

**THE USES OF CENSUS DATA:  
AN ANALYTICAL REVIEW**

**BY**

**THE COUNCIL OF ECONOMIC ADVISERS**

**APRIL 1, 2000**

## OVERVIEW:

Constitutionally, the purpose of the decennial census is to ensure an accurate apportionment of seats in the House of Representatives based on state populations. Since the early 1800s, however, policy makers have recognized that an accurate census can provide other valuable information to improve the policy process. Today, policy makers at all levels of government, as well as private businesses, households, researchers, and nonprofit organizations, rely on an accurate census in myriad ways that range far beyond the single fact of how many people live in each state. This report provides a brief overview of these uses.

## I. FEDERAL GOVERNMENT USES

Monitoring compliance with Federal law. Questions on ancestry, gender, race, Hispanic origin, language spoken at home, place of birth, citizenship and year of entry provide critical information for monitoring compliance with the Voting Rights Act, the Civil Rights Act, and other anti-discrimination and affirmative action plan requirements.

Assessing economic well being. Accurate census data are critical for developing accurate assessments of economic well-being for the Nation as a whole as well as for different racial, ethnic, and regional populations.

Assisting families and low-income populations. Accurate census data are critical for programs that aim to identify areas eligible for housing assistance and rehabilitation loans; housing subsidies; job training and employment services; energy cost assistance; and community economic development. Accurate census data also are critical to allocating funds for supplemental food programs and other social services for women and children.

Assisting the elderly, the disabled, and veterans. Accurate census data are required to determine and forecast the number of persons eligible for benefits based on age, such as Social Security and Medicare and to forecast the number of persons eligible for Social Security disability benefits. They are necessary to develop baselines for reducing employment barriers faced by persons with disabilities and to allocate funds for vocational education and rehabilitation programs for disabled workers. Accurate census data are required to determine where to build veterans hospitals, to establish baselines for veteran population projections, and to report to Congress on the needs of selected groups of veterans, such as Vietnam-era and female veterans.

Education. The accuracy of census data affects the allocation of funding for numerous Federal education programs such as vocational and adult education.

Other. Census data on farm residence help USDA assess housing conditions and needs on farms. Information on place of work and journey to work helps the Federal

government formulate national transportation and energy-use policies.

## **II. STATE AND LOCAL GOVERNMENT USES**

Drawing legislative boundaries. Decisions on redistricting and the determination of state and local voting district boundaries require accurate census data.

Education. Accurate census data are critical to local government agencies and school boards trying to determine the need for new schools, including what type (elementary, middle, or high school).

Infrastructure, public health and environmental protection, and program planning. Numerous state and local government planning responsibilities depend on accurate census data, including determining the need for schools, highways, public transportation, hospitals, libraries, and police and fire protection. Water and sewage disposal information helps identify needs for water purification, treatment, or sewage facilities. Farm data are used to allocate funds to land grant colleges, for cooperative extension activities, and for grants to agricultural experiment stations. Accurate census data make for better planning and implementation of a variety of programs, including education and training, health, education, and social services. Accurate census data help public health officials perform tasks such as locating areas in danger of ground water contamination and waterborne diseases. They help environmental agencies analyze energy consumption, identify conservation opportunities, and forecast energy needs.

Disaster relief. Accurate census information helps local governments predict transportation needs in disaster recovery and contingency planning initiatives. The data help governments and relief agencies in assessing the amount of displacement and the shelter and recovery needs of populations affected by natural disasters such as floods, hurricanes, tornadoes, and earthquakes.

Assisting families, low-income populations, the elderly, the disabled, and veterans. Accurate census data are necessary for appropriate state implementation of Federal programs for these groups in areas such as housing assistance, energy cost assistance, community development, and employment and social services. Accurate census data also help city and community officials pinpoint areas that need special programs such as meals-on-wheels and social service agencies identify special needs such as telephone access in case of medical emergency.

### III. BUSINESS USES

Product development and marketing. Accurate census data on where people of different ages live helps businesses of all kinds to develop and market their products. For example:

Manufacturers of baby products such as baby food, clothes, diapers, and toys, and manufacturers of maternity clothes and greeting cards need accurate information on children as they develop and market their product lines, as do television producers of children's programs and planners of large family amusement parks.

Architects, contractors, and real estate firms need accurate information on the size and composition of households and their housing as they design, build, and sell houses and apartments.

Producers of consumer durables such as television sets, washing machines, and home furnishings benefit from accurate information on households and their characteristics.

Accurate census information on language spoken at home helps television and radio stations define foreign language service areas and marketing companies develop products and services tailored to those who speak languages other than English.

Forecasting demand. Businesses forecasting demand for their products require accurate census data to develop these forecasts. Utilities depend on accurate census data to develop long-range plans for new facilities and networks.

Location decisions. A variety of business location decisions are improved by accurate census data. Examples include: businesses seeking to pinpoint areas to gauge potential markets for locating new stores, plants, or warehouses; businesses interested in finding sites having a labor force with certain education characteristics; building developers and contractors selecting sites for new housing developments; and businesses seeking to pinpoint areas of a city for locating new restaurants specializing in particular types of ethnic food.

Providing equal opportunities and achieving compliance with Federal law. Accurate census data help businesses set up and monitor affirmative action and anti-discrimination plans. And they help companies to comply with anti-discrimination legislation such as the Equal Employment Opportunities Act.

