



# Population Estimates and Projections

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## ESTIMATES OF THE NUMBER OF HOUSEHOLDS BY STATE JULY 1, 1973 AND 1972

This report presents figures on total households and husband-wife households by State for July 1, 1972, and provisional figures for July 1, 1973. The 1973 figures are designated provisional since they are based on 1973 provisional estimates of the population for States.

California led all States in the total number of households for 1973 with 7.2 million. Alaska had the smallest number of households: 89,000 in 1973.

Differences between States with respect to the increase in number of households between 1970 and 1973 are largely attributable to differences in population growth by age. For example, Florida, with the largest population growth for all ages, did not have the largest increase in households. Between 1970 and 1973, Florida had an increase of 434,000 households while California had an increase of 601,000 households. California had the greater increase in households due to two major reasons: (1) California had a larger increase in the adult population; and (2) California had a higher proportion of primary individuals (persons maintaining their own households while living alone or with persons unrelated to them) for all age groups.

Arizona had the greatest percent increase in households (22 percent) over the 1970 to 1973 period. For the majority of States the average annual percent of increase in the number of households was larger in the period 1970-1973 than in 1960-1970, reflecting the national tendency for

more rapid increase in the ages where rates of household formation are greatest.

### METHOD OF ESTIMATION

The method of preparing the 1972 and 1973 estimates of households by State shown in this report was generally as follows: Percentages of persons who were household heads ("headship rates") and other relevant percentages were developed from the 1970 census, by age, by State. These percentages were applied to 1972 and 1973 State population estimates, by age, to obtain preliminary estimates of the number of households by State within each age group. These preliminary 1972 and 1973 estimates were then adjusted to the number of households in the United States on July 1, 1972 and 1973 (estimated from Current Population Survey figures), to yield the final 1972 and 1973 estimates by States.

The specific steps involved are shown below:

1. Data for both sexes combined from the 1970 census were posted by State, by age (under 14, 14 to 19, 20 to 24, 25 to 44, 45 to 64, and 65 and over) for the following categories:

- (t) Total persons in age group
- (a) Heads of husband-wife families
- (b) Other family heads
- (c) Primary individuals
- (d) Household members not heads
- (e) Persons not in households

2. The following household headship rates, and other proportions, were calculated by State, by age:

$$\frac{(a)}{(t)}, \quad \frac{(b)}{(t)}, \quad \frac{(c)}{(t)}, \quad \frac{(d)}{(t)}, \quad \frac{(e)}{(t)},$$

3. State population estimates for 1972 and 1973 by age (as above) were posted.

4. Preliminary estimates of the 1972 and 1973 population in each class, (a) to (e), by age, by State, were calculated (step 2 x step 3).

5. The preliminary estimates (step 4) were summed over all States to United States totals by age, for each class, (a) to (e).

6. Estimates for the United States for 1972 and 1973, by age, for each class, (a) to (e), were posted. These estimates were basically the statistics obtained from the March Current Population Surveys for 1972 and 1973 (with an allowance added to include resident Armed Forces in military barracks and the institutional population) which were converted to the July data by ratio adjustment to the July 1, 1972 and 1973 population estimates.

7. Adjustment factors by age, for each class, (a) to (e), were calculated (step 6 ÷ step 5). The effect of this step was an upward adjustment of 1.6 percent for 1972 and 2.3 percent for 1973 in the total number of households estimated in step 5.

8. Adjustment factors derived in step 7 were applied to preliminary estimates of the 1972 and 1973 population in each class, (a) to (e), by age, by State (step 7 x step 4).

The data for 1970 used in the preparation of this report are from the 1970 Census of Population, Vol. 1, Characteristics of the Population, Parts 2 through 52, tables 138, 152, and 153. The 1972 and 1973 estimates of population by States are consistent with Current Population Reports, Series P-25, No. 518, Estimates of the Population of States, by Age: 1970 to 1973. The 1972 and 1973 estimates of the number of households for the United States for July 1 used to develop adjustment factors were derived by adjusting data from Current Population Reports, Series P-20, Nos. 246 and 258, to the total resident population for July 1972 and 1973.

