

Data for Decision Makers



County Data for Decision Makers User's Guide

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The *Data for Decision Makers* (DDM) county profile provides current demographic, social, and economic indicators for Iowa's counties and the state. The DDMs provide a profile of the county, a way to compare among counties, and a way to compare counties to the state. They are meant to help Iowa's residents and policy makers understand the situations and contexts of people in the counties.

This user's guide provides an overview of the topics and indicator items that are in the DDM, gives background information about the indicators, as well as providing other online resources about the topics and the data. The DDMs are updated periodically as new releases of data are available. The *Data for Decision Makers* are accessed from the ISU Extension and Outreach Indicators Portal.¹

Population - Page One

Total population for the county, communities in the county, and the state are on page one of the DDM. These data come from the 2000 through 2020 Decennial Censuses carried out by the Census Bureau.² Also included is the county population by sex along with the most recent **population estimates** for the counties, towns, and state. The estimates are updated annually using an administrative records estimation process.³ The population totals are used to calculate the percentage changes that are shown for the county, surrounding counties, and the state of Iowa.

Demographics - Page Two

Data on race, Hispanic origin, age, households, families, and educational attainment are on page two. The data for race, Hispanic origin, and age are from the Decennial Censuses.² For **race**, respondents can self-select one or more categories. Those choosing more than one race are counted in the "two or more races" category. **Hispanic origin** is considered to be an ethnic group, not a race category. Persons of Hispanic origin can be of any race.⁴

Various **age groups** are reported along with the median age,⁵ age dependency ratios,⁶ and a population pyramid.⁷ The **median age** shows the midpoint of the age distribution with half of the residents being below the median in age and the other half being above. A higher median age is an indicator of an overall older population.

Age dependency ratios indicate the typically dependent population compared with those of working age and show the population that usually relies on others for the goods and services they consume.⁶ A higher age dependency ratio can result from larger numbers of children, larger numbers of older persons, or both relative to the working age population.

The **population pyramid**⁷ visually shows the age and sex structure for the county and is a useful way to compare across age and sex groups. Each bar (except the top bar) represents a 5-year age group with females on the right and males on the left. In these visuals, the length of the bar shows the percent of the total population for each age/sex group.

American Community Survey

The information on households, families, educational attainment, along with income, housing, occupation, employment, and poverty comes from the American Community Survey (ACS) carried out by the Census Bureau.⁸ The ACS is updated annually and provides basic social, economic, and detailed housing information. Because the ACS information is gathered with a sample survey methodology that is different from the Decennial Census, the reporting for small population areas gives a 5-year pooled estimate rather than a point-in-time count. In addition, **margins of error** (MOE) are given for each estimate to indicate the level of uncertainty and reliability associated with the estimate.⁹

Households (occupied housing units) are the main units for which ACS data are collected. There may be from one to several persons living at each location. In order to be classified as a family, a household must have at least two persons living together, one of whom is related to the householder by birth, marriage, or adoption. Non-family households, with no relatives of the householder, frequently are householders who are living alone.

Educational attainment, reported for persons age 25 and older, shows those completing at least high school and those with a bachelor's degree or higher. There are often significant variations among the counties in the percentage of residents who have completed at least a bachelor's degree.

Socioeconomics - Pages Three, Four Income,¹⁰ housing, earnings,¹⁰ poverty, and other socioeconomic data continue on pages three and four of the DDM. An **income distribution** for households is provided along with median⁵ income for households and families. Because families may have more than one person with income, family median income is usually higher than that for all households. Per capita income is the average income per person.

Housing data provided in the DDM include the total number of housing units, occupancy by owners or renters, along with median⁵ housing value and median rent. The age of the housing is indicated by the percentages built by decade. Some counties have significant portions of their housing built before 1940. Median housing values, median rents, and the age of housing units vary significantly among the counties.

The five main **occupational groups** used to classify work are included as well as estimates of **employment** and unemployment.¹⁰ A

portion of the persons categorized as not in the labor force are those who are retired. Median⁵ **earnings** are reported by sex. In general, the median earnings for males tend to be higher than those for females.

