



Population Estimates and Projections

U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

Series P-25, No. 604

Issued June 1975

ESTIMATES OF THE POPULATION OF ALASKA CENSUS DIVISIONS AND METROPOLITAN AREAS: JULY 1, 1973 AND 1974

This report presents population estimates for July 1, 1973 and provisional estimates for July 1, 1974 for census divisions and metropolitan areas in Alaska. These estimates were prepared by the Bureau of the Census as part of its continuing population estimates program. They are consistent in methodological approach with county or county equivalent estimates for other States jointly prepared by State agencies and the Bureau of the Census under the auspices of the Federal-State Cooperative Program and published in *Current Population Reports*, Series P-26.

Census division estimates for July 1, 1971, July 1, 1972, and provisional estimates for July 1, 1973, were published earlier in *Current Population Reports*, Series P-25, Nos. 517 and 531. The provisional estimates in the last cited report are superseded by the numbers published here.

This report introduces an additional estimating procedure using administrative records, made possible by the availability of a new data source. Because of the resultant change in weighting of methods and changes in input data in other methods used, estimates shown here may not always be comparable with those for the earlier years.

The methods used have been tested against the 1970 census and recent special censuses. A decision on current methodology was made by the Bureau of the Census on the basis of the tests. For a more detailed description of the Federal-State Cooperative Program and an analysis of 1970 test results for methods other

than the recently developed Administrative Records method, see *Current Population Reports*, Series P-26, No. 21, "Federal-State Cooperative Program for Local Population Estimates: Test Results—April 1, 1970," April 1973. Results of a test of the Administrative Records method are presented in *Current Population Reports*, Series P-25, No. 547.¹

The estimates shown for July 1, 1973, are based on an average of the following methods, adjusted to agree with the July 1, 1973 State estimate published in Series P-25, No. 533.

1. **The Regression (ratio-correlation) method.** In the Regression method a multiple regression equation is used to relate changes in a number of different data series to change in population distribution.² The series of data used in the Regression method for Alaska are: elementary school enrollment in grades 1 through 8 plus elementary special and elementary ungraded (X_1)

¹ Results of earlier studies were given in "Use of Administrative Records for Small-Area Population Estimates," by Meyer Zitter and David L. Word; a paper presented at the Annual Meeting of Population Association of America, New Orleans, Louisiana, April 27, 1974. A copy of this paper can be obtained by writing Chief, Population Division, Bureau of the Census, Washington, D.C. 20233.

² Descriptions of methodologies are given in *Current Population Reports*, Series P-25, Nos. 427 and 520. Modifications made to the methodologies for the current series will be given in forthcoming reports in Series P-25.

and three-year averages of resident births (X_2). The prediction equation for Alaska for the 1970's is given by

$$\hat{Y} = 0.2087 + 0.5125X_1 + 0.3309X_2$$

2. **Component Method II.** This method employs vital statistics to measure natural increase and school enrollment to measure net migration. The estimates made by the Census Bureau's Component Method II are specific to the civilian population under 65. To this population is added an estimate of the population 65 and over based on Medicare statistics and an estimate of the resident military population based on station strength statistics.²

3. **The Administrative Records method.** This newly developed component method uses administrative records (in this instance individual Federal income tax returns) to measure civilian intercounty migration and reported vital statistics to estimate natural increase.³ The tax returns are matched for the successive periods to determine the number of persons whose county of residence changed during the estimating period. A net migration rate based on the number of taxpayers changing residence is derived; this rate is then assumed to apply to the total population. This estimate is made specific to the civilian population under age 65 by excluding from the migration computations data relating to persons 65 years and over. These estimates are then combined with independent estimates of the population 65 and over based on Medicare statistics. The other components of population change—births, deaths, immigration, net movement between the Armed Forces and civilian population, and resident military population—are identical with Component Method II (described above).

The provisional July 1, 1974 estimate for Anchorage Census Division was developed by adding the average change between 1973 and 1974 estimates based on Component Method II and the Housing Unit method to the 1973 estimate. In the **Housing Unit method** the estimates of the population are based on

estimates of the housing inventory. Changes in the housing inventory are derived from data on building permits issued and demolition records, or on data on electric meter connections. The provisional July 1, 1974 estimates for the remaining census divisions were developed by adding the change between 1973 and 1974 Component Method II estimates to the 1973 estimates. All census divisions were subsequently adjusted to agree with the provisional July 1, 1974 State estimate published in **Current Population Reports**, Series P-25, No. 533.

