

The 2010 Census: the employment impact of counting the Nation

The 2010 Census count marked the addition of 564,000 temporary, intermittent workers to payrolls; 2010 Census hiring masked the underlying trends in Current Employment Statistics estimates

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Every 10 years, the U.S. Census Bureau carries out a count of every resident in the United States, including Puerto Rico and the U.S. island territories, as mandated by the United States Constitution.¹ To accomplish this task, the Census Bureau hires a large number of temporary workers for short periods. As a result, some employment estimates from the Current Employment Statistics (CES) survey are affected.² Historically—and most recently in 2010, a year following the end of one of the deepest U.S. recessions ever—the ability to accurately account for the impact of these temporary, intermittent census workers and gauge underlying employment trends has been vital.

During the most recent recession (between December 2007 and June 2009),³ employment in nonfarm establishments fell by 7.5 million. Although the rate of job losses slowed in the second half of 2009, an additional 1.2 million jobs were cut by the end of that year. In 2010, employment growth resumed, and nearly 1 million positions were added to payrolls, about 13 percent of the jobs lost during the recession. Although employment did grow during the year, the effect of 2010 Census employment masked underlying trends within the economy on a month-to-month basis because a large number of workers were hired early in the

year to work on the 2010 Census and then let go as work on the census wound down. (See chart 1.)

Census hiring

The 2010 Census involved several phases, in which thousands of temporary workers were hired. Each phase had an impact on some CES employment estimates. Initial hiring began in November 2008, about a year and a half prior to the official April 1, 2010, Census Day. Initially, workers were hired to canvass 145 million addresses.⁴ Then, in early 2010, census forms were sent to all households, together with a request that they be returned by the April 1 deadline. Next, census workers followed up to canvass approximately 47 million households that had not returned the forms.⁵ Finally, a quality assurance phase ensured a complete count and verified the data that were collected.

Although hiring for the 2010 Census began in November 2008, the effects on payroll employment estimates were not apparent for several months. (See chart 2.) In April 2009, the 2010 Census witnessed its first major hiring event, with 114,000 enumerators brought on for address canvassing. Workers went out into communities to physically verify every residence that appeared on the Census Bureau's master address list. Enumerators verified addresses already on their list, deleted inaccurate data, added missing addresses to the list, and updated maps. The task

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Chart 1. Total nonfarm employment, seasonally adjusted, January 2008–February 2011

