C3.186: P26/138

### **CURRENT POPULATION REPORTS**



# FEDERAL-STATE COOPERATIVE PROGRAM FOR

# **Population Estimates**

### U.S. DEPARTMENT OF COMMERCE/Bureau of the Census

Series P-26, No. 138

U.S. GOVERNMENT Depository Material

COUNTIES AND METROPOLITAN AREAS:

JULY 1, 1973 AND 1974 STATE LIBRARY COMMISSION

This report presents population estimates for July 1, 1973 and provisional estimates for July 1, 1974, for counties and metropolitan areas prepared under the auspices of the Federal-State Cooperative Program for Local Population Estimates. The objective of this program is the development and publication of estimates of the population of counties using uniform procedures largely standardized for data input and methodology. The estimates shown here were prepared jointly by the Bureau of the Census and the Division of Records and Statistics, Iowa State Department of Health and the Office of Planning and Programming. The latter agency was designated by the Governor to work with the Bureau of the Census in implementing and carrying out the Federal-State Cooperative Program.

County estimates for July 1, 1971, July 1, 1972, and provisional estimates for July 1, 1973, were published earlier in **Current Population Reports**, Series P-26, Nos. 31 and 72. The provisional estimates in the last report are superseded by the numbers published here.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

Issued September 1975

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DES MOINES LOWA was made jointly by the individual States and the Bureau of the Census on the basis of the tests. For a more detailed description of the 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

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.

Current Population Reports, Series P-25, No. 560.1

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.<sup>2</sup> The series

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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.

of data used in the Regression method for lowa are: automobile registrations  $(X_1)$ , two-year average of resident births  $(X_2)$ , two-year average of resident deaths  $(X_3)$ , and elementary school enrollment in grades 1 through 8 plus elementary special and elementary ungraded. The prediction equation for lowa for the 1970's is given by

$$\hat{Y} = 0.0014 + 0.8577X_1 + 0.0346X_2 + 0.0470X_3 + 0.0586X_4$$

- 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.<sup>2</sup>
- 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 estimates for large metropolitan counties were developed by adding the average change between 1973 and 1974 estimates based on Component Method II and the Housing Unit method to the 1973 estimates. In the Housing Unit

Table 2 of this report presents estimates of the population of metropolitan areas and metropolitan counties 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. Where an SMSA falls in more than one State (indicated in the SMSA title) information on the other State parts of the area can be obtained by referring to the P-26 report for the other States.

The 1973 estimates published in this report represent revisions to county estimates shown in **Current Population Reports**, Series P-25, No. 560. 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 counties, 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 counties because of corrections made subsequent to the release of the official State figure. All county populations for 1970 reflect the most recent corrections in the census count.

The estimates presented in the tables 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.

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 counties were developed by adding the change between 1973 and 1974 Component Method II estimates to the 1973 estimates. All counties were subsequently adjusted to agree with the provisional July 1, 1974 State estimate published in Current Population Reports, Series P-25, No. 533.

<sup>&</sup>lt;sup>2</sup> See footnote 2 on page 1.

<sup>&</sup>lt;sup>3</sup> 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 IOWA COUNTIES: JULY 1, 1973 AND JULY 1, 1974

