



CENSUS DATA AT WORK

TEACHER VERSION

Subject Level:

Middle School English

Grade Level:

7

Approx. Time Required:

120 minutes

Learning Objectives:

- Students will be able to describe the data the U.S. Census Bureau collects and explain how people can use those data to make decisions about a community.
- Students will be able to organize information from texts in a visual format.
- Students will be able to draw conclusions from multiple texts.
- Students will be able to effectively annotate a text to better understand it.
- Students will be able to use evidence from a text to support their claims and to make inferences.

Activity Description

Teachers will engage students in a discussion about what the Census Bureau does and what types of information it collects. Then students will read and annotate informational texts from the Census Bureau and work with a partner to answer questions about the texts. Students will also analyze an infographic of people with different professions to determine how each of those people might use the data gathered by the Census Bureau; students will be asked to use evidence from the infographic text to support their answers. Students will then complete a wireframe (similar to a graphic organizer) for an online resource about how census data can help their own community.

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7

Approximate Time Required:

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Topics:

- City planning
- Community development
- Data collection

Skills Taught:

- Annotating text
 - Citing textual evidence
 - Drawing conclusions
 - Making inferences
 - Understanding how data are used
-

Materials Required

- The student version of this activity, 13 pages

Activity Items

The following items are part of this activity. The items and their sources appear at the end of this teacher version.

- Item 1: Flyer on the American Community Survey
- Item 2: Measuring America: Why We Ask
- Item 3: How Do We Know? An American Community

For more information to help you introduce your students to the Census Bureau, read "[Census Bureau 101 for Students](#)." This information sheet can be printed and passed out to your students as well.

Standards Addressed

See chart below. For more information, read

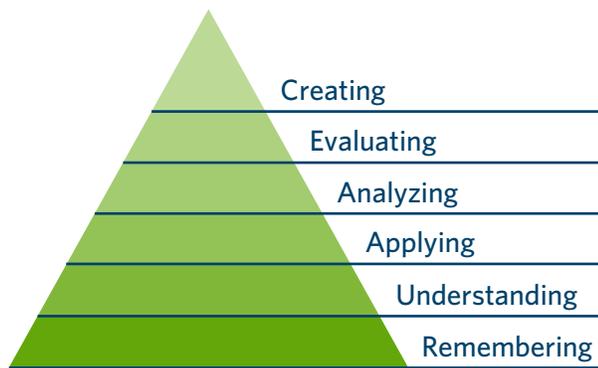
"[Education Standards and Guidelines Addressed by Statistics in Schools](#)."

Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects

Standard	Strand	Cluster
CCSS.ELA-LITERACY.RI.7.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Reading: Informational Text	Key Ideas and Details

Bloom's Taxonomy

Students will **analyze** information from Census Bureau texts and determine how it applies to their community.



Teacher Notes

Before the Activity

Students must understand the following key terms:

- **Bachelor's degree** – an academic degree (usually representing completion of 4 years of study) awarded by a college or university
- **Educational attainment** – the highest level of education that a person has completed
- **Entrepreneur** – a person who organizes, manages, and assumes the risks of a business or enterprise
- **Wireframe** – an image or visual representation to arrange information, most often used when planning the design of a Web site

Teachers should give students an overview of the Census Bureau using "[*Census Bureau 101 for Students*](#)." As teachers go over the content, they should discuss the following questions with students:

- What kind of data do you think the government collects?
- How might the government use the data?
- What other organizations or individuals might use data collected by the Census Bureau?
- How might these organizations or individuals use the data?

Teachers may want to explain to students that this activity focuses on the American Community Survey (ACS), which is conducted monthly by the Census Bureau and is designed to show how communities are changing. The ACS produces national data on more than 35 categories of information, such as education, income, housing, and employment, by asking questions of a sample of the population.

During the Activity

For Part 1, students should read and annotate **Item 1** individually and then work with a partner to answer the questions. For Part 2, question 7, students should read and annotate **Item 2** and then complete the prompt on their own.

