

## Chapter 2.

# History of the Current Population Survey

---

### INTRODUCTION

The Current Population Survey (CPS) has its origin in a program established to provide direct measurement of unemployment each month on a sample basis. Several earlier efforts attempted to estimate the number of unemployed using various devices ranging from guesses to enumerative counts. The problem of measuring unemployment became especially acute during the economic depression of the 1930s.

The Enumerative Check Census, taken as part of the 1937 unemployment registration, was the first attempt to estimate unemployment on a nationwide basis using probability sampling. During the latter half of the 1930s, the Work Projects Administration (WPA) developed techniques for measuring unemployment, first on a local area basis and later on a national basis. This research combined with the experience from the Enumerative Check Census led to the Sample Survey of Unemployment, which was started in March 1940 as a monthly activity by the WPA.

### MAJOR CHANGES IN THE SURVEY: A CHRONOLOGY

In August 1942, responsibility for the Sample Survey of Unemployment was transferred to the Bureau of the Census, and in October 1943, the sample was thoroughly revised. At that time, the use of probability sampling was expanded to cover the entire sample, and new sampling theory and principles were developed and applied to increase the efficiency of the design. The households in the revised sample were in 68 Primary Sampling Units (PSUs) (see Chapter 3), comprising 125 counties and independent cities. By 1945, about 25,000 housing units were designated for the sample, of which about 21,000 contained interviewed households.

One of the most important changes in the CPS sample design took place in 1954 when, for the same total budget, the number of PSUs was expanded from 68 to 230, without any change in the number of sample households. The redesign resulted in a more efficient system of field organization and supervision, and it provided more information per unit of cost. Thus the accuracy of published statistics improved as did the reliability of some regional as well as national estimates.

Since the mid-1950s, the CPS sample has undergone major revision on a regular basis. The following list chronicles the important modifications to the CPS starting in the mid-1940s:

- **July 1945.** The CPS questionnaire was revised. The revision consisted of the introduction of four basic employment status questions. Methodological studies showed that the previous questionnaire produced results that misclassified large numbers of part-time and intermittent workers, particularly unpaid family workers. These groups were erroneously reported as not active in the labor force.
- **August 1947.** The selection method was revised. The method of selecting sample units within a sample area was changed so that each unit selected would have the same chance of selection. This change simplified tabulations and estimation procedures.
- **July 1949.** Previously excluded dwelling places were now covered. The sample was extended to cover special dwelling places—hotels, motels, trailer camps, etc. This led to improvements in the statistics, (i.e., reduced bias) since residents of these places often have characteristics that are different from the rest of the population.
- **February 1952.** Document-sensing procedures were introduced into the survey process. The CPS questionnaire was printed on a document-sensing card. In this procedure, responses were recorded by drawing a line through the oval representing the correct answer using an electrographic lead pencil. Punch cards were automatically prepared from the questionnaire by document-sensing equipment.
- **January 1953.** Ratio estimates now used data from the 1950 population census. Starting in January 1953, population data from the 1950 census were introduced into the CPS estimation procedure. Prior to that date, the ratio estimates had been based on 1940 census relationships for the first-stage ratio estimate, and 1940 population data were used to adjust for births, deaths, etc., for the second-stage ratio estimate. In September 1953, a question on “color” was added and the question on “veteran status” was deleted in the second-stage ratio estimate. This change made it feasible to publish separate, absolute numbers for individuals by race whereas only the percentage of distributions had previously been published.
- **July 1953.** The 4-8-4 rotation system was introduced. This sample rotation system was adopted to improve measurement over time. In this system, households are interviewed for 4 consecutive months during 1 year, leave the sample for 8 months, and return for the same

---

period of 4 months the following year. In the previous system, households were interviewed for 6 months and then replaced. The 4-8-4 system provides some year-to-year overlap, thus improving estimates of change on both a month-to-month and year-to-year basis.

