## Community and Economic Development

## Indicators Program



Iowa Income Trends: 1949-2015
Sandra Charvat Burke

## 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).

Figure 1. Median household income, American Community Survey, 2011-2015, 5-year estimates.


## 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 areas ${ }^{8}$ 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 2.


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 20062010 (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.,


Decrease $10.0 \%-24.0 \% \square$ Decrease $0.1 \%-9.9 \% \square$ Increase $0.1 \%-9.9 \% \square$ Increase $10.0 \%-25.3 \% \square$ Increase $43.9 \%$

Figure 5. Year inflation adjusted median household income highest, 1979-2015

$\square$ 2006-2010 American Community Survey $\square$ 2011-2015 American Community Survey
$97 \%, 120 \%)$. 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 (20112015) 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

Table 1. Median Household Income, Nominal \$ (Current \$) and Adjusted to 2015 \$ (Real \$), 2011-2015, 2006-2010 American Community Survey ${ }^{1}$ and Decennial Censuses, 1979 - 1999. ${ }^{2}$

|  | Nominal \$ (Current \$) Unadjusted for Inflation |  |  |  |  |  |  |  |  | 2015 \$ (Real \$) Adjusted for Inflation |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County | $\begin{gathered} \hline 2011- \\ 2015^{1} \\ \text { Estimate } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \% \text { IA } \\ 11-15 \\ \text { Median }^{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2006- \\ 2010^{1} \\ \text { Estimate } \\ \hline \end{gathered}$ | $1999{ }^{2}$ | $1989{ }^{2}$ | $1979{ }^{2}$ | \% IA 1979 Median $^{2}$ | $\begin{gathered} \text { Rank } \\ 11-15^{1} \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Rank } \\ & 1979^{2} \\ & \hline \end{aligned}$ | $\begin{gathered} \text { \% Change, } \\ \text { Adjusted } \\ \text { 1979-2015 } \\ \hline \end{gathered}$ | $\begin{gathered} 2006- \\ 2010 \\ \text { Estimate } \\ \hline \end{gathered}$ | 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 | 49619 | 54658 |
| Black Hawk | 48369 | 90.9 | 44178 | 37266 | 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 | 53773 |
| 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 | 44701 | 52451 |
| Buena Vista | 48195 | 90.6 | 43182 | 35300 | 25311 | 16222 | 96.6 | 59 | 33 | -9.0 | 46937 | 50220 | 48380 | 52960 |
| Butler | 52360 | 98.5 | 47702 | 35883 | 23292 | 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 | 52591 |
| Cass | 43750 | 82.3 | 40820 | 32922 | 21801 | 14136 | 84.1 | 88 | 74 | -5.2 | 44369 | 46837 | 41671 | 46150 |
| Cedar | 59047 | 111.0 | 54321 | 42198 | 27713 | 17292 | 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 | 15609 | 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 | 12158 | 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 | 33922 | 22209 | 15633 | 93.1 | 60 | 47 | -5.8 | 48236 | 48260 | 42451 | 51037 |
| Dallas | 76320 | 143.5 | 67037 | 48528 | 28874 | 18661 | 111.1 | 1 | 7 | 25.3 | 72866 | 69039 | 55191 | 60923 |
| Davis | 48888 | 91.9 | 46597 | 32864 | 20054 | 13015 | 77.5 | 53 | 89 | 15.1 | 50649 | 46755 | 38332 | 42490 |
| Decatur | 38560 | 72.5 | 37138 | 27343 | 18105 | 11074 | 65.9 | 99 | 97 | 6.7 | 40367 | 38900 | 34606 | 36153 |
| Delaware | 58274 | 109.6 | 47078 | 37168 | 25757 | 15991 | 95.2 | 12 | 40 | 11.6 | 51172 | 52878 | 49233 | 52206 |
| Des Moines | 44423 | 83.5 | 41937 | 36790 | 26536 | 17252 | 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 | 22790 | 16338 | 97.3 | 63 | 27 | -10.4 | 45963 | 47382 | 43561 | 53339 |
| Fayette | 44928 | 84.5 | 41055 | 32453 | 21109 | 14815 | 88.2 | 79 | 64 | -7.1 | 44625 | 46170 | 40348 | 48366 |
| Floyd | 44797 | 84.2 | 39467 | 35237 | 23344 | 16031 | 95.4 | 81 | 39 | -14.4 | 42899 | 50131 | 44620 | 52336 |
| Franklin | 48605 | 91.4 | 44863 | 36042 | 23741 | 15365 | 91.5 | 55 | 56 | -3.1 | 48764 | 51276 | 45379 | 50162 |
| Fremont | 53324 | 100.3 | 47225 | 38345 | 22948 | 13201 | 78.6 | 31 | 86 | 23.7 | 51331 | 54552 | 43863 | 43097 |
| Greene | 46898 | 88.2 | 43286 | 33883 | 22320 | 14464 | 86.1 | 71 | 70 | -0.7 | 47050 | 48204 | 42663 | 47221 |
| Grundy | 56750 | 106.7 | 56184 | 39396 | 26314 | 18006 | 107.2 | 16 | 11 | -3.5 | 61069 | 56048 | 50297 | 58784 |
| Guthrie | 51013 | 95.9 | 50090 | 36495 | 23356 | 13352 | 79.5 | 39 | 85 | 17.0 | 54446 | 51920 | 44643 | 43590 |
| Hamilton | 49813 | 93.7 | 46188 | 38658 | 25847 | 16304 | 97.1 | 47 | 29 | -6.4 | 50204 | 54998 | 49405 | 53228 |
| Hancock | 52981 | 99.6 | 47318 | 37703 | 25445 | 15967 | 95.0 | 33 | 41 | 1.6 | 51433 | 53639 | 48636 | 52127 |
| Hardin | 51019 | 95.9 | 44694 | 35429 | 23457 | 15541 | 92.5 | 38 | 53 | 0.6 | 48580 | 50404 | 44836 | 50737 |
| Harrison | 53567 | 100.7 | 51303 | 38141 | 22258 | 13895 | 82.7 | 29 | 75 | 18.1 | 55764 | 54262 | 42545 | 45363 |
| Henry | 49321 | 92.7 | 41983 | 39087 | 24952 | 15662 | 93.2 | 51 | 45 | -3.5 | 45634 | 55608 | 47694 | 51132 |
| Howard | 49869 | 93.8 | 46068 | 34641 | 21913 | 13795 | 82.1 | 46 | 77 | 10.7 | 50074 | 49283 | 41885 | 45036 |
| Humboldt | 47252 | 88.8 | 45282 | 38201 | 24557 | 15843 | 94.3 | 65 | 43 | -8.6 | 49219 | 54347 | 46939 | 51723 |
| Ida | 46993 | 88.4 | 44521 | 34805 | 22859 | 13632 | 81.1 | 69 | 81 | 5.6 | 48392 | 49516 | 43693 | 44504 |
| Iowa | 59375 | 111.6 | 56053 | 41222 | 26579 | 17063 | 101.6 | 9 | 15 | 6.6 | 60927 | 58645 | 50804 | 55706 |
| Jackson | 49028 | 92.2 | 42489 | 34529 | 22487 | 16308 | 97.1 | 52 | 28 | -7.9 | 46184 | 49123 | 42982 | 53241 |
| Jasper | 55033 | 103.5 | 46396 | 41683 | 28702 | 16986 | 101.1 | 24 | 17 | -0.8 | 50430 | 59301 | 54862 | 55454 |
| Jefferson | 42899 | 80.7 | 44167 | 33851 | 22630 | 14162 | 84.3 | 93 | 73 | -7.2 | 48008 | 48159 | 43256 | 46235 |