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

County	July 1, 1974	July 1, 1973	April 1, 1970 (census) <sup>1</sup>	Change, 1970 to 1974		Components of change, 1970 to 1974 <sup>2</sup>			
	(provi- sional)			Number	Percent	Births	Deaths	Net migration	
	and resid							Number	Percent
Iowa	2,855,000	2,863,000	2,825,041	30,000	1.0	181,000	125,000	-26,000	-0.9
Adair	9,200	9,700	9,487	-300	-3.0	500	500	-300	-2.7
Adams	6,200	6,200	6,322	-200	-2.5	300	400	-100	-1.2
Allamakee	15,100	15,200	14,968	100	0.9	900	800	(Z)	0.2
Appanoose	14,400	15,000	15,007	-600	-4.1	900	1,000	-500	-3.2
Audubon	9,200	9,200	9,595	-400	-4.6	400	500	-400	-4.2
Benton	23,200	23,200	22,885	400	1.6	1,300	1,100	200	0.8
Black Hawk	132,400	134,100	132,916	-600	-0.4	8,700	4,800	-4,500	-3.4
Boone	26,100	27,000	26,470	-400	-1.4	1,400	1,400	-400	-1.5
Bremer	24,100	23,500	22,737	1,400	6.0	1,400	900	900	3.8
Buchanan	22,400	22,100	21,762	600	2.8	1,500	1,000	100	0.5
Buena Vista	20,700	20,900	20,693	(Z)	-0.2	1,200	1,000	-200	-1.2
Butler	17,100	17,200	16,953	200	1.1	1,000	800	(Z)	(Z)
Calhoun	13,700	14,000	14,292	-600	-4.2	700	800	-500	-3.8
Carroll	23,500	23,300	22,912	600	2.7	1,400	1,100	300	1.5
Cass	16,700	17,200	17,007	-300	-1.6	1,000	1,100	-200	-1.0
Cedar	17,400	17,800	17,655	-200	-1.3	1,000	800	-400	-2.2
Cerro Gordo	49,700	49,500	49,223	500	1.0	2,900	2,300	-200	-0.4
Cherokee	16,500	17,200	17,269	-800	-4.6	1,000	800	-1,000	-5.8
Chickasaw	15,000	15,000	14,969	100	0.5	1,000	700	-200	-1.5
Clarke	7,800	7,800	7,581	200	2.5	400	500	200	3.0
Clay	18,500	18,500	18,464	100	0.4	1,100	800	-100	-0.8
Clayton	20,600	20,800	20,606	(Z)	-0.2	1,300	1,100	-300	-1.4
Clinton	57,500	56,900	56,749	700	1.3	3,800	2,600	-400	-0.7
Crawford	18,500	18,600	19,116	-600	-3.3	1,300	900	-1,000	-5.4
Dallas	27,600	26,900	26,085	1,500	5.9	1,700	1,300	1,200	4.5
Davis	8,700	8,400	8,207	500	5.7	500	500	400	5.1
Decatur	9,800	9,600	9,737	(Z)	0.3	500	600	100	1.3
Delaware	18,800	19,100	18,770	(Z)	-0.1	1,300	800	-400	-2.4
Des Moines	45,800	45,600	46,982	-1,200	-2.6	2,800	2,200	-1,900	-3.9
Dickinson	13,300	13,100	12,565	800	6.0	700	600	600	5.0
Dubuque	91,600	93,800	90,609	1,000	1.1	6,800	3,500	-2,300	-2.5
Emmet	13,500	13,900	14,009	-500	-3.4	900	700	-700	-5.1
Fayette	25,800	26,500	26,898	-1,100	-3.9	1,500	1,300	-1,300	-4.7
Floyd	20,000	19,800	19,860	100	0.6	1,200	1,000	-100	-0.4
Franklin	13,300	13,100	13,255	(Z)	0.3	700	700	100	0.7
Fremont	9,500	9,400	9,282	200	2.6	500	600	300	3.3
Greene	12,200	12,400	12,716	-500	-3.7	700	700	-400	-3.2
Grundy	14,300	14,100	14,119	200	1.6	700	600	100	0.5
Guthrie	12,500	12,500	12,243	300	2.2	600	700	300	2.4
Hamilton	17,700	18,300	18,383	-700	-3.6	1,000	800	-900	-4.7
Hancock	13,200	13,700	13,506	-300	-2.1	900	600	-500	-3.9
Hardin	22,300	22,100	22,248	(Z)	0.1	1,200	1,100	(Z)	-0.1
Harrison	16,600	16,800	16,240	300	2.0	1,000	900	300	1.6
Henry	18,000	17,900	18,114	-200	-0.9	1,000	900	-300	-1.7
Howard	11,400	11,300	11,442	-100	-0.7	600	600	(Z)	-0.4
Humboldt	12,300	12,600	12,519	-200	-1.4	700	500	-300	-2.2
Ida	9,100	9,300	9,283	-200	-1.9	500	500	-100	-1.3
Iowa	15,300	15,700	15,419	-200	-1.0	900	700	-300	-2.0
Jackson	21,600	21,400	20,839	800	3.7	1,500	1,000	300	1.4
Jasper	36,000	36,600	35,425	500	1.5	2,200	1,500	-200	-0.4

See footnotes at end of table.

