Community and Economic Development

Indicators Program

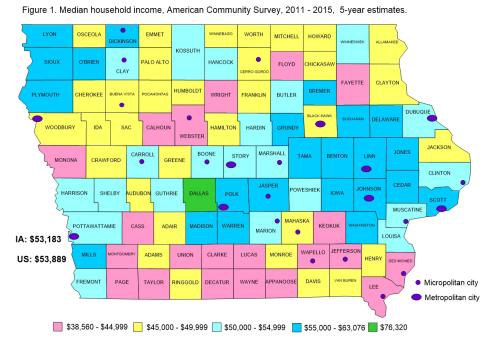


Iowa Income Trends: 1949 - 2015

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Findings

- Statewide, median household income was \$53,183 during the 2011-2015 period. Counties ranged from \$38,560 (Decatur) to \$76,320 (Dallas) (Figures 1, 2; Table 1).
- For many counties, the ranking they had on median household income changed between 1979 and the 2011-2015 period. Three counties (Fremont, Lyon, Winneshiek) went up in rank by at least 50 places. Five other counties (Black Hawk, Cerro Gordo, Des Moines, Lee, Webster) declined in rank by at least 50 places (Figure 3, Table 1).
- Inflation adjustment indicates that purchasing power for Iowa's households declined 3.0% statewide between 1979 and 2015. Residents in 14 counties in the 2011-2015 period had at least 10% less purchasing power than those who lived in those counties in 1979. Statewide, the state's adjusted median household income was higher in both 1979 and 1999 than in either the 2011-2015 or 2006-2010 periods (Figures 2, 4-5; Table 1).
- Median family income was \$67,466 during the 2011-2015 period. The counties ranged from \$51,322 (Decatur) to \$92,428 (Dallas). Inflation adjusted median family income increased 114.3% statewide between 1949 and 1979. Between 1979 and the 2011-2015 period, median family income increased 3.1% statewide. Inflation adjusted median family income was highest statewide for Iowa in 1999 (Figures 6, 8-10; Tables 2, 4).



Introduction

Economic well-being and how it may be changing are some of the most frequently studied aspects of American society. This report examines household and family median income levels and trends between 1949 and 2015 for Iowa and its counties. The information used in this report is from the U.S. Census Bureau and includes recent data (2011-2015 and 2006-2010 estimates) from the American Community Survey (ACS)¹ as well as data for 1949 through 1999 from the Decennial Censuses.²

Median Household Income, 2011-2015

For both the ACS and the Decennial Censuses, households are the main units for which data are collected. Households are made up of all occupied housing units and include those in which someone is living alone. The respondents are asked to report their income for the year preceding the survey, thus the income measure represents an annual total. The household's income is determined by summing together the annual income of all persons 15 years of age and older living in the household. Both the ACS and the Decennial Censuses have recorded the income of households and families in the location where they live, not where they work.

Median income is a key indicator of the central tendency of an income distribution and it is often utilized in analysis of income. The median divides the income distribution into two equal parts such that half the cases fall below the median value and the other half are above the median value. For these data, the median is based on the total number of households including those with no income.

The most recent data from the American Community Survey provide period estimates pooled across the five years of 2011-2015. For the state of Iowa, the ACS reported a median annual income of \$53,183 for Iowa's households during 2011-2015, slightly lower than the figure of \$53,889 for U.S. households (Figures 1, 2; Table 1). Margins of error and coefficients of variation for the ACS data in this report are in Table 5.3

County level median household income varied widely across the state. Dallas County households had the highest median income at \$76,320, 143.5% of the state's household median figure. The Dallas County median was nearly \$12,000 higher than the second highest county (Warren, \$64,447) and nearly double that of Decatur County (\$38,560), the county with the lowest household median income. Decatur County's figure was 72.5% of the state household median income. In addition to Decatur County, 15 other counties in southern Iowa ranked among the lowest fourth in median household income. Several counties scattered across north central Iowa were among the lowest as well. Counties among the highest in median household income tended to be part of or surrounding

the Des Moines or Cedar Rapids metropolitan areas⁸ or to be in the northwest corner of the state (Figure 1, Table 1).

Median Household Income, 1979-2010

Median income for households was reported in each Decennial Census from 1980 through 2000. Since the income data were reported for the calendar year preceding each census year, the income data are for 1979, 1989, and 1999 respec-

tively. In addition, ACS 5-year estimates for the period 2006-2010 are available as well. Although there are some differences in how income is reported between the ACS and the Decennial Censuses, the measures for both ask for household income in the year preceding the survey and are relatively comparable across the two types of surveys.⁴ The state median household income reported in the current (unadjusted) dollars of each period

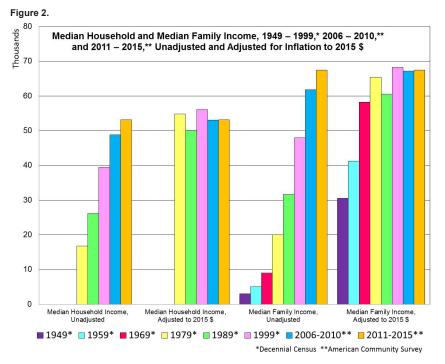


Figure 3. Change in Rank in Median household income, 1979 - 2015



was \$16,799 for 1979, \$26,229 for 1989, \$39,469 for 1999, and \$48,872 for 2006-2010 (Figure 2, Table 1).

One way to examine how a county fared during the intervening years from 1979 to 2015 is to examine, in percentage terms, how a county's median compared to the state median (Table 1). In the 2011-2015 period, the counties ranged from 72.5% of the state median (Decatur Co.) to 143.5% of the state figure (Dallas Co.). In 1979, the county range was from 59.6% (Ringgold Co.) to 123.6% (Scott Co.) of the state median. Some counties maintained a similar percentage between the two periods (Warren Co., 119%, 121%; Poweshiek Co., 92%, 96%; Decatur Co., 65%, 72%). Other counties saw their median level of income, relative to the state, increase (Harrison Co., 82%, 100%; Ringgold Co., 59%, 88%; Mills Co., 97%, 120%). Still other counties found their median level of income, relative to the state, lower in 2011-2015 than in 1979 (Black Hawk Co., 116%, 90%; Des Moines Co., 102%, 83%; Lee Co., 98%, 81%) (Table 1).

County rankings in median income are another way to see how a county has fared over the decades. Between 1979 and the 2011-2015 period, some of the counties gained in rank in median income, relative to other counties, while some declined. Seventeen counties increased in rank by at least 25 places during the period. Three counties (Fremont, +55; Lyon, +52; Winneshiek, +52) went up in rank by at least 50 places. In contrast, fourteen other counties experienced declines in rank by at least 25 places. For five of these counties, the declines were substantial (Lee, -71; Webster, -69; Des Moines, -68; Black Hawk, -54; Cerro Gordo, -51). Thirty counties had similar ranks at both time

periods (Figure 3, Table 1).

Adjustment for Inflation Because of inflation of prices over time,

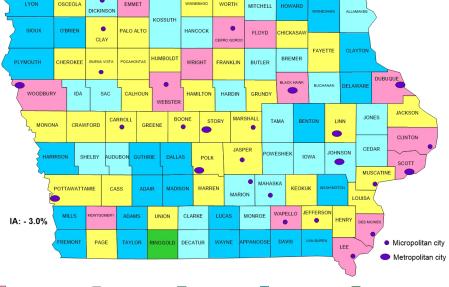
financial data reported in dollars from one period of time are usually not equivalent in purchasing power to dollars reported from another time period. Direct comparison of dollar values across time can be misleading because the value and purchasing power of those dollars have changed.

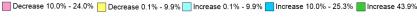
The primary way to compare income values across a period of years is to adjust the values for inflation that has occurred during the period. In this report, income data from the earlier years are adjusted to 2015 dollar values using the Consumer Price Index for all urban consumers (CPI-U) provided by the Bureau of Labor Statistics.⁵ For ACS income data, dollar values from all years in the estimate period (2011-2015) are adjusted to the dollar values of the *last* year in the set (2015) before being aggregated and reported for the estimates period by the Census Bureau.

After adjusting the median household income values from 1979 through 2010 to



Figure 4. Inflation adjusted median household income percentage change, 1979 - 2015.





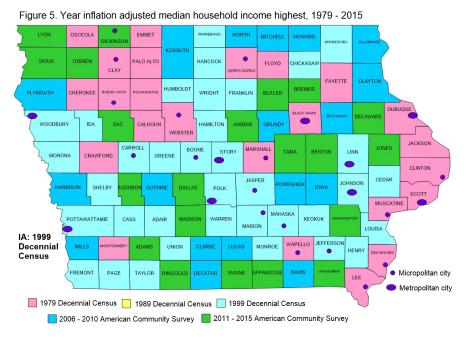


Table 1. Median Household Income, Nominal \$ (Current \$) and Adjusted to 2015 \$ (Real \$), 2011 – 2015, 2006 – 2010 American Community Survey¹ and Decennial Censuses, 1979 – 1999.²