Before instructing students to start the activity, teachers should introduce (or review) annotating text with students. Teachers may find it helpful to share the following instructions with them:

- Write useful notes in the margins. A good example is “It seems like it’s important to fill out the American Community Survey questionnaire so we know how many schools we need to build”; a bad example is “That’s so interesting!”
- Ask meaningful questions in the margins.
- Circle terms you don’t know that you need to know to understand the text.
- Add reaction symbols throughout. For example, an exclamation point means you were surprised to learn that fact, and the letter “C” means you have a connection to that fact.

For Part 2, question 8, students should analyze **Item 3** and respond to the prompt individually.

For Part 3, the final piece of this activity, teachers should instruct students to complete a wireframe for a Web site that will teach people how census data are used in their community. Teachers could explain to students that people who make Web sites sometimes design what’s called a wireframe to sketch out what the individual Web pages will look like and what they will say. People who do this kind of job are often called user experience, or UX, designers. Graphic designers also sometimes create wireframes.

Teachers may want to tell students that people who write for Web sites use short, direct sentences and bulleted lists, and that students should do the same with their wireframes.

After the Activity

Teachers should have students share their wireframes in small groups, encouraging students to provide feedback on each wireframe by noting something that was done well and something that could be adjusted to make the wireframe better.

Extension Ideas

- For homework, teachers could have students review the Census Bureau’s “Are You in a Survey?” Web page—www.census.gov/programs-surveys/are-you-in-a-survey.html—and write down key information from that page that they would want to incorporate into a Web page about census data in their community (based on their wireframe).
- Teachers could connect this activity to a larger research project or writing assignment about the use of census data in communities.

Student Activity

Click [here](#) to download a printable version for students.

Activity Items

The following items are part of this activity and appear at the end of this student version.

- Item 1: Flyer on the American Community Survey
- Item 2: Measuring America: Why We Ask
- Item 3: How Do We Know? An American Community

Student Learning Objectives

- I will be able to describe the data the U.S. Census Bureau collects and explain how people can use those data to make decisions about a community.
- I will be able to organize information from texts in a visual format.
- I will be able to draw conclusions from multiple texts.
- I will be able to effectively annotate a text to better understand it.
- I will be able to use evidence from a text to support my claims and to make inferences.

Part 1: What is the American Community Survey?

Read and annotate **Item 1: Flyer on American Community Survey**. When you're annotating, note key details, any questions you have, things that surprise you, and vocabulary words you're unsure about. When you're done annotating, work with a partner to answer the following questions:

1. The text describes the information from the American Community Survey (ACS) as vital. Why is it so important?

Student answers will vary but could include:

- **Information from the ACS helps determine where federal and state funds are spent.**
- **It is used to plan important aspects of our community, including schools, hospitals, and bridges.**

2. According to the text, what will the ACS never ask for and why?

The ACS will never ask for Social Security numbers, money or donations, credit card information, or personal information via e-mail in order to protect participants' privacy.

3. What are three different ways people can respond to the ACS?

People can respond to the ACS through an online or paper questionnaire, over the phone, or in person (with a field representative who visits them).

4. Why do you think the Census Bureau offers so many ways for people to complete the survey? Use a citation from the text to support your inference.

Student answers will vary, but students could say that the Census Bureau needs enough people to respond to ensure reliable survey results. Also, some people prefer to respond one way as opposed to another. Students may use a citation from the first or second paragraph about the importance of data from the ACS.

5. Where can people see the data collected through the ACS?

People can see the data at the “Data Tools and Apps” page of the Census Bureau Web site.

6. Look through the table with examples of topics that the ACS collects information about. You may notice that different topics of information could be useful for different types of people. Which topic do you think would be the most important to your school leaders? Explain your answer.

Student answers will vary but could include:

- **“Industry and Occupation,” so that they know which jobs are growing and what students should be prepared for.**
- **“Age,” so that they know how many students to expect in each grade.**

Part 2: How can people use information from the American Community Survey?