#### EVALUATION OF THE METHOD

The accuracy of the estimates depends on the accuracy of the data on which they are based

(that is, the national household estimates and State population estimates), and on the validity of the assumptions inherent in the method by which these data were joined to produce the estimates. The assumptions are: (1) that the interstate differences in household headship rates in the 1970 census persisted over the 1970 to 1973 period; (2) that changes in headship rates by States occurred uniformly, that is, that between 1970 and 1973 the trends in the headship rates, by age, were the same for each State as for the United States. The validity of these assumptions was subjected to indirect and direct checks, as follows:

A study was made of the success with which the number of households by States in 1970, as given by the Census, could be estimated from the information on the 1970 census population by States and the 1960 census headship rates, by States, using a method corresponding to the method described above. The 1960 headship rates were applied to the 1970 census State population figures to obtain preliminary estimates of the number of households by State, within each age group. These preliminary 1970 estimates were then adjusted proportionately so that they added to the total number of households for the United States (by age of head) as given in the 1970 census. (This step involves the assumption of uniform changes in headship rates.) The effect of this step was an upward adjustment of 5.9 percent in the preliminary estimates of the number of households with the adjustment varying according to age of head and type of household.

The adjusted 1970 estimates were then compared with the 1970 census figures on households by State. The results of this study are shown in table A. The difference between the adjusted

**Table A. Distribution of States by Percent Deviation of 1970 Estimate of Households From 1970 Census Number of Households**

Percent deviation of 1970 estimate from 1970 census figure	Total households	Husband-wife households
Total, 50 States and the District of Columbia	51	51
0 to 1.9.....	31	44
2.0 to 3.9.....	16	4
4.0 to 5.9.....	4	1
6.0 to 7.9.....	-	1
8.0 and over.....	-	1
Mean deviation.....	1.91	1.32

- Represents zero.

1970 estimates and the 1970 census was less than 4 percent in all but a few States. The average (mean) deviation disregarding sign was 1.9 percent over all States. These results suggest that, for most States, the assumptions inherent in the estimating method held reasonably true for the 1960 to 1970 period.

Comparison of the preliminary 1970 estimate and the adjusted 1970 estimate with the number of households for each State given in the 1970 census indicated that making the adjustment to national household totals provided an improved estimate for the great majority of States. For 42 out of 50 States, and for the District of Columbia, the adjusted 1970 estimate was definitely better than the preliminary estimate; that is, the adjusted estimate was closer to the 1970 census figure for the State than was the preliminary estimate. For seven States, the adjusted estimate was worse than the preliminary estimate and for one other State the adjusted estimate was not much better than the preliminary estimate. However, for none of these eight States did the adjusted estimate differ by more than 5.2 percent from the number of households given in the 1970 census.

A direct check for the current time period was made by comparing the distribution of house-

holds by region shown in the present estimates with figures based on the Current Population Survey. A distribution of households by region was computed from Current Population Survey data for 1972 and 1973. This percentage distribution was then applied to the estimated total households for July 1, 1972 and 1973, and the resulting estimates of households by region were compared with the corresponding figures obtained from the State household estimates. The results of this comparison are shown in table B. The distribution of households by region is quite similar in the estimates and in the Current Population Survey data.

The accuracy of the estimates as indicated by the results shown in table A reflects only the effect on the estimates of the assumptions that were made concerning changes in household headship rates. Table A does not measure the additional effect of using postcensal estimates of age groups, by State, which themselves are subject to a fair degree of error. A priori, it is to be expected that the use of such age estimates would tend to increase the average error of the household estimates, but the exact contribution of this component to the error is not known. Table B includes the effect of errors in postcensal estimates.

**Table B. Distribution of Households by Region, in the Estimates and in the Current Population Survey for 1972 and 1973**

(Numbers in thousands)

Region	1973 provisional estimates	1973 CPS <sup>1</sup>	1972 estimates	1972 CPS <sup>1</sup>	Difference between estimates and CPS			
					1973		1972	
					Number	Percent	Number	Percent
United States....	68,737	68,737	67,132	67,132	-	-	-	-
Northeast.....	16,412	16,329	16,176	16,036	+83	+0.5	+140	+0.9
North Central.....	18,701	18,644	18,365	18,447	+57	+0.3	-82	-0.4
South.....	21,263	21,284	20,620	20,617	-21	-0.1	+3	(Z)
West.....	12,361	12,479	11,971	12,032	-118	-0.9	-61	-0.5

- Represents zero.