	Nominal \$ (Current \$) Unadjusted for Inflation 2011- % IA 2006- % IA										(Real \$) A	djusted for	r Inflation	1
	2011- 2015 ¹	% IA 11-15	$2006-2010^{1}$				% IA 1979	Rank	Rank	% Change, Adjusted	2006- 2010			
County	Estimate	Median ¹	Estimate	1999^{2}	1989^{2}	1979^{2}	Median ²	11-15 ¹	1979 ²	1979-2015	Estimate	1999	1989	1979
Adair	46526	87.5	45202	35179	21426	12527	74.6	73	91	13.8	49133	50048	40954	40897
Adams	48043	90.3	40368	30453	20570	12844	76.5	61	90	14.6	43878	43325	39318	41932
Allamakee	45890	86.3	46623	33967	21098	13098	78.0	76	88	7.3	50677	48324	40327	42761
Appanoose	41394	77.8	34689	28612	17833	11352	67.6	97	96	11.7	37705	40705	34086	37061
Audubon	46979	88.3	42717	32215	21501	13722	81.7	70	78	4.9	46431	45831	41098	44798
Benton	60606	114.0	54726	42427	25959	16742	99.7	6	19	10.9	59485	60360		54658
Black Hawk	48369	90.9	44178		25683	19494	116.0	58	4	-24.0	48019	53017	49091	63642
Boone	52985	99.6	49578	40763	26110	16471	98.0	32	23	-1.5	53889	57992	49907	
Bremer	62163	116.9	55676	40826	27326	18102	107.8	4	10	5.2	60517	58082	52232	59098
Buchanan	56150	105.6	51961	38036	23386	16066	95.6	18	36	7.1	56479	54113		52451
Buena Vista	48195	90.6	43182	35300	25311	16222	96.6	59	33	-9.0	46937	50220	48380	
Butler	52360	98.5	47702	35883		15698	93.4	34	44	2.2	51850	51050	44521	51249
Calhoun	44921	84.5	41611	33286	22496	15036	89.5	80	60	-8.5	45229	47355	42999	49088
Carroll	50559	95.1	47507	37275	24391	16109	95.9	42	35	-3.9	51638	53030	46622	
Cass	43750	82.3	40820	32922	21801	14136	84.1	88	74	-5.2	44369	46837	41671	46150
Cedar	59047	111.0	54321		27713		102.9	11	13	4.6	59044	60034	52971	56453
Cerro Gordo	46122	86.7	44741	35867	25116	16443	97.9	75	24	-14.1	48631	51027	48007	53681
Cherokee	48599	91.4	44635	35142	22967		92.9	56	49	-4.6	48516	49996	43900	50959
Chickasaw	47040	88.4	41372	37649	24656	15541	92.5	68	53	-7.3	44969	53562	47128	50737
Clarke	43327	81.5	45596	34474	21735		72.4	91	92	9.2	49561	49045	41545	39692
Clay	50389	94.7	43542	35799	25028	16222	96.6	45	33	-4.9	47328	50930	47839	52960
Clayton	48007	90.3	45873	34068	21406	13356	79.5	62	84	10.1	49862	48468	40916	43603
Clinton	50498	95.0	46170	37423	25410	18516	110.2	43	8	-16.5	50185	53241	48569	60449
Crawford	48084	90.4	44377		22209	15633	93.1	60	47	-5.8	48236	48260		51037
Dallas	76320	143.5	67037	48528	28874	18661	111.1	1	7	25.3	72866	69039	55191	
Davis	48888	91.9	46597	32864	20054	13015	77.5	53	89	15.1	50649	46755		42490
Decatur	38560	72.5	37138	27343	18105		65.9	99	97	6.7	40367	38900	34606	
Delaware	58274	109.6	47078	37168	25757		95.2	12	40	11.6	51172	52878	49233	
Des Moines	44423	83.5	41937	36790			102.7	82	14	-21.1	45584	52340	50722	56323
Dickinson	57265	107.7	50174	39020	25211	16032	95.4	13	38	9.4	54537	55513	48189	52340
Dubuque	54605	102.7	48573	39582	28276	19396	115.5	26	5	-13.8	52797	56312	54048	63322
Emmet	47795	89.9	42286	33305		16338	97.3	63	27	-10.4	45963	47382	43561	
Fayette	44928	84.5	41055	32453	21109	14815	88.2	79	64	-7.1	44625	46170	40348	48366
Floyd	44797	84.2	39467	35237		16031	95.4	81	39	-14.4	42899	50131		52336
Franklin	48605	91.4	44863		23741		91.5	55	56	-3.1	48764	51276	45379	
Fremont	53324	100.3	47225		22948		78.6	31	86	23.7	51331	54552		43097
Greene	46898	88.2	43286	33883	22320		86.1	71	70	-0.7	47050	48204	42663	
Grundy	56750	106.7	56184	39396			107.2	16	11	-3.5	61069	56048		58784
Guthrie	51013	95.9	50090		23356		79.5	39	85	17.0	54446	51920		43590
Hamilton	49813	93.7	46188		25847		97.1	47	29	-6.4	50204	54998		53228
Hancock	52981	99.6	47318		25445		95.0	33	41	1.6	51433	53639		52127
Hardin	51019	95.9	44694		23457		92.5	38	53	0.6	48580	50404		50737
Harrison	53567	100.7	51303		22258		82.7	29	75	18.1	55764	54262		45363
Henry	49321	92.7	41983		24952		93.2	51	45	-3.5	45634	55608		51132
Howard	49869	93.8	46068		21913		82.1	46	77	10.7	50074	49283	41885	
Humboldt	47252	88.8	45282	38201			94.3	65	43	-8.6	49219	54347	46939	
Ida	46993	88.4	44521		22859		81.1	69	81	5.6	48392	49516		44504
Iowa	59375	111.6	56053		26579		101.6	9	15	6.6	60927	58645		55706
Jackson	49028	92.2	42489		22487		97.1	52	28	-7.9	46184	49123	42982	
Jasper	55033	103.5	46396		28702		101.1	24	17	-0.8	50430	59301		55454
- asper	42899	80.7	44167		22630		84.3	93	73	-7.2	48008	48159		46235

Table 1. Median Household Income, Nominal \$ (Current \$) and Adjusted to 2015 \$ (Real \$), 2011 – 2015, 2006 – 2010 American Community Survey and Decennial Censuses, 1979 – 1999. (continued)

	2011-	% IA	ominal \$ (Cu 2006-	irent \$)	∪naajus	iea ior l	% IA			% Change,	\$ (Real \$) A 2006-	ujustea 10	1 11111111101	11
County	2015 ¹ Estimate	11-15 Median ¹	2010 ¹ Estimate	1999 ²	1989 ²	1979 ²	1979 Median ²	Rank 11-15 ¹	Rank 1979 ²	Adjusted 1979-2015	2010 Estimate	1999	1989	1979
Johnson	55700	104.7	51380		27862		96.7	19	31	5.0	55848	56992	53256	
Jones	55060	104.7	47955		24480		97.0	23	30	3.5	52125	53278	46792	
Keokuk	43838	82.4	42698		22234		80.4	23 87	82	-0.5	46411	48406	42499	4407
Kossuth	51496	96.8	48277		23321		91.5	36	55	2.6	52475	49170	44576	
		81.4	42444		24671		98.8	92	21	-20.0		51491	47157	5416
Lee	43312		53674								46135			
Linn	59322	111.5			32137 25590		119.6	10	3	-9.5	58341	65736	61428 48913	
Louisa	51144	96.2	50457				99.3	37	20	-6.0	54844	55607		
Lucas	43962	82.7	43005		21316		71.9	85	93	11.5	46744	43926	40744	
Lyon	57130	107.4	49506		22676		88.0	15	66	18.4	53811	52465	43344	4823
Madison	60060	112.9	53183		26644		92.8	8	50	18.0	57808	59532	50928	5090
Mahaska	48726	91.6	45025		23115		84.8	54	72	4.8	48940	53086	44183	4650
Marion	54693	102.8	53370		27991		98.5	25	22	1.2	58011	60323	53503	5402
Marshall	53351	100.3	45232		28333		106.3	30	12	-8.5	49165	54443	54156	
Mills	63979	120.3	59481		27420		97.7	3	25	19.4	64653	60361	52411	5359
Mitchell	49488	93.1	48506		24519		86.0	49	71	4.9	52724	49570	46866	
Monona	40302	75.8	41398	33235	20714	13438	80.0	98	83	-8.1	44998	47282	39593	4387
Monroe	46304	87.1	43245	34877	20745	13190	78.5	74	87	7.5	47005	49618	39653	4306
Montgomery	42418	79.8	38624	33214	23312	14830	88.3	94	63	-12.4	41983	47253	44559	4841:
Muscatine	53676	100.9	51025	41803	29786	18233	108.5	28	9	-9.8	55462	59472	56934	5952
O'Brien	55227	103.8	44018	35758	23125	14718	87.6	20	67	14.9	47846	50872	44202	48050
Osceola	49448	93.0	43889	34274	23037	15215	90.6	50	57	-0.5	47705	48761	44034	49672
Page	43912	82.6	40778	35466	22050	13805	82.2	86	76	-2.6	44324	50456	42147	45069
Palo Alto	47113	88.6	42800	32409	21223	14590	86.9	66	69	-1.1	46522	46107	40566	47632
Plymouth	57130	107.4	56379	41638	26796	15889	94.6	15	42	10.1	61281	59237	51219	5187
Pocahontas	45069	84.7	42105	33362	23517	14611	87.0	78	68	-5.5	45766	47463	44951	4770
Polk	60061	112.9	56094	46116	31221	18849	112.2	7	6	-2.4	60972	65608	59677	6153
Pottawattamie	51976	97.7	48728	40089	26639	16930	100.8	35	18	-6.0	52965	57033	50919	5527
Poweshiek	51006	95.9	50998	37836	26063	15566	92.7	40	51	0.4	55433	53828	49818	5081
Ringgold	47042	88.5	42336	29110	20761	10011	59.6	67	99	43.9	46017	41414	39683	3268
Sac	49572	93.2	42986		21818		88.0	48	65	2.7	46724	46769	41704	4825
Scott	55114	103.6	49964	42701	29979	20767	123.6	22	1	-18.7	54309	60749	57303	6779
Shelby	50952	95.8	44085		22702		90.6	41	58	2.6	47918	53268	43393	4966
Sioux	61627	115.9	51557		25692		96.2	5	34	16.8	56040	57669		
Story	50438	94.8	48248		26668		101.2	44	16	-9.2	52443	57536	50974	
Tama	55203	103.8	46288		24297		92.0	21	54	9.5	50313	53235	46442	
Taylor	44246	83.2	40300		18641		69.9	84	94	15.4	43804	44525	35631	
Union	44351	83.4	40879		21550		81.3	83	80	-0.6	44434	45390	41191	
Van Buren	45111	84.8	40073		19244		68.9	77	95	19.4	43558	44237	36784	
Wapello	42095	79.2	40073		21060		88.8	96	61	-13.6	43579	45793	40255	
-														
Warren	64447	121.2	62034		32452		119.6	2	2	-1.7	67428	71630	62030	
Washington	56390	106.0	50710		25822		89.5	17	59	14.8	55119	55631	49357	
Wayne	43358	81.5	35425		17599		64.5	90	98	22.7	38505	41798	33639	
Webster	42408	79.7	40806		23692		97.4	95	26	-20.6	44354	50269	45286	
Winnebago	47668	89.6	41871		23480		88.5	64	62	-1.8	45512	54604	44880	
Winneshiek	54429	102.3	50693		24383		81.7	27	79	21.5	55101	55353	46606	
Woodbury	46720	87.8	44343		25186		95.6	72	37	-10.9	48199	54786	48141	
Worth	48459	91.1	49673		22902		93.0	57	48	-5.0	53992	51848	43776	
Wright	43698	82.2	44035	36197	24582	15633	93.1	89	47	-14.4	47864	51496	46987	5103
State of Iowa	53183	100.0	48872	39469	26229	16799	100.0			-3.0	53122	56151	50135	5484
United States	53889	101.3	51914	41994	30056	16841	100.3			-2.0	56428	59744	57450	5498

¹American Community Survey 5-Year Estimates 2011-2015, 2006-2010, U.S. Census Bureau; ²Decennial Census 1979-1999, U.S. Census Bureau

2015 dollars, the state median household income reported in real (adjusted) dollars for each decade is \$54,844 for 1979, \$50,135 for 1989, \$56,151 for 1999 and \$53,122 for 2006-2010. These amounts, along with the 2011-2015 estimate (\$53,183), show that the purchasing power of Iowans did *not* increase each decade. In fact, the median purchasing power for Iowa's households was higher in both 1979 and 1999 than in the 2006-2010 and 2011-2015 periods (Figure 2, Table 1).

The county figures for adjusted median household income also show an up-anddown pattern between 1979 and 2015. During the first decade, from 1979 to 1989, a large majority of counties (89) experienced a decline in adjusted median income. The loss in adjusted median income was more than \$10,000 for Black Hawk, Clinton, Jackson, and Scott Counties. This decade of the 1980s was difficult for Iowa with the farm crisis, manufacturing losses, and a population decline as well. During the second decade, from 1989 to 1999, all the counties recorded an increase in adjusted median income with the gains exceeding \$10,000 in Benton, Dallas, Fremont, and Harrison Counties. Although all counties rebounded during this decade, 30 still were lower than their income level in 1979 (Table 1).

