Components of County Population Change, 2010-2018

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69 of Iowa's 99 Counties Experiencing Population Loss

This report investigates the relative success of Iowa's counties in attracting, retaining, and producing new residents since 2010.

Using annual population estimates data from the U.S. Census Bureau, the report compares trends in the two key components of population growth: natural change and net migration. Figure 1



Percentage Change in Total Population, 2010-2018
Decline
Growth: Slower than state
Growth: Faster than state

Highlights

- Iowa's population grew by 3.6 percent between April 1, 2010 and July 1, 2018. Iowa ranks 27th among the 50 states in its rate of population growth this decade and lags the national average growth rate of 6.0 percent.
- Natural population change, the surplus of births over deaths, explained 76 percent of Iowa's recent growth. Net migration contributed the remaining 24 percent.
- More than two thirds of Iowa's counties have lost population since 2010. Figure 1 illustrates the direction and pace of population growth by county through 2018.
- Iowa's gains are accruing disproportionately to its larger counties. The state's five most populous counties have generated or captured more than 90 percent of Iowa's net growth since 2010. Polk County, home to 15 percent of Iowa residents, accounted for more than 50 percent of the state's net growth.
- Dallas County's 36 percent growth rate was the fastest, while Emmet County's 10 percent loss was the steepest.
- Davis (pop. 9,017) was the smallest county with a population gain. Clinton (pop. 46,518) was the largest county to experience a loss. Clinton's loss of 2,599 residents was the largest numeric decline among the counties.

Explanation of Terms

Components of Population Change

Two different phenomena influence a county's total population size over time: natural change and net migration. Natural change is the difference between the number of births and deaths in a given time period. Net migration is the difference between the number of people moving into and out of the county. The combined effects of all births, deaths, and migration flows lead to population growth or decline in the county.

The U.S. Census Bureau estimates each of the key components of population change using administrative records, including registered births and deaths, Federal income tax returns, Medicare enrollees, and military movement. The Census Bureau supplements its estimates using information from the American Community Survey (ACS), the Decennial Census, and other data sources.

Natural Change

Natural population change is the difference between the number of births and deaths that occur during a given time period. When the number of births exceeds the number of deaths, the county experiences natural population growth. If the number of deaths exceeds the number of births, the county is said to be in natural decline.

Births. The U.S. Census Bureau estimates the total number of live births occurring to residents in a county using reports from its Federal-State Cooperative Program for Population Estimates (FSCPE) and the National Center for Health Statistics.

Deaths. The total number of deaths occurring in the county are estimated using reports from the FSCPE and the National Center for Health Statistics.

Net Migration

Net migration is the difference between the number of people moving into and out of the county during the reference time period. Net migration has two components: net international migration and net domestic migration. **Net international migration**. International migration flows describe the movement of individuals across the borders of the United States. It should be noted that international migration is measured regardless of a person's citizenship status and, to the extent possible, includes undocumented migrants. Also captured within international migration flows are the movements of members of the Armed Forces.

International in-migrants are current county residents who lived outside the United States in the year prior to the reference period. For example, an individual who was living in Canada in 2016 and moved directly to Story County, Iowa during 2017 would be counted as an international in-migrant for the 2010-2018 measurement period.

International out-migrants are former U.S. residents who moved to a new residence outside the United States during the reference period.

Net domestic migration. Domestic migration flows describe the movement of individuals from one U.S. state or county to another during a particular time period of interest.

A person is included as a domestic migrant if they were residing in the United States at the beginning of the reference period and moved from one state or county to another during the period of interest. For example, a person who was born in Mexico, moved to the state of Texas in 2009, and then moved to Story County, Iowa in 2017 would be counted as a domestic in-migrant to Story County for the 2010-2018 measurement period.

Residual

The Census Bureau's population change estimates may include a residual component that cannot be attributed to any specific demographic component of population change. For this reason, the natural change and net migration components may not exactly sum to the reported total population change for a given geographic area.

