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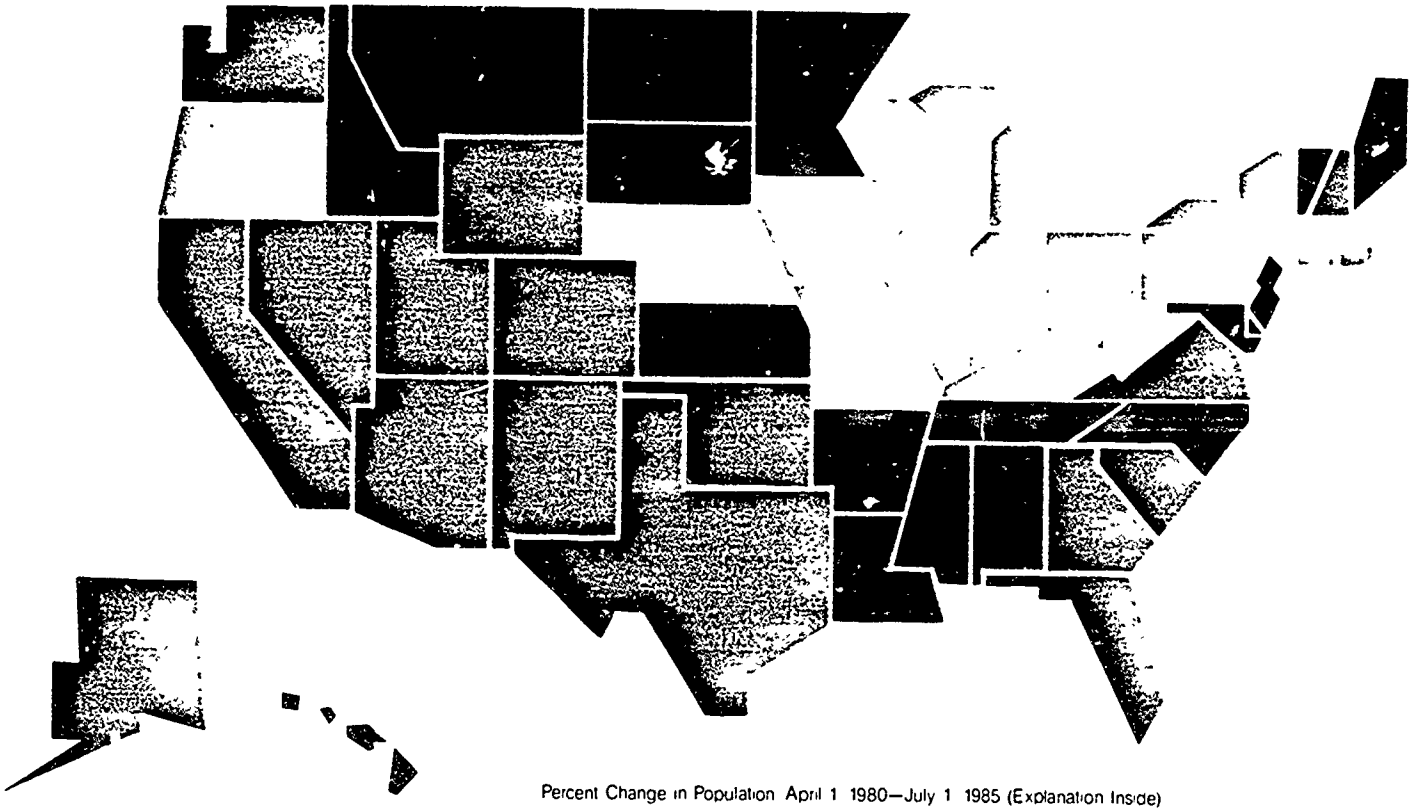
ABSTRACT

This census education package is a prototype of one to be distributed nationwide for the 1990 U.S. Census. The objectives of this K-12 project are to provide educators with instructional materials and to introduce and teach about census information. General information includes: (1) census history; (2) planning the census; (3) uses of census summary data; and (4) the roles of civic duty, confidentiality, and the law. The kit contains: (1) suggested school and district census outreach activities; (2) a teacher's guide; (3) a census vocabulary list; (4) nine reproducible activity sheets, with accompanying instructional materials and suggestions; (5) a list of U.S. history milestones that have been recorded by the Census Bureau; (6) a history of U.S. census-taking entitled "Counting for Representation: The Census and the Constitution"; and (7) a list of selected resource materials. Maps, graphs, and charts are included. (JHP)

We Know We Can Count On You!

Census Education Project: 1988



Percent Change in Population April 1 1980—July 1 1985 (Explanation Inside)

Census Bureau Mission

In its best interest, a civilized nation counts and profiles its people and institutions. Doing so ably and objectively is the abiding mission of the United States Census Bureau. We honor privacy, shun partisanship, invite scrutiny, and share our expertise globally. Striving to excel, we chronicle the Nation's past, describe its present, and illuminate its future.

Teaching About The Census

Project Objectives and Goals

This census education package is a prototype of one to be prepared and distributed nationwide for the Bicentennial Census of the United States in 1990 The objectives of this 1988 K-12 project, and its 1990 counterpart, are 1) to provide educators with materials they can use in their classroom teaching and 2) to introduce educators and students to an important national event in which everyone in the country needs to participate.

For the first objective, the goals are to supply teachers with timely materials that

- are reproducible, easy to use, and require little preparation;
- are appropriate for various subjects such as history, geography, political science, civics, mathematics, language arts, and current events;
- can help improve students' critical thinking, problem-solving, data analysis, and reading comprehension skills;
- make use of information with real-world relevance useful to students now and in their adult lives; and
- give students "hands on" exposure to such information.

For the second, the goals are to help educators and students become aware of and understand

- what a census is,
- some of the history of the decennial census in the United States,
- the need for a complete count of population and housing,
- the civic responsibility of answering a census;
- the confidential nature of answers to a census;
- the summary nature of public census data; and
- how census data affect everyday life.

It is hoped, in meeting both sets of goals, that educators are provided with materials they will want to use, re-use, and recommend to colleagues

Detailed suggestions on grade and reading levels, subject placement, and skill area applications are provided in the Teacher's Guide sheet. This K-12 package has nine teacher-ready reproducible activity or lesson sheets The reverse side of each sheet has Teacher's Notes giving explicit commentary on that activity's purpose and procedures with suggested follow-up activities.

Each activity is a self-contained unit and should provide ample information for a teacher to use it. However, teachers may find the additional background information in this folder helpful. Where appropriate, activity sheets refer the teacher back to the folder narrative

Census History

Factfinding is one of this country's oldest activities Enumeration of some of the population occurred early in its development, even before Independence. In the early 1600's a census was taken in Virginia People were counted in nearly all of the northern colonies before the Revolutionary War.

Concern with the need for a *national* census arose during the constitutional deliberations. This concern centered on equal representation and direct taxation of the population of the States To ensure that these be equitable, especially for the apportioning of the House of Representatives, the Founding Fathers decided in Article I, Section 2 of the US Constitution, adopted in 1787, that

> "Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers ..The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct."

This constitutional order—to apportion representatives fairly among the States by a count of the population at least every 10 years—has been followed since 1790 and is the origin of the decennial census in this country.

The first census recorded very limited information It only tallied counts of the population and some very basic characteristics, such as sex It took 18 months to complete the 1790 census However, through the years, the Nation's needs and interests for statistical information have grown To stay in step the content of the census has changed with the changing needs of the country Presently, the decennial census is limited to items on population and housing

Timeliness of reporting also has become as important as collecting the information After the 1880 census, it took nearly a decade to publish all the reports

On the Cover

The map shows percent change in the population for States from April 1, 1980 (the census) to July 1, 1985 (an estimate). Those areas shaded in "yellow" had a range of population percentage change from -2.0% to 2.3% in the 5 1/4-year period. Those in "red" gained from 2.5% to 6.5%. The remaining states grew between 6.7% and 29.7%. The U.S average increase in population was 5.4%.

The specific percentages of change, the July 1, 1985 estimates, and population figures for 1960 to 1985 are shown on the "U.S. Population Data" table, which is a companion to Activity 7 in this package.

These data were extracted from the *State and Metropolitan Data Book: 1986* This reference book is listed and briefly explained in the *Census Bureau Teaching Resources Guide* elsewhere in this kit.

Advances in technology have helped make it possible to process and publish data more rapidly. A distinguishing feature of 1890 census processing was the first use of the punchcard and electric tabulating machines developed by Herman Hollerith. The first commercial electronic computer, UNIVAC-1, was used to compile some of the statistics from the 1950 census. Also, to gather information more efficiently, the census-by-mail was first used in 1960.

It was only in 1902 that a permanent census office was established in the Interior Department, and in 1903 it was transferred to the new Department of Commerce and Labor. When that department was split in 1913, the Bureau of the Census was placed in the Department of Commerce.

Ever since 1913, the Congress has delegated the authority to conduct the census to the Secretary of Commerce. That authority has been further delegated to the Bureau of the Census. Under mandate, the Secretary of Commerce must report counts for each State to the President within 9 months after Census Day, which has been April 1 of the census year since 1930. Within 10 days of the opening of the next session of the Congress, the President must send to the Clerk of the House of Representatives, the census count for each State and the number of Representatives to which each State is entitled, following the method of apportionment selected by the Congress. Within 15 days, the Clerk of the House then notifies the Governor of each State how many Representatives that State will be entitled to in the next Congress.

Planning the Bicentennial Census

In keeping with the constitutional directive adopted in 1787, the next national census will be taken in 1990. It will mark the bicentennial of the first census of this country. With the completion of the next census, a milestone will be passed that no other nation has achieved. The 1990 census will complete a 200-year unbroken chain of regular periodic enumerations in the United States.

The task of taking the census in 1990 will be more complex than it was in 1790 and any time since. Since 1790, the country has grown dramatically, but the time allowed to complete a census and report its findings is very limited.

The Census Bureau anticipates that the US population will approach 250 million people by 1990. It also is expected that the number of housing units will total over 100 million. To measure the size of the population, the number of housing units, and their associated characteristics for the Nation is a huge task requiring millions of hours of preparation.

Responding to this challenge, the Census Bureau began planning for the 1990 census in the early 1980's. As part of this process, a series of small-scale censuses have been conducted and scheduled to address a variety of issues ranging from questionnaire content and design to processing equipment needs. These census-taking tests began in 1985 and will end with the Dress Rehearsal Census in 1988. The areas of the country included are: Tampa, Florida and Jersey City, New Jersey (1985); East Central Mississippi and Central Los Angeles County, California (1986); North Central North Dakota (1987); and the City of St. Louis, East Central Missouri, and Eastern Washington (1988).

Collecting 1990 Census Information

How will the 1990 census be taken? Every household in the Nation will receive a census questionnaire in the mail shortly before Census Day—April 1, 1990. The form is to be completed to represent each household's composition and characteristics as of Census Day. Nearly 95% of these households will be asked to return the form in the mail right away.

The other 5% of the population, residing in sparsely settled rural areas and in special places (such as nursing homes, college dormitories, military barracks, and boarding homes), will have a census taker visit to pick up the completed form.

If a household was supposed to return the form by mail but did not, a census representative—from one of about 450 local district offices to be established nationwide—must then go to that home and obtain the information. This increases the cost of taking the census.

What happens then? Once forms are returned, processing begins. They are checked for completeness. If information is missing, a census representative must contact that household to complete the missing items. This, too, can increase the expense and cause delays. After these checks are made, the answers to questions on an individual form are tallied along with answers to the same questions from all other census forms. This results

Additional Assistance

From Census Bureau Regional Offices

Census Specialists in our 12 regional offices are ready to help you. They can help you locate census information on your community and State, provide you with training and technical assistance and point you toward other sources of information in your State.

Atlanta, GA 30309-3147
1365 Peachtree Street, N.E.,
Room 625
(404) 347-2274

Boston, MA 02222-1084
Boston Federal Office Bldg
10 Causeway St., Room 553
(617) 565-7078

Charlotte, NC 28202-3220
222 South Church Street, 4th Floor
(704) 371-6144

Chicago, IL 60604-2689
175 W. Jackson Boulevard, Room 557
(312) 353-0980

Dallas, TX 75242-0399
1100 Commerce Street
Room 3C54
(214) 767-0625

Denver, CO 80226-0750
7655 W. Mississippi Avenue
PO Box 26750
(303) 236-2200

in the creation of statistical totals for a variety of geographic areas. It is these numeric totals, *not personal answers*, that are then published and put to thousands of uses.

What will be asked? The specific questions will not be decided until 1988. Present planning suggests the 1990 census questions will be similar, but not identical, to those for 1980. Questionnaire length will not be expanded.

Most households will receive a short census form asking only a limited number of questions about each household member, such as age and marital status, and characteristics about the housing unit. On the average, this form will take about 15-20 minutes to complete.

The remaining households will receive a form that will contain more questions about the members of the household and the housing unit. These households will be selected following a sampling pattern. Responses from these *sample* households will be very important, because these answers will statistically depict the total population on items like education. This sampling method will be used is to minimize demands made on the public, while producing useful and reliable data.

Uses of Census Summary Data

Only questions that address important policy and program needs are included on census forms. For instance, the data from questions on plumbing facilities provide information for Federal studies on housing standards and quality. Likewise, summary statistics from the income questions are widely used by Federal, State, and local governments in the distribution of funds to communities for a variety of programs, including education. The 1990 population totals will be used to determine congressional, State, and local election district boundaries.

Something for Most Everyone. The above examples present mandated and legislatively specified uses of census data. But there is a myriad of other applications of census information. The number of those applications and the variety of agencies and persons using the data are rising. Given the size of the Nation's population and the complexity of American society, more decision makers are finding that major plans, especially those involving monetary investments, are facilitated by using census data.

State and local governments draw heavily on census data in planning and implementing State/community projects and developments, like planning for new schools. Business and industry make use of these statistics, especially those for small geographic areas, in deciding plant/office locations, expansions, and the like. An increasing number of social service providers have found that census facts give the kind of assistance they need in reaching and helping their clientele. Through the 1980 Neighborhood Statistics Program, census information has now been made available for approximately 28,000 neighborhoods, giving community leaders a better understanding of the areas in which they live. Finally, more individuals are using census summary information to guide decisions of personal importance to them—such as planning a small business or helping choose a new area of a community in which to live. Here are some specific examples of each.

Government

- During a heat wave, public health officials in St. Louis used census data to locate areas with large numbers of elderly people. City workers went door-to-door convincing many of these older persons to go to "cooling centers." Lives were saved.
- In San Francisco, transportation planners used census information to select bus routes, subway stops, and highways that needed widening.
- A combination of census facts and census geographic concepts found extensive use in the development of a master land use plan by a middle-sized Arkansas city. The plan will help guide the city's development into the 21st century.

Business and Industry

- A new company wanted sites for a chain of medical clinics in the Northwest. It used census data to narrow the selection of communities with high numbers of families with young children.
- A motor lodge owner in Southern Colorado wanting to attract more tourists analyzed income data for cities and counties to devise a newspaper advertising campaign.
- An Indianapolis band specializing in 50's and 60's music used age, race, income, and education statistics to plan a nationwide tour.

Detroit, MI 48226-2769
Federal Building and U.S. Courthouse
231 W. Lafayette, Room 565
(313) 226-4675

Kansas City, KS 66101-2419
One Gateway Center, Fifth Floor
4th and State Streets
(913) 236-3731

Los Angeles, CA 90049-5076
11777 San Vicente Boulevard, Room 810
209-6612

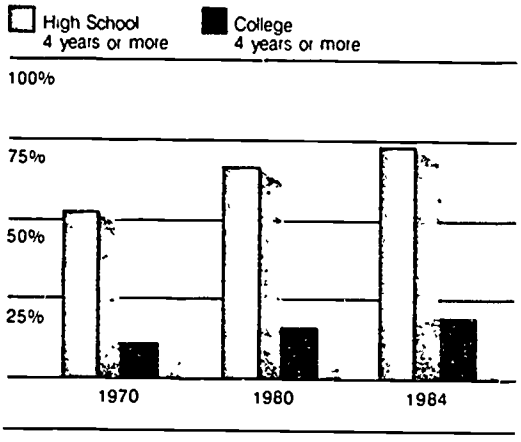
New York, NY 10278-0044
Federal Office Building, Room 37-130
26 Federal Plaza
(212) 264-4730

Philadelphia, PA 19106-3395
105 S. 7th Street, 1st Floor
(215) 597-8313

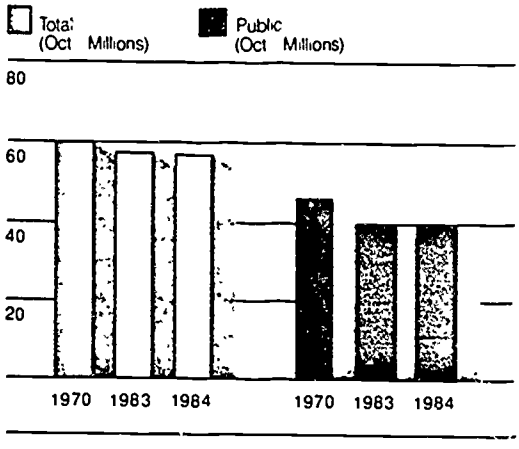
Seattle, WA 98109
Lake Union Building
1700 Westlake Avenue, North
(206) 442-7080

Recent Education Trends

Educational Attainment (Persons 25 years old and over)

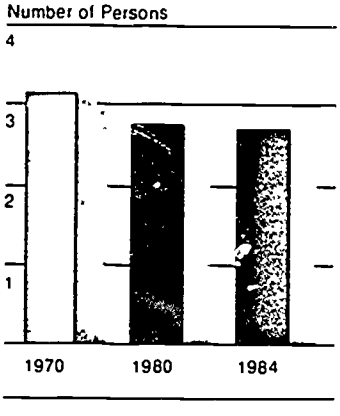


K-12 School Enrollment- Total and Public

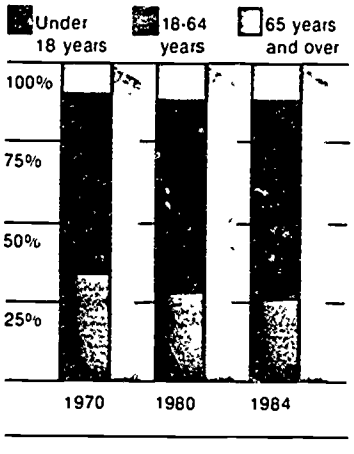


Recent Population Trends

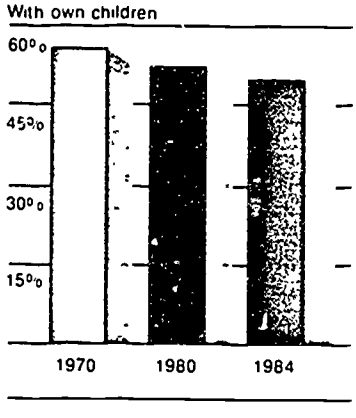
Persons per Household



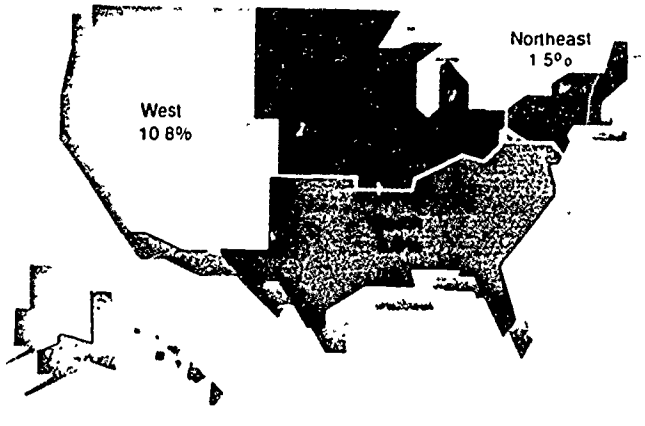
Resident Population- Age Distribution



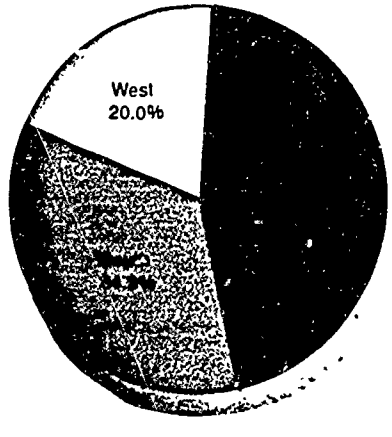
Percent of Families With Children (under age 18)



Resident Population- Percent Change: 1980 to 1985



Population Distribution by Region, 1985



Source 1986 Statistical Abstract and State and Metropolitan Area Data Book, 1986

Social Service Providers

- Officials of a child services program in Jackson, Mississippi found census information valuable in program planning and used it to obtain numbers of pre-school children.
- In Newport News, Virginia, a church official employed age data for the community to plan a new church. Finding a high proportion of elderly meant building a structure of one story, not two.
- An agency in Denver is examining census figures to identify pockets of poverty in the city Once located, residents in those areas will be surveyed to determine the adequacy of various services.

Neighborhoods

- The large number of working mothers with small children in a low-income neighborhood—revealed by a study of census data—prompted community officials in a Midwestern city to seek and win approval for a day care center.
- Leaders of an Oklahoma City neighborhood examined sewage disposal information from the census to develop a case for improved sewer services in their area
- A Philadelphia research center used Neighborhood Statistics data in a study exploring the incidence of cancer

Individuals

- A Chicago college student investigated socioeconomic census information in making a decision to begin a teaching career.
- An individual starting a telephone book delivery business in central Michigan used data on numbers of households and persons to determine the number of books to order
- In a Southwestern city, an entrepreneur wanting to open a roller skating rink studied small-area age statistics to pinpoint possible sites

Census Answers: Civic Duty, Confidentiality, and the Law

The purpose of the census is to obtain counts—statistical totals Questions are asked of individuals and households to compile these totals

Answering census questions is a civic responsibility. It is also the law (Title 13 of the US Code) Failure to comply can result in penalties including fines of up to $500

This same law keeps answers to the census away from welfare agencies, the Immigration and Naturalization Service, the Internal Revenue Service, courts, police, the military, everyone

No one—neither a census taker nor any other employee of the Census Bureau—can reveal information about any individual or family to anyone outside the Census Bureau. Census workers swear an oath to uphold this privacy An employee breaking this confidence is subject to severe penalties of up to 5 years in prison and $5,000 in fines

The integrity of census confidentiality also has been upheld in court Legal challenges from outside the Census Bureau for access to actual census forms and other protected material have all been denied. This stand on confidentiality is a hallmark of census-taking in the United States

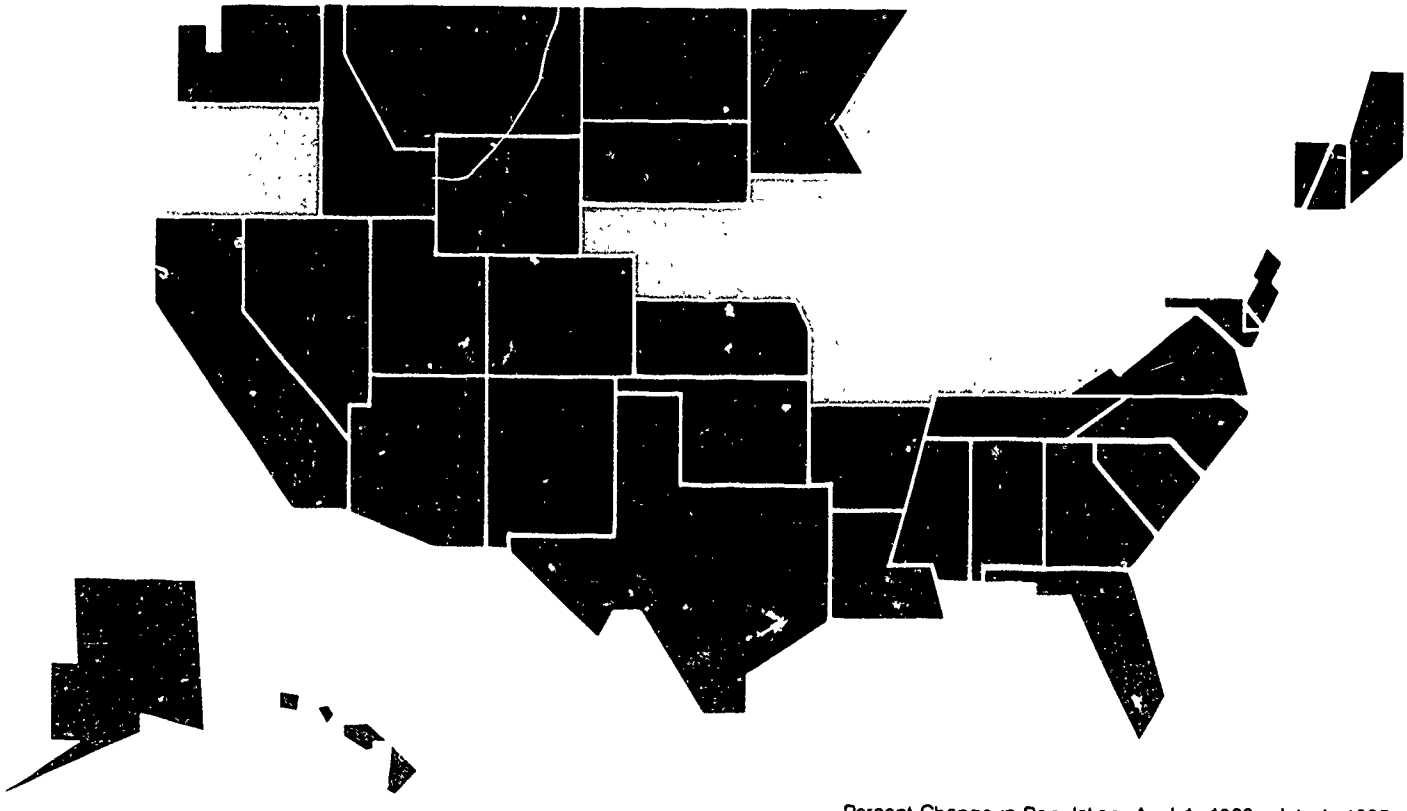
Acknowledgments

This Census Education Project package is a prototype for the 1990 Bicentennial Census Education Project This, the 1988 edition, and its 1986 and 1987 predecessors, are the results of a joint effort between the Census Bureau and members of the education community Persons involved in material development and review and providing specific material recommendations are. **Patricia Cancellier,** Population Education Consultant, Cleveland, Ohio; **Lester McCrea,** Education Liaison for the City of Baltimore and Director of the Urban Life-Population Education Institute; **Kimberly Crews,** Population Relerence Bureau, Washington, D.C., **Dr. Leah Engelhardt,** Mississippi State University, **Nancy Brown,** Mississippi State Department of Education, **Carol Marquis,** San Ramon Unified Schools, Danville, California, **Dossett Foster,** Memphis City Schools, **Dr. Richard Hulsart,** Colorado Department of Education, **Dr. Lawrence Worden,** Hillsborough County Public Schools, Tampa, Florida; the participants of the **1990 Census Education Project Planning Conference (July 1985);** and educators and students from districts in **North Central North Dakota; Central Los Angeles County; East Central Mississippi; Tampa, Florida; Jersey City, New Jersey; Philadelphia, Pennsylvania; Detroit, Michigan; Nelson and Oldham Counties, Kentucky; South Bend, Indiana; Memphis, Tennessee; New Orleans, Louisiana; Edinburg, Texas; and Pico Rivera, California.**

A special acknowledgment is also extended to **Statistics Canada** and its Vancouver staff for use of a lesson prepared for teachers for the 1986 Canadian Census

We Know We Can Count On You!

