

# Data For You

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## The American Community Survey: What It Is and How To Use It



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**American Community Survey**

A Webinar for

Iowa State University Extension Staff

Professional Development

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The American Community Survey (ACS) is a nationwide survey carried out by the U.S. Census Bureau to measure and describe the social, economic, housing, and demographic characteristics of the U.S. population, including states, regions, counties, and local areas. This publication provides an introduction and overview of the ACS and is meant to present some of the basics about the ACS data and how to use them. This publication is designed to accompany a webinar produced as a professional development offering for Iowa State University Extension and Outreach staff. This offering is part of a data access, portal, and training project being carried out by Communities and Economic Development Extension at Iowa State University.<sup>1</sup>

### Introduction

The American Community Survey (ACS) covers a broad range of topics describing the social, economic, housing, and demographic characteristics of the population. The ACS is now the data program from which we get much of this type of information about our population. The ACS has replaced the portion of the Decennial Census that was commonly called the “long form” and which was conducted with sampling rather than a complete count or 100% coverage. In 2000 and earlier, the complete count or “short form” of the Decennial Census covered basic demographics and housing while the “long form” included social, work, economic, and detailed housing information (Figure 1). This changed in 2010 in that the “long form” was replaced with the ACS while the “short form” continued to collect demographic, household, and some housing information from every household in the U.S. (Figure 2).

The ACS is carried out in a different way than was the “long form” of the Decennial Census. Rather than being done all at one time in April of the census year, the ACS is a continuous, on-going, monthly, sample survey of households carried out across the U.S.

Geographic areas now have sampling done on a monthly basis and the data from an entire period of months are pooled and weighted to produce the estimates of the population characteristics. The ACS data are described as *characteristics* of the population, *not* counts, and are also described as “estimates.” Among the new features of the ACS data that are especially important to users are the *period estimates* and the *margins of error*. This publication will give an overview of these new features.

The ACS topics (Figure 3) are similar in scope to those on the “long form” of the Decennial Census in 2000, but the Census Bureau cautions that there are differences in items, wording, time frames of reference, residency rules, and other aspects of the questions that may impact the ability to compare

information from the ACS with earlier “long form” data. Items listed under the Demographic heading in Figure 3 as well as housing tenure are those that were also covered in the 2010 Decennial Census. Users needing to make aggregations, comparisons, statistical significance determinations or other more complex analysis with ACS data should consult materials and handbooks that give more in-depth and detailed coverage than that contained in this publication. The Census Bureau and other entities provide detailed handbooks and guidance on the ACS and readers can find these references at the end of this report.<sup>2</sup>

### Period Estimates

One new aspect of the ACS is that the data are now given as *period estimates*. The designation as “period” estimates comes from the fact that the

#### Figure 1. Decennial Census 2000 – 2 Parts

- **Complete Count, 100% coverage, “short” form**
  - **basic demographics, households**
  - **very basic housing**
- **Sample portion, “long” form**
  - **social characteristics**
  - **work and economic characteristics**
  - **most of the housing data**

#### Figure 2. Decennial Census 2010 – only 1 Part

- **Complete Count, 100% coverage, “short” form**
  - **basic demographics, households**
  - **very basic housing**
- **NO sample portion, “long” form**
  - **no social characteristics**
  - **no work and economic characteristics**
  - **no for most of the housing data**

data are collected over a period of time, not just one point-in-time, and represent information from *all* the months included in the period. There are three time intervals used for pooling the data: one year, three years, and five years (all calendar years). Thus, one-year estimates include 12 months of data, three-year estimates include 36 months, and five-year estimates have 60 months (Figure 4).<sup>3</sup> Data from each entire period are pooled, weighted, and controlled to a total population from the Census Bureau’s annual estimates program.<sup>4</sup> The Census Bureau notes that the estimate “describes the average characteristics of an area over a specific time period.”<sup>5</sup>

The sets of estimates that are available for any particular geographic area depend on the population size of the area. Geographic regions with less than 20,000 people will have 5-year estimates as the only period set available. Regions with population from 20,000 to 64,999 will have 3-year period estimates available as well as those for five years. The regions that have 65,000 or more people also have 1-year estimates in addition to the other two time period sets. For Iowa, the population criteria for estimates result in ten counties and six cities having all three estimate sets. An additional 26 counties and 16 cities are large enough to have 3-year estimates, but the other 63 counties and all the remaining incorporated places have only the 5-year estimate sets (Figures 5 - 6, Tables 1 - 2).

One advantage of the ACS data is that updates to the estimates are provided annually rather than every ten years as with the Decennial Census. The Census Bureau began releasing ACS data for all the geographic regions in the U.S. with the 2010 sets of estimates. Before that, ACS data were only available for larger population areas. As the period estimate sets transition from one year to the next, the oldest year of data is dropped from the set and the new year of data is added (Figure 7).<sup>3</sup> The period estimates should be labeled with the entire period of years included in the set. For example, 3-year estimates that include the years 2010

through 2012 would be labeled 2010 - 2012. In practice, however, it is common to see just the *last year* of the set used in a description. Thus, 1-year, 3-year, and 5-year estimates with 2012 as the last year in the set are all *2012* estimates (Figure 8).

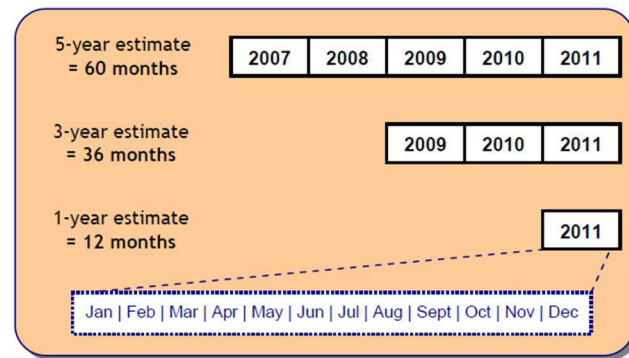
The Census Bureau has been releasing ACS data annually for several years. The most recent sets, as of this writing, have 2012 as the last year in the period (Figure 8). Because of the differing number of years in the estimates sets, each interval period has

a different number of sets released. For example, using 2006 as a starting year, there have been seven sets (2006 - 2012) of 1-year estimates for geographic regions of qualifying population size. For 3-year estimates, five sets have been released, but for 5-year estimates, only three sets are available (Figure 9). In general, it is recommended to only use estimates dated 2006 or later. Estimates from earlier years were available only for larger population areas and did not include group quarters populations in the tabulations.

### Figure 3. American Community Survey – Content

- **SOCIAL**
  - Ancestry
  - Citizenship & Year of Entry
  - Disability Status
  - Educational Attainment
  - Field of Degree
  - Health Insurance
  - Grandparents
  - Fertility
  - Language
  - Marital Status & History
  - Place of Birth
  - Migration
  - Relationship
  - School Enrollment
  - Veteran Status
- **ECONOMIC**
  - Employment & Work Status
  - Income & Earnings
  - Industry & Occupation
  - Class of Worker
  - Commuting
  - Poverty Status
  - SNAP Receipt
- **DEMOGRAPHIC**
  - Age & Sex
  - Race & Hispanic Origin
  - Households, Families
- **HOUSING**
  - Age of Householder
  - House Heating, Plumbing
  - Value of Home
  - Rooms and Bedrooms
  - Year Structure Built
  - Units in Structure
  - Kitchen Facilities
  - Owner Costs, Statistics
  - Renter Costs, Statistics
  - Vehicles Available
  - Race of Householder
  - Year Householder Moved In
  - Tenure, Occupancy, Vacancy

Figure 4.

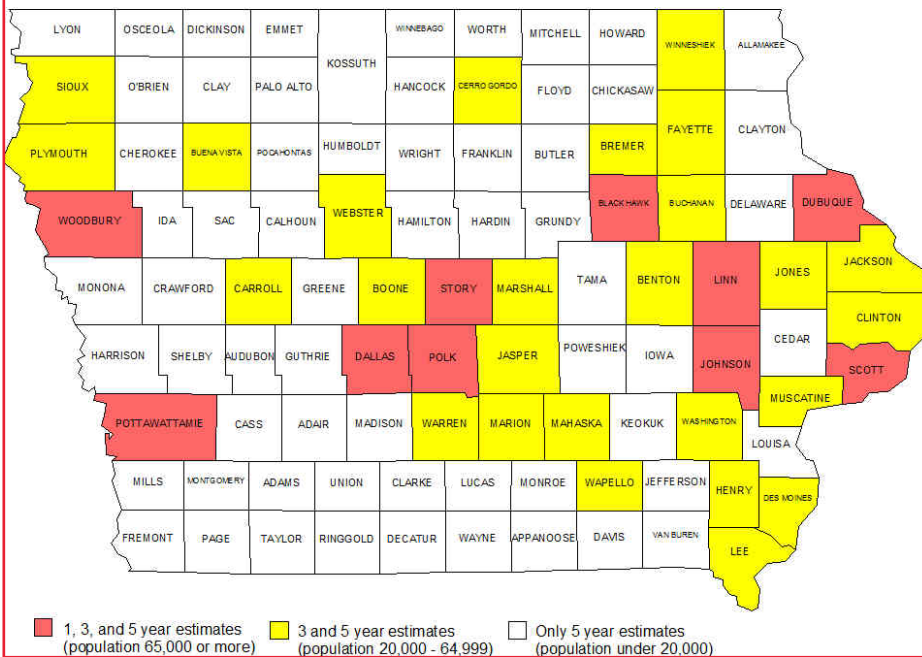


From Julie Zimmerman

Figure 5. Period Estimates for Iowa

		1-year estimates	3-year estimates	5-year estimates
10 counties 6 cities	65,000+ people	X	X	X
26 counties 16 cities	20,000 – 64,999 people		X	X
63 counties all remaining incorporated places	Less than 20,000 people			X

Figure 6. American Community Survey Estimates Availability for Counties in Iowa, 2012 Vintage Estimates



**Margins of Error**

Because the ACS data are based on samples of the population rather than assessing the entire population, there is some level of uncertainty associated with the estimates of the characteristics. The uncertainty around an estimate due to sampling is called sampling error and, in general, is related to sample size. Larger samples tend to have smaller levels of sampling error. By pooling multiple months and years of surveys for the ACS, the sample size for a geographic level is increased which reduces the sampling error. The Census Bureau provides, for each characteristic estimate, a margin of error (MOE) that helps to assess the amount of sampling error and the reliability associated with the estimate. The MOE is reported as +/- a numerical value that should be added to or subtracted from the point estimate value and which give the upper and lower bounds of a 90% confidence interval around the estimate. The interval represents the range within which the true value of the estimate is

Figure 7.

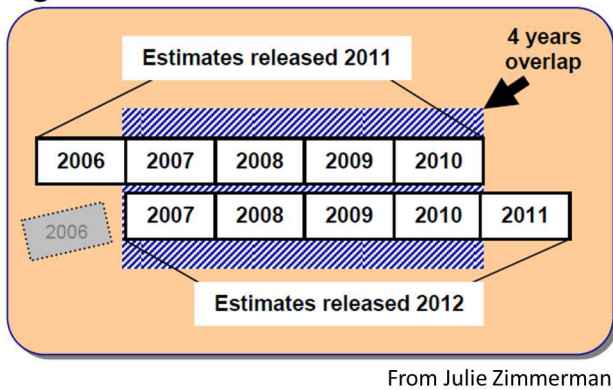


Figure 8. Period Estimates Labeling

Data *should* be labeled by entire period

- 2012 1 year estimates
- 2010 – 2012 3 year estimates
- 2008 – 2012 5 year estimates
- ...but are called 2012 estimates (by last year of period)

Table 1. Iowa Incorporated Place Populations of 20,000 or more<sup>1</sup> (2010 Decennial Census,<sup>2</sup> 2012 Annual Estimates<sup>3</sup>) and Availability of American Community Survey (ACS)<sup>4</sup> 1, 3, and 5 Year Estimates, based on ACS 2012 Vintage Estimates.

Incorporated Place	Population		ACS Estimates Available			Incorporated Place	Population		ACS Estimates Available		
	2010 Decennial population	2012 population estimate	1-year estimates	3-year estimates	5-year estimates		2010 Decennial population	2012 population estimate	1-year estimates	3-year estimates	5-year estimates
Ames	58,965	60,634		✓	✓	Fort Dodge	25,206	24,751		✓	✓
Ankeny	45,582	49,080		✓	✓	Iowa City	67,862	70,133	✓	✓	✓
Bettendorf	33,217	34,255		✓	✓	Marion	34,768	35,843		✓	✓
Burlington	25,663	25,665		✓	✓	Marshalltown	27,552	27,683		✓	✓
Cedar Falls	39,260	39,993		✓	✓	Mason City	28,079	27,823		✓	✓
Cedar Rapids	126,326	128,119	✓	✓	✓	Muscatine	22,886	22,988		✓	✓
Clinton	26,885	26,647		✓	✓	Ottumwa	25,023	24,806		✓	✓
Council Bluffs	62,230	62,115		✓	✓	Sioux City	82,684	82,719	✓	✓	✓
Davenport	99,685	101,363	✓	✓	✓	Urbandale	39,463	41,020		✓	✓
Des Moines	203,433	206,688	✓	✓	✓	Waterloo	68,406	68,297	✓	✓	✓
Dubuque	57,637	58,155		✓	✓	West Des Moines	56,609	59,296		✓	✓

<sup>1</sup>For all incorporated places in Iowa *not* listed in this table as well as census tracts, and zip code tabulation areas, *ONLY* five year estimates are available.

<sup>2</sup>2010 Decennial Census, <http://www.census.gov/2010census/>

<sup>3</sup>Annual Population Estimates Program, <http://www.census.gov/popest/>

<sup>4</sup>American Community Survey, <http://www.census.gov/acs/www/>

expected to be with a level of confidence of 90% (Figures 10, 11; Table 3). Margins of error can be large or small and a smaller MOE relative to the size of the estimate usually represents a more precise estimate or one that is in sharper focus. A larger MOE suggests that the estimate is less precise and less focused (Figure 12).<sup>3</sup> AS MOEs become relatively larger, the less confidence there is that the estimate is close to the true population value. In some

**Figure 9. Period Estimates Released from ACS thus far**

- **1 year estimates: 2006 onward to 2012**
- **3 year estimates: 2006-2008, 2007-2009, 2008-2010, 2009-2011, 2010-2012**
- **5 year estimates: 2006-2010, 2007-2011, 2008-2012**
- **in general, don't use estimates with 2005 or earlier years, geographic regions and included residents are incomplete**

Table 2. Iowa County and State Populations (2010 Decennial Census,<sup>1</sup> 2012 Annual Estimates<sup>2</sup>) and Availability of American Community Survey (ACS)<sup>3</sup> 1-, 3-, and 5-Year Estimates, based on ACS 2012 Vintage Estimates.

County	Population		ACS Estimates Available			County	Population		ACS Estimates Available		
	2010 Decennial population	2012 population estimate	1-year estimates	3-year estimates	5-year estimates		2010 Decennial population	2012 population estimate	1-year estimates	3-year estimates	5-year estimates
Adair	7,682	7,481			✓	Jefferson	16,843	16,867			✓
Adams	4,029	3,911			✓	Johnson	130,882	136,317	✓	✓	✓
Allamakee	14,330	14,237			✓	Jones	20,638	20,639		✓	✓
Appanoose	12,887	12,700			✓	Keokuk	10,511	10,374		✓	✓
Audubon	6,119	5,910			✓	Kossuth	15,543	15,346			✓
Benton	26,076	25,827		✓	✓	Lee	35,862	35,617			✓
Black Hawk	131,090	131,820	✓	✓	✓	Linn	211,226	215,295	✓	✓	✓
Boone	26,306	26,195		✓	✓	Louisa	11,387	11,278			✓
Bremer	24,276	24,479		✓	✓	Lucas	8,898	8,760			✓
Buchanan	20,958	20,942		✓	✓	Lyon	11,581	11,757			✓
Buena Vista	20,260	20,592		✓	✓	Madison	15,679	15,654			✓
Butler	14,867	14,986			✓	Mahaska	22,381	22,443		✓	✓
Calhoun	9,670	9,909			✓	Marion	33,309	33,419		✓	✓
Carroll	20,816	20,631		✓	✓	Marshall	40,648	40,857		✓	✓
Cass	13,956	13,723			✓	Mills	15,059	14,837			✓
Cedar	18,499	18,416			✓	Mitchell	10,776	10,725			✓
Cerro Gordo	44,151	43,788		✓	✓	Monona	9,243	9,124			✓
Cherokee	12,072	11,946			✓	Monroe	7,970	8,063			✓
Chickasaw	12,439	12,276			✓	Montgomery	10,740	10,566			✓
Clarke	9,286	9,370			✓	Muscatine	42,745	42,879		✓	✓
Clay	16,667	16,599			✓	O'Brien	14,398	14,172			✓
Clayton	18,129	17,835			✓	Osceola	6,462	6,193			✓
Clinton	49,116	48,717		✓	✓	Page	15,932	15,713			✓
Crawford	17,096	17,309			✓	Palo Alto	9,421	9,275			✓
Dallas	66,135	71,967	✓	✓	✓	Plymouth	24,986	24,907		✓	✓
Davis	8,753	8,689			✓	Pocahontas	7,310	7,150			✓
Decatur	8,457	8,253			✓	Polk	430,640	443,710	✓	✓	✓
Delaware	17,764	17,574			✓	Pottawattamie	93,158	92,913	✓	✓	✓
Des Moines	40,325	40,340		✓	✓	Poweshiek	18,914	18,736			✓
Dickinson	16,667	16,972			✓	Ringgold	5,131	5,096			✓
Dubuque	93,653	95,097	✓	✓	✓	Sac	10,350	10,153			✓
Emmet	10,302	10,120			✓	Scott	165,224	168,799	✓		✓
Fayette	20,880	20,793		✓	✓	Shelby	12,167	12,069			✓
Floyd	16,303	16,056			✓	Sioux	33,704	34,268		✓	✓
Franklin	10,680	10,554			✓	Story	89,542	91,140	✓	✓	✓
Fremont	7,441	7,147			✓	Tama	17,767	17,536			✓
Greene	9,336	9,153			✓	Taylor	6,317	6,208			✓
Grundy	12,453	12,448			✓	Union	12,534	12,594			✓
Guthrie	10,954	10,777			✓	Van Buren	7,570	7,449			✓
Hamilton	15,673	15,344			✓	Wapello	35,625	35,366		✓	✓
Hancock	11,341	11,134			✓	Warren	46,225	46,891		✓	✓
Hardin	17,534	17,302			✓	Washington	21,704	21,914		✓	✓
Harrison	14,928	14,548			✓	Wayne	6,403	6,344			✓
Henry	20,145	20,236		✓	✓	Webster	38,013	37,273		✓	✓
Howard	9,566	9,563			✓	Winnebago	10,866	10,600			✓
Humboldt	9,815	9,729			✓	Winnesiek	21,056	21,061		✓	✓
Ida	7,089	7,108			✓	Woodbury	102,172	102,323	✓	✓	✓
Iowa	16,355	16,189			✓	Worth	7,598	7,519			✓
Jackson	19,848	19,712		✓	✓	Wright	13,229	12,991			✓
Jasper	36,842	36,602		✓	✓	State of Iowa	3,046,355	3,074,186	✓	✓	✓