Table 1. Median Household Income, Nominal \$ (Current \$) and Adjusted to 2015 \$ (Real \$), 2011-2015, 2006-2010 American Community Survey ${ }^{1}$ and Decennial Censuses, 1979 -1999. ${ }^{2}$ (continued)

|  | Nominal \$ (Current \$) Unadjusted for Inflation |  |  |  |  |  |  |  |  | 2015 \$ (Real \$) Adjusted for Inflation |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County | $\begin{gathered} \hline 2011- \\ 2015^{1} \\ \text { Estimate } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \% \text { IA } \\ 11-15 \\ \text { Median }^{1} \\ \hline \end{gathered}$ | $\begin{gathered} 2006- \\ 2010^{1} \\ \text { Estimate } \\ \hline \end{gathered}$ | $1999{ }^{2}$ | $1989{ }^{2}$ | $1979{ }^{2}$ | $\begin{gathered} \text { \% IA } \\ 1979 \\ \text { Median }^{2} \\ \hline \end{gathered}$ | $\begin{gathered} \text { Rank } \\ 11-15^{1} \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Rank } \\ & 1979^{2} \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { \% Change, } \\ \text { Adjusted } \\ 1979-2015 \\ \hline \end{gathered}$ | $\begin{gathered} 2006- \\ 2010 \\ \text { Estimate } \\ \hline \end{gathered}$ | 1999 | 1989 | 1979 |
| Johnson | 55700 | 104.7 | 51380 | 40060 | 27862 | 16253 | 96.7 | 19 | 31 | 5.0 | 55848 | 56992 | 53256 | 53061 |
| Jones | 55060 | 103.5 | 47955 | 37449 | 24480 | 16297 | 97.0 | 23 | 30 | 3.5 | 52125 | 53278 | 46792 | 53205 |
| Keokuk | 43838 | 82.4 | 42698 | 34025 | 22234 | 13501 | 80.4 | 87 | 82 | -0.5 | 46411 | 48406 | 42499 | 44077 |
| Kossuth | 51496 | 96.8 | 48277 | 34562 | 23321 | 15373 | 91.5 | 36 | 55 | 2.6 | 52475 | 49170 | 44576 | 50188 |
| Lee | 43312 | 81.4 | 42444 | 36193 | 24671 | 16590 | 98.8 | 92 | 21 | -20.0 | 46135 | 51491 | 47157 | 54161 |
| Linn | 59322 | 111.5 | 53674 | 46206 | 32137 | 20084 | 119.6 | 10 | 3 | -9.5 | 58341 | 65736 | 61428 | 65568 |
| Louisa | 51144 | 96.2 | 50457 | 39086 | 25590 | 16674 | 99.3 | 37 | 20 | -6.0 | 54844 | 55607 | 48913 | 54436 |
| Lucas | 43962 | 82.7 | 43005 | 30876 | 21316 | 12073 | 71.9 | 85 | 93 | 11.5 | 46744 | 43926 | 40744 | 39415 |
| Lyon | 57130 | 107.4 | 49506 | 36878 | 22676 | 14776 | 88.0 | 15 | 66 | 18.4 | 53811 | 52465 | 43344 | 48239 |
| Madison | 60060 | 112.9 | 53183 | 41845 | 26644 | 15591 | 92.8 | 8 | 50 | 18.0 | 57808 | 59532 | 50928 | 50900 |
| Mahaska | 48726 | 91.6 | 45025 | 37314 | 23115 | 14245 | 84.8 | 54 | 72 | 4.8 | 48940 | 53086 | 44183 | 46506 |
| Marion | 54693 | 102.8 | 53370 | 42401 | 27991 | 16549 | 98.5 | 25 | 22 | 1.2 | 58011 | 60323 | 53503 | 54027 |
| Marshall | 53351 | 100.3 | 45232 | 38268 | 28333 | 17856 | 106.3 | 30 | 12 | -8.5 | 49165 | 54443 | 54156 | 58294 |
| Mills | 63979 | 120.3 | 59481 | 42428 | 27420 | 16417 | 97.7 | 3 | 25 | 19.4 | 64653 | 60361 | 52411 | 53597 |
| Mitchell | 49488 | 93.1 | 48506 | 34843 | 24519 | 14450 | 86.0 | 49 | 71 | 4.9 | 52724 | 49570 | 46866 | 47175 |
| Monona | 40302 | 75.8 | 41398 | 33235 | 20714 | 13438 | 80.0 | 98 | 83 | -8.1 | 44998 | 47282 | 39593 | 43871 |
| Monroe | 46304 | 87.1 | 43245 | 34877 | 20745 | 13190 | 78.5 | 74 | 87 | 7.5 | 47005 | 49618 | 39653 | 43061 |
| Montgomery | 42418 | 79.8 | 38624 | 33214 | 23312 | 14830 | 88.3 | 94 | 63 | -12.4 | 41983 | 47253 | 44559 | 48415 |
