey. This data provides the best base of demographic information that is available to and used by the majority of the country's jurisdictions. Although the information becomes outdated toward the end of the decade, the census still provides a valuable resource. The most recent census was taken on April 1, 2000. However, not all of the results of this census were available in time for use in this plan. The 2000 Census data has been used wherever possible.

1 Population Characteristics

The Hampstead Election District has experienced steady growth since 1930. The greatest increases have occurred since 1960, when the study area had a population of 3,410. While Carroll County as a whole has also been experiencing significant growth since 1960, the Election District has grown faster than the County. Both Carroll County and the Election District have been growing at a faster rate than the State of Maryland since 1960.

During the decade 1960 - 1970, the Hampstead Election District grew by 55 percent from 3,410 people in 1960 to 5,290 people in 1970, as shown in the table below. The Town of Hampstead population doubled in size between 1980 and 1990 and nearly did so again between 1990 and 2000. While the Election District and the Town have generally grown faster than the County since 1960, the Town represented slightly more than 3 percent (3.3) of the county population in 2000. The entire election district contained slightly less than 9 percent (8.7) of the entire Carroll County population.





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Population Trends 1930 - 2000 Census

Year	Town of Hampstead		Election District		Carroll County		Maryland	
	Population	% Change	Population	% Change	Population	% Change	Population	% Change
1930	905	N/A	2,404	N/A	35,978	N/A	1,631,526	N/A
1940	664	(27)	2,529	5	39,054	9	1,821,244	12
1950	667	2	2,627	4	44,907	15	2,343,001	29
1960	696	3	3,410	30	52,785	18	3,100,689	32
1970	961	38	5,290	55	69,006	31	3,923,897	27
1980	1,293	35	7,857	49	96,356	40	4,216,933	7
1990	2,608	102	10,300	31	123,372	28	4,781,468	13
2000	5,060	94	13,111	27	150,897	22	5,296,486	11

Source: U. S. Census, Carroll County Department of Planning

According to the 2000 Census, the Hampstead Study Area population was 13,111. Females represented 51.0 percent of the population (6,685), and males represented 49.0 percent of the population (6,426). The table below presents the population age structure for 1990 and 2000 by gender for the entire election district. The 0 - 4 age group decreased from 8.4 percent of the total population in 1990 to 7.4 percent in 2000, while the age groups 35 - 44 and 45 - 54 grew as a percentage of the total population. The next table shows the distribution of males and females in general in 2000.

Persons by Gender by Age Hampstead Election District 1990 and 2000 Census

Age	1990						2000					
	Male		Female		Total		Male		Female		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
0-4	451	8.9	417	8.0	868	8.4	509	7.9	494	7.4	1,003	7.7
5-9	376	7.4	391	7.4	767	7.5	616	9.6	554	8.3	1,170	8.9
10-14	351	6.9	345	6.6	696	6.8	583	9.1	519	7.8	1,102	8.4
15-19	322	6.4	335	6.4	657	6.4	412	6.4	432	6.5	844	6.4
20-24	316	6.3	326	6.2	642	6.2	273	4.2	243	3.6	516	3.9
25-34	972	19.2	988	18.8	1,960	19.0	814	12.7	904	13.5	1,718	13.1
35-44	916	18.1	930	17.7	1,846	17.9	1,208	18.8	1,273	19.0	2,481	18.9
45-54	602	11.9	570	10.9	1,172	11.4	950	14.8	976	14.6	1,926	14.8
55-64	383	7.6	403	7.7	786	7.6	535	8.3	537	8.0	1,072	8.2
65-74	259	5.1	312	6.0	571	5.5	334	5.2	405	6.1	739	5.6
75+	112	2.2	223	4.3	335	3.3	192	3.0	348	5.2	540	4.1
Total	5,060	100.0	5,240	100.0	10,300	100.0	6,426	100.0	6,685	100.0	13,111	100.0

Source: U. S. Census





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Persons by Gender 2000 Census