Z Less than 0.05 percent.

<sup>1</sup>See text.

## RELATED REPORTS

Statistics on households in 1972 and 1973 for the United States based on current surveys are presented in Current Population Reports, Series P-20, Nos. 246 and 258. Population estimates for States are presented in Current Population Reports, Series P-25, No. 520.

## DEFINITIONS AND EXPLANATIONS

Household. A household consists of all the persons who occupy a housing unit. A house, an apartment or other group of rooms, or a single room, is regarded as a housing unit when it is occupied or intended for occupancy as separate living quarters; that is, when the occupants do

not live and eat with any other persons in the structure and there is either (1) direct access from the outside or through a common hall or (2) a kitchen or cooking equipment for the exclusive use of the occupants.

A household includes the related family members and all the unrelated persons, if any, such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit, or a group of unrelated persons sharing a housing unit as partners, is also counted as a household. The count of house-

holds excludes group quarters, such as rooming houses, military barracks, and institutions.

A "husband-wife" household is a household in which the head is a married man whose wife lives with him.

#### **ROUNDING OF ESTIMATES**

Estimates presented in the tables of this report have been rounded to the nearest thousand without being adjusted to group totals which are independently rounded. Percentages are based on unrounded numbers.

Table 1. ESTIMATES OF THE NUMBER OF HOUSEHOLDS BY STATES, FOR THE UNITED STATES, JULY 1, 1973 AND 1972, WITH COMPARABLE FIGURES FOR APRIL 1, 1970 AND 1960