Table 2 of this report presents estimates of the population of metropolitan areas and metropolitan census divisions in the State. The titles and definitions of the standard metropolitan statistical areas (SMSA's) are those currently defined by the Office of Management and Budget, Executive Office of the President.

The 1973 estimates published in this report represent revisions to census division estimates shown in **Current Population Reports**, Series P-25, No. 547. They reflect more current data on population change than were available at the time that the Series P-25 report was prepared. The estimates for census divisions, incorporated places, and other general purpose governments published in the Series P-25 report were used as the basis for the distribution of funds under the State and Local Fiscal Assistance Act of 1972. See that report for a description of methods, assumptions, and limitations of the estimates.

Corresponding estimates for other States in the program will be published as they become available. The appendix table shows reports published to date for States in the 1973-74 series, together with those published earlier in the decade.

The 1970 census total for the State shown on the table may differ slightly from the sum of the census divisions because of corrections made subsequent to the release of the official State figure. All census division populations for 1970 reflect the most recent corrections in the census count. The only census division with a correction of more than 500 is Anchorage.

The estimates presented in the table have been rounded to the nearest hundred without being adjusted to the State total, which was independently rounded to the nearest thousand. Percentages are based on unrounded numbers.

² See footnote 2 on page 1.

³ For a discussion of this methodology see Donald E. Starsinic, "Development of Population Estimates for Revenue Sharing Areas," in U.S. Bureau of the Census, **Census Tract Papers**, Series GE-40, No. 10; and Zitter and Word, *op cit*.

**Table 1. ESTIMATES OF THE POPULATION OF ALASKA CENSUS DIVISIONS:
JULY 1, 1973 AND JULY 1, 1974**

(State estimates are shown to the nearest thousand, census division estimates to the nearest hundred)

Census division	July 1, 1974 (provi- sional)	July 1, 1973	April 1, 1970 (census) ¹	Change, 1970 to 1974		Components of change, 1970 to 1974 ²			
				Number	Percent	Births	Deaths	Net migration	
								Number	Percent
Alaska.....	337,000	330,000	302,173	35,000	11.6	30,000	6,000	11,000	3.6
Aleutian Islands.....	7,400	7,400	8,221	-800	-9.5	500	100	-1,200	-14.8
Anchorage.....	148,800	145,800	126,385	22,400	17.8	13,200	2,100	11,400	9.0
Angoon.....	400	500	503	-100	-11.3	(Z)	(Z)	-100	-13.9
Barrow-North Slope.....	5,100	3,700	3,451	1,600	47.1	300	100	1,400	40.9
Bethel.....	8,500	8,400	7,767	800	9.8	900	200	(Z)	0.5
Bristol Bay Borough.....	1,100	1,100	1,147	(Z)	-1.8	100	(Z)	-100	-4.4
Bristol Bay.....	3,700	3,700	3,485	200	6.7	300	100	(Z)	(Z)
Cordova-McCarthy.....	1,900	2,000	1,857	(Z)	2.6	100	100	(Z)	-0.4
Fairbanks.....	46,300	46,800	45,864	500	1.1	5,000	700	-3,800	-8.3
Haines.....	2,000	1,700	1,504	500	30.1	100	100	400	25.5
Juneau.....	15,700	15,400	13,556	2,200	16.1	1,100	400	1,500	11.0
Kenai-Cook Inlet.....	13,700	13,900	14,250	-600	-4.0	1,100	300	-1,400	-9.9
Ketchikan.....	10,700	10,400	10,041	600	6.2	900	300	(Z)	0.5
Kobuk.....	4,400	4,400	4,048	400	9.1	500	100	(Z)	0.5
Kodiak.....	8,900	8,400	9,409	-500	-5.4	1,000	200	-1,300	-13.8
Kuskokwim.....	2,500	2,400	2,306	200	8.8	200	100	100	4.4
Matanuska-Susitna.....	9,500	8,800	6,509	3,000	45.5	600	200	2,600	39.5
Nome.....	6,100	5,900	5,749	400	7.0	600	200	(Z)	0.3
Outer Ketchikan.....	1,700	1,700	1,676	(Z)	1.3	200	100	-100	-4.5
Prince of Wales.....	2,600	2,300	2,106	500	24.6	100	100	400	20.5
Seward.....	2,400	2,500	2,336	100	2.9	200	100	(Z)	-0.9
Sitka.....	6,600	6,700	6,109	500	8.3	500	100	200	3.0
Skagway-Yakutat.....	2,300	2,300	2,157	200	7.6	200	100	100	3.4
Southeast Fairbanks.....	4,600	4,600	4,179	400	10.4	500	100	(Z)	0.9
Upper Yukon.....	1,400	1,400	1,282	100	10.7	100	100	100	5.8
Valdez-Chitina-Whittier..	3,700	3,500	3,098	600	18.3	200	100	400	12.6
Wade Hampton.....	4,000	4,300	3,917	100	2.4	500	100	-300	-7.8
Wrangell-Petersburg.....	5,600	5,400	4,913	700	15.0	500	200	500	9.3
Yukon-Koyukuk.....	5,200	5,200	4,758	400	8.5	400	100	200	3.4

Z Less than 50 persons or less than 0.05 percent.