## Table 1. ESTIMATES OF THE POPULATION OF IOWA COUNTIES: JULY 1, 1973 AND JULY 1, 1974—Continued

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

County	July 1, 1974	July 1,	April 1, 1970 (census) <sup>1</sup>	Change, 1970 to 1974		Components of change, 1970 to 1974 <sup>2</sup>			
	(provi- sional)	1973		Number	Percent	Births	Deaths	Net migration	
								Number	Percent
000,15- 0	14.000	15 500	15 774	1 500	-9.8	900	700	-1,700	-11.1
Jefferson	14,200	15,500	15,774	-1,500 1,700	2.4	4,900	1,700	-1,500	-2.0
Johnson <sup>3</sup>	73,900	73,500	72,127		-2.6	1,200	900	-800	-4.1
Jones	19,300	19,600	19,868	-500 -400	-2.9	700	900	-300	-2.1
Keokuk	13,500	13,900	13,943 22,937	-400	-1.8	1,300	1,000	-800	-3.4
Kossuth	22,500	23,000		100	0.1	2,600	2,300	-300	-0.7
Lee	43,100	42,400	42,996				5,800	-4,400	-2.7
Linn	164,600	164,600	163,213	1,400	0.9	11,500		100	
Louisa	11,000	11,000	10,682	300	2.6	700	500		1.0
Lucas	10,200	10,400	10,163	100	0.8	600	700	200	1.9
Lyon	13,600	13,600	13,340	200	1.8	800	500	-100	-0.6
Madison	12,300	12,200	11,558	700	6.3	700	700	700	5.9
Mahaska	22,300	22,400	22,177	100	0.7	1,300	1,300	100	0.2
Marion	27,100	26,800	26,352	700	2.8	1,500	1,200	500	1.8
Marshall	42,000	42,100	41,076	900	2.2	2,800	1,700	-200	-0.4
Mills	12,900	12,300	11,832	1,100	9.4	800	600	900	7.5
Mitchell	12,600	12,800	13,108	-500	-3.9	700	600	-600	-4.5
Monona	11,900	12,000	12,069	-100	-1.2	700	700	-100	-0.7
Monroe	9,400	9,400	9,357	(Z)	-0.1	500	600	100	1.1
Montgomery	13,000	13,000	12,781	200	1.8	800	800	300	2.3
Muscatine	38,600	38,200	37,181	1,400	3.8	2,700	1,700	500	1.2
O'Brien	17,800	17,500	17,522	200	1.4	1,000	900	200	1.2
Osceola	8,400	8,500	8,555	-200	-1.8	500	400	-300	-3.1
Page	19,100	18,900	18,537	600	3.0	1,100	1,100	600	3.4
Palo Alto	13,500	13,300	13,289	200	1.4	800	700	100	0.8
Plymouth	24,100	24,000	24,322	-200	-0.9	1,500	1,000	-700	-2.9
Pocahontas	11,900	12,100	12,793	-900	-6.7	700	600	-900	-7.2
Polk	297,600	296,700	286,130	11,500	4.0	20,500	11,200	2,200	0.8
Pottawattamie	86,900	87,500	86,991	-100	-0.1	6,300	3,400	-2,900	-3.3
Poweshiek	20,000	19,400	18,803	1,200	6.6	1,100	900	1,100	5.7
Ringgold	6,200	6,300	6,373	-100	-2.3	300	400	-100	-1.4
Sac	15,100	15,300	15,573	-500	-3.3	800	800	-500	-3.0
Scott	147,400	145,600	142,687	4,700	3.3	10,600	5,500	-400	-0.3
Shelby	15,300	15,700	15,528	-200	-1.3	900	700	-400	-2.8
Sioux	28,700	28,600	27,996	700	2.4	1,900	1,100	-100	-0.5
Story	65,900	65,900	62,783	3,100	4.9	3,900	1,800	1,000	1.6
Tama	20,200	20,200	20,147	100	0.3	1,100	1,100	(Z)	-0.1
Taylor	8,200	8,600	8,790	-600	-7.2	400	600	-400	-5.0
Union	13,500	13,500	13,557	-100	-0.5	800	900	(Z)	-0.2
Van Buren	8,700	8,600	8,643	100	1.2	400	600	200	2.8
Wapello	41,400	42,100	42,149	-800	-1.8	2,400	2,200	-1,000	-2.3
Warren	30,800	30,600	27,432	3,400	12.4	2,200	900	2,100	7.8
Washington	19,200	19,000	18,967	200	1.0	1,200	900	-100	-0.4
Wayne	8,700	8,500	8,405	300	3.5	400	600	500	6.2
Webster	47,200	47,600	48,391	-1,200	-2.5	2,900	2,000	-2,100	-4.3
Winnebago	14,100	14,100	12,990	1,100	8.5	800	600	1,000	7.4
Winneshiek		22,000	21,758	200	0.9	1,200	900	-100	-0.3
	21,900	104,200	103,052	700	0.9	7,400	4,700	-2,000	-2.0
Woodbury	103,800			-400	-4.2	500	500	-400	-3.9
Worth	8,600	9,000	8,984			800	900	-500	-2.9
Wright	16,700	17,200	17,294	-500	-3.2	800	900	-500	-2.9