<sup>1</sup>2010 Decennial Census, <http://www.census.gov/2010census/>

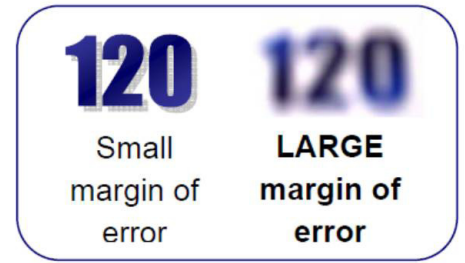
<sup>2</sup>Annual Population Estimates Program, <http://www.census.gov/popest/>

<sup>3</sup>American Community Survey, <http://www.census.gov/acs/www/>

**Figure 10. Margins of Error**

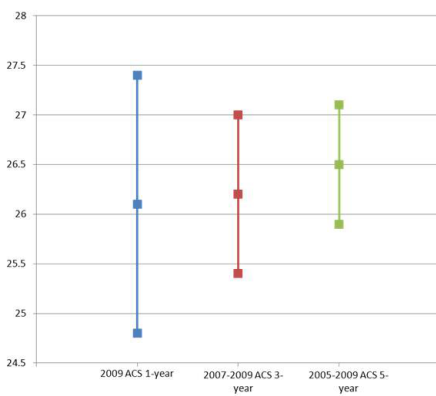
- Because from a sample, *uncertainty*
- Smaller sample has greater uncertainty
- Estimate +/- margin of error (90% confidence)
- For smaller population areas, need more months/years of sampling to get a *\*!#reasonably#!\** reliable estimate
- Always report margins of error

**Figure 12.**



From Julie Zimmerman

**Figure 11. Margins of Error**



**Theoretically, more years of sampling should give a smaller confidence interval**

Source: 2009 American Community Survey 1-year, 3-year, and 5-year estimates, Table S1201 "Marital Status"

**Figure 13. Currency vs. Reliability**

Currency	Reliability
1-year estimates provide information based on the last year	Larger sample sizes produce estimates that are more statistically reliable
3-year estimates provide information based on the last year and the 2 years before that	3-year estimates are based on 3 times as many sample cases as 1-year estimates
5-year estimates provide information based on the last year and the 4 years before that	5-year estimates are based on 5 times as many sample cases as 1-year estimates

- Single year estimate more current
- Using multi-year estimates increases reliability, ie. smaller MOE
- **\*\*When there is a choice\*\***

cases, especially for small geographic areas or small subgroup populations, margins of error can be relatively large suggesting that the estimate is unreliable and should be used only with caution. Margins of error for ACS estimates should always be included when reporting ACS estimate values.

If the population of an area is large enough to have more than just the 5-year estimates, then the user may have a choice of which period set to use. As a general rule, estimate sets with the shortest time frame and more recent years give a more current estimate. Estimates of a longer time frame may have smaller margins of error than those of a shorter time period (Figure 13).

A selection of ACS data for Iowa's industrial sectors illustrates how estimate values and margins of error can vary when more years of data are used in the estimates. Table 3 shows 1-year, 3-year, and 5-year estimates

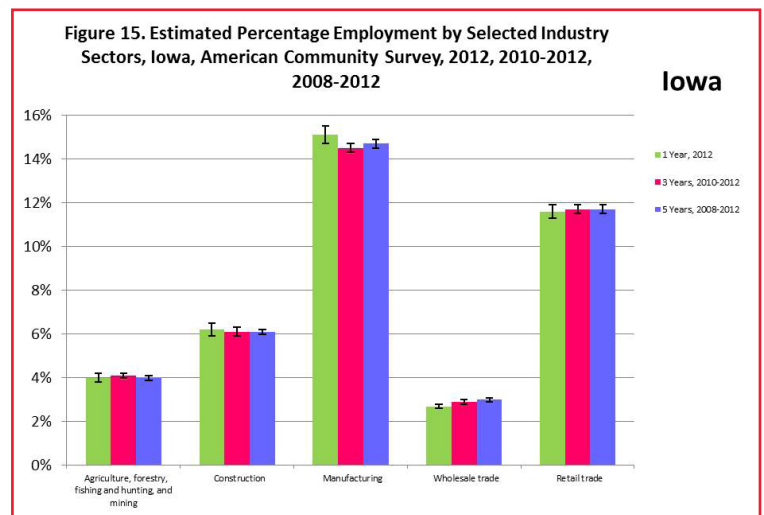
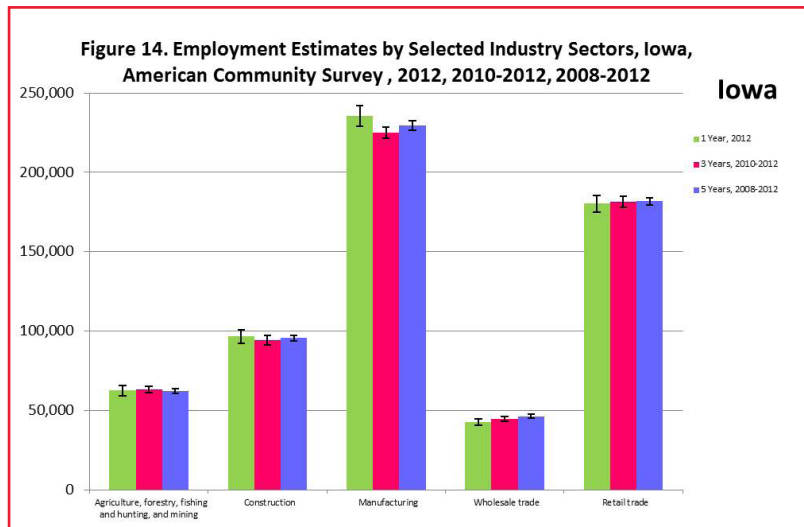
**Table 3. Employment Estimates and Percentages by Selected Industry Sectors**

IOWA	Iowa 1 year, 2012	MOE	Iowa 3 years, 2010 - 2012	MOE	Iowa 5 years, 2008 - 2012	MOE
INDUSTRY						
Civilian employed population 16 years and over	1,556,772	+/-8,497	1,546,002	+/-5,419	1,557,331	+/-4,175
Agriculture, forestry, fishing and hunting, and mining	62,538	+/-3,140	63,143	+/-2,079	62,188	+/-1,408
Construction	96,566	+/-4,166	94,343	+/-2,844	95,581	+/-1,852
Manufacturing	235,362	+/-6,447	224,845	+/-3,417	229,557	+/-2,831
Wholesale trade	42,632	+/-2,138	44,766	+/-1,563	46,372	+/-1,248
Retail trade	180,225	+/-5,336	181,417	+/-3,733	181,666	+/-2,966
Civilian employed population 16 years and over						
Agriculture, forestry, fishing and hunting, and mining	4.00%	+/-0.2	4.10%	+/-0.1	4.00%	+/-0.1
Construction	6.20%	+/-0.3	6.10%	+/-0.2	6.10%	+/-0.1
Manufacturing	15.10%	+/-0.4	14.50%	+/-0.2	14.70%	+/-0.2
Wholesale trade	2.70%	+/-0.1	2.90%	+/-0.1	3.00%	+/-0.1
Retail trade	11.60%	+/-0.3	11.70%	+/-0.2	11.70%	+/-0.2

for the state of Iowa’s total civilian employment age 16 and over along with five selected industrial sectors. The last year in all the sets is 2012 and both number estimates and percentage estimates are given for each set. A review of the estimated employment in each category shows fairly similar numbers across the different period sets of estimates. The estimated percentage for each industrial sector is quite similar as well. Thus, the overall picture for employment in these sectors for the State of Iowa is quiet similar regardless of which period set of estimates is used (Figures 14 - 15; Table 3).<sup>3</sup> These data also illustrate that the margins of error are smaller for the estimate sets with more years of data included in the set. This example shows that if more than one set of period estimates is available for a geographic region, the user may be able to choose a set that is more recent if current information is important or a set with a longer time period if reliability is important for the user’s purpose (Figure 13).

**Geographic and Time Comparisons**

Because of the complexity of the ACS data, there are some guidelines that should be followed when using the data and making comparisons across geographic regions and across time periods. Comparisons of geographic regions should be made using the same period set and types of estimates. For example, if the geographic areas being compared all have 1-year estimates, then it would be appropriate to use 1-year estimates (using the same year) to compare the regions. In many cases for Iowa, however, a geographic region will only have 5-year estimates available (Figure 6, Tables 1 - 2). In these situations, the only comparisons that are appropriate would be using the 5-year estimates for all the regions being compared even if 1-year or 3-year are available for some of the areas. As an example, Story County is large enough to have 1-year estimates available so a comparison of Story County with Polk County or Linn County using 1-year estimates would be appropriate. However, if the comparison needed



**Figure 16. Period Estimates – Geographic Comparison**

- Only compare the same period, type of estimates
- If you only have 5 year estimates for a region, then must use 5 year estimates when comparing to another region
- example: Story County, Ames, Story City
- 5 year only because Story City only has 5 year

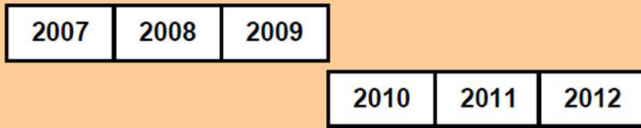
**Figure 17. Period Estimates – Time Period Comparison**

- Within same geographic area; hope no boundary changes
- Recommended to compare periods that do not overlap
- Comparison periods should have same time length
- example: 3 year with 3 year; 1 year with 1 year
- Quite problematic currently for 5 year estimate comparisons



**Figure 18.**

Only compare estimates that do NOT overlap



From Julie Zimmerman

(on the northern edge of the county) would need to be included to compare with both Ames and Story County, then only 5-year estimates could be used for *all* the regions because that is the only set available for Story City (Figure 16, Tables 1 - 2).

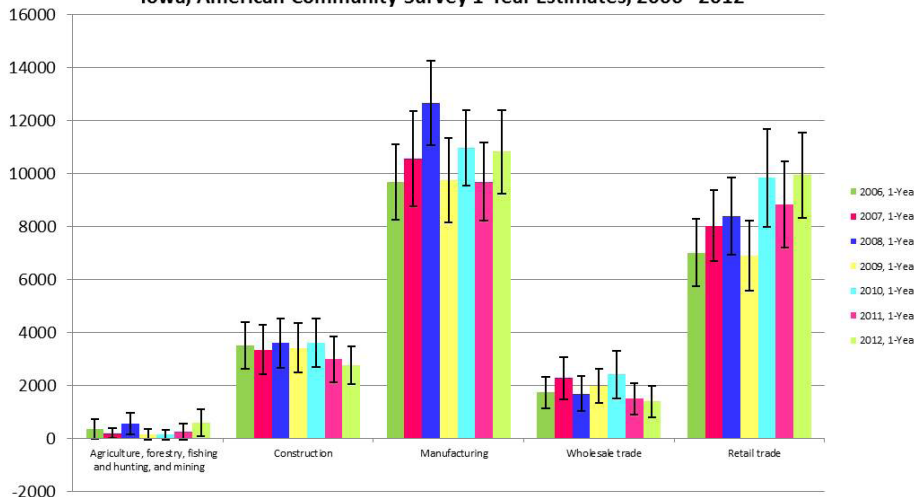
Other guidelines are suggested when comparing a geographic region across time periods. As always, there should be no boundary changes for the geographic region between the time periods used for comparison. Because many of the ACS estimates sets are pooled across several years, it is suggested that time comparisons be made only for estimate sets that don't have overlapping years (Figure 18).<sup>3</sup> If years do overlap, then the data from the overlapping years are repeated in both sets and it is difficult to isolate and attribute changes.

An additional guideline is that time comparisons should use the same period set of estimates. In other words, 1-year estimates should be compared with other 1-year estimates, not with 3-year or 5-year sets. Likewise, 3-years should be compared with other 3-year sets. This guideline, coupled with the recommendation that there should not be overlapping years in the time comparisons, leads to some difficulties in making time comparisons for smaller population areas. As an example, for areas that have 1-year estimates, comparisons can be made among any of the seven years that have been released thus far (Figure 19, Table 4). Regions with 3-year estimates could be compared between 2006-2008 and 2009-2011 or 2010-2012. Likewise 2007-2009 could be compared with 2010-2012 (Figure 9). For regions with only 5-year estimates, however, no periods are yet available that could be compared without having several years that overlap. There will need to be three more years of estimates (2009-2013, 2010-2014, 2011-2015) released until the set for 2011-2015 is available to make an appropriate comparison with the 2006-2010 set and not have years that overlap.

Table 4. Cedar Rapids, Iowa, American Community Survey 1-Year Estimates, 2006 – 2012

	Industry Estimates						
	2006	2007	2008	2009	2010	2011	2012
Civilian employed population 16 years and over	65,397	66,834	63,768	67,202	69,160	67,572	65,770
Agriculture, forestry, fishing and hunting, and mining	360	204	560	159	151	266	598
Construction	3,509	3,355	3,602	3,418	3,607	2,992	2,768
Manufacturing	9,675	10,558	12,654	9,737	10,953	9,682	10,827
Wholesale trade	1,733	2,282	1,697	1,983	2,411	1,503	1,404
Retail trade	7,005	8,027	8,390	6,902	9,839	8,829	9,934
	MOE						
	2006	2007	2008	2009	2010	2011	2012
Civilian employed population 16 years and over	+/-2,737	+/-2,670	+/-3,123	+/-2,395	+/-2,618	+/-2,729	+/-2,729
Agriculture, forestry, fishing and hunting, and mining	+/-370	+/-197	+/-415	+/-193	+/-184	+/-306	+/-510
Construction	+/-884	+/-925	+/-938	+/-934	+/-913	+/-859	+/-710
Manufacturing	+/-1,409	+/-1,796	+/-1,587	+/-1,593	+/-1,424	+/-1,469	+/-1,577
Wholesale trade	+/-592	+/-794	+/-663	+/-650	+/-883	+/-597	+/-599
Retail trade	+/-1,269	+/-1,347	+/-1,471	+/-1,318	+/-1,849	+/-1,631	+/-1,613

**Figure 19. Employment Estimates by Selected Industry Sectors, Cedar Rapids, Iowa, American Community Survey 1-Year Estimates, 2006 - 2012**



would be between Story County and the city of Ames (largest city in the county), then 1-year estimates could not be used for Story County because

Ames only has 3- or 5-year available. For that comparison, either the 3- or 5-year could be used. Finally, if a smaller community such as Story City

### Iowa Employment Examples

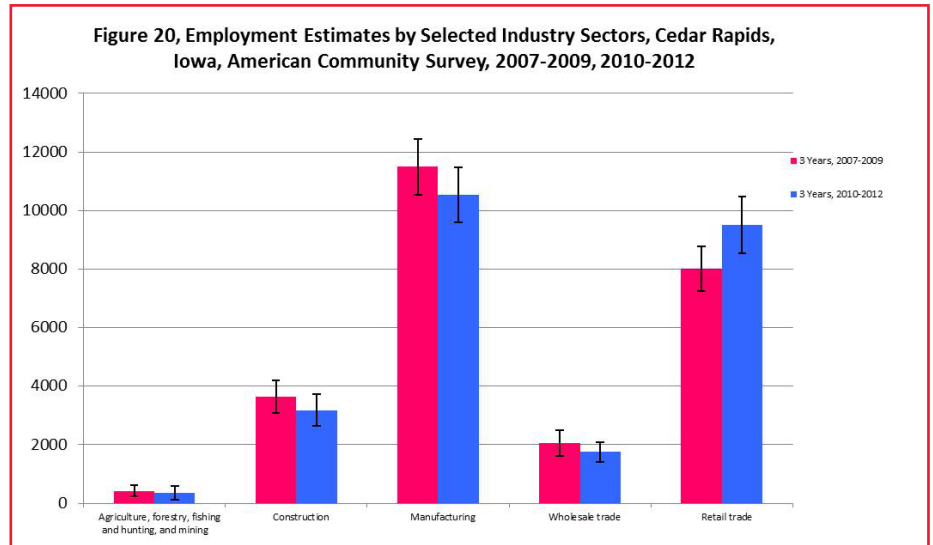
Among the data available from the ACS are estimates for employment by industry sector. Selected data for five sectors are provided here to illustrate ACS data use. First, estimates for the state of Iowa show the differences for a large population region (3 million+) comparing 1-year, 3-year, and 5-year estimates. The estimate values are similar but the MOEs are smaller for the estimates from the longer time periods (Figures 14 - 15; Table 3). For these state-level data, the MOEs are relatively small for all the period sets.