The more recent periods, from 1999 through the 2011-2015 estimates period included two national recessions, one in 2001 and the Great Recession of 2007-2009. Reflecting these difficult economic times, 73 counties experienced a decrease in adjusted median household income between 1999 and the 2006-2010 period and 53 counties had a lower adjusted median income in 2011-2015 than during the 2006-2010 period (Table 1).

Looking across the entire time period from 1979 to the 2011-2015 estimates period, a small majority of the counties (50 of 99) experienced a decline in adjusted median household income and, thus, a loss of purchasing power during that time. Although many counties were near the state level decline (-\$1,661, -3.0%),

five counties declined by least \$10,000 and 18 or more percent. The residents of Black Hawk County in the 2011-2015 period had nearly a quarter less purchasing power than did the residents who lived there in 1979 (Black Hawk Co., -\$15,273, -24.0%; Scott Co., -\$12,684, -18.7%; Des Moines Co., -\$11,900, -21.1%; Webster Co., -\$11,032, -20.6%; Lee Co., -\$10,849, -20.0%). In percentage terms during the 1979-2015 period, 14 counties experienced at least a 10% drop in adjusted median household income (Figure 4, Table 1).

In contrast to these counties with declines are 49 other counties with an increase in adjusted median income between 1979 and the 2011-2015 estimates period. There were four (Dallas, Fremont, Mills, Ringgold) that recorded a gain of at least \$10,000 and 19 or more percent during this time. Among these four, Dallas County had the largest dollar increase (+\$15,397) while Ringgold County's percentage gain (+43.9%) was highest. Nineteen counties experienced at least a 10% gain in adjusted median household income during the period (Figure 4, Table 1).

Statewide, after adjusting for inflation, median household income, and thus purchasing power, was higher in 1999 (\$56,151) than for any of the other time periods included in this report. The second highest time period was 1979 (\$54,844). Among the counties, 21 recorded their highest adjusted median in the 2011-2015 estimates period. For 18 others the highest was during 2006-2010. Similar to the statewide trend, thirty-six counties had their highest adjusted median in 1999. As a reflection of the poor economy in Iowa in the 1980s, none of the counties had their highest adjusted median in 1989, but for 24 counties the highest adjusted median household income was in 1979, more than 35 years ago (Figure 5, Table 1).

Median Family Income, 1949-2015

Median *family* income is another measure reported by the ACS and the earlier Decennial Censuses. The Decennial Census reported median family income much earlier (1950 Census, 1949)

income) than household median income (1980 Census, 1979 income). Median family income can thus be compared historically for a much longer period, more than 60 years, than that for median household income (Table 2).

Families consist of households in which there are at least two persons who are related, thus, families are a subset of all households. Households that do not meet the family criteria are classified as nonfamily households. Nonfamily households may be households with a person living alone, students in apartments with roommates who are not relatives, and households with non-married partners. Family income data contrasts with household income data in that nonfamily households are excluded from the family income calculation. Family income measures are widely reported and used but include a smaller number of the total households in a geographic area.

The income of families includes the income of the householder plus incomes of all household members 15 years and over who are *related* to the householder. Because families must have *at least two* persons who are related, income amounts are usually higher for family households than the equivalent measures for all households because there may be more persons in family households giving more potential workers and more potential sources of income.

The ACS reports median income for families and, as for all households, the median is based on the total number of families including those with no income. For the 2011-2015 estimates period, the ACS reported a median income of \$67,466 for Iowa's family households. County level median family income varied from \$51,322 in Decatur County to \$92,428 in Dallas County. The county figures ranged from 76% to 137% of the state median family income. The statewide figure for Iowa's families was somewhat higher in the 2011-2015 period than that for the U.S. overall (\$66,011) (Figures 2, 6, Table 2).

As would be expected, the statewide median for Iowa's families (\$67,466) was higher (+\$14,283) than the median for the state's households (\$53,183) in the 2011-2015 estimates period. This was the case for all the counties as well. For the other four time periods when both household and family medians were reported (1979, 1989, 1999, 2006-2010), the median family income was higher than the median

household income at the state level and for all the counties (Tables 1, 2).

For the 2011-2015 period, the difference between the median household and median family incomes varied from less than \$9,000 (Cass, Crawford, Louisa, Mahaska, Marshall, Ringgold, and Tama Counties) to more than \$27,000 in both Johnson and Story Counties. The large

difference for those two counties very likely reflects the large student populations with relatively low income that are living alone or with roommates in nonfamily households. Nonfamily households such as these will be included in the tally of household income but not in the calculation for family income. For all the years included in this report, Johnson and Story Counties consistently had the largest difference between median family and median household income (Tables 1, 2).

For the five time periods in this report when both household and family medians were reported, counties that tend to be high on the household median measure also tend to be high on the family median measure. Depending on the year, the correlations between the two measures ranged from 0.89 to 0.97. This would be expected since all the family income data is included in the household income measure.⁶

During the period between 1949 and 2011-2015, some of the counties experienced significant changes in how they ranked in median family income, while others were relatively stable across the decades. Thirteen counties gained 40 or more places in rank; three by at least 60 places (Mills, +74; Madison, +69; Warren, +62). Ten of these thirteen counties with the highest gains in rank were counties adjacent to metropolitan cities and likely benefited from suburban developments and housing that attracted more affluent residents (Figure 7; Tables 2, 3).

The counties with gains in rank contrasted with 12 others that dropped in rank by at least 40 places. The largest declines in rank of at least 60 places were in Des Moines (-84), Webster (-74), Woodbury (-73), Lee (-70), Wapello (-70), and Buena Vista (-60) Counties (Tables 2, 3). Six of the 12 counties with the largest declines are micropolitan counties (Buena Vista, Cerro Gordo, Des Moines, Lee, Wapello, Webster) along with two that have metropolitan cities (Black Hawk, Woodbury).8

Figure 6. Median family income, American Community Survey, 2011 - 2015, 5-year estimates.

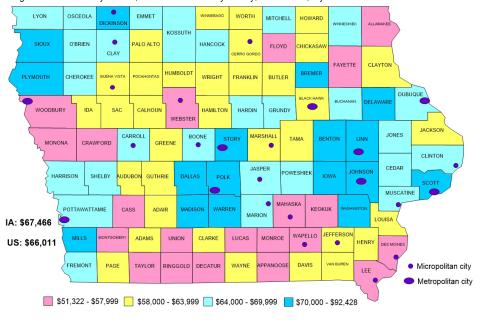


Figure 7. Change in rank in median family income, 1949 - 2015.

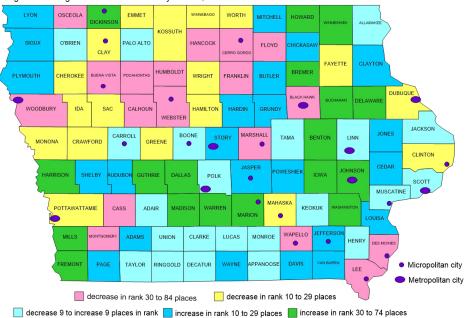


Table 2. Median Family Income, Nominal \$ (Unadjusted), 2011 – 2015, 2006 – 2010 American Community Survey¹ and Decennial Census, 1949 – 1999.²

				Nomina	ıl \$ (Cur	rent \$) U	nadjusted for	Inflation					
County	2011-2015 ¹ Estimate	% IA 11-15 Median ¹	2006-2010 ¹ Estimate	1999 ²	1989 ²	1979 ²	% IA 1979 Median ²	1969 ²	1959 ²	1949 ²	Rank 11-15 ¹	Rank 1979 ²	Rank 1949 ²
Adair	58738	87.1	57287	42884	26046	14737	73.5	7694	3313	2467	70	93	76
Adams	58659	86.9	52782	40030	23906	15158	75.6	7020	3426	2392	71	91	83
Allamakee	56614	83.9	55926	40589	26635	15864	79.1	6697	3369	2137	86	86	93
Appanoose	55727	82.6	41250	35980	22683	14322	71.4	6394	3355	1795	89	94	98
Audubon	61224	90.7	58641	37288	25590	15432	77.0	6567	3447	2573	53	90	70
Benton	75776	112.3	64970	49701	30872	20059	100.0	8447	4557	2821	8	20	49
Black Hawk	63011	93.4	57495	47398	32438	22310	111.3	10054	6396	3714	49	5	1
Boone	69260	102.7	66872	49346	31659	19909	99.3	8412	4763	3089	21	22	26
Bremer	78551	116.4	68602	50299	32662	20952	104.5	8893	4979	2705	4	12	56
Buchanan	69792	103.4	61421	45421	28050	19336	96.4	8069	4557	2446	19	28	78
Buena Vista	58604	86.9	53382	41549	29186	19612	97.8	8794	4426	3277	73	24	14
Butler	63710	94.4	59641	42209	27492	18300	91.3	7666	4076	2525	46	51	74
Calhoun	58512	86.7	50037	41583	27905	17672	88.1	7741	4244	3007	75	63	39
Carroll	67436	100.0	61960	47040	29270	18993	94.7	7973	4380	3068	25	34	29
Cass	52165	77.3	48884	40564	26817	17287	86.2	7454	4089	2626	98	69	65
Cedar	68212	101.1	63893	48850	31915	20514	102.3	8820	4254	3033	23	16	35
Cerro Gordo	63408	94.0	60148	46099	31399	20149	100.5	9185	5517	3379	47	18	6
Cherokee	65276	96.8	56696	42897	28350	19171	95.6	8521	4083	3286	34	31	12
Chickasaw	61472	91.1	50530	44306	28348	18344	91.5	7701	4034	2636	51	49	62
Clarke	58333	86.5	54707	42171	27129	14927	74.4	7224	3664	2360	77	92	85
Clay	64563	95.7	56460	42769	30346	19243	96.0	8624	4441	3144	39	29	21
Clayton	59837	88.7	53905	40199	25586	16408	81.8	7120	3569	2424	63	81	79
Clinton	65441	97.0	58681	46450	31046	21247	106.0	9661	5690	3323	32	10	8
Crawford	56640	84.0	53794	40231	26431	18351	91.5	7832	3977	2647	85	48	60
Dallas	92428	137.0	84018	58293	34881	21368	106.6	9247	4831	2952	1	9	42
Davis	59088	87.6	52855	40982	23519	15809	78.8	6980	3664	2038	68	87	95
Decatur	51322	76.1	48015	34831	22872	14113	70.4	5690	2973	1908	99	96	97
Delaware	70412	104.4	59802	43607	29685	18546	92.5	7820	3621	2670	16	42	59
Des Moines	55297	82.0	53946	45089	32097	20948	104.5	9636	5733	3297	94	13	10
Dickinson	71327	105.7	59648	47739	30659	18471	92.1	7964	3978	2768	14	45	50
Dubuque	68157	101.0	61138	48742	33828	22484	112.1	10168	6026	3513	24	4	4
Emmet	64085	95.0	55844	41296	27288	19545	97.5	8414	4635	3197	42	26	17
Fayette	56935	84.4	52627	39960	26685	17579	87.7	7790	4215	2678	83	65	58
Floyd	56004	83.0	52808	41133	28188	18665	93.1	8276	4910	3023	88	39	38
Franklin	58636	86.9	52917	45184	28492	18240	91.0	7593	4141	3128	72	52	24
Fremont	65109	96.5	59622		27452		80.9	7805	3762	2317	36	84	86
Greene	59242	87.8		41230			88.7	8619	4005	2750	66	61	51
Grundy	69940	103.7	68151		30847	20611	102.8	8413	4247	3050	18	15	32
Guthrie	61006	90.4	61951		26615	16254	81.1	7362	3491	2165	55	83	89
Hamilton	60427	89.6	61472		31069	18590	92.7	8333	4582	2942	57	41	43
Hancock	64403	95.5	55922	44248	29400	18790	93.7	7740	3869	3302	40	37	9
Hardin	66875	99.1	57612		28539	18891	94.2	8718	4594	3003	27	36	40
Harrison	65147	96.6	63283		27293	16635	83.0	7449	3990	2397	35	77	82 52
Henry	60335	89.4 90.7	53985	46985	30385 26209		91.6	9128	4639	2746	58 54	47	52 87
Howard Humboldt	61172 50072		55582 57063		29082	16779	83.7	7203	3337	2277	54 62	74 40	87 18
	59972	88.9 89.1	57063 58635				92.8	8268	4751	3170	62 50	40	18
Ida	60133		58635		27287		81.8	8847 7680	3910	3051	59 13	82	31 53
Iowa	71674 58516	106.2	64578 54210		31687 27436		100.7	7689 8216	4354	2744	13	17 27	53 67
Jackson	58516	86.7	54210				96.9 97.7	8216	4585	2602	74		67
Jasper	68685	101.8	56484		32927		97.7	9361	5345	3035	22	25	33
Jefferson	59173	87.7	55552	43819	29439	10468	82.1	8458	4708	2411	67	79	80