Census Education Project: 1988



Percent Change in Population: April 1, 1980 – July 1, 1985

– 2.0% to 2.4%
2.5% to 6.5%
6.6% to 29.7%

A K-12 Teaching Package

Reproducible Lessons With Teacher's Notes Are Now Available From:

_____

_____

Census '88

Suggested School & District Census Outreach Activities

Outreach is **vital** to the success of the census of the Nation in 1990 and of the parts of the States of Washington and Missouri being counted in 1988 (See the last page of this leaflet for maps of the census areas.) This is the case because so much rests upon the willingness of the American people to respond promptly, accurately, and completely. Without that willingness, costs can increase, delays can be created, and data quality can suffer We are working to minimize these problems and others by calling on community institutions to help.

Your school and district can help ensure that the 1988 census in your area is complete and accurate. You can help generate an awareness of the census and its importance in **your community** by performing some of the following suggested school/district census outreach activities You must decide what is appropriate and reasonable, but whatever your class, school, or district can do will help make this census—**your census**—as successful as possible. **Thank You For Your Help.**

Get The Message Home. The next two pages of this leaflet contain sets of take-home announcements that can be reproduced and given to students to take to their parents/guardians as a reminder The first is an announcement for use BEFORE Census Day, March 20. The second is a reminder for AFTER Census Day. These announcements or ones of your own could be attached to report cards or school bulletins.

Create A Media Campaign. A variety of school communications vehicles could be used to generate awareness among the student body and members of the community. Possibilities include: statements on outdoor marquees; announcements on scoreboards/public address systems at sporting events; posters on school bus exteriors/interiors and in gymnasiums; messages on school cable TV, radio, telephone, or electronic bulletin board systems; school newspaper stories; and classroom bulletin board displays.

Some of these could be approached as contests. For instance, in art classes, students could create posters, cartoons, and collages that explain the importance of the census and the need for everyone to be counted. Themes can be extracted from the narrative in the Census Education Project folder. Students could participate in a slogan contest. What bumpersticker-sized statement might best describe **their** importance in the census? Essay or writing contests are another area to consider Students could cover census data use, the importance of the census to the community, or historical change in the community, county, region and so forth. Contests and winners could be reported in the school newspaper. Journalism and English students can gain valuable experience in covering a community-wide story.

Develop Outreach Around Special Events. If there is a special school or community event occurring around the time of the census (such as a fair, a concert, a dance, or a sporting event), census announcements could be posted or made.

Produce A Historical Exhibit. Library, lobby, and other displays could be made showing historical population changes which have taken place in the community, county, or the State. A combination of photographs, other graphics, and written information can create an effective presentation celebrating these changes. Members of local historical societies or genealogical groups make good sources of technical assistance and good speakers for classes or school assemblies. Display projects might be undertaken by history, civics, or political science classes or by the student government.

Have Special Presentations. Census data are being put to many uses in your State/community. You could invite people who use this information to give special presentations in a class or an assembly. Possible sources include. a local, county, reservation, or regional planning office, a chamber of commerce, an education planning office, a market research firm, a county extension agency, a large business, a documents library.

Make School/District Employees Aware. Outreach to your employees or colleagues is important. A school principal or district superintendent can help ensure employees know about the census and the need for them to respond by including announcements in employee bulletins, with paychecks, and the like. School boards and parent-teacher groups also need to be aware of the census.

Make Other Community Leaders Aware. We have developed other 1988 census outreach programs. These are directed toward local governments, American Indian reservations, religious organizations, the media, and a number of community organizations, businesses, and State offices. All parts of your community have a stake in a complete and accurate census. You can act as a catalyst to the awareness and support of these and other influential community institutions by showing your support. **Let them know you're counting on them!**

When Should I Do This? The best time to perform these activities is in the 2 weeks before Census Day—**March 20, 1988.** However, after March 20, people still have time to respond to the census. Using the second reminder in this leaflet or organizing a Post-Census Day media campaign can communicate this message

What If I Want Additional Information? If you have questions about the 1988 census or the Census Education Project, please contact the Census Regional Office nearest you. Addresses and telephone numbers are listed inside the kit folder.

PRECENSUS DAY
TAKE-HOME CENSUS ANNOUNCEMENT—FOR USE BEFORE MARCH 20, 1988

This sheet of announcements can be reproduced and given to students to take home to parents/guardians as a reminder. We also have left room for an educator's signature, if you wish. This should go out just BEFORE Census Day. March 20.

CENSUS '88:

WE KNOW WE CAN COUNT ON YOU!

Dear Parent/Guardian:

Census Day is March 20, 1988 in our community. Please complete your CENSUS FORM. Our community and our schools depend on a complete count of our population and housing units. It helps us plan for the education needs of the students of today and tomorrow Census information is important in planning community projects, like highways and health centers, and in distributing funds for many services New jobs and economic growth can also be based upon census totals. We **all** stand to lose, if everyone is not counted. So please fill out your form. If you receive a return enve.ope with your form, use it to mail back your answers. If not, hold on to the form until a census tal.er visits you. Thank you.

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(NOTE: Copies of this announcement should ONLY go to parents/guardians living within one of the three 1988 census areas. These areas are delineated on the back page of this leaflet.)

POSTCENSUS DAY
TAKE-HOME CENSUS ANNOUNCEMENT--FOR USE FROM MARCH 21—APRIL 15, 1988

This sheet of announcements can be reproduced and given to students to take home to parents/guardians as a reminder. We have also left room for an educator's signature, if you wish. This should go out AFTER Census Day, March 20.

CENSUS '88:

THERE'S STILL TIME!

Census Day in our community has come and gone. It was March 20. If you haven't completed your **CENSUS** form, don't panic! There's still time.

Please **ANSWER** all the questions completely. If a postage paid envelope came with your form, use it to **MAIL BACK** your completed questionnaire **RIGHT AWAY!** If no envelope was included, hold on to the form until a census taker visits your home.

Remember, we all stand to lose, if everyone is not counted! Thank you.

CENSUS '88:

THERE'S STILL TIME!

Census Day in our community has come and gone. It was March 20. If you haven't completed your **CENSUS** form, don't panic! There's still time.

Please **ANSWER** all the questions completely. If a postage paid envelope came with your form, use it to **MAIL BACK** your completed questionnaire **RIGHT AWAY!** If no envelope was included, hold on to the form until a census taker visits your home.

Remember, we all stand to lose, if everyone is not counted! Thank you.

CENSUS '88:

THERE'S STILL TIME!

Census Day in our community has come and gone. It was March 20. If you haven't completed your **CENSUS** form, don't panic! There's still time.

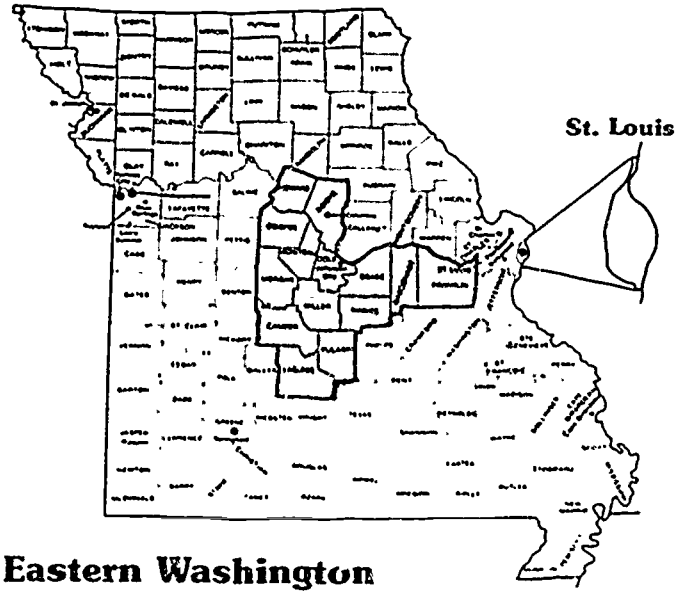
Please **ANSWER** all the questions completely. If a postage paid envelope came with your form, use it to **MAIL BACK** your completed questionnaire **RIGHT AWAY!** If no envelope was included, hold on to the form until a census taker visits your home.

Remember, we all stand to lose, if everyone is not counted! Thank you.

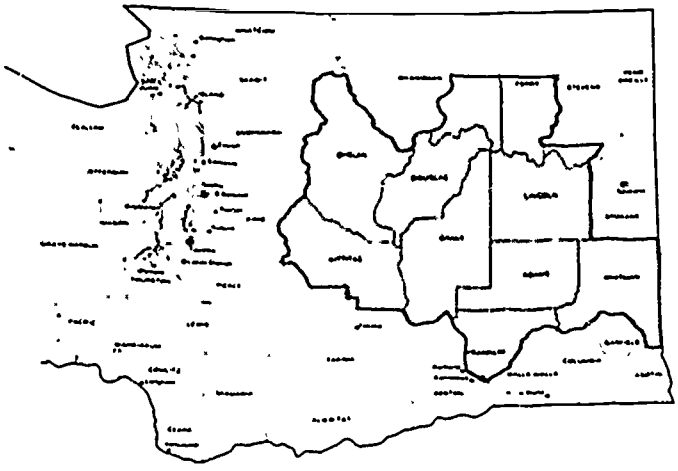
(NOTE: Copies of this announcement should ONLY go to parents/guardians living within one of the three 1988 census areas. These areas are delineated on the back page of this leaflet.)

Fact Sheet

The 1988 Census of St. Louis, Missouri East Central Missouri



Eastern Washington



Q. I thought the next census was in 1990. Why is a census being taken in 1988?

A. You are right The next **national** census will be taken in 1990 That census will count everyone in the country It cannot be done without planning. The 1988 census in Eastern Washington, East Central Missouri, and the City of St Louis, Missouri is the last of the US Census Bureau's planning program to get ready for the big count in 1990

Other censuses were taken in Tampa, Florida and Jersey City, New Jersey in 1985, in East Central Mississippi and Central Los Angeles County, California in 1986, and North Central North Dakota in 1987 These censuses helped us make decisions on how best to count the people and housing of the Nation in 1990.

The 1988 census is also called the Dress Rehearsal Census. Just like preparing for a play on stage, this is the last part of our testing and it will match as closely as possible what we will do in 1990.

Q. Where will the 1988 census be taken?

A. Only parts of the country are included. The maps show the areas in which the census will be taken. In the State of Missouri, the counties of Boone, Camden, Cole, Cooper, Franklin, Gasconade, Howard, Laclede, Maries, Miller, Moniteau, Morgan, Osage, and Pulaski and the City of St. Louis are included. In Washington State, the census area contains the counties of Adams, Chelan, Douglas, Franklin, Grant, Kittitas, Lincoln, and Whitman and the Colville and Spokane Indian Reservations.

Q. When will this census be taken?

A. The official date of the 1988 census, or **Census Day**, is **March 20, 1988.** The answers people give in the census should represent their household or living situation as of that day Anyone not answering by that day must still respond.

The count from the 1988 census will include everyone who usually lives in the three areas on Census Day. People who are only visiting the areas on that day will not be counted. Babies born before midnight of Census Day will be counted.

Q. How will this census be taken?

A. The census form, or questionnaire, will be delivered by the U.S Postal Service to all households in the census areas. Households that receive a postage-paid return envelope with their form will be asked to return the completed form in the mail This is the way every household will be counted in the City of St Louis, most of East Central Missouri, and a part of Eastern Washington For the rest of the households in Missouri and Washington, the completed forms will be picked up by a census taker

The census will be taken using two different questionnaires. One is called the short form Most households will receive this one It asks basic questions on population and housing, like age of the household members and whether the housing unit is owned or rented About one out of every six housing units will receive the other questionnaire It is called the long form. It has the same questions as the short form and also has additional questions, like amount of education and the year the housing unit was built

Q. Is the public required to answer the census questions?

A. Yes The law makes it **mandatory** to answer all census questions. This same law also requires that all information about individuals be kept confidential The Census Bureau only publishes statistics that are **totals** for an area, not individual answers

Teacher's Guide

Census Education Project (1988 Edition)

Project Objectives and Goals

This census education package is a prototype of one to be prepared and distributed nationwide for the Bicentennial Census of the United States in 1990. The objectives of this 1988 K-12 project, and its planned 1990 counterpart, are 1) to provide educators with materials they can use in their classroom teaching and 2) to introduce educators and students to an important national event in which everyone in the country needs to participate.

For the first objective, the goals are to supply teachers with timely materials that

- are reproducible, easy to use, and require little preparation;
- are appropriate for various subjects such as history, geography, political science, civics, mathematics, language arts, and current events;
- can help improve students' critical thinking, problem-solving, data analysis, and reading comprehension skills;
- make use of information with real-world relevance useful to students now and in their adult lives; and
- give students "hands on" exposure to such information.

For the second objective, the goals are to help educators and students become aware of and understand

- what a census is;
- some of the history of the decennial census in the United States,
- the need for a complete count of population and housing;
- the civic responsibility of answering a census;
- the confidential nature of answers to a census,
- the summary nature of public census data; and
- how census data affect everyday life

Timing. In the 1988 Census of the City of St. Louis, Missouri; East Central Missouri; and Eastern Washington, Census Day is March 20. While educators in these areas may want to teach portions of the 1988 materials throughout the school year, we recommend the peak time be the 2 weeks before Census Day. Also, during this time, we ask educators to undertake some of the suggested school and district outreach activities discussed elsewhere in this kit. By focusing on this peak time, the actions taken by schools in the census areas will coincide with other 1988 census outreach events and activities to be planned by a wide variety of local officials and community leaders.

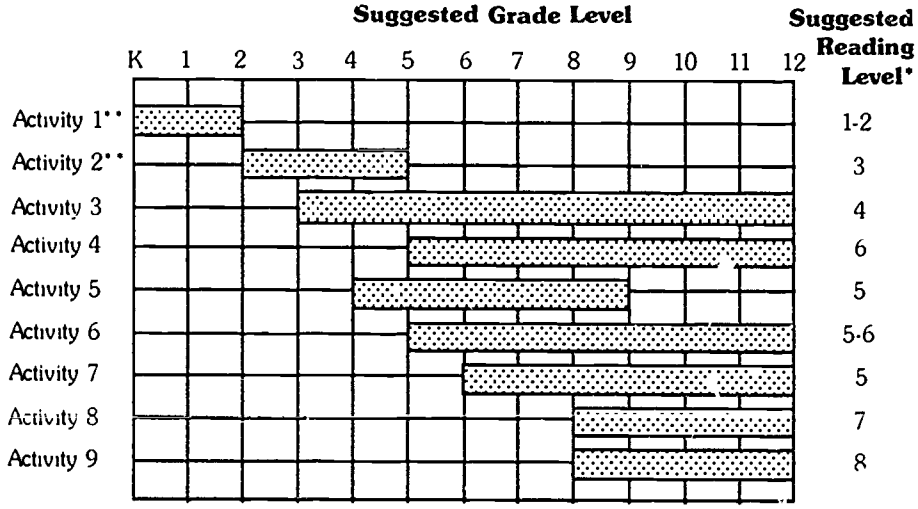
(NOTE Educators outside the 1988 census areas receiving this kit are asked to teach some of the lessons around April 1 This day has been established as Census Day for the Nation in 1990 We hope discussions of the census can become a perennial part of the curriculum around this day.)

Using the Census Education Materials

There are nine activities in this package. Each has Teacher's Notes giving explicit commentary on that activity's purpose and procedures with suggested follow-up activities.

All the materials are reproducible. Activities 1 and 2 are also provided in Spanish. We hope copies will be supplied to your students, but activities or portions of them can be used as oral presentations.

Grade and Reading Levels. The lessons have no notations on them indicating grade level or reading level. They are numbered 1 through 9 and generally rise in difficulty. Suggestions on grade and reading levels are given below. However, you should be the judge of appropriateness for your students.



* To account for the unique nature of many "census" words, a vocabulary list also has been provided. The reading levels have been determined using a Modified Fry readability formula See Timothy Standal, **Social Education**, "How to Use Readibility Formulas More Effectively", March 1981.

** Activities 1 and 2 were also designed with ESL (English as a Second Language) students in mind The use of these activities as ESL lessons may be appropriate across the K-12 span.

Subject Area. The diversity of the activities makes them useful in many subject areas. Recommendations have been listed, but they should not be seen as inclusive. The activities or variations of them can be appropriate in other courses or areas. For example, the information on the Activity 7 data sheet or gathered in Activity 3 could become an experimental data base for a computer class. Portions of the materials could become the source for school newspaper stories or school video projects. Subject area possibilities are therefore extensive.

Subject Area	Activity								
	1	2	3	4	5	6	7	8	9
English/Reading	X	X	X	X	X	X	X	X	X
Mathematics	X	X	X	X	X	X	X	X	X
Social Studies	X	X	X	X	X	X	X	X	X
Contemporary Issues			X	X		X	X	X	X
United States History				X		X	X		
Civics/Political Science		X		X		X	X	X	
Sociology			X		X	X	X	X	X
Economics			X		X	X	X	X	X
Geography		X	X	X	X	X	X	X	X
Science	X		X		X	X	X	X	X
General	X		X					X	
Biology						X	X		
Earth					X	X	X		X

Social Concepts. The following table lists major social concepts and the activities that illustrate them.

Concept	Activity								
	1	2	3	4	5	6	7	8	9
Self/Family	X		X						
Community	X		X	X	X			X	X
State/Region		X			X	X	X		
Nation		X		X		X	X	X	X
Socialization	X	X	X	X		X		X	X
Interaction		X	X	X	X		X	X	X
Ethnic Awareness								X	X
Quality of Life		X	X		X			X	X
Change in Society		X	X	X	X	X	X	X	X
Geographic Mobility		X	X			X	X		X

Skills. The table below shows which activity emphasizes various decision making, communication, and social participation skills.

	Activity								
	1	2	3	4	5	6	7	8	9
Decision Making									
Compare, contrast, or evaluate information	X	X	X	X	X	X	X	X	X
Differentiate between relevant and irrelevant information	X	X	X	X	X	X	X	X	X
Generate a reasoned decision/ course of action		X	X		X	X	X	X	X
Communication									
Interpret tables, charts, maps	X	X	X		X	X	X	X	X
Prepare and conduct interviews			X					X	
Engage in group discussions	X	X	X	X	X	X	X	X	X
Make individual or group reports			X	X	X		X	X	X
Social Participation									
Focus on task	X	X	X	X	X	X	X	X	X
Contribute ideas to discussion		X	X	X	X	X	X	X	X
Facilitate intergroup cooperation			X		X		X	X	X

Census Vocabulary

Apportionment — The means of providing each state with equal representation in the HOUSE OF REPRESENTATIVES using population counts from the 1790 census This has been repeated every 10 years since 1790 and is called REAPPORTIONMENT. Article I of the Constitution, adopted in 1787, provided for apportionment, reapportionment, and the census.

Census — A complete count, or ENUMERATION, of a population in a given area Such a count can also include things other than population The decennial census in the United States counts the population and housing units of the Nation.

Census Data — The numbers totaled from individual answers on census forms for different geographic units. For instance, there were 116,492,644 females in the United States in 1980 That is a piece of census data To produce it meant adding up all the girls and women on all the census forms for the country.

Census Day — The official date of a census. In the United States, national Census Day has been April 1 since 1930 The count produced during a census will stand for everyone who usually lives in the area being counted on Census Day If Census Day passes by and someone forgot to be counted, it does not mean it is too late to be counted A census enumerator will visit the households that did not return their census form

Census Enumerator — A person who helps collect the information to be totaled in a census To become an enumerator, the person must take an oath swearing not to share any individual answers with anyone except another census employee who also has sworn to keep the information private.

Census Geography — The different land units used by the CENSUS BUREAU when taking a census Some of these are political units, like a city or county. Others are called statistical units One of these is called a CENSUS TRACT It is a unit of land within a political geographic area, like a county. Census tracts are usually small in land area. Census data for census tracts provide a closer picture of the population and changes taking place within the larger geographic unit

Census Year — The year a census is taken The DECENNIAL census is taken every 10 years: 1790,. 1970, 1980, 1990 The census TEST years before the 1990 census are 1985, 1986, 1987, and 1988

Confidential — Private In the census, this means no one but sworn United States Census Bureau employees can look at a specific person's answers to the census.

Decennial Census — A census taken every 10 years A decennial census has been taken in the United States in years ending in 0 (zero) since 1790

Housing Unit — A house, an apartment, a group of rooms, or a single room, that is occupied or, if vacant, is intended for occupancy as separate living quarters

Population — The number of people or inhabitants of an area.

Statistics — A collection of numeric DATA. In the census, a SUMMARY STATISTIC is a number or other value such as a percentage for a population in a geographic area (city, county, etc.) This is the only kind of information published from a census

Survey — A way to collect facts or opinions from a portion or SAMPLE of a population Usually the answers from these people or households will be used to represent those of everyone in the population Censuses include both sample surveys and complete counts to collect facts

Undercount — The degree to which people in housing units are missed in the count In the decennial census in 1980, the general population is ESTIMATED to have been undercounted by about 1 percent nationally

United States Bureau Of The Census — The Federal office in charge of taking the decennial census and doing other surveys. The CENSUS BUREAU is a part of the UNITED STATES DEPARTMENT OF COMMERCE.

Activity 1

Taking a Census

One, two, three, four. You are counting. A CENSUS is a count. A census counts people. It tells us how many people are old. It tells how many people are young. It tells us how many people are girls. It tells how many people are boys.

A census counts homes. It tells us the kinds of homes people have. It tells us how many homes there are.

It tells us this and more.

We need counts of people and homes. We need to count everyone A census answers big questions. Can you count people and homes? Can you add them up? This is what a census does.

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1. **Draw a picture of a family.** **Draw it here.**

2. How many grown-ups did you draw? _____

3. How many boys did you draw? _____

4. How many girls did you draw? _____

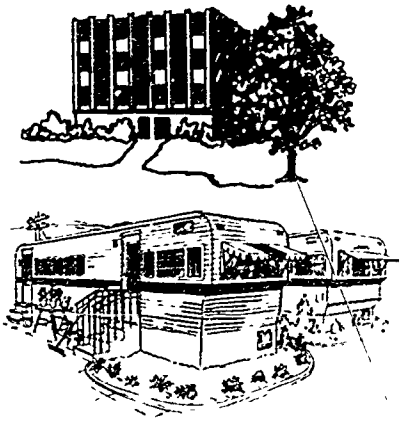
5. How many people are in your picture? _____

This is what a census does.

6. **These are houses.**
   How many houses do you see? _____

7. **This is an apartment building. Each apartment has one window.**
   How many apartments do you see? _____

8. **These are mobile homes. People live here too.**
   How many mobile homes do you see? _____



9. **Add the houses, apartments, and mobile homes. How many are there?** _____

This is what a census does.

Actividad 1

Tomando un Censo

Uno, dos, tres, cuatro. Usted está contando. Un CENSO es un recuento. Un censo cuenta las personas. Nos dice cuántas personas son ancianos. Nos dice cuántas personas son jóvenes. Nos dice cuántas personas son niñas. Nos dice cuántas personas son niños.

Un censo cuenta hogares. Nos dice qué tipo de hogares tienen las personas.

Nos dice cuántos hogares hay.

Nos dice esto y más.

Necesitamos las cifras de las personas y los hogares. Necesitamos contarlos a todos. Un censo contesta preguntas importantes. ¿Puede usted contar las personas y los hogares? ¿Puede sumarlos? Esto es lo que hace el censo.

---

1. Haga un dibujó de una familia. **Dibújelo aquí.**

2. ¿Cuántos adultos dibujó? _____

3. ¿Cuántos niños dibujó? _____

4. ¿Cuántas niñas dibujó? _____

5. ¿Cuantas personas hay en su dibujó? _____

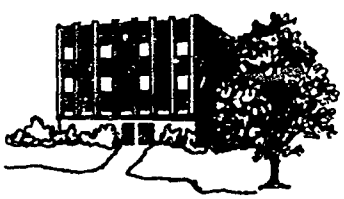
Esto es lo que hace un censo.