| Muscatine | 53676 | 100.9 | 51025 | 41803 | 29786 | 18233 | 108.5 | 28 | 9 | -9.8 | 55462 | 59472 | 56934 | 59525 |
| 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 | 51873 |
| Pocahontas | 45069 | 84.7 | 42105 | 33362 | 23517 | 14611 | 87.0 | 78 | 68 | -5.5 | 45766 | 47463 | 44951 | 47700 |
| Polk | 60061 | 112.9 | 56094 | 46116 | 31221 | 18849 | 112.2 | 7 | 6 | -2.4 | 60972 | 65608 | 59677 | 61536 |
| Pottawattamie | 51976 | 97.7 | 48728 | 40089 | 26639 | 16930 | 100.8 | 35 | 18 | -6.0 | 52965 | 57033 | 50919 | 55271 |
| Poweshiek | 51006 | 95.9 | 50998 | 37836 | 26063 | 15566 | 92.7 | 40 | 51 | 0.4 | 55433 | 53828 | 49818 | 50818 |
| Ringgold | 47042 | 88.5 | 42336 | 29110 | 20761 | 10011 | 59.6 | 67 | 99 | 43.9 | 46017 | 41414 | 39683 | 32683 |
| Sac | 49572 | 93.2 | 42986 | 32874 | 21818 | 14781 | 88.0 | 48 | 65 | 2.7 | 46724 | 46769 | 41704 | 48255 |
| Scott | 55114 | 103.6 | 49964 | 42701 | 29979 | 20767 | 123.6 | 22 | 1 | -18.7 | 54309 | 60749 | 57303 | 67798 |
| Shelby | 50952 | 95.8 | 44085 | 37442 | 22702 | 15214 | 90.6 | 41 | 58 | 2.6 | 47918 | 53268 | 43393 | 49669 |
| Sioux | 61627 | 115.9 | 51557 | 40536 | 25692 | 16163 | 96.2 | 5 | 34 | 16.8 | 56040 | 57669 | 49108 | 52767 |
| Story | 50438 | 94.8 | 48248 | 40442 | 26668 | 17006 | 101.2 | 44 | 16 | -9.2 | 52443 | 57536 | 50974 | 55519 |
| Tama | 55203 | 103.8 | 46288 | 37419 | 24297 | 15448 | 92.0 | 21 | 54 | 9.5 | 50313 | 53235 | 46442 | 50433 |
| Taylor | 44246 | 83.2 | 40300 | 31297 | 18641 | 11747 | 69.9 | 84 | 94 | 15.4 | 43804 | 44525 | 35631 | 38350 |
| Union | 44351 | 83.4 | 40879 | 31905 | 21550 | 13661 | 81.3 | 83 | 80 | -0.6 | 44434 | 45390 | 41191 | 44599 |
| Van Buren | 45111 | 84.8 | 40073 | 31094 | 19244 | 11569 | 68.9 | 77 | 95 | 19.4 | 43558 | 44237 | 36784 | 37769 |
| Wapello | 42095 | 79.2 | 40093 | 32188 | 21060 | 14915 | 88.8 | 96 | 61 | -13.6 | 43579 | 45793 | 40255 | 48693 |
| Warren | 64447 | 121.2 | 62034 | 50349 | 32452 | 20087 | 119.6 | 2 | 2 | -1.7 | 67428 | 71630 | 62030 | 65578 |
| Washington | 56390 | 106.0 | 50710 | 39103 | 25822 | 15043 | 89.5 | 17 | 59 | 14.8 | 55119 | 55631 | 49357 | 49111 |
| Wayne | 43358 | 81.5 | 35425 | 29380 | 17599 | 10828 | 64.5 | 90 | 98 | 22.7 | 38505 | 41798 | 33639 | 35350 |
| Webster | 42408 | 79.7 | 40806 | 35334 | 23692 | 16369 | 97.4 | 95 | 26 | -20.6 | 44354 | 50269 | 45286 | 53440 |
| Winnebago | 47668 | 89.6 | 41871 | 38381 | 23480 | 14873 | 88.5 | 64 | 62 | -1.8 | 45512 | 54604 | 44880 | 48556 |
| Winneshiek | 54429 | 102.3 | 50693 | 38908 | 24383 | 13718 | 81.7 | 27 | 79 | 21.5 | 55101 | 55353 | 46606 | 44785 |
| Woodbury | 46720 | 87.8 | 44343 | 38509 | 25186 | 16054 | 95.6 | 72 | 37 | -10.9 | 48199 | 54786 | 48141 | 52411 |
| Worth | 48459 | 91.1 | 49673 | 36444 | 22902 | 15617 | 93.0 | 57 | 48 | -5.0 | 53992 | 51848 | 43776 | 50985 |
| Wright | 43698 | 82.2 | 44035 | 36197 | 24582 | 15633 | 93.1 | 89 | 47 | -14.4 | 47864 | 51496 | 46987 | 51037 |
| State of Iowa | 53183 | 100.0 | 48872 | 39469 | 26229 | 16799 | 100.0 |  |  | -3.0 | 53122 | 56151 | 50135 | 54844 |
| United States | 53889 | 101.3 | 51914 | 41994 | 30056 | 16841 | 100.3 |  |  | -2.0 | 56428 | 59744 | 57450 | 54981 |