Table 2. Median Family Income, Nominal \$ (Unadjusted), 2011 – 2015, 2006 – 2010 American Community Survey¹ and Decennial Census, 1949 – 1999.² (continued)

				Nomina	ıl \$ (Curi	ent \$) U	nadjusted for	Inflation					
County	2011-2015 ¹ Estimate	% IA 11-15 Median ¹	2006-2010 ¹ Estimate	1999 ²	1989 ²	1979 ²	% IA 1979 Median ²	1969 ²	1959 ²	1949 ²	Rank 11-15 ¹	Rank 1979 ²	Rank 1949 ²
Johnson	83245	123.4	74547	60112		22294	111.2	9745	5309	3034	2	6	34
Jones	66158	98.1	59167	44269	28142	19040	95.0	8081	4462	2721	31	33	54
Keokuk	55571	82.4	53456	41818	26706	15964	79.6	7140	3854	2241	93	85	88
Kossuth	64974	96.3	61012	41159	27665	18001	89.8	7877	3986	3129	37	57	23
Lee	55694	82.6	50630	42658	29970	20084	100.2	8956	5282	3144	90	19	21
Linn	77036	114.2	69250	56494	38142		115.7	10721	6359	3433	6	2	5
Louisa	60068	89.0	54923	43972	29258	18742	93.5	8668	4169	2487	61	38	75
Lucas	57183	84.8	56647	38352	27482	15592	77.8	7217	3713	2155	82	89	90
Lyon	66685	98.8	57348	45144	26142	17147	85.5	7301	3559	2978	29	72	41
Madison	71899	106.6	67099	48289	30547	18309	91.3	7712	3934	2400	12	50	81
Mahaska	57459	85.2	57877	43557	27465	16681	83.2	7488	4260	2578	81	76	69
Marion	69510	103.0	65817	50052	31995	19156	95.5	8267	4600	2536	20	32	72
Marshall	61662	91.4	55716	46627	34495	20719	103.3	9669	5392	3215	50	14	16
Mills	78556	116.4	73532	49592	32798	18943	94.5	8918	4190	2465	3	35	77
Mitchell	64078	95.0	63356	41233	29341	17237	86.0	7601	4258	2713	44	70	55
Monona	55602	82.4	51098	41172	24887	15690	78.2	6975	3857	2604	92	88	66
Monroe	56724	84.1	53052	41611	25325	16583	82.7	7343	3807	2148	84	78	92
Montgomery	54088	80.2	50595	40129	28827	18192	90.7	8188	4150	2632	96	53	63
Muscatine	64083	95.0	61445	48373	34083	21150	105.5	9729	5204	2913	43	11	45
O'Brien	66729	98.9	59391	42959	28519	17768	88.6	7586	4129	3054	28	62	30
Osceola	64133	95.1	58286	41977	28599	17933	89.4	7431	3692	3290	41	59	11
Page	60519	89.7	52791	42446	27933	17081	85.2	7685	3996	2529	56	73	73
Palo Alto	59606	88.3	57208	41808	25705	17321	86.4	7722	3598	2629	64	68	64
Plymouth	72047	106.8	69261	50009	31011	18532	92.4	8187	4164	3090	11	44	25
Pocahontas	59009	87.5	56250	40568	27865	17341	86.5	7686	4220	3078	69	67	28
Polk	74335	110.2	70445	56560	37669	22512	112.3	10682	6464	3651	9	3	2
Pottawattamie	65286	96.8	60354	47105	31044	19903	99.3	9356	5591	3229	33	23	15
Poweshiek	66652	98.8	65744	46599	31031	17859	89.1	8487	4236	2700	30	60	57
Ringgold	55646	82.5	51269	34472	25133	12391	61.8	6602	2573	1974	91	99	96
Sac	63750	94.5	54304	40504	26264	17175	85.7	7912	4136	3141	45	71	22
Scott	72195	107.0	64513	52045	36160	23812	118.8	10775	6459	3631	10	1	3
Shelby	64782	96.0	55523	44681	26218	17606	87.8	8010	3933	2645	38	64	61
Sioux	70971	105.2	60043	45846	29356	18067	90.1	7638	3994	2924	15	56	44
Story	77539	114.9	74278	55472	35482	21679	108.1	9687	5410	3157	5	8	19
Tama	63379	93.9	55011	43646	28659	18088	90.2	8047	4082	2889	48	55	46
Taylor	54128	80.2		37194			69.4	6005	2867	2151	95	97	91
Union	57736	85.6	50546		26441		82.0	7167	3861	2541	79	80	71
Van Buren	58011	86.0	50064		22574		70.6	6011	3286	2055	78	95	94
Wapello	53242	78.9	49309	39224			89.6	8511	5388	3084	97	58	27
Warren	76605	113.5	74042	56344			110.9	9958	5217	2578	7	7	69
Washington	70000	103.8	60466		30295		90.7	8776	4233	2866	17	54	47
Wayne	58397	86.6	44784	35534		13128	65.5	6024	3021	1781	76	98	99
Webster	56373	83.6	54129	43772		19981	99.6	9136	5494	3277	87	21	14
Winnebago	60086	89.1	58700		28750		87.2	8575	4308	2853	60	66	48
Winneshiek	66933	99.2	61558		28876		83.7	7762	3916	2373	26	75	84
Woodbury	57590	85.4	55957	46499		19223	95.9	9035	5539	3377	80	30	7
Worth	61265	90.8	56659	41763			91.9	8505	4166	3025	52	46	37
Wright	59263	87.8	53890	44043			92.4	9061	4712	3025	65	43	37
State of Iowa	67466	100.0	61804	48005	31659	20052	100.0	9018	5069	3068			
United States	66011	97.8	62982	50046	35225	19917	99.3	9590	5660	3073			

¹American Community Survey 5-Year Estimates 2011-2015, 2006-2010, U.S. Census Bureau; ²Decennial Census 1949-1999, U.S. Census Bureau

Of the 15 counties with highest rank in 1949, seven remained in the top 15 in 1979 but only three (Linn, Polk, Scott) remained at that level in 2011-2015. There was somewhat more consistency among the counties with the lowest ranks. Of the 15 counties ranked lowest in 1949, eleven were among the lowest in 1979 and six (Allamakee, Appanoose, Decatur, Keokuk, Ringgold, Taylor) remained in 2011-2015 (Table 3).

The rank changes are confirmed by changes in the correlations among the family median income measures. The relationships among the family median measures weaken as the length of time between the measures increases. For example, the correlation of family median income in 1949 with family median income in both 1959 and 1969 is 0.76. However, the correlation between the family median of 1949 and those of 2006-2010 and 2011-2015 is 0.32. Even though there is a shorter time span for the household median measures, a declining correlation among the measures as the time passed also is shown.⁷ These declining correlations indicate that some counties that tended to be high in income in the earlier years in this report were not necessarily high in the later years included here (Tables 1-3).

Inflation Adjusted Median Family Income

As was done for median household income, the median family income data from the earlier years in this report were adjusted for inflation into 2015 dollar values, again using the CPI-U.⁵ After the adjustment, the state median family income reported in real (adjusted) dollars for each decade was \$30,553 for 1949, \$41,287 for 1959, \$58,240 for 1969, \$65,464 for 1979, \$60,514 for 1989, \$68,295 for 1999 and \$67,178 for 2006-2010. These amounts, along with the 2011-2015 estimate (\$67,466), show that the purchasing power of Iowa's families statewide has remained relatively flat since the highest figure in 1999 (Figure 2, Table 4).

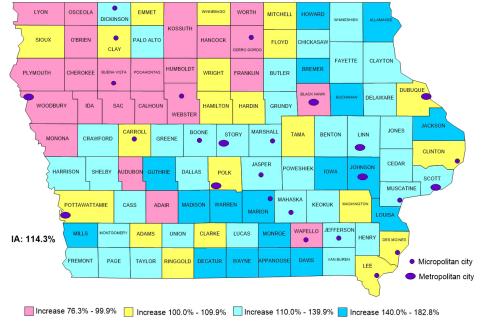
Table 3. Rank of Highest and Lowest Counties in Median Family Income, 1949, 2 1979, 2 and 2011 - 2015.

	Highest Rank	Highest in 2011 - 2015 ¹			Highest in 1979 ²	Rank in 2015 ¹		Highest in 1949 ²	Rank in 2011 - 2015 ¹
-	1	Dallas	1		Scott	10	1	Black Hawk	49
	2	Johnson	2	2	Linn	6	2	Polk	9
	3	Mills	3	3	Polk	9	3	Scott	10
	4	Bremer	4	ļ	Dubuque	24	4	Dubuque	24
	5	Story	5	5	Black Hawk	49	5	Linn	6
	6	Linn	6	3	Johnson	2	6	Cerro Gordo	47
	7	Warren	7	7	Warren	7	7	Woodbury	80
	8	Benton	8	3	Story	5	8	Clinton	32
	9	Polk	9	9	Dallas	1	9	Hancock	40
	10	Scott	1	0	Clinton	32	10	Des Moines	94
	11	Plymouth	1	1	Muscatine	43	11	Osceola	41
	12	Madison	1.	2	Bremer	4	12	Cherokee	34
	13	Iowa	1	3	Des Moines	94	13	Buena Vista	73
	14	Dickinson	1	4	Marshall	50	14	Webster	87
	15	Sioux	1	5	Grundy	18	15	Pottawattamie	33
-	Lowest Rank	Lowest in 2011 - 2015 ¹			Lowest in 1979 ²	Rank in 2011 - 2015 ¹		Lowest in 1949 ²	Rank in 2011 - 2015 ¹
-	85	Crawford	8	5	Keokuk	93	 85	Clarke	77
	86	Allamakee	8		Allamakee	86	86	Fremont	36
	87	Webster	8		Davis	68	87	Howard	54

Lowest Rank	Lowest in 2011 - 2015 ¹		Lowest in 1979 ²	Rank in 2011 - 2015 ¹		Lowest in 1949 ²	Rank in 2011 - 2015 ¹
85	Crawford	85	Keokuk	93	85	Clarke	77
86	Allamakee	86	Allamakee	86	86	Fremont	36
87	Webster	87	Davis	68	87	Howard	54
88	Floyd	88	Monona	92	88	Keokuk	93
89	Appanoose	89	Lucas	82	89	Guthrie	55
90	Lee	90	Audubon	53	90	Lucas	82
91	Ringgold	91	Adams	71	91	Taylor	95
92	Monona	92	Clarke	77	92	Monroe	84
93	Keokuk	93	Adair	70	93	Allamakee	86
94	Des Moines	94	Appanoose	89	94	Van Buren	78
95	Taylor	95	Van Buren	78	95	Davis	68
96	Montgomery	96	Decatur	99	96	Ringgold	91
97	Wapello	97	Taylor	95	97	Decatur	99
98	Cass	98	Wayne	76	98	Appanoose	89
99	Decatur	99	Ringgold	91	99	Wayne	76

 $^{^1}$ American Community Survey 5-Year Estimates 2011-2015, U.S. Census Bureau; 2 Decennial Census Data 1949, 1979, U.S. Census Bureau.