Gender	Town of Hampstead		Election District		Carroll County		Maryland	
	#	%	#	%	#	%	#	%
Male	2,456	48.5	6,426	49.0	74,470	49.4	2,557,794	48.3
Female	2,604	51.5	6,685	51.0	76,427	50.6	2,738,692	51.7
Total	5,060	100.0	13,111	100.0	150,897	100.0	5,296,486	100.0

Source: U.S. Census

The following table shows the Hampstead Election District's racial characteristics in 1980, 1990, and 2000. The study area is predominantly white, with minorities accounting for slightly more than two percent of the total population in 2000. Between 1990 and 2000, the study area realized an increase in the actual number of minorities. As the study area continues to grow, the population will likely become more diverse.

Racial Characteristics Hampstead Election District 1980-2000 Census

Race	1980		1990		2000	
	Persons	%	Persons	%	Persons	%
White	7,805	99.3	10,237	99.9	12,832	97.9
Black	17	0.2	21	<0.01	84	0.6
American Indian, Eskimo, Aleut	6	0.1	0	<0.00	7	0.1
Asian, Pacific Islander	22	0.3	35	<0.01	79	0.6
Other	7	0.1	7	<0.01	24	0.2
Total	7,857	100.0	10,300	100.0	13,111	100.0

Source: U.S. Census

The next tables compares the racial structure of the population of the Hampstead Election District to the county and state racial structure. The county population is more diversified racially than the Hampstead Election District, with 95.7 percent of the county population being white and 97.9 percent of the study area being white. All minority categories in the Election District are generally equal to or smaller than the percentage of minorities in the entire county.

Racial Characteristics 2000 Census

Race	Hampstead Election District		Carroll County		Maryland	
	#	%	#	%	#	%
White	12,832	97.9	144,399	95.7	3,391,308	64.0
Total Minority Populations	194	2.1	6,498	4.3	1,905,178	36.0
Black	84	0.6	3,433	2.3	1,477,411	27.9
American Indian, Eskimo, Aleut	7	0.1	330	0.2	15,423	0.3
Asian or Pacific Islander	79	0.6	1,162	0.8	213,232	4.0
Other Race	24	0.2	471	0.3	95,525	1.8
2 or More	85	0.6	1,102	0.7	103,587	2.0
Total	13,111	100.0	150,897	100.0	5,296,486	100.0

Source: U. S. Census





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2 Household Type, Size, and Relationship

According to the 2000 Census, the Hampstead Election District had 13,111 people residing in 4,659 households. The average number of persons per household was 2.81. The table below shows types of households for 1990 and 2000 for the Town of Hampstead, the Hampstead Election District, Carroll County, and Maryland. Family households consist of a householder and one or more persons living in the same household who are related to the householder by birth, marriage, or adoption. The number of households in the Election District increased by 26.7 percent from 1990 to 2000. The number of persons per household is slightly higher for the Town of Hampstead than that of the Election District or county.

Households by Type 1990 and 2000 Census								
Household Type	Town of Hampstead		Hampstead Election District		Carroll County		Maryland	
	1990	2000	1990	2000	1990	2000	1990	2000
Family Households	720	1,328	2,932	3,673	33,909	41,094	1,245,814	1,359,318
Married-couple families	597	1,059	2,598	3,106	29,476	34,936	948,563	994,549
Other family, male householder	18	66	79	167	1,197	1,808	65,362	84,893
Other family, female householder	105	203	255	400	3,236	4,350	231,889	279,876
Non-family households	339	459	743	986	8,339	11,409	503,177	621,541
Total Households	1,059	1,787	3,675	4,659	42,248	52,503	1,748,991	1,980,859
Persons per household	2.46	2.83	2.8	2.81	2.85	2.81	2.67	2.61
Group Quarters Population	0	0	0	0	2,915	3,581	113,856	134,056

Source: U. S. Census

In 1990 and 2000, 100 percent of all town residents lived in a household (no group quarters). Family households (2 or more related people living in one unit) represented approximately 79 percent of the total community. Approximately 85 percent of the family households were married-couple families, which accounted for 67 percent of the Election District's total households. Non-family households (people unrelated to the householder) accounted for approximately 21 percent of the households in the community.