6. **Estas son casas.**

   ¿Cuántas casas ve? _____

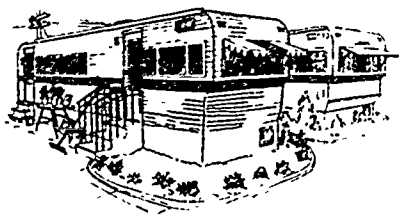
7. **Este es un edificio de apartamentos. Cada apartamento tiene una ventana.**

   ¿Cuántos apartamentos ve? _____



8. **Estas son casas móviles. Aquí también viven personas**

   ¿Cuántas casas móviles ve? _____



9. **Sume las casas, los apartamentos y las casas móviles. ¿Cuántas hay?** _____

Esto es lo que hace un censo.

Teacher's Notes:
Activity 1
Taking a Census

The **purpose** of this activity is to expose primary and ESL (English as a Second Language) students to the concept of a census. The activity is provided in both **English** and **Spanish.** The exercise, along with discussion and the suggested activities, should show them that the final figures from a census are totals representing groups of people; not individuals. (NOTE: See the **Teacher's Guide** sheet for grade, reading, and skill levels and other placement suggestions. If used with kindergarten students, the lesson should be read to them.)

Procedure: This activity could begin with a mystery word puzzle. Ask the students to solve the puzzle and spell the answers. The first letter of each answer gives them the mystery word.

An animal that meows.	=	**CAT**
Part of the body you hear with.	=	**EAR**
It's in the middle of your face.	=	**NOSE**
It comes down in the winter and it is white.	=	**SNOW**
The opposite of down.	=	**UP**
The number after 5.	=	**SIX**
The mystery word is		**CENSUS.**

The following mystery word puzzle is provided for use with the Spanish version of this activity.

Lo que esta sobre sus hombros.	=	**CABEZA**
Animal grande que tiene una trompa.	=	**ELEFANTE**
Esta en el medio de su cara.	=	**NARIZ**
El numero que viene despues del 5.	=	**SEIS**
Parte del cuerpo con la cual usted oye.	=	**OIDO**

La palabra misteriosa es **CENSO.**

Ask the students if they know what the word means. Discuss it with them, then have them complete the activity. If the space provided for drawing "a picture of a family" seems too small, have the students draw the picture on a separate piece of paper. (NOTE: Since family situations are so varied, a predefined "family picture" to be used with the first four questions has not been drawn. If each student draws a picture of his or her own family, the "family population" totals will vary. You may want to tell the students what to draw. In their totals, have them include all adults in their answer to question 2.)

For Discussion: A CENSUS is a complete count of a population in an area. This count could include things other than people. In the United States, a census of **all** the people and **all** the homes (housing units) happens every 10 years. It happens in years ending in zero. Ask them if they can figure out when the next national census is.

A census is taken in the United States because it is written in the U.S. Constitution. The numbers help make sure each State is fairly represented in the House of Representatives. The totals also are used to make other big decisions. For instance, imagine that the people in City Hall wanted to build a new playground. They wanted it to be in a place where children could easily get to it. From looking at the census numbers for all parts of the city, they found that almost all the children lived on one side of the city. Ask the students where they think the playground was put. (This situation could be drawn on the chalkboard.)

Suggested Activities: Students also could do a count of the members of their class and discuss the numbers. They could count and total the number of girls and boys in the room, their ages, the type of housing they live in, or other characteristics. This could be done by having the students stand and form groups for the characteristic in question (girls on one side of the room, boys on the other). They could then regroup for the next characteristic and so forth.

The activity could be expanded by designating a few students as "census officials". Their job is to total all the information that has been collected in the "census". The totals for each item could be listed on the chalkboard. This class profile could then be discussed. Other items which could be investigated in this fashion are the types of pets they have, their favorite TV shows, their favorite colors, and so forth.

A walking tour near the school with the students counting the different types of housing is another good activity. This, too, could be conducted as a survey. From outside observation, students could generate totals for the number of floors in a house, exterior colors, exterior materials (siding, brick, stone), as well as the type of home. They could also be asked to distinguish between housing and nonresidential structures (stores, gas stations, and the like).

As an indoor extension of this activity, have the students help you create a bulletin board collage.

They could collect different pictures/drawings of people and housing from magazines at home. Set a specific time frame for this activity, for example, have them collect pictures for a week before the actual census. Tell the students they will be conducting a "people and housing picture census." You may want to establish some categories (older persons, young people, apartment buildings, single family homes, and so forth.) Since census counts are associated with geography, your categories could be further divided. For example, you could use headings of urban and rural. Put those category labels on the bulletin board and have the students bring in their entries and add them to the correct category. On the last day of your "census", have the students sum the people and housing by category and in total.

Activity 2

Right + Under = Missedpop

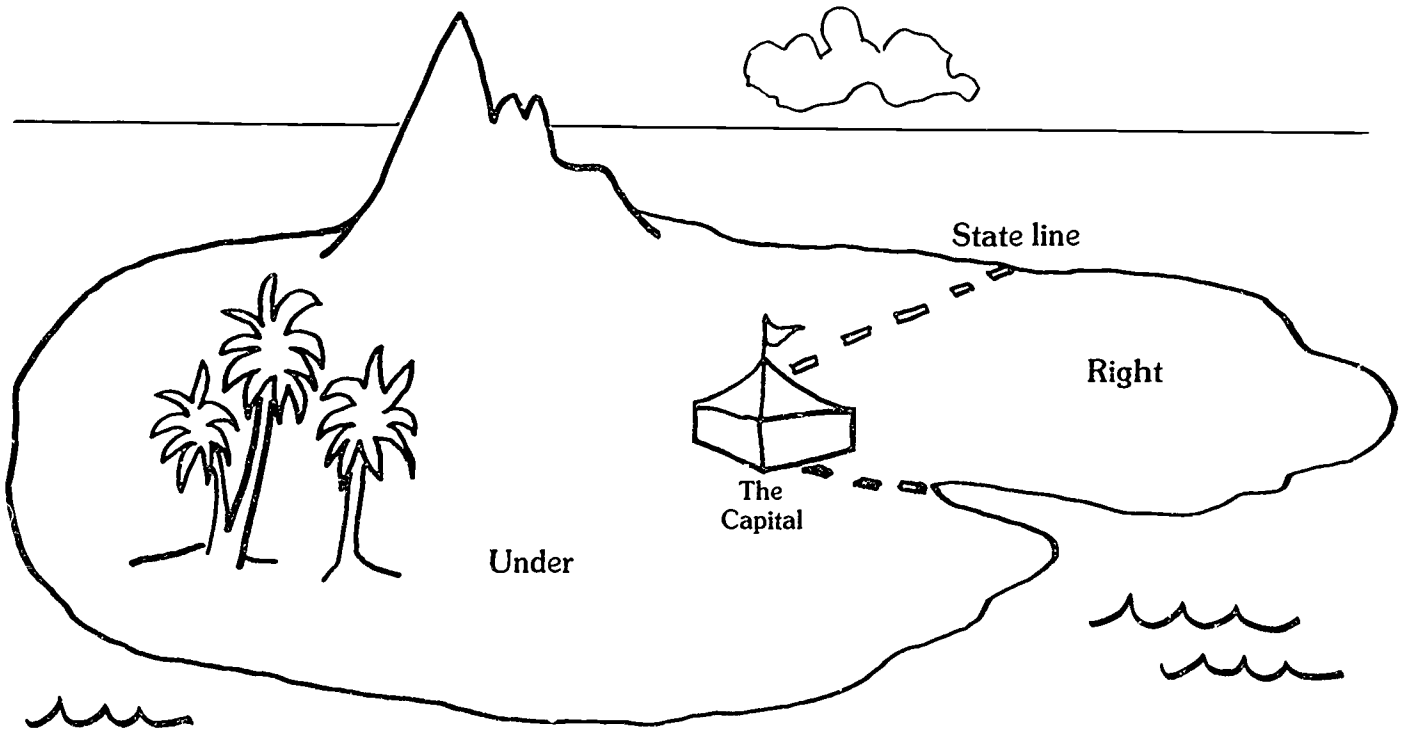
There is a very small make-believe land called MISSEDPOP. It is ruled by the High Council in the capital city. MISSEDPOP has two States. One is named RIGHT. The other is called UNDER. RIGHT has more people than UNDER. There are 250 people living in RIGHT. UNDER only has 200. Over the years the numbers have changed, but RIGHT has always had more people.

The people of RIGHT are happy about this. Because RIGHT has more people, it has more power in the High Council. It has five members. UNDER only has four. When the council votes on things, RIGHT always seems to win. RIGHT got the new swimming pool. It got the new park. It even got the new library. The people of RIGHT are happy. They feel their council members represent them well. They tell their council members what they need.

Since RIGHT has more people, it gets more votes. Some people in UNDER feel it is unfair, but it is fair. In the law it was written, "There shall be nine members of the High Council. Their number shall be divided between the two States. This shall be done using the number of people living in each. The people of MISSEDPOP shall be counted every 10 years to do this. This count shall be called a census. This count shall decide the number of members for each State."

It had been 10 years since the last census. The number of people in each State had changed. This was known. Some people had died, but many babies had been born. Some people had left MISSEDPOP. Others had moved to MISSEDPOP from faraway lands. The numbers had changed but no one knew by how much. They would soon know. The census was being taken.

The Land of Missedpop



The leaders of UNDER thought they would finally beat RIGHT. They thought they had more people than it did. They had to prove it. The only way was to be counted. To be counted, everyone was to fill out a census form. They were then to send it to the capital of MISSEDPOP.

The leaders of RIGHT knew some people would not care about the census. They knew some new people from faraway lands would be afraid. They knew others just would not understand.

The leaders of RIGHT went everywhere in the State. They spoke to their people. They showed them the count was important. They talked about the new park, the new library, and the new swimming pool. They told the people there was nothing to fear. The people listened. Everyone from RIGHT turned in the census forms.

In the State of UNDER, the leaders did nothing. They were so sure they would be Number 1. They did not try to talk to their people. They did not see the need.

The people of UNDER are not very different from the people of RIGHT. Some of them, too, did not care to be counted. Some were afraid. Some did not understand why the census was important. So some of the people of UNDER did not answer the census.

Then, the census ended. The numbers were totaled. RIGHT had grown to 300 people. UNDER had grown too! The leaders of UNDER cheered, until they heard the number. It was 240.

The leaders of UNDER were shocked. "It has to be wrong," they said. "It has to be changed." Nothing could be done. The number was final. It would stand for another 10 years. UNDER had been **undercounted.**

The old council law was then used. It decided the number of High Council members for each State. With 540 people in MISSEDPOP, each member of the council would stand for 60 people. With 300 people in RIGHT, it got 5 members. With 240 people in UNDER, it only got 4 members. The council had not changed. The people of UNDER who were not counted might have changed this. Alas, it was too late.

Everyone in UNDER quickly understood what those missing people meant. The very next day the High Council had a vote. It decided where to put the new school. The vote was 5 to 4. RIGHT had won again.

Actividad 2

Oriente + Occidente = Atlántida

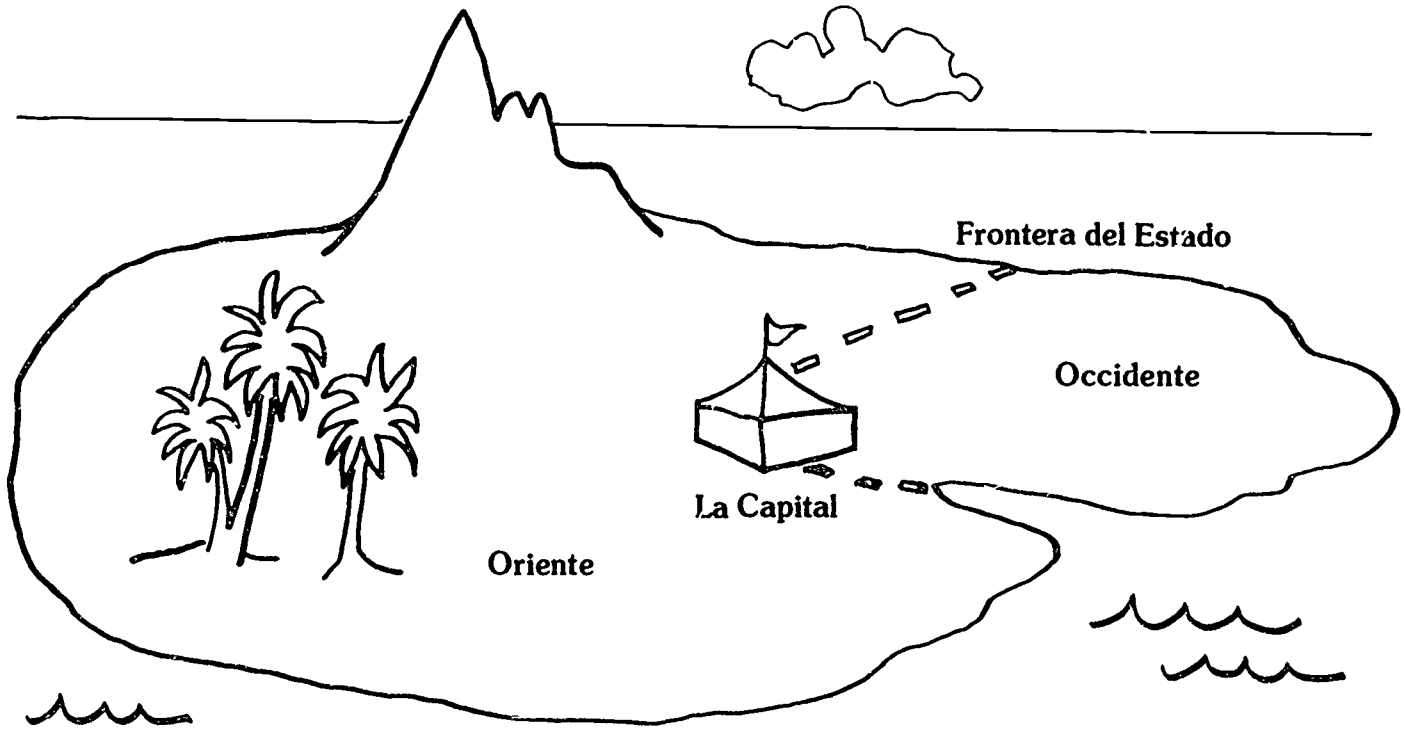
Hay un pequeño país imaginario llamado Atlántida. Está gobernado por el Consejo Mayor en la ciudad capital. Atlántida tiene dos estados. Uno de ellos se llama ORIENTE. El otro se llama OCCIDENTE. ORIENTE tiene más personas que OCCIDENTE. Hay 250 personas viviendo en ORIENTE.OCCIDENTE sólo tiene 200. A través de los años los números han cambiado, pero ORIENTE siempre ha tenido más personas.

Las personas de ORIENTE están contentas. ORIENTE tiene más personas y por eso, tiene más poder en el Consejo Mayor. ORIENTE tiene cinco miembros. OCCIDENTE sólo tiene cuatro. Cuando el Consejo vota sobre algo, parece que ORIENTE siempre gana. ORIENTE consiguió la piscina nueva. ORIENTE consiguió un parque nuevo. Así mismo consiguió una biblioteca nueva. Las personas de ORIENTE están felices. Ellos creen que sus miembros del consejo los representan bien. Ellos le dicen a sus miembros del Consejo lo que necesitan.

Como ORIENTE tiene más personas, ORIENTE obtiene más votos. Algunas personas en OCCIDENTE piensan que no es justo, pero sí es justo. La ley escrita dice, "El Consejo Mayor debe tener nueve miembros. Su número debe ser dividido entre los dos estados. Esto debe hacerse usando el número de personas que viven en cada estado. Para hacer esto, las personas de Atlántida deben ser contadas cada 10 años. Este recuento se llamará un censo. Este recuento decidirá el número de miembros al Consejo por cada estado".

Han pasado 10 años desde el último censo. El número de personas en cada estado ha cambiado. Esto se sabía. Algunas personas habían muerto, pero muchos bebés habían nacido. Algunas personas se habían ido

El País de Atlántida



de Atlántida. Otros se habían mudado a Atlántida de tierras lejanas. Los números habían cambiado, pero nadie sabía por cuánto. Pronto sabrán. El censo se está tomando.

Los líderes de OCCIDENTE pensaron que ellos vencerían finalmente a los de ORIENTE. Pensaron que tenían más personas de las que tenían realmente. Ellos tenían que probarlo. La única manera fue contándose. Para contarse, todos tenían que llenar el formulario del censo. Luego tenían que enviarlos a la capital de Atlántida.

Los líderes de ORIENTE sabían que a algunas personas no les interesaría el censo. Ellos sabían que algunas personas que vinieron de tierras lejanas tendrían miedo. Ellos sabían que otros no apreciaban la importancia del censo.

Los líderes de ORIENTE fueron a todos los lugares en el Estado. Ellos hablaron con su gente. Ellos les indicaron que el recuento era importante. Les hablaron sobre el parque nuevo, la biblioteca nueva y la piscina nueva. Le dijeron a la gente que no había nada a que tenerle miedo. Las personas escucharon. Todos los de ORIENTE devolvieron sus formularios del censo.

En el Estado de OCCIDENTE, los líderes no hicieron nada. Ellos estaban muy seguros que iban a ser el número 1. Ellos no trataron de hablarles a su gente. Ellos no vieron la necesidad.

Las personas de OCCIDENTE no son muy diferentes a las personas de ORIENTE. A varios de ellos no les importaba que se les contara. Algunos tenían miedo. Algunos no entendieron por qué el censo era importante. Por lo tanto, algunas personas de OCCIDENTE no contestaron el censo.

Luego, el censo terminó. Se sumaron los números. ORIENTE había crecido hasta 300 personas. ¡OCCIDENTE también había crecido! Los líderes de OCCIDENTE vitorearon hasta que oyeron el número. Fue 240.

Los líderes de OCCIDENTE se quedaron aturdidos. "Tiene que haber un error", dijeron. "Se tiene que cambiar". Nada pudo hacerse. El número era final. El número permanecería por otros 10 años. OCCIDENTE había sido subcontado.

Entonces se utlizó la antigua ley del consejo. Ésta decidió el número de miembros del Consejo Mayor por cada Estado. Con 540 personas en Atlántida, cada miembro del consejo representaría a 60 personas. ORIENTE con 300 personas, obtuvo 5 miembros. OCCIDENTE con 240 personas, soló obtuvo 4 miembros. El consejo no había cambiado. Las personas de OCCIDENTE que no fueron contadas pudieron haber cambiado esto. ¡Qué lástima!, ya era demasiado tarde.

Todos en OCCIDENTE entendieron rápidamente lo que significan esas personas que no se contaron. Al día siguiente, el Consejo Mayor tenía una votación. Ésta decidía dónde poner la escuela nueva. La votación fue 5 contra 4. ORIENTE había ganado de nuevo.

Teacher's Notes:
Activity 2

Right + Under = Missedpop

The **purposes** of this activity are to show students the authority under which a census is taken, the importance of a census, the need for everyone to be counted, and the important uses of census data. (NOTE: See the **Teacher's Guide** sheet for grade, reading, and skill levels and other placement suggestions. If used in Grade 2 or lower, the story should be read to the students.)

Although the story presents these in simple terms, the messages are accurate. Article I of the U.S. Constitution adopted in 1787 provides the mandate for a census. The results of the U.S. Census do decide representation in the House of Representatives. People missed in a census undercut their own, their neighbors', and their State's political power. Besides representation, census data are used for a variety of activities/programs affecting everyday life. **See the Census Education Project folder for detailed discussions.** (NOTE: It is important to note that the reapportionment formula, as well as the representative form of government in the United States, is more complex than that of MISSEDPOP.)

This activity also is recommended for use in ESL classes and, like Activity 1, has been translated into Spanish. Since the name of the make-believe land, MISSEDPOP, does not translate, the name ATLANTIS has been substituted. Also, the two states, RIGHT and UNDER, have been renamed EAST and WEST, respectively.

Procedure: Either read the story aloud or have the students read it themselves. If read aloud, draw the map on the chalkboard. Once read, discuss the story with the students. Ask them some of the following questions. What is a census? What says a census must be taken in MISSEDPOP? What is one reason that it is important a census is taken there? Do more people mean more votes/power or less? Which State had more people? Which State has more votes? Why did some people in UNDER not want to be counted? How often is a census taken in MISSEDPOP? What does undercount mean? Other questions can also be designed to test general comprehension.

Suggested Activities: The map and the story can be used as a **geography** lesson. Students can study the map and describe things found on it. They can associate information from the story, like population, with the map. They can add items mentioned in the story—the park, swimming pool, and library—to the appropriate State. Ask the students to look at the land area of each State. Which is bigger? The answer is UNDER. This may lead them to think UNDER should have more council members, but **population** is the key to the size of the High Council, as it is in the House in the United States. For instance, Alaska contains 570,833 square miles, had a population of 401,851 in 1980, and has one representative. New Jersey, on the other hand, contains 7,468 square miles, had a 1980 population of 7,364,823, and has 14 representatives.

This activity can also be used as an **arithmetic** exercise. Students could be asked to figure out by how many people each State grew from census to census. On the average, how many people were added to each State in each of the 10 years? How has the average number of people represented by one council member changed in MISSEDPOP? For the latter item, in its old census this was 50. Four hundred fifty people in MISSEDPOP divided by 9 members equals 50 people per member. In the new census the average is 60. The change is 10. (In the United States, the membership of the House of Representatives has been set at 435 since 1911. Because the U.S. population continues to grow with each successive census, each representative represents more people on the average. In 1980, the total population was 226,545,805. Each representative, therefore, represents over 500,000 people.)

Interested in Other Materials on This Topic? This activity can be extended by supplementing it with two other products from the Census Bureau. One is a wall map called **Congressional Districts of the 100th Congress of the United States.** Besides the 100th Congress, the districts of the 1st, 25th, 50th, and 75th Congresses are depicted on this commemorative map.

The other product is a booklet titled **Counting for Representation: The Census and the Constitution.** It provides historical background and current information on the decennial census, apportionment, and other representation issues

Both of these products are explained more fully in the **Teaching Resources Guide** which came with the kit containing this Activity Sheet. If you do not have access to the kit, simply request a free copy of the booklet and ordering information for the map from the Customer Services Branch, Data User Services Division, U.S. Census Bureau, Washington, DC 20233.

Activity 3

Where Have We Been? Where Are We Going?

Pretend you are a businessperson. You think selling school supplies to students in grades 4 through 8 is a great idea. You have 50 million dollars to spend. According to your figures, you can open 50 stores across the country. That is a big investment. You want to be sure you are doing a smart thing. You decide it would be wise to know more about this group—your market.

At the library you locate some census reports for the United States. In one, you find out that, in 1960, there were almost 17 million people between the ages of 10 and 14. Next, you look at the 1970 report. It shows the number in this group was getting close to 21 million! That was an increase of over 4 million people in 10 years! You close your eyes and see dollar signs.

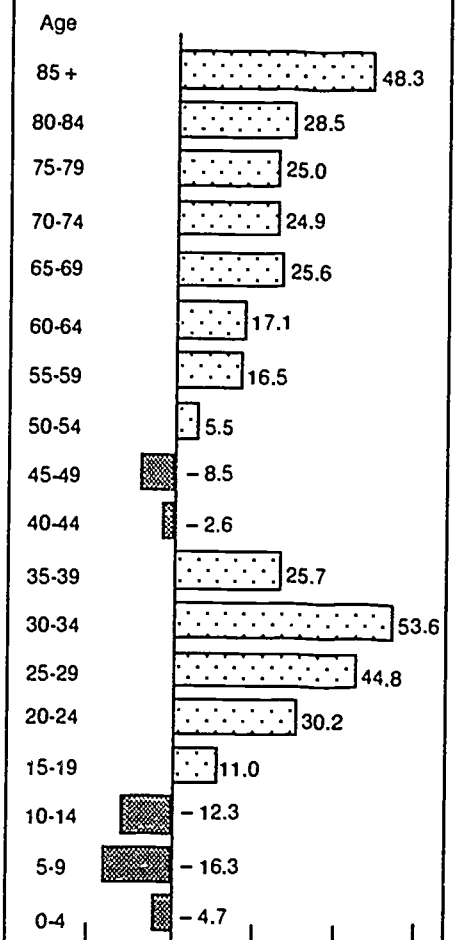
You are about ready to run out of the library and talk a rich aunt into giving you another 10 million dollars or so. You stop. There is one more census report. It is for 1980. You look at the numbers and your mouth drops open. The figure changed between 1970 and 1980. It changed by over 2½ million, **but in the other direction!** The number of persons ages 10 to 14 dropped to just over 18 million!

Why? There were fewer babies born in the late 1960's than in the late 1950's. This meant fewer persons in this age group by 1980.

Thank goodness you looked at the 1980 report. What if you had not? What if there had been no 1980 census? What if the 1970 report was the most recent one for you to examine? What might have happened? You might have invested all your money and some of your aunt's. You probably would have gone broke. Your aunt would never speak to you again. You might be left with a warehouse full of Bruce Springsteen looseleaf binders with nowhere to sell them.

All of this because you were not aware of one change in the population. Things do change. That is why current information is important.

Percent Change by Age for the U.S. Population: 1970 to 1980



This exercise asks you to think about change and the need for current information. In it, you will compare things about yourself with things about your parents or an adult in your home **when they were your age.** Put your answers in the column "You-Now" Take the exercise home and ask an adult the same questions. Remember these answers should be ones your parent or an adult would give back when he or she was your age. Put those answers in the columns "Parent/Adult at Your Age." Do you see any differences? Bring this form back to school for other comparisons.