Composition of County Change, 2010-2018

	Population on	Natural	Net		Population on	Overall %	
County	April 1, 2010	Change	Migration	Total Change	July 1, 2018	Change	Rank
State of Iowa	3,046,872	83,182	26,463	109,273	3,156,145	3.6%	
Adair	7,682	-282	-340	-619	7,063	-8.1%	96
Adams	4,029	-51	-337	-384	3,645	-9.5%	97
Allamakee	14,328	149	-646	-496	13,832	-3.5%	61
Appanoose	12,887	-168	-272	-450	12,437	-3.5%	62
Audubon	6,119	-143	-472	-613	5,506	-10.0%	98
Benton	26,069	500	-930	-427	25,642	-1.6%	38
Black Hawk	131,090	4,244	-2,835	1,318	132,408	1.0%	19
Boone	26,308	-21	74	38	26,346	0.1%	29
Bremer	24,276	357	335	671	24,947	2.8%	14
Buchanan	20,958	637	-383	241	21,199	1.1%	18
Buena Vista	20,265	1,084	-1,490	-391	19,874	-1.9%	44
Butler	14,869	-266	-52	-330	14,539	-2.2%	48
Calhoun	10,177	-263	-211	-478	9,699	-4.7%	75
Carroll	20,816	133	-795	-662	20,154	-3.2%	56
Cass	13,952	-407	-609	-1,022	12,930	-7.3%	94
Cedar	18,495	44	97	132	18,627	0.7%	21
Cerro Gordo	44,151	-312	-1,177	-1,504	42,647	-3.4%	60
Cherokee	12,067	-251	-501	-746	11,321	-6.2%	89
Chickasaw	12,442	53	-528	-478	11,964	-3.8%	66
Clarke	9,286	146	-4	137	9,423	1.5%	17
Clay	16,667	55	-579	-533	16,134	-3.2%	57
Clayton	18,128	-50	-516	-572	17,556	-3.2%	54
Clinton	49,117	168	-2,777	-2,599	46,518	-5.3%	82
Crawford	17,096	629	-567	62	17,158	0.4%	26
Dallas	66,138	6,505	17,290	24,042	90,180	36.4%	1
Davis	8,753	507	-242	264	9,017	3.0%	12
Decatur	8,457	-2	-569	-567	7,890	-6.7%	91
Delaware	17,770	256	-963	-701	17,069	-3.9%	69
Des Moines	40,325	2	-1,177	-1,187	39,138	-2.9%	53
Dickinson	16,667	-313	806	486	17,153	2.9%	13
Dubuque	93,643	2,510	770	3,211	96,854	3.4%	11
Emmet	10,302	-120	-939	-1,049	9,253	-10.2%	99
Fayette	20,882	-299	-927	-1,222	19,660	-5.9%	85
Floyd	16,295	2	-531	-534	15,761	-3.3%	59
Franklin	10,680	38	-598	-556	10,124	-5.2%	80
Fremont	7,438	-93	-360	-445	6,993	-6.0%	86
Greene	9,337	-113	-241	-356	8,981	-3.8%	65
Grundy	12,453	11	-153	-149	12,304	-1.2%	35
Guthrie	10,955	-134	-98	-235	10,720	-2.1%	47
Hamilton	15,673	80	-807	-721	14,952	-4.6%	74
Hancock	11,338	-96	-530	-626	10,712	-5.5%	84
Hardin	17,534	-304	-349	-666	16,868	-3.8%	64
Harrison	14,937	-166	-641	-803	14,134	-5.4%	83
Henry	20,145	121	-208	-78	20,067	-0.4%	32
Howard	9,564	69	-446	-377	9,187	-3.9%	68
Humboldt	9,814	-83	-179	-267	9,547	-2.7%	50
Ida	7,089	-144	-103	-248	6,841	-3.5%	63
lowa	16,355	75	-284	-214	16,141	-1.3%	36
Jackson	19,853	-113	-297	-421	19,432	-2.1%	46