Region, division, and State	Total households								Husband-wife households 1973 provisional	Husband-wife households 1972
	July 1, 1973 provisional	July 1, 1972	April 1, 1970 census	April 1, 1960 census	Change, 1970 to 1973		Average annual percent of change			
					Number	Percent	1970 to 1973	1960 to 1970		
United States.....	68,737,000	67,132,000	63,449,747	53,021,061	+5,287,000	+8.3	+2.5	+1.8	46,651,000	46,061,000
<b>REGIONS:</b>										
Northeast.....	16,412,000	16,176,000	15,482,778	13,521,070	+929,000	+6.0	+1.8	+1.4	10,892,000	10,863,000
North Central.....	18,701,000	18,365,000	17,537,256	15,377,361	+1,164,000	+6.6	+2.0	+1.3	12,995,000	12,884,000
South.....	21,263,000	20,620,000	19,258,163	15,503,321	+2,005,000	+10.4	+3.0	+2.2	14,623,000	14,338,000
West.....	12,361,000	11,971,000	11,171,550	8,619,309	+1,189,000	+10.6	+3.1	+2.6	8,141,000	7,977,000
<b>NORTHEAST:</b>										
New England.....	3,920,000	3,843,000	3,645,325	3,115,910	+274,000	+7.5	+2.2	+1.6	2,650,000	2,626,000
Middle Atlantic.....	12,492,000	12,334,000	11,837,453	10,405,160	+655,000	+5.5	+1.7	+1.3	8,242,000	8,236,000
<b>NORTH CENTRAL:</b>										
East North Central.....	13,169,000	12,938,000	12,382,927	10,709,659	+786,000	+6.3	+1.9	+1.5	9,159,000	9,089,000
West North Central.....	5,532,000	5,427,000	5,154,329	4,667,702	+377,000	+7.3	+2.2	+1.0	3,836,000	3,796,000
<b>SOUTH:</b>										
South Atlantic.....	10,519,000	10,167,000	9,438,213	7,267,832	+1,080,000	+11.4	+3.3	+2.6	7,171,000	7,013,000
East South Central.....	4,209,000	4,103,000	3,867,989	3,307,354	+341,000	+8.8	+2.6	+1.6	2,940,000	2,895,000
West South Central.....	6,536,000	6,350,000	5,952,261	4,928,135	+584,000	+9.8	+2.9	+1.9	4,513,000	4,429,000
<b>WEST:</b>										
Mountain.....	2,918,000	2,792,000	2,518,324	1,975,581	+400,000	+15.9	+4.5	+2.4	2,044,000	1,973,000
Pacific.....	9,443,000	9,178,000	8,653,226	6,643,728	+789,000	+9.1	+2.7	+2.6	6,097,000	6,004,000
<b>NEW ENGLAND:</b>										
Maine.....	329,000	324,000	302,923	280,355	+27,000	+8.8	+2.6	+0.8	229,000	228,000
New Hampshire.....	252,000	244,000	225,378	180,020	+27,000	+11.9	+3.5	+2.2	178,000	173,000
Vermont.....	145,000	142,000	132,098	110,732	+13,000	+10.1	+3.0	+1.8	101,000	99,000
Massachusetts.....	1,884,000	1,848,000	1,759,692	1,534,732	+125,000	+7.1	+2.1	+1.4	1,236,000	1,226,000
Rhode Island.....	315,000	309,000	291,965	257,335	+23,000	+7.7	+2.3	+1.3	212,000	210,000
Connecticut.....	994,000	977,000	933,269	752,736	+60,000	+6.5	+1.9	+2.2	695,000	691,000
<b>MIDDLE ATLANTIC:</b>										
New York.....	6,198,000	6,134,000	5,913,861	5,248,261	+285,000	+4.8	+1.4	+1.2	3,930,000	3,943,000
New Jersey.....	2,375,000	2,338,000	2,218,182	1,806,295	+157,000	+7.1	+2.1	+2.1	1,653,000	1,646,000
Pennsylvania.....	3,918,000	3,861,000	3,705,410	3,350,604	+213,000	+5.7	+1.7	+1.0	2,658,000	2,648,000
<b>EAST NORTH CENTRAL:</b>										
Ohio.....	3,469,000	3,413,000	3,289,432	2,852,321	+180,000	+5.5	+1.6	+1.4	2,430,000	2,415,000
Indiana.....	1,721,000	1,687,000	1,609,494	1,387,910	+112,000	+6.9	+2.1	+1.5	1,230,000	1,216,000
Illinois.....	3,692,000	3,641,000	3,502,138	3,084,738	+190,000	+5.4	+1.6	+1.3	2,477,000	2,471,000
Michigan.....	2,840,000	2,785,000	2,653,059	2,238,650	+187,000	+7.0	+2.1	+1.7	2,002,000	1,983,000
Wisconsin.....	1,447,000	1,411,000	1,328,804	1,146,040	+118,000	+8.9	+2.6	+1.5	1,020,000	1,003,000
<b>WEST NORTH CENTRAL:</b>										