Z Less than 50 persons or less than 0.05 percent.

 $<sup>^{1}</sup>$ Total does not agree with the sum of the counties due to corrections made to the county populations after release of the official State counts.

<sup>&</sup>lt;sup>2</sup>Births 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.

 $<sup>^3</sup>$ The population of Johnson County, as counted in the special census on September 20, 1974, was 75,025. The estimates shown here have been adjusted to reflect this count.

### Table 2. ESTIMATES OF THE POPULATION OF METROPOLITAN AREAS AND THEIR COMPONENT COUNTIES: IOWA, JULY 1, 1973 AND 1974

(SMSA totals rounded independently of county numbers)

Standard metropolitan statistical area and county	July 1, 1974 (provi- sional)	July 1, 1973	April 1. 1970 (census)	Change, 1970 to 1974		Components of change, 1970 to 1974			
				Number		Births	Deaths	Net migration	
				Number	Percent			Number	Percent
CEDAR RAPIDS, IOWA	164,600	164,600	163,213	1,400	0.9	11,500	5,800	-4,400	-2.7
Linn	164,600	164,600	163,213	1,400	0.9	11,500	5,800	-4,400	-2.7
DAVENPORT-ROCK ISLAND- MOLINE, IOWA-ILL.			2 4 10				3 13		
(Iowa portion)	147,400	145,600	142,687	4,700	3.3	10,600	5,500	-400	-0.3
Scott	147,400	145,600	142,687	4,700	3.3	10,600	5,500	-400	-0.3
DES MOINES, IOWA	328,400	327,300	313,562	14,900	4.7	22,700	12,100	4,300	1.4
Polk	297,600	296,700	286,130	11,500	4.0	20,500	11,200	2,200	0.8
Warren	30,800	30,600	27,432	3,400	12.4	2,200	900	2,100	7.8
DUBUQUE, IOWA	91,600	93,800	90,609	1,000	1.1	6,800	3,500	-2,300	-2.5
Dubuque	91,600	93,800	90,609	1,000	1.1	6,800	3,500	-2,300	-2.5
OMAHA, NEBRIOWA (Iowa	16- 1		-1-17		10	11-11			
portion)	86,900	87,500	86,991	-100	-0.1	6,300	3,400	-2,900	-3.3
Pottawattamie	86,900	87,500	86,991	-100	-0.1	6,300	3,400	-2,900	-3.3
SIOUX CITY, IOWA-NEBR.	142		and the			10.7			and the
(Iowa portion)	103,800	104,200	103,052	700	0.7	7,400	4,700	-2,000	-2.0
Woodbury	103,800	104,200	103,052	700	0.7	7,400	4,700	-2,000	-2.0
WATERLOO-CEDAR FALLS, IOWA	132,400	134,100	132,916	-600	-0.4	8,700	4,800	-4,500	-3.4
Black Hawk	132,400	134,100	132,916	-600	-0.4	8,700	4,800	-4,500	-3.4