Composition of County Change, 2010-2018

County	Population on April 1. 2010	Natural Change	Net Migration	Total Change	Population on July 1. 2018	Overall % Change	Rank
lasper	36.842	318	8	305	37.147	0.8%	20
lefferson	16.840	-98	1.641	1.541	18.381	9.2%	_0
lohnson	130,882	9.251	11.134	20.378	151,260	15.6%	2
lones	20,636	75	41	108	20.744	0.5%	22
Keokuk	10,511	75	-363	-286	10,225	-2.7%	51
Kossuth	15,545	-140	-491	-637	14,908	-4.1%	71
	35 862	-143	-1 659	-1 807	34 055	-5.0%	79
Linn	211 238	8 906	5 961	14 671	225 909	6.9%	7
Louisa	11 387	253	-474	-218	11 169	-1 9%	, 42
Lucas	8 900	-31	-219	-255	8 645	-2.9%	52
Lvon	11 581	480	-251	230	11 811	2.0%	16
Madison	15 679	151	417	570	16 249	3.6%	9
Mahaska	22 382	418	-791	-382	22 000	-1 7%	40
Marion	33 307	279	-174	100	33 407	0.3%	28
Marshall	40 648	546	-1 218	-667	39 981	-1.6%	39
Mills	15 059	158	-153	4	15 063	0.0%	30
Mitchell	10,776	-102	-96	-207	10,569	-1.9%	43
Monona	9 242	-465	-93	-563	8 679	-6.1%	87
Monroe	7 972	-405	-25	-303	7 790	-0.1%	49
Montgomery	10 740	-250	-188	-737	10.003	-6.9%	45
Muscatine	10,740	1 255	-1 073	-737	10,005	-0.5%	24
O'Brion	14 209	-150	-1,075	559	12 940	2.9%	67
Osceola	14,358 6.462	-159	-390	-338	13,840 6 040	-6.5%	07 QA
Page	15 946	-294	-300	-422	15 2/9	-0.5%	50 72
Palo Alto	9 /21	-234	-318	-497	8 9 7 9	-5.2%	72 81
Plymouth	2/ 09/	-177	-310	-452	25 005	-5.2%	22
Pocahontas	7 310	-126	-230	-570	6 740	-7.8%	25
Polk	/30 632	28 673	27 8/1	56 572	487 204	-7.8%	3
Pottawattamie	430,032	28,075	_1 999	38/	93 533	13.1%	25
Poweshiek	18 915	-367	-1,555	-216	18 699	-1 1%	23
Ringgold	5 130	-169	150	-162	4 968	-3.2%	55
Sac	10 350	-105	-401	-102	4,508	-6.1%	88
Scott	165 223	6 208	1 930	-051 8 060	173 283	-0.1%	8
Shelby	12 169	-225	-365	-591	11 578	-4.9%	76
Sioux	33 704	2 0 7 0	-872	1 205	3/ 909	3.6%	70 10
Story	89 542	3 542	4 993	8 563	98 105	9.6%	5
Tama	17 767	174	-987	-863	16 904	-4 9%	77
Taylor	6 317	-13	-112	-126	6 191	-2.0%	45
Union	12 534	-59	-114	-175	12 359	-1 4%	37
Van Buren	7 571	9	-559	-551	7 020	-7.3%	93
Wanello	35 624	304	-705	-419	35 205	-1 2%	34
Warren	46 228	1 256	3 601	4 828	51,056	10.4%	4
Washington	21 704	433	22	437	22 141	2.0%	15
Wavne	6 403	39	-38	-7	6 <u>4</u> 01	0.0%	
Webster	28 012	-37	-1 707	-1 736	26 277	-4 6%	72
Winnehago	10 874	-37 -88	-275	-356	10 512	-3.3%	, 5 58
Winneshiek	21 052	-00 ₋⊑1	-275	-330	20,010	_3.3% _1 Q%	50 79
Woodbury	102 175	-51 4 870	-4 512	-1,029	102 530	- - 1.5% በ <u>4%</u>	70 27
Worth	7 501	-+,070 _17	-0F	_120	7 /52	0.4%	∠7 //1
Wright	12 220	-42	-50	-130	12 600	-1.0/0	41 70
**!IBIIL	13,223	-03	-404	-223	12,090	-4.170	70

2010-2018 Natural Change

Natural population change contributed about 83,200 additional residents for Iowa between 2010 and 2018. The state's cumulative rate of natural population growth was 2.7 percent since 2010.