7. Read and annotate **Item 2: Measuring America: Why We Ask.** When you’re annotating, note key details, any questions you have, things that surprise you, and vocabulary words you’re unsure about.

Next, choose three things the ACS asks about that relate to your school or community. Fill in the following table with those examples:

Student answers will vary but could include:

The ACS asks about ...	This information is used to ...	An example of how this information could be used in my school or community is ...
School enrollment (including whether a person is enrolled in a public or private school)	Determine which education resources are being used in a community and how	If enrollment numbers are too high at my school, my community may decide to open a new school.
How people get to and from places	Understand commuting patterns	If many people are driving to work in my area, transportation officials may plan for more improvements to the roads and highways.
Income and living expenses	Help understand the need for economic and housing assistance	My community may determine that there is a need to open a homeless shelter or soup kitchen.

8. Read through **Item 3: How Do We Know? An American Community** and choose the two jobs you’re most interested in. Then complete the following table, citing evidence from the text that describes how each one uses ACS data:

Student answers will vary but could include:

Job:	How a person in that role might use ACS data:
Educator	A superintendent might use ACS data to determine the English-language ability of students to figure out how many English-language teachers to hire.
Fire chief	A fire chief might use ACS data to understand where people live (apartments, single-family homes, etc.) to know where to place fire safety resources.

Part 3: How can I use census data in my own community?

Imagine that you are creating a Web page to teach people how census data are used in your community. One of the first steps is to complete what user experience, or UX, designers call a wireframe, which is like a first draft of a Web page.

Fill in the following wireframe to plan your Web page, referring to the directions in the margins.

Write the general name of your Web site here.

Think of a more specific title for this Web page and write it here.

Choose three examples from what you've read of how people use ACS data. Write their job on the first line and one phrase about how they use the data on the next lines. Do this for each of these three boxes.

Think of two questions people might have about the ACS. Write each question next to the lines marked "Q:" and your answer next to the lines marked "A:" Refer to the texts for ideas on what to put here.

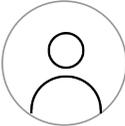
Create an illustration here to show how ACS information is used. Stick figures are OK!

In large letters, write a closing, one-sentence summary on the importance of Census Bureau data here.

Census Data in Action









Frequently Asked Questions

Q: _____

A: _____

Q: _____

A: _____

Item 1: Flyer on the American Community Survey

American Community Survey (ACS)

What is it?

The American Community Survey (ACS) is an ongoing sample survey that provides vital information on a yearly basis about our nation and its people. Information from the survey generates data that help determine how hundreds of billions of dollars in federal and state funds are distributed each year. This U.S. Census Bureau survey samples about 295,000 addresses each month for an estimated 3.5 million households each year. For more information, go to <www.census.gov/acs>.

How does this survey help me?

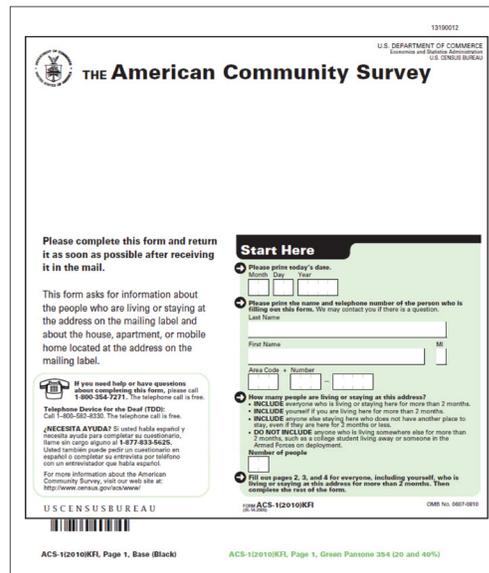
Through the ACS, we know more about jobs and occupations, educational attainment, veterans, whether people own or rent their home, and other topics. Public officials, planners, and entrepreneurs use this information to assess the past and plan the future. When you respond to the ACS, you are doing your part to help your community plan hospitals and schools, support school lunch programs, improve emergency services, build bridges, and inform businesses looking to add jobs and expand to new markets, and more.