Figure 8. Inflation adjusted median family income percentage change, 1949 - 1979



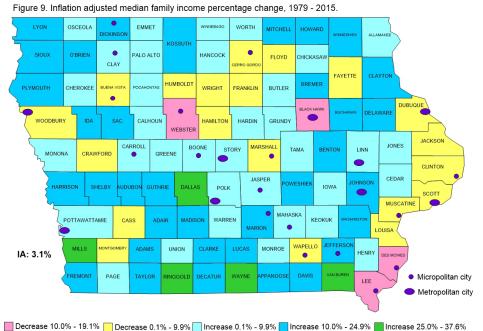
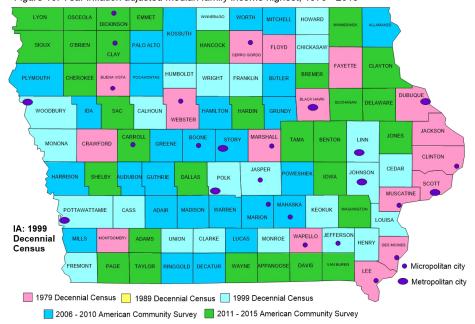


Figure 10. Year inflation adjusted median family income highest, 1979 - 2015



Because the reporting of median family income goes many years further back than that for median household income, it is possible to see a longer economic trend of purchasing power in Iowa. In general, after adjusting for inflation, the post World War II period from 1949 through 1979 was a time of relative economic gain for Iowa's families. There

was an increase in relative income at each decade statewide as well as in all but seven of the counties. Three counties (Hancock, Lyon, Osceola) decreased between 1949 and 1959 and four (Adair, Ida, Jefferson, Ringgold) declined between 1969 and 1979. All the other counties registered a gain in relative income and purchasing power at each

decade across the thirty years. The gain between 1959 and 1969 was especially notable in that all counties increased with the statewide gain being equivalent to \$17,000 in 2015 dollar values. All the counties had greater purchasing power in 1979 than in 1949. By 1979, Iowa had a statewide gain of 114%, seventy-six counties had more than doubled in adjusted income and eight of these were at least 150% higher (Figure 8, Table 4).

A different pattern emerged after 1979 and the 1980 Census. During the decade of the 1980s, the state, as well as 90 counties, recorded a decline in adjusted family median income. The family income declines between 1979 and 1989 mirrored the decreases noted earlier in this report for household income during the same decade and the difficult economic times for Iowa during that period. All counties gained purchasing power between 1989 and 1999, but for many the rebound did not match where they had been in 1979. After 1999, the pattern of gains and declines in adjusted median family income was mixed. Between 1999 and the 2006-2010 period the state figure decreased as well as those for 50 counties. Between the 2006-2010 period and 2011-2015, the state figure increased but 48 counties recorded declines.

The pattern of change for adjusted median family income for the entire period between 1979 and 2011-2015 was quite different from the changes recorded before 1979. Twenty-four counties experienced a decline in adjusted median family income during these later years. For four counties (Black Hawk, Des Moines, Lee, Webster) the decrease was greater than ten percent. Although the state overall experienced a 3.1% gain, that figure was quite low in comparison to the 114% increase between 1949 and 1979. Seventy-five counties recorded gains the highest of which was 37.6% for Ringgold County. However, this largest gain was half the size of the lowest increase (76.3%, Ida County) recorded for the 1949-1979 period (Figures 8, 9; Table 4).

Table 4. Median Family Income, 2015 \$ and Adjusted for Inflation to 2015 \$ (Real \$), 2011-2015, 2006 – 2010 American Community Survey and Decennial Census, 1949-1999.

	2011	2006			2015 Re	eal \$ Adj	usted for	Inflation	0/ 01	0/ 01
Name	2011- 2015 ¹ Estimate	2006- 2010 ¹ Estimate	1999 ²	1989²	1979 ²	1969 ²	1959 ²	1949 ²	% Change, Adjusted 1979-2015	% Change, Adjusted 1949-1979
Adair	58738	62268	61010	49785	48112	49690	26984	24568	22.1	95.8
Adams	58659	57372	56950	45695	49486	45337	27904	23821	18.5	107.7
Allamakee	56614	60789	57745	50911	51791	43251	27440	21282	9.3	143.4
Appanoose	55727	44837	51188	43357	46757	41294	27326	17876	19.2	161.6
Audubon	61224	63740	53049	48913	50381	42411	28076	25624	21.5	96.6
Benton	75776	70619	70708	59010	65487	54553	37116	28093	15.7	133.1
Black Hawk	63011	62494	67432	62003	72835	64931	52095	36987	-13.5	96.9
Boone	69260	72687	70203	60514	64997	54327	38794	30762	6.6	111.3
Bremer	78551	74567	71559	62431	68402	57433	40554	26938	14.8	153.9
Buchanan	69792	66762	64619	53616	63126	52111	37116	24359	10.6	159.1
Buena Vista	58604	58024	59111	55787	64027	56794	36049	32635	-8.5	96.2
Butler	63710	64827	60050	52549	59744	49509	33199	25146	6.6	137.6
Calhoun	58512	54388	59159	53338	57694	49993	34567	29946	1.4	92.7
Carroll	67436	67348	66922	55947	62006	51491	35675	30553	8.8	102.9
Cass	52165	53135	57709	51259	56437	48140	33305	26152	-7.6	115.8
Cedar	68212	69449	69497	61003	66972	56962	34648	30205	1.9	121.7
Cerro Gordo	63408	65378	65584	60017	65780	59319	44935	33650	-3.6	95.5
Cherokee	65276	61626	61028	54189	62588	55031	33256	32724	4.3	91.3
Chickasaw	61472	54924	63033	54185	59888	49735	32857	26251	2.6	128.1
Clarke	58333	59464	59995	51855	48732	46654	29843	23503	19.7	107.3
Clay	64563	61369	60846	58004	62823	55696	36172	31310	2.8	100.6
Clayton	59837	58592	57190	48906	53567	45983	29069	24140	11.7	121.9
Clinton	65441	63784	66083	59342	69365	62393	46345	33093	-5.7	109.6
Crawford	56640	58472	57235	50521	59910	50581	32392	26361	-5.5	127.3
Dallas	92428	91324	82932	66672	69760	59719	39348	29398	32.5	137.3
Davis	59088	57451	58304	44955	51612	45078	29843	20296	14.5	154.3
Decatur	51322	52190	49553	43718	46075	36747	24215	19001	11.4	142.5
Delaware	70412	65002	62038	56741	60547	50503	29493	26590	16.3	127.7
Des Moines	55297	58637	64147	61351	68389	62231	46695	32834	-19.1	108.3
Dickinson	71327	64835	67917	58602	60302	51433	32400	27566	18.3	118.8
Dubuque	68157	66454	69344	64660	73403	65667	49081	34985	-7.1	109.8
Emmet	64085	60700	58751	52159	63809	54340	37752	31838	0.4	100.4
Fayette	56935	57203	56850	51006	57390	50310	34331	26669	-0.8	115.2
Floyd	56004	57400	58519	53879	60936	53448	39992	30105	-8.1	102.4
Franklin	58636	57518	64282	54460	59548	49037	33728	31151	-1.5	91.2
Fremont	65109					50406		23074	22.9	129.6
Greene	59242			52128	58063		32620	27386	2.0	112.0
	69940	65362	58657	58962	67289	55663 54333	34591	30374	3.9	121.5
Grundy		74077	66335							
Guthrie	61006	67338	62030	50873	53064	47545	28434	21561	15.0	146.1
Hamilton	60427	66817	65117	59386	60691	53816	37320	29298	-0.4	107.2
Hancock	64403	60785	62950	56196	61344	49987	31513	32884	5.0	86.5
Hardin	66875	62622	59597	54550	61673	56303	37418	29906	8.4	106.2
Harrison	65147	68786	63431	52169	54308	48107	32498	23871	20.0	127.5
Henry	60335	58679	66844	58079	59995	58951	37784	27347	0.6	119.4
Howard	61172	60415	61579	50097	54778	46519	27180	22676	11.7	141.6
Humboldt	59972	62025	66168	55588	60776	53397	38696	31569	-1.3	92.5
Ida	60133	63734	61430	52157	53564	57136	31847	30384	12.3	76.3
Iowa	71674	70193	69634	60567	65931	49657	35463	27327	8.7	141.3
Jackson	58516	58924	60501	52442	63462	53061	37344	25913	-7.8	144.9
Jasper	68685	61396	71235	62938	63929	60455	43535	30225	7.4	111.5
Jefferson	59173	60165	62340	56271	53763	54624	38346	24010	10.1	123.9

Table 4. Median Family Income, 2015 \$ and Adjusted for Inflation to 2015 \$ (Real \$), 2011-2015, 2006 – 2010 American Community Survey¹ and Decennial Census, 1949 – 1999.² (continued)