FREE-TIME SURVEY--THEN AND NOW

	You—Now	Parent/Adult at Your Age
1. How many people live in your home?		
Adults	_____	_____
Children and teenagers	_____	_____
Total people	_____	_____
2. How many pets are there in your home?	_____	_____
3. What are your three favorite free-time activities?		
Bicycle riding	_____	_____
Watching television	_____	_____
Reading	_____	_____
Listening to music	_____	_____
Outdoor sports	_____	_____
Swimming	_____	_____
Video games	_____	_____
Crafts (like sewing)	_____	_____
Other _____	_____	_____
Other _____	_____	_____
4. Class Question _____	_____	_____
_____		
5. Class Question _____	_____	_____
_____		

Teacher's Notes:
Activity 3

Where Have We Been? Where Are We Going?

The **purposes** of this activity are to give students experience in conducting a survey; show them how data change for an area over time; and to demonstrate the importance of current information in decision making. (NOTE: See the **Teacher's Guide** sheet for grade, reading, and skill levels and other placement suggestions.)

Procedure: Distribute copies of the survey to your students. Read the introductory paragraphs aloud. Your students will be conducting a survey on leisure/free-time activities. Blanks have been left at Item 4 and 5, "Class Question." Have the students make class questions of their own.

Advise your students that their answers and those of their parents (or other adult in household) will be kept **confidential** (private). No one will be asked to share this information with anyone else except you. Explain that it is important that they return the questionnaires. If some students do not, it will mean there is an **undercount** and statistics (totals) tabulated from the forms will not be an accurate picture of the class and an inaccurate decision might result. For example, let's say that over half the students favored one particular free-time activity, bicycle riding, but none of them answered and returned their form. The result could be that the class would not decide to open a bicycle shop when it is really needed.

When the forms are returned, let the students know if there was a 100 percent return or undercount. It is **not** suggested that you single out students who did not return their form.

Tabulate the data from the forms, keeping the student and parent/adult responses separate. An alternate approach here is listing the questions on the chalkboard, you reading the answers, and one or two students tallying them on the board.

Once tabulated on the board, present the following problem to the class:

> Keep in mind that you are a businessperson and you want to open one of your 50 stores near this school. Obviously you are interested in making your business a success. You have changed your mind about selling school supplies. You want to sell products that will be popular with the students in the school. Using the results (totals) from your class survey, what type of store would you open: a pet store, a record and tape store, a sporting goods shop, a bicycle store, or something else? Why? Would you be interested in opening more than one kind of store? Why?

Have the students work individually or in small groups. Once they have analyzed the data and made their decision(s), ask them to do the same thing using their parents' (adults') totaled responses. Have them share their decisions and reasons for them with the rest of the class. What kinds of choices did they make? Were there any differences between the choices of the class and those for their parents' (adults') time? What if they had used their parents' (adults') data to make a decision now (use an exotic difference like a video game parlor)? Would their store be as successful? Would they have possibly missed an opportunity? Emphasize that this is one reason it is important to take a U.S. census on a regular basis. Current information is needed to make good plans and decisions that keep up with change. **(For a clear example of how census data change, see Activity 7.)**

Finally, ask them if there are other pieces of information they might need to make the decision on their store, such as characteristics of the population. For example, if they knew the store catered to 11-year-olds more than any other age, it would be important to know how many 11-year-olds there are. (For examples of how census data are used by business and others see the folder narrative on **Uses of Census Data.**)

Suggested Activities: For advanced students - Ask them to prepare a class profile from the results of their survey. Some of the items they might include are: average number of children and teenagers per household, average number of pets per household, and so on. They could also note numeric changes between the student and adult data sets. Ask them to write an essay based on this profile. Have them graphically present some of their findings.

Activity 4

What's Your Guess?

	True or False	
1. The Constitution requires that a census be taken in the United States every ten years.	T	F
2. The first census was taken in 1790.	T	F
3. Census figures are used to decide how many seats (representatives) each State will have in the U.S. House of Representatives.	T	F
4. The next national census of population and housing will be taken in 1990.	T	F
5. The results of a census help guide thousands of decisions that affect everyone.	T	F
6. In the 1980 census, there was an **undercount** of the nation's population. This means not everyone was counted.	T	F
7. Only sworn United States Census Bureau workers can look at an individual's or household's census form (questionnaire).	T	F
8. Census figures provided to the public, businesses, and government agencies are totals (summaries) for geographic areas, like a State.	T	F

	Multiple Choice			
9. The population of the United States in 1790 was about a) 63 million b) 400,000 c) 4 million d) 226 million.	a	b	c	d
10. The population of the United States in 1980 was about a) 63 million b) 150 million c) 226 million d) 329 million.	a	b	c	d
11. The State with the largest population in 1980 was a) Alaska b) California c) Delaware d) New York.	a	b	c	d
12. From the 1980 census totals, the State receiving the largest number of seats in the U.S. House of Representatives was a) Alaska b) California c) Delaware d) New York.	a	b	c	d
13. The State with the smallest population in 1980 was a) Alaska b) Rhode Island c) Delaware d) New Jersey.	a	b	c	d
14. The State that grew the fastest (by the greatest percentage) between 1970 and 1980 was a) California b) Nevada c) New York d) Texas.	a	b	c	d
15. The State with the highest population density (average number of people per square mile) in 1980 was a) Delaware b) Alaska c) New Jersey d) Rhode Island.	a	b	c	d

Teacher's Notes:
Activity 4

What's Your Guess?

The **purpose** of this activity is to quiz students on their knowledge and perceptions about the U.S. census and some facts that result from it.

Procedure: Before administering the lesson in class, read through the answers given below. The lesson could be used as a vehicle for in-class discussion, as a pre-test and post-test with other Activity Sheets, such as Activity 7, testing your students' gain in knowledge, or become the basis for student research projects.

Answers to Activity 4

1. **True.** The U.S. Constitution, adopted in 1787, made provision for a national census to be taken every 10 years. This was prescribed in Article I, Section 2. (See the kit folder section on **Census History** for the wording.)

2. **True.** In keeping with the above noted Article and Section, the first census was taken in 1790. It began in August of that year and took 18 months to complete. Thomas Jefferson directed the first census.

3. **True.** The 1790 census results formed the basis for the apportionment of the House, as mandated in the Constitution. All subsequent censuses have been the official basis for reapportionment.

4. **True.** The 1990 census will mark the bicentennial of census taking in this country.

5. **True.** The data resulting from a census are used for much more than the reapportionment of the House. The information is the basis for allocating Federal, State, and local monies for a variety of programs and has wide applications in everyday business activities. (See discussion on **Uses of Census Data** in the package folder.)

6. **True.** Evaluation surveys after the 1980 census indicated that the total population of the country was undercounted by approximately 1 percent. On a proportionate basis, this figure was higher for minority populations.

7. **True.** Maintaining the confidentiality of individual census answers is critical to developing and maintaining the trust of the American public. Statutes that made response compliance mandatory (with penalties for refusals) and responses confidential (with penalties for disclosure) were codified by Congress in 1954 in Title 13, U.S. Code. Under this law, only sworn Census Bureau employees can look at a specific individual's answers, forms, and related materials. An employee breaking this confidence is subject to stiff fines and imprisonment.

8. **True.** A decennial census is taken to generate totals of the Nation's population and housing units, as well as other characteristics of both, as decided by Congress. It is these totals for various geographic areas, not the personal information, which are published and used by the public and private sectors.

9. **C.** The figure recorded for 1790 was 3,929,314. Geographically, the 1790 census covered what is now known as the United States from Maine to Georgia and the territories to the west of them which they claimed.

10. **C.** The final count from the 1980 census was 226,545,805 people. This number represented the population at the time in the 50 states and the District of Columbia. (See **Activity 6** for U.S. population counts from 1790 to 1980.)

11. **B.** In 1980 California had a population of 23,667,902. It has officially held its number one ranking since the 1970 census. Before then, New York was the most populous State in the country. It maintained this position in each of the censuses from 1810 to 1960. In 1790 and 1800, Virginia led the Nation in population, based on its boundaries at those times. (See the **U.S. Population Data** table associated with **Activity 7** for the other State information for 1960-1985.)

12. **B.** Students should recognize the direct relationship between the size of a population count for a State and its number of seats in the U.S. House of Representatives. The greater the population is, the greater the number of seats in the House (after the guaranteed one seat for each State). Since California had the largest State population in 1980, it received the largest number of seats. It presently has 45 members in the House.

13. **A.** While Alaska has nearly 1/6 of the country's total area, it had only 401,851 people living in its borders in 1980. As of a 1985 estimate, Alaska is now 49th, ahead of Wyoming. (See the **U.S. Population Data** table associated with **Activity 7** for other State information for 1960-1985.)

14. **B.** Nevada was the fastest growing (percentage) State in the 1970s. With a small population base, it did not have to add that many people to have a high percentage increase. A 1970 population of 488,738 and an increase across the decade of 311,755 gave it a 10 year percentage change of 63.8%. By comparison, Texas added over 3 million people in the 1970s and grew by 27.1%.

15. **C.** With 7,364,823 people in 1980 and a land area of 7,468 square miles, New Jersey had the highest population density of any State—986 persons per square mile. Although not listed on the **U.S. Population Data** table, students can calculate this statistic for their State.

Activity 5

Would You Sell Snowshoes In Honolulu?

Would you sell snowshoes in Honolulu? This sounds like a crazy question. If you were asked, you would probably say no. Why? The climate is all wrong! If the place was Juneau, Alaska, what would you say? Yes? It does make more sense. How did you know? You might call it common sense, but you were using facts to make a decision. It snows a lot in Juneau. When was the last time you heard of snow in Honolulu? If you want to sell snowshoes, there had better be snow.

The same kinds of decisions are made every day using census data. Many people used to make these kinds of decisions by guessing. Sometimes they would be right. Other times they would be wrong.

In today's world, millions of dollars can be lost on a guess. That is why people find they need facts to help make decisions. They use facts, or data, to help choose new business locations or to add new products, for instance. More and more of these people use **census** facts.

This exercise asks you to make choices like those made every day. Imagine this...

Sallie works for Data Day Company, a research firm. She helps people make decisions using census data. Sallie has just come to her office and her boss runs in with a stack of papers.

"We just got these requests from four different groups of people," he says. "All of them want to find the best location in Squareton for some new services. They all want to know, by this afternoon, where in Squareton to begin looking. I want you to figure out some of the best areas in Squareton for each service." He leaves.

Sallie looks at the papers. One is from the Mayor of the City of Squareton. The City just received money from the State. It is for building a new playground and a new senior citizens recreation center. The City also got funds to buy one new bus and add one new bus route.

The second request is from Got You Covered Insurance Company. The company sells renter's insurance. Its boss wants to open a new office in Squareton.

The third is from Dead Ringer Telephone Services. The letter says they want to sell telephone answering machines. They opened one store in Squareton, but got no sales. They think they were on the wrong side of the city.

The last note comes from Heal You Quick Medical Centers. The company has centers all across the State. The president thinks Squareton is a great place to build the next one. The medical centers specialize in care for older people and children.

"Wow! It's going to be a busy day," Sallie says. "I had better get started." She begins by asking herself, "Who needs or uses all these services?" She makes some choices. Next, she studies the census report for Squareton looking at all the different kinds of census facts. She picks the ones she thinks best stand for the people who will use each service. Sallie makes Table 1 to show all her work

Sallie's Table 1

Service	Who Needs or Uses It	Best Census Fact
Playground	Children	People Less Than Age 15
Senior Citizens Center	Older People	People Age 65 or Older
Bus Route	People Without a Car	Households With No Vehicle
Renter's Insurance	People Who Rent Their Homes	Renter Households
Answering Machine	People Who Live Alone	Households With One Person
Medical Center	Older People and Children	People Age 65 and Older People Less Than Age 15

The census report Sallie is using has census facts for different parts of Squareton. Squareton is cut into 16 parts. These parts are called census tracts. They are numbered 1 through 16. The report has information for all 16. Sallie also has a census map of Squareton. It shows where the 1 parts, or tracts, are.

Sallie looks at the information in the report. She decides to make another table. She lists only the "Census Facts" she picked to stand for the kinds of people most likely to need or use each service. For her table, she uses short names for each "Census Fact."

She decides that **the parts of the city with the highest numbers are the most important.** She looks for the highest numbers in each "Census Fact" column to pick the census tracts best for each service. For instance, there are 729 children in Tract 1. Census Tract 1 has the largest number of children of all 16. Tract 1 should be one of the best locations for the playground.

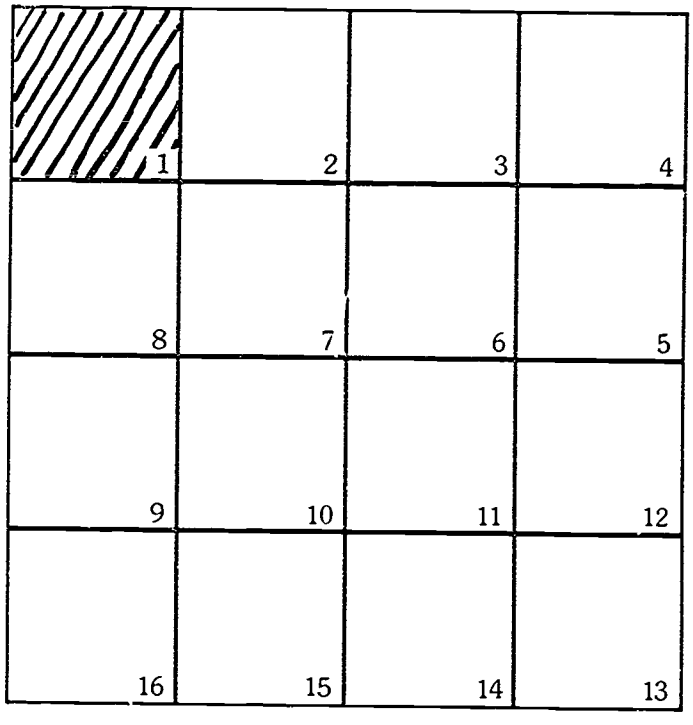
Sallie picks her areas for the six services. She gives her choices to her boss. He is pleased. What do you think Sallie's choices were? See if you can make the same choices using Sallie's Table 2 and the map. (Hint: There are 4 "best" tracts for each service, except the medical center. It only has two.)

First go down each "Census Fact" column in Table 2. Look for the highest numbers and circle your choices. Match those choices to their tract numbers in the left column of Table 2. Mark the matching tract area on the map for each of your choices. Use the patterns below the map to stand for your choices for eacn service. (Tract 1 is marked for you.)

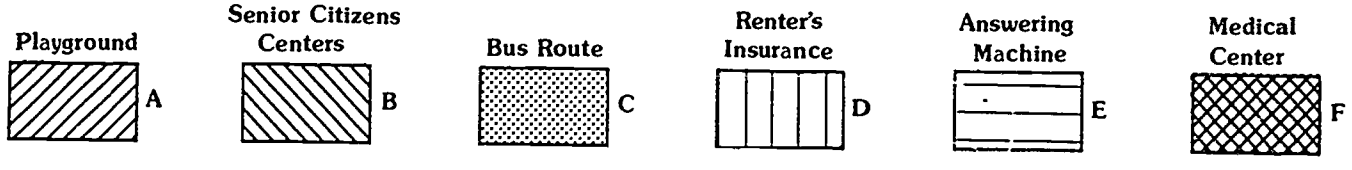
Sallie's Table 2
Census Facts for Squareton Tracts

Census Tract	Children	Older People	No Car	Renters	Live Alone
1	729	79	29	111	61
2	622	571	15	82	20
3	42	822	57	143	219
4	119	245	226	101	88
5	225	311	301	122	97
6	179	619	99	84	139
7	701	567	100	95	157
8	695	82	132	57	63
9	91	378	87	320	191
10	300	300	139	458	394
11	195	234	94	105	414
12	211	243	278	165	72
13	77	176	299	97	49
14	111	22	113	72	375
15	321	11	47	489	398
16	210	0	142	327	192

Census Map of Squareton



Patterns to Use and Letters for Best Locations for Each Service



Teacher's Notes:
Activity 5

Would You Sell Snowshoes in Honolulu?

The **purposes** of this activity are to give students a hands-on experience with and exposure to decision making using census data and to demonstrate, in a simple manner, some of the actual uses of census data. (NOTE: See the **Teacher's Guide** sheet for grade, reading, and skill levels and other placement suggestions. See the project folder narrative for census data use examples and other background.)

Procedure: The length of this activity may warrant you conducting it orally. It would be beneficial to draw the map and the "service patterns" and to write the table on the chalkboard. An alternative is to enlarge the student version of Table 2 and the map, then create an overhead transparency. The service patterns and Table 2 answers could be identified with different color markers.

Explain to the students that they are going to be assistants to a research firm. Their task after reading or hearing the story is to select the parts (census tracts) of the city of Squareton best suited for the six services.

Students could work independently, but the exercise lends itself to group work. Groups could determine solutions for all six, or you could establish six separate "Research Groups," for example, a "Playground Group," a "Bus Route Group," and so forth.

Once the students have correctly identified each total service area, ask them to pinpoint (using the letters A-F and a dashed line in the case of the Bus Route) the best location for each service within the service area. It should be the spot that makes it most accessible to the people within each service area, such as the center. The Answer Map has these located for you.

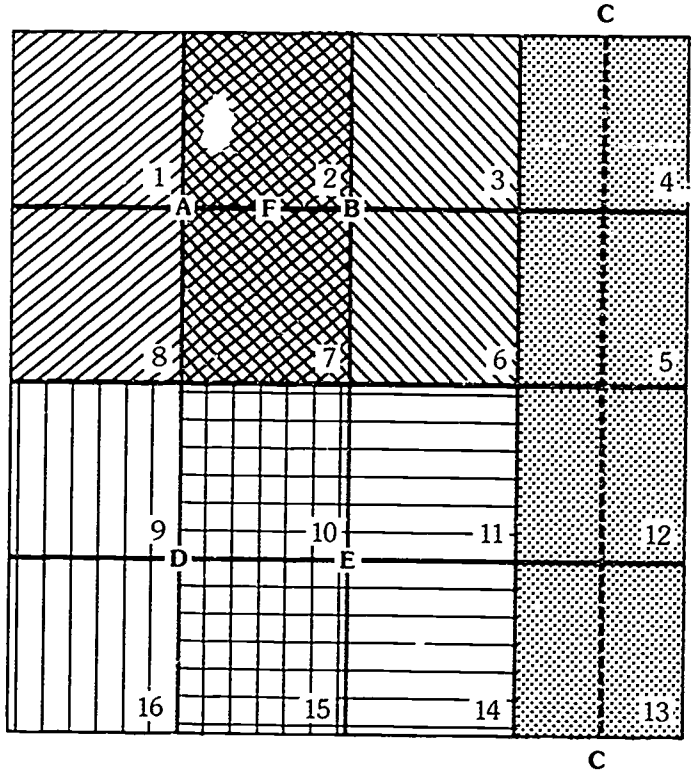
The selection of the "Medical Center" area is both the hardest and the easiest for them. The students must look for high numbers in two table categories – Children and Older People—at the same time. But by solving the "Playground" and "Senior Citizens Center" sections of the

Answers to Activity 5

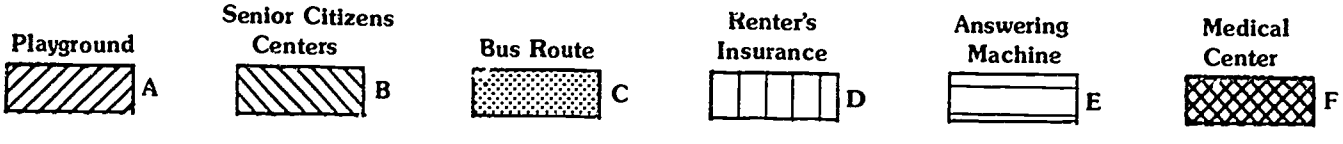
Sallie's Table 2—Census Facts

Census Tract	Children	Older People	No Car	Renter	Live Alone
1	729	79	29	111	61
2	622	571	75	82	201
3	42	322	57	143	219
4	119	245	226	101	88
5	225	311	301	122	97
6	179	619	99	84	139
7	701	567	100	95	157
8	595	82	132	57	63
9	91	378	87	320	191
10	300	300	139	45	394
11	195	234	94	105	414
12	211	243	278	155	72
13	77	176	299	97	49
14	111	22	113	72	375
15	321	11	47	489	398
16	210	0	142	327	192

Census Map of Squareton



Patterns to Use and Letters for Best Locations for Each Service



exercise and marking the **correct patterns** for each on one map, the "Medical Center" area magically appears (Note: Take this into consideration of your use colored markers.) Similar "magic" will also show up in Tracts 10 and 15. See if anyone notices For extra credit, ask the students what this might tell them. Answer: One-person households are also generally renter households.

Suggested Activities: Ask the students to think about other pieces of data that would be important in locating these services. For instance, looking for low income areas may be important for determining the bus route, or the reverse may be important for opening a shop to sell answering machines.

Some other important pieces of data are not necessarily census related. Things like availability of land, land prices, street patterns, zoning laws, and/or the present location(s) of similar services can all be important in the selection of a service site.

The students could also examine their own community or State? What new services have recently come in? Why might they have located where they are? What about the reverse situation? Students may be aware of local businesses or stores which have not succeeded They may want to discuss reasons.

To keep tabs on both, students could start a newspaper file. You might even call your local government or Chamber of Commerce to see what new developments are on the horizon. Ask them what kinds of statistical data are available for your area especially for small geographic areas. Also, don't forget to check with your library for census and other data resources.

The students could ask their parents if they have ever made use of census information in their jobs. If so, what was used and how?

While assembling such information, the students could create a series of files for use as class or school research resources. Labels such as population, population characteristics (for example, age structure), housing, housing characteristics (such as rental housing), land prices, business developments, employment/labor force, and so forth, could be used.

The files could be established with a geographic hierarchy, that is, neighborhood, community, State/region, Nation. (Include a copy of the Data Sheet from Activity 7 in the State/region file.)

Once they have gathered this kind of information, especially census data for small geographic areas, ask the students to apply what they have learned from the prepared activity to things they now know about their own community or State. Where would they put a playground, bus route, and so forth?

Want Something More Difficult? This activity can be extended and/or replaced with additional exercises analysing census tract data, if you wish. There is a series of booklets produced after the 1980 census designed to introduce students, educators, and other users to specific products from the census. These are called Product Primers. The primers were designed for high school and beyond.

Product Primer 10 deals with the report series for census tract data. The primer contains two exercises analyzing data for Wichita, Kansas. The second exercise is most useful in extending this Activity Sheet. Through a combination of a narrative profile of the city, explanations of various demographic measures, maps, and graphic depictions of selected census tract data, students are asked to match the data to the census tracts they represent.

This primer and the primer series are explained in the **Teaching Resources Guide** which came with the kit containing this Activity Sheet. If you do not have access to the kit, simply request a free copy of **Product Primer 10: Census Tracts** by writing to the Customer Services Branch, Data User Services Division, U.S. Census Bureau, Washington, DC 20233.

Activity 6

Lights! Camera! Action!

In a very real sense, a census is like a photograph. It is a picture of a population. In the United States, we have been "snapping" these national pictures at a rate of one every 10 years beginning in 1790. While each census records only a moment in time, together the 20 previous U.S. decennial censuses are something like a motion picture. They give a history of the Nation's population growing and moving. From those frames of the movie, we can see how much we have changed. The table and map on the next page show some of these changes.

1. In 1790 the population of the country was _____. By 1980, _____ people inhabited the United States. How many people were added to the population between 1790 and 1980?_____ What do you think makes a nation's population grow?_____

   _____

   _____ If you wanted to show a picture (chart or graph) of how much the country's population had changed from 1790 to 1980, what might you do? Can you show an example on a separate sheet of paper?