<sup>&</sup>lt;sup>1</sup>Births 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.			Report No.				
	1973 and provisional 1974	1972 and provisional 1973	1971 and provisional 1972	State	1973 and provisional 1974	1972 and provisional 1973	1971 and provisional 1972		
Ala	125	76	48	Mont	109	53	19		
Alaska	(1)	( <sup>2</sup> )	(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	135	82	20		
Colo	103	62	17	N. Mex	123	85	(3)		
Conn	116	79	(3)	N. Y	(1)	( <sup>2</sup> )	(3)		
Del	111	57	15	N. C	114	68	44		
Fla	130	90	46	N. Dak	102	60	(3)		
Ga	124	92	37	Ohio	122	80	*40		
Hawaii	105	56	23	Okla	112	63	24		
Idaho	106	51	9	Oreg	(1)	74	(3)		
111	128	78	27	Pa	136	93	*39		
Ind	113	75	14	R. I	98	65	22		
Iowa	138	72	31	S. C	108	71	34		
Kans	129	64	43	S. Dak	101	61	*12		
Ку	120	84	35	Tenn	133	83	47		
La	97	54	*16	Tex	(1)	( <sup>2</sup> )	(3)		
Maine	99	59	28	Utah	96	55	10		
Md	(1)	( <sup>2</sup> )	(3)	Vt	95	49	*13		
Mass	137	91	42	Va	127	88	36		
Mich	110	69	32	Wash	(1)	66	(3)		
Minn	132	. 87	38	W. Va	121	89	30		
Miss	131	86	(3)	Wis	126	81	26		
Mo	134	77	45	Wyo	100	73	(3)		

10

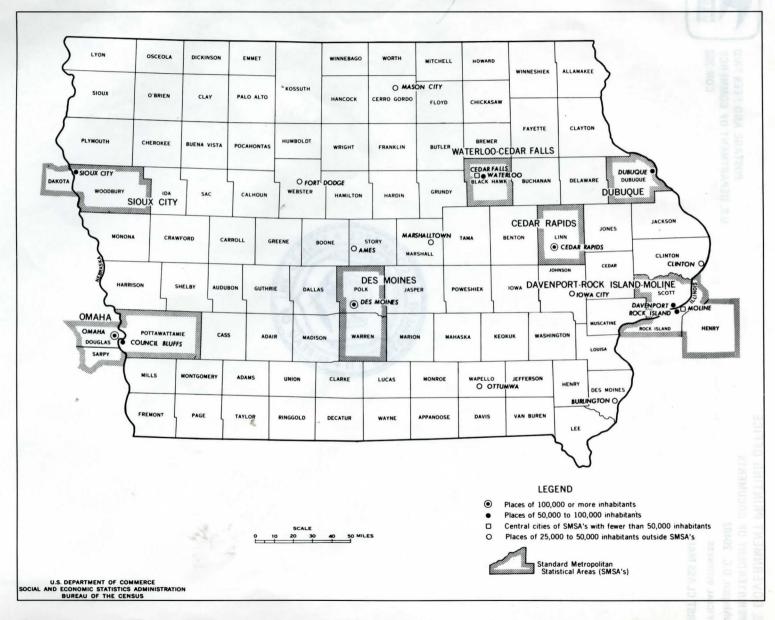
<sup>\*</sup>First year only. For second year, see Series P-25, No. 517.

'County 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; and Texas, No. 609.

'County 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.

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

#### COUNTIES, METROPOLITAN AREAS, AND SELECTED PLACES: IOWA



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