The large population of the state contrasts with the smaller population of Cedar Rapids (126,326; Table 1), however, Cedar Rapids is still large enough to have 1-year estimates. The annual estimates show variability from one year to the next, but the retail trade sector does show some increase in employment across the years. In addition, the margins of error for the individual sectors are larger, relative to the estimate size, than was the case for the state data. Thus, smaller population areas will tend to have larger margins of error than areas with larger populations. Even though Cedar Rapids is a moderate sized city, very few residents are employed in agriculture. The margins of error for a number of the individual years would indicate a “negative” number of people in agriculture. The Census Bureau notes that in these cases the lower bound should be considered to be zero. These data for agricultural employment illustrate the problems with estimating a small population subgroup even though the city itself is relatively large.

For Cedar Rapids, the 3-year estimate sets across the same years help to smooth out the year-to-year variability noted with the 1-year estimates as well as having smaller margins of error (Figure 20, Table 5). The 3-year data for the agricultural sector in Cedar Rapids also keep the estimates out of the “negative” territory noted by the MOEs in some of the 1-year data. Thus, the 3-year data would be more appropriate to use for the agricultural

**Table 5. Employment Estimates by Selected Industry Sectors, 3-Year Estimates, Cedar Rapids, Iowa**

INDUSTRY	2007-2009, 3 year		2010-2012, 3 year	
	estimate	moe	estimate	moe
Civilian employed population 16 years and over	67,787	+/- 1,374	67,585	+/- 1,260
Agriculture, forestry, fishing and hunting, and mir	423	+/- 181	364	+/- 233
Construction	3,642	+/- 562	3,185	+/- 548
Manufacturing	11,497	+/- 956	10,539	+/- 928
Wholesale trade	2,062	+/- 438	1,754	+/- 344
Retail trade	8,015	+/- 759	9,511	+/- 959



sector than the 1-year estimates. There are, then, advantages and disadvantages in determining which estimate set to use when there is a choice among time period sets.

Marshalltown, Iowa is smaller than Cedar Rapids (27,552; Table 1) but does have both 3- and 5-year estimates available. The employment numbers across the industrial sectors are smaller yet than those for Cedar Rapids (Figure 21, Table 6). Along with the small estimate values come some relatively large MOEs that are more than 50% of the size of the estimate. Overall, the MOEs for Marshalltown are larger, relative to the estimate size, than those reported for Cedar Rapids.

#### Evaluating Margins of Error and Coefficients of Variation

The margin of error (MOE) of an estimate describes the precision of the estimate at a particular confidence level and is one of the main items used to evaluate the usability of the estimate. It is not, however, the absolute size or magnitude of the error that is important but rather

it is the magnitude of the MOE *relative* to the size of the estimate. An estimate value that is numerically large may be able to have a MOE that also is numerically large and still be usable. In other cases, especially for small population areas, the MOE may be nearly as large as the estimate value itself which suggests caution with using that data (Figure 22).

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 MOE 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 (example formula, Figure 23). The smaller the CV, the higher the relative reliability of the estimate.

**Table 6. Employment Estimates by Selected Industry Sectors, 3-Year Estimates, Marshalltown, Iowa**

INDUSTRY	2007-2009, 3 Year		2010-2012, 3 Year	
	estimate	moe	estimate	moe
Civilian employed population 16 years and over	11,292	+/-589	12,701	+/-583
Agriculture, forestry, fishing and hunting, and mining	225	+/-151	193	+/-121
Construction	757	+/-178	656	+/-239
Manufacturing	3,194	+/-445	3,616	+/-542
Wholesale trade	159	+/-93	176	+/-96
Retail trade	1,218	+/-276	1,346	+/-309

The Census Bureau says, “there are no hard and fast rules about the size of CVs.”<sup>5</sup> Thus, it does not provide definitive guidelines to determine when a MOE or CV may be too large to make the estimate unusable. ESRI, a geographic information system company, suggests that a CV of 12% or less indicates an estimate with high reliability while a CV of 40% would signal low reliability. Similar criteria from the Office of Financial Management of the State of Washington suggest a CV of 15% or lower as indicating an estimate with high reliability (Figure 24).<sup>6</sup> Overall, decisions about what level of MOEs and CVs are acceptable depend on the use of the data and the context of the situation. Even though there are some general guidelines, this is one area where the user will need to make judgment calls about how they use the ACS data.

The Iowa examples of employment by industry noted earlier can show how to calculate the CV as well as illustrate situations where caution should be used. Using the data for the 1-year, 2012 estimates for Iowa (Table 3), the estimate for the agriculture, etc. sector is 62,538 with a MOE +/- 3,140. The CV for this estimate would be:

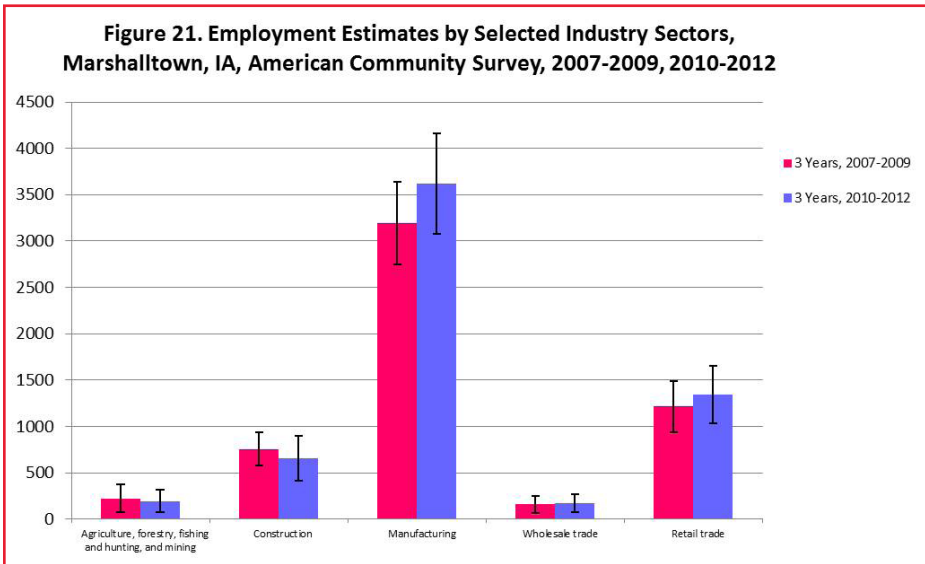
$$((3140/1.645)/62538) \times 100 = 3.05\%$$

The estimate for the manufacturing sector is 235,362 with a MOE +/- 6,447. The CV for this estimate is:

$$((6447/1.645)/235362) \times 100 = 1.7\%$$

For both these estimates, the MOEs and CVs are relatively small and these would be considered to be reliable estimates (Figure 25).

Cedar Rapids, has a smaller population region with few in agriculture (Table 4). For the 1-year data for 2012, the MOE for the agriculture sector is nearly as large as the estimate itself. Already, that indicates a need for caution with that estimate. Although the CV for the manufacturing estimate is still relatively low (8.85%), the CV for



**Figure 22. Margins of Error**

- When are they too big to use??
- Relative size of the error to the size of the estimate
- A few can just “eyeball,” they look bad, are really large
- Correct method – calculate coefficient of variation
- Easy to do

**Figure 23. Coefficient of Variation (CV):**  
*Relative amount of sampling error associated with a sample estimate*

- $CV = (\text{Standard Error}/\text{Estimate}) * 100\%$   
or
- $CV = ((\text{MOE}/1.645) / \text{Estimate}) * 100\%$

the agriculture sector is nearly 52% and definitely at a level where reliability would be questioned (Figure 26).

Since Cedar Rapids has several periods of estimates available, it may be that the 3-year estimates give better reliability (Table 5). The CV for the manufacturing sector for the 3-year 2010-2012 estimates (5.35%) is lower than that for the 1-year estimates. And, although the CV for the agriculture sector (38.9%) is lower with the 3-year estimates than with the 1-year set, it is still in the range indicating low reliability. To get an estimate for the agricultural sector in Cedar Rapids that is even moderately reliable, it would necessitate using the 5-year, 2008-2012 set (estimate, 421; MOE +/- 156; CV 22.55; Appendix p. 21). This example illustrates that even in a larger population area, a small subgroup within that area may be hard to measure reliably with the ACS.

Marshalltown provides yet another example (Table 6). As it is smaller than Cedar Rapids, the estimated number of people employed in agriculture and manufacturing in 2012-2012 is smaller yet. For the agriculture estimate, the CV is at 38% and that for manufacturing is 9.1%. Thus, for these estimates for Marshalltown, the 5-year estimates should also be reviewed and likely used instead of the 3-year set.

#### Iowa Economic Data Examples

The next section of this publication begins a review of a greater variety of economic measures that are provided by the ACS. As part of the data program of the ACS, the Census Bureau prepares four profiles for geographic regions. There is a social profile, an economic profile, one for housing, and another for demographics. These profiles contain many of the most frequently used data under each of the topic groups (Figure 29). The various profiles are a recommended starting point when exploring the ACS data for a geographic region.

#### Figure 24.

**Census Bureau says:**

**“no hard and fast rules about the size of CVs”**

**ESRI, geographic information systems says:**

**high reliability = CV <= 12%**

**medium reliability = CV 12% - 40%**

**low reliability = CV > 40%**

**Office of Financial Management, State of Washington says:**

**high reliability = CV <= 15%**

**medium reliability = CV 15% - 30%**

**low reliability = CV > 30%**

#### Figure 25. Coefficient of Variation (CV)

- **CV = ((MOE/1.645) / Estimate) \* 100%**
- **Agriculture, etc.**
- **CV = ((3140/1.645)/ 62538) \* 100**
- **CV = (1908.81/62538) \* 100 = 0.0305 \* 100 = 3.05%**
- **Manufacturing**
- **CV = ((6447/1.645)/235362) \* 100**
- **CV = (3919.15/235362) \* 100 = 0.0166 \* 100 = 1.7%**

**Table 3, Iowa, 1-year, 2012**

#### Figure 26. Coefficient of Variation (CV)

- **CV = ((MOE/1.645) / Estimate) \* 100%**
- **Agriculture, etc.**
- **CV = ((510/1.645)/ 598) \* 100**
- **CV = (310.03/598) \* 100 = 0.5184 \* 100 = 51.8%**
- **Manufacturing**
- **CV = ((1577/1.645)/10827) \* 100**
- **CV = (958.662/10827) \* 100 = 0.0885 \* 100 = 8.85%**

**Table 4, Cedar Rapids, 1-year, 2012**

#### Figure 27. Coefficient of Variation (CV)

- **CV = ((MOE/1.645) / Estimate) \* 100%**
- **Agriculture, etc.**
- **CV = ((233/1.645)/ 364) \* 100**
- **CV = (141.64/364) \* 100 = 0.3891 \* 100 = 38.9%**
- **Manufacturing**
- **CV = ((928/1.645)/10539) \* 100**
- **CV = (564.134/10549) \* 100 = 0.0535 \* 100 = 5.35%**

**Table 5, Cedar Rapids, 3-year, 2010 - 2012**

**Figure 28. Coefficient of Variation (CV)**

- $CV = ((MOE/1.645) / Estimate) * 100\%$
- **Agriculture, etc.**
- $CV = ((121/1.645)/ 193) * 100$
- $CV = (73.556/193) * 100 = 0.3811 * 100 = 38.1\%$
- **Manufacturing**
- $CV = ((542/1.645)/3616) * 100$
- $CV = (329.483/3616) * 100 = 0.0911 * 100 = 9.1\%$

**Table 6, Marshalltown, 3-year, 2010 - 2012**

**Figure 29. Data Profiles**

- **Social**
- **Economic**
- **Housing**
- **Demographic**

**Figure 30. Iowa Regions Included:**

- **State of Iowa**
- **Cedar Rapids**
- **Marshalltown**
- **Adams Co, Corning, Nodaway, Carbon**
- **Allamakee Co, Waukon, Postville**
- **Buena Vista Co, Storm Lake, Alta**
- **Wapello Co, Ottumwa, Eldon**
- **Polk Co, Des Moines, Alleman**
- **U.S.**

**Figure 31. Selection from economic profile**

- total employment**
- employment by industry**
- household income**
- health insurance coverage**
- poverty of families and individuals**

**Omitted here from profile**

- occupation**
- family income**
- commuting to work**
- class of worker**
- many more subcategories than here**

Appendix pages 19 - 39 provide a selection of data items from the economic profile for the 5-year estimates of 2008 - 2012 for various geographic regions across Iowa. The regions include Iowa's state level data, several counties, a variety of cities and towns, both large and small, along with the data for the U.S (Figure 30, Appendix pages 19 - 39). The selected economic items include total employment, employment by industry, household income, health insurance coverage, and poverty of families and individuals. A number of items from the economic profile have been omitted from the appendix tables in this publication. Users consulting the complete economic profile could also find occupation, family income, commuting to work, class of worker, along with many subcategories in the economic categories (Figure 31, Tables 7 - 9).

The data columns shown in the appendix tables include the columns given in the various profiles produced by the Census Bureau. For each data item there is the estimate itself, the MOE for the estimate, the percentage that the estimate represents of the distribution, and the MOE for the percentage item (Table 7). The 2010 Decennial population count for each area has been added at the top as a reference guide for the size of each area.

The State of Iowa data illustrates some of the information that can be found in these economic profiles (Table 7 - 9; appendix p. 20). Among the questions that can be answered are:

- What percent of those 16 and older are in the labor force?
- What percent of children under age six have all the parents in their family in the labor force?

- How many people are employed in manufacturing?
- What is the largest industry category?
- What level of MOEs are there for the industry percentage categories?
- What is the income level of 20% of Iowa's households?
- What is the MOE of the median household income?
- What percentage of households were receiving food stamp (SNAP) benefits?
- Is the median family income higher or lower than the median household income?
- What is the poverty rate for families with female householder, no husband present and with children under 5 only? (answers provided<sup>7</sup>) (To find the number of families or people below the poverty level, one would need to consult other poverty tables)

**Table 7. Data Columns from Economic Profile**

**Columns:**  
**Estimate**  
**MOE for estimate**  
**Percentage**  
**MOE for percentage**

**Added:**  
**2010 Decennial**  
**population**  
**at top right**

Subject 5-Year Estimates, 2008 - 2012	State of Iowa Census 2010 Population 3,046,355			
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	2,405,664	+/-1,206	2,405,664	(X)
In labor force	1,651,480	+/-3,349	68.60%	+/-0.1
Not in labor force	754,184	+/-3,216	31.40%	+/-0.1
<b>OWN CHILDREN</b>				
Own children under 6 years	232,656	+/-1,309	232,656	(X)
All parents in family in labor force	173,448	+/-2,052	74.60%	+/-0.9
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	1,557,331	+/-4,175	1,557,331	(X)
Agriculture, forestry, fishing and hunting, and mining	62,188	+/-1,408	4.00%	+/-0.1
Construction	95,581	+/-1,852	6.10%	+/-0.1
Manufacturing	229,557	+/-2,831	14.70%	+/-0.2
Wholesale trade	46,372	+/-1,248	3.00%	+/-0.1
Retail trade	181,666	+/-2,366	11.70%	+/-0.2
Transportation and warehousing, and utilities	73,661	+/-1,570	4.70%	+/-0.1
Information	30,862	+/-1,118	2.00%	+/-0.1
Finance and insurance, and real estate and rental and leasing	119,357	+/-2,244	7.70%	+/-0.1
Professional, scientific, and management, and administrative and waste management services	106,174	+/-2,192	6.80%	+/-0.1
Educational services, and health care and social assistance	372,756	+/-3,654	23.90%	+/-0.2
Arts, entertainment, and recreation, and accommodation and food services	118,557	+/-2,291	7.60%	+/-0.1
Other services, except public administration	68,747	+/-1,668	4.40%	+/-0.1
Public administration	51,853	+/-1,315	3.30%	+/-0.1

Income data are one of the most frequently consulted items in the ACS. Because the ACS data are collected across periods of months and years, the income and other dollar-denominated data are inflation adjusted by the Census Bureau in order to be comparable across the entire period. Using the national inflation level from the Consumer Price Index, the dollar-denominated items are inflation adjusted to the most recent year of the period set. The dollar-denominated items include income, rent, home value, and energy costs (Figure 32).