Is my information confidential?

Participating in U.S. Census Bureau censuses and surveys is safe. The Census Bureau is required by law to protect your information and keep your responses strictly confidential. It's against the law for the Census Bureau to publicly release your responses in any way that could identify you, your household, or your organization.

To protect your privacy, the American Community Survey NEVER asks for:

- Your social security number
- Your personal information via e-mail
- Money or donations
- Credit card information



How am I notified to participate?

You will receive a letter, signed by the Census Bureau director, informing you that your address was selected to be included in the American Community Survey. If you are notified, you will:

- Receive a letter and instruction card explaining how to complete the survey online, and/or receive a paper copy of the survey to complete and return to Jeffersonville, IN.

If you do not complete the survey you may:

- Receive a visit from one of our field representatives to complete the survey with you.

Item 1: Flyer on the American Community Survey (Continued)

How often is the data released?

New data are available each year.

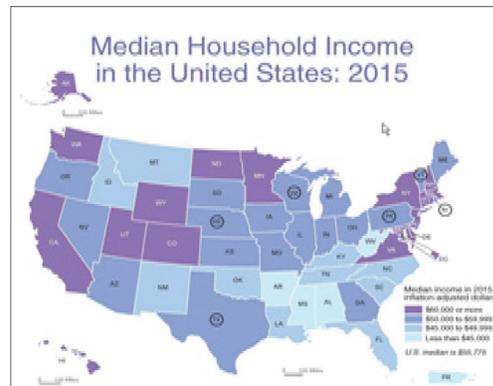
What products are available from the data?

- ACS 1-year estimates—for geographies with 65,000 or more people.
- ACS 1-year supplemental estimates—for geographies with 20,000 or more people.
- ACS 5-year estimates—all geographies.
- Public Use Microdata Sample (PUMS) Files—for 1- and 5-year datasets.

NOTE: The Census Bureau discontinued the ACS 3-year estimates as of 2014, though previous 3-year estimates are available.

How would I use this information?

- Developing business plans
- Completing grants
- Planning for strategic and economic development
- Preparing for emergency management operations



Where can I access the data?

We release the data in various data tools for your convenience. To access the “Data Tools and Apps” Web page, go to www.census.gov/data/data-tools.html.

What are some of the topics available in the ACS?

Demographic	Social	Economic	Housing
<ul style="list-style-type: none"> • Total Population • Group Quarters Population • Hispanic or Latino Origin • Race • Relationship • Age • Sex • Demographic 	<ul style="list-style-type: none"> • Ancestry • Citizenship Status • Disability Status • Educational Attainment • Fertility • Field of Degree • Grandparents as Caregivers 	<ul style="list-style-type: none"> • Class of Worker • Commuting to Work/Journey to Work • Employment Status • Food Stamps/Supplemental Nutrition Assistance Program (SNAP) • Health Insurance Coverage • Income and Earnings • Industry and Occupation 	<ul style="list-style-type: none"> • Computer Ownership & Internet Access • House Heating Fuel • Kitchen Facilities • Occupancy/Vacancy Status • Occupants per Room • Owner Monthly Costs • Plumbing Facilities

Item 2: Measuring America : Why We Ask



MEASURING AMERICA

April 23, 2015

Why We Ask

The American Community Survey (ACS) asks questions about our lives—how old we are, how much we earn, whether we work or go to school, how much we pay in rent or on a mortgage, whether we need assistance with daily routines, and more. These 72 questions provide an annual portrait of the nation and our communities that America can use to assess the past and plan the future. The ACS is our only source of detailed data about communities across the nation. When you fill out the survey, you are supplying information that will help fund school lunch programs, improve emergency services, build bridges, plan hospitals and schools, and inform businesses looking to add jobs or expand to new markets.