Poverty¹¹ is usually thought about in terms of not having enough money to meet basic needs of food, clothing and shelter and it is usually measured by income indicators. Poverty data from the ACS show, based on household or family size and composition, the number or percent of households or

persons whose income fell below a set of dollar value thresholds specified by the U.S. Department of Health and Human Services.¹¹ If a family's or an individual's income was less than the dollar value of the appropriate threshold, then that family and every individual in it was considered to be in poverty. The dollar value thresholds are revised annually based on inflation in the prices of consumer goods. In general, poverty status is not determined for people who live in group quarters such as college dorms or institutions.¹¹ Although the DDM

has tables for poverty status by race and Hispanic origin and by family status, for some smaller counties the estimates for some of these subgroups are suppressed. This is usually due to the small numbers of persons in these groups in many of Iowa's counties resulting in poverty estimates that are unreliable with large margins of error.⁹ For subgroups for which the county poverty data are not given, users should use the state level estimates as an approximation of the level in the county.

References and Notes:

¹*Data for Decision Makers* for Iowa's counties, cities, legislative districts, Extension regions, health, and housing are updated as new data become available. They can be found at <https://indicators.extension.iastate.edu>. The Data for Decision Makers are part of the Indicators Data and Portal Project that is supported by Iowa State University Extension and Outreach through the data team of Extension to Communities and Economic Development.

²The **Decennial Census** surveys and counts every household and person in the United States. A Decennial Census is carried out every 10 years in the years ending in zero and is required by the U.S. Constitution to reapportion Congress. More information can be found at: <https://www.census.gov>.

³The Census Bureau's **Population Estimates Program** produces annual estimates of the population for the U.S., states, counties, and towns. The estimates program uses an administrative records estimation process involving current data on births, deaths, and migration to calculate population change since the most recent Decennial Census. More information can be found at: <https://www.census.gov/programs-surveys/pep.html>.

⁴More information regarding the reporting of **race and Hispanic origin** can be found at: <https://www.census.gov/topics/population/race.html> and <https://www.census.gov/topics/population/hispanic-origin.html>.

⁵A **median** is the middle value of a distribution. Half of the values are above the median and half are below.

⁶The **age dependency ratio** compares, by age, those typically not in the labor force with those who typically are in the labor force. Old Age dependency is persons 65+ per 100 persons age 18-64. Child dependency is persons under age 18 per 100 persons age 18-64. The total age dependency ratio is persons under age 18 plus persons 65 or older per 100 persons age 18-64.

⁷In a **population pyramid**, the length of each bar shows the size of each age/sex group relative to the other groups. The length of the bar can represent each group's percent of the total population or the actual population counts of the group. The pyramid is a useful way to compare across age and sex groups. More information on population pyramids can be found at: <https://www.census.gov/newsroom/blogs/random-samplings/2016/06/americas-age-profile-told-through-population-pyramids.html>.

⁸The **American Community Survey (ACS)** is an ongoing survey that provides annual information for the U.S., states, counties, towns, and many other geographic regions. The ACS is the primary source for social, economic, and housing data. The home page for the American Community Survey and guidance is: <https://www.census.gov/programs-surveys/acs/>.

⁹Because the ACS data are based on samples of the population, there is some level of uncertainty or sampling error associated with each estimate. The Census Bureau provides 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 expected to be with a level of confidence of 90%. A smaller MOE relative to the size of the estimate represents a more precise and reliable estimate. As MOEs become relatively larger, the less confidence there is that the point estimate is close to the true population value. In some cases, especially for **small geographic areas** or **subgroup populations**, margins of error can be relatively large. For this DDM, MOEs that are half or more of the size of the point estimate value are considered to be unreliable and the point estimate values and MOE values are suppressed. For areas or subgroups for which the county data are not given, users should use the state level estimates as an approximation of the level in a county. See: <https://www.census.gov/programs-surveys/acs/library/handbooks.html>.

¹⁰Concepts and measurement of **income, earnings, occupation, and employment** can be found at: <https://www.census.gov/topics/income-poverty/poverty.html>; <https://www.census.gov/topics/employment/labor-force.html>; and <https://www.census.gov/topics/employment/industry-occupation.html>.

¹¹Persons in the various types of group quarters who are not included in the population for whom poverty is determined were excluded from the numerator and denominator when calculating poverty rates. **Poverty concepts** and measurement as used in the ACS can be found at: <https://www.census.gov/topics/income-poverty/poverty.html> and https://www.census.gov/topics/income-poverty/library/publications.2021.List_855700001.html. Federal poverty information and guidelines can be found at: <https://aspe.hhs.gov/poverty-guidelines>.

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