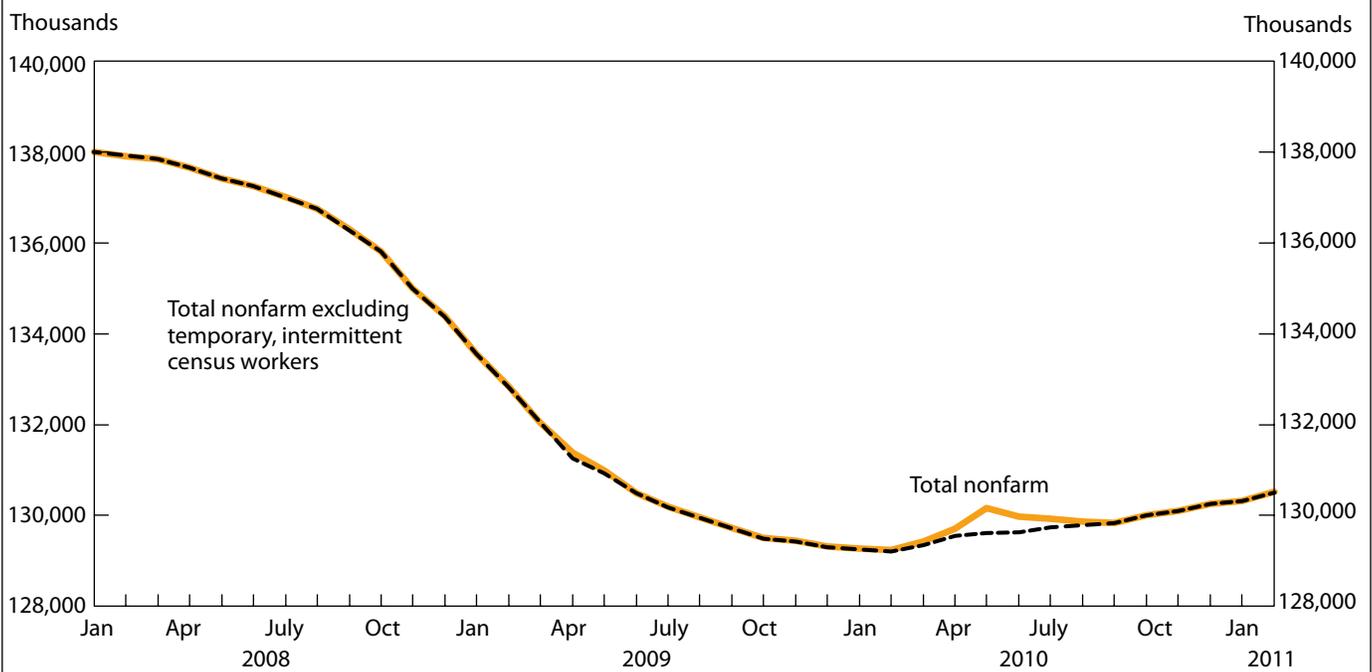
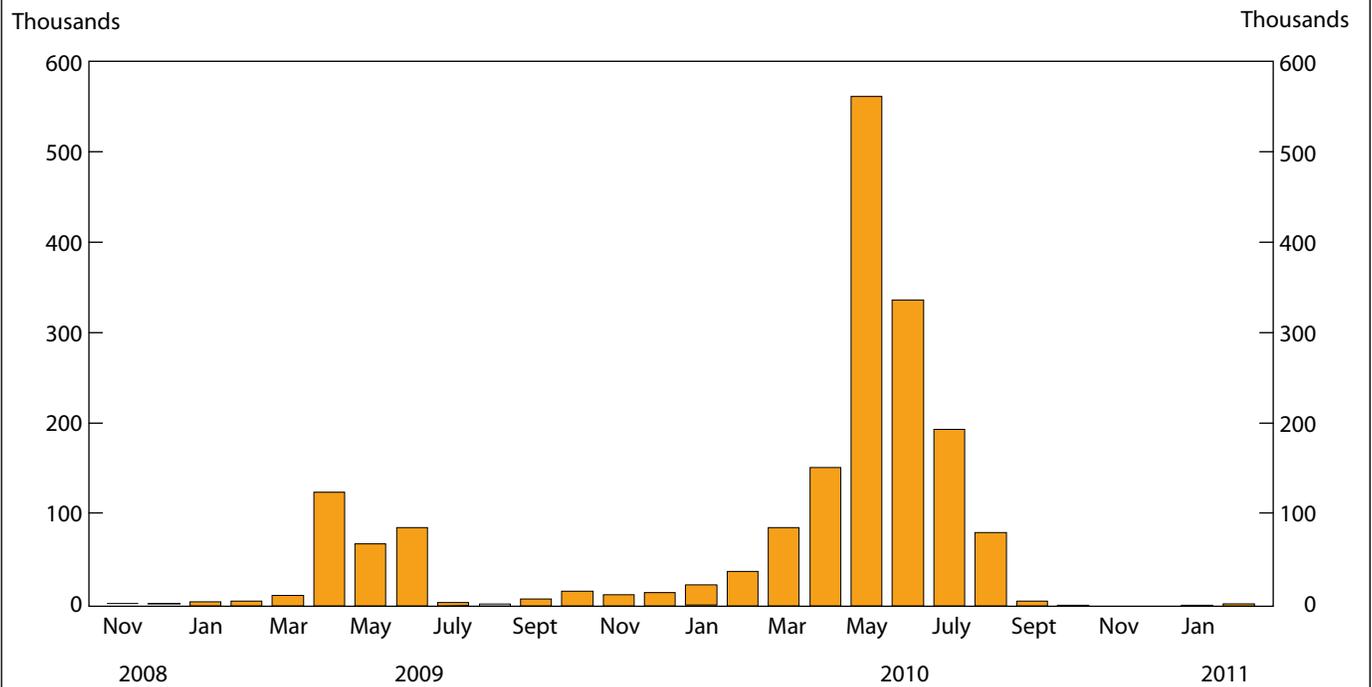