What we ask about...	How your responses help...
 <p>Employment</p> <p>The ACS asks whether respondents are employed, unemployed, and out of the labor force. It also asks about weeks and hours worked and about industry and occupation.</p>	<p>This information helps government at all levels better understand unemployment and the availability of workers, plan unemployment programs and services, and develop programs to boost employment. Communities learn which occupations and industries are growing in their areas and businesses can find locations with the workforce they need.</p>
 <p>Education</p> <p>The ACS asks about school enrollment, gathering information on America's students from nursery school to graduate school and on whether they are in a private or public school. It also asks about educational attainment—did the respondent earn a high school diploma or the equivalent, a bachelor's degree, or higher?</p>	<p>These statistics help communities to measure how well educational resources are serving their populations, measure changes in education over time, evaluate the educational attainment of the workforce, and identify the educational and training needs of adults. This information also helps communities to bridge gaps between the educational attainment of potential workers and the educational requirements of potential employers.</p>
 <p>Veterans</p> <p>The ACS asks about a person's military service, where veterans are moving throughout the country, their ages, and their VA service-connected disability rating status to understand veterans needs at the community level. Though the Department of Veterans Affairs (VA) maintains veterans' records, the ACS provides additional statistics about all veterans, regardless of whether they utilize VA services.</p>	<p>These statistics help communities plan for future health care and nursing homes. Statistics about whether veterans are in school and/or working help plan and fund job training, and statistics about veterans' homes help improve the home loan guarantee program.</p>
 <p>Income and Housing Costs</p> <p>The ACS asks several questions about the money you receive from various sources and your regular living expenses such as rents, mortgages, taxes, and utilities.</p>	<p>The statistics that result from these questions help gauge the need for economic and housing assistance. How many people live in poverty, what are their characteristics—the ACS is the only source of these data at the community level. Income and poverty estimates factor into funding requests that address need. When combined with income, selected monthly owner costs provide an excellent measure of affordability and excessive shelter costs.</p>



Item 2: Measuring America: Why We Ask (Continued)

	<p>Income and Housing Costs</p> <p>The ACS asks several questions about the money you receive from various sources and your regular living expenses such as rents, mortgages, taxes, and utilities.</p>	<p>The statistics that result from these questions help gauge the need for economic and housing assistance. How many people live in poverty, what are their characteristics—the ACS is the only source of these data at the community level. Income and poverty estimates factor into funding requests that address need. When combined with income, selected monthly owner costs provide an excellent measure of affordability and excessive shelter costs.</p>	
	<p>Commuting</p> <p>The ACS asks about your daily commute—where you go, how you get there, what time you leave for work, and how long it takes—to understand where people are traveling during a normal day.</p>	<p>Precise information about your commuting patterns is crucial to planning improvements to roads and highways, developing transportation and services, and creating emergency response strategies.</p>	
	<p>Disability and Health Insurance</p> <p>The ACS asks about a person's difficulty with specific daily living tasks: Do you have difficulty seeing or hearing? Do you have difficulty walking or climbing stairs or in dressing or bathing?</p> <p>The ACS also asks whether people have health insurance, including type of health insurance for those who have health coverage plans.</p>	<p>Communities use these statistics to plan services such as transportation, employment programs, and public service accessibility for people with disabilities. Businesses that serve this population may also seek areas that have a high demand for their services.</p> <p>From these statistics, we learn which groups are at risk of experiencing limited health care access, poor health, and poor health outcomes.</p>	
	<p>Housing Characteristics</p> <p>The ACS asks questions about plumbing, kitchen facilities, and other housing features to help identify areas with substandard housing.</p> <p>Questions about the size and age of housing also flag local problems like overcrowding, health hazards, and congestion.</p>	<p>Through your ACS responses, we learn about communities eligible for housing assistance, rehabilitation loans, and other programs that help people afford decent, safe, and sanitary housing.</p> <p>Your responses help communities plan solutions. In places where disaster strikes, these data are vital in planning recovery.</p>	
	<p>Owners and Renters</p> <p>The ACS asks about whether you own or rent your home, and the amount of monthly rent or how much the home and property are worth.</p>	<p>These statistics are used to analyze whether adequate housing is affordable for residents, protect owners and renters, and allocate and fund housing assistance programs. Governments use these statistics to understand changes in local housing markets, ensure residents have affordable housing options, qualify for assistance, and reduce the tax revenue losses from vacant or abandoned properties.</p>	
	<p>People and Relationships</p> <p>The ACS asks respondents about their age, sex, race, Hispanic origin, and their relationship to others in the household.</p>	<p>This information, along with other statistics such as income, occupation, and education is used to monitor well-being, discrimination, and economic hardship. State and local agencies use this information to plan and administer programs providing funds and services for groups such as single parents, low-income families, older people living alone, etc.</p>	
<p>Source: U.S. Census Bureau, American Community Survey Questions and Why We Ask <www.census.gov/acs/www/about_the_survey/questions_and_why_we_ask/>.</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <div data-bbox="316 1669 462 1732">  </div> <div data-bbox="519 1680 730 1732"> <p>U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU</p> </div> <div data-bbox="1144 1669 1299 1732"> <p>CENSUS.GOV #MeasuringAmerica</p>  </div> </div>			