	-	2006			2015 Re	al \$ Adji	usted for	Inflation	0/ 61	0/ 61
Name	2011- 2015 ¹ Estimate	2006- 2010 ¹ Estimate	1999 ²	1989 ²	1979 ²	1969 ²	1959 ²	1949 ²	% Change, Adjusted 1979-2015	% Change, Adjusted 1949-1979
Johnson	83245	81029	85520	75704	72783	62935	43241 36343	30215	14.4	140.9
Jones	66158	64312	62980	53791	62160	52189		27098	6.4	129.4
Keokuk	55571	58104	59493	51047	52118	46112	31390	22317	6.6	133.5
Kossuth	64974	66317	58556	52880	58768	50871	32466	31161	10.6	88.6
Lee	55694	55033	60688	57285	65568	57840	43021	31310	-15.1	109.4
Linn	77036	75272	80372	72906	75721	69239	51794	34188	1.7	121.5
Louisa	60068	59699	62558	55925	61187	55980	33956	24767	-1.8	147.1
Lucas	57183	61573	54562	52530	50903	46609	30242	21461	12.3	137.2
Lyon	66685	62335	64225	49969	55980	47152	28988	29657	19.1	88.8
Madison	71899	72934	68699	58388	59773	49806	32042	23901	20.3	150.1
Mahaska	57459	62910	61967	52497	54458	48359	34697	25674	5.5	112.1
Marion	69510	71540	71208	61156	62539	53390	37467	25255	11.1	147.6
Marshall	61662	60561	66335	65935	67641	62445	43917	32017	-8.8	111.3
Mills	78556	79926	70553	62691	61843	57594	34127	24548	27.0	151.9
Mitchell	64078	68865	58661	56083	56274	49089	34681	27018	13.9	108.3
Monona	55602	55541	58574	47570	51223	45046	31415	25932	8.5	97.5
Monroe	56724	57665	59199	48407	54138	47423	31008	21391	4.8	153.1
Montgomery	54088	54994	57090	55101	59391	52880	33801	26211	-8.9	126.6
Muscatine	64083	66788	68819	65147	69048	62832	42386	29010	-7.2	138.0
O'Brien	66729	64555	61117	54512	58007	48992	33630	30414	15.0	90.7
Osceola	64133	63354	59719	54665	58546	47991	30071	32764	9.5	78.7
Page	60519	57381	60387	53392	55764	49631	32547	25186	8.5	121.4
Palo Alto	59606	62183	59479	49133	56548	49870	29305	26181	5.4	116.0
Plymouth	72047	75284	71146	59275	60501	52874	33915	30772	19.1	96.6
Pocahontas	59009	61141	57715	53262	56613	49638	34372	30653	4.2	84.7
Polk	74335	76571	80466	72002	73495	68987	52649	36359	1.1	102.1
Pottawattami	65286	65602	67015	59338	64977	60423	45538	32157	0.5	102.1
Poweshiek	66652	71461	66295	59314	58304	54811	34502	26888	14.3	116.8
Ringgold	55646	55727	49042	48040	40453	42637	20957	19658	37.6	105.8
Sac	63750	59026	57624	50202	56071	51098	33687	31280	13.7	79.3
Scott	72195	70123	74043	69117	77739	69587	52608	36160	-7.1	115.0
Shelby	64782	60351	63566	50114	57478	51730	32034	26341	12.7	118.2
Sioux	70971	65264	65224	56112	58983	49328	32531	29119	20.3	102.6
Story	77539	80737	78918	67821	70775	62561	44064	31440	9.6	125.1
Tama	63379	59794	62094	54780	59052	51969	33248	28771	7.3	105.2
Taylor	54128	52343	52915	43582	45422	38782	23351	21421	19.2	112.0
Union	57736	54941	58974	50540	53698	46286	31448	25305	7.5	112.2
Van Buren	58011	54417	51814	43149	46199	38820	26764	20465	25.6	125.7
Wapello	53242	53597	55803	50664	58637	54966	43885	30713	-9.2	90.9
Warren	76605	80480	80159	70046	72604	64311	42492	25674	5.5	182.8
Washington	70000	65724	64925	57907	59362	56677	34477	28542	17.9	108.0
Wayne	58397	48678	50553	42386	42859	38904	24606	17736	36.3	141.6
Webster	56373	58836	62273	54990	65232	59002	44748	32635	-13.6	99.9
Winnebago	60086	63804	67301	54954	57080	55379	35088	28412	5.3	100.9
Winneshiek	66933	66911	65394	55194	54772	50129	31895	23632	22.2	131.8
Woodbury	57590	60823	66153	58639	62757	58350	45115	33631	-8.2	86.6
Worth	61265	61586	59415	54632	60152	54927	33932	30125	1.9	99.7
Wright	59263	58576	62659	55816	60518	58518	38379	30125	-2.1	100.9
State of Iowa	67466	67178	68295	60514	65464	58240	41287	30553	3.1	114.3
United States	66011	68459	71199	67330	65023	61934	46100	30603	1.5	112.5

¹American Community Survey 5-Year Estimates 2011-2015, 2006-2010 U.S. Census Bureau; ²Decennial Census Data 1949-1999, U.S. Census Bureau.

The family income picture by the 2011-2015 period was quite mixed. Thirtyone counties did, in fact, record their highest adjusted median family income in the 2011-2015 period. Clusters of these counties were in the northwestern, southern, and east central regions of Iowa. In contrast, 17 counties had their highest adjusted median family income in 1979. Although there were locations across Iowa for these counties, a cluster of them was in eastern Iowa along the Mississippi River. The statewide figure for adjusted median family income was highest in 1999 along with that for 24 counties. The period of 2006-2010 was highest for 27 counties (Figure 10, Table 4).

Trends, Comments, and Summary

The use of American Community Survey median income estimates for both households and families along with the equivalent median income data from the earlier Decennial Censuses, enables comparisons across time as well as comparisons among the counties and the state. Some reminders about the data are in order, however. In general, the household median income measures may be preferred over the family median measures. The household measures include all the households of a geographic region. Because the family measures exclude nonfamily households, they do not include some of the households with the lowest incomes. The household data may thus give a better picture of the real economic situation for the residents of an area. In addition, it should be kept in mind that a median shows the middle of a distribution and that half of the households are *below* the median value. For locations where the median itself is low, half the households will be even lower.

Overall, some counties and regions of Iowa have fared better than have others during the decades reported here. Counties that are adjacent to core metropolitan counties, especially the Des Moines (Polk Co.) and Cedar Rapids (Linn Co.) metropolitan areas are among those with the highest median income, both for households and families.⁸ In 2011-2015, eight (Dallas, Mills, Bremer, Warren, Benton, Plymouth,

Madison, Iowa) of the top fifteen counties in median family income were counties adjacent to counties with metropolitan cities. None of these eight were in the top group in 1949 but three (Warren, Dallas, Bremer) had reached the top group in 1979. The eight counties noted here now have residents that have higher incomes and are more affluent than were the residents of those counties in past decades (Figures 1, 6; Tables 1-3).

During these decades, the suburban fringes of the metropolitan cities spread farther from the core cities into the neighboring counties. These neighboring counties, which were once quite rural and "small-town" have, over the decades, become suburbanized with office park developments, shopping, and new housing areas. People can now work and live in these areas but they can also conveniently commute to jobs in the core city. With new opportunities for work, and particularly with new, upscale housing, these areas are attractive for families, especially those with better paying jobs. Since the income of households and families is counted where they live, not where they work, these areas now are the residential areas with some of Iowa's most affluent residents. The residents of these newer developed areas have boosted the income measures of the entire county to levels that previous residents did not.

In both 1949 and 1979 the counties with the highest median family incomes were predominantly those with the core metropolitan or micropolitan cities.8 Some of these metropolitan counties (Polk, Linn, and Scott) have maintained their ranking across the decades with high median family income. In contrast, several other metropolitan counties have declined in rank. Dubuque County, once 4th in rank, was 24th in recent years. Black Hawk County was 49 places lower. Woodbury County sank from 7th in 1949 to 80th in 2011-2015. These declines are substantial and significant for these areas that previously were among Iowa's highest (Figures 3, 7; Tables 1-3).

A number of counties with micropolitan cities have also not fared well in income across the decades.8 Buena Vista, Cerro Gordo, Clinton, Des Moines, Lee, Marshall, Wapello, and Webster Counties have all experienced a decline in rank in the income measures across these time periods. Several of these were previously among the top income counties and are now ranked among the lowest 25. In many cases, the residents of these counties in the recent time periods have at least ten percent *less* purchasing power, after inflation adjustment, than the residents who lived in those areas in 1979 or earlier. Inflation adjusted median family income was 13%-19% lower in 2011-2015 than in 1979 for Des Moines, Lee, and Webster Counties. Among the other micropolitan counties of Iowa, Dickinson County, with the recreational areas of Spirit and Okoboji Lakes, had substantial gains in income measures (Figures 4, 9; Tables 1, 4).

Many of Iowa's relatively rural counties made income gains in the recent periods. As a broad generality, from 50 percent to 80 percent of counties that were relatively rural (ie. not metropolitan core, not metropolitan adjacent, or not micropolitan⁸) had gains in rank or percent of adjusted median income between 1979 and the 2011-2015 period. Although the residents of these rural counties, in general, did not have quite the income gains noted for the suburbanized, metropolitan adjacent counties, their residents did experience better purchasing power than residents who lived in those counties in earlier decades. Many of these counties recorded their highest median household or family income in the 2006-2010 or 2011-2015 periods.

Some of the state's historical regional variations still are apparent, however. Southern Iowa counties have typically been among the state's lowest in income. Even with the enhanced gains in many rural counties in recent years, southern Iowa still tends to be a region with lower household and family income than other

Iowa areas. The increases of the most recent years have not been enough to close the income gap with other Iowa areas. Additionally, there are scattered around the state and along the Mississippi river, counties and areas that have struggled economically in recent decades. For many of these counties, the highest median incomes after inflation adjustment were recorded in 1979, more than 35 years ago. In contrast to these struggling areas, it is also apparent that many metropolitan areas and their surrounding counties continue to be the state's highest income areas (Figures 1, 5-6, 10; Tables 1-4).

To understand the changes in income recorded in these time periods, it is necessary to think about changes in jobs and their the locations, changes in wages, changes in the composition and social situations of the residents of the counties, and changes in the overall U.S. economy. It is apparent that the decades following World War II were a period of relative prosperity for the U.S. and for Iowa and its counties. The changes in inflation adjusted income show real gains in income and purchasing power for Iowa during those years. It should be kept in mind, however, that some of the income increases are likely due to having many more women in the gainful workforce. It became much more common in the 1970s and later for women to be employed outside the home, even when there were younger children in the family (Figure 8, Tables 2, 4).

It is also apparent that the decade of the 1980s was economically difficult for most of Iowa, more so than for the rest of the U.S. overall. None of Iowa's counties had a highest adjusted median income in this decade. During these years there was a farm crisis and a significant loss of manufacturing jobs across the state. For a number of counties, well-paying manufacturing jobs were lost and did not return. For other counties, it is not so much that manufacturing jobs were lost, but those that are still there do not now pay as well as they once did

in 1979 and earlier. Some counties that lost these higher-paying jobs have not yet recovered the jobs or the higher wage structure that they once had. Residents now living in these counties do not have the opportunities for higher-wage employment that previous residents once had.

In contrast to some of the metropolitan and micropolitan counties, many rural regions in Iowa have recorded income gains in the more recent years reported here. These areas have likely been impacted by agricultural commodity prices that have been relatively high, especially during the years of 2011-2013 which are included in the 2011-2015 estimates period. As ACS data for income become available for 2016 and later periods that do not include the years of the high commodity prices, there may be declines noted for rural Iowa counties.

There are population composition factors that can be affecting income across Iowa's counties as well. As has been noted, some of Iowa's metropolitan adjacent counties have been growing in population, housing, and work opportunities. Not only have these counties attracted new residents, in some cases these residents are also relatively affluent with higher incomes. Newer, upscale housing developments are a factor in attracting these new residents who push up the county's income measures.