[^0]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 20062010 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 20072009. 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 20112015 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


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


[^1]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). ${ }^{8}$

Table 2. Median Family Income, Nominal \$ (Unadjusted), 2011-2015, 2006-2010 American Community Survey ${ }^{1}$ and Decennial Census, $1949-1999 .{ }^{2}$

|  | Nominal \$ (Current \$) Unadjusted for Inflation |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County | $\begin{gathered} \hline \text { 2011-2015 } \\ \text { Estimate } \end{gathered}$ | \% IA 11-15 <br> Median ${ }^{1}$ | $\begin{gathered} 2006-2010^{1} \\ \text { Estimate } \\ \hline \end{gathered}$ | $1999^{2}$ | $1989{ }^{2}$ | $1979{ }^{2}$ | $\begin{array}{r} \text { \% IA } 1979 \\ \text { Median }^{2} \\ \hline \end{array}$ | $1969{ }^{2}$ | $1959{ }^{2}$ | $1949^{2}$ | $\begin{gathered} \text { Rank } \\ 11-15^{1} \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Rank } \\ & 1979^{2} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Rank } \\ & 1949^{2} \\ & \hline \end{aligned}$ |
| 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 | 46547 | 27452 | 16228 | 80.9 | 7805 | 3762 | 2317 | 36 | 84 | 86 |
| Greene | 59242 | 87.8 | 60133 | 41230 | 27272 | 17785 | 88.7 | 8619 | 4005 | 2750 | 66 | 61 | 51 |
| Grundy | 69940 | 103.7 | 68151 | 46627 | 30847 | 20611 | 102.8 | 8413 | 4247 | 3050 | 18 | 15 | 32 |
| Guthrie | 61006 | 90.4 | 61951 | 43601 | 26615 | 16254 | 81.1 | 7362 | 3491 | 2165 | 55 | 83 | 89 |
| Hamilton | 60427 | 89.6 | 61472 | 45771 | 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 | 41891 | 28539 | 18891 | 94.2 | 8718 | 4594 | 3003 | 27 | 36 | 40 |
| Harrison | 65147 | 96.6 | 63283 | 44586 | 27293 | 16635 | 83.0 | 7449 | 3990 | 2397 | 35 | 77 | 82 |
| Henry | 60335 | 89.4 | 53985 | 46985 | 30385 | 18377 | 91.6 | 9128 | 4639 | 2746 | 58 | 47 | 52 |
| Howard | 61172 | 90.7 | 55582 | 43284 | 26209 | 16779 | 83.7 | 7203 | 3337 | 2277 | 54 | 74 | 87 |
| Humboldt | 59972 | 88.9 | 57063 | 46510 | 29082 | 18616 | 92.8 | 8268 | 4751 | 3170 | 62 | 40 | 18 |
| Ida | 60133 | 89.1 | 58635 | 43179 | 27287 | 16407 | 81.8 | 8847 | 3910 | 3051 | 59 | 82 | 31 |
| Iowa | 71674 | 106.2 | 64578 | 48946 | 31687 | 20195 | 100.7 | 7689 | 4354 | 2744 | 13 | 17 | 53 |
| Jackson | 58516 | 86.7 | 54210 | 42526 | 27436 | 19439 | 96.9 | 8216 | 4585 | 2602 | 74 | 27 | 67 |
| Jasper | 68685 | 101.8 | 56484 | 50071 | 32927 | 19582 | 97.7 | 9361 | 5345 | 3035 | 22 | 25 | 33 |
| Jefferson | 59173 | 87.7 | 55352 | 43819 | 29439 | 16468 | 82.1 | 8458 | 4708 | 2411 | 67 | 79 | 80 |