2. Between 1970 and 1980 the country grew by _____ people. In what census years was the U.S. population less than the 1970 to 1980 population increase?_____

3 The center of population is a kind of summary statistic. It does not tell you by how much any single area of the country grew. The map, however, does give a graphic indication of which way population growth has gone. In what direction has the center of population moved? _____

4. In 1790, in what state was the center located? _____ In what census year did the center cross the Mississippi River? _____ In what state do you guess the center will be located in 1990? _____ What if we added another 20 million people to the population by 1990 and **every** part of the country got an equal share of the growth. Where would the center move? _____

   _____

5. From 1930 to 1940 the United States population grew at its slowest rate (smallest percentage increase). It was only 7.3%. Can you think of any major historic event that happened during that decade? _____

   _____ How could it affect population growth? _____

   _____

   _____ Can you think of any other major historic events that have happened that might have had an effect on population growth or the center of population? _____

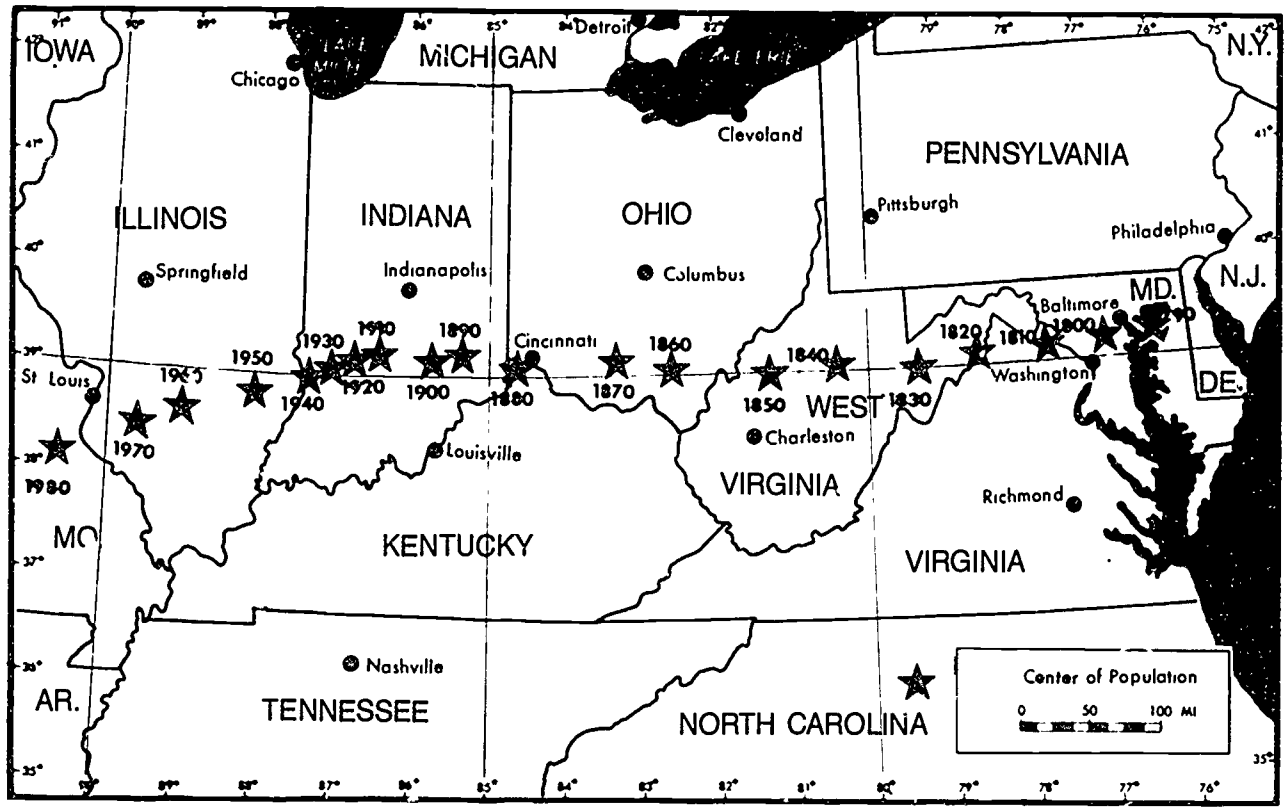
   _____

POPULATION

CENSUS DATE	Number
Coterminous U.S.*	
1790 (Aug. 2)	3,929,214
1800 (Aug. 4)	5,308,483
1810 (Aug. 6)	7,239,881
1820 (Aug. 7)	9,638,453
1830 (June 1)	12,866,020
1840 (June 1)	17,069,453
1850 (June 1)	23,191,876
1860 (June 1)	31,443,321
1870 (June 1)	39,818,449
1880 (June 1)	50,155,783
1890 (June 1)	62,947,714
1900 (June 1)	75,994,575
1910 (Apr. 15)	91,972,266
1920 (Jan. 1)	105,710,620
1930 (Apr. 1)	122,775,046
1940 (Apr. 1)	131,669,275
1950 (Apr. 1)	150,697,361
1960 (Apr. 1)	178,464,236
United States	
1950 (Apr. 1)	151,325,798
1960 (Apr. 1)	179,323,175
1970 (Apr. 1)	203,302,031
1980 (Apr. 1)	226,545,805

* Enclosed by a common boundary . Excludes Alaska and Hawaii.

CENTER OF POPULATION



The "Center of Population" is that point at which the country would balance perfectly if it were a flat surface and every person on it had an equal weight.

Teacher's Notes:
Activity 6

Lights! Camera! Action!

The **purpose** of this activity is to help students understand the historic growth of the U.S. population, the impact of historic events on its growth, the movement of the population (in general from the East and the Midwest) and the expansion into new areas (generally in the South and the West). NOTE: See the **Teachers Guide** sheet for grade, reading, and skill levels and other placement suggestions. See the project folder narrative for background on the census.

Procedure: Ask your students to answer the questions using the data in the table and the map. A group discussion of the answers works particularly well with this activity. However, if you would like to use the activity to test your students' table reading and data analysis skills, discussion of the answers could be postponed until after the papers have been graded.

Although the concept of the "center of population" is more theoretical than real, it should give students a quick graphic depiction of the expansion of the country both in population growth and land area. It is a substitute for a detailed examination of growth/change on a sub-national basis or of growth associated with the geographic expansion of the country. Activity 7 will help students understand the former.

Answers to Activity 6

1. 3,929,214 or about 4 million persons; 226,545,805; 222,616,591; births and immigration (national population change = births — deaths + immigration — emigration); students could: calculate the number change from census to census and graph those decade figures simply graph the actual population, draw 20 circles proportionate in size to the population for each census, and so on

2. 23,243,774, 1790 to 1850

3. West and South

4. Maryland; 1980 (approximately ¼ mile west of De Soto in Jefferson County, Missouri); Missouri, given previous patterns; it would **not** move, because the population would still be balanced at its 1980 center.

5. The Depression; people had fewer children and immigration fell drastically to only 528,000 people from 1931-1940, **population growth**—World War I, World War II, **center of population**—Westward expansion, addition of new States and their population to the country, Sunbelt growth of the 1970's.

Suggested Activities: Students could use this activity as a jumping off point for research projects on historic population growth in the United States. These could, for instance, focus on the importance of immigration during the late 1800's and early 1900's or on the effects of the post-World War II Baby Boom.

Students could also change their geographic focus and examine their State, county, or community. How have historic events been recorded in their population histories?

To find historic census totals for your State or community, first consult your local library and its government publications section. An excellent report series from the 1980 census is **Number of Inhabitants** which gives historic population counts. There is one volume for each State, the District of Columbia, Puerto Rico, the Virgin Islands, and the outlying areas. Also, check with your Chamber of Commerce or local government. The **Census Teaching Resources Guide** that came with this package will also direct you to your State Data Center and the Census Bureau Regional Office nearest you, as well as a variety of reports and maps

Activity 7

State the States

Boom Town! Ghost Town! Boom-Bust Cycle! These are phrases from the Nation's past and its present. They say something about population change, among other things **The population of an area is rarely static.** It is always changing in some way. Population change is a product of births, deaths, and migration (both into and out of an area) This, then, means that population change in an area is influenced by natural, social, and economic forces.

This country's population is not static. While it may seem that some places in it have not changed, it is safe to say that, across the Nation's various geographic areas, the population changes This includes States Although there has never been such a thing as a Ghost State, there have been Boom States and States caught in Boom-Bust Cycles. For example, earlier in this decade, Energy States, like Texas and Oklahoma, were called Boom States. Population growth was rapid there, while other parts of the country were having economic slow times and population losses. Since then, declining oil prices have triggered declines and growth slowdowns in these Southwestern States' economies and populations. People have moved away as the States have gone from boom to bust. But as is generally said by Oklahomans and Texans, "Things will pick up again," and they probably will.

This exercise asks you to look at these and other changes that have happened across the Nation in its States Answer the following questions using the table entitled **U.S. Population Data.**

1. Name the five States that increased by the biggest percentages (grew the fastest) between 1960 and 1970, 1970 and 1980, and 1980 and 1985. Rank them in order (biggest first). Hint. Look at columns 15 through 17 of the data table.

1960-1970	1970-1980	1980-1985
1. _____	1. _____	1. _____
2. _____	2. _____	2. _____
3. _____	3. _____	3. _____
4. _____	4. _____	4 _____
5. _____	5. _____	5. _____

2. Which 3 States were among the top 5 in each of the above time periods?

_____, _____, _____

3. From what regions of the country are the top 5 States in each of the above time periods?

_____

4. In the 1960's, the 1970's, and through the first half of the 1980's, three States led the Nation in numeric increase in population These States are California, Texas, and Florida. In the 1970's alone, these 3 added nearly 10 million people in total. These gains have affected their total population ranking among States. Look at Columns 11 through 14 of the data table. Record the rankings for each of these 3 States:

	1960	1970	1980	1985
California	_____	_____	_____	_____
Texas	_____	_____	_____	_____
Florida	_____	_____	_____	_____

5. Name the five most populous (having the largest populations) States in 1985. Rank them and list their 1985 populations.

	State name	Population		State name	Population
1.			4.		
2.			5.		
3.					

6. Name the five States that lost population or grew the slowest (lowest percentage of increase) between 1960 and 1970, 1970 and 1980, and 1980 and 1985. (Do not include the District of Columbia.)

	1960-1970	1970-1980	1980-1985
1.			
2.			
3.			
4.			
5.			

7. Name the five least populous States in 1985. Rank them and list their 1985 populations.

	State name	Population		State name	Population
1.			4.		
2.			5.		
3.					

8. In the 1960's, 1970's, and the first half of the 1980's, two of the Nation's four regions (Northeast, Midwest, South, and West) have grown much faster than the other two. Name them and list their percentages of change and 1985 populations.

Region	Percent Change 1960-1970	Percent Change 1970-1980	Percent Change 1980-1985	1985 Population

9. Find your State on the data sheet. Study the information across the table. Write two short sentences describing two interesting facts you find.

United States Population Data

(For use with Activity 7)

Region, division, and State	Area, 1980				Population												
					Total persons (1,000)						Rank				Percent change		
					July 1 [3]			April 1 [4]									
	Total (Sq mi)	State rank	Land [1] (Sq mi)	Water [2] (Sq mi)	1985	1984	1983	1980	1970	1960	1985	1980	1970	1960	1980-1985	1970-1980	1960-1970
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
United States	3,618,770	X	3,539,289	79,481	238,740	236,495	234,284	226,546	203,302	179,323	X	X	X	X	5.4	11.4	13.4
Northeast	168,875	X	162,745	6,130	49,859	49,728	49,535	49,135	49,061	44,678	X	X	X	X	1.5	0.2	9.8
New England	66,672	X	63,012	3,660	12,660	12,578	12,491	12,348	11,848	10,509	X	X	X	X	2.5	4.2	12.7
Maine	33,265	39	30,995	2,270	1,164	1,156	1,145	1,125	994	969	38	38	38	36	3.5	13.2	2.6
New Hampshire	9,279	44	8,593	288	998	978	959	921	738	607	41	42	41	45	8.4	24.8	21.6
Vermont	9,614	43	9,273	341	535	530	525	511	445	390	48	48	48	47	4.6	15.0	14.1
Massachusetts	8,284	45	7,824	460	5,822	5,798	5,766	5,737	5,689	5,149	12	11	10	9	1.5	0.8	10.5
Rhode Island	1,212	50	1,055	157	968	962	956	947	950	859	42	40	39	39	2.2	-0.3	10.6
Connecticut	5,018	48	4,872	146	3,174	3,155	3,140	3,108	3,032	2,535	28	25	24	25	2.1	2.5	19.6
Middle Atlantic	102,203	X	99,733	2,470	37,199	37,150	37,044	36,787	37,213	34,168	X	X	X	X	1.1	-1.1	8.9
New York	49,108	30	47,377	1,731	17,783	17,746	17,685	17,558	18,241	16,782	2	2	2	1	1.3	-3.7	8.7
New Jersey	7,787	46	7,468	319	7,562	7,517	7,468	7,365	7,171	6,067	9	9	8	8	2.7	2.7	18.2
Pennsylvania	45,308	33	44,888	420	11,853	11,887	11,891	11,864	11,801	11,319	4	4	3	3	-0.1	0.5	4.3
Midwest	766,365	X	752,093	14,272	59,197	59,078	58,918	58,866	56,589	51,619	X	X	X	X	0.6	4.0	9.6
East North Central	248,540	X	243,961	4,579	41,642	41,574	41,504	41,682	40,262	36,225	X	X	X	X	-0.1	3.5	11.1
Ohio	41,330	35	41,004	326	10,744	10,740	10,738	10,798	10,657	9,706	7	6	6	5	-0.5	1.3	9.8
Indiana	36,185	38	35,932	253	5,499	5,492	5,474	5,490	5,195	4,662	14	12	11	11	0.2	5.7	11.4
Illinois	56,345	24	55,645	700	11,535	11,522	11,491	11,427	11,110	10,081	5	5	5	4	0.9	2.8	10.2
Michigan	58,527	23	56,954	1,573	9,088	9,058	9,054	9,262	8,882	7,823	8	8	7	7	-1.9	4.3	13.5
Wisconsin	56,153	26	54,426	1,727	4,775	4,762	4,747	4,706	4,418	3,952	16	16	16	15	1.5	6.5	11.8
West North Central	517,825	X	508,132	9,693	17,555	17,504	17,415	17,183	16,327	15,394	X	X	X	X	2.2	5.2	6.1
Minnesota	84,402	12	79,548	4,854	4,193	4,163	4,145	4,076	3,806	3,414	21	21	19	18	2.9	7.1	11.5
Iowa	56,275	25	55,965	310	2,884	2,903	2,904	2,914	2,825	2,758	29	27	25	24	-1.0	3.1	2.4
Missouri	69,697	19	68,945	752	5,029	5,001	4,963	4,917	4,678	4,320	15	15	13	13	2.3	5.1	8.3
North Dakota	70,703	17	69,300	1,403	685	687	681	653	618	632	46	46	45	44	4.9	5.7	-2.2
South Dakota	77,116	16	75,952	1,164	708	705	699	691	666	681	45	45	44	40	2.5	3.7	-2.2
Nebraska	77,355	15	76,644	711	1,606	1,605	1,596	1,570	1,485	1,411	36	35	35	34	2.3	5.7	5.2
Kansas	82,277	14	81,778	499	2,450	2,440	2,427	2,364	2,249	2,179	32	32	28	28	3.7	5.1	3.2
South	898,575	X	873,005	25,570	81,858	80,765	79,713	75,372	62,812	54,973	X	X	X	X	8.6	20.0	14.3
South Atlantic	278,927	X	266,910	12,017	40,227	39,533	38,875	36,959	30,678	25,972	X	X	X	X	8.8	20.5	18.1
Delaware	2,044	49	1,932	112	622	614	606	594	548	446	47	47	46	46	4.6	8.4	22.9
Maryland	10,460	42	9,837	623	4,392	4,349	4,301	4,217	3,924	3,101	20	18	18	21	4.2	7.5	26.5
District of Columbia	69	X	63	6	626	625	625	638	757	764	X	X	X	X	-2.0	-15.6	-0.9
Virginia	40,767	36	39,704	1,063	5,706	5,636	5,559	5,347	4,651	3,967	13	14	14	14	6.7	14.9	17.2
West Virginia	24,231	41	24,119	112	1,936	1,951	1,963	1,950	1,744	1,860	34	34	34	30	-0.7	11.8	-6.2
North Carolina	52,669	28	48,843	3,826	6,255	6,166	6,077	5,882	5,084	4,556	10	10	12	12	6.4	15.7	11.6
South Carolina	31,113	40	30,203	910	3,347	3,302	3,256	3,122	2,591	2,383	24	24	26	26	7.2	20.5	8.7
Georgia	58,910	21	58,056	854	5,976	5,842	5,733	5,463	4,588	3,943	11	13	15	16	9.4	19.1	16.4
Florida	58,664	22	54,153	4,511	11,366	11,050	10,754	9,746	6,791	4,952	6	7	9	10	16.6	43.5	37.1
East South Central	181,947	X	178,824	3,123	15,122	15,033	14,945	14,666	12,808	12,050	X	X	X	X	3.1	14.5	6.3
Kentucky	40,409	37	39,669	740	3,726	3,720	3,714	3,661	3,221	3,038	23	23	23	22	1.8	13.7	6.0
Tennessee	42,144	34	41,155	989	4,762	4,726	4,689	4,591	3,926	3,567	17	17	17	17	3.7	16.9	10.1
Alabama	51,705	29	50,767	938	4,021	3,989	3,960	3,894	3,444	3,267	22	22	21	19	3.3	13.1	5.4
Mississippi	47,689	32	47,233	456	2,613	2,598	2,583	2,521	2,217	2,178	31	31	29	29	3.7	13.7	1.8
West South Central	437,701	X	427,271	10,430	26,510	26,199	25,893	23,747	19,326	16,951	X	X	X	X	11.6	22.9	14.0
Arkansas	53,187	27	52,078	1,109	2,359	2,346	2,325	2,286	1,923	1,786	33	33	32	31	3.2	18.9	7.7
Louisiana	47,751	31	44,521	3,230	4,481	4,461	4,441	4,206	3,645	3,257	18	19	20	20	6.5	15.4	11.9
Oklahoma	69,956	18	68,655	1,301	3,301	3,310	3,311	3,025	2,559	2,328	25	26	27	27	9.1	18.2	9.9
Texas	266,807	2	262,017	4,790	16,370	16,083	15,816	14,229	11,199	9,580	3	3	4	6	15.0	27.1	16.9
West	1,784,955	X	1,751,446	33,509	47,826	46,924	46,117	43,172	34,838	28,053	X	X	X	X	10.8	23.9	24.2
Mountain	863,563	X	855,194	8,369	12,789	12,563	12,339	11,373	8,289	6,855	X	X	X	X	12.5	37.2	20.9
Montana	147,046	4	145,388	1,658	826	823	816	787	694	675	44	44	43	41	5.0	13.3	2.8
Idaho	83,564	13	82,412	1,152	1,005	999	988	944	713	667	40	41	42	42	6.4	32.4	6.9
Wyoming	97,809	9	96,989	820	509	513	516	470	332	330	50	49	49	48	8.5	41.3	0.6
Colorado	104,091	8	103,595	496	3,231	3,190	3,149	2,890	2,210	1,754	26	28	30	33	11.8	30.8	26.0
New Mexico	121,593	5	121,335	258	1,450	1,426	1,402	1,303	1,017	951	37	37	37	37	11.3	28.1	6.9
Arizona	114,000	6	113,508	492	3,187	3,072	2,977	2,718	1,775	1,302	27	29	33	35	17.2	53.1	36.3
Utah	84,899	11	82,073	2,826	1,645	1,623	1,595	1,461	1,059	891	35	36	36	38	12.6	37.9	18.9
Nevada	110,561	7	109,894	667	936	917	897	800	489	285	43	43	47	49	16.9	63.8	71.6
Pacific	921,392	X	896,252	25,140	35,037	34,361	33,778	31,800	26,549	21,198	X	X	X	X	10.2	19.8	25.2
Washington	68,138	20	66,511	1,627	4,409	4,349	4,305	4,132	3,413	2,853	19	20	22	23	6.7	21.1	19.6
Oregon	97,073	10	96,184	889	2,687	2,676	2,660	2,633	2,092	1,769	30	30	31	32	2.1	25.9	18.3
California	158,706	3	156,299	2,407	26,365	25,795	25,311	23,668	19,971	15,717	1	1	1	2	11.4	18.5	27.1
Alaska	591,004	1	570,833	20,171	521	505	482	402	303	226	49	50	50	50	29.7	32.8	34.1
Hawaii	6,471	47	6,425	46	1,054	1,037	1,019	965	770	633	39	39	40	43	9.2	25.3	21.6

[1] Dry land and land temporarily or partially covered by water [2] Permanent inland water surface [3] Estimates [4] Census figures

Source: U.S. Census Bureau, State and Metropolitan Data Book, 1986, U.S. Government Printing Office, 1986, p. 504

Teacher's Notes:
Activity 7

State the States

The **purposes** of this activity are to give students experience in reading and interpreting tables, to show them measures of State population change, and to help them understand some of the factors influencing population change.(NOTE: See the **Teacher's Guide** sheet for grade, reading, and skill levels and other placement suggestions. See the project folder narrative for background information on the census.)

Procedure: Give each student a copy of the table entitled, "U.S. Population Data" and the "State the States" worksheet. Ask them to find the answers to the questions on the worksheet using the State population figures on the table This activity can be done by individual students, but lends itself to small group work. Have the students or groups of students compare answers to ensure the accuracy of their work.

Answers to Activity 7

NOTE: The population figures in the table are presented in thousands and rounded to the nearest thousand

1. **1960-1970** Nevada, Florida, Arizona, Alaska, California.
   1970-1980 Nevada, Arizona, Florida, Wyoming, Utah;
   1980-1985 Alaska, Arizona, Nevada, Florida, Texas.

2. Nevada, Florida, Arizona

3. West and South

4. **California**--1960 =2, 1970 =1, 1980 =1, 1985 =1
   Texas—1960 =6, 1970 =4, 1980 =3, 1985 =3
   Florida—1960 =10, 1970 =9, 1980 =7, 1985 =6

5. California—26,365,000.
   New York—17,783,000.
   Texas—16,370,000;
   Pennsylvania—11,853,000.
   Illinois—11,535,000.

6. **1960-1970** West Virginia
   North Dakota, South Dakota, Wyoming, Mississippi
   1970-1980 New York, Rhode Island, Pennsylvania, Massachusetts, Ohio
   1980-1985 Michigan, Iowa, West Virginia, Ohio, Pennsylvania.

7. Wyoming—509,000; Alaska 521,000; Vermont—535,000; Delaware—622,000.
   North Dakota--685,000.

8. **West**—1960-1970 24.2%, 1970-1980 23.9%; 1980-1985 10.8%; 47,826,000

   South—1960-1970 14.3%; 1970-1980 20.0%; 1980-1985 8.6% 81,858,000

Suggested Activities: Given the number of data items on the data table, there are many different things students can do For instance, ask the students to choose one of the population characteristics--high percentage increase, large numbers added, population decline—and depict (code) it on a U.S map showing state boundaries using different colors or cross-hatching des_ s. You could use the folder cover of this package as a guide

Ask them to write a short essay describing what they see. They could also be asked for alternate ways of presenting the data on the sheet, such as a new table highlighting only states which grew close to the U.S. average or that of their State

The students might also examine change for states other than their home state, for example, those where relatives and friends live. Have them also examine population changes in areas such as "Energy States" and attempt to link them to economic shifts, e.g. the population figures for Oklahoma in 1980, 1983, 1984, and 1985. Have them look at "Sunbelt-Frostbelt" differences.

NOTE: "Sunbelt" has many definitions One, possibly the easiest, includes all complete States south of a "straight" line running east to west, beginning at the Virginia-North Carolina border. Western States become a problem. Nevada, California and Hawaii tend to be included.

Students could also calculate the percentage of the total U.S. population found in each of the four regions in 1960, 1970, 1980, and 1985. They should see something interesting between 1970 and 1980, if they sum the percentages for the South and the West. 1980 marks the first time that these two regions contained over 50.0 percent of the Nation's population (52.3 percent in 1980; 48.0 percent in 1970). Ask them what implications this had on representation in U.S House of Representatives.

Other percentages could be calculated. For example, what percent of the U.S. population resided in the students' home state in 1985? They could also examine population density, that is, the average number of people per square mile of land area. (NOTE. Make sure they include the extra 3 zeroes to the population figures in performing these calculations, since they are presented in thousands.)

Activity 8

That's Easy For You To Say!

Say this: The population of the United States in 1980 was 226,545,805 people. That was easy to say. Wasn't it? In a few breaths you have just stated what took years to produce. What? That's right, years! Have you ever tried to count 226,545,805 people? It is a big job!

It is difficult to convey the size of the job of taking a census in the United States. A few 1980 census facts and figures about the process may help. For instance, during just a few months of 1980, hundreds of thousands of temporary employees were recruited, trained, equipped, and supervised. The peak employment for these field operations was about 270,000 people—roughly equal to the 1980 population of St. Paul, Minnesota or Tampa, Florida! Here is another one. After all the census information was collected, questionnaires were microfilmed. This operation required about 5,000 miles of microfilm. That is equal to you taking a trip from Acadia National Park in Maine to Des Moines, Iowa via San Diego, California.

These bits of census trivia give an idea of the scope of a census in one way, but the countless decisions made in the years before Census Day are still hidden. A good way to understand the many aspects of planning, conducting, and reporting a census is to tackle one head on. Let us say you want to plan and maybe conduct a school census or at least a survey. Below is a checklist of questions that you need to answer before you ever walk up to someone and say, "Hi! I have a few questions to ask you."

Defining the Task

How much time do you have for the whole project?
Is this a class project or something larger?
Will this be a census, collecting information from everyone, or a survey of a portion of the school's population?
Will you collect facts, such as in a national census, or conduct something else, like an opinion poll?
When will you collect the information?
In general, what are the major topics to be researched and why?

Designing the Questionnaire

How many topics do you want to include?
How many questions?
How many possible answers will there be for each question?
Are the questions concise and easy to understand?
Do you want to include "background" questions, like age, sex, grade, where the person lives?
Will the questions provide the information you are seeking?
How are the questions arranged on your form?
How will your forms be printed?
Could the school newspaper print them?

Collecting the Information

Who is supposed to answer the questions?
Are you going to have "enumerators", or is this a "hand-out/hand-in" project?
How will you deal with the privacy of answers?
How will you get everyone to respond?
Do you need to publicize?
What will you do if someone is away or does not answer?
How will you make sure everyone is only counted once?
How will you know you got all the forms back?

Processing the Information

How will you check the returned questionnaires for completeness?
How will you process--summarize--the information?
Is the questionnaire designed to make this easy?
Are you using a computer or manually tallying?
How does the use of one or the other affect the amount of time you need or how much you can ask?
How will you check to make sure there were no errors in the processing?
If this processing is performed on a computer, how will you construct the data base?
If it is done by hand, how will you record the information—on a form, on the chalkboard, both?

Reporting the Data

How will you report the information?
What tables do you want to make?
Do you want to include graphics, like bar or pie charts?
Would percentages help communicate the information better?
Do you want to write a report about the findings?

Wasn't that easy?

Teacher's Notes:
Activity 8

That's Easy For You To Say!

The **purpose** of this activity is to clearly demonstrate to students through a hands-on experience many of the aspects of planning, conducting, and reporting a survey of their own. It will show students what goes into the production of statistical information, how individual responses on a questionnaire are merged into statistical reports, and the usefulness of the summarized information.