- **September 1953.** High speed electronic equipment was introduced for tabulations. The introduction of electronic calculation greatly increased timeliness and led to other improvements in estimation methods. Other benefits included the substantial expansion of the scope and content of the tabulations and the computation of sampling variability. The shift to modern computers was made in 1959. Keeping abreast of modern computing is a continuous process, and the Census Bureau regularly updates its computer environment.
- **February 1954.** The number of PSUs was expanded to 230. The number of PSUs was increased from 68 to 230 while retaining the overall sample size of 25,000 designated housing units. The 230 PSUs consisted of 453 counties and independent cities. At the same time, a substantially improved estimation procedure (see Chapter 10, Composite Estimation) was introduced. Composite estimation took advantage of the large overlap in the sample from month-to-month.

These two changes improved the reliability of most of the major statistics by a magnitude that could otherwise be achieved only by doubling the sample size.

- **May 1955.** Monthly questions on part-time workers were added. Monthly questions exploring the reasons for part-time work were added to the standard set of employment status items. In the past, this information had been collected quarterly or less frequently and was found to be valuable in studying labor market trends.
- **July 1955.** Survey week was moved. The CPS survey week was moved to the calendar week containing the 12th day of the month to align the CPS time reference with that of other employment statistics. Previously, the survey week had been the calendar week containing the 8th day of the month.
- **May 1956.** The number of PSUs was expanded to 330. The number of PSUs was expanded from 230 to 330. The overall sample size also increased by roughly two-thirds to a total of about 40,000 household units (about 35,000 occupied units). The expanded sample covered 638 counties and independent cities.  
  
All of the former 230 PSUs were also included in the expanded sample.  
  
The expansion increased the reliability of the major statistics by around 20 percent and made it possible to publish more detailed statistics.
- **January 1957.** The definition of employment status was changed. Two relatively small groups of people, both formerly classified as employed “with a job but not

at work,” were assigned to new classifications. The reassigned groups were (1) people on layoff with definite instructions to return to work within 30 days of the layoff date and (2) people waiting to start new wage and salary jobs within 30 days of the interview. Most of the people in these two groups were shifted to the unemployed classification. The only exception was the small subgroup in school during the survey week who were waiting to start new jobs; these were transferred to “not-in-labor force.” This change in definition did not affect the basic question or the enumeration procedures.

- **June 1957.** Seasonal adjustment was introduced. Some seasonally adjusted unemployment data were introduced early in 1955. An extension of the data—using more refined seasonal adjustment methods programmed on electronic computers—was introduced in July 1957. The new data included a seasonally adjusted rate of unemployment and trends of seasonally adjusted total employment and unemployment. Significant improvements in methodology emerged from research conducted at the Bureau of Labor Statistics (BLS) and the Census Bureau in the following years.
- **July 1959.** Responsibility for CPS was moved between agencies. Responsibility for the planning, analysis, and publication of the labor force statistics from the CPS was transferred to the BLS as part of a large exchange of statistical functions between the Commerce and Labor Departments. The Census Bureau continued to have (and still has) responsibility for the collection and computer processing of these statistics, for maintenance of the CPS sample, and for related methodological research. Interagency review of CPS policy and technical issues continues to be the responsibility of the Statistical Policy Division, Office of Management and Budget.
- **January 1960.** Alaska and Hawaii were added to the population estimates and the CPS sample. Upon achieving statehood, Alaska and Hawaii were included in the independent population estimates and in the sample survey. This increased the number of sample PSUs from 330 to 333. The addition of these two states affected the comparability of population and labor force data with previous years. Another result was in an increase of about 500,000 in the noninstitutionalized population of working age and about 300,000 in the labor force, four-fifths of this in nonagricultural employment. The levels of other labor force categories were not appreciably changed.
- **October 1961.** Conversion to the Film Optical Sensing Device for Input to the Computer (FOSDIC) system. The CPS questionnaire was converted to the FOSDIC type used by the 1960 census. Entries were made by filling

---

in small circles with an ordinary lead pencil. The questionnaires were photographed to microfilm. The microfilms were then scanned by a reading device which transferred the information directly to computer tape. This system permitted a larger form and a more flexible arrangement of items than the previous document-sensing procedure and did not require the preparation of punch cards. This data entry system was used through December 1993.