What are "group quarters"?

Group quarters refers to institutions such as prisons, jails, nursing homes, hospitals, and juvenile institutions. Non-institutional group quarters includes rooming houses, group homes, college dormitories, military quarters, and emergency shelters.

In 1990, the majority of households in the Election District contained 2, 3, or 4 people. Family households followed a similar trend. Most of the non-family households contained one person.





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3 Household Income

The 1990 Census shows that in 1989 the majority of households had an income ranging between \$15,000 and \$74,999, with the distribution weighted toward the higher end of the range. As shown in the following table, the median family income is slightly higher than the median household income for the Election District. County-wide, the median household income was \$42,378, and the median family income was \$46,491 in 1989.

Household and Family Income 1990 Census				
Income Range	Hampstead Election District		Carroll County # of Households	State of Maryland # of Households
	# of Households (3,697 total)	# of Families (2,979 total)		
Less than \$5,000	57	36	984	76,524
\$5,000 - \$9,999	199	56	1,719	96,326
\$10,000 - \$14,999	167	99	2,164	98,036
\$15,000 - \$24,999	416	284	4,887	236,234
\$25,000 - \$34,999	495	388	6,083	257,159
\$35,000 - \$49,999	1,003	855	10,069	347,612
\$50,000 - \$74,999	983	902	10,586	363,760
\$75,000 - \$99,999	274	268	3,674	152,604
\$100,000 - \$149,999	87	80	1,485	82,683
\$150,000 or more	16	11	562	38,404
Median Household Income	\$42,616			
Median Family Income	\$46,487			
Per Capital Income	\$15,931			

Source: U. S. Census, 1990

4 Educational Attainment

The table below presents the distribution of educational attainment for the Hampstead Election District and for Carroll County for persons aged 25 and over in 1990. Over half of the people in the Hampstead Election District had either a high school diploma or some college but no degree. Overall, Carroll County has a slightly higher percentage (25%) of persons who had an Associate degree, Bachelor's degree, or Graduate/Professional degree compared to the Hampstead Election District (23%). The Election District was very similar to the County as a whole in terms of educational attainment.





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Educational Attainment Persons 25 Years of Age and Over 1990 Census

Educational Level	Hampstead		Election District		Carroll County		Maryland	
	#	%	#	%	#	%	#	%
Less than 9 th Grade	129	8	497	7	6,681	8	246,505	8
9 th - 12 th Grade, No diploma	161	10	770	12	10,368	13	427,427	14
High School Graduate (or equivalency)	549	33	2,541	38	27,397	35	878,432	28
Some College, No Degree	409	24	1,361	20	14,890	19	580,833	19
Associate Degree	137	8	387	6	4,324	5	163,304	5
Bachelor's Degree	208	12	727	11	9,993	13	486,695	15
Graduate or Professional Degree	78	5	387	6	5,500	7	339,469	11
Total Persons 25 and Over	1,671	100	6,670	100	79,133	100	3,122,665	100

Source: U. S. Census

❖ Population Projections

The factual base, which serves as background to a comprehensive planning document, guides the development of the rest of the plan. This information and data also provide a basis on which forecasts and projections can be developed and used to formulate policies.

Population projections are used in several ways in the process of developing a comprehensive plan. Projecting what the population will be at certain years helps a jurisdiction to plan for needed improvements to public facilities. A jurisdiction can then include items in the capital improvements program budget at the appropriate times to ensure that facilities are brought on line as they are needed, before they become inadequate. These projections help us to establish the capacity of needed facilities, or the demand. By studying population projections and associated growth trends, a determination can be made about the point at which this may occur. Appropriate measures may then be taken to ensure that additional population growth does not negatively impact facilities or create demand before a jurisdiction can improve its facilities.