www.census.gov/library/visualizations/2015/comm/why_we_ask.html

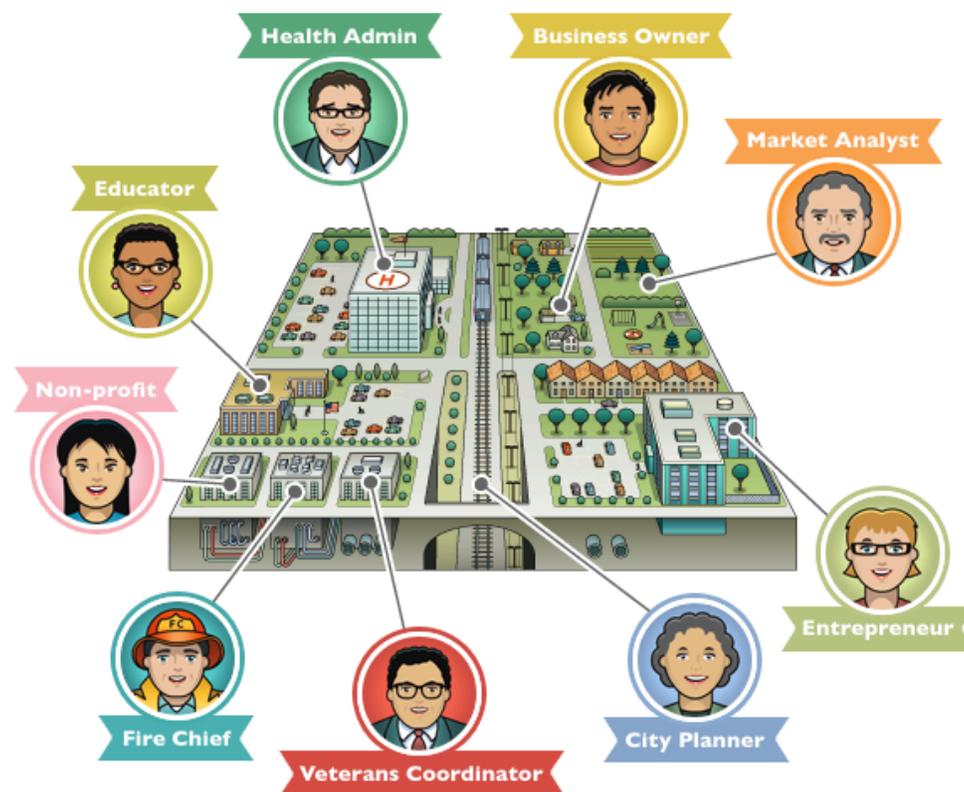
Item 3: How Do We Know? An American Community



HOW DO WE KNOW?