- **January 1963.** In response to recommendations of a review committee, two new items were added to the monthly questionnaire. The first was an item, formerly carried out only intermittently, on whether the unemployed were seeking full- or part-time work. The second was an expanded item on household relationships, formerly included only annually, to provide greater detail on the marital status and household relationship of unemployed people.
- **March 1963.** The sample and population data used in ratio estimates were revised. From December 1961 to March 1963, the CPS sample was gradually revised. This revision reflected the changes in both population size and distribution as established by the 1960 census. Other demographic changes, such as the industrial mix between areas, were also taken into account. The overall sample size remained the same, but the number of PSUs increased slightly to 357 to provide greater coverage of the fast growing portions of the country. For most of the sample, census lists replaced the traditional area sampling. These lists were developed in the 1960 census. These changes resulted in further gains in reliability of about 5 percent for most statistics. The census-based updated population information was used in April 1962 for first- and second-stage ratio estimates.
- **January 1967.** The CPS sample was expanded from 357 to 449 PSUs. An increase in total budget allowed the overall sample size to increase by roughly 50 percent to a total of about 60,000 housing units (52,500 occupied units). The expanded sample had households in 863 counties and independent cities with at least some coverage in every state.

This expansion increased the reliability of the major statistics by about 20 percent and made it possible to publish more detailed statistics.

The concepts of employment and unemployment were modified. In line with the basic recommendations of the President's Committee to Appraise Employment and Unemployment Statistics (U.S. Department of Commerce, 1976), a several-year study was conducted to develop and test proposed changes in the labor force concepts. The principal research results were implemented in January 1967. The changes included a revised age cutoff in defining the labor force and new questions to improve the information on hours of work,

the duration of unemployment, and the self-employed. The definition of unemployment was also revised slightly. The revised definition of unemployment led to small differences in the estimates of level and month-to-month change.

- **March 1968.** Separate age/sex ratio estimation cells were introduced for Negro<sup>1</sup> and Other races. Previously, the second-stage ratio estimation used non-White and White race categories by age groups and sex. The revised procedures allowed separate ratio estimates for Negro and Other<sup>2</sup> race categories.

This change amounted essentially to an increase in the number of ratio estimation cells from 68 to 116.

- **January 1971 and January 1972.** The 1970 census occupational classification was introduced. The questions on occupation were made more comparable to those used in the 1970 census by adding a question on major activities or duties of current job. The new classification was introduced into the CPS coding procedures in January 1971. Tabulated data were produced in the revised version beginning in January 1972.
- **December 1971–March 1973.** The sample was expanded to 461 PSUs and the data used in ratio estimation were updated. From December 1971 to March 1973, the CPS sample was revised gradually to reflect the changes in population size and distribution described by the 1970 census. As part of an overall sample optimization, the sample size was reduced slightly (from 60,000 to 58,000 housing units), but the number of PSUs increased to 461. Also, the cluster design was changed from six nearby (but not contiguous) to four usually contiguous households. This change was undertaken after research found that smaller cluster sizes would increase sample efficiency.

Even with the reduction in sample size, this change led to a small gain in reliability for most characteristics. The noninterview adjustment and first stage ratio estimate adjustment were also modified to improve the reliability of estimates for central cities and the rest of the standard metropolitan statistical areas (SMSAs).

In January 1972, the population estimates used in the second-stage ratio estimation were updated to the 1970 census base.

- **January 1974.** The inflation-deflation method was introduced for deriving independent estimates of the population. The derivation of independent estimates of the civilian noninstitutionalized population by age, race,

---

<sup>1</sup> Negro was the race terminology used at that time.

<sup>2</sup> Other includes American Indian, Eskimo, Aleut, Asian, and Pacific Islander.

---

and sex used in second-stage ratio estimation in preparing the monthly labor force estimates now used the inflation-deflation method (see Chapter 10).