Examining median household income along with the margin of error across a range of areas of varying population sizes illustrates issues and the complexity with using these estimates. The median household income for Iowa for the 5-year estimate period of 2008 - 2012 was \$51,129 with a MOE of +/- \$273. This is a very small MOE relative to the income value and results in a CV of less than one percent (0.32%). Cedar Rapids has nearly the same median household income, but because it is much smaller than the state's population, the MOE is more than five times larger at \$1,429. Adams County, Iowa's smallest, was just over 4,000 people at Census 2010. The median household income

**Table 8. Data Columns from Economic Profile**

Subject 5-Year Estimates, 2008 - 2012	State of Iowa Census 2010 Population 3,046,355			
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	1,223,509	+/-3,819	1,223,509	(X)
Less than \$10,000	75,398	+/-1,885	6.20%	+/-0.2
\$10,000 to \$14,999	67,953	+/-1,301	5.60%	+/-0.1
\$15,000 to \$24,999	134,208	+/-2,064	11.00%	+/-0.2
\$25,000 to \$34,999	136,565	+/-1,914	11.20%	+/-0.2
\$35,000 to \$49,999	183,903	+/-2,305	15.00%	+/-0.2
\$50,000 to \$74,999	249,513	+/-2,684	20.40%	+/-0.2
\$75,000 to \$99,999	162,595	+/-2,320	13.30%	+/-0.2
\$100,000 to \$149,999	142,354	+/-2,077	11.60%	+/-0.2
\$150,000 to \$199,999	38,692	+/-1,043	3.20%	+/-0.1
\$200,000 or more	32,328	+/-1,146	2.60%	+/-0.1
Median household income (dollars)	51,129	+/-273	(X)	(X)
<b>WITH SOCIAL SECURITY</b>				
With Social Security	358,727	+/-2,035	29.30%	+/-0.1
Mean Social Security income (dollars)	17,047	+/-74	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	129,071	+/-2,083	10.50%	+/-0.2
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
Median family income (dollars)	64,772	+/-372	(X)	(X)
Per capita income (dollars)	26,545	+/-136	(X)	(X)
Median earnings for workers (dollars)	28,665	+/-194	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	44,788	+/-221	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	34,333	+/-223	(X)	(X)

**Table 9. Data Columns from Economic Profile**

Subject 5-Year Estimates, 2008 - 2012	State of Iowa Census 2010 Population 3,046,355			
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	3,001,335	+/-373	3,001,335	(X)
With health insurance coverage	2,739,108	+/-5,054	91.30%	+/-0.2
No health insurance coverage	262,227	+/-5,059	8.70%	+/-0.2
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	7.90%	+/-0.2
With related children under 18 years	(X)	(X)	13.60%	+/-0.4
With related children under 5 years only	(X)	(X)	18.00%	+/-1.0
Families with female householder, no husband present	(X)	(X)	30.30%	+/-0.8
With related children under 18 years	(X)	(X)	38.70%	+/-1.0
With related children under 5 years only	(X)	(X)	54.50%	+/-2.6
All people	(X)	(X)	12.20%	+/-0.2
Under 18 years	(X)	(X)	15.90%	+/-0.5
65 years and over	(X)	(X)	7.50%	+/-0.2

**Figure 32. Inflation Adjustment for \$ amounts**

- Dollar-valued data items are inflation adjusted to the *most recent year* for the period
- Income, rent, home value, and energy costs
- Adjusted using inflation factors based on the Consumer Price Index (CPI)
- Adjustment designed to put the data into dollars with equal purchasing power

**Figure 33. Median Household income Examples**

Iowa	\$51,129	MOE +/- \$273	
Cedar Rapids	\$52,242	MOE +/- \$1,429	
Adams County	\$45,099	MOE +/- \$4,257	
Corning	\$36,071	MOE +/- \$5,930	
Nodaway	\$26,250	MOE +/- \$29,102	not usable
Carbon	\$34,375	MOE +/- \$7,477	

Table 10. Median Household Income, Margin of Error, Coefficient of Variation, and Population, ACS Estimates 2008 - 2012

Area	2010 population	Med HH Income \$	MOE \$	CV %
U.S.	309 million	53,046	85	0.097%
Iowa	3 million	51,129	273	0.32%
Des Moines	203,400	44,862	1,126	1.53%
Cedar Rapids	126,326	52,242	1,429	1.66%
Wapello Co	35,625	41,088	1,973	2.90%
Marshalltown	27,552	46,672	3,204	4.17%
Ottumwa	25,023	37,251	2,646	4.30%
Storm Lake	10,600	45,208	3,091	4.16%
Adams Co	4,029	45,099	4,257	5.70%
Waukon	3,897	38,787	6,914	10.80%
Postville	2,227	39,010	10,632	16.60%
Corning	1,635	36,071	5,930	10.00%
Eldon	927	31,912	7,500	14.30%
Alleman	432	75,000	16,675	13.50%
Nodaway	114	26,250	29,102	67.40%
Carbon	34	34,375	7,477	13.22%

of \$45,099 has a MOE of +/- \$4,257. With a population of 114, Nodaway is a very small town. Its median household income estimate of \$26,250 has a MOE of +/- \$29,102, a value larger than the estimate itself. Clearly, for Nodaway, the median household income estimate will not be usable (Figure 33).

Table 10 lists many of the Iowa regions included in the appendix tables along with their 2010 population, median household income, margin of error, and the CV for the margin of error. The regions are listed in descending order by population, and, in general the CVs increase as the area population decreases. A population area as large as that of

the United States has a margin of error for median household income of just +/- \$85 giving a CV of less than a tenth of one percent. Although several of the communities (Postville, Eldon, Alleman, Carbon) have CVs that are at the high end of what is considered highly reliable, for those listed, Nodaway is the only one that would be considered unusable. Alleman presents an interesting example since its MOE is quite large at \$16,675. The Alleman median household income, however, is also quite large which keeps the CV within an acceptable range. One caveat is in order, and that is for the town of Carbon. The town is very small (population 34) and the profile contains a lot of cells with zero values. This is in itself a caution for using any of the town's data even though the CV for the income value is in an acceptable range.

**Guidelines and Judgment Calls**

Users of ACS data will likely have to make judgments about the usability of any particular estimate or set of estimates from the ACS. Among the guidelines that are most firmly "set" are those that pertain to comparisons (Figure 34). Although a variety of estimate periods may be available, comparisons should be made only with or between *comparable period* sets of estimates. Compare 1-year sets only with other 1-year sets, not 3- or 5-year estimates. If a region only has 5-year estimates available, then any comparisons with that region must use 5-year estimates for all the other regions being compared. It is recommended that comparisons across time periods be made with estimate sets that do not have overlapping years. The Census Bureau provides details for testing whether the difference between the estimates of different time periods or between geographic areas are statistically significant and users should consult the Census Bureau's handbooks and other publications.<sup>2</sup>

If the margins of error and CVs from a set of estimates are too large, the

user can possibly turn to a longer period of estimates to use instead. This is a problem for small population areas, however, because if the CVs from the 5-year estimates are too large, then there are no other sets to be able to use. Because estimates from small population areas may have large margins of error, it is recommended to use the largest population area or geographic region that is relevant and provides reasonable margins of error and CVs. Data for a county or a neighboring community may need to be used in place of the data of a very small town for which its own data estimates are out of the range of usability.

An additional recommended strategy is to use the largest subgrouping of people that still is relevant. As an example, use 20-year age groupings of people rather than 5-year age groupings (Figure 35). If the user needs to aggregate cells of detailed data to make larger subgroups, the margins of error must also be recalculated for the new aggregated groups. The Census Bureau provides details on how to do that and users, again, should consult the handbooks.<sup>2</sup>

Another important consideration is the use that will be made of the information. The purpose for which the data are needed will likely make a difference in the level of error that can be considered acceptable. For example, if the use is for a general profile of an area, it is possible that a somewhat larger margin of error may be acceptable. If some type of exact planning is to be done with the data, then more caution regarding margins of error may be needed. It is also recommended that if the data are used in grant writing that careful attention is given to the “cut off” criteria for the grant eligibility. Agency evaluation of the grant application may focus on the estimate value and not take the MOEs into consideration (Figure 36).

The examples shown in this publication illustrate the need for judgment calls on whether an estimate is usable. In general, estimates for very

### Figure 34. Guidelines for using ACS data

- **Comparisons: use *same period* sets of estimates**
- **If a geographic region only has 5 year estimates, then *have to use 5 year* for all other comparison regions as well**
- **Time period comparisons should not have overlapping data periods**

### Figure 35. More Guidelines for using ACS data

- **If margins of error and CVs are too large, use longer period estimates; a problem if only 5 years estimates are available**
- **Use largest geographic region that relevant eg. county instead of town**
- **Use largest grouping of people that relevant eg. not 5 year age groups, but 20 year groupings**

### Figure 36. Evaluating usefulness of estimates can also depend on the type of use or decision to be made with the data

- **If *general profile* perhaps larger MOEs are ok, especially if compare to another relevant geographic area eg. town to county or town to another similar town**
- **If *exact planning* to be done with the data, then very, very careful, especially for small population areas**
- **If *grant writing*, then careful attention to the “cut off” level for eligibility....may hinge on the estimate not MOEs; agency to agency variability in use of MOEs**

### Figure 37. Find other sources of similar data

- **If basic demographics (age, sex, race, Hispanic, households, relationships, owner, renter) are what is needed, then can use Decennial Census 2010**
- **Some basic demographics for counties are also available from annual estimates program Census Bureau says may be a better choice than ACS**

large population areas or groups will be usable. The example of the agriculture industry in Cedar Rapids, however, does show the need for looking closely at small subgroups even if the overall population of an area is relatively large. Caution is recommended for using estimates for small population areas. If there are lots of zeros or near zeros in the estimate set,

then they may not be very useful. If the MOEs are nearly as large as the estimate or if the MOE would include zero in the estimate range, then they may not be usable. In these circumstances and any others for which there are concerns, the estimates should be reviewed carefully and CVs calculated before using.



**Figure 38. Find other sources of similar data**

- **Per capita income data from Bureau Economic Analysis annual by county**
- **Poverty of children and their families from free and reduced school meals program**
- **Food stamp (SNAP) households as indicator of financial need and low income**

**Figure 39. How Realistic are Your Expectations for Data?**

- **Some data are especially hard to obtain**
  - Detailed characteristics of individuals or small groups
  - City-level data
  - Data about business establishments
  - “Real-time” data
- **Issues that confound data collection**
  - Cost
  - Logistics
  - Personal privacy
  - Business confidentiality

**Figure 40. Are Census Data Becoming Obsolete?**

- **Information technology advances have opened new frontiers for data & data sharing**
- **Many people are jumping on the BIG DATA bandwagon**
- **Before abandoning traditional sources, ask...**
  - what & whom are these new data actually measuring?
  - are these new data providers truly objective?
  - will these sources be around in 5, 10, 15 years?

**Figure 41. In Defense of the ACS**

- **Broad data collection infrastructure**
- **Federal mandate**
- **Representative samples**
- **Detailed documentation**
- **Consistent methodologies allow for comparison of data over time & across places**
- **Publication of MOE values improves transparency**

**Find Other Sources of Similar Data**

In some situations, a user may be able to find data similar to some of the ACS items from other sources. If it is basic demographic data that is needed, age, sex, race, ethnicity, households, family relationships, along with housing counts or owner and renter, these are items that are available from the Decennial Census as well as from the ACS. The Decennial Census is carried out as a complete count survey and thus does not involve sampling or margins of error. It would be a recommended alternative source for the demographic items, especially for very small population areas. In addition, some of the basic demographic data for counties are also available from the Census Bureau’s annual estimates program and is another alternative source for these data (Figure 37).<sup>4</sup>

The Bureau of Economic Analysis annually estimates per capita income for counties and would be a different source for income information. Low income information for children and their families may be found using data from the free and reduced school meals program. Additional low income information may be determined from the food stamp (SNAP) program eligibility as well (Figure 38).

**Additional Thoughts on Data Issues**

The discussion here has centered on specific aspects of the ACS that users need to consider as they access, review, and utilize ACS data. However, broader data issues also affect the ACS, including costs, information technology, limitations on data, recent data innovations, privacy, as well as consistency and reliability of alternative data sources and providers.

The ACS provides data that often are difficult and costly to obtain. Because many kinds of data are now readily available through the internet, users may not have realistic ideas about the data collection process, the detail that is needed, the costs involved, and the need for personal privacy (Figure 39). There are new advances in informa-

tion technology that allow greater data access and sharing. With the advances in “Big Data,” users may think that data sources such as the ACS and the Decennial Census are not needed (Figure 40). The marketing and advertising uses of “Big Data,” overlook many aspects of what the ACS has to consider in terms of a broad collection process, measurement issues, the representativeness of the samples, and personal privacy. The ACS utilizes consistent methods and measures across the range of geographies and time periods that allow appropriate and valid comparisons to be made. Unlike many alternative, private data sources for which the methodologies, representativeness, and process remain unclear or unknown, the ACS is a transparent and well documented data process. Although there are issues and some limitations with

### Figure 42. Using ACS Data in the Field

- **No apologies**
  - **No need to apologize to your stakeholders for the limitations of ACS data.**
- **Hold conversations**
  - **Talk about how and why we measure certain population characteristics.**
  - **Discuss the challenges we face in measuring them**
  - **Understanding these concepts makes us better consumers of all data, not just ACS data.**

ACS data, we at least know what those limitations are and how to evaluate them. Such evaluation of the quality of many private data sources is not available (Figure 42). Discussion of these issues with your stakeholders as you present and utilize ACS data can

help them understand the challenges of measuring our population’s characteristics and lead to better planning and programming decisions to benefit our people and communities (Figure 42).

## Thank you



Portal Project Web Page: [indicators.extension.iastate.edu](http://indicators.extension.iastate.edu)

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Extension and Outreach

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Subject 5-Year Estimates, 2008 - 2012	State of Iowa		Census 2010 Population 3,046,355	
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	2,405,664	+/-1,206	2,405,664	(X)
In labor force	1,651,480	+/-3,349	68.60%	+/-0.1
Not in labor force	754,184	+/-3,216	31.40%	+/-0.1
Own children under 6 years	232,656	+/-1,309	232,656	(X)
All parents in family in labor force	173,448	+/-2,052	74.60%	+/-0.9
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	1,557,331	+/-4,175	1,557,331	(X)
Agriculture, forestry, fishing and hunting, and mining	62,188	+/-1,408	4.00%	+/-0.1
Construction	95,581	+/-1,852	6.10%	+/-0.1
Manufacturing	229,557	+/-2,831	14.70%	+/-0.2
Wholesale trade	46,372	+/-1,248	3.00%	+/-0.1
Retail trade	181,666	+/-2,366	11.70%	+/-0.2
Transportation and warehousing, and utilities	73,661	+/-1,570	4.70%	+/-0.1
Information	30,862	+/-1,118	2.00%	+/-0.1
Finance and insurance, and real estate and rental and leasing	119,357	+/-2,244	7.70%	+/-0.1
Professional, scientific, and management, and administrative and waste manag	106,174	+/-2,192	6.80%	+/-0.1
Educational services, and health care and social assistance	372,756	+/-3,654	23.90%	+/-0.2
Arts, entertainment, and recreation, and accommodation and food services	118,557	+/-2,291	7.60%	+/-0.1
Other services, except public administration	68,747	+/-1,668	4.40%	+/-0.1
Public administration	51,853	+/-1,315	3.30%	+/-0.1
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	1,223,509	+/-3,819	1,223,509	(X)
Less than \$10,000	75,398	+/-1,885	6.20%	+/-0.2
\$10,000 to \$14,999	67,953	+/-1,301	5.60%	+/-0.1
\$15,000 to \$24,999	134,208	+/-2,064	11.00%	+/-0.2
\$25,000 to \$34,999	136,565	+/-1,914	11.20%	+/-0.2
\$35,000 to \$49,999	183,903	+/-2,305	15.00%	+/-0.2
\$50,000 to \$74,999	249,513	+/-2,684	20.40%	+/-0.2
\$75,000 to \$99,999	162,595	+/-2,320	13.30%	+/-0.2
\$100,000 to \$149,999	142,354	+/-2,077	11.60%	+/-0.2
\$150,000 to \$199,999	38,692	+/-1,043	3.20%	+/-0.1
\$200,000 or more	32,328	+/-1,146	2.60%	+/-0.1
Median household income (dollars)	51,129	+/-273	(X)	(X)
With Social Security	358,727	+/-2,035	29.30%	+/-0.1
Mean Social Security income (dollars)	17,047	+/-74	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	129,071	+/-2,083	10.50%	+/-0.2
Median family income (dollars)	64,772	+/-372	(X)	(X)
Per capita income (dollars)	26,545	+/-136	(X)	(X)
Median earnings for workers (dollars)	28,665	+/-194	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	44,788	+/-221	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	34,333	+/-223	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	3,001,335	+/-373	3,001,335	(X)
With health insurance coverage	2,739,108	+/-5,054	91.30%	+/-0.2
No health insurance coverage	262,227	+/-5,059	8.70%	+/-0.2
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	7.90%	+/-0.2
With related children under 18 years	(X)	(X)	13.60%	+/-0.4
With related children under 5 years only	(X)	(X)	18.00%	+/-1.0
Families with female householder, no husband present	(X)	(X)	30.30%	+/-0.8
With related children under 18 years	(X)	(X)	38.70%	+/-1.0
With related children under 5 years only	(X)	(X)	54.50%	+/-2.6
All people	(X)	(X)	12.20%	+/-0.2
Under 18 years	(X)	(X)	15.90%	+/-0.5
65 years and over	(X)	(X)	7.50%	+/-0.2