Many factors are typically entered into the formula for population projections, for which the specific factors depend on the projection method. These factors generally include statistics related to births, deaths, immigration (new people moving in), outmigration (people moving out), labor force, average annual growth rate, and potentially many more. This presents a difficult situation for the Town of Hampstead. Much of this information is not available for such a small geographic area. Therefore, some of the more complex and accurate models commonly used to make projections, such as the Cohort Survival Method, could not be used. The following projections then are based on available information and provide a general idea of what may be expected in the future based on current conditions.

1 Assumptions

While projections can only be as good as the data available to calculate them, certain assumptions must still be made even with reliable data. The assumptions that are implicit in a





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forecasting model can also profoundly influence the forecasts. The analysis is based on the following assumptions:

- ◆ Historic population data was reviewed assuming that past trends will continue into the future.
- ◆ Forecasts developed by secondary sources are accurate.
- ◆ Future population growth in Hampstead will be influenced by national, regional, and local economic and social conditions. These variables were not explicitly incorporated into the model. However, historic trends are influenced by these factors and are thus indirectly included in the forecast.
- ◆ The vacancy rate reported in the 2000 U.S. Census will remain consistent.
- ◆ No other unforeseen impacts on the growth rate will occur, such as moratoriums on water or building permits, change in the housing market, etc.
- ◆ Population estimates made by the Carroll County Planning Department for the years proceeding the 2000 Census are accurate. Projections are calculated using these figures.

2 Traditional Forecast (to determine when growth will happen)

One of the factors that is often considered in trying to project the population of an area is the “average annual growth rate,” or AAGR. The AAGR represents the average growth rate of an area over a period of time. Past trends in this rate can be examined for relevance and application to future growth. The following table shows the AAGR for Hampstead and Carroll County for each decade since 1930. Hampstead had a substantial period of growth (in comparison to its other decades) between 1980 and 2000.

The next table uses the various factors to project possible future population trends that could occur until the year 2025 in 5-year increments. These projections were developed using a number of

Average Growth Rate per Decade Hampstead, Carroll County, and Maryland 1930-2000			
Year	Hampstead %	Carroll County %	Maryland %
1930 to 1940	-2.66	0.85	1.16
1940 to 1950	0.20	1.50	2.86
1950 to 1960	0.28	1.75	3.23
1960 to 1970	3.81	3.07	2.65
1970 to 1980	3.45	3.96	0.74
1980 to 1990	10.17	2.80	1.34
1990 to 2000	9.40	2.23	1.08

Source: U.S. Bureau of Census; Maryland Dept. of Planning

different methods in order to present a range of possible future population figures, some more feasible than others. Four different scenarios are presented. The first shows the population growth based on the AAGR of the past 10 years. Scenario #2 shows the possible growth based on the 5-year timeframe in which the greatest amount of growth was experienced. The projections in the third scenario are based on the AAGR of the one year that experienced the highest amount of growth. The last scenario uses dwelling units per year, persons per household,





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and vacancy rate to project population. Since a significant amount of detailed and specific information generally used to develop population projections is not available, either due to lack of primary research or because the sample area is too small, the projections found in this chapter are rough estimates to be used to get a very general idea of possible future population size.

To identify the AAGR for the period between 1990 and 2000, the growth rate for each year was determined. These growth rates were then averaged for the 10-year period. To calculate the projections in Scenario #1, the AAGR for the 1990-2000 period was then applied to each year from 2000 to 2025. To identify the AAGR for the 1986-1991 period shown in Scenario #2, the growth rate for each of these years was determined and then averaged for the 5-year period. Scenario #3 uses a growth rate experienced during the 1987-1988 period. This growth rate was applied to each of the years following 2000.