An American Community

The U.S. Census Bureau's American Community Survey (ACS) is a vital source of information that helps communities, businesses and state and local governments invest, provide services and plan for the future. With statistics on age, income level, education, occupation and veterans status, the ACS enables decision-makers to appropriately fund school-lunch programs, place new hospitals, build new businesses and take other actions that lead to healthy towns and cities.



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#HowDoWeKnow

Item 3: How Do We Know? An American Community (Continued)



HOW DO WE KNOW?

Health Admin



Benjamin, a director for a health care provider, uses ACS information on age, income, disability, and health insurance to place an urgent care facility in a rural community. He would also use the information to plan particular services. For example, a younger community might need more pediatric care, while an older community might need more oncology and other geriatric care.

Business Owner



Thomas is a small business owner who operates a service station and is looking to expand. He uses the ACS information to figure out where to place his business based on commute patterns. He is also able to plan his operating hours around busy commute times.

Market Analyst



A national chain of grocery stores wants to grow — but how does it pick a new location that fits its services? Justin heads a team of experts who identify the best possibilities for the company. He uses the ACS information to look at household composition and plan for what type of products the new store should feature. For example, young professionals buy different products than do families with children.



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Item 3: How Do We Know? An American Community (Continued)



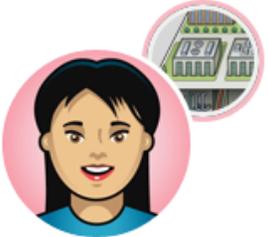
HOW DO WE KNOW?

Educator



Jocelyn, a school superintendent, needs to provide educational services for the community. She uses the ACS to figure out how many children their area should expect in the coming years, information on languages spoken at home, English-language ability, disability, family structure, and income to help her determine what kinds of services and staff they'll need to have. The ACS information also helps her determine whether older children and adults need additional services such as dropout prevention and adult literacy classes.

Non-profit



Allison is the director of a non-profit food bank. She wants to make sure the organization is making the most of critical resources. She uses the ACS to look at age, employment, income, and food stamp information to find an area with people who could use their help putting food on the table. She also utilizes the information as she applies for grants that will help her fund the operation.

Entrepreneur



Karen is a technology expert with ideas for a series of smartphone apps. She wants to find a location for her new company. She uses the ACS to look at the education level of the potential workforce and the quality of the community's infrastructure. She also looks at how many people in the area have telephone service, so as to get an idea of how her immediate community might respond to the new product.



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Item 3: How Do We Know? An American Community (Continued)



HOW DO WE KNOW?

Fire Chief



A local fire department wants to make sure it can provide the best possible coverage to its citizens. Fire Chief Ryan wants to keep his community safe, so he works with the city council and local interest groups to use ACS information such as housing units, mix of single family homes, and multi-unit apartment complex information to guide where the city should place vital fire safety resources. He also uses it to help plan for emergencies and natural disasters.

Veterans Coordinator



A local veterans services non-profit organization wants to make sure they are providing the proper services to veterans, returning service members, and their families. Carlos, the organization's lead coordinator, uses the ACS' veterans status, period of service, and age information to provide information on VA medical services, and state or municipal resources available in the local area. He also combines the information with that on employment status and educational attainment to plan job training and other support programs.

City Planner



Vanessa is a city planner and civil engineer planning infrastructure changes to meet the needs of a growing and changing community. She uses the ACS to figure out where to put vital infrastructure such as highways, mass transit systems, and power lines. She also uses the information to plan water and sewage treatment facilities — this is why she needs to know if a home has a flush toilet.



To learn more about the American Community Survey, please visit www.census.gov/acs







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#HowDoWeKNOW

The American Community Survey is a survey and its estimates are subject to sampling error.

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www.census.gov/library/visualizations/2012/comm/acs_community.html