Chart 2. Temporary, intermittent census workers' level of employment, not seasonally adjusted, November 2008–February 2011



was carried out largely by workers going door to door.⁶

As the address-canvassing phase wrapped up over the next 2 months, so did the need for workers. The level of temporary, intermittent census workers fell to 4,000 in July 2009 and remained relatively low for the next 7 months.

In March 2010, hiring of temporary decennial census workers resumed, affecting CES employment estimates substantially. The level of temporary, intermittent census workers on payrolls reached 87,000. Employment levels grew rapidly over the next 2 months as hiring peaked in May 2010, with 564,000 temporary, intermittent census workers on payrolls.⁷ This employment peak marked the nonresponse follow-up phase, which began May 1, 2010.⁸ During this phase of the 2010 decennial census, enumerators went door to door to interview occupants of households that had failed to return census forms.

Over the next 3 months (June through August), employment of temporary, intermittent census workers declined considerably as fewer workers were needed for quality assurance. This process involved reinterviewing some households to clarify information received on forms; verifying that housing units listed as vacant were, in fact, unoccupied as of April 1, 2010; and verifying the geographical locations of various addresses for which forms were completed and returned, but with an address that did not match the one on file.⁹ By September 2010, the level of temporary, intermittent census workers had fallen to 6,000.

Even fewer workers were needed once the data collection and followup phases were completed. Those workers who did remain on payrolls worked to process and tabulate results, which had to be delivered to the President by December 31, 2010.¹⁰ As of November 2010, the employment effect of the decennial Census had ended for the year.¹¹

Employment impact of the 2010 Census

One must understand the magnitude of hiring for the 2010 Census in order to distinguish underlying employment trends from this special activity that occurs just once every decade. The extensive staffing needed to carry out this short-term operation translated into a major, although temporary, impact on employment. The impact could be seen in employment estimates for a number of government and industry sectors: the total nonfarm sector; service-providing industries; government (as a whole); the Federal Government; Federal

Government, except U.S. Postal Service; and other Federal Government. Changes were significant from month to month during the strongest hiring months and again as the temporary, intermittent census employees were laid off.

Data users could reference total private employment data for a picture of underlying U.S. employment trends that excluded the impact of fluctuating 2010 Census temporary employment. After losing jobs throughout 2008 and 2009, the private sector reached an employment trough in February 2010.¹² Since then, the private sector added 1.2 million jobs in 2010.

Employment trends in the private sector, however, did not provide a complete picture. As the 2010 Census progressed, the hiring and laying off of temporary, intermittent census workers masked job changes occurring elsewhere within government. From November 2008 through November 2010,¹³ the Federal Government, excluding the impact of hiring for the 2010 Census, saw modest employment gains, with the addition of 69,000 jobs. State government employment exhibited relatively small declines over the period, with 47,000 jobs lost. Local municipalities witnessed the bulk of the employment change during this time: the local government sector saw 298,000 positions cut, with losses accelerating in 2010. Chart 3 shows employment trends in government, excluding temporary, intermittent census workers, from 6 months before the census hiring began.