From a general education standpoint, this kind of activity can sharpen skills in problem-solving and decision-making, provide students with academic skills useful in college and, potentially, in adult careers; give students an opportunity to work with personally relevant data, and result in information useful to the school administration.

This activity could take the form of a full-scale enumeration of the student body If that is too ambitious, a small survey, or an opinion poll, of a sample of the school's population/specific classes may be more appropriate, especially using topics of interest to the students and the educators.

Since national Census Day is April 1, 1990 you could schedule this activity or parts of it (especially the data collection) to perennially coincide with this date If you intend to actually have the students conduct a survey or a census, remember to allow yourself the lead time necessary to perform the subactivities listed below. NOTE: See the **Teacher's Guide** Sheet for grade, reading, and skills levels and other placement information. See the project folder narrative for background information on the census.)

Procedure: There are many ways to approach this activity In fact, the various segments can be performed as self-contained units. It can also be very beneficial to perform the problem solving planning process without following up with the actual taking of a census or a survey, especially if time is very limited. In general, the exercise lends itself to group discussions and actions

If taken as a whole, students should eventually see the interdependencies of their decisions For instance, knowing how they will process the information collected (either manually tallying or using a computer) should be examined when they decide how long the questionnaire will be.

It is advisable to have students write down their decisions. Some kind of filing system is suggested, possibly using the subactivity headings as a start. Writing down their choices, how they came to these decisions, and who was involved, will give them a working history with supporting evidence should decisions come into question later in the process

For the entire project, a broad series of subactivities to use as guideposts are

defining the task,
designing the questionnaire,
collecting the information,
processing the information,
and reporting the data

Within each, the procedure can be as simple or as complex as you wish. The listing on the front represents possible questions and topics for you and the students to address. They are not necesarily all-inclusive, and at the same time, their number is not meant to overwhelm you While solutions to all of these kinds of questions are critical to the Census Bureau in taking a national census or survey, the relative "success" of a school/class census or survey does not rest on having answers to all of them.

Hints to teachers: Limit the number of questions to about 10. Use questions that have answers that can be circled or checked, not fill-ins Include 2 or 3 "background" items, so students can correlate data and make statements like "The girls were more likely to say.." Have the students select the research topic(s). An opinion poll may be more interesting to students than a total fact survey, especially one focused on a topic presently being discussed at school, such as "where to hold the prom" or "whether to have live music at the dance or not." Other topic possibilities are, music, TV, sports, a local or national current event, or an issue before the student government Once the questionnaire is complete, have the students role play as different respondents This will give a test of the questions and indicate to them any changes necessary

Activity 9

Studying A Statistical Snapshot

The decennial census (taken every ten years) provides a statistical snapshot of our population and housing. This portrait tells us—through numbers—who we are, where we live, and generally what we look like as a people. These censuses also allow us to measure differences from one area to another and over time. All these facts are important in making a variety of decisions Now it's your turn As student demographers (population experts), see if you can answer the questions below using the data from the "Statistical Snapshot From the 1980 Census."

1. Imagine this newscast from a few years ago. "Today the U.S. Department of Commerce's Bureau of the Census reported some of its findings from the 1980 census. With a count of 226,545,805 persons, the Nation has grown by 11.4 percent over the 1970 figure. On the average, there were 64 persons per square mile of land area. In 1980, the median age for persons in the United States was 30. (The median is the midpoint value. Fifty percent of the population was older than this and fifty percent was younger.) On the average, households in this country contained 2.75 persons. The average . . ." WAIT A MINUTE! How many average persons or average households have you ever seen?

   While these types of summary statistics provide a capsulized picture of our country, they leave much hidden from view about the parts of our Nation that are summed to produce these national numeric totals.

   The table, **Statistical Snapshot From the 1980 Census,** gives you data from the 1980 census for the Nation and eight areas within it—four counties and four incorporated places, in this case, cities. (NOTE: Incorporated places are cities, boroughs, towns, and villages chartered under the laws of their States.) Study the table and identify eight major differences between the values of any data item for the country and any of the eight geographic areas. For example, in 1980, approximately one quarter of all year-round housing units were in structures built before 1940, but in Montebello, California, only eight percent were constructed in 1939 or earlier. Now find eight differences of your own. Once you have done that, see if you can find any values in the counties or cities that are identical or **very** close to those for the United States. Try to find three. Using these similarities and differences, write a paragraph that highlights and describes what you have found.

2. Population density is a measure used to understand population distribution over the land area of different geographic units. It helps you understand, on the average, the concentration of population—how close together or how far apart people live. Population density is generally expressed as the number of people for one unit of land area, such as a square mile. Calculate the population density per square mile for the United States and the eight other geographic areas. Compare your figures for the counties and cities with that for the country. Compare the county values with those for the cities.

   Now imagine this... You are a transportation planner wanting to establish a new bus system. Using only your population density figures, which of the eight geographic areas would you choose as the primary location? Which would be your second choice? Why?

3. People have different needs at different ages. Some products and services required by children will be different from those required by senior citizens. Also, the concentration of a particular age group in a locality can have an effect on products and services needed in the future as that group grows older.

   Now imagine this... You are a school planner. Leaders from each of the eight geographic areas want to know if they should expand their school systems. They have asked you for your quick opinion. Looking only at the percentages in the various age categories, you tell two "definitely yes," two others "maybe," and the other four "no." Can you identify which ones are which? In making your choices, also be sure to look at the proportions in the youngest age category. Why would this group be important?

   Now imagine you are the transportation planner again. You're still working on your bus system plans, but now you're told that service to older people is as important as is high population density. Have your top two choices changed?

   The populations of Boone County, Missouri and Whitman County, Washington have median ages well below the national average. Since the percentages of their population under age 18 also are lower than that for the Nation, how can their median ages be so low? (Hint: Remember what "median" means.) What do you suppose is special about these counties that would create the high proportion of population in these ages?

4. The United States is both racially and ethnically diverse. In this country in 1980, the Census Bureau counted 26,495,025 Blacks; 1,420,400 American Indians, Eskimos, and Aleuts; and 3,500,429 Asian and Pacific Islanders. There were also 14,608,673 persons of Spanish origin in 1980.

   Imagine you are the director of Speciality Business Consultants, Inc., a private firm that helps persons in the above categories plan and open speciality shops catering to specific racial and ethnic clients. For each major group, in which two or three geographic areas would you concentrate your efforts?

5. As a housing analyst, you help a variety of business people market their products and services. Using the table, for each of the following companies, where might you tell their executive staffs to direct their marketing efforts: Historic Home Preservers—a homeowner's remodeling service; You Rent It-We Rent It—a rental furniture company catering to people who rent apartments; Tiny Homebuilders—a developer specializing in homes sold to smaller households? Where might you tell the following companies **NOT** to go: Take Me To The Top Services—an elevator installer for high-rise apartments; and We Can Manage It—a company specializing in managing property rented to senior citizens?

6. Now imagine this... What if some portion of these numbers was grossly underrepresented? How would this undercount affect your decisions?

STATISTICAL SNAPSHOT FROM THE 1980 CENSUS	United States	Montebello, California	Tampa, Florida	Nesnoba County, Mississippi	Boone County, Missouri	St Louis, Missouri	Jersey City, New Jersey	Rolette County, North Dakota	Whitman County, Washington
Land Area (square miles)	3,539,289	8	84	572	687	61	13	914	2,151
Population	226,545,805	52,929	271,523	23,789	100,376	453,085	223,532	12,177	40,103
Population Change, 1970-1980	11.4%	23.6%	-2.2%	14.4%	24.0%	-27.2%	-14.1%	5.4%	5.8%
Age, Under 5 years	7.2%	8.2%	6.4%	8.5%	6.2%	7.1%	7.7%	11 4%	5.4%
5-17 years	20 9%	19.3%	18.7%	23.6%	16 1%	19 0%	21 7%	28 8%	13.4%
65 years & older	11.3%	10.8%	14.8%	14 0%	7.6%	17.6%	11 8%	9.4%	8.2%
Median	30.0	29.5	32.1	30 0	24 8	31 7	29.9	23 7	23 6
Race, White	83.4%	61.4%	73.9%	71 8%	91.4%	53 5%	57 1%	41 9%	93.8%
Black	11.7%	0 6%	23 5%	17.9%	6.4%	45.6%	27 7%	0 1%	1.4%
American Indian, Eskimo & Aleut	0 7%	0.5%	0 2%	10.0%	0.2%	0.1%	0.1%	57 7%	0.6%
Asian & Pacific Islander	1.5%	13.6%	0.7%	0 1%	1.1%	0.4%	4 4%	0.2%	2.8%
Ethnicity, Spanish Origin	6.5%	59.3%	13.3%	0.6%	1 0%	1 2%	18.6%	0 3%	1 6%
Year-Round Housing Units	86,692,823	18,521	113,775	8,859	37,384	201,960	87,948	3,763	14,315
Households	80,389,673	17,905	105,603	8,040	35,296	178,048	80,720	3,425	13,279
Renter Households	35.6%	49 4%	38 9%	19.9%	43.6%	54.8%	72.0%	33 6%	49.4%
Owner Households	64.4%	50.6%	61 1%	80.1%	56.4%	45.2%	28.0%	66.4%	50.6%
Average Number of Persons per Household	2.75	2.92	2.51	2.94	2.51	2 49	2 74	3 44	2 47
Year-Round Housing Units in Structures of 5 or More Units	17 8%	29 6%	21.1%	4.0%	16.2%	21.2%	45.9%	7 0%	24 2%
Year Structure Built									
1970—March 1980	26 2%	23 0%	18 8%	33.0%	38.8%	3 7%	4 6%	37.6%	23 7%
1939 or Earlier	25.8%	8 0%	17 3%	17.1%	14.1%	60.6%	61 0%	23 3%	36.2%

Table Definitions

Land Area—This does not include large rivers, lakes and other bodies of inland water

American Indian, Eskimo & Aleut—This is a general racial category It includes Alaska Native people and persons from hundreds of Indian tribes

Asian & Pacific Islander—This, too, is a general racial category It includes a variety of peoples They are Chinese, Filipino, Jap Asian Ind an, Korean, Vietnamese, Hawaiian, Samoan and Guamanian

Spanish Origin—This is not a racial category It is a general category of ethnicity (ancestry or nationality group) People who said they were Mexican American, Chicano, Puerto Rican, Cuban or of a similar group are included here Persons of Spanish origin may be of any race

Year-Round Housing Units—These are all occupied houses, apartments, mobile homes, tents, vans, and other structures and all vacant units available or intended for people to live in all year They do not include vacation units intended for seasonal occupancy and vacant units held for migratory labor

Households—These are year-round housing units with people in them. They are also called occupied housing units

Structure—A structure is a building with one or more houses or apartments A structure can be a single family house, a mobile home, or a building with apartments.

Teacher's Notes:
Activity 9

Studying A Statistical Snapshot

The **purposes** of this activity are to give students experience in reading and interpreting tables, mathematical calculation, and decision making; to provide an exposure to decennial census data for small geographic areas; to demonstrate the summary nature of census data; to illustrate the importance of a complete count; and to suggest some of the uses of census data. This activity also exposes students to three key elements of community studies: people, space, and time. (NOTE: See the **Teacher's Guide** sheet for grade, reading, and skill levels and other placement suggestions. See the project folder narrative for other census data use examples.)

Procedure: Give each student a copy of the table, "Statistical Snapshot From the 1980 Census," and the questions for Activity 9. If the students have difficulty finding the information in the table, you may want to produce an overhead transparency and take them through the table. You may want to give this as a take-home assignment, an in-class exercise, or a group activity. Have them place their answers on a separate piece of paper.

Introduce the activity by asking your students: 1) What is the decennial census, 2) Why is a census taken, and 3) What are some uses of the data resulting from the census? Examine the narrative in the **kit folder** for background information.

You might tell them that the census provides data for a variety of geographic areas (neighborhoods, American Indian reservations, states, cities, and so on). For the information to be accurate, everyone must answer the questions on a census form. Once all the forms are returned, the individual answers are summarized and totaled for all geographic areas. It is only after the answers are totaled that they become useful in making decisions ranging from deciding the boundaries for all the seats in the House of Representatives to locating a new school.

Before having the students answer the questions, it may be useful to help them better understand how individual answers blend together to become a summary statistic. By a show of hands, ask each student how many people live in his or her household (1, 2, 3, 4, etc.), tally these on the chalkboard, calculate the population in each category, sum all the category totals (the total population), and divide that number by the number of students (student households). This figure is the class' average household size (or average persons per household). Besides providing clarity between individual and grouped data, it also should help them see how data can differ geographically (compare the class figure with others in the table), and answer the question of how, on the average, there can be a fraction of a person per household.

Answers to Activity 9

1. Differences can be found in any of the data elements; for example the race and Spanish origin percentages. Have the students look across each category. For similarities, look at St. Louis' percent "Under 5 Years of Age," Neshoba County's "Median Age," and Jersey City's "Average Number of Persons per Household."

2. Reading the table's geographic headings, the population densities are. 64, 6616, 3232, 42, 146, 7428, 17195, 13, and 19. (They have been rounded to the nearest whole number.) These are averages for the entire area of each entity. Densities in portions of each area will be higher or lower than these. A way to illustrate population density is to have the students draw a square. Explain that the square represents an "average" square mile. Have them put 13 dots inside it for Rolette County. Next have them draw another square of the **same size** and have them "imagine" placing nearly 17,200 dots inside for Jersey City.

   #1 = Jersey City. #2 = St. Louis. They both have high population densities within small land areas.

3. In answering this, the students should be looking at the percentages of persons under age 5 (future students) and persons ages 5-17 (present students). If they use the national figures as their breakpoints, there are clear choices.
   Yes = Rolette and Neshoba Counties. Maybe = Montebello and Jersey City. No = all the rest.

   This group represents the population of future school children. Planners would want to know if sufficient space exists in schools and if there would be enough teachers, desks, and so forth to accommodate new students. They also would want to be sure a sufficient number of students would be entering the system to maintain or increase existing capacities. Migration into or out of an area also can greatly affect school planning.

   Because of the high percentages of persons age 65 and older **and** high population density, the transportation planner would probably change the choices. #1 = St. Louis. #2 = Tampa.

   Both counties must have high concentrations of young adults. Since the median is the midpoint value, this means that 50 percent of the distribution is below the median. In

the case of Boone County, this means that half the population is younger than age 24.8. With 22.3 percent of the population less than 18 years old, about 28 percent are younger than age 25 but older than 17.

Both counties contain large universities.

4. The students should look for the highest percentages in each category. NOTE: The students may ask why the race categories do not total 100 percent. The "Other" category has not been included in the table, it is the difference.

   For extended discussion, have the students examine the race and ethnic category definitions at the bottom of the table, especially Asian and Pacific Islander and Spanish Origin. Although not shown here, data specific to these individual race and ethnic populations are available in other census publications. Ask the students, how having information for these specific populations would further help them target their business plans.

   For example, in Montebello, 28,211 of the 31,387 persons of Spanish origin were Mexican and in Jersey City, 26,830 of the 41,672 persons of Spanish origin were Puerto Rican. Ask them how this information would alter their overall planning for a specific product used almost exclusively by persons of Puerto Rican origin.

5. Best choices. Historic Home Preservers = St. Louis, extremely high percentage of older housing and a relatively high proportion of owner-occupied housing. You Rent It-We Rent It = Jersey City, highest proportion of structures with 5 or more housing units and the highest percentage of renter households. Tiny Homebuilders = Tampa, small household size and high percentage of owner-occupied households. Take Me To The Top Services = Rolette and Neshoba Counties, lowest percentage of multifamily housing structures and high percentages of owner-occupied households. We Can Manage It = Boone and Whitman Counties, low percentage of older persons.

6. An undercount of segments of the population can result in faulty decisions. Inaccuracies in the data can alter or halt projects and cause misallocations in the distribution of local funds and services. Some of these are designed for the very people who failed to be counted. Being missed in a census has an effect on the people missed as well as their neighbors.

Localize This Lesson! The far right column of the table, "Statistical Snapshot From the 1980 Census," contains a series of blanks. These have been provided so you can insert the same information shown in the table **for your community.** Besides learning about some selected parts of the country, your students can take a first-hand **look at where they live.** Answers to the various questions may necessarily change by adding these local census data. You may want to have the students construct this profile once you have obtained the tabular information.

The information in the table was obtained from two publications. Land area and population change 1970-1980 were taken from the U.S. Bureau of the Census' **County and City Data Book: 1983,** U.S. Government Printing Office, 1983 (Stock # 003-024-05833-2). For counties or their equivalents, these data can be found in Table B, Items 1 and 4. For cities, boroughs, towns, and villages of 25,000 or more persons in 1980, they are located in Table C, Items 1 and 4. For all places of 2,500 or more persons, the same information is located in Table D, Items 1 and 3.

All the other elements in the table, "Statistical Snapshot From the 1980 Census," are from a report series from the 1980 Census of Population and Housing, **Summary Characteristics for Governmental Units and Standard Metropolitan Statistical Areas,** U.S. Government Printing Office, 1982. There is one report for each state, the District of Columbia, and Puerto Rico. The series is coded PHC80-3-[2 through 53] The bracketed number represents the code for each area. The percentages for race, Spanish origin, and owner/renter households shown in this Activity's table are displayed as raw numbers in the report series Use total population and total occupied housing units as the denominators for computing your percentage. The school-age population percentages were generated by subtraction. All the values displayed in this Activity's table are from data presented in Tables 1, 2, and 5 of the above publication series.

You can access these documents from a number of sources. Begin with your school library or a public or university library near you Check the Government Documents or Reference sections. If the reports are not available, they can be obtained through interlibrary loan The 1,400 Federal and Census Depository Libraries have these volumes. Additionally, the 1,300 agencies that are part of the State Data Center system have copies of these and other census volumes for their State. You can contact the State Data Center lead agency in your state for the data and/or the address of the affiliate closest to you, the lead agencies are listed in the **Teaching Resources Guide,** which came with this kit You also can contact one of the Census Bureau's Regional Offices for help; they are listed inside the kit folder.

Note on the Geographic Areas in this Table: Since 1985, the Census Bureau has been conducting small-scale censuses in preparation for the national 1990 census. The eight geographic areas in this table have been or are part of these censuses The population and housing of Tampa and Jersey City were enumerated in 1985. The City of Montebello and Neshoba County were part of the 1986 Censuses of Central Los Angeles County and East Central Mississippi. The 1987 Census of North Central North Dakota included Rolette County. The City of St. Louis and Boone and Whitman counties are part of the censuses to be taken in 1988.

The Return for SOUTH CAROLINA having been made since the foregoing Schedule was originally printed, the whole Enumeration is here given complete, except for the N. Western Territory, of which no Return has yet been publiſhed.

DISTICTS	Free white Males of 16 years and upwards, including heads of families.	Free white Males under sixteen years.	Free white Females, including heads of families.	All other free persons.	Slaves.	Total.
Vermont	22435	22328	40505	255	16	85539
N. Hampshire	36086	34851	70160	630	158	141885
Maine	24384	24748	46870	538	NONE	96540
Massachusetts	95453	87289	190582	5463	NONE	378787
Rhode Island	16019	15799	32652	3407	948	68825
Connecticut	60523	54403	117448	2808	2764	237946
New York	83700	78122	152320	4654	21324	340120
New Jersey	45251	41416	83287	2762	11423	184139
Pennsylvania	110788	106948	206363	6537	3737	434373
Delaware	11783	12143	22384	3899	8887	59094
Maryland	55915	51339	101395	8043	103036	319728
Virginia	110936	116135	215046	12866	292627	747610
Kentucky	15154	17057	28922	114	12430	73677
N. Carolina	69988	77506	140710	4975	100572	393751
S. Carolina	35576	37722	66880	1801	107094	249873
Georgia	13103	14044	25739	398	29264	82548
	807094	791850	1541263	59150	694280	3893635

Total number of Inhabitants of the United States exclusive of S. Western and N. Territory.	Free white Males of 21 years and upwards.	Free Males under 21 years of age.	Free white Females.	All other Persons.	Slaves.	Total
S. W. territory	6271	10277	15365	361	3417	35691
N. Ditto	—	—	—	—	—	—

With South Carolina's returns, the United States totals almost 4 million for its first census. The Return of the Whole Number of Persons- - -Philadelphia 1793.

Courtesy: Bureau of the Census.

MILESTONES IN AMERICAN HISTORY RECORDED BY THE CENSUS BUREAU

1790--First decennial census of population enumerates 3.9 million people. The center of population is 23 miles east of Baltimore, Maryland, on the eastern shore of the Chesapeake Bay.

1850-1860--Center of U.S. population crosses the western boundary of the original states and territories enumerated in the 1790 census as the center moves from West Virginia (then part of Virginia) to Ohio.

1880--U.S. population reaches 50 million.

1880-1890--Center of population reaches Indiana.

1890--Western frontier has ended, Census Bureau announces.

1915--U.S. population reaches 100 million.

1920--America has more urban residents than rural for the first time in a decennial census.

1930-1940--Slowest U.S. population growth rate ever recorded between censuses: 7.2 percent.

1940-1950--The number of owner-occupied housing units passes the number of renter-occupied units for the first time.

1940-1950--Center of population reaches Illinois.

1940-1950--For the first time, the number of people employed in service-producing industries (transportation, trade, government, professions, etc.) was greater than the number of people employed in goods-producing industries (agriculture, mining, construction, manufacturing, etc.)

1963--New York, which had led all states in total population since the 1820 census, was ousted from the top spot by California.

1967--U.S. population reaches 200 million.

1978--The participation rate for women in the labor force reaches 50 percent for the first time.

1980--First census to show that the total population of the South and West had surpassed the North and North Central regions.

1980--Center of U.S. population crosses the Mississippi River to a spot just west of De Soto, Jefferson County, Mo., approximately 40 miles southwest of St. Louis; and roughly 750 miles west of the center of population in 1790.

Counting for Representation: The Census and the Constitution

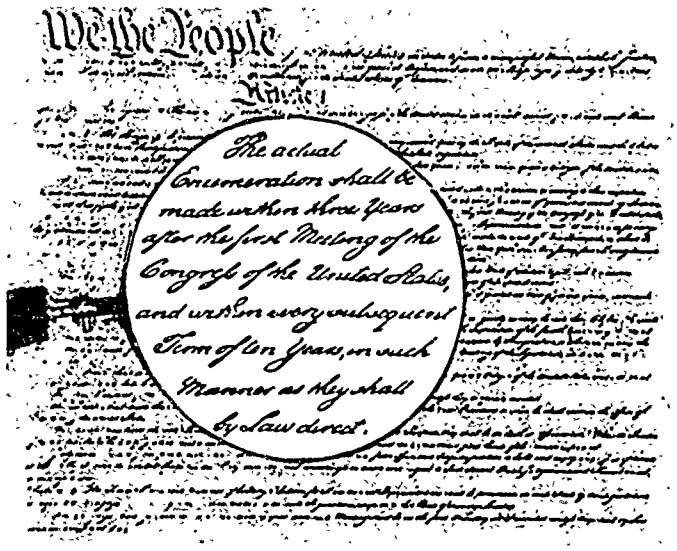
People counting people

Counting people is an old American practice dating from colonial days. The need for a census of the new United States arose soon after the 13 Colonies broke their ties with Great Britain. The Revolutionary War (1775-83) costs had been high, and the new Nation had to find ways to pay the debt; one way was to divide it equally among the people. Another reason for a census was to establish a truly representative government to sit in the two Houses of Congress. While each State, regardless of size, would have two Senators in the Senate, Members of the House of Representatives would be apportioned—divided up—among the States according to their population. The only way to find out how many people there were was to count them, so for the first time in history, a nation decided to make a census part of its constitution. As adopted in 1787, the U.S. Constitution included these words in Article I, Section 2:

> Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers.... The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct.

When they wrote the Constitution, the Founding Fathers tried to find a proper balance in the way the country was to be run. By counting people for both taxes and representation at the same time, they believed the census would be both accurate and fair. Had the census been only for tax purposes, the count probably would have been too low; if only for representation, each State would want as many Members in the House as possible and might report more people than it actually had. Counting for taxation, nevertheless, never did follow from the constitutional directive. On the other hand, the constitutional order--to apportion (or reapportion) representatives fairly among the States by a count of the population at least every 10 years—has been followed since 1790 and is the origin of today's decennial census. Based on the 1790 census, the original number of 65 House Members grew to 106, who represented a population of almost 4 million. When the House reached its present size of 435 in 1911, it represented 92 million people—the number from the census taken in 1910. The 1980 census counted over 226 million people for the same size House.

Ever since 1913, the Congress has delegated the authority to conduct the census to the Secretary of Commerce, and has permitted the Secretary to further delegate this authority to the Bureau of the Census. The Secretary must report counts for each State to the President within 9 months from Census Day (for most of this century, this has been April 1) of the year ending in "0." Within one week of the opening of the next session of the Congress, the President must send to the Clerk of the House of Representatives the census count for each State and the number of Representatives to which each State is entitled, following the method of apportionment Congress chose. Within 15 days, the Clerk of the House then notifies the Governor of each State how many Representatives that State will be entitled to in the next Congress.



U. S. Department of Commerce
BUREAU OF THE CENSUS

For sale by Customer Services (DUSD), Bureau of the Census, Washington, DC 20233 Price, 50 cents per copy for two-color brochure, 25 cents per copy for black-and-white reproducibles. A discount of 25 percent is available on orders of 100 copies or more sent to a single address.

Who should be counted?