Table 2. Median Family Income, Nominal \$ (Unadjusted), 2011-2015, 2006 - 2010 American Community Survey ${ }^{1}$ and Decennial Census, 1949 - $1999 .{ }^{2}$ (continued)

|  | Nominal \$ (Current \$) Unadjusted for Inflation |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County | $\begin{gathered} \text { 2011-2015 }{ }^{1} \\ \text { Estimate } \\ \hline \end{gathered}$ | $\begin{gathered} \text { \% IA } 11-15 \\ \text { Median }^{1} \\ \hline \end{gathered}$ | $\begin{gathered} \hline 2006-2010^{1} \\ \text { Estimate } \\ \hline \end{gathered}$ | $1999{ }^{2}$ | $1989{ }^{2}$ | $1979{ }^{2}$ | \% IA 1979 <br> Median ${ }^{2}$ | $1969{ }^{2}$ | $1959{ }^{2}$ | $1949{ }^{2}$ | $\begin{gathered} \text { Rank } \\ 11-15^{1} \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Rank } \\ & 1979^{2} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Rank } \\ & 1949^{2} \end{aligned}$ |
| Johnson | 83245 | 123.4 | 74547 | 60112 | 39606 | 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 | 23194 | 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 | 48156 | 37194 | 22801 | 13913 | 69.4 | 6005 | 2867 | 2151 | 95 | 97 | 91 |
| Union | 57736 | 85.6 | 50546 | 41453 | 26441 | 16448 | 82.0 | 7167 | 3861 | 2541 | 79 | 80 | 71 |
| Van Buren | 58011 | 86.0 | 50064 | 36420 | 22574 | 14151 | 70.6 | 6011 | 3286 | 2055 | 78 | 95 | 94 |
| Wapello | 53242 | 78.9 | 49309 | 39224 | 26506 | 17961 | 89.6 | 8511 | 5388 | 3084 | 97 | 58 | 27 |
| Warren | 76605 | 113.5 | 74042 | 56344 | 36646 | 22239 | 110.9 | 9958 | 5217 | 2578 | 7 | 7 | 69 |
| Washington | 70000 | 103.8 | 60466 | 45636 | 30295 | 18183 | 90.7 | 8776 | 4233 | 2866 | 17 | 54 | 47 |
| Wayne | 58397 | 86.6 | 44784 | 35534 | 22175 | 13128 | 65.5 | 6024 | 3021 | 1781 | 76 | 98 | 99 |
| Webster | 56373 | 83.6 | 54129 | 43772 | 28769 | 19981 | 99.6 | 9136 | 5494 | 3277 | 87 | 21 | 14 |
| Winnebago | 60086 | 89.1 | 58700 | 47306 | 28750 | 17484 | 87.2 | 8575 | 4308 | 2853 | 60 | 66 | 48 |
| Winneshiek | 66933 | 99.2 | 61558 | 45966 | 28876 | 16777 | 83.7 | 7762 | 3916 | 2373 | 26 | 75 | 84 |
| Woodbury | 57590 | 85.4 | 55957 | 46499 | 30678 | 19223 | 95.9 | 9035 | 5539 | 3377 | 80 | 30 | 7 |
| Worth | 61265 | 90.8 | 56659 | 41763 | 28582 | 18425 | 91.9 | 8505 | 4166 | 3025 | 52 | 46 | 37 |
| Wright | 59263 | 87.8 | 53890 | 44043 | 29201 | 18537 | 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 |  |  |  |