Minnesota.....	1,246,000	1,219,000	1,153,946	991,981	+92,000	+8.0	+2.4	+1.5	868,000	857,000
Iowa.....	968,000	949,000	896,311	841,357	+72,000	+8.0	+2.4	+0.6	683,000	674,000
Missouri.....	1,613,000	1,588,000	1,520,567	1,359,826	+92,000	+6.1	+1.8	+1.1	1,090,000	1,084,000
North Dakota.....	198,000	194,000	181,613	173,362	+16,000	+8.9	+2.6	+0.5	142,000	140,000
South Dakota.....	217,000	212,000	200,807	194,821	+17,000	+8.3	+2.5	+0.3	153,000	151,000
Nebraska.....	515,000	504,000	473,721	433,448	+41,000	+8.7	+2.6	+0.9	357,000	352,000
Kansas.....	775,000	761,000	727,364	672,907	+48,000	+6.6	+2.0	+0.8	543,000	537,000
<b>SOUTH ATLANTIC:</b>										
Delaware.....	181,000	177,000	164,804	128,582	+17,000	+10.1	+3.0	+2.5	127,000	125,000
Maryland.....	1,281,000	1,251,000	1,175,073	863,003	+106,000	+9.0	+2.7	+3.1	888,000	878,000
District of Columbia.....	275,000	270,000	262,538	252,066	+13,000	+4.8	+1.4	+0.4	114,000	115,000
Virginia.....	1,509,000	1,469,000	1,390,636	1,074,442	+118,000	+8.5	+2.5	+2.6	1,057,000	1,041,000
West Virginia.....	590,000	583,000	547,214	521,142	+43,000	+7.9	+2.3	+0.5	412,000	411,000
North Carolina.....	1,651,000	1,606,000	1,509,564	1,204,715	+141,000	+9.4	+2.8	+2.3	1,173,000	1,153,000
South Carolina.....	817,000	791,000	734,373	603,551	+83,000	+11.3	+3.3	+2.0	565,000	554,000
Georgia.....	1,495,000	1,453,000	1,369,225	1,070,287	+126,000	+9.2	+2.7	+2.5	1,025,000	1,008,000
Florida.....	2,719,000	2,568,000	2,284,786	1,550,044	+434,000	+19.0	+5.4	+3.9	1,810,000	1,729,000
<b>EAST SOUTH CENTRAL:</b>										
Kentucky.....	1,067,000	1,040,000	983,665	851,867	+83,000	+8.4	+2.5	+1.4	756,000	744,000
Tennessee.....	1,336,000	1,299,000	1,213,187	1,003,301	+123,000	+10.2	+3.0	+1.9	941,000	924,000
Alabama.....	1,116,000	1,091,000	1,034,113	884,116	+82,000	+8.0	+2.4	+1.6	777,000	768,000
Mississippi.....	689,000	671,000	636,724	568,070	+53,000	+8.3	+2.4	+1.1	466,000	460,000
<b>WEST SOUTH CENTRAL:</b>										
Arkansas.....	681,000	663,000	615,424	523,552	+66,000	+10.7	+3.1	+1.6	475,000	466,000
Louisiana.....	1,146,000	1,118,000	1,052,038	892,344	+94,000	+8.9	+2.6	+1.6	770,000	760,000
Oklahoma.....	924,000	902,000	850,803	734,593	+74,000	+8.6	+2.6	+1.5	632,000	622,000
Texas.....	3,784,000	3,666,000	3,433,996	2,777,646	+350,000	+10.2	+3.0	+2.1	2,636,000	2,580,000
<b>MOUNTAIN:</b>										
Montana.....	238,000	233,000	217,304	202,240	+20,000	+9.4	+2.8	+0.7	164,000	162,000
Idaho.....	246,000	238,000	218,960	193,839	+27,000	+12.2	+3.5	+1.2	179,000	175,000
Wyoming.....	116,000	112,000	104,600	99,187	+12,000	+11.1	+3.2	+0.5	83,000	81,000
Colorado.....	802,000	765,000	690,928	529,424	+111,000	+16.0	+4.6	+2.7	549,000	528,000
New Mexico.....	335,000	319,000	289,389	251,209	+46,000	+15.9	+4.5	+1.4	235,000	226,000
Arizona.....	655,000	619,000	539,157	366,630	+116,000	+21.6	+6.0	+3.9	460,000	437,000
Utah.....	339,000	326,000	297,934	241,532	+41,000	+13.7	+3.9	+2.1	252,000	244,000
Nevada.....	188,000	180,000	160,052	91,520	+28,000	+17.3	+4.9	+5.6	123,000	120,000
<b>PACIFIC:</b>										
Washington.....	1,172,000	1,148,000	1,105,587	894,168	+67,000	+6.0	+1.8	+2.1	793,000	785,000
Oregon.....	774,000	748,000	691,631	558,222	+82,000	+11.9	+3.5	+2.1	531,000	518,000
California.....	7,175,000	6,972,000	6,573,861	4,981,024	+601,000	+9.1	+2.7	+2.8	4,543,000	4,476,000
Alaska.....	89,000	87,000	79,059	57,250	+10,000	+13.0	+3.8	+3.2	66,000	65,000
Hawaii.....	232,000	223,000	203,088	153,064	+29,000	+14.1	+4.1	+2.8	164,000	160,000