Subject 5-Year Estimates, 2008 - 2012	Cedar Rapids city, Iowa Census 2010 Population 126,326			
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	100,587	+/-549	100,587	(X)
In labor force	71,114	+/-928	70.70%	+/-0.9
Not in labor force	29,473	+/-898	29.30%	+/-0.9
Own children under 6 years	9,943	+/-509	9,943	(X)
All parents in family in labor force	7,882	+/-541	79.30%	+/-3.3
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	66,936	+/-951	66,936	(X)
Agriculture, forestry, fishing and hunting, and mining	421	+/-156	0.60%	+/-0.2
Construction	3,397	+/-362	5.10%	+/-0.5
Manufacturing	10,841	+/-601	16.20%	+/-0.9
Wholesale trade	1,894	+/-331	2.80%	+/-0.5
Retail trade	8,893	+/-589	13.30%	+/-0.9
Transportation and warehousing, and utilities	3,383	+/-449	5.10%	+/-0.7
Information	2,324	+/-334	3.50%	+/-0.5
Finance and insurance, and real estate and rental and leasing	5,228	+/-446	7.80%	+/-0.6
Professional, scientific, and management, and administrative and waste manag	6,347	+/-560	9.50%	+/-0.8
Educational services, and health care and social assistance	14,566	+/-747	21.80%	+/-1.1
Arts, entertainment, and recreation, and accommodation and food services	5,172	+/-417	7.70%	+/-0.6
Other services, except public administration	2,884	+/-348	4.30%	+/-0.5
Public administration	1,586	+/-265	2.40%	+/-0.4
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	52,614	+/-706	52,614	(X)
Less than \$10,000	3,015	+/-334	5.70%	+/-0.6
\$10,000 to \$14,999	2,856	+/-354	5.40%	+/-0.7
\$15,000 to \$24,999	5,751	+/-477	10.90%	+/-0.9
\$25,000 to \$34,999	5,561	+/-456	10.60%	+/-0.8
\$35,000 to \$49,999	7,898	+/-609	15.00%	+/-1.2
\$50,000 to \$74,999	10,936	+/-653	20.80%	+/-1.3
\$75,000 to \$99,999	6,967	+/-508	13.20%	+/-0.9
\$100,000 to \$149,999	6,347	+/-442	12.10%	+/-0.9
\$150,000 to \$199,999	1,737	+/-185	3.30%	+/-0.3
\$200,000 or more	1,546	+/-244	2.90%	+/-0.5
Median household income (dollars)	52,242	+/-1,429	(X)	(X)
With Social Security	14,153	+/-503	26.90%	+/-0.9
Mean Social Security income (dollars)	17,066	+/-447	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	6,886	+/-478	13.10%	+/-0.9
Median family income (dollars)	68,458	+/-1,880	(X)	(X)
Per capita income (dollars)	28,503	+/-820	(X)	(X)
Median earnings for workers (dollars)	30,659	+/-639	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	46,987	+/-1,240	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	37,935	+/-1,406	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	125,403	+/-259	125,403	(X)
With health insurance coverage	114,128	+/-1,052	91.00%	+/-0.8
No health insurance coverage	11,275	+/-999	9.00%	+/-0.8
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	7.70%	+/-1.0
With related children under 18 years	(X)	(X)	12.50%	+/-1.9
With related children under 5 years only	(X)	(X)	18.00%	+/-5.0
Families with female householder, no husband present	(X)	(X)	26.90%	+/-3.9
With related children under 18 years	(X)	(X)	35.50%	+/-5.5
With related children under 5 years only	(X)	(X)	54.70%	+/-12.2
All people	(X)	(X)	12.30%	+/-0.9
Under 18 years	(X)	(X)	15.20%	+/-2.3
65 years and over	(X)	(X)	7.10%	+/-1.5

Subject	Marshalltown city, Iowa Census 2010 Population 27,552			
	5-Year Estimates, 2008 - 2012	Estimate	Margin of Error	Percent
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	21,098	+/-264	21,098	(X)
In labor force	13,477	+/-425	63.90%	+/-1.9
Not in labor force	7,621	+/-418	36.10%	+/-1.9
Own children under 6 years	2,707	+/-242	2,707	(X)
All parents in family in labor force	1,761	+/-300	65.10%	+/-8.8
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	12,467	+/-462	12,467	(X)
Agriculture, forestry, fishing and hunting, and mining	254	+/-127	2.00%	+/-1.0
Construction	670	+/-162	5.40%	+/-1.3
Manufacturing	3,474	+/-395	27.90%	+/-3.0
Wholesale trade	199	+/-72	1.60%	+/-0.6
Retail trade	1,281	+/-195	10.30%	+/-1.6
Transportation and warehousing, and utilities	625	+/-141	5.00%	+/-1.1
Information	174	+/-89	1.40%	+/-0.7
Finance and insurance, and real estate and rental and leasing	365	+/-121	2.90%	+/-1.0
Professional, scientific, and management, and administrative and waste manag	562	+/-146	4.50%	+/-1.1
Educational services, and health care and social assistance	2,999	+/-327	24.10%	+/-2.5
Arts, entertainment, and recreation, and accommodation and food services	938	+/-237	7.50%	+/-1.8
Other services, except public administration	515	+/-126	4.10%	+/-1.0
Public administration	411	+/-126	3.30%	+/-1.0
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	10,162	+/-275	10,162	(X)
Less than \$10,000	577	+/-147	5.70%	+/-1.5
\$10,000 to \$14,999	666	+/-153	6.60%	+/-1.5
\$15,000 to \$24,999	1,135	+/-204	11.20%	+/-2.0
\$25,000 to \$34,999	1,496	+/-216	14.70%	+/-2.1
\$35,000 to \$49,999	1,578	+/-232	15.50%	+/-2.2
\$50,000 to \$74,999	2,316	+/-241	22.80%	+/-2.2
\$75,000 to \$99,999	1,215	+/-189	12.00%	+/-1.9
\$100,000 to \$149,999	788	+/-148	7.80%	+/-1.4
\$150,000 to \$199,999	291	+/-100	2.90%	+/-1.0
\$200,000 or more	100	+/-48	1.00%	+/-0.5
Median household income (dollars)	46,672	+/-3,204	(X)	(X)
With Social Security	3,222	+/-209	31.70%	+/-2.1
Mean Social Security income (dollars)	17,762	+/-747	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	1,547	+/-252	15.20%	+/-2.4
Median family income (dollars)	56,986	+/-2,257	(X)	(X)
Per capita income (dollars)	21,880	+/-925	(X)	(X)
Median earnings for workers (dollars)	27,953	+/-1,873	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	41,491	+/-1,889	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	32,939	+/-2,614	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	26,508	+/-225	26,508	(X)
With health insurance coverage	23,573	+/-484	88.90%	+/-1.6
No health insurance coverage	2,935	+/-419	11.10%	+/-1.6
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	10.20%	+/-2.1
With related children under 18 years	(X)	(X)	17.20%	+/-3.9
With related children under 5 years only	(X)	(X)	14.80%	+/-9.2
Families with female householder, no husband present	(X)	(X)	29.40%	+/-8.5
With related children under 18 years	(X)	(X)	35.00%	+/-10.3
With related children under 5 years only	(X)	(X)	51.90%	+/-27.1
All people	(X)	(X)	14.20%	+/-2.5
Under 18 years	(X)	(X)	19.30%	+/-4.8
65 years and over	(X)	(X)	6.30%	+/-2.2

Subject 5-Year Estimates, 2008 - 2012	Adams County, Iowa Census 2010 Population 4,029			
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	3,329	+/-26	3,329	(X)
In labor force	2,164	+/-87	65.00%	+/-2.6
Not in labor force	1,165	+/-88	35.00%	+/-2.6
Own children under 6 years	265	+/-42	265	(X)
All parents in family in labor force	220	+/-49	83.00%	+/-13.6
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	2,048	+/-99	2,048	(X)
Agriculture, forestry, fishing and hunting, and mining	254	+/-61	12.40%	+/-2.8
Construction	102	+/-32	5.00%	+/-1.6
Manufacturing	215	+/-61	10.50%	+/-3.0
Wholesale trade	99	+/-49	4.80%	+/-2.4
Retail trade	169	+/-41	8.30%	+/-1.9
Transportation and warehousing, and utilities	143	+/-39	7.00%	+/-1.9
Information	35	+/-18	1.70%	+/-0.9
Finance and insurance, and real estate and rental and leasing	94	+/-38	4.60%	+/-1.9
Professional, scientific, and management, and administrative and waste manag	36	+/-18	1.80%	+/-0.9
Educational services, and health care and social assistance	634	+/-102	31.00%	+/-4.5
Arts, entertainment, and recreation, and accommodation and food services	72	+/-29	3.50%	+/-1.4
Other services, except public administration	92	+/-41	4.50%	+/-2.0
Public administration	103	+/-42	5.00%	+/-2.1
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	1,723	+/-91	1,723	(X)
Less than \$10,000	121	+/-38	7.00%	+/-2.1
\$10,000 to \$14,999	116	+/-37	6.70%	+/-2.0
\$15,000 to \$24,999	248	+/-56	14.40%	+/-3.0
\$25,000 to \$34,999	181	+/-52	10.50%	+/-2.9
\$35,000 to \$49,999	291	+/-62	16.90%	+/-3.4
\$50,000 to \$74,999	395	+/-62	22.90%	+/-3.7
\$75,000 to \$99,999	193	+/-50	11.20%	+/-2.9
\$100,000 to \$149,999	109	+/-33	6.30%	+/-1.9
\$150,000 to \$199,999	30	+/-18	1.70%	+/-1.1
\$200,000 or more	39	+/-22	2.30%	+/-1.3
Median household income (dollars)	45,099	+/-4,257	(X)	(X)
With Social Security	631	+/-57	36.60%	+/-3.0
Mean Social Security income (dollars)	15,753	+/-1,289	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	168	+/-56	9.80%	+/-3.1
Median family income (dollars)	57,262	+/-3,379	(X)	(X)
Per capita income (dollars)	25,709	+/-2,431	(X)	(X)
Median earnings for workers (dollars)	27,407	+/-2,285	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	37,097	+/-1,707	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	29,708	+/-4,260	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	3,938	+/-45	3,938	(X)
With health insurance coverage	3,626	+/-92	92.10%	+/-2.2
No health insurance coverage	312	+/-89	7.90%	+/-2.2
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	7.60%	+/-2.9
With related children under 18 years	(X)	(X)	10.40%	+/-4.7
With related children under 5 years only	(X)	(X)	16.80%	+/-14.4
Families with female householder, no husband present	(X)	(X)	37.80%	+/-20.3
With related children under 18 years	(X)	(X)	32.50%	+/-19.6
With related children under 5 years only	(X)	(X)	31.00%	+/-34.6
All people	(X)	(X)	11.20%	+/-2.8
Under 18 years	(X)	(X)	12.40%	+/-6.2
65 years and over	(X)	(X)	13.30%	+/-5.0

Subject 5-Year Estimates, 2008 - 2012	Corning city, Iowa Census 2010 Population 1,635			
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	1,371	+/-107	1,371	(X)
In labor force	832	+/-104	60.70%	+/-4.8
Not in labor force	539	+/-68	39.30%	+/-4.8
Own children under 6 years	113	+/-46	113	(X)
All parents in family in labor force	87	+/-44	77.00%	+/-20.5
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	788	+/-104	788	(X)
Agriculture, forestry, fishing and hunting, and mining	16	+/-13	2.00%	+/-1.7
Construction	60	+/-30	7.60%	+/-3.7
Manufacturing	89	+/-41	11.30%	+/-4.7
Wholesale trade	24	+/-21	3.00%	+/-2.6
Retail trade	74	+/-29	9.40%	+/-3.2
Transportation and warehousing, and utilities	72	+/-31	9.10%	+/-3.8
Information	17	+/-13	2.20%	+/-1.7
Finance and insurance, and real estate and rental and leasing	53	+/-26	6.70%	+/-3.2
Professional, scientific, and management, and administrative and waste manag	23	+/-17	2.90%	+/-2.1
Educational services, and health care and social assistance	247	+/-52	31.30%	+/-5.9
Arts, entertainment, and recreation, and accommodation and food services	22	+/-12	2.80%	+/-1.5
Other services, except public administration	39	+/-22	4.90%	+/-2.7
Public administration	52	+/-25	6.60%	+/-3.0
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	768	+/-63	768	(X)
Less than \$10,000	71	+/-27	9.20%	+/-3.3
\$10,000 to \$14,999	90	+/-32	11.70%	+/-4.0
\$15,000 to \$24,999	116	+/-32	15.10%	+/-4.0
\$25,000 to \$34,999	101	+/-36	13.20%	+/-4.7
\$35,000 to \$49,999	89	+/-40	11.60%	+/-4.9
\$50,000 to \$74,999	161	+/-33	21.00%	+/-4.3
\$75,000 to \$99,999	80	+/-34	10.40%	+/-4.2
\$100,000 to \$149,999	42	+/-19	5.50%	+/-2.5
\$150,000 to \$199,999	8	+/-10	1.00%	+/-1.3
\$200,000 or more	10	+/-10	1.30%	+/-1.3
Median household income (dollars)	36,071	+/-5,930	(X)	(X)
With Social Security	317	+/-40	41.30%	+/-5.5
Mean Social Security income (dollars)	15,474	+/-1,858	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	114	+/-42	14.80%	+/-5.3
Median family income (dollars)	55,893	+/-8,291	(X)	(X)
Per capita income (dollars)	25,556	+/-3,446	(X)	(X)
Median earnings for workers (dollars)	29,332	+/-2,394	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	37,893	+/-2,035	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	33,798	+/-3,485	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	1,538	+/-141	1,538	(X)
With health insurance coverage	1,409	+/-123	91.60%	+/-3.8
No health insurance coverage	129	+/-63	8.40%	+/-3.8
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	11.90%	+/-5.2
With related children under 18 years	(X)	(X)	19.90%	+/-10.2
With related children under 5 years only	(X)	(X)	25.00%	+/-25.8
Families with female householder, no husband present	(X)	(X)	34.80%	+/-22.9
With related children under 18 years	(X)	(X)	34.80%	+/-22.9
With related children under 5 years only	(X)	(X)	36.00%	+/-42.4
All people	(X)	(X)	16.10%	+/-4.0
Under 18 years	(X)	(X)	21.00%	+/-10.1
65 years and over	(X)	(X)	15.70%	+/-7.1



Subject 5-Year Estimates, 2008 - 2012	Nodaway city, Iowa Census 2010 Population 114			
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	69	+/-32	69	(X)
In labor force	56	+/-26	81.20%	+/-11.4
Not in labor force	13	+/-11	18.80%	+/-11.4
Own children under 6 years	26	+/-31	26	(X)
All parents in family in labor force	9	+/-14	34.60%	+/-51.0
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	37	+/-18	37	(X)
Agriculture, forestry, fishing and hunting, and mining	0	+/-10	0.00%	+/-40.6
Construction	1	+/-2	2.70%	+/-6.9
Manufacturing	2	+/-4	5.40%	+/-10.2
Wholesale trade	3	+/-4	8.10%	+/-11.3
Retail trade	2	+/-3	5.40%	+/-8.6
Transportation and warehousing, and utilities	10	+/-12	27.00%	+/-21.9
Information	0	+/-10	0.00%	+/-40.6
Finance and insurance, and real estate and rental and leasing	0	+/-10	0.00%	+/-40.6
Professional, scientific, and management, and administrative and waste manag	0	+/-10	0.00%	+/-40.6
Educational services, and health care and social assistance	16	+/-10	43.20%	+/-20.1
Arts, entertainment, and recreation, and accommodation and food services	0	+/-10	0.00%	+/-40.6
Other services, except public administration	2	+/-4	5.40%	+/-10.3
Public administration	1	+/-2	2.70%	+/-5.8
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	42	+/-19	42	(X)
Less than \$10,000	12	+/-11	28.60%	+/-18.1
\$10,000 to \$14,999	8	+/-9	19.00%	+/-20.8
\$15,000 to \$24,999	1	+/-4	2.40%	+/-8.0
\$25,000 to \$34,999	4	+/-4	9.50%	+/-10.2
\$35,000 to \$49,999	10	+/-12	23.80%	+/-24.8
\$50,000 to \$74,999	1	+/-3	2.40%	+/-6.4
\$75,000 to \$99,999	1	+/-3	2.40%	+/-6.1
\$100,000 to \$149,999	5	+/-5	11.90%	+/-11.9
\$150,000 to \$199,999	0	+/-10	0.00%	+/-38.1
\$200,000 or more	0	+/-10	0.00%	+/-38.1
Median household income (dollars)	26,250	+/-29,102	(X)	(X)
With Social Security	10	+/-8	23.80%	+/-17.9
Mean Social Security income (dollars)	9,580	+/-1,901	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	20	+/-16	47.60%	+/-23.0
Median family income (dollars)	35,357	+/-40,354	(X)	(X)
Per capita income (dollars)	12,030	+/-7,033	(X)	(X)
Median earnings for workers (dollars)	23,750	+/-29,384	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	38,333	+/-17,738	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	38,750	+/-66,184	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	118	+/-65	118	(X)
With health insurance coverage	107	+/-62	90.70%	+/-9.2
No health insurance coverage	11	+/-12	9.30%	+/-9.2
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	46.40%	+/-34.9
With related children under 18 years	(X)	(X)	47.60%	+/-46.7
With related children under 5 years only	(X)	(X)	41.70%	+/-58.3
Families with female householder, no husband present	(X)	(X)	-	**
With related children under 18 years	(X)	(X)	-	**
With related children under 5 years only	(X)	(X)	-	**
All people	(X)	(X)	58.40%	+/-26.0
Under 18 years	(X)	(X)	65.90%	+/-37.1
65 years and over	(X)	(X)	36.40%	+/-36.5