- **September 1975.** State supplementary samples were introduced. An additional sample, consisting of about 14,000 interviews each month, was introduced in July 1975 to supplement the national sample in 26 states and the District of Columbia. In all, 165 new PSUs were involved. The supplemental sample was added to meet a specific reliability standard for estimates of the annual average number of unemployed people for each state. In August 1976, an improved estimation procedure and modified reliability requirements led to the supplement PSUs being dropped from three states.

Thus, the size of the supplemental sample was reduced to about 11,000 households in 155 PSUs.

- **October 1978.** Procedures for determining demographic characteristics were modified. At this time, changes were made in the collection methods for household relationship, race, and ethnicity data. From now on, race was determined by the respondent rather than by the interviewer.

Other modifications included the introduction of earnings questions for the two outgoing rotations. New items focused on usual hours worked, hourly wage rate, and usual weekly earnings. Earnings items were asked of currently employed wage and salary workers.

- **January 1979.** A new two-level, first-stage ratio estimation procedure was introduced. This procedure was designed to improve the reliability of metropolitan/nonmetropolitan estimates.

Other newly introduced items were the monthly tabulation of children's demographic data, including relationship, age, sex, race, and origin.

- **September/October 1979.** The final report of the National Commission on Employment and Unemployment Statistics (NCEUS; "Levitan" Commission) (Executive Office of the President, 1976) was issued. This report shaped many of the future changes to the CPS.
- **January 1980.** To improve coverage, about 450 households were added to the sample, increasing the number of total PSUs to 629.
- **May 1981.** The sample was reduced by approximately 6,000 assigned households, bringing the total sample size to approximately 72,000 assigned households.
- **January 1982.** The race categories in the second-stage ratio estimation adjustment were changed from White/Non-White to Black/Non-Black. These changes were made to eliminate classification differences in race that existed between the 1980 census and the CPS. The

change did not result in notable differences in published household data. Nevertheless, it did result in more variability for certain "White," "Black," and "Other" characteristics.

As is customary, the CPS uses ratio estimates from the most recent decennial census. Beginning in January 1982, these ratio estimates were based on findings from the 1980 census. The use of the 1980 census-based population estimates, in conjunction with the revised second-stage adjustment, resulted in about a 2 percent increase in the estimates for total civilian noninstitutionalized population 16 years and over, civilian labor force, and unemployed people. The magnitude of the differences between 1970 and 1980 census-based ratio estimates affected the historical comparability and continuity of major labor force series; therefore, the BLS revised approximately 30,000 series going back to 1970.

- **November 1982.** The question series on earnings was extended to include items on union membership and union coverage.
- **January 1983.** The occupational and industrial data were coded using the 1980 classification systems. While the effect on industry-related data was minor, the conversion was viewed as a major break in occupation-related data series. The census developed a "list of conversion factors" to translate occupation descriptions based on the 1970 census-coding classification system to their 1980 equivalents.  
  
Most of the data historically published for the "Black and Other" population group were replaced by data that relate only to the "Black" population.
- **October 1984.** School enrollment items were added for people 16–24 years of age.
- **April 1984.** The 1970 census-based sample was phased out through a series of changes that were completed by July 1985. The redesigned sample used data from the 1980 census to update the sampling frame, took advantage of recent research findings to improve the efficiency and quality of the survey, and used a state-based design to improve the estimates for the states without any change in sample size.
- **September 1984.** Collection of veterans' data for females was started.
- **January 1985.** Estimation procedures were changed to use data from the 1980 census and the new sample. The major changes were to the second-stage adjustment, which replaced population estimates for "Black" and "Non-Black" (by sex and age groups) with population estimates for "White," "Black," and "Other" population groups. In addition, a separate, intermediate step

---

was added as a control to the Hispanic<sup>3</sup> population. The combined effect of these changes on labor force estimates and aggregates for most population groups was negligible; however, the Hispanic population and associated labor force estimates were dramatically affected and revisions were made back to January 1980 to the extent possible.