How is the Average Annual Growth Rate Calculated?

$$\frac{(\text{recent year} - \text{previous year})}{\text{previous year}}$$

The last scenario projects population without the use of a strict growth rate. Since the current developments in progress are expected to continue for several years yet, the average number of units that have been completed during the past 5 years was used to estimate the number of dwelling units that could be completed in each of the coming years. The number of dwelling units this would produce was multiplied by an estimated persons per household for the Town (2.83) to determine the total number of people that may be added to the population as a result. This anticipated population was then multiplied by the occupancy rate (96.5%, which is determined by subtracting the vacancy rate reported in the 2000 U.S. Census from 100%). This additional population was added to the previous year's expected population to identify the population for each year from 2000 to 2025. Immigration and birth and death rates were not used due to lack of availability and due to lack of historical data.

Population Projections (Traditional) Town of Hampstead 2000 to 2025 (Base 2000 Population: 5,060)

Year	Method Used to Calculate			
	#1 AAGR 1990-2000 (5.96%)	#2 AAGR 1986-1991 (11.71%)	#3 Growth Rate 1987-1988 (23.37%)	#4 [D.U./Yr (35.2) x Persons/Hshld (2.83)] x Occupancy Rate (96.5%)
2001	5,362	5,653	6,243	5,156
2002	5,681	6,314	7,701	5,252
2003	6,020	7,054	9,501	5,348
2004	6,378	7,880	11,722	5,444
2005	6,759	8,803	14,461	5,540
2010	9,028	15,313	41,328	6,021
2015	12,058	26,640	118,112	6,502
2020	16,106	46,344	337,553	6,982
2025	21,513	80,622	964,694	7,462

Source: U.S. Census Bureau; Carroll County Bureau of Permits, Inspections, and Review; Carroll County Department of Planning





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3 Build-Out Analysis (to identify how much growth is expected)

Another useful method for identifying projected populations is by determining the amount of population possible based on land use designations. Land use designations identify the ultimate use desired for the land, which generally equates to being the future zoning for the land. After a property is zoned to match the land use designation shown on the adopted comprehensive plan map, the development potential is defined by that zoning. Once all of the land within the scope of the comprehensive plan is developed, which in this case is the Growth Area Boundary (GAB), theoretically there would be no additional residential units added and thus no additional population. At this point, the area has reached its “zoning capacity” or is said to have reached “build-out”.

To develop a very rough estimate of future population based on land use designations (future zoning), land available (no approved plan) for residential development, within the Town limits as well as between the current town limits and the GAB, was identified. A few lots here and there which may be able to subdivide off another lot or two were not included. The available land was matched with the planned land use designation for those specific properties. Based on the total acreage in each residential category, the number of houses that could be built was estimated. The total possible number of units on the available vacant land was calculated by applying a multiplier to the total acreage in each residential land use designation to get a total number of dwelling units. This multiplier was determined based on the average number of units that a developer typically achieves. These units were multiplied by the average persons per household (PPH) for the Town of Hampstead of 2.83 according to the 2000 U.S. Census data. This produced a potential population in each land use designation, all of which were added together to obtain the total potential additional population as shown in the table below.

Potential Additional Population from Undeveloped Land Town of Hampstead and Growth Area Boundary							
Land Use Designation	Acreage Within Town	Acreage Outside Town	Total Undeveloped Acreage	Multiplier	Potential Units	PPH	Potential Population
R-7,500	11.07	24.13	35.20	4.20	147.9	2.83	418
R-10,000	12.23	46.46	58.69	2.80	164.3	2.83	465
R-20,000	22.37	284.67	307.04	1.40	429.9	2.83	1,217
R-40,000	--	--	--	0.70	--	2.83	--
Conservation	--	79.41	79.41	0.23	18.3	2.83	52
Total Potential Additional Population							2,152

The population in April of 2000 for the Town of Hampstead was 5,060 people based on the 2000 U.S. Census. The estimated existing population of the area within the GAB was 1,791 people. To arrive at this number, the total number of units outside of the Town but inside the GAB was counted and then multiplied by the Census persons per household figure. This number was added to the current Town population to determine the current population within the entire GAB. To arrive at a total projected population at build-out (capacity of zoning), the estimated current population 6,851 was added to the projected additional population and the expected population from approved subdivisions. The total projected population of 10,152, assuming all residential land within the GAB is annexed and built as planned, represents a 67 percent increase





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in the April 2000 population of the GAB. (These numbers would be subject to change if any land included in the calculations undergoes a rezoning or change in land use designation.)