A changing age composition in a county can also have an effect on income. Many of Iowa's counties have had losses in population, especially of young people, and now have an older age structure than in previous decades. As residents age and then retire their income profile changes. Older residents that are no longer gainfully employed will likely be living on a fixed income based on Social Security and other retirement income. They will no longer have the level of income they once did when they were working. In addition, there are likely to be more oneperson households as spouses die and widowed persons are living alone. There is likely a decline in income for the

surviving spouse. These aging related changes are another source of income decline for a county. The aging of residents and their income changes are likely more important in rural areas of Iowa than in the metropolitan counties. In recent decades, rural Iowa has had an older age structure than that for metropolitan and adjacent counties and will have higher proportions of older residents already in retirement or moving into retirement in the near future.

Finally, aside from job, wage, and population changes, income for Iowa's residents also depends on the health of the overall U.S. economy. Declines in Iowa reflected broader economic trends such as unemployment and losses of work opportunities during the nationwide recessions of 2001 and 2007-2009. The state, as an integrated part of the U.S. economy, is not immune when things decline nationwide.

ISU Indicators Portal

Iowa State University Extension and Outreach maintains a data and indicators portal that can be especially useful for ACS data users. At this portal (www.indicators.extension.iastate.edu)⁹ users can find data on many subject areas (including this report), tools for designing maps and graphs, and reports on population trends and data measures and their use. The indicators portal is available for use by the general public as well as the staff, students, and faculty of Iowa State University.

Table 5. Median Household and Median Family Income, Margins of Error, and Coefficients of Variation, American Community Survey 5-Year Estimates, 2011-2015 and 2006-2010.

	2011-	2011-	2011-	ninal \$ (Curr 2006-	2006-	ljusted 2006-	2011-	Family Inco	ome Nomi 2011-	inal \$ (Current 2006-	\$) Unadju 2006-	2006-
	2011- 2015 ¹	2011- 2015 ¹	2011-	2006- 2010 ¹	2006- 2010 ¹	2006-	2011- 2015 ¹	2011- 2015 ¹	2011-	2006- 2010 ¹	2006- 2010 ¹	2006-
County	Estimate	MOE	CV %	Estimate	MOE	CV %	Estimate	MOE	CV %	Estimate	MOE	CV %
Adair	46526	+/-2,513	3.3	45202	+/-3,497	4.7	58738	+/-1,803	1.9	57287	+/-3,100	3.3
Adams	48043	+/-5,022	6.4	40368	+/-4,300	6.5	58659	+/-2,610	2.7	52782	+/-4,580	5.3
Allamakee	45890	+/-2,455	3.3	46623	+/-2,177	2.8	56614	+/-3,125	3.4	55926	+/-2,857	3.1
Appanoose	41394	+/-1,872	2.7	34689	+/-2,773	4.9	55727	+/-3,150	3.4	41250	+/-4,656	6.9
Audubon	46979	+/-4,662	6.0	42717	+/-6,707	9.5	61224	+/-4,241	4.2	58641	+/-7,486	7.8
Benton	60606	+/-2,773	2.8	54726	+/-2,437	2.7	75776	+/-2,277	1.8	64970	+/-2,837	2.7
Black Hawk	48369	+/-1,415	1.8	44178	+/-816	1.1	63011	+/-1,392	1.3	57495	+/-1,517	1.6
Boone	52985	+/-2,343	2.7	49578	+/-2,086	2.6	69260	+/-4,376	3.8	66872	+/-2,827	2.6
Bremer	62163	+/-2,072	2.0	55676	+/-2,202	2.4	78551	+/-3,194	2.5	68602	+/-2,748	2.4
Buchanan	56150	+/-2,046	2.2	51961	+/-1,735	2.0	69792	+/-4,349	3.8	61421	+/-2,220	2.2
Buena Vista	48195	+/-2,162	2.7	43182	+/-1,777	2.5	58604	+/-3,146	3.3	53382	+/-2,425	2.8
Butler	52360	+/-1,539	1.8	47702	+/-2,175	2.8	63710	+/-1,805	1.7	59641	+/-2,721	2.8
Calhoun	44921	+/-2,895	3.9	41611	+/-2,546	3.7	58512	+/-2,902	3.0	50037	+/-3,860	4.7
Carroll	50559	+/-3,518	4.2	47507	+/-2,627	3.4	67436	+/-2,406	2.2	61960	+/-2,037	2.0
Cass	43750	+/-2,378	3.3	40820	+/-1,353	2.0	52165	+/-3,264	3.8	48884	+/-2,850	3.5
Cedar	59047	+/-2,534	2.6	54321	+/-2,631	2.9	68212	+/-3,976	3.5	63893	+/-3,462	3.3
Cerro Gordo	46122	+/-1,395	1.8	44741	+/-1,673	2.3	63408	+/-2,783	2.7	60148	+/-2,000	2.0
Cherokee	48599	+/-4,399	5.5	44635	+/-2,331	3.2	65276	+/-5,002	4.7	56696	+/-2,910	3.1
Chickasaw	47040	+/-2,495	3.2	41372	+/-2,577	3.8	61472	+/-2,776	2.7	50530	+/-2,766	3.3
Clarke	43327	+/-3,242	4.5	45596	+/-5,456	7.3	58333	+/-11,289	11.8	54707	+/-4,359	4.8
Clay	50389	+/-4,507	5.4	43542	+/-2,230	3.1	64563	+/-5,577	5.3	56460	+/-4,201	4.5
Clayton	48007	+/-1,518	1.9	45873	+/-2,115	2.8	59837	+/-2,970	3.0	53905	+/-1,971	2.2
Clinton	50498	+/-2,968	3.6	46170	+/-1,741	2.3	65441	+/-3,919	3.6	58681	+/-2,377	2.5
Crawford	48084	+/-4,013	5.1	44377	+/-1,693	2.3	56640	+/-4,171	4.5	53794	+/-2,856	3.2
Dallas	76320	+/-2,150	1.7	67037	+/-2,337	2.3	92428	+/-2,914	1.9	84018	+/-2,458	1.8
Davis	48888	+/-2,130	3.6	46597	+/-3,040	4.0	59088	+/-5,459	5.6	52855	+/-3,194	3.7
Davis	38560	+/-2,684	4.2	37138	+/-3,833	6.3	51322	+/-3,453	3.0 4.1	48015	+/-3,217	4.1
Delaware	58274	+/-2,430	2.5	47078	+/-3,125	4.0	70412	+/-5,209	4.5	59802	+/-3,418	3.5
Des Moines			1.9			2.2	55297		2.5	53946		2.3
Dickinson	44423	+/-1,418	2.5	41937	+/-1,484	2.8		+/-2,314	3.4	59648	+/-2,037	2.3
	57265	+/-2,366		50174 48573	+/-2,273		71327	+/-3,998			+/-2,109	
Dubuque	54605	+/-1,219	1.4		+/-1,366	1.7	68157	+/-1,669	1.5	61138	+/-1,444	1.4
Emmet	47795	+/-3,758	4.8	42286	+/-2,768	4.0	64085	+/-5,333	5.1	55844	+/-4,264	4.6
Fayette	44928	+/-2,331	3.2	41055	+/-1,336	2.0	56935	+/-2,895	3.1	52627	+/-2,132	2.5
Floyd	44797	+/-3,209	4.4	39467	+/-1,827	2.8	56004	+/-3,362	3.6	52808	+/-2,878	3.3
Franklin	48605	+/-2,080	2.6	44863	+/-2,575	3.5	58636	+/-4,020	4.2	52917	+/-6,044	6.9
Fremont	53324	+/-2,830	3.2	47225	+/-4,034	5.2	65109	+/-3,502	3.3	59622	+/-3,740	3.8
Greene	46898	+/-2,939	3.8	43286	+/-3,063	4.3	59242	+/-4,683	4.8	60133	+/-5,292	5.3
Grundy	56750	+/-2,626	2.8	56184	+/-3,771	4.1	69940	+/-3,708	3.2	68151	+/-3,057	2.7
Guthrie	51013	+/-1,670	2.0	50090	+/-3,181	3.9	61006	+/-3,037	3.0	61951	+/-3,377	3.3
Hamilton	49813	+/-3,439	4.2	46188	+/-3,529	4.6	60427	+/-2,301	2.3	61472	+/-1,647	1.6
Hancock	52981	+/-3,570	4.1	47318	+/-3,889	5.0	64403	+/-3,294	3.1	55922	+/-3,172	3.4
Hardin	51019	+/-1,670	2.0	44694	+/-2,185	3.0	66875	+/-2,157	2.0	57612	+/-3,436	3.6
Harrison	53567	+/-2,881	3.3	51303	+/-2,018	2.4	65147	+/-2,944	2.7	63283	+/-2,379	2.3
Henry	49321	+/-2,690	3.3	41983	+/-1,680	2.4	60335	+/-3,363	3.4	53985	+/-3,722	4.2
Howard	49869	+/-3,486	4.2	46068	+/-2,135	2.8	61172	+/-4,243	4.2	55582	+/-5,208	5.7
Humboldt	47252	+/-3,356	4.3	45282	+/-2,716	3.6	59972	+/-2,951	3.0	57063	+/-4,045	4.3
Ida	46993	+/-2,561	3.3	44521	+/-2,438	3.3	60133	+/-2,478	2.5	58635	+/-3,076	3.2
Iowa	59375	+/-5,982	6.1	56053	+/-2,340	2.5	71674	+/-3,787	3.2	64578	+/-2,857	2.7
Jackson	49028	+/-2,720	3.4	42489	+/-3,089	4.4	58516	+/-4,374	4.5	54210	+/-2,548	2.9
Jasper	55033	+/-2,218	2.5	46396	+/-1,512	2.0	68685	+/-3,857	3.4	56484	+/-3,198	3.4
Jefferson	42899	+/-3,322	4.7	44167	+/-5,202	7.2	59173	+/-6,839	7.0	55352	+/-3,788	4.2

Table 5. Median Household and Median Family Income, Margins of Error, and Coefficients of Variation, American Community Survey 5-Year Estimates, 2011-2015 and 2006-2010. (continued)