¹Total does not agree with the sum of the census divisions due to corrections made to the census division populations after release of the official State counts.

²Births and deaths are based on reported vital statistics from April 1, 1970, to December 31, 1973, with extrapolations to June 30, 1974. Net migration is the difference between net change and natural increase.

**Table 2. ESTIMATES OF THE POPULATION OF METROPOLITAN AREAS AND THEIR
COMPONENT CENSUS DIVISIONS: ALASKA, JULY 1, 1973 AND 1974**

(SMSA totals rounded independently of census division numbers)

Standard metropolitan statistical area and census division	July 1, 1974 (provi- sional)	July 1, 1973	April 1, 1970 (census)	Change, 1970 to 1974		Components of change, 1970 to 1974 ¹			
				Number	Percent	Births	Deaths	Net migration	
								Number	Percent
ANCHORAGE.....	148,800	145,800	126,385	22,400	17.8	13,200	2,100	11,400	9.0
Anchorage.....	148,800	145,800	126,385	22,400	17.8	13,200	2,100	11,400	9.0

¹Births and deaths are based on reported vital statistics from April 1, 1970, to December 31, 1973, with extrapolations to June 30, 1974. Net migration is the difference between net change and natural increase.

APPENDIX

ESTIMATES PUBLISHED IN SERIES P-26 REPORTS SINCE 1970

(Reports issued under the Federal-State Cooperative Program for Population Estimates, jointly prepared by the Bureau of the Census and designated State agencies)

State	Report No.			State	Report No.		
	1973 and provisional 1974	1972 and provisional 1973	1971 and provisional 1972		1973 and provisional 1974	1972 and provisional 1973	1971 and provisional 1972
Ala.....		76	48	Mont.....	109	53	19
Alaska.....	(¹)	(²)	(³)	Nebr.....	104	58	25
Ariz.....	94	50	*11	Nev.....	117	67	29
Ark.....	115	70	33	N. H.....	107	52	18
Calif.....	119	(²)	*41	N. J.....		82	20
Colo.....	103	62	17	N. Mex.....		85	(³)
Conn.....	116	79	(³)	N. Y.....	(¹)	(²)	(³)
Del.....	111	57	15	N. C.....	114	68	44
Fla.....		90	46	N. Dak.....	102	60	(³)
Ga.....		92	37	Ohio.....		80	*40
Hawaii.....	105	56	23	Okla.....	112	63	24
Idaho.....	106	51	9	Oreg.....	(¹)	74	(³)
Ill.....		78	27	Pa.....		93	*39
Ind.....	113	75	14	R. I.....	98	65	22
Iowa.....		72	31	S. C.....	108	71	34
Kans.....		64	43	S. Dak.....	101	61	*12
Ky.....	120	84	35	Tenn.....		83	47
La.....	97	54	*16	Tex.....		(²)	(³)
Maine.....	99	59	28	Utah.....	96	55	10
Md.....	(¹)	(²)	(³)	Vt.....	95	49	*13
Mass.....		91	42	Va.....		88	36
Mich.....	110	69	32	Wash.....	(¹)	66	(³)
Minn.....		87	38	W. Va.....		89	30
Miss.....		86	(³)	Wis.....		81	26
Mo.....		77	45	Wyo.....	100	73	(³)

*First year only. For second year, see Series P-25, No. 517.

¹County or county equivalent estimates for 1973 and provisional 1974 are published in Series P-25 for the following States: Maryland, No. 596; Washington, No. 597; New York, No. 599; Oregon, No. 602; Alaska, No. 604.

²County or county equivalent estimates for 1972 and provisional 1973 are published in Series P-25 for the following States: Alaska, No. 531; California, No. 532; Maryland, No. 530; New York, No. 527; and Texas, No. 535.

³County estimates for this State for 1971 and provisional 1972 are published in Series P-25, No. 517.

CENSUS DIVISIONS, METROPOLITAN AREAS, AND SELECTED PLACES: ALASKA