Subject	Carbon city, Iowa Census 2010 Population 34			
	5-Year Estimates, 2008 - 2012	Estimate	Margin of Error	Percent
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	24	+/-16	24	(X)
In labor force	11	+/-10	45.80%	+/-44.4
Not in labor force	13	+/-16	54.20%	+/-44.4
Own children under 6 years	0	+/-10	0	(X)
All parents in family in labor force	0	+/-10	-	**
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	11	+/-10	11	(X)
Agriculture, forestry, fishing and hunting, and mining	0	+/-10	0.00%	+/-74.4
Construction	0	+/-10	0.00%	+/-74.4
Manufacturing	3	+/-4	27.30%	+/-35.6
Wholesale trade	0	+/-10	0.00%	+/-74.4
Retail trade	2	+/-3	18.20%	+/-28.9
Transportation and warehousing, and utilities	2	+/-3	18.20%	+/-27.8
Information	0	+/-10	0.00%	+/-74.4
Finance and insurance, and real estate and rental and leasing	0	+/-10	0.00%	+/-74.4
Professional, scientific, and management, and administrative and waste manag	0	+/-10	0.00%	+/-74.4
Educational services, and health care and social assistance	2	+/-4	18.20%	+/-28.2
Arts, entertainment, and recreation, and accommodation and food services	2	+/-3	18.20%	+/-29.0
Other services, except public administration	0	+/-10	0.00%	+/-74.4
Public administration	0	+/-10	0.00%	+/-74.4
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	16	+/-10	16	(X)
Less than \$10,000	0	+/-10	0.00%	+/-61.7
\$10,000 to \$14,999	0	+/-10	0.00%	+/-61.7
\$15,000 to \$24,999	0	+/-10	0.00%	+/-61.7
\$25,000 to \$34,999	9	+/-10	56.30%	+/-40.1
\$35,000 to \$49,999	5	+/-5	31.30%	+/-31.9
\$50,000 to \$74,999	2	+/-3	12.50%	+/-24.2
\$75,000 to \$99,999	0	+/-10	0.00%	+/-61.7
\$100,000 to \$149,999	0	+/-10	0.00%	+/-61.7
\$150,000 to \$199,999	0	+/-10	0.00%	+/-61.7
\$200,000 or more	0	+/-10	0.00%	+/-61.7
Median household income (dollars)	34,375	+/-7,477	(X)	(X)
With Social Security	9	+/-10	56.30%	+/-40.1
Mean Social Security income (dollars)	15,244	+/-5,325	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	0	+/-10	0.00%	+/-61.7
Median family income (dollars)	32,250	+/-39,524	(X)	(X)
Per capita income (dollars)	25,275	+/-8,593	(X)	(X)
Median earnings for workers (dollars)	31,875	+/-8,729	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	36,250	+/-7,422	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	-	**	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	24	+/-16	24	(X)
With health insurance coverage	24	+/-16	100.00%	+/-50.4
No health insurance coverage	0	+/-10	0.00%	+/-50.4
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	0.00%	+/-82.3
With related children under 18 years	(X)	(X)	-	**
With related children under 5 years only	(X)	(X)	-	**
Families with female householder, no husband present	(X)	(X)	-	**
With related children under 18 years	(X)	(X)	-	**
With related children under 5 years only	(X)	(X)	-	**
All people	(X)	(X)	0.00%	+/-50.4
Under 18 years	(X)	(X)	-	**
65 years and over	(X)	(X)	0.00%	+/-100.0

Subject	Allamakee County, Iowa Census 2010 Population 14,330			
	5-Year Estimates, 2008 - 2012	Estimate	Margin of Error	Percent
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	11,493	+/-59	11,493	(X)
In labor force	7,612	+/-229	66.20%	+/-1.9
Not in labor force	3,881	+/-224	33.80%	+/-1.9
Own children under 6 years	1,040	+/-78	1,040	(X)
All parents in family in labor force	745	+/-107	71.60%	+/-8.9
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	7,012	+/-273	7,012	(X)
Agriculture, forestry, fishing and hunting, and mining	747	+/-148	10.70%	+/-2.1
Construction	511	+/-110	7.30%	+/-1.6
Manufacturing	1,051	+/-172	15.00%	+/-2.4
Wholesale trade	120	+/-59	1.70%	+/-0.8
Retail trade	933	+/-156	13.30%	+/-2.1
Transportation and warehousing, and utilities	545	+/-146	7.80%	+/-2.1
Information	81	+/-43	1.20%	+/-0.6
Finance and insurance, and real estate and rental and leasing	333	+/-97	4.70%	+/-1.3
Professional, scientific, and management, and administrative and waste manag	210	+/-65	3.00%	+/-0.9
Educational services, and health care and social assistance	1,489	+/-181	21.20%	+/-2.4
Arts, entertainment, and recreation, and accommodation and food services	432	+/-122	6.20%	+/-1.7
Other services, except public administration	350	+/-116	5.00%	+/-1.6
Public administration	210	+/-66	3.00%	+/-0.9
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	5,805	+/-220	5,805	(X)
Less than \$10,000	224	+/-67	3.90%	+/-1.1
\$10,000 to \$14,999	373	+/-87	6.40%	+/-1.5
\$15,000 to \$24,999	678	+/-104	11.70%	+/-1.7
\$25,000 to \$34,999	793	+/-147	13.70%	+/-2.4
\$35,000 to \$49,999	992	+/-163	17.10%	+/-2.6
C	1,361	+/-182	23.40%	+/-3.1
\$75,000 to \$99,999	717	+/-131	12.40%	+/-2.4
\$100,000 to \$149,999	519	+/-123	8.90%	+/-2.0
\$150,000 to \$199,999	72	+/-38	1.20%	+/-0.7
\$200,000 or more	76	+/-38	1.30%	+/-0.7
Median household income (dollars)	47,539	+/-2,983	(X)	(X)
With Social Security	2,149	+/-147	37.00%	+/-2.1
Mean Social Security income (dollars)	16,234	+/-815	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	576	+/-136	9.90%	+/-2.2
Median family income (dollars)	54,114	+/-3,087	(X)	(X)
Per capita income (dollars)	23,392	+/-929	(X)	(X)
Median earnings for workers (dollars)	22,218	+/-1,061	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	41,200	+/-2,683	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	25,442	+/-1,890	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	13,965	+/-113	13,965	(X)
With health insurance coverage	12,493	+/-268	89.50%	+/-1.7
No health insurance coverage	1,472	+/-237	10.50%	+/-1.7
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	6.50%	+/-1.7
With related children under 18 years	(X)	(X)	13.60%	+/-4.1
With related children under 5 years only	(X)	(X)	22.20%	+/-12.0
Families with female householder, no husband present	(X)	(X)	28.10%	+/-12.5
With related children under 18 years	(X)	(X)	45.00%	+/-16.2
With related children under 5 years only	(X)	(X)	67.20%	+/-29.3
All people	(X)	(X)	11.00%	+/-2.2
Under 18 years	(X)	(X)	18.40%	+/-5.6
65 years and over	(X)	(X)	8.70%	+/-3.2

Subject 5-Year Estimates, 2008 - 2012	Waukon city, Iowa Census 2010 Population 3,897			
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	3,252	+/-114	3,252	(X)
In labor force	2,051	+/-157	63.10%	+/-4.4
Not in labor force	1,201	+/-152	36.90%	+/-4.4
Own children under 6 years	247	+/-77	247	(X)
All parents in family in labor force	195	+/-72	78.90%	+/-16.7
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	1,868	+/-164	1,868	(X)
Agriculture, forestry, fishing and hunting, and mining	66	+/-58	3.50%	+/-3.1
Construction	114	+/-56	6.10%	+/-3.1
Manufacturing	285	+/-94	15.30%	+/-4.8
Wholesale trade	9	+/-16	0.50%	+/-0.8
Retail trade	352	+/-108	18.80%	+/-5.5
Transportation and warehousing, and utilities	111	+/-50	5.90%	+/-2.7
Information	19	+/-20	1.00%	+/-1.1
Finance and insurance, and real estate and rental and leasing	125	+/-67	6.70%	+/-3.5
Professional, scientific, and management, and administrative and waste manag	42	+/-34	2.20%	+/-1.8
Educational services, and health care and social assistance	476	+/-105	25.50%	+/-5.2
Arts, entertainment, and recreation, and accommodation and food services	109	+/-59	5.80%	+/-3.1
Other services, except public administration	98	+/-60	5.20%	+/-3.0
Public administration	62	+/-40	3.30%	+/-2.2
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	1,715	+/-118	1,715	(X)
Less than \$10,000	100	+/-46	5.80%	+/-2.7
\$10,000 to \$14,999	211	+/-68	12.30%	+/-3.8
\$15,000 to \$24,999	220	+/-73	12.80%	+/-4.2
\$25,000 to \$34,999	214	+/-85	12.50%	+/-4.7
\$35,000 to \$49,999	272	+/-87	15.90%	+/-5.0
\$50,000 to \$74,999	415	+/-108	24.20%	+/-6.1
\$75,000 to \$99,999	168	+/-62	9.80%	+/-3.6
\$100,000 to \$149,999	96	+/-56	5.60%	+/-3.2
\$150,000 to \$199,999	19	+/-22	1.10%	+/-1.3
\$200,000 or more	0	+/-10	0.00%	+/-1.3
Median household income (dollars)	38,787	+/-6,914	(X)	(X)
With Social Security	666	+/-92	38.80%	+/-4.8
Mean Social Security income (dollars)	15,758	+/-1,307	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	275	+/-81	16.00%	+/-4.6
Median family income (dollars)	49,219	+/-10,765	(X)	(X)
Per capita income (dollars)	21,111	+/-1,823	(X)	(X)
Median earnings for workers (dollars)	21,172	+/-1,110	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	35,609	+/-8,125	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	24,063	+/-4,282	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	3,738	+/-93	3,738	(X)
With health insurance coverage	3,487	+/-147	93.30%	+/-2.7
No health insurance coverage	251	+/-99	6.70%	+/-2.7
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	9.80%	+/-4.5
With related children under 18 years	(X)	(X)	20.30%	+/-10.8
With related children under 5 years only	(X)	(X)	29.50%	+/-27.2
Families with female householder, no husband present	(X)	(X)	36.00%	+/-17.8
With related children under 18 years	(X)	(X)	59.40%	+/-22.7
With related children under 5 years only	(X)	(X)	63.90%	+/-42.2
All people	(X)	(X)	14.30%	+/-5.3
Under 18 years	(X)	(X)	25.90%	+/-13.7
65 years and over	(X)	(X)	14.50%	+/-8.1

Subject 5-Year Estimates, 2008 - 2012	Postville city, Iowa Census 2010 Population 2,227			
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	1,479	+/-165	1,479	(X)
In labor force	933	+/-157	63.10%	+/-7.0
Not in labor force	546	+/-112	36.90%	+/-7.0
Own children under 6 years	361	+/-90	361	(X)
All parents in family in labor force	217	+/-67	60.10%	+/-15.6
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	884	+/-161	884	(X)
Agriculture, forestry, fishing and hunting, and mining	37	+/-32	4.20%	+/-3.5
Construction	54	+/-32	6.10%	+/-3.4
Manufacturing	357	+/-110	40.40%	+/-10.2
Wholesale trade	22	+/-19	2.50%	+/-2.1
Retail trade	39	+/-28	4.40%	+/-3.2
Transportation and warehousing, and utilities	39	+/-29	4.40%	+/-3.1
Information	0	+/-10	0.00%	+/-2.5
Finance and insurance, and real estate and rental and leasing	50	+/-44	5.70%	+/-4.5
Professional, scientific, and management, and administrative and waste manag	63	+/-61	7.10%	+/-6.7
Educational services, and health care and social assistance	139	+/-53	15.70%	+/-5.7
Arts, entertainment, and recreation, and accommodation and food services	8	+/-11	0.90%	+/-1.2
Other services, except public administration	42	+/-34	4.80%	+/-3.8
Public administration	34	+/-37	3.80%	+/-4.1
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	741	+/-96	741	(X)
Less than \$10,000	20	+/-20	2.70%	+/-2.7
\$10,000 to \$14,999	63	+/-57	8.50%	+/-7.4
\$15,000 to \$24,999	122	+/-45	16.50%	+/-5.6
\$25,000 to \$34,999	131	+/-51	17.70%	+/-6.8
\$35,000 to \$49,999	123	+/-43	16.60%	+/-5.9
\$50,000 to \$74,999	180	+/-84	24.30%	+/-10.1
\$75,000 to \$99,999	63	+/-37	8.50%	+/-5.0
\$100,000 to \$149,999	33	+/-22	4.50%	+/-3.1
\$150,000 to \$199,999	6	+/-9	0.80%	+/-1.1
\$200,000 or more	0	+/-10	0.00%	+/-3.0
Median household income (dollars)	39,010	+/-10,632	(X)	(X)
With Social Security	233	+/-57	31.40%	+/-7.7
Mean Social Security income (dollars)	16,260	+/-2,166	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	155	+/-78	20.90%	+/-9.5
Median family income (dollars)	36,938	+/-10,997	(X)	(X)
Per capita income (dollars)	15,881	+/-1,995	(X)	(X)
Median earnings for workers (dollars)	19,461	+/-3,246	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	37,109	+/-10,599	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	17,227	+/-5,845	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	2,122	+/-250	2,122	(X)
With health insurance coverage	1,576	+/-261	74.30%	+/-7.3
No health insurance coverage	546	+/-159	25.70%	+/-7.3
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	22.70%	+/-11.1
With related children under 18 years	(X)	(X)	37.30%	+/-16.4
With related children under 5 years only	(X)	(X)	38.00%	+/-35.1
Families with female householder, no husband present	(X)	(X)	54.00%	+/-30.4
With related children under 18 years	(X)	(X)	57.80%	+/-31.1
With related children under 5 years only	(X)	(X)	65.40%	+/-55.9
All people	(X)	(X)	23.40%	+/-8.0
Under 18 years	(X)	(X)	33.70%	+/-13.1
65 years and over	(X)	(X)	11.60%	+/-8.9

Subject 5-Year Estimates, 2008 - 2012	Buena Vista County, Iowa		Census 2010 Population 20,260	
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	15,741	+/-99	15,741	(X)
In labor force	11,129	+/-257	70.70%	+/-1.5
Not in labor force	4,612	+/-237	29.30%	+/-1.5
Own children under 6 years	1,779	+/-138	1,779	(X)
All parents in family in labor force	1,501	+/-164	84.40%	+/-5.1
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	10,761	+/-255	10,761	(X)
Agriculture, forestry, fishing and hunting, and mining	930	+/-152	8.60%	+/-1.4
Construction	563	+/-118	5.20%	+/-1.1
Manufacturing	2,861	+/-286	26.60%	+/-2.5
Wholesale trade	310	+/-111	2.90%	+/-1.0
Retail trade	1,113	+/-172	10.30%	+/-1.6
Transportation and warehousing, and utilities	183	+/-58	1.70%	+/-0.5
Information	117	+/-49	1.10%	+/-0.5
Finance and insurance, and real estate and rental and leasing	290	+/-69	2.70%	+/-0.6
Professional, scientific, and management, and administrative and waste manag	332	+/-78	3.10%	+/-0.7
Educational services, and health care and social assistance	2,520	+/-241	23.40%	+/-2.2
Arts, entertainment, and recreation, and accommodation and food services	737	+/-165	6.80%	+/-1.5
Other services, except public administration	573	+/-129	5.30%	+/-1.2
Public administration	232	+/-72	2.20%	+/-0.7
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	7,645	+/-160	7,645	(X)
Less than \$10,000	496	+/-138	6.50%	+/-1.8
\$10,000 to \$14,999	455	+/-106	6.00%	+/-1.4
\$15,000 to \$24,999	850	+/-133	11.10%	+/-1.7
\$25,000 to \$34,999	819	+/-147	10.70%	+/-1.9
\$35,000 to \$49,999	1,461	+/-198	19.10%	+/-2.6
\$50,000 to \$74,999	1,595	+/-160	20.90%	+/-2.1
\$75,000 to \$99,999	995	+/-155	13.00%	+/-2.0
\$100,000 to \$149,999	688	+/-119	9.00%	+/-1.6
\$150,000 to \$199,999	107	+/-41	1.40%	+/-0.5
\$200,000 or more	179	+/-60	2.30%	+/-0.8
Median household income (dollars)	46,947	+/-1,716	(X)	(X)
With Social Security	2,279	+/-130	29.80%	+/-1.6
Mean Social Security income (dollars)	16,137	+/-811	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	801	+/-147	10.50%	+/-1.9
Median family income (dollars)	57,337	+/-2,732	(X)	(X)
Per capita income (dollars)	22,965	+/-1,005	(X)	(X)
Median earnings for workers (dollars)	25,253	+/-1,026	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	35,788	+/-1,602	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	28,661	+/-1,897	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	19,865	+/-71	19,865	(X)
With health insurance coverage	17,683	+/-379	89.00%	+/-1.8
No health insurance coverage	2,182	+/-353	11.00%	+/-1.8
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	9.70%	+/-2.6
With related children under 18 years	(X)	(X)	15.40%	+/-4.5
With related children under 5 years only	(X)	(X)	18.80%	+/-11.3
Families with female householder, no husband present	(X)	(X)	51.00%	+/-10.8
With related children under 18 years	(X)	(X)	56.20%	+/-11.6
With related children under 5 years only	(X)	(X)	64.40%	+/-24.3
All people	(X)	(X)	12.70%	+/-2.4
Under 18 years	(X)	(X)	19.20%	+/-5.7
65 years and over	(X)	(X)	8.30%	+/-2.9