- **June 1985.** The CPS computer-assisted telephone interviewing (CATI) facility was opened at Hagerstown, Maryland. A series of tests over the next few years were conducted to identify and resolve the operational issues associated with the use of CATI. Later tests focused on CATI-related issues, such as data quality, costs, and mode effects on labor force estimates. Samples used in these tests were not used in the CPS.
- **April 1987.** First CATI cases were used in CPS monthly estimates. Initially, CATI started with 300 cases a month. As operational issues were resolved and new telephone centers were opened—Tucson, Arizona, (May 1992) and Jeffersonville, Indiana, (September 1994)—the CATI workload was gradually increased to about 9,200 cases a month (January 1995).
- **June 1990.** The first of a series of experiments to test alternative labor force questionnaires was started at the Hagerstown Telephone Center. These tests used random digit dialing and were conducted in 1990 and 1991.
- **January 1992.** Industry and occupation codes from the 1990 census were introduced. Population estimates were converted to the 1990 census base for use in ratio estimation procedures.
- **July 1992.** The CATI and computer-assisted personal interviewing (CAPI) Overlap (CCO) experiments began. CATI and automated laptop versions of the revised CPS questionnaire were used in a sample of about 12,000 households selected from the National Crime Victimization Survey sample. The experiment continued through December 1993.

The CCO ran parallel to the official CPS. The CCO's main purpose was to gauge the combined effect of the new questionnaire and computer-assisted data collection. It is estimated that the redesign had no statistically significant effect on the total unemployment rate, but it did affect statistics related to unemployment, such as the reasons for unemployment, the duration of unemployment, and the industry and occupational distribution of the unemployed with previous work experience. It also is estimated that the redesign significantly increased the employment-to-population ratio and the labor force participation rate for women, but significantly decreased the employment-to-population ratio for men. Along with the changes in employment data,

the redesign significantly influenced the measurement of characteristics related to employment, such as the proportion of the employed working part-time, the proportion working part-time for economic reasons, the number of individuals classified as self-employed, and industry and occupational distribution of the employed.

- **January 1994.** A new questionnaire designed solely for use in computer-assisted interviewing was introduced in the official CPS. Computerization allowed the use of a very complex questionnaire without increasing respondent burden, increased consistency by reducing interviewer error, permitted editing at time of interviewing, and allowed the use of dependent interviewing where information reported in one month (industry/occupation, retired/disabled statuses, and duration of unemployment) was confirmed or updated in subsequent months.

CPS data used by the BLS were adjusted to reflect an undercount in the 1990 decennial census. Quantitative measures of this undercount are derived from a post-enumeration survey. Because of reliability issues associated with the post-enumeration survey for small areas of geography (i.e., places with populations of less than one million), the undercount adjustment was made only to state and national level estimates. While the undercount varied by geography and demographic group, the overall undercount was estimated to be slightly more than 2 percent for the total 16 and over civilian noninstitutionalized population.

- **April 1994.** The 16-month phase-in of the redesigned sample based on the 1990 census began. The primary purpose of this sample redesign was to maintain the efficiency of the sampling frames. Once phased in, this resulted in a monthly sample of 56,000 eligible housing units in 792 sample areas. The details of the 1990 sample redesign are described in TP63RV.
- **December 1994.** Starting in December 1994, a new set of response categories was phased in for the relationship to reference person question. This modification was directed at individuals not formally related to the reference person to identify whether there were unmarried partners in a household. The old partner/roommate category was deleted and replaced with the following categories: unmarried partner, housemate/roommate, and roomer/boarder. This modification was phased in for two rotation groups at a time and was fully in place by March 1995. This change had no effect on the family statistics produced by CPS.
- **January 1996.** The 1990 CPS design was changed because of a funding reduction. The original reliability requirements of the sample were relaxed, allowing a reduction in the national sample size from roughly 56,000 eligible housing units to 50,000 eligible housing

---

<sup>3</sup> Hispanics may be any race.