Population Projection (Zoning Capacity) Town of Hampstead and Growth Area Boundary (Based on 2001 Proposed Land Use Designations)	
Existing Town Population	5,060
Existing Population Outside Town	1,791
Potential Population from Approved Subdivisions	1,149
Potential Population from Undeveloped Land	2,152
Total Projected Population for GAB	10,152
Source: Carroll County Planning Department, 2001	

4 Blended Forecast

Population projections are based on many factors. Historic trends, while not always accurate indicators of future trends, provide a basis upon which projections can be made. Economic development, in and out migration, births and deaths, as well as changing age and household characteristics can play a significant role in affecting the population characteristics of a specific area.

While population projections based on past and current population growth are very useful, identifying the total population that could possibly occur in the Town is also important information. Regardless of the growth possible by such factors as births and immigration, the population capacity of a town based on zoning or land use designation is still a limiting factor in the extent to which the population can grow.

Both methods of projecting population have disadvantages. Historic trends and information used to complete traditional population forecasts do not take into account the fact that a jurisdiction can only grow so much. They also don't accommodate unforeseen trends and technology that might influence population growth. Population projections based on land use and zoning carry the assumption that the zoning will not change. Since rezonings cannot always be foreseen, these actions could alter the total population that is projected.

By blending the traditional projections with the projections based on zoning capacity or build-out, these projections can also be used as a guide to determine when the Town will reach certain population levels. The various methods used for the traditional forecast provide a high and low range of possible population. However, for each of the previous scenarios presented, the approximate year in which "build-out" would occur is shown in the following table. Everything after that year is shaded out.





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**Hampstead Community Planning Area Population Projections
Year Population Would Reach Zoning Capacity
(Based on Projected Population of 10,152)**

Year	Method Used to Calculate			
	#1 AAGR 1990-2000 (5.96 %)	#2 AAGR 1986-1991 (11.71%)	#3 Growth Rate 1987-1988 (23.37%)	#4 [D.U./Yr (35.2) x Persons/Hshld (2.83)] x Occupancy Rate (96.5%)
2001	5,362	5,653	6,243	5,156
2002	5,681	6,314	7,701	5,252
2003	6,020	7,054	9,501	5,348
2004	6,378	7,880	11,722	5,444
2005	6,759	8,803		5,540
2006	7,161	9,833		5,636
2007	7,588	10,985		5,732
2008	8,041			5,828
2009	8,520			5,925
2010	9,028			6,021
2011	9,566			6,117
2012	10,136			6,213
2013				6,309
2014				6,405
2015				6,501
2016				6,597
2017				6,694
2018				6,790
2019				6,886
2020				6,982
2021				7,078
2022				7,174
2023				7,270
2024				7,366
2025				7,462

Source: U.S. Census Bureau; Carroll County Bureau of Permits, Inspections, and Review; Carroll County Department of Planning

The table above blends the projection for rate of growth with the estimation for possible population based on the land use designations or zoning capacity. The population projection based on AAGR 1986-91 and the growth rate for 1987-88 (Scenarios #2 and #3) are probably unrealistic projections based on the fact that the Town has put additional growth controls in effect since that time. Currently, developers cannot record more than 50 lots per year in one subdivision. In addition, most of the land available for development is not yet within the town limits. Although this is a significant time period on which to base a projection, the rate of development has decreased significantly since that time period. While it is possible to maintain that level of growth for a shorter time period, it is not likely that this level of growth would be maintained over a 25-year time period. Therefore, the historic growth rate for that time period would probably not be representative of future growth rates.





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Given that we know the projected population once the Town reaches the Growth Area Boundary and its zoning capacity, we can use the various scenarios above to estimate a range of possible years when the Town will reach this population. If you eliminate the fastest and the slowest growth rates, zoning capacity would be reached sometime between the years 2007 and 2011.