${ }^{1}$ American Community Survey 5-Year Estimates 2011-2015, 2006-2010, U.S. Census Bureau; ${ }^{2}$ Decennial 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. ${ }^{1}$

| Highest Rank | $\begin{aligned} & \text { Highest in } \\ & 2011-2015^{1} \end{aligned}$ |  | Highest in $1979^{2}$ | $\begin{gathered} \text { Rank in } \\ 2011-2015^{1} \end{gathered}$ |  | Highest in $1949^{2}$ | Rank in $2011-2015^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Dallas | 1 | Scott | 10 | 1 | Black Hawk | 49 |
| 2 | Johnson | 2 | Linn | 6 | 2 | Polk | 9 |
| 3 | Mills | 3 | Polk | 9 | 3 | Scott | 10 |
| 4 | Bremer | 4 | Dubuque | 24 | 4 | Dubuque | 24 |
| 5 | Story | 5 | Black Hawk | 49 | 5 | Linn | 6 |
| 6 | Linn | 6 | Johnson | 2 | 6 | Cerro Gordo | 47 |
| 7 | Warren | 7 | Warren | 7 | 7 | Woodbury | 80 |
| 8 | Benton | 8 | Story | 5 | 8 | Clinton | 32 |
| 9 | Polk | 9 | Dallas | 1 | 9 | Hancock | 40 |
| 10 | Scott | 10 | Clinton | 32 | 10 | Des Moines | 94 |
| 11 | Plymouth | 11 | Muscatine | 43 | 11 | Osceola | 41 |
| 12 | Madison | 12 | Bremer | 4 | 12 | Cherokee | 34 |
| 13 | Iowa | 13 | Des Moines | 94 | 13 | Buena Vista | 73 |
| 14 | Dickinson | 14 | Marshall | 50 | 14 | Webster | 87 |
| 15 | Sioux | 15 | Grundy | 18 | 15 | Pottawattamie | 33 |


| Lowest Rank | $\begin{aligned} & \text { Lowest in } \\ & 2011-2015^{1} \end{aligned}$ |  | Lowest in $1979^{2}$ | Rank in $2011-2015^{1}$ |  | $\begin{gathered} \text { Lowest in } \\ 1949^{2} \end{gathered}$ | $\begin{gathered} \text { Rank in } \\ 2011-2015^{1} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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.


[^2]Figure 9. Inflation adjusted median family income percentage change, 1979-2015

$\square$ Decrease 10.0\%-19.1\% $\square$ Decrease $0.1 \%-9.9 \% \square$ Increase $0.1 \%-9.9 \% \square$ Increase 10.0\%-24.9\% $\square$ Increase 25.0\% - 37.6\%

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 20062010 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 ${ }^{1}$ and Decennial Census, 1949-1999. ${ }^{2}$

| Name | $\begin{gathered} 2011- \\ 2015^{1} \\ \text { Estimate } \end{gathered}$ | 2015 Real \$ Adjusted for Inflation |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \hline 2006- \\ 2010^{1} \\ \text { Estimate } \end{gathered}$ | $1999{ }^{2}$ | $1989{ }^{2}$ | $1979{ }^{2}$ | $1969{ }^{2}$ | $1959{ }^{2}$ | $1949^{2}$ | $\begin{gathered} \hline \text { \% Change, } \\ \text { Adjusted } \\ \text { 1979-2015 } \end{gathered}$ | \% 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 | 64806 | 66221 | 52473 | 52980 | 50406 | 30641 | 23074 | 22.9 | 129.6 |
| Greene | 59242 | 65362 | 58657 | 52128 | 58063 | 55663 | 32620 | 27386 | 2.0 | 112.0 |
| Grundy | 69940 | 74077 | 66335 | 58962 | 67289 | 54333 | 34591 | 30374 | 3.9 | 121.5 |
| 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 Survey ${ }^{1}$ and Decennial Census, 1949-1999. ${ }^{2}$ (continued)

| Name | $\begin{gathered} 2011- \\ 2015^{1} \\ \text { Estimate } \\ \hline \end{gathered}$ | 2015 Real \$ Adjusted for Inflation |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \hline 2006- \\ 2010^{1} \\ \text { Estimate } \end{gathered}$ | $1999{ }^{2}$ | $1989{ }^{2}$ | $1979{ }^{2}$ | $1969{ }^{2}$ | $1959{ }^{2}$ | $1949{ }^{2}$ | $\begin{gathered} \text { \% Change, } \\ \text { Adjusted } \\ \text { 1979-2015 } \end{gathered}$ | $\begin{gathered} \hline \text { \% Change, } \\ \text { Adjusted } \\ \text { 1949-1979 } \end{gathered}$ |
| Johnson | 83245 | 81029 | 85520 | 75704 | 72783 | 62935 | 43241 | 30215 | 14.4 | 140.9 |
| Jones | 66158 | 64312 | 62980 | 53791 | 62160 | 52189 | 36343 | 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 |