---

units. The reduced CPS national sample contained 754 PSUs. The details of the sample design changes as of January 1996 are described in Appendix H, TP63RV.

- **January 1998.** A new two-step composite estimation method for the CPS was implemented (See Appendix I). The first step involved computation of composite estimates for the main labor force categories, classified by key demographic characteristics. The second adjusted person-weights, through a series of ratio adjustments, to agree with the composite estimates, thus incorporating the effect of composite estimation into the person-weights. This new technique provided increased operational simplicity for microdata users and improved the accuracy of labor force estimates by using different compositing coefficients for different labor force categories. The weighting adjustment method assured additivity while allowing this variation in compositing coefficients.
- **July 2001.** Effective with the release of July 2001 data, official labor force estimates from the CPS and the Local Area Unemployment Statistics (LAUS) program reflect the expansion of the monthly CPS sample from about 50,000 to about 60,000 eligible households. This expansion of the monthly CPS sample was one part of the Census Bureau's plan to meet the requirements of the State Children's Health Insurance Program (SCHIP) legislation. The SCHIP legislation requires the Census Bureau to improve state estimates of the number of children who live in low-income families and lack health insurance. These estimates are obtained from the Annual Demographic Supplement to the CPS. In September 2000, the Census Bureau began expanding the monthly CPS sample in 31 states and the District of Columbia. States were identified for sample supplementation based on the standard error of their March estimate of low-income children without health insurance. The additional 10,000 households were added to the sample over a 3-month period. The BLS chose not to include the additional households in the official labor force estimates, however, until it had sufficient time to evaluate the estimates from the 60,000 household sample. See Appendix J, Changes to the Current Population Survey Sample in July 2001, for details.
- **January 2003.** The 2002 Census Bureau occupational and industrial classification systems, which are derived from the 2000 Standard Occupational Classification (SOC) and the 2002 North American Industry Classification System (NAICS), were introduced into the CPS. The composition of detailed occupational and industrial classifications in the new systems was substantially changed from the previous systems, as was the structure for aggregating them into broad groups. This created breaks in existing data series at all levels of aggregation.

Questions on race and ethnicity were modified to comply with new federal standards. Beginning in January 2003, individuals are asked whether they are of Hispanic ethnicity before being asked about their race. Individuals are now asked directly if they are Spanish, Hispanic, or Latino. With respect to race, the response category of Asian and Pacific Islanders was split into two categories: a) Asian and b) Native Hawaiian or Other Pacific Islanders. The questions on race were reworded to indicate that individuals could select more than one race and to convey more clearly that individuals should report their own perception of what their race is. These changes had little or no impact on the overall civilian noninstitutionalized population and civilian labor force but did reduce the population and labor force levels of Whites, Blacks or African Americans, and Asians beginning in January 2003. There was little or no impact on the unemployment rates of these groups. The changes did not affect the size of the Hispanic or Latino population and had no significant impact on the size of their labor force, but did cause an increase of about half a percentage point in their unemployment rate.

New population controls reflecting the results of Census 2000 substantially increased the size of the civilian noninstitutionalized population and the civilian labor force. As a result, data from January 2000 through December 2002 were revised. In addition, the Census Bureau introduced another large upward adjustment to the population controls as part of its annual update of population estimates for 2003. The entire amount of this adjustment was added to the labor force data in January 2003. The unemployment rate and other ratios were not substantially affected by either of these population control adjustments.

The CPS program began using the X-12 ARIMA software for seasonal adjustment of time series data with release of the data for January 2003. Because of the other revisions being introduced with the January data, the annual revision of 5 years of seasonally adjusted data that typically occurs with the release of data for December was delayed until the release of data for January. As part of the annual revision process, the seasonal adjustment of CPS series was reviewed to determine if additional series could be adjusted and if the series currently adjusted would pass a technical review. As a result of this review, some series that were seasonally adjusted in the past are no longer adjusted.

Improvements were introduced to both the second-stage and composite weighting procedures. These changes adapted the weighting procedures to the new race/ethnic classification system and enhanced the stability over time of national and state/substate labor force estimates for demographic groups.