	Median I	Household	Income Non	ninal \$ (Curr		djusted			inal \$ (Current	sted			
	2011-	2011-	2011-	2006-	2006-	2006-		2011-	2011-	2011-	2006-	2006-	2006-
County	2015 ¹ Estimate	2015 ¹ MOE	2015 CV %	2010 ¹ Estimate	2010 ¹ MOE	2010 CV %	F	2015 ¹ Estimate	2015 ¹ MOE	2015 CV %	2010 ¹ Estimate	2010 ¹ MOE	2010 CV %
Johnson	55700		2.3	51380	+/-1,565	1.9		83245	+/-2,184	1.6	74547	+/-2,183	1.8
Jones		+/-2,891	3.2	47955	+/-3,431	4.3		66158	+/-2,264	2.1	59167	+/-3,504	3.6
Keokuk	43838	+/-2,685	3.7	42698	+/-2,884	4.1		55571	+/-2,588	2.8	53456	+/-1,710	
Kossuth	51496		2.5	48277	+/-3,082	3.9		64974	+/-2,672	2.5	61012	+/-3,750	
Lee	43312	+/-1,869	2.6	42444	+/-1,937	2.8		55694	+/-2,093	2.3	50630	+/-2,129	
Linn		+/-1,387	1.4	53674	+/-1,131	1.3		77036	+/-1,716	1.4	69250	+/-1,376	
Louisa	51144	+/-3,292	3.9	50457	+/-2,940	3.5		60068	+/-2,335	2.4	54923	+/-3,796	4.2
Lucas		+/-2,108	2.9	43005	+/-4,125	5.8		57183	+/-3,555	3.8	56647	+/-3,180	
Lyon	57130		3.1	49506	+/-2,866	3.5		66685	+/-3,236	2.9	57348	+/-2,733	2.9
Madison	60060	+/-3,154	3.2	53183	+/-2,825	3.2		71899	+/-5,554	4.7	67099	+/-5,826	
Mahaska	48726		3.8	45025	+/-2,613	3.5		57459	+/-1,792	1.9	57877	+/-3,177	3.3
Marion	54693		3.8	53370	+/-2,227	2.5		69510	+/-1,792	2.6	65817	+/-2,035	
Marshall			1.9	45232	+/-1,847	2.5		61662		1.6	55716		2.6
	53351								+/-1,628			+/-2,371	
Mills	63979	+/-2,937	2.8	59481	+/-4,268	4.4		78556	+/-2,879	2.2	73532	+/-2,787	2.3
Mitchell	49488	+/-3,035	3.7	48506	+/-4,297	5.4		64078	+/-4,506	4.3	63356	+/-2,357	2.3
Monona		+/-2,695	4.1	41398	+/-2,917	4.3		55602	+/-4,748	5.2	51098	+/-3,142	
Monroe	46304	+/-4,395	5.8	43245	+/-2,837	4.0		56724	+/-5,204	5.6	53052	+/-7,450	
Montgomery	42418	+/-3,776	5.4	38624	+/-2,180	3.4		54088	+/-3,467	3.9	50595	+/-3,009	3.6
Muscatine	53676		2.2	51025	+/-1,758	2.1		64083	+/-2,478	2.4	61445	+/-3,306	
O'Brien	55227	+/-3,484	3.8	44018	+/-1,925	2.7		66729	+/-2,921	2.7	59391	+/-4,531	4.6
Osceola	49448	+/-2,926	3.6	43889	+/-5,792	8.0		64133	+/-3,889	3.7	58286	+/-3,588	
Page		+/-2,020	2.8	40778	+/-3,134	4.7		60519	+/-4,566	4.6	52791	+/-3,646	
Palo Alto	47113	+/-2,245	2.9	42800	+/-3,200	4.5		59606	+/-3,903	4.0	57208	+/-2,507	2.7
Plymouth			2.8	56379	+/-3,295	3.6		72047	+/-2,953	2.5	69261	+/-2,530	
Pocahontas	45069	+/-2,595	3.5	42105	+/-2,598	3.8		59009	+/-3,188	3.3	56250	+/-2,985	3.2
Polk	60061	+/-876	0.9	56094	+/-866	0.9		74335	+/-1,392	1.1	70445	+/-939	0.8
Pottawattamie	51976	+/-1,225	1.4	48728	+/-1,491	1.9		65286	+/-2,187	2.0	60354	+/-1,849	1.9
Poweshiek	51006	+/-2,327	2.8	50998	+/-2,988	3.6		66652	+/-3,035	2.8	65744	+/-2,092	1.9
Ringgold	47042	+/-3,689	4.8	42336	+/-3,331	4.8		55646	+/-2,948	3.2	51269	+/-3,102	3.7
Sac	49572	+/-1,708	2.1	42986	+/-2,509	3.5		63750	+/-2,569	2.4	54304	+/-2,196	2.5
Scott	55114	+/-1,052	1.2	49964	+/-1,107	1.3		72195	+/-1,641	1.4	64513	+/-1,326	1.2
Shelby	50952	+/-2,615	3.1	44085	+/-2,427	3.3		64782	+/-3,708	3.5	55523	+/-4,655	5.1
Sioux	61627	+/-2,482	2.4	51557	+/-1,765	2.1		70971	+/-3,035	2.6	60043	+/-1,734	1.8
Story	50438	+/-1,346	1.6	48248	+/-1,401	1.8		77539	+/-2,963	2.3	74278	+/-1,763	1.4
Tama		+/-1,959	2.2	46288	+/-1,943	2.6		63379	+/-1,767	1.7	55011	+/-2,695	3.0
Taylor	44246	+/-2,840	3.9	40300	+/-1,957	3.0		54128	+/-2,853	3.2	48156	+/-3,517	4.4
Union	44351	+/-2,897	4.0	40879	+/-3,488	5.2		57736	+/-2,178	2.3	50546	+/-3,393	
Van Buren	45111	+/-2,697	3.6	40073	+/-3,069	4.7		58011	+/-3,312	3.5	50064	+/-3,204	3.9
Wapello	42095	+/-1,372	2.0	40093	+/-2,076	3.1		53242	+/-4,534	5.2	49309	+/-1,585	2.0
Warren	64447	+/-2,075	2.0	62034	+/-1,974	1.9		76605	+/-2,418	1.9	74042	+/-2,355	1.9
Washington	56390	+/-2,418	2.6	50710	+/-1,679	2.0		70000	+/-4,298	3.7	60466	+/-2,560	2.6
Wayne	43358	+/-2,705	3.8	35425	+/-2,388	4.1		58397	+/-4,124	4.3	44784	+/-3,965	5.4
Webster	42408	+/-1,846	2.6	40806	+/-1,613	2.4		56373	+/-4,134	4.5	54129	+/-3,193	3.6
Winnebago	47668	+/-2,807	3.6	41871	+/-2,768	4.0		60086	+/-4,692	4.7	58700	+/-2,326	2.4
Winneshiek	54429	+/-2,466	2.8	50693	+/-2,070	2.5		66933	+/-2,138	1.9	61558	+/-2,039	2.0
Woodbury	46720	+/-1,256	1.6	44343	+/-1,233	1.7		57590	+/-2,046	2.2	55957	+/-1,744	1.9
Worth	48459	+/-2,871	3.6	49673	+/-2,197	2.7		61265	+/-3,378	3.4	56659	+/-5,781	6.2
Wright		+/-3,902	5.4	44035	+/-2,101	2.9		59263	+/-2,997	3.1	53890	+/-3,474	
State of Iowa	53183	+/-313	0.4	48872	+/-269	0.3		67466	+/-363	0.3	61804	+/-329	
United States	53889	+/-110	0.1	51914	+/-89	0.1		66011	+/-191	0.2	62982	+/-199	0.2

¹American Community Survey, 5-Year Estimates 2011-2015, 2006-2010, U.S. Census Bureau

Iowa Income Trends: 1949 - 2015

Notes:

¹Information in this report for the time periods after 1999 comes from the American Community Survey (ACS) data program carried out by the U.S. Census Bureau. ACS estimates in this report are based on sample survey data pooled across the 5-year periods of 2006 - 2010 and 2011 - 2015. The ACS is now the data source for most socioeconomic data that was previously provided in the Decennial Census. See:

http://www.census.gov/programs-survey/acs http://www.census.gov/acs/www/

http://www.census.gov/acs/www/guidance_for_data_users/guidance_main/ http://www.census.gov/acs/www/guidance_for_data_users/handbooks/

²The information in this report for 1999 and earlier comes from the U.S. Decennial Census. See: http://www.census.gov/2010census/http://www.census.gov/main/www/cen2000.html http://www.census.gov/main/www/cen1990.html http://www.census.gov/population/www/censusdata/hiscendata.html

³Because the ACS data are from a sample of the population and not a complete count, margins of error are provided to give an indication of the reliability of each estimate. The margin of error for an ACS estimate is a numerical value that, when added to or subtracted from the point estimate value, gives the range of a 90% statistical confidence interval around the estimate. The interval specifies the range of values which is likely, with a probability of 0.90, to contain the underlying population value. The Census Bureau suggests using the Coefficient of Variation (CV), a measure of the relative amount of sampling error associated with a sampling estimate, as a way to assess the usability of an estimate. The CV is a ratio of the Standard Error (SE) of the estimate to the estimate itself and is usually expressed as a percent. The SE is simply the margin of error divided by 1.645 (this is a constant since it is a 90% confidence interval). The resulting SE is then divided by the estimate value and multiplied by 100 to get a percent. The smaller the CV, the higher the relative reliability of the estimate. In general, estimates with a CV less than 15% indicates a high degree of reliability in the estimate.

⁴The ACS and the Decennial Census have varied in the reference period for which income information is collected. Although both ask for annual income for the year preceding the survey, for the Decennial Census, all respondents would be reporting income for the *same* year, i.e. the year before the census (1949, 1959, 1969, 1979, 1989, 1999). Respondents for the ACS report a year of income, but the year being reported will vary depending on when the respondent takes the survey during the 5-year period of the estimates. The ACS income estimates are pooled across the five years of the estimate period. The calculation of the income medians as well as the definitions of households and families are the same across the Decennial Censuses and the ACS estimates.

⁵Bureau of Labor Statistics, U.S. Department of Labor http://www.bls.gov/home.htm Consumer Price Index http://www.bls.gov/cpi/ and Inflation Calculator http://www.bls.gov/data/inflation_calculator.htm

The correlation coefficient is a statistical measure that indicates the extent to which two or more variables fluctuate together. A positive correlation indicates the extent to which those variables increase or decrease in parallel; a negative correlation indicates the extent to which one variable increases as the other decreases. A "0" coefficient means there is no relationship between the variables at all, while -1 or +1 means that there is a perfect negative or positive correlation. The correlation between 1979 household median income and 1979 family median income = 0.97; the coefficient between 1989 median household income and 1989 median family income = 0.95; the coefficient between 1999 household median income and 1999 family median income = 0.92; the coefficient between 2006-2010 median household income and 2011-2015 median household income and 2011-2015 median family income = 0.90.

The correlation between 1949 median family income and 1959 = 0.77; 1969 = 0.76; 1979 = 0.78; 1989 = 0.64; 1999 = 0.50; 2006-2010 = 0.33; 2011-2015 = 0.32. The correlation between 1979 median household income and 1989 = 0.88; 1999 = 0.79; 2006-2010 = 0.58; 2011-2015 = 0.59

⁸A metropolitan city is one that has at least 50,000 residents. Core metropolitan counties for Iowa and their core cities are: Black Hawk Co. (Waterloo/Cedar Falls), Dubuque Co. (Dubuque), Johnson Co. (Iowa City), Linn Co. (Cedar Rapids), Polk Co. (Des Moines), Pottawattamie Co. (Council Bluffs/Omaha), Scott Co. (Davenport/Bettendorf), Story Co. (Ames), Woodbury Co. (Sioux City)

A micropolitan city has between 10,000 and 49,999 residents. Micropolitan counties for Iowa and their core cities are: Boone Co. (Boone), Buena Vista Co. (Storm Lake), Carroll Co. (Carroll), Cerro Gordo Co. (Mason City), Clay Co. (Spencer), Clinton Co. (Clinton), Des Moines Co. (Burlington), Dickinson Co. (Spirit Lake/Okoboji), Jasper Co. (Newton), Jefferson Co. (Fairfield), Lee Co. (Ft. Madison/Keokuk), Mahaska Co. (Oskaloosa), Marion Co. (Pella), Marshall Co. (Marshalltown), Muscatine Co. (Muscatine), Wapello Co. (Ottumwa), Webster Co. (Ft. Dodge) http://www.iowadatacenter.org/aboutdata/statisticalareas https://obamawhitehouse.archives.gov/omb/inforeg statpolicy/background-information

9http://www.indicators.extension.iastate.edu

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