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

The family income picture by the 20112015 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 micropolitan ${ }^{8}$ ) 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, wellpaying 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 $\left(\right.$ 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 ${ }^{1}$ 5-Year Estimates, 2011-2015 and 2006-2010.

|  | Median Household Income Nominal \$ (Current \$) Unadjusted |  |  |  |  |  | Median Family Income Nominal \$ (Current \$) Unadjusted |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County | $\begin{gathered} \text { 2011- } \\ 2015^{1} \\ \text { Estimate } \end{gathered}$ | $\begin{aligned} & 2011- \\ & 2015^{1} \\ & \text { MOE } \end{aligned}$ | $\begin{gathered} 2011- \\ 2015 \\ \text { CV \% } \end{gathered}$ | $\begin{gathered} \hline 2006- \\ 2010^{1} \\ \text { Estimate } \end{gathered}$ | $\begin{aligned} & 2006- \\ & 2010^{1} \\ & \text { MOE } \end{aligned}$ | $\begin{gathered} 2006- \\ 2010 \\ \text { CV \% } \end{gathered}$ | $\begin{gathered} \hline 2011- \\ 2015^{1} \\ \text { Estimate } \end{gathered}$ | $\begin{aligned} & 2011- \\ & 2015^{1} \\ & \text { MOE } \end{aligned}$ | $\begin{gathered} 2011- \\ 2015 \\ \text { CV \% } \end{gathered}$ | $\begin{gathered} \hline 2006- \\ 2010^{1} \\ \text { Estimate } \end{gathered}$ | $\begin{aligned} & 2006- \\ & 2010^{1} \\ & \text { MOE } \end{aligned}$ | $\begin{gathered} 2006- \\ 2010 \\ \text { CV \% } \end{gathered}$ |
| 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 | 2.1 | 92428 | +/-2,914 | 1.9 | 84018 | +/-2,458 | 1.8 |
| Davis | 48888 | +/-2,904 | 3.6 | 46597 | +/-3,040 | 4.0 | 59088 | +/-5,459 | 5.6 | 52855 | +/-3,194 | 3.7 |
| Decatur | 38560 | +/-2,684 | 4.2 | 37138 | +/-3,833 | 6.3 | 51322 | +/-3,453 | 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 | 44423 | +/-1,418 | 1.9 | 41937 | +/-1,484 | 2.2 | 55297 | +/-2,314 | 2.5 | 53946 | +/-2,037 | 2.3 |
| Dickinson | 57265 | +/-2,366 | 2.5 | 50174 | +/-2,273 | 2.8 | 71327 | +/-3,998 | 3.4 | 59648 | +/-2,109 | 2.1 |
| Dubuque | 54605 | +/-1,219 | 1.4 | 48573 | +/-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 ${ }^{1}$ 5-Year Estimates, 2011-2015 and 2006-2010. (continued)