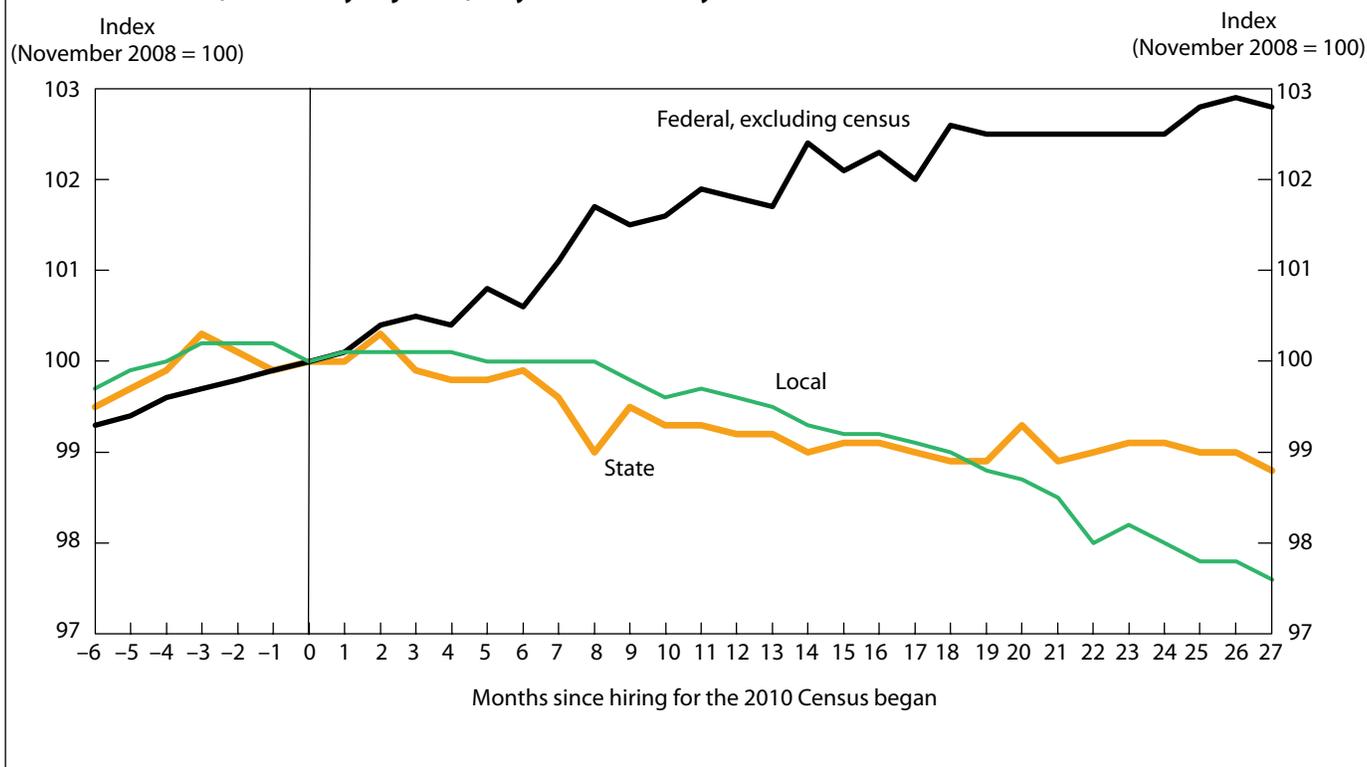
The 2000 and 2010 Censuses

The 2000 Census provides a context for an understanding of hiring and layoffs for the 2010 Census. Both censuses followed a similar pattern of hiring and subsequent laying off of large numbers of workers. The Census Bureau first brought on temporary, intermittent workers for the 2000 Census in April 1998, 2 years before the official Census Day and a full 7 months sooner than initial hiring for the 2010 operation. Employment levels remained relatively small for nearly 2 years before the 2000 Census Day, until 95,000 workers were added in March 2000.

As with the 2010 Census, hiring for the 2000 Census peaked in May 2000, at a level of 530,000 workers, just 34,000 less than peak employment in May 2010. Employment then declined rapidly for both censuses. By September of both 2000 and 2010, employment of temporary, intermittent workers had decreased by more than 95 percent from payroll levels observed during the peak month. (See table 1.)