---

More detailed information on these changes and an indication of their effect on national labor force estimates appear in “Revisions to the Current Population Survey Effective in January 2003” in the February 2003 issue of *Employment and Earnings*, available on the Internet at <<http://www.bls.gov/cps/rvcps03.pdf>>.

- **January 2004.** Population controls were updated to reflect revised estimates of net international migration for 2000 through 2003. The updated controls resulted in a decrease of 560,000 in the estimated size of the civilian noninstitutionalized population for December 2003. The civilian labor force and employment levels decreased by 437,000 and 409,000 respectively. The Hispanic or Latino population and labor force estimates declined by 583,000 and 446,000 respectively and Hispanic or Latino employment was lowered by 421,000. The updated controls had little or no effect on overall and subgroup unemployment rates and other measures of labor market participation.

More detailed information on the effect of the updated controls on national labor force estimates appears in “Adjustments to Household Survey Population Estimates in January 2004” in the February 2004 issue of *Employment and Earnings*, available on the Internet at <<http://www.bls.gov/cps/cps04adj.pdf>>.

Beginning with the publication of December 2003 estimates in January 2004, the practice of concurrent seasonal adjustment was adopted. Under this practice, the current month’s seasonally adjusted estimate is computed using all relevant original data up to and including those for the current month. Revisions to estimates for previous months, however, are postponed until the end of the year. Previously, seasonal factors for the CPS labor force data were projected twice a year. With the introduction of concurrent seasonal adjustment, BLS will no longer publish projected seasonal factors for CPS data. More detailed information on concurrent seasonal adjustment is available in the January 2004 issue of *Employment and Earnings* in “Revision of Seasonally Adjusted Labor Force Series,” available on the Internet at <<http://www.bls.gov/cps/cpsrs2004.pdf>>.

In addition to introducing population controls that reflected revised estimates of net international migration for 2000 through 2003, in January 2004, the LAUS program introduced a linear wedge adjustment to CPS 16+ statewide estimates of the population, labor force, employment, unemployment, and unemployment rate.

This adjustment linked the 1990 decennial census-based CPS estimates, adjusted for the undercount (see January 1994), to the 2000 decennial census-based CPS estimates. This adjustment provided consistent estimates of statewide labor force characteristics from the 1990s to the 2000s. It also provided consistent CPS series for use in the LAUS program’s econometric models that are used to produce the official labor force estimates for states and selected sub-state areas, which use CPS employment and unemployment estimates as dependent variables.

- **April 2004.** The 16-month phase-in of the redesigned sample based on the 2000 census began. This is the sample design documented in this technical paper.
- **September 2005.** Hurricane Katrina made landfall on the Gulf Coast after the August 2005 survey reference period. The data produced for the September reference period were the first from the CPS to reflect any impacts of the storm. The Census Bureau attempted to contact all sample households in the disaster areas except those areas under mandatory evacuation at the time of the survey. Starting in October, all areas were surveyed. In accordance with standard procedures, uninhabitable households, and those for which the condition was unknown, were taken out of the CPS sample universe. People in households that were successfully interviewed were given a higher weight to account for those missed. Also starting in October, BLS and the Census Bureau added several questions to identify persons who were evacuated from their homes, even temporarily, due to Hurricane Katrina. Beginning in November 2005, state population controls used for CPS estimation were adjusted to account for interstate moves by evacuees. This had a negligible effect on estimates for the total United States. The CPS will continue to identify Katrina evacuees monthly, possibly through December 2006.

## REFERENCES

Executive Office of the President, Office of Management and Budget, Statistical Policy Division (1976), **Federal Statistics: Coordination, Standards, Guidelines: 1976**, Washington, DC: Government Printing Office.

U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Labor, Bureau of Labor Statistics. “Concepts and Methods Used in Labor Force Statistics Derived from the Current Population Survey,” **Current Population Reports**. Special Studies Ser. P23, No. 62. Washington, DC: Government Printing Office, 1976.