|  | Median Household Income Nominal \$ (Current \$) Unadjusted |  |  |  |  |  | Median Family Income Nominal \$ (Current \$) Unadjusted |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County | $\begin{gathered} \hline 2011- \\ 2015^{1} \\ \text { Estimate } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 2011- \\ & 2015^{1} \\ & \text { MOE } \end{aligned}$ | $\begin{gathered} \hline 2011- \\ 2015 \\ \text { CV \% } \end{gathered}$ | $\begin{gathered} \hline 2006- \\ 2010^{1} \\ \text { Estimate } \\ \hline \end{gathered}$ | $\begin{aligned} & 2006- \\ & 2010^{1} \\ & \text { MOE } \end{aligned}$ | $\begin{gathered} 2006- \\ 2010 \\ \text { CV \% } \end{gathered}$ | $\begin{gathered} \hline 2011- \\ 2015^{1} \\ \text { Estimate } \\ \hline \end{gathered}$ | $\begin{aligned} & 2011- \\ & 2015^{1} \\ & \text { MOE } \end{aligned}$ | $\begin{gathered} 2011- \\ 2015 \\ \text { CV \% } \end{gathered}$ | $\begin{gathered} 2006- \\ 2010^{1} \\ \text { Estimate } \\ \hline \end{gathered}$ | $\begin{aligned} & 2006- \\ & 2010^{1} \\ & \text { MOE } \end{aligned}$ | $\begin{gathered} 2006- \\ 2010 \\ \text { CV \% } \end{gathered}$ |
| Johnson | 55700 | +/-2,099 | 2.3 | 51380 | +/-1,565 | 1.9 | 83245 | +/-2,184 | 1.6 | 74547 | +/-2,183 | 1.8 |
| Jones | 55060 | +/-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 | 1.9 |
| Kossuth | 51496 | +/-2,160 | 2.5 | 48277 | +/-3,082 | 3.9 | 64974 | +/-2,672 | 2.5 | 61012 | +/-3,750 | 3.7 |
| Lee | 43312 | +/-1,869 | 2.6 | 42444 | +/-1,937 | 2.8 | 55694 | +/-2,093 | 2.3 | 50630 | +/-2,129 | 2.6 |
| Linn | 59322 | +/-1,387 | 1.4 | 53674 | +/-1,131 | 1.3 | 77036 | +/-1,716 | 1.4 | 69250 | +/-1,376 | 1.2 |
| Louisa | 51144 | +/-3,292 | 3.9 | 50457 | +/-2,940 | 3.5 | 60068 | +/-2,335 | 2.4 | 54923 | +/-3,796 | 4.2 |
| Lucas | 43962 | +/-2,108 | 2.9 | 43005 | +/-4,125 | 5.8 | 57183 | +/-3,555 | 3.8 | 56647 | +/-3,180 | 3.4 |
| Lyon | 57130 | +/-2,941 | 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 | 5.3 |
| Mahaska | 48726 | +/-3,067 | 3.8 | 45025 | +/-2,613 | 3.5 | 57459 | +/-1,792 | 1.9 | 57877 | +/-3,177 | 3.3 |
| Marion | 54693 | +/-2,857 | 3.2 | 53370 | +/-2,227 | 2.5 | 69510 | +/-2,948 | 2.6 | 65817 | +/-2,035 | 1.9 |
| Marshall | 53351 | +/-1,636 | 1.9 | 45232 | +/-1,847 | 2.5 | 61662 | +/-1,628 | 1.6 | 55716 | +/-2,371 | 2.6 |
| 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 | 40302 | +/-2,695 | 4.1 | 41398 | +/-2,917 | 4.3 | 55602 | +/-4,748 | 5.2 | 51098 | +/-3,142 | 3.7 |
| Monroe | 46304 | +/-4,395 | 5.8 | 43245 | +/-2,837 | 4.0 | 56724 | +/-5,204 | 5.6 | 53052 | +/-7,450 | 8.5 |
| Montgomery | 42418 | +/-3,776 | 5.4 | 38624 | +/-2,180 | 3.4 | 54088 | +/-3,467 | 3.9 | 50595 | +/-3,009 | 3.6 |
| Muscatine | 53676 | +/-1,919 | 2.2 | 51025 | +/-1,758 | 2.1 | 64083 | +/-2,478 | 2.4 | 61445 | +/-3,306 | 3.3 |
| 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 | 3.7 |
| Page | 43912 | +/-2,020 | 2.8 | 40778 | +/-3,134 | 4.7 | 60519 | +/-4,566 | 4.6 | 52791 | +/-3,646 | 4.2 |
| Palo Alto | 47113 | +/-2,245 | 2.9 | 42800 | +/-3,200 | 4.5 | 59606 | +/-3,903 | 4.0 | 57208 | +/-2,507 | 2.7 |
| Plymouth | 57130 | +/-2,586 | 2.8 | 56379 | +/-3,295 | 3.6 | 72047 | +/-2,953 | 2.5 | 69261 | +/-2,530 | 2.2 |
| 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 | 55203 | +/-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 | 4.1 |
| 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 | 43698 | +/-3,902 | 5.4 | 44035 | +/-2,101 | 2.9 | 59263 | +/-2,997 | 3.1 | 53890 | +/-3,474 | 3.9 |
| State of Iowa | 53183 | +/-313 | 0.4 | 48872 | +/-269 | 0.3 | 67466 | +/-363 | 0.3 | 61804 | +/-329 | 0.3 |
| United States | 53889 | +/-110 | 0.1 | 51914 | +/-89 | 0.1 | 66011 | +/-191 | 0.2 | 62982 | +/-199 | 0.2 |

[^3]
## Notes:

${ }^{1}$ Information 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/
${ }^{2}$ The 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
${ }^{3}$ Because 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.
${ }^{4}$ The 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.
${ }^{5}$ Bureau 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
${ }^{6}$ 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 2006-2010 median family income $=0.89$; the coefficient between 2011-2015 median household income and 2011-2015 median family income $=0.90$.
${ }^{7}$ 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 $1989=0.88 ; 1999=0.79 ; 2006-2010=0.58 ; 2011-2015=0.59$
${ }^{8}$ A 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
${ }^{9} \mathrm{http}$ ://www.indicators.extension.iastate.edu

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[^0]:    ${ }^{1}$ American Community Survey 5-Year Estimates 2011-2015, 2006-2010, U.S. Census Bureau; ${ }^{2}$ Decennial Census 1979-1999, U.S. Census Bureau

[^1]:    $\square$ decrease 9 to increase 9 places in rank $\square$ increase in rank 10 to 29 places $\square$ increase in rank 30 to 74 places

[^2]:    $\square$ Increase 76.3\%-99.9\% $\square$ Increase 100.0\% - 109.9\% $\square$ Increase 110.0\% - 139.9\% $\square$ Increase 140.0\% - 182.8\%

[^3]:    ${ }^{1}$ American Community Survey, 5-Year Estimates 2011-2015, 2006-2010, U.S. Census Bureau