There were differences between the two censuses. For example, employment for the 2000 Census concluded in April 2001, lasting 37 months, whereas the 2010 Census required about 30 months from start to finish.¹⁴ Also, during the 2010 count, only short forms, containing just 10 questions focusing on collecting demographic information and counting the

Chart 3. Index of Federal (excluding census), State, and local government employment during the 2010 Census, seasonally adjusted, May 2008–February 2011



population, were sent to every household. During the 2000 Census, most households received the short form; however, about 1 in 6 addresses received long forms, which requested more detailed information, such as socioeconomic and housing characteristics. For the 2010 count, these long forms were replaced by the American Community Survey, an ongoing survey that is sent out monthly rather than once every decade.¹⁵ Furthermore, workers for the 2010 Census used hand-held global-positioning system devices. During address canvassing, these devices allowed workers to immediately upload coordinates of each individual living quarters to the Census Bureau’s master address list. This approach marked a change from the 2000 Census, as well as from all previous census counts, in which paper forms and maps were used. Although the 2000 and 2010 Censuses were similar in hiring patterns—following the same general em-

ployment trend of ramping up several months in advance of the official Census Day, peaking in May of the census year, and then declining sharply by year’s end—several differences in processing may have made the 2010 count more efficient.

TEMPORARY EMPLOYMENT INCREASES in support of conducting the 2010 Census affected employment substantially. At the peak of activity, 564,000 temporary, intermittent workers were on payrolls before the 2010 Census was complete. Census hiring greatly affected Federal Government payrolls and obscured the underlying employment trends up through the aggregate of total nonfarm employment. It is important to understand the magnitude of 2010 Census hiring in order to identify underlying trends in payroll employment. □

Table 1. Decennial temporary, intermittent workers, employment level and over-the-month change,¹ not seasonally adjusted, 1990, 1998–2001, and 2008–11

[in thousands]

Year	January	February	March	April	May	June	July	August	September	October	November	December
1990												
Level.....	4	15	68	153	335	251	179	81	44	27	19	13
Change...	+4	+11	+53	+85	+182	-84	-72	-98	-37	-16	-8	-7
1998												
Level.....	-	-	-	1	3	3	2	14	12	29	41	20
Change...	-	-	-	+1	+2	0	-1	+12	-3	+17	+12	-22
1999												
Level.....	23	40	38	22	8	9	11	17	18	11	13	15
Change...	+4	+17	-2	-16	-14	+1	+2	+6	+1	-7	+1	+2
2000												
Level.....	32	59	154	181	530	305	232	146	24	11	6	1
Change...	+17	+27	+95	+28	+348	-225	-73	-86	-122	-12	-6	-4
2001												
Level.....	2	2	1	-	-	-	-	-	-	-	-	-
Change...	+1	0	-1	-	-	-	-	-	-	-	-	-
2008												
Level.....	-	-	-	-	-	-	-	-	-	-	1	3
Change...	-	-	-	-	-	-	-	-	-	-	+1	+2
2009												
Level.....	5	6	12	126	69	9	4	5	8	17	13	15
Change...	+2	+2	+5	+114	-57	-60	-5	+1	+3	+9	-4	+2
2010												
Level.....	24	39	87	154	564	339	196	82	6	1	0	0
Change...	+9	+15	+48	+66	+411	-225	-143	-114	-77	-5	-1	0
2011												
Level.....	1	3	-	-	-	-	-	-	-	-	-	-
Change..	+1	+2	-	-	-	-	-	-	-	-	-	-

¹ Sum of previous month's level and over-the-month change may not equal next month's level because of rounding.

NOTE: Dash indicates that no temporary, intermittent workers were counted on payrolls.

Notes

¹ See "One Year Out Facts/Statistics" (U.S. Census Bureau, no date), on the Internet at 2010.census.gov/news/press-kits/one-year-out/about-one-year-out/one-year-out-facts-statistics.html (visited Mar. 8, 2011). The census will include everyone living in "all 50 states, Washington, D.C., American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Puerto Rico, and the U.S. Virgin Islands." People will be counted at their usual place of residence on April 1, 2010. An accurate census count is necessary for many reasons. First and foremost, the population within a State determines the number of seats which that State holds within the U.S. House of Repre-

sentatives. But also, the information obtained from the census is used to determine how Federal funding is spent on hospitals, job training centers, schools, senior centers, public-works projects, and emergency services. (See "Why It's Important" (U.S. Census Bureau, no date), on the Internet at 2010.census.gov/2010census/about/why-important.php (visited Mar. 8, 2011).)