Originally, Article I, Section 2 based apportionment on "the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three-fifths of all other Persons [Editor's note: slaves]." The practice of "Service for a Term of Years" soon died out. All American Indians have been considered to be taxed since the 1940's, and the Civil War of 1861-65 ended slavery and the three-fifths rule. The Constitution (Amendment 14) now refers to the "whole number" of persons, which the Census Bureau has taken to mean that all those persons who are residents of the United States should be included. Who are the exceptions and what are the special situations? Here are the Bureau of the Census's rules about them:

Two groups of people are specifically excluded from the census count. Persons living on the grounds of an embassy, ministry, legation, chancellery, or consulate are considered to be living on foreign soil, and therefore not residents of the United States. Also, citizens of foreign countries temporarily visiting or traveling in the United States are not counted in the census because they have not established a residence. On the other hand, Americans who are temporarily abroad on vacations, business trips, and the like are counted at their usual residence in the United States. Those Americans, however, who are overseas for an extended period (in the Armed Forces, working at civilian jobs, studying in foreign universities, etc.) generally are not included, because they are considered to have a "usual residence" outside of the United States.

Should undocumented or illegal aliens be included in the count for apportionment?

Congress debated this question on a number of occasions. The results support the statement of James Madison that the apportionment is to be "founded on the aggregate number of inhabitants" of each State. To the Census Bureau, that means all people here as residents, whether or not they are citizens or even not legally admitted as immigrants. In the 1970's, it became apparent that large numbers of persons were illegally entering the United States. Believing that these numbers might affect the apportionment of the U.S. Congress, the Federation for American Immigration Reform (FAIR) brought suit in 1979 to make the Census Bureau keep illegal aliens out of the apportionment count. The suit was decided in favor of the Census Bureau, but on procedural grounds. Even so, the United States District Court did address the real issue of whether or not illegal aliens should be included in the census. The court noted that "the Constitution requires the counting of the whole number of persons" and that illegal aliens "are clearly persons." How many undocumented aliens were counted in the census? Although the census does not ask anyone whether he or she has the proper papers to be in this country, a reasonable estimate of these persons included in the 1980 census is about 2 million, or less than 1 percent of the U.S. population.

Where should people be counted?

As important as who should be included in the count is the question of where the counted persons should be listed as living. The basic rule laid down in the first census act of March 1, 1790 states:

> ...every person whose usual place of abode shall be in any family...shall be returned as of such family; and the name of every person, who shall be an inhabitant of any district, but without a settled place of residence, shall be inserted...in that division where he or she shall be..., and every person occasionally absent at the time of the enumeration, as belonging to that place in which he usually resides in the United States.

From that act came the term "usual residence" and the idea of counting persons where they live and sleep most of the time. That place is not necessarily the same as the person's legal residence, voting residence, or the place where he or she can be found on Census Day. There are rules to determine where a person should be counted for certain groups of people, among them members of the Armed Forces (counted as residents of the area where they are stationed), college students (counted where they are living while at college, either in a

dormitory or in local housing), and persons in institutions (at the institution if long-term, or at home, generally, if short-term).

But what is the Census Bureau's role--officially?

An agency in the Department of Commerce, the Bureau of the Census conducts the census of population and housing in years ending in "0." Title 13 of the United States Code authorizes the census, outlines its timing and scope (and the scope of other Bureau censuses and surveys), requires the public to answer the questions and makes all the information confidential, and sets the penalties for disclosing this information.

The role of the Bureau of the Census in the apportionment process has two parts:

- To carry out the census itself—counting the Nation's people and recording information about them, such as age, race, and so on.

- To unofficially calculate the apportionment by determining the number of Representatives for each State based upon the results of that census.

How is apportionment calculated?

Three factors are needed to calculate apportionment:

- the population base
- the size of the body (the House of Representatives) to be divided
- a method to use for the calculation

The first two are fairly straightforward. The census obtains a count for each of the 50 States in accordance with the enumeration and residence rules discussed above, and the Congress determines the current size of the House of Representatives. From 1800 to 1840, the number of seats in the House increased as the population grew and new States were admitted to the Union. In 1850, for the first time, the number of seats was fixed before apportionment. The current House size, 435 members, has not been changed since the apportionment following the 1910 census, except for a temporary increase when Alaska and Hawaii became States in 1959.

How does one choose a method to calculate apportionment?

You might think, it's easy—once you know the number of people in the country and in a State and the number of representatives in the House. Don't you just divide the number in the country by the number in the State and give each of the 50 States that same share of the votes in the House? But what if there's a fraction left over? Can any State send a third of an elected official to Congress?

Generally, the assignment of seats for whole shares is not a problem, no matter what method is used, the assignment of seats for fractional shares is the issue that presents the problem. The apportionment procedure affects only the assignment of the 51st and successive seats, since the Constitution provides that each State must have at least one representative.

Finding a method that would solve the fraction problem adequately was a concern of Congress from 1792 until the early 1900's, during which time mathematicians, statisticians, and politicians came up with different ways (that had their own problems), some of which were never used. (See fig 1.)

The 1792 Apportionment Act was known as the Jefferson plan, named for Thomas Jefferson, then Secretary of State in President George Washington's

Thomas Jefferson; Courtesy Library of Congress

cabinet. This plan gave one Representative for every 33,000 people in each State, the fractions—or remainders—being disregarded. Essentially the same method was used after each of the next four censuses, but with progressively larger numbers to deal with.

In 1840, a change in the method of apportionment resulted from lengthy Senate debates on reapportionment in 1832 led by Daniel Webster of Massachusetts. He maintained that Jefferson's method was unconstitutional because it discriminated against small States by disregarding the fractions. Webster's position was that the Constitution required Congress to apportion Representatives "as near as may be" to the population of each State. Therefore, an additional Member was awarded for a fraction of over one-half. This practice, as Jefferson's had, also resulted in a House of Representatives of varying size, depending upon the ratio chosen and the population of each State. In the Nation's early years, increasing the size of the House of Representatives after each census was not a problem. As new States joined the union, and as the population of existing States grew, more members were added as needed, but it became apparent that continued growth in the size of the House would begin to strain its workings.

Samuel F. Vinton, a Representative from Ohio during the middle 1800's, was responsible for the method used in 1850. It seemed to be the answer to the problem of reapportionment because it appeared to be the fairest way to distribute a fixed number of seats. The Vinton method worked this way in 1850: A House size of 233 was selected. The total population was divided by 233 to determine the number by which each State's population would be divided. The resulting "quotas"—each State's exact share in the House—were used to assign the 233 seats. First, each State received the whole number of the quota. The remaining seats needed to make 233 were allocated by giving the States with the largest fractions each a seat until all 233 seats were assigned.

Vinton's method served for several decades. After the census of 1880, however, people noticed that if the size of the House increased from its then current size of 293 to 299, Alabama would not change from its 8-member delegation. But if the House size were to be fixed instead at 300, Alabama would actually lose a member and have only 7. Fortunately for Alabama, the size of the House was set at 332, and Alabama maintained an 8-member delegation. This troublesome characteristic of the Vinton method was named the "Alabama Paradox" (under which a State would be entitled to fewer seats if the size of the House were increased and the population of all States remained constant).

In 1910, Congress adopted a more refined and complex version of the Vinton method, known as Major Fractions. Some call this "Webster's method." Major Fractions, which was also used in 1930, is one of several methods that use a priority list to assign representatives to States. (Congress could not decide on an apportionment plan based on the 1920 census, but later passed a bill that made reapportionment automatic even if no action was taken.) The present method of Equal Proportions,

Figure 1. Deciphering the Methods

Five apportionment methods use formulas in which the State's total population (P) is the numerator and the divisor creates a numerical value that determines each State's priority for its next seat. In the divisors below, "n" represents the number of the State's next seat. The different divisors are designed to achieve different tests.

Here is a summary of the divisor methods, the formulas, and their tests.

Method	Divisor	Test
Equal Proportions (current method)	$\sqrt{n(n-1)}$	Smallest percent difference between number of persons per representative and smallest percent difference between number of representatives per person
Major Fractions	$\frac{n-1}{2}$	Smallest absolute difference between number of representatives per person
Harmonic Means	$\frac{2(n-1)n}{(n-1)+n}$	Smallest absolute difference between number of person per representative
Smallest Divisors	$n-1$	Smallest absolute "representation surplus"
Greatest Divisors	n	Smallest absolute "representation deficiency"

Source: Adapted from Sam T. Davis, "Reapportionment: Numerical Politics." *American Demographics*, Vol. 3, No. 10 (November 1981), p. 27.

adopted in 1941 (Title 2, Section 2a, United States Code) is another system that uses a priority list. The priority value is calculated by dividing the population of the State by a divisor. (See fig 1.) Each of the priority list methods has a different divisor, designed to reach certain objectives. For example, following the 1980 results, each of the 50 States was awarded one seat out of the current 435 total. Then, the 51st seat went to the State that had the highest priority value for its second seat. In computing the apportionment from the 1980 State totals, seat 51 went to California, whose priority value under the method of Equal Proportions was 16,736,300. The next seat, number 52, went to New York, with a second-seat priority value of 12,414,877, and Texas received seat number 53, with a priority value of 10,060,986. (See fig. 2.)

Once the number of seats assigned to the individual States is determined, the task of drawing the new congressional districts is generally that of each State legislature. This process of redistricting has required much legislative action.

Redistricting

When setting up or changing the boundaries of congressional or legislative districts, there are two ways to control the districts for political purposes—by geography or by population. Almost from the beginning, election districts began to take on all sorts of strange shapes and population sizes to favor some particular group or party, not always in keeping with the Constitution's principle of equal representation.

How do you tinker with geography?

A practice sometimes followed by some State legislatures when redistricting is called gerrymandering, after Elbridge Gerry, the Governor of Massachusetts in 1812, when Essex County's senatorial election districts were drawn to make sure his party's candidate was elected. The map that resulted looked like a salamander. One of Gerry's critics called it a gerrymander and the name stuck. In 1842, Congress required that congressional districts be contiguous (no separate parts), but some States got around this by connecting the parts with strips of land that might or might not contain people; others created long, narrow districts that wound across a State. In 1872, Congress said that districts had to be compact, but this also was interpreted in different ways.

How about population?

In the history of redistricting, if you wanted to discriminate against certain people because of their race, national origin, beliefs, income, or the way they vote, you made sure any such groups either were divided up among several districts, or that they were outnumbered by the people you wanted to favor. This was done even after 1901, when Congress said that districts not only had to be compact but also approximately equal in population. In any case, all of these provisions were dropped in 1929.

Figure 2. Apportionment Mini-Guide

How does the method of Equal Proportions work? California receives the 51st seat because it is the most populous State. Why does California receive the 54th seat (its third) before Pennsylvania receives its second?

The formula is: $\frac{P}{\sqrt{n(n-1)}}$

where "P" is the State population and "n" is the number of seats a State would have if it gained a seat. Thus, each State's claim to a seat (the priority value) would be the total State population divided by the geometric means of its current and next seats ($\sqrt{n(n-1)}$).

Listed below are the first 10 seats awarded on the basis of the method of equal proportions in 1930. The list continues in this fashion until the 385 seats (numbers 51 through 435) have been allocated. (Each State got one of the first 50 seats.)

Seat	State	1980 population	Seat number	Multiplier*	Priority value
51	California	23,668,562	2	0.70710678	16,736,200
52	New York	17,557,288	2	0.70710678	12,414,877
53	Texas	14,228,383	2	0.70710678	10,060,986
54	California	23,668,562	3	0.40824829	9,662,650
55	Pennsylvania	11,866,728	2	0.70710678	8,391,044
56	Illinois	11,418,461	2	0.70710678	8,074,071
57	Ohio	10,797,419	2	0.70710678	7,634,928
58	New York	17,557,288	3	0.40824829	7,167,733
59	Florida	9,739,992	2	0.70710678	6,887,214
60	California	23,668,562	4	0.28867513	6,832,525

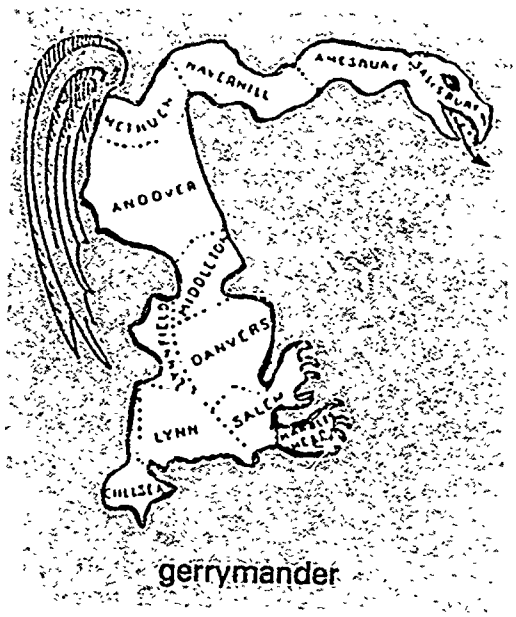
Note: *The multiplier is merely the reciprocal of the geometric mean $\left(\frac{\sqrt{n(n-1)}}{1}\right)$

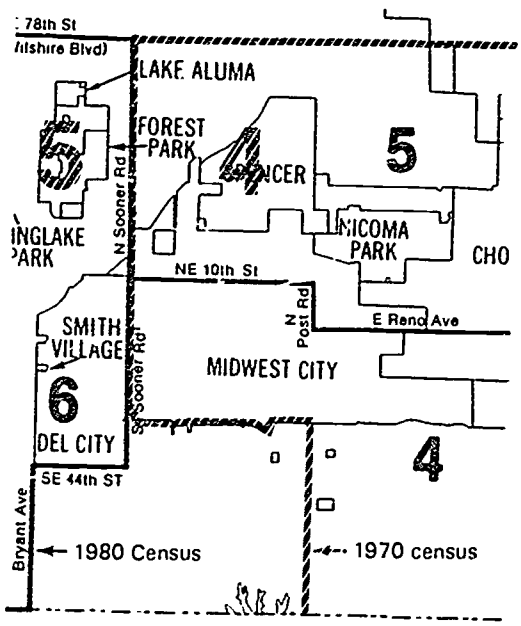
Source: Penelope E. Harvison *et al.* "Drawing the Lines—By the Numbers. The Statistical Foundations of the Electoral Process. *Government Information Quarterly*, Vol. 2, No. 4 (November 1985), p. 395. Statistics are taken from the 1980 Decennial Census.

How was representation brought back into constitutional "balance"?

For over 30 years after 1929, some States established new districts with little or no attention to "balance." They simply failed to redistrict despite major population movements or elected "members at large" to avoid redistricting. The result was that a district with a large population would have no more political "clout" than one that had few people: Each district still had only one representative.[1]

In a series of decisions beginning in 1962, the U.S. Supreme Court restored the equal-population rule and extended it to State and local legislative districts as well. In the case of Wesberry v. Sanders (1964), for example, the Court ruled that "as nearly as practicable, one man's vote in a congressional election is to be worth as much as another's." After the Voting Rights Act was passed in 1964, Federal courts held that using race to discriminate in drawing district boundaries was unconstitutional; in 1986, the U.S. Supreme Court stated that redistricting plans could not be challenged only because the proposed boundaries might discriminate against parts of the total population, such as Blacks or persons of Spanish origin. Thus race *and* population had to be considered in redistricting at any level.





What is the Census Bureau's role in the redistricting process?

When there has been a change in population or its distribution within States, almost all States use census data in altering their congressional and legislative district boundaries.

The States themselves—and not the Census Bureau—set these boundaries. Once they are law, however, the Bureau adds up the decennial census population of each congressional district and publishes the figures for official use.

The States, then, need the census and the Census Bureau's help in determining population counts for small areas. Congress passed legislation in December 1975, Public Law 94-171, which set up a voluntary program between the Bureau and States that wished to receive population tabulations for election precincts and certain other geographic areas. Those responsible for the legislative apportionment or redistricting of each State were to submit to the Secretary of Commerce a plan identifying the geographic areas for which they wanted specific tabulations of population from the 1980 census. This plan had to be submitted not later than 3 years before the census date, developed in a nonpartisan manner, and meet Census Bureau technical guidelines. In February and March 1981, the Bureau delivered the "Public Law 94-171 Population Counts" on computer tape, microfiche, and paper to 23 participating States and similar data to the other 27 States. In addition to the total population, there were counts of people in five race groups and of Hispanic/Spanish origin. The data covered the major geographic areas recognized in the census—States, counties, county subdivisions, places, census tracts (or block numbering areas), enumeration districts or block groups, census blocks, and election precincts where asked for, together with the numeric code for each area to help with the calculations. These statistics, which anyone could purchase, were for approximately 2.5 million blocks and over 300,000 additional small areas.

For 1990, the Census Bureau plans to block-number the entire country and to have counts for each of 8 to 12 million blocks. By offering State population figures by block as well as voting district, the legislators will be able to be much more flexible in creating redistricting plans to satisfy political considerations and legal guidelines. The 21st Decennial Census will be taken as of April 1, 1990. By April 1, 1991, the

[1]Some examples of great disparities in congressional district population sizes in modern U.S. history include: New York (1930) 776,425 in the largest district and 90,671 in the smallest district; Ohio (1946) 698,650 and 163,561; Illinois (1946) 914,053 and 112,116; Arkansas (1946) 423,152 and 177,476, Texas (1962) 951,527 and 216,371; Michigan (1962) 802,994 and 177,431; Maryland (1962) 711,045 and 243,570; and South Dakota (1962) 497,669 and 182,845.

Census Bureau will deliver copies of census block maps, the 1990 Public Law 94-171 tape files, and prints of these data to the Governor and legislature of each State.

Much of the success of the 1980 redistricting data program and the 1990 program that follows is the result of a decade-long partnership involving State officials, the National Conference of State Legislatures, and the Census Bureau.

Aside from its direct goals, the program has served as an example of how State and Federal governments can work together to identify and fulfill a critical constitutional need.

What does the future hold for census data and elections?

The relationship between census statistics and representation has become more closely knit in the last two decades, largely because of the redistricting data program. Census Bureau planners are looking to the future and the increasing use of technological developments to meet the time requirements that States have to redraw their districts.

- Duplicating and providing the enormous number of maps for everyone engaged in the redistricting process has been expensive and time-consuming. The automated geographic system the Census Bureau is developing should make it easier and faster to produce maps with voting district boundaries. As States begin to have their own computerized map files, the exchange of current geographic information should be made more convenient.

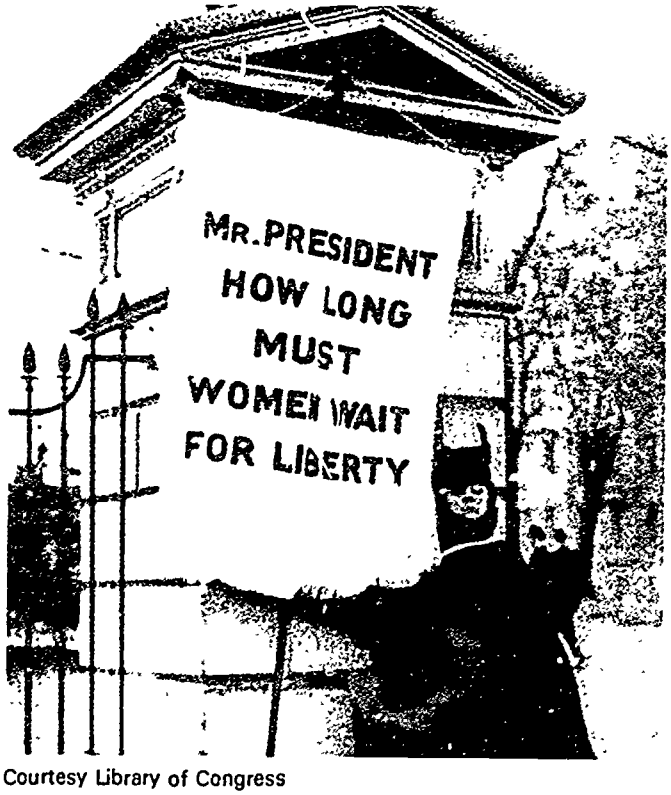
The Bureau of the Census has recognized that it must be alert to the social and governmental changes that affect the people of the United States and the way in which they are represented. If there are new laws and rules, the Bureau may need to provide the States with more statistics; and as new developments occur in individual States and legislatures, it may need to change its procedures to adapt to new needs. The Census Bureau's connection to representation is a vital part of the constitutional system, and the commitment to work with the individual States in this basic governmental process is most important.

Summary

Given the laws and court decisions that require numbers and information about people, the importance of the decennial census cannot be overstated. The completeness and accuracy of population counts from every section of the country directly affect every citizen's voting strength. States use census information to define their congressional and legislative districts. If there is a disproportionate undercount in any area, the results will correspondingly lessen the effect of the people's vote in that area.

Just as "being counted" spelled equal representation in the Constitution in 1787, it means the same today. At a recent meeting of city officials planning for the 21st census in 1990, a demographer from Anchorage, Alaska, said, "If you're not counted, you're not represented, and if you're not represented, you're not going to have the same clout as others."

Today the census is even more important than it was 200 years ago. Equal representation is for everyone, citizen or not, and everyone must be counted for that. But the census results provide more than just the figures for apportionment. Distributing Federal and State funds among some 39,000 local governments also depends on census data. In addition, social and economic data are used in marketing studies and in locating new businesses; academic research; Federal, State, and local planning (such as for child-care and senior-centers, schools, and transportation); affirmative



Courtesy Library of Congress

action programs; and many other activities. Finally, the people of the United States expect information about themselves, their community, State, and Nation. Much of that information is available only through the census, which remains distinctively a cornerstone of the Constitution itself.

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UNCLE SAM. "Whe-ew!! And what will the tew hundredth be?"

Courtesy Smithsonian Institution, Div. of Political History, Photo No 69751.

Figure 3. Portion of Census Questionnaire

Here are the QUESTIONS ↓	These are the columns for ANSWERS → Please fill one column for each person listed in Question 1.	PERSON in column 1
		Last name First name / Middle initial
2. How is this person related to the person in column 1? *Fill one circle.* *If "Other relative" of person in column 1, give exact relationship, such as mother-in-law, niece, grandson, etc.*		*START in this column with the household member (or one of the members) in whose name the home is owned or rented. If there is no such person, start in this column with any adult household member.*
3. Sex *Fill one circle.*		○ Male ○ Female
4. Is this person — *Fill one circle*		○ White ○ Black or Negro ○ Japanese ○ Chinese ○ Filipino ○ Korean ○ Vietnamese ○ Indian (Amer.) *Print tribe* ○ Asian Indian ○ Hawaiian ○ Guamanian ○ Samoan ○ Eskimo ○ Aleut ○ Other — *Specify*

Census Bureau
Teaching Resources Guide
August 1987

The U.S. Census Bureau is known as "The Fact Finder for the Nation." The name is very appropriate because the agency constantly collects data and provides information. The Census Bureau is best known for the national census of population and housing occurring every 10 years, but it also conducts national economic, agriculture, and governments censuses every 5 years. Besides censuses, the Census Bureau administers about 250 sample surveys each year (many for other Federal agencies) and prepares estimates and projections.

This collection of facts results in a wide range of products. Statistics are available in printed reports (with tables, charts and maps), microfiche, computer diskettes and tapes, wall maps, and through a new on-line data service—CENDATA. While printed documents provide data primarily in tabular form, many also give the user descriptive narratives. Different products provide census data for large geographic areas (the Nation, regions, States) and small ones (counties, cities, neighborhoods). Some census publications, such as the Statistical Abstract of the United States, also combine facts from many sources into handy statistical references.

Census facts and figures are a vital part of everyday living. They tell us who we are, how and where we live, how we are housed, and what changes are taking place in our Nation. These data help guide thousands and thousands of decisions. Government officials, business people, reporters, market analysts, elected officials, and community leaders use census information in their work, and *so can you.*

Teachers who want their students to expand their CRITICAL THINKING SKILLS, use facts and figures with REAL WORLD RELEVANCE, stay current with important social and economic trends, and gain an understanding of the census' place and its importance in American life, will find census data products invaluable teaching aids.

The Guide that follows gives an inventory and description of selected products and serves as an aid to finding the most up-to-date census materials, including those for local areas. This resource listing provides limited subject placement suggestions. However, all the products noted have application in the SOCIAL STUDIES (ECONOMICS, GEOGRAPHY, HISTORY, SOCIOLOGY, URBAN AND COMMUNITY STUDIES). Data from many of the printed reports have application in MATHEMATICS and COMPUTER SCIENCE. Products also are appropriate for other studies, such as LIFE and ENVIRONMENTAL SCIENCES, HOME ECONOMICS, CONSUMER EDUCATION, CURRENT EVENTS, READING, WRITING, and JOURNALISM.

In addition to the products listed, there are numerous publications from the 1980 census that provide statistics for the United States, States, cities, counties, American Indian reservations, metropolitan areas, and so forth, as well as reports on specific subjects such as income, occupation, education, and family characteristics.

LET US KNOW HOW YOU USE CENSUS DATA

We are working to increase student and teacher familiarity with census information, its uses, and censuses in general. At present, we also are working on the development of materials for our 1990 Bicentennial Census Education Project. When ready, this K-12 package will be made available to *all* elementary and secondary schools across the Nation.

If you currently use census data in the classroom or if you develop an interesting activity using some of the products listed here, let us hear from you. If your lesson or procedure is published, we will give you the credit.

Simply write it up and provide the purpose of the activity, the procedure, any special materials required, a suggestion on grade level/span, subject placement, and reading level, if appropriate. Also tell us who you are, where you teach, what you teach, grade, name of your principal or superintendent, and so forth. By all means, include your address and phone number. Send your idea(s) to the Census Education Project address listed below.

We want to make our census products useful to teachers and our Bicentennial Census Education Project as good as possible. With your help, they will be.