Subject	Storm Lake city, Iowa		Census 2010 Population 10,600	
	5-Year Estimates, 2008 - 2012 Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	8,047	+/-208	8,047	(X)
In labor force	5,909	+/-226	73.40%	+/-2.4
Not in labor force	2,138	+/-212	26.60%	+/-2.4
Own children under 6 years	1,120	+/-170	1,120	(X)
All parents in family in labor force	1,027	+/-175	91.70%	+/-6.0
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	5,744	+/-227	5,744	(X)
Agriculture, forestry, fishing and hunting, and mining	176	+/-130	3.10%	+/-2.2
Construction	218	+/-92	3.80%	+/-1.6
Manufacturing	1,901	+/-259	33.10%	+/-4.4
Wholesale trade	192	+/-99	3.30%	+/-1.7
Retail trade	553	+/-141	9.60%	+/-2.4
Transportation and warehousing, and utilities	36	+/-37	0.60%	+/-0.6
Information	41	+/-36	0.70%	+/-0.6
Finance and insurance, and real estate and rental and leasing	115	+/-56	2.00%	+/-1.0
Professional, scientific, and management, and administrative and waste manag	122	+/-71	2.10%	+/-1.2
Educational services, and health care and social assistance	1,452	+/-209	25.30%	+/-3.4
Arts, entertainment, and recreation, and accommodation and food services	477	+/-142	8.30%	+/-2.5
Other services, except public administration	356	+/-120	6.20%	+/-2.1
Public administration	105	+/-55	1.80%	+/-1.0
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	3,651	+/-175	3,651	(X)
Less than \$10,000	277	+/-113	7.60%	+/-3.0
\$10,000 to \$14,999	209	+/-92	5.70%	+/-2.4
\$15,000 to \$24,999	456	+/-125	12.50%	+/-3.3
\$25,000 to \$34,999	345	+/-134	9.40%	+/-3.7
\$35,000 to \$49,999	775	+/-166	21.20%	+/-4.6
\$50,000 to \$74,999	773	+/-142	21.20%	+/-3.8
\$75,000 to \$99,999	381	+/-123	10.40%	+/-3.2
\$100,000 to \$149,999	351	+/-105	9.60%	+/-2.9
\$150,000 to \$199,999	36	+/-27	1.00%	+/-0.7
\$200,000 or more	48	+/-33	1.30%	+/-0.9
Median household income (dollars)	45,208	+/-3,091	(X)	(X)
With Social Security	1,030	+/-130	28.20%	+/-3.1
Mean Social Security income (dollars)	15,267	+/-1,422	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	510	+/-133	14.00%	+/-3.6
Median family income (dollars)	52,679	+/-6,918	(X)	(X)
Per capita income (dollars)	19,430	+/-1,378	(X)	(X)
Median earnings for workers (dollars)	22,358	+/-1,523	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	31,976	+/-1,254	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	28,774	+/-2,258	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	10,323	+/-78	10,323	(X)
With health insurance coverage	9,243	+/-309	89.50%	+/-2.8
No health insurance coverage	1,080	+/-286	10.50%	+/-2.8
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	13.00%	+/-4.9
With related children under 18 years	(X)	(X)	20.00%	+/-7.5
With related children under 5 years only	(X)	(X)	25.30%	+/-17.8
Families with female householder, no husband present	(X)	(X)	68.50%	+/-16.0
With related children under 18 years	(X)	(X)	74.50%	+/-15.3
With related children under 5 years only	(X)	(X)	74.80%	+/-28.4
All people	(X)	(X)	15.40%	+/-4.1
Under 18 years	(X)	(X)	24.50%	+/-9.0
65 years and over	(X)	(X)	6.60%	+/-4.9

Subject	Alta city, Iowa Census 2010 Population 1,883			
	5-Year Estimates, 2008 - 2012	Estimate	Margin of Error	Percent
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	1,425	+/-135	1,425	(X)
In labor force	961	+/-129	67.40%	+/-4.9
Not in labor force	464	+/-72	32.60%	+/-4.9
Own children under 6 years	187	+/-53	187	(X)
All parents in family in labor force	106	+/-41	56.70%	+/-17.9
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	939	+/-130	939	(X)
Agriculture, forestry, fishing and hunting, and mining	49	+/-30	5.20%	+/-2.9
Construction	75	+/-23	8.00%	+/-2.5
Manufacturing	222	+/-61	23.60%	+/-5.4
Wholesale trade	31	+/-31	3.30%	+/-3.3
Retail trade	96	+/-38	10.20%	+/-3.6
Transportation and warehousing, and utilities	28	+/-18	3.00%	+/-1.8
Information	5	+/-8	0.50%	+/-0.8
Finance and insurance, and real estate and rental and leasing	42	+/-19	4.50%	+/-2.0
Professional, scientific, and management, and administrative and waste manag	24	+/-15	2.60%	+/-1.6
Educational services, and health care and social assistance	219	+/-52	23.30%	+/-4.5
Arts, entertainment, and recreation, and accommodation and food services	67	+/-28	7.10%	+/-2.9
Other services, except public administration	52	+/-21	5.50%	+/-2.1
Public administration	29	+/-17	3.10%	+/-1.7
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	763	+/-70	763	(X)
Less than \$10,000	27	+/-21	3.50%	+/-2.8
\$10,000 to \$14,999	58	+/-25	7.60%	+/-3.1
\$15,000 to \$24,999	101	+/-32	13.20%	+/-4.1
\$25,000 to \$34,999	125	+/-43	16.40%	+/-5.2
\$35,000 to \$49,999	104	+/-33	13.60%	+/-4.1
\$50,000 to \$74,999	140	+/-35	18.30%	+/-4.2
\$75,000 to \$99,999	115	+/-33	15.10%	+/-4.2
\$100,000 to \$149,999	57	+/-24	7.50%	+/-3.1
\$150,000 to \$199,999	21	+/-12	2.80%	+/-1.5
\$200,000 or more	15	+/-10	2.00%	+/-1.4
Median household income (dollars)	42,331	+/-7,615	(X)	(X)
With Social Security	247	+/-44	32.40%	+/-5.8
Mean Social Security income (dollars)	17,294	+/-1,720	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	52	+/-25	6.80%	+/-3.3
Median family income (dollars)	59,625	+/-5,641	(X)	(X)
Per capita income (dollars)	25,252	+/-2,221	(X)	(X)
Median earnings for workers (dollars)	29,344	+/-2,806	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	39,083	+/-2,779	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	31,106	+/-3,064	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	1,835	+/-180	1,835	(X)
With health insurance coverage	1,636	+/-176	89.20%	+/-2.9
No health insurance coverage	199	+/-53	10.80%	+/-2.9
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	7.20%	+/-3.6
With related children under 18 years	(X)	(X)	10.90%	+/-6.0
With related children under 5 years only	(X)	(X)	7.70%	+/-8.1
Families with female householder, no husband present	(X)	(X)	26.00%	+/-16.5
With related children under 18 years	(X)	(X)	29.10%	+/-21.1
With related children under 5 years only	(X)	(X)	60.00%	+/-58.7
All people	(X)	(X)	9.80%	+/-3.9
Under 18 years	(X)	(X)	12.00%	+/-6.9
65 years and over	(X)	(X)	8.20%	+/-5.6



Subject	Wapello County, Iowa Census 2010 Population 35,625			
	5-Year Estimates, 2008 - 2012	Estimate	Margin of Error	Percent
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	28,277	+/-108	28,277	(X)
In labor force	17,987	+/-461	63.60%	+/-1.6
Not in labor force	10,290	+/-466	36.40%	+/-1.6
Own children under 6 years	2,541	+/-148	2,541	(X)
All parents in family in labor force	1,888	+/-205	74.30%	+/-6.2
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	16,366	+/-496	16,366	(X)
Agriculture, forestry, fishing and hunting, and mining	261	+/-85	1.60%	+/-0.5
Construction	736	+/-149	4.50%	+/-0.9
Manufacturing	4,318	+/-408	26.40%	+/-2.3
Wholesale trade	353	+/-125	2.20%	+/-0.8
Retail trade	2,072	+/-289	12.70%	+/-1.8
Transportation and warehousing, and utilities	870	+/-216	5.30%	+/-1.3
Information	203	+/-82	1.20%	+/-0.5
Finance and insurance, and real estate and rental and leasing	648	+/-157	4.00%	+/-0.9
Professional, scientific, and management, and administrative and waste manag	732	+/-183	4.50%	+/-1.1
Educational services, and health care and social assistance	3,578	+/-270	21.90%	+/-1.6
Arts, entertainment, and recreation, and accommodation and food services	1,319	+/-259	8.10%	+/-1.6
Other services, except public administration	777	+/-154	4.70%	+/-1.0
Public administration	499	+/-102	3.00%	+/-0.6
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	14,570	+/-305	14,570	(X)
Less than \$10,000	1,121	+/-194	7.70%	+/-1.3
\$10,000 to \$14,999	1,272	+/-199	8.70%	+/-1.4
\$15,000 to \$24,999	1,955	+/-251	13.40%	+/-1.7
\$25,000 to \$34,999	2,028	+/-265	13.90%	+/-1.8
\$35,000 to \$49,999	2,185	+/-238	15.00%	+/-1.6
\$50,000 to \$74,999	2,699	+/-291	18.50%	+/-1.9
\$75,000 to \$99,999	1,542	+/-205	10.60%	+/-1.4
\$100,000 to \$149,999	1,164	+/-175	8.00%	+/-1.2
\$150,000 to \$199,999	342	+/-116	2.30%	+/-0.8
\$200,000 or more	262	+/-79	1.80%	+/-0.5
Median household income (dollars)	41,088	+/-1,973	(X)	(X)
With Social Security	4,865	+/-217	33.40%	+/-1.5
Mean Social Security income (dollars)	16,458	+/-657	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	2,943	+/-291	20.20%	+/-1.9
Median family income (dollars)	50,402	+/-2,203	(X)	(X)
Per capita income (dollars)	22,825	+/-844	(X)	(X)
Median earnings for workers (dollars)	25,871	+/-1,350	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	40,797	+/-1,321	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	30,953	+/-1,813	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	34,994	+/-119	34,994	(X)
With health insurance coverage	31,015	+/-403	88.60%	+/-1.2
No health insurance coverage	3,979	+/-410	11.40%	+/-1.2
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	13.40%	+/-1.9
With related children under 18 years	(X)	(X)	23.40%	+/-3.8
With related children under 5 years only	(X)	(X)	25.20%	+/-9.6
Families with female householder, no husband present	(X)	(X)	37.50%	+/-7.1
With related children under 18 years	(X)	(X)	45.70%	+/-9.0
With related children under 5 years only	(X)	(X)	62.80%	+/-21.8
All people	(X)	(X)	17.80%	+/-1.9
Under 18 years	(X)	(X)	24.90%	+/-4.7
65 years and over	(X)	(X)	11.60%	+/-2.9

Subject	Ottumwa city, Iowa Census 2010 Population 25,023				
	5-Year Estimates, 2008 - 2012	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>					
Population 16 years and over		19,850	+/-198	19,850	(X)
In labor force		12,474	+/-462	62.80%	+/-2.3
Not in labor force		7,376	+/-457	37.20%	+/-2.3
Own children under 6 years		1,794	+/-182	1,794	(X)
All parents in family in labor force		1,331	+/-216	74.20%	+/-8.2
<b>INDUSTRY</b>					
Civilian employed population 16 years and over		11,156	+/-493	11,156	(X)
Agriculture, forestry, fishing and hunting, and mining		56	+/-37	0.50%	+/-0.3
Construction		448	+/-133	4.00%	+/-1.2
Manufacturing		3,015	+/-339	27.00%	+/-2.8
Wholesale trade		289	+/-114	2.60%	+/-1.0
Retail trade		1,486	+/-250	13.30%	+/-2.1
Transportation and warehousing, and utilities		432	+/-131	3.90%	+/-1.2
Information		167	+/-78	1.50%	+/-0.7
Finance and insurance, and real estate and rental and leasing		499	+/-149	4.50%	+/-1.3
Professional, scientific, and management, and administrative and waste manag		556	+/-172	5.00%	+/-1.5
Educational services, and health care and social assistance		2,469	+/-248	22.10%	+/-2.2
Arts, entertainment, and recreation, and accommodation and food services		993	+/-238	8.90%	+/-2.1
Other services, except public administration		516	+/-136	4.60%	+/-1.2
Public administration		230	+/-78	2.10%	+/-0.7
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>					
Total households		10,270	+/-302	10,270	(X)
Less than \$10,000		901	+/-184	8.80%	+/-1.7
\$10,000 to \$14,999		979	+/-185	9.50%	+/-1.8
\$15,000 to \$24,999		1,480	+/-215	14.40%	+/-2.0
\$25,000 to \$34,999		1,513	+/-255	14.70%	+/-2.4
\$35,000 to \$49,999		1,547	+/-229	15.10%	+/-2.2
\$50,000 to \$74,999		1,899	+/-276	18.50%	+/-2.6
\$75,000 to \$99,999		894	+/-182	8.70%	+/-1.8
\$100,000 to \$149,999		744	+/-140	7.20%	+/-1.4
\$150,000 to \$199,999		175	+/-74	1.70%	+/-0.7
\$200,000 or more		138	+/-67	1.30%	+/-0.7
Median household income (dollars)		37,251	+/-2,646	(X)	(X)
With Social Security		3,396	+/-212	33.10%	+/-1.9
Mean Social Security income (dollars)		16,018	+/-823	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months		2,418	+/-267	23.50%	+/-2.6
Median family income (dollars)		44,347	+/-2,684	(X)	(X)
Per capita income (dollars)		21,230	+/-1,155	(X)	(X)
Median earnings for workers (dollars)		23,731	+/-2,380	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)		39,446	+/-1,918	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)		30,037	+/-2,031	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>					
Civilian noninstitutionalized population		24,405	+/-129	24,405	(X)
With health insurance coverage		21,374	+/-380	87.60%	+/-1.6
No health insurance coverage		3,031	+/-384	12.40%	+/-1.6
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>					
All families		(X)	(X)	15.50%	+/-2.8
With related children under 18 years		(X)	(X)	26.20%	+/-5.1
With related children under 5 years only		(X)	(X)	31.80%	+/-12.7
Families with female householder, no husband present		(X)	(X)	36.70%	+/-8.6
With related children under 18 years		(X)	(X)	43.40%	+/-10.5
With related children under 5 years only		(X)	(X)	59.60%	+/-29.0
All people		(X)	(X)	20.40%	+/-2.6
Under 18 years		(X)	(X)	27.30%	+/-5.9
65 years and over		(X)	(X)	12.60%	+/-3.6

Subject	Eldon city, Iowa Census 2010 Population 927			
	5-Year Estimates, 2008 - 2012	Estimate	Margin of Error	Percent
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	739	+/-130	739	(X)
In labor force	439	+/-99	59.40%	+/-7.6
Not in labor force	300	+/-73	40.60%	+/-7.6
Own children under 6 years	103	+/-47	103	(X)
All parents in family in labor force	53	+/-30	51.50%	+/-26.2
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	412	+/-94	412	(X)
Agriculture, forestry, fishing and hunting, and mining	11	+/-10	2.70%	+/-2.5
Construction	46	+/-29	11.20%	+/-6.7
Manufacturing	59	+/-26	14.30%	+/-6.2
Wholesale trade	7	+/-7	1.70%	+/-1.7
Retail trade	58	+/-28	14.10%	+/-5.5
Transportation and warehousing, and utilities	16	+/-16	3.90%	+/-3.9
Information	10	+/-9	2.40%	+/-2.1
Finance and insurance, and real estate and rental and leasing	13	+/-11	3.20%	+/-2.5
Professional, scientific, and management, and administrative and waste manag	17	+/-14	4.10%	+/-3.4
Educational services, and health care and social assistance	86	+/-29	20.90%	+/-6.1
Arts, entertainment, and recreation, and accommodation and food services	54	+/-36	13.10%	+/-7.5
Other services, except public administration	13	+/-10	3.20%	+/-2.3
Public administration	22	+/-29	5.30%	+/-6.9
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	410	+/-74	410	(X)
Less than \$10,000	56	+/-31	13.70%	+/-7.1
\$10,000 to \$14,999	55	+/-32	13.40%	+/-7.1
\$15,000 to \$24,999	65	+/-31	15.90%	+/-6.7
\$25,000 to \$34,999	55	+/-28	13.40%	+/-6.4
\$35,000 to \$49,999	54	+/-27	13.20%	+/-6.1
\$50,000 to \$74,999	54	+/-23	13.20%	+/-5.1
\$75,000 to \$99,999	65	+/-32	15.90%	+/-7.6
\$100,000 to \$149,999	6	+/-6	1.50%	+/-1.4
\$150,000 to \$199,999	0	+/-10	0.00%	+/-5.3
\$200,000 or more	0	+/-10	0.00%	+/-5.3
Median household income (dollars)	31,912	+/-7,500	(X)	(X)
With Social Security	119	+/-43	29.00%	+/-8.4
Mean Social Security income (dollars)	16,055	+/-2,866	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	100	+/-41	24.40%	+/-9.4
Median family income (dollars)	34,545	+/-12,192	(X)	(X)
Per capita income (dollars)	16,432	+/-2,163	(X)	(X)
Median earnings for workers (dollars)	23,417	+/-2,768	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	33,906	+/-5,674	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	26,042	+/-7,341	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	966	+/-178	966	(X)
With health insurance coverage	718	+/-135	74.30%	+/-9.0
No health insurance coverage	248	+/-109	25.70%	+/-9.0
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	17.20%	+/-9.9
With related children under 18 years	(X)	(X)	22.20%	+/-14.5
With related children under 5 years only	(X)	(X)	32.30%	+/-30.4
Families with female householder, no husband present	(X)	(X)	52.10%	+/-27.0
With related children under 18 years	(X)	(X)	50.70%	+/-27.9
With related children under 5 years only	(X)	(X)	64.50%	+/-47.3
All people	(X)	(X)	17.00%	+/-6.8
Under 18 years	(X)	(X)	18.30%	+/-13.7
65 years and over	(X)	(X)	7.30%	+/-8.0