**Examples of Business Use of Census Data.** Newspaper accounts and census questionnaires provide examples of businesses that use census data.

Numerous small businesses responded to a request for examples of business uses of census data, but so too did some large companies. For example, one large fast-food chain reported that for the past 20 years they had relied on decennial censuses to perform market analysis and determine site locations for new restaurants. The company also has used the Census Bureau's TIGER Line files (a digital map database) to merge their own proprietary information with the detailed social and economic data from the decennial census for small geographic areas for use in its corporate planning.

Around the time of the last census, a prominent newspaper ran a lead article in its Business section entitled, "For Business, Census is a Marketing Data Motherlode." The article noted how retailers, such as one large general merchandise company, use the census to fine-tune neighborhood promotions; how a large grocery chain used it to study potential sites for new stores; and how one consumer products firm used it to estimate sales of diapers a decade out. The article also described how banks use census data to provide a basic demographic sketch of the neighborhoods around each of their branches.

Examples of uses of census data culled from a sample of monthly activity reports from the Census Bureau's Regional Office Information Services Program include the following:

- An independent television station in Philadelphia that is using ZIP code level data for a viewer profile to design program and advertising strategies.
- A foreign language newspaper distributor seeking increased circulation in New York, New Jersey, and Connecticut used census data to list languages spoken at home in each county of the three states.
- A major advertising firm used census data on languages spoken at home in the Chicago area to develop a new advertising campaign for a client.
- A district sales office for an automobile manufacturer is using ZIP Code and city profiles for a market analysis that will be used to help local dealerships develop sales campaigns.
- A real estate company in Colorado is using census data to determine which languages to use on a series of instructional tapes on buying and selling real estate.

#### **IV. COMMUNITY GROUP USES**

Delivering health, social, and educational services. In many cases, private social service agencies and community groups have the same needs for accurate census data as state and local government agencies that provide social services. Private groups benefit from accurate census data to set up and administer assistance programs for children, teens,

and older persons; to provide services that reflect cultural differences; to teach English, and conduct voter registration drives; to provide housing and job training for displaced homemakers; to provide veteran support services and promote the need for veteran services and facilities.

Disaster relief. As with social services, non-governmental organizations benefit from accurate census information in much the same way as governments when planning for and responding to disasters like hurricanes, tornadoes, floods, and earthquakes.

## **V. INDIVIDUAL USES**

Location decisions. Individuals can make better choices about home-buying, job relocation, or starting a small business if they can take advantage of accurate census information.

## **VI. ACADEMIC RESEARCH USES**

Accurate census data are vital to researchers in a wide variety of endeavors. Some of the most important needs include the following:

Any research requiring comprehensive information at the neighborhood level must rely on the census, with its tract level information.

Research on ethnicity or other research requiring reasonable numbers of observations of relatively small population groups must rely on the census.

The decennial census is the only consistent source of data for researchers examining trends over periods of decades.

The census is the best source of information for research on immigration and mobility.

## **VII. USES BY OTHER SURVEYS AND DATA COLLECTION**

Serving as an important base for other surveys. Data from the decennial Census form a crucial input into the sample designs of other national surveys such as the Current Population Survey (the source of the nation's unemployment statistics), the Survey of Income and Program Participation, the National Crime Victimization Survey, the Survey of Recent College Graduates, the Consumer Expenditure Survey (the source for expenditure weights used in calculating the Consumer Price Index), and statistics compiled by the National Center for Educational Statistics (NCES) and the National Center for Health Statistics (NCHS).

Calculating rates. Data from other sources are combined with data from the Census to compute rates of various indicators. For example, NCHS uses its own survey data combined with Census data to calculate numerous vital statistics and rates for health service utilization. Similarly, the Bureau of Justice Statistics uses Census data to calculate imprisonment and victimization rates, and the Federal Bureau of Investigation uses Census data to calculate crime rates.

Creating national estimates. Census data are used to adjust surveys to be nationally representative. For example, the NCES uses Census data to make its survey results on education indicators reflect the total United States population.

**Case Study: The Current Population Survey.** Information on the labor force, employment, and unemployment is derived from the monthly Current Population Survey (CPS). The March supplement to the CPS provides information for calculating the poverty rate and measures of household and family income. The accuracy of the CPS depends critically on the accuracy of census information, because all of the population “controls” for a decade are derived from the previous decennial census. These population controls are then updated monthly using estimates of births, deaths, and migration. The BLS has incorporated information about the undercount in the 1990 census into the CPS.

BLS Commissioner Abraham has advised Census Director Prewitt that if the BLS had not incorporated the undercount, and, instead, used the official 1990 census population estimates used for apportionment, its estimate of the working age population would have been too low by 2.1 million. Labor force information for persons of Hispanic origin and blacks would have been affected disproportionately because these groups make up three-fourths of persons not counted in the official statistics. Without information on the undercount, BLS says its estimates of the overall level of employment and unemployment would have been too low, and the geographic and demographic distribution of unemployment (and other measures) shown in their data would have been inaccurate. Moreover these errors would have persisted for (at least) the next 10 years.

Unemployment statistics from the CPS are included in the allocation formulas used to distribute funds in many Federal programs. Use of inaccurate population estimates could cause a shift of several percent in a state’s allocation. Many Federal programs are tied to the poverty rate, which could also be affected by inaccurate population counts. This and other information derived from the CPS affects evaluations of such initiatives as welfare reform, health insurance legislation, and minimum wage legislation.