U.S. Department of Commerce
BUREAU OF THE CENSUS
DX-3300N

U.S. Bureau of the Census
Census Education Project
Decennial Planning Division
Washington, D.C. 20233
(301) 763-4358

SELECTED CENSUS RESOURCES

(See the Product Highlights Section immediately following this inventory for a brief description)

Title	Census Publication No.	GPO Stock No.	Price	Order From[1]
1. MAPS, CHARTS AND RELATED PRODUCTS				
A. 1980 Population Distribution Map (Night-time View, Wall-Sized)	GE-70 No. 6	003-024-06445-6	$ 2.25	GPO
B. 1980 Population Distribution Map (Night-time View, 8½ x 11)	(Specify 8½ x 11)		Free[2]	CSB
C. Census Teaching Resource: Using the 1980 Population Distribution Map			Free[2]	CSB
D 1980 Urban and Rural Population Distribution Map (Wall-Sized)	GE-50 No. 83	003-024-06513-4	$ 500	GPO
E. Employment in Manufacturing: 1982 (Map/Charts)	GE-70 No 5		$ 150	CSB
F. Congressional Districts of the 100th Congress of the United States (Wall Map)	GE-50 No. 85	003-024-06228-3	$ 4.75	GPO
G. Metropolitan Statistical Areas, June 30, 1986 (Wall Map)	GE-50 No. 84	003-024-06506-1	$ 500	GPO
H. 1982 Census of Agriculture—Graphic Summary	AC82-SS-1	003-024-06362-0	$ 950	GPO
I. 1982 Census of Governments—Graphic Summary	GC82(6)-5	003-024-06345-0	$ 2.50	GPO
J. Women of the World—A Chartbook for Developing Regions	WID—5	003-024-06202-0	$ 2.75	GPO
2. SPECIAL REPORTS				
A. Counting for Representation: The Census and the Constitution	(2 color) (blk/wht)		$ 0.50[3] $ 0.25[3]	CSB CSB
B. Population Profile of the United States. 1984-85	P-23 No 150	803-005-10003-1	$ 2.75	GPO
C. Patterns of Metropolitan Area and County Population Growth: 1980-1984	P-25 No. 976	003-001-91473-5	$ 2.75	GPO
D. We, the Americans	(We Series #1)	003-024-05692-5	$ 1.00	GPO
E. We, the American Women	(We Series #2)	003-024-05694-1	$ 1.00	GPO
F. We, the Black Americans	(We Series #3)	003-024-05693-3	$ 1.25	GPO
G. Nosotros	(We Series #4)	003-024-05695-0	$ 1.50	GPO
H. Ancestry of the Population by State: 1980	PC80-S1-10	003-024-05236-9	$ 4.50	GPO
I. Asian & Pacific Islander Population by State: 1980	PC80-S1-12	003-024-05832-4	$ 1.50	GPO
J. American Indian Areas and Alaska Native Villages: 1980	PC80-S1-13	003-024-06055-8	$ 2.75	GPO

Title	Census Publication No.	GPO Stock No.	Price	Order From[1]
K. Women in the American Economy	P-23 No 146	003-001-91563-4	$ 2.75	GPO
L. World Population Profile: 1985	ISP-WP-85	003-024-06218-6	$ 4.25	GPO
3. STATISTICAL COMPENDIA				
A. Statistical Abstract of the United States: 1987	(paper) (cloth)	003-024-06572-0 003-024-06573-8	$22.00 $29.00	GPO GPO
B. County and City Data Book: 1983[4]		003-024-05833-2	$24.00	GPO
C. State and Metropolitan Area Data Book: 1986[4 5]		003-024-06334-4	$28.00	GPO
4. PRODUCT REFERENCE MATERIAL				
A. Factfinder for the Nation (Series)	CFF No. 1-22		$ 5.00	CSB
• Statistics on Race & Ethnicity	CFF No 1		$ 0.25	CSB
• Population Statistics	CFF No 7		$ 0.25	CSB
• Census Geography—Concepts & Products	CFF No 8		$ 0.30	CSB
• Census Bureau Programs & Products	CFF No 18		$ 0.40	CSB
B. Census Curriculum Support Project (High School and College Series)				
• Product Primers (Series)	Primer #1-14		$ 14.00[3]	CSB
• Number of Inhabitants	Primer #1		$ 1.00	CSB
• General Housing Characteristics	Primer #2		$ 1.00	CSB
• General Population Characteristics	Primer #5		$ 1.00	CSB
• Summary Characteristics for Governmental Units & SMSAs	Primer #8		$ 1.00	CSB
• Census Tracts	Primer #10		$ 1.00	CSB
• General Social & Economic Characteristics	Primer #11		$ 1.00	CSB
• County Business Patterns	Primer #13		$ 1.00	CSB
• Updates 7-11 (Data Use/Product Listings)			Free[2]	CSB
C. Neighborhood Statistics from the 1980 Census — Program Overview			Free[2]	CSB
5. STAYING UP-TO-DATE				
A. Monthly Product Announcement			Free	CSB
B. Data User News (Monthly Newsletter)		DUN	$10.00/yr.	GPO
C. Commerce News (Ongoing Press Release Series)			Free	PIO
D. Census Data in Microcomputer Format (Information Brochure)			Free	CSB

NOTE. 1 For order code explanations see WHERE TO SEND REQUESTS
2. Limited to 10 copies per single address. Available only while supply lasts.
3. One of each is available free of charge. A discount of 25 percent is available on orders of 100 or more copies of a single publication going to a single address.
4. Available also on diskettes for IBM-PC compatible microcomputers. Contact Customer Services Branch for information.
5. Complimentary sampler diskette available. Contact Customer Services Branch for information.

PRODUCT HIGHLIGHTS

1A-B. The Night-Time Map is one of the most popular maps produced by the Census Bureau. Population distribution is depicted for the country as if every household's "lights are on". The map shows no state boundaries or city names.

1C This 2-page resource provides teachers with suggestions for using the 1980 Night-Time Population Distribution Map. The resource and the map, which must be ordered separately, make good additions in history, geography, life and earth sciences classes.

1D. This map is called the "Day-Time" map and is an excellent companion to the "Night-Time" version. It shows State and county (or statistical equivalent) boundaries. Through the use of various colors and patterns, the size of the Nation's rural and urban populations are depicted by location.

1E. This colorful 30" x 42" wall chart/map has 4 separate presentations of manufacturing employment in the country. Based on data collected in the 1982 Census of Manufactures, it displays national, State, and county 1982 information and 1972-1982 change by State. Good addition to geography, economics, and graphic design classes.

1F Use this map to celebrate the Bicentennial of the Constitution! This 35" x 47" product commemorates not only the 100th Congress (January 1987-January 1989) but also the 75th, 50th, 25th, and 1st. The front of the map shows the boundaries of all 435 districts in the 100th Congress and gives students a graphic depiction of "equal representation". The number of Representatives by State also is displayed in tabular form.

The reverse side shows the boundaries of the voting and nonvoting areas of the country and the district borders of the 1st, 25th, 50th, 75th, and 100th Congresses. This side clearly demonstrates the geographic expansion of the country, the formation of States, district boundary changes, and the effect of population growth on representation. The map is an excellent companion to the booklet, *Counting for Representation: The Census and the Constitution* (see Item 2A).

1G. Based on areas established by the Office of Management and Budget, this map (35" x 47") displays all metropolitan statistical areas in the United States and Puerto Rico as of June 30, 1986. Four 1980 census population categories are shown, in shades of one color, and the extent of urbanization in each area is outlined. Useful in a variety of social studies classes and a good companion to Items 2C and 3C.

1H. The 1982 Census of Agriculture Graphic Summary provides a brief set of national tabular data on farms, farm operators, farm products and a wide range of other characteristics and changes from 1978 to 1982. Most of the 188-page report displays these agricultural characteristics on colorful choropleth maps (by county) and one-and two-color dot maps of the United States. This map book represents a useful earth, life, environmental, and agricultural sciences teaching resource.

1I The 49-page chart and map book provides 1982 data and change information on various governmental organizations (including school districts), taxable property values, governmental finances and employment, and other topics. The information is presented in line, bar, and pie charts, State maps, and short narratives. Useful in civics, government, and political science classes

1J. Comprised of colorful charts and short narratives, this 70-page document gives a graphic status report on women by country in the world's developing regions. While focusing on characteristics of women (such as literacy, labor force participation and fertility), it contains 1985 total population estimates and information for both sexes Most data are from each country's latest census.

2A. The Nation's census was born in the Constitution. This 8-page booklet examines this constitutional origin, what apportionment is, the Census Bureau's role in this representation process, and changes that have taken place in apportionment methods and who is counted for the purposes of representation and where. The text also provides background for classroom discussions on topics such as gerrymandering and the size of the House of Representatives. An excellent addition to junior high and high school social studies and mathematics classes. The 100th Congressional District Map (Item 1F) and the booklet make a superb combination.

2B. This unique 2-color publication is packed with information on 17 topics presented in an easy-to-digest format. Topics such as population trends, migration, voting, income, and school enrollment are explored in one- to two-page narratives with appropriate graphics, "bullet" statistics, and sources of further information. As a student project resource, a teacher lesson aid, and a library reference, it has applications in a broad range of subjects. In addition, the 1970 to 1985 summary tables in the appendix make an excellent data base for time series analysis in social studies and mathematics classes and for data base construction in computer science.

2C. The report (65 pages) contains 1984 population estimates and 1980 census counts for metropolitan statistical areas, their component counties, and central

cities. It provides text highlights and detailed discussions of metropolitan, city, suburban, and county patterns of change since 1980. Various rankings are also included. Coupled with the Metropolitan Statistical Areas Map (see item 1G), students can gain an indepth understanding of not only which areas of the country have large, medium and small populations, but also which have grown or declined in population.

2D-G. Based on 1980 census and more recent Census Bureau survey information, these 16 to 23 page booklets give sweeping profiles of the total population, women, Blacks and persons of Spanish origin in this country. With succinct, understandable commentary and effective graphics, they look at topics such as education, employment, income, marital status, and voting participation. The "We, the Americans" series has been primarily designed for high school students. Also, "Nosotros" bilingual format makes it an excellent addition to ESL and Spanish language classes.

2H-J. These reports contain special compilations of 1980 statistics. They have short overviews and primarily consist of detailed tables "Ancestry" presents population size and geographic distribution information of more than 100 ancestry groups The "Asian and Pacific Islander" report displays data by State for the Chinese, Filipino, Japanese, Asian Indian, Vietnamese, Korean, Hawaiian, Guamanian, Samoan and other Asian and Pacific Islander populations. "American Indian Areas and Alaska Native Villages" reports total American Indian, Eskimo, and Aleut population counts and figures for identified American Indian areas (including reservations, tribal trust lands, and historic areas of Oklahoma) and for Alaska Native Villages and regional corporations.

2K. *Women in the American Economy* gives a detailed look at the breadth of change and constancy in the economic status of women in this country. Various aspects of labor force status, education, income, and poverty are explored through a combination of narratives, tables, and graphs. Special sections present information on the wage gap and occupational outlook. Good reference addition for business, sociology, and home economics courses.

2L. This attractive report (53 pages) presents recent and projected data on countries and selected cities of the world in a combination narrative, map, table, and graph format. Topics include population change to the year 2000, fertility, literacy, urbanization, aging, and others. Useful as a world geography and life and earth sciences supplement, a library resource, and a data base source for computer science classes.

3A. The *Abstract* is the most comprehensive single volume document of its kind produced by the Census Bureau. Summary data on over 30 topics—covering the social, economic, and political organization of the United States—make this a premier reference. This edition features over 1,600 tables and graphic charts, new data from the Economic Censuses, special State rankings for 60 selected data items, and a guide to sources listing over 1,000 publications for further reference. Every library should have one. (It is published annually.)

3B. The *County and City Data Book* (1,064 pages) provides a comprehensive demographic, social, and economic profile for the 50 states, the District of Columbia, 3,137 counties, and 945 cities with 25,000 or more inhabitants. It includes scores of data items (such as climate, crime, population, housing, race, age, employment, land area, bank deposits, personal income) and maps for each State. Rankings are provided for the top 75 cities and counties by selected characteristics. It is an excellent reference and useful as a teaching aid in classes such as marketing, mathematics, social studies. (The next edition is forthcoming in early 1988.)

3C The *State and Metropolitan Data Book: 1986* contains information on a wide array of topics Data on birth rates, property taxes, motor vehicle accidents, physicians, and, of course, population, housing, employment, and other subjects are but a sample of what is available. Information is grouped by State and metropolitan areas for numerous data items. State and metropolitan rankings are also presented. See how your state or area stacks up! Classroom applications are abundant.

4A. *Factfinders* give topical overviews and explanations of Census Bureau products, programs and concepts. For *Factfinders* describing data products, an explanation of who uses the various statistics, how the data are published, and how to find the data are included. A selection of *Factfinders* has been provided in the preceding listing. A complete index of all 22 Factfinders is available from the CSB.

4B The Census Curriculum Support Project (CCSP) materials have been developed primarily for use in college level courses. However, high school teachers can also use them with advanced students to generate familiarity with census products and the uses of demographic data in everyday life. Each of *The Product Primers* provides background information for the product, exercises to teach census concepts and data use skills, and the exercise answer keys. The Primers can also be used for self-study. The first 12 focus on 1980 census products. Primer 13 is the first to deal with strictly economic data—County Business Patterns, a

product which is published annually. Primer 10, Census Tracts, is excellent for use in marketing and urban studies, and environmental science classes. Information on accessing the products discussed in the Primers is available from the Census Bureau Regional Office in your area or your State Data Center (see section, WHERE TO GET HELP & WHERE TO LOCATE STATE/LOCAL CENSUS DATA.)

The *Updates*, published periodically, help keep instructors current with census resources. Some contain bibliographies.

4C. The Neighborhood Statistics Program, new for 1980, was one of the most unusual data sets produced by the Census Bureau. Approximately 1,300 cities, counties, townships, and other areas participated. These local jurisdictions identified neighborhoods geographically in their areas. The Census Bureau then generated 1980 data tables and a 9-page narrative profile highlighting some of the information for *each* neighborhood. These products cover subjects such as population, race, marital status, educational attainment, income, poverty status, and housing. The *Program Overview* gives a more indepth introduction to Neighborhood Statistics. To find out what areas of your State participated, contact the Census Bureau Regional Office nearest you or your State Data Center. Teachers of social studies (especially geography, urban and community studies), mathematics, environmental science, marketing, language arts, and journalism should investigate the use of Neighborhood Statistics in the classroom.

5A Every month, the "Announcement" provides a listing of all new Census Bureau products available.

5B. This monthly newsletter reports on new products, data highlights (some graphically presented), applications of census data, plans for upcoming censuses, and the like.

5C. A good way to quickly learn about new census findings, major trends, and new resources is to receive the same press releases we send to newspapers and radio and television stations. These releases present information in a short, easily digestible format. Some releases also include summary tables. Besides social studies and mathematics, writing and journalism teachers should not overlook this ongoing classroom resource.

5D The Census Bureau is placing more and more of its summary statistics reports on diskettes for use on IBM-PC compatible microcomputers. Selected tables from documents like Items 3B and 3C have been converted to this storage format. Other files contain data on County Business Patterns, agriculture, new residential and nonresidential construction, and population estimates. When contacting CSB for information, ask for the brochure, the latest set of "Data Developments" sheets, and order forms for these diskette files.

WHERE TO SEND REQUESTS

CSB—U.S. Bureau of the Census
CUSTOMER SERVICES BRANCH
Data User Services Division
Washington, DC 20233
(301) 763-4100

PIO—U.S. Bureau of the Census
PUBLIC INFORMATION OFFICE
Washington, DC 20233
(301) 763-4040

G. O—Superintendent of Documents
GOVERNMENT PRINTING OFFICE
Washington, DC 20402
(202) 783-3238

How to Order: Send your order to the appropriate agency. Products may be purchased by check, money order, or credit card. Check and money order purchases should be made payable to Superintendent of Documents, including orders mailed to CSB. Credit card purchases may be telephoned or mailed into the appropriate agency. Be sure to include the card number and expiration date. GPO accepts MasterCard, VISA, and Choice. CSB accepts MasterCard and VISA. Postage and handling are included in the product prices.

WHERE TO GET HELP & WHERE TO LOCATE STATE/LOCAL CENSUS DATA

U.S. Census Bureau Regional Offices

Census Specialists in our 12 regional offices are ready to help you. They can help you locate census information on your community/State, provide you with training and technical assistance, and point you toward other sources of information in your State.

- Atlanta, GA (404) 347-2274
- Boston, MA (617) 565-7078
- Charlotte, NC (704) 371-6144
- Chicago, IL (312) 353-0980
- Dallas, TX (214) 767-0625
- Denver, CO (303) 236-2200
- Detroit, MI (313) 226-4675
- Kansas City, KS (913) 236-3731
- Los Angeles, CA (213) 209-6612
- New York, NY (212) 264-4730
- Philadelphia, PA (215) 597-8313
- Seattle, WA (206) 442-7080

State Data Centers

State Data Centers are agencies that provide users with access to census data, training, and technical assistance. Depending upon the center and the request, services may be free of charge or have an associated cost. Presently, there are State Data Centers in every State plus the District of Columbia, Puerto Rico, and the Virgin Islands. These and State Data Center Affiliates, which total about 1,300, are excellent sources of State and local data. A listing of the lead agencies in charge of all 53 State Data Centers is provided at the end of this guide.

Other Sources

Many public libraries, chambers of commerce, city, county, regional planning offices; and similar agencies use census data and/or maintain census collections in varying levels. Some of these, especially planning offices, also produce their own demographic data, such as local population and housing estimates. These agencies are local data sources. Your State Data Center and/or Census Bureau Regional Office can help you quickly pinpoint them. They also can tell you which local governments in your state have data from the 1980 Neighborhood Statistics Program.

STATE DATA CENTER PROGRAM LEAD AGENCIES

Alabama
Center for Business and Economic Research
University of Alabama
PO Box AK
University, AL 35486
(205) 348 6191

Alaska
Alaska Department of Labor
Research and Analysis
PO Box 25504
Juneau, AK 99802-5504
(907) 465-4500

Arizona
The Arizona Department of Economic Security
1300 West Washington, 1st Floor
PO Box 6123-045Z
Phoenix, AZ 85005
(602) 255-5984

Arkansas
Center for Information Services
University of Arkansas at Little Rock, 2801 South University Avenue
Little Rock, AR 72204
(501) 371-1973

California
State Census Data Center
Department of Finance
1025 P Street
Sacramento, CA 95814
(916) 322-4651

Colorado
Division of Local Government
Colorado Dept of Local Affairs
1313 Sherman Street, Room 520
Denver, CO 80203
(303) 866-2156

Connecticut
Comprehensive Planning Division
Office of Policy and Management
State of Connecticut
80 Washington Street
Hartford, CT 06106
(203) 566-3905

Delaware
Delaware Development Office
99 Kings Highway
PO. Box 1401
Dover, DE 19903
(302) 736-4271

District of Columbia
Data Services Division
Mayor's Office of Planning
Presidential Bldg., Room 313
415 12th Street, N.W
Washington DC 20004
(202) 727-6533

Florida
Florida State Data Center
Executive Office of the Governor
Office of Planning and Budgeting
The Capitol
Tallahassee, FL 32301-8047
(904) 487-2814

Georgia
Division of Demographic and Statistical Services
Georgia Office of Planning and Budget
270 Washington St., SW Room 608
Atlanta, GA 30334
(404) 656-0911

Hawaii
State Department of Planning and Economic Development
Kamamalu Building, Room 602A
250 S King Street
Honolulu, HI 96813
(mailing address)
PO Box 2359
Honolulu, HI 96804
(808) 548 3082

Idaho
Division of Economic and Community Affairs
Department of Commerce
State Capitol Bldg., Room 108
Boise, ID 83720
(208) 334-4714

Illinois
Division of Planning and Financial Analysis
Illinois Bureau of the Budget
William Stratton Bldg., Room 605
Springfield, IL 62706
(217) 782-3500

Indiana
Indiana State Library
Indiana State Data Center
Indianapolis, IN 46204
Mr Ray Ewick, Director
(317) 232-3733

Iowa
Research Section
Iowa Department of Economic Development 200 East Grand Avenue
Des Moines, IA 50309
(515) 281-3925

Kansas
State Library
State Capitol Building, Room 343-N
Topeka, KS 66612
(913) 296-3296

Kentucky
Urban Studies Center
College of Urban & Public Affairs
University of Louisville
Gardencourt Campus
Alta Vista Rd
Louisville, KY 40292
(502) 588 6626

Louisiana
State Planning Office
Louisiana Department of Administration
PO Box 94095
Baton Rouge, LA 70804
(504) 342-7410

Maine
Division of Economic Analysis and Research
Maine Department of Labor
20 Union Street
Augusta, ME 04330
(207) 289-2271

Maryland
Maryland Department of State Planning
301 West Preston Stre
Baltimore, MD 21201
(301) 225-4450

Massachusetts
Massachusetts Institute for Social and Economic Research
University of Massachusetts
117 Draper Hall
Amherst, MA 01003
(413) 545 0176

Michigan
Michigan Information Center
Department of Management and Budget
Office of Revenue and Tax Analysis
PO Box 30026
Lansing, MI 48909
(517) 373-2697

Minnesota
State Demographic Unit
Minnesota State Planning Agency
101 Capitol Square Bldg
550 Cedar Street
St Paul, MN 55101
(612) 296 4886

Mississippi
Center for Population Studies
The University of Mississippi
Bondurant Building, Room 3W
University, MS 38677
(601) 232-7288

Missouri
Planning Section
Missouri Coordinating Board for Higher Education
101 Adams Street
Jefferson City, MO 65101
(314) 751 2361

Montana
Census and Economic Information Center
Montana Department of Commerce
1424 9th Avenue
Capitol Station
Helena MT 59620 0401
(406) 444 2896

Nebraska
Bureau of Business Research
200 CBA
The University of Nebraska Lincoln
Lincoln NE 68588 0406
(402) 472 2334

Nevada
Nevada State Library
Capitol Complex
401 North Carson
Carson City, NV 89710
(702) 885-5160

New Hampshire
Office of State Planning
State of New Hampshire
2-1/2 Beacon Street
Concord, NH 03301
(603) 271-2155

New Jersey

New Jersey Department of Labor
Division of Planning and Research
CN 388
Trenton, NJ 08625-0388
(609) 984-2593

New Mexico

Economic Development and Tourism Dept
1100 St Francis Drive
Santa Fe, NM 87503
(505) 827-0276

New York

Division of Economic Research
and Statistics
New York Department of Commerce
1 Commerce Plaza, Room 905
99 Washington Ave.
Albany, NY 12245
(518) 474-6005

North Carolina

North Carolina Office of State Budget
and Management
116 West Jones Street
Raleigh, NC 27611
(919) 733-7061

North Dakota

Dept of Agricultural Economics
North Dakota State University
Morrill Hall
PO Box 5636
Fargo, ND 58105
(701) 237-8621

Ohio

Ohio Data Users Center
Ohio Department of Development
State Office Tower Bldg., 26th Floor
PO Box 1001
Columbus, OH 43216
(614) 466 2115

Oklahoma

Oklahoma State Data Center
Department of Commerce
#5 Broadway Executive Park
6...1 Broadway Extension
Oklahoma City, OK 73116 8214
(405) 843-9770

Oregon

Intergovernmental Relations Division
Executive Building
155 Cottage Street, N E
Salem, OR 97310
(503) 378-3732

Pennsylvania

Institute of State and Regional Affairs
Pennsylvania State University
at Harrisburg
Middletown, PA 17057
(717) 948 6336

Puerto Rico

Puerto Rico Planning Board
Minillas Government Center
North Building
Avenida De Diego
PO Box 41119
San Juan, PR 00940-9985
(809) 728-4430

Rhode Island

Rhode Island Statewide Planning
Program
265 Melrose Street, Room 203
Providence, RI 02907
(401) 277-2656

South Carolina

Division of Research and Statistical
Services
Budget and Control Board
State of South Carolina
Rembert C Dennis Bldg., Room 337
1000 Assembly Street
Columbia SC 29201
(803) 734 3782

South Dakota

Business Research Bureau
School of Business
414 East Clark
University of South Dakota
Vermillion, SD 57069
(605) 677-5287

Tennessee

Tennessee State Planning Office
John Sevier State Office Bldg
500 Charlotte Ave., Suite 307
Nashville, TN 37219
(615) 741-1676

Texas

Data Management Program
Texas Advisory Commission on
Intergovernmental Relations
Sam Houston Building
201 E 14th Street
Austin, TX 78711
(mailing address)
PO Box 13206, (ACIR)
Capitol Station
Austin, TX 78701
(512) 463-1812

Utah

Office of Planning and Budget
State Capitol, Room 116
Salt Lake City, UT 84114
(801) 533-6082

Vermont

Policy Research and Coordination Staff
Pavilion Office Building
109 State Street
Montpelier, VT 05602
(802) 828-3326

Virginia

Department of Planning & Budget
445 Ninth Street Office Bldg
PO Box 1422
Richmond, VA 23211
(804) 786-7843

Virgin Islands

Department of Commerce of the
Virgin Islands
PO Box 6400
Charlotte Amalie
St Thomas, VI 00801
(809) 774-8784 X214

Washington

Office of Financial Management
Policy Analysis and Forecasting Unit
Insurance Building, Room 320
AQ-44
Olympia, WA 95804-020'
(206) 586-2808

West Virginia

Community Development Division
Governor's Office of Economic
and Community Development
Capitol Complex
Bldg 6, Room 533
Charleston, WV 25305
(304) 348-4010

Wisconsin

Demographic Services Center
Department of Administration
101 South Webster St., 7th Floor
PO Box 7868
Madison, WI 53707-7868
(608) 266-1927

Wyoming

Institute for Policy Research
University of Wyoming
PO Box 3925
Laramie, WY 82071
(307) 766-5141