Subject 5-Year Estimates, 2008 - 2012	Polk County, Iowa		Census 2010 Population 430,640	
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	332,916	+/-450	332,916	(X)
In labor force	245,184	+/-1,487	73.60%	+/-0.4
Not in labor force	87,732	+/-1,376	26.40%	+/-0.4
Own children under 6 years	37,869	+/-443	37,869	(X)
All parents in family in labor force	27,947	+/-919	73.80%	+/-2.3
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	230,366	+/-1,599	230,366	(X)
Agriculture, forestry, fishing and hunting, and mining	2,723	+/-442	1.20%	+/-0.2
Construction	12,744	+/-945	5.50%	+/-0.4
Manufacturing	18,061	+/-868	7.80%	+/-0.4
Wholesale trade	7,346	+/-549	3.20%	+/-0.2
Retail trade	25,435	+/-1,149	11.00%	+/-0.5
Transportation and warehousing, and utilities	9,645	+/-624	4.20%	+/-0.3
Information	5,937	+/-592	2.60%	+/-0.3
Finance and insurance, and real estate and rental and leasing	39,232	+/-1,420	17.00%	+/-0.6
Professional, scientific, and management, and administrative and waste manag	22,420	+/-1,174	9.70%	+/-0.5
Educational services, and health care and social assistance	47,386	+/-1,451	20.60%	+/-0.6
Arts, entertainment, and recreation, and accommodation and food services	19,705	+/-1,111	8.60%	+/-0.5
Other services, except public administration	9,779	+/-778	4.20%	+/-0.3
Public administration	9,953	+/-692	4.30%	+/-0.3
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	171,227	+/-952	171,227	(X)
Less than \$10,000	9,165	+/-692	5.40%	+/-0.4
\$10,000 to \$14,999	7,413	+/-442	4.30%	+/-0.3
\$15,000 to \$24,999	16,014	+/-869	9.40%	+/-0.5
\$25,000 to \$34,999	17,130	+/-831	10.00%	+/-0.5
\$35,000 to \$49,999	23,403	+/-1,058	13.70%	+/-0.6
\$50,000 to \$74,999	33,826	+/-1,101	19.80%	+/-0.6
\$75,000 to \$99,999	24,522	+/-1,036	14.30%	+/-0.6
\$100,000 to \$149,999	25,255	+/-1,126	14.70%	+/-0.7
\$150,000 to \$199,999	7,891	+/-519	4.60%	+/-0.3
\$200,000 or more	6,608	+/-621	3.90%	+/-0.4
Median household income (dollars)	58,096	+/-1,019	(X)	(X)
With Social Security	38,836	+/-685	22.70%	+/-0.4
Mean Social Security income (dollars)	17,621	+/-280	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	20,904	+/-798	12.20%	+/-0.5
Median family income (dollars)	73,440	+/-1,165	(X)	(X)
Per capita income (dollars)	29,973	+/-419	(X)	(X)
Median earnings for workers (dollars)	33,304	+/-569	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	49,905	+/-800	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	39,787	+/-673	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	427,063	+/-396	427,063	(X)
With health insurance coverage	390,793	+/-1,829	91.50%	+/-0.4
No health insurance coverage	36,270	+/-1,784	8.50%	+/-0.4
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	8.10%	+/-0.6
With related children under 18 years	(X)	(X)	13.00%	+/-1.0
With related children under 5 years only	(X)	(X)	15.80%	+/-2.3
Families with female householder, no husband present	(X)	(X)	25.60%	+/-2.4
With related children under 18 years	(X)	(X)	32.80%	+/-2.8
With related children under 5 years only	(X)	(X)	49.70%	+/-6.3
All people	(X)	(X)	11.30%	+/-0.6
Under 18 years	(X)	(X)	15.70%	+/-1.2
65 years and over	(X)	(X)	5.40%	+/-0.7

Subject	Des Moines city, Iowa Census 2010 Population 203,433			
	5-Year Estimates, 2008 - 2012	Estimate	Margin of Error	Percent
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	158,180	+/-677	158,180	(X)
In labor force	111,969	+/-1,171	70.80%	+/-0.7
Not in labor force	46,211	+/-1,041	29.20%	+/-0.7
Own children under 6 years	18,624	+/-702	18,624	(X)
All parents in family in labor force	13,212	+/-724	70.90%	+/-3.0
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	102,810	+/-1,272	102,810	(X)
Agriculture, forestry, fishing and hunting, and mining	843	+/-269	0.80%	+/-0.3
Construction	6,773	+/-770	6.60%	+/-0.7
Manufacturing	9,224	+/-643	9.00%	+/-0.6
Wholesale trade	2,731	+/-331	2.70%	+/-0.3
Retail trade	11,943	+/-733	11.60%	+/-0.7
Transportation and warehousing, and utilities	4,597	+/-442	4.50%	+/-0.4
Information	3,031	+/-390	2.90%	+/-0.4
Finance and insurance, and real estate and rental and leasing	14,581	+/-788	14.20%	+/-0.8
Professional, scientific, and management, and administrative and waste manag	9,701	+/-695	9.40%	+/-0.7
Educational services, and health care and social assistance	19,851	+/-897	19.30%	+/-0.8
Arts, entertainment, and recreation, and accommodation and food services	10,355	+/-738	10.10%	+/-0.7
Other services, except public administration	5,023	+/-539	4.90%	+/-0.5
Public administration	4,157	+/-428	4.00%	+/-0.4
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	82,325	+/-896	82,325	(X)
Less than \$10,000	6,700	+/-587	8.10%	+/-0.7
\$10,000 to \$14,999	5,076	+/-428	6.20%	+/-0.5
\$15,000 to \$24,999	10,304	+/-656	12.50%	+/-0.8
\$25,000 to \$34,999	10,091	+/-660	12.30%	+/-0.8
\$35,000 to \$49,999	13,146	+/-720	16.00%	+/-0.8
\$50,000 to \$74,999	16,113	+/-726	19.60%	+/-0.9
\$75,000 to \$99,999	10,034	+/-643	12.20%	+/-0.8
\$100,000 to \$149,999	7,673	+/-532	9.30%	+/-0.6
\$150,000 to \$199,999	1,824	+/-269	2.20%	+/-0.3
\$200,000 or more	1,364	+/-224	1.70%	+/-0.3
Median household income (dollars)	44,862	+/-1,126	(X)	(X)
With Social Security	19,640	+/-612	23.90%	+/-0.7
Mean Social Security income (dollars)	16,091	+/-373	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	15,975	+/-735	19.40%	+/-0.9
Median family income (dollars)	54,987	+/-1,888	(X)	(X)
Per capita income (dollars)	23,914	+/-465	(X)	(X)
Median earnings for workers (dollars)	28,004	+/-623	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	41,895	+/-856	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	35,201	+/-798	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	202,001	+/-328	202,001	(X)
With health insurance coverage	178,056	+/-1,234	88.10%	+/-0.6
No health insurance coverage	23,945	+/-1,230	11.90%	+/-0.6
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	13.20%	+/-1.1
With related children under 18 years	(X)	(X)	21.30%	+/-1.8
With related children under 5 years only	(X)	(X)	25.70%	+/-3.9
Families with female householder, no husband present	(X)	(X)	30.30%	+/-2.8
With related children under 18 years	(X)	(X)	38.60%	+/-3.5
With related children under 5 years only	(X)	(X)	53.90%	+/-7.4
All people	(X)	(X)	17.70%	+/-1.1
Under 18 years	(X)	(X)	25.50%	+/-2.2
65 years and over	(X)	(X)	7.00%	+/-1.2

Subject	Alleman city, Iowa Census 2010 Population 432			
	5-Year Estimates, 2008 - 2012	Estimate	Margin of Error	Percent
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	454	+/-87	454	(X)
In labor force	353	+/-77	77.80%	+/-6.9
Not in labor force	101	+/-36	22.20%	+/-6.9
Own children under 6 years	49	+/-31	49	(X)
All parents in family in labor force	49	+/-31	100.00%	+/-34.8
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	344	+/-75	344	(X)
Agriculture, forestry, fishing and hunting, and mining	8	+/-6	2.30%	+/-1.6
Construction	37	+/-24	10.80%	+/-5.7
Manufacturing	21	+/-12	6.10%	+/-3.1
Wholesale trade	8	+/-7	2.30%	+/-1.9
Retail trade	39	+/-19	11.30%	+/-4.5
Transportation and warehousing, and utilities	22	+/-13	6.40%	+/-3.8
Information	6	+/-5	1.70%	+/-1.5
Finance and insurance, and real estate and rental and leasing	22	+/-18	6.40%	+/-5.3
Professional, scientific, and management, and administrative and waste manag	22	+/-15	6.40%	+/-4.2
Educational services, and health care and social assistance	108	+/-40	31.40%	+/-8.8
Arts, entertainment, and recreation, and accommodation and food services	18	+/-16	5.20%	+/-4.5
Other services, except public administration	4	+/-5	1.20%	+/-1.5
Public administration	29	+/-22	8.40%	+/-6.4
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	224	+/-39	224	(X)
Less than \$10,000	8	+/-14	3.60%	+/-6.2
\$10,000 to \$14,999	5	+/-5	2.20%	+/-2.5
\$15,000 to \$24,999	11	+/-10	4.90%	+/-4.1
\$25,000 to \$34,999	12	+/-10	5.40%	+/-4.5
\$35,000 to \$49,999	28	+/-17	12.50%	+/-7.5
\$50,000 to \$74,999	48	+/-24	21.40%	+/-9.6
\$75,000 to \$99,999	46	+/-23	20.50%	+/-9.2
\$100,000 to \$149,999	50	+/-21	22.30%	+/-8.7
\$150,000 to \$199,999	9	+/-12	4.00%	+/-5.3
\$200,000 or more	7	+/-6	3.10%	+/-2.9
Median household income (dollars)	75,000	+/-16,672	(X)	(X)
With Social Security	46	+/-18	20.50%	+/-7.6
Mean Social Security income (dollars)	22,607	+/-4,125	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	12	+/-10	5.40%	+/-4.6
Median family income (dollars)	89,688	+/-20,955	(X)	(X)
Per capita income (dollars)	33,298	+/-6,319	(X)	(X)
Median earnings for workers (dollars)	37,500	+/-8,434	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	59,750	+/-15,315	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	49,792	+/-6,988	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	621	+/-139	621	(X)
With health insurance coverage	588	+/-129	94.70%	+/-4.3
No health insurance coverage	33	+/-30	5.30%	+/-4.3
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	3.00%	+/-3.3
With related children under 18 years	(X)	(X)	2.20%	+/-4.2
With related children under 5 years only	(X)	(X)	0.00%	+/-68.4
Families with female householder, no husband present	(X)	(X)	14.30%	+/-20.0
With related children under 18 years	(X)	(X)	0.00%	+/-61.7
With related children under 5 years only	(X)	(X)	-	**
All people	(X)	(X)	4.20%	+/-4.0
Under 18 years	(X)	(X)	2.20%	+/-3.9
65 years and over	(X)	(X)	0.00%	+/-38.5

Subject 5-Year Estimates, 2008 - 2012	United States Census 2010 Population 308,745,538			
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	243,810,053	+/-14,996	243,810,053	(X)
In labor force	157,664,311	+/-117,361	64.70%	+/-0.1
Not in labor force	86,145,742	+/-109,794	35.30%	+/-0.1
Own children under 6 years	23,348,383	+/-16,890	23,348,383	(X)
All parents in family in labor force	15,102,957	+/-34,771	64.70%	+/-0.1
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	141,996,548	+/-126,057	141,996,548	(X)
Agriculture, forestry, fishing and hunting, and mining	2,699,250	+/-13,352	1.90%	+/-0.1
Construction	9,221,878	+/-35,319	6.50%	+/-0.1
Manufacturing	15,079,996	+/-38,714	10.60%	+/-0.1
Wholesale trade	4,018,762	+/-17,349	2.80%	+/-0.1
Retail trade	16,422,596	+/-32,514	11.60%	+/-0.1
Transportation and warehousing, and utilities	7,096,633	+/-19,457	5.00%	+/-0.1
Information	3,139,327	+/-15,250	2.20%	+/-0.1
Finance and insurance, and real estate and rental and leasing	9,574,851	+/-30,266	6.70%	+/-0.1
Professional, scientific, and management, and administrative and waste manag	15,141,136	+/-34,024	10.70%	+/-0.1
Educational services, and health care and social assistance	32,513,621	+/-115,138	22.90%	+/-0.1
Arts, entertainment, and recreation, and accommodation and food services	13,039,332	+/-54,457	9.20%	+/-0.1
Other services, except public administration	7,027,803	+/-23,893	4.90%	+/-0.1
Public administration	7,021,363	+/-34,591	4.90%	+/-0.1
<b>INCOME AND BENEFITS (IN 2012 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	115,226,802	+/-238,575	115,226,802	(X)
Less than \$10,000	8,272,970	+/-18,128	7.20%	+/-0.1
\$10,000 to \$14,999	6,260,673	+/-19,312	5.40%	+/-0.1
\$15,000 to \$24,999	12,309,201	+/-25,116	10.70%	+/-0.1
\$25,000 to \$34,999	11,939,777	+/-19,965	10.40%	+/-0.1
\$35,000 to \$49,999	15,779,346	+/-23,470	13.70%	+/-0.1
\$50,000 to \$74,999	20,929,952	+/-42,956	18.20%	+/-0.1
\$75,000 to \$99,999	14,110,448	+/-55,747	12.20%	+/-0.1
\$100,000 to \$149,999	14,768,587	+/-72,215	12.80%	+/-0.1
\$150,000 to \$199,999	5,510,639	+/-30,947	4.80%	+/-0.1
\$200,000 or more	5,345,209	+/-31,223	4.60%	+/-0.1
Median household income (dollars)	53,046	+/-85	(X)	(X)
With Social Security	32,660,129	+/-94,685	28.30%	+/-0.1
Mean Social Security income (dollars)	16,727	+/-19	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	13,180,710	+/-23,871	11.40%	+/-0.1
Median family income (dollars)	64,585	+/-190	(X)	(X)
Per capita income (dollars)	28,051	+/-78	(X)	(X)
Median earnings for workers (dollars)	30,376	+/-45	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	48,629	+/-149	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	37,842	+/-87	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	303,984,241	+/-10,092	303,984,241	(X)
With health insurance coverage	258,778,088	+/-353,683	85.10%	+/-0.1
No health insurance coverage	45,206,153	+/-360,603	14.90%	+/-0.1
<b>PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL</b>				
All families	(X)	(X)	10.90%	+/-0.1
With related children under 18 years	(X)	(X)	17.20%	+/-0.1
With related children under 5 years only	(X)	(X)	18.20%	+/-0.2
Families with female householder, no husband present	(X)	(X)	30.10%	+/-0.1
With related children under 18 years	(X)	(X)	39.10%	+/-0.1
With related children under 5 years only	(X)	(X)	46.60%	+/-0.3
All people	(X)	(X)	14.90%	+/-0.1
Under 18 years	(X)	(X)	20.80%	+/-0.2
65 years and over	(X)	(X)	9.40%	+/-0.1

References and Notes:

<sup>1</sup>Information on the data access, portal, and training project being carried out by Communities and Economic Development Extension and Outreach at Iowa State University can be obtained at:  
<http://indicators.extension.iastate.edu/>

<sup>2</sup>The home web pages for the American Community Survey and guidance are:  
<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/guidance_main/)  
[http://www.census.gov/acs/www/guidance\\_for\\_data\\_users/training\\_presentations/](http://www.census.gov/acs/www/guidance_for_data_users/training_presentations/)  
[http://www.census.gov/acs/www/guidance\\_for\\_data\\_users/handbooks/](http://www.census.gov/acs/www/guidance_for_data_users/handbooks/)  
Useful materials to be found at these sites include:  
*A Compass for Understanding and Using American Community Survey Data*  
*An Overview of the American Community Survey*  
*Understanding Multiyear Estimates from the American Community Survey*  
*Things that May Affect the Estimates from the American Community Survey*

<sup>3</sup>Good resources for understanding the ACS and for graphs with error bars Julie N Zimmerman, University of Kentucky Department of Community and Leadership Development, [jjimm@email.uky.edu](mailto:jjimm@email.uky.edu)  
<http://www.ca.uky.edu/snarl>  
<http://www2.ca.uky.edu/snarl/KentuckyByTheNumbers/ACSPages/ACSUsingtheData.htm>  
*New Kid in Town: Understanding Data from the American Community Survey*  
*And Now for the Grain of Salt: Margins of Error and the American Comm Survey*  
*A Picture is Worth...: Using a Newer Program to Make Charts and Graphs with Data from the American Community Survey*

<sup>4</sup>Data from the annual population estimates program can be found at:  
<http://www.census.gov/popest/>

<sup>5</sup>[http://www.census.gov/acs/www/guidance\\_for\\_data\\_users/training\\_presentations/](http://www.census.gov/acs/www/guidance_for_data_users/training_presentations/)  
*Things that May Affect the Estimates from the American Community Survey*

<sup>6</sup>[http://www.esri.com/data/esri\\_data/literature](http://www.esri.com/data/esri_data/literature)  
*The American Community Survey*  
<http://www.ofm.wa.gov/pop/acs/default.asp>  
*American Community Survey: User Guide*

<sup>7</sup>Answers to questions page 13:  
What percent of those 16 and older are in the labor force? 68.6%  
What percent of children under age six have all the parents in their family in the labor force? 74.6%  
How many people are employed in manufacturing? 229,557  
What is the largest industry category? Educational services, and health care and social assistance  
What level of MOEs are there for the industry percentage categories? +/- 0.1 - 0.2 %  
What is the income level of 20% of Iowa's households? \$50,000 - \$74,999  
What is the MOE of the median household income? +/- \$273  
What percentage of households were receiving food stamp (SNAP) benefits? 10.5%  
Is the median family income higher or lower than the median household income? Higher  
What is the poverty rate for families with female householder, no husband present and with children under 5 only? 54.5%

.... and justice for all

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