Nearly one half of Iowa's counties experienced natural population decline from 2010-2018. Monona, Adair, and Ringgold Counties had the highest rates of natural decline.

Counties that attract young adults and families typically enjoy higher rates of natural population growth than counties with an older population base. In Iowa, the counties with the highest rates of natural population growth include Dallas, Johnson, and Polk.

Figure 2 illustrates the average rates of natural population change by individual county from 2010 to 2018. In all, 15 counties had natural growth exceeding the statewide average rate, 37 counties had below-average rates of natural 47 of lowa's counties experienced natural population declines from 2000-2009.

growth, and 47 counties experienced natural population declines.

Figures 3 and 4 show the separate effects of population change from births and deaths. Dallas, Davis, and Polk Counties had the highest rates of growth from births. Winneshiek, Jefferson, and Poweshiek Counties had the lowest rates of growth from births. Monona, Ringgold, and Cass Counties posted the highest rates of loss from deaths. Johnson, Story, and Dallas Counties had the lowest rates of loss from deaths.













2000-2009 Net Migration

lowa's net population gain from migration flows is approaching 26,500 for the decade thus far. These gains are relatively concentrated, with only 19 counties gaining more residents from migration than they have lost since 2010. Figure 5 illustrates the direction and pace of overall net migration by individual county.

Considering only domestic migration flows, Iowa has lost more than 21,800 residents in its net exchanges with other states this decade.

Figure 6 shows the patterns of domestic migration loss or gain by county. Only 11 counties have experienced a net inflow of domestic residents since 2010. Among the gainers, Dallas, Warren, and Dickinson Counties experienced the highest rates of growth from domestic in-migration. The counties with the highest domestic loss rates include Buena Vista, Emmet, and Adams Counties. 80 of lowa's counties lost population from net out-migration between 2010-2018.

International in-migration more than offset Iowa's domestic migration losses. Iowa attracted nearly 48,300 net, new residents from outside the United States during the current decade. Figure 7 illustrates net international migration gains and losses by county.

Although most of Iowa's counties attracted at least some growth from international migration, the state's net inflows were absorbed disproportionately by a handful of counties. Paced by Jefferson, Story, and Johnson, thirteen counties added international migrants more rapidly than average for the state. Those 13 counties accounted for 75 percent of Iowa's net international gain.





Summary

Annual population estimates from the U.S. Census Bureau help counties to benchmark their performance in producing, retaining, and attracting new residents. This report investigates population growth in Iowa's counties during the period from 2010-2018.

Although lowa's population is growing, the gains are accumulating to a minority of its counties. Only 30 of 99 counties have experienced overall population growth for the decade thus far. Natural population declines occurred in 47 counties, 80 counties experienced net out-migration, and 42 counties suffered both natural decline and net out-migration.

In all, only 14 of Iowa's counties enjoyed growth from both natural change and net migration. Most of these were found in metropolitan statistical areas (MSAs), including: Story in the Ames MSA; Linn and Jones in the Cedar Rapids MSA; Polk, Dallas, Madison, and Warren in the Des Moines MSA; Dubuque in the Dubuque MSA; Johnson and Washington in the Iowa City MSA; Scott in the Quad Cities MSA; and Bremer in the Waterloo-Cedar Falls MSA. Cedar and Jasper were the only non-MSA counties to experience both natural population growth and positive net migration flows.

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