² The Current Employment Statistics (CES) program is a monthly survey of about 140,000 businesses and government agencies representing approximately 440,000 individual worksites. For

more information on the program's concepts and methodology, see "Technical Notes to Establishment Data Published in Employment and Earnings" (U.S. Bureau of Labor Statistics, Mar. 4, 2011), on the Internet at www.bls.gov/web/empsit.supp.toc.htm#technote (visited Jan. 11, 2011). To access CES data, see "Current Employment Statistics – CES (National)" (U.S. Bureau of Labor Statistics, no date), on the Internet at www.bls.gov/ces (visited Jan. 11, 2011). The CES data used in this article are seasonally adjusted unless otherwise noted.

³ Recessions are identified by the National Bureau of Economic Research (NBER). According to the NBER, the most recent recession began in December 2007 and ended in June 2009. The previous two recessions were, respectively, from March 2001 to November 2001 and from July 1990 to March 1991. (See "U.S. Business Cycle Expansions and Contractions" (National Bureau of Economic Research, Sept. 20, 2010), on the Internet at www.nber.org/cycles/cyclesmain.html (visited Mar. 8, 2011).)

⁴ See "Address Canvassing Facts/Statistics" (U.S. Census Bureau, Oct. 21, 2010), on the Internet at 2010.census.gov/news/press-kits/one-year-out/address-canvassing/address-canvassing-facts-statistics.html (visited Mar. 8, 2011).

⁵ See "Nation Achieves 74 Percent Final Mail Participation in 2010 Census" (U.S. Census Bureau, Oct. 21, 2010), on the Internet at 2010.census.gov/news/releases/operations/final-mail-participation.html (visited Mar. 8, 2011).

⁶ "Address Canvassing Facts/Statistics."

⁷ A peak is reached in the month in which the employment estimate changes from positive to negative. For example, during the 2010 Census, employment in the series continued to expand through its high in May before declining in June.

⁸ See "Nonresponse Follow-Up: Electronic Press Kit" (U.S. Cen-

sus Bureau, no date), on the Internet at 2010.census.gov/news/pdf/EPK_NRFU_FINAL.pdf (visited Mar. 8, 2011).

⁹ See "Non-response Follow Up Category: Quality Assurance and The 2010 Census" (U.S. Census Bureau, June 9, 2010), on the Internet at blogs.census.gov/2010census/non-response-follow-up/page/2 (visited Mar. 8, 2011).

¹⁰ See "What You Can Do: Stay Involved and Informed" (U.S. Census Bureau, no date), on the Internet at 2010.census.gov/2010census/involved/index.php (visited Mar. 8, 2011).

¹¹ The year 2011 marked the final phases of the Census Coverage Measurement Program, which entailed bringing on a relatively small number of employees for several months to review the effectiveness of the 2010 Census count. At the time of publication of this article, the program had gone on for 28 months, from November 2008 to February 2011. (See "2010 Census Frequently Asked Questions: It's in Our Hands" (U.S. Census Bureau, May 10, 2010), on the Internet at 2010.census.gov/partners/pdf/2010_TQA_Agent_FAQs_english.pdf (visited Mar. 14, 2011); and www.census.gov/coverage_measurement (visited Mar. 14, 2011).)

¹² A trough is reached in the month in which employment changes from negative to positive. For example, total private employment continued to decline until February 2010, when it reached a low point, after which it began to increase.

¹³ November 2010 was the first time that hiring for the 2010 Census reached zero since the process began.

¹⁴ See note 11.

¹⁵ See "2010 Census: It's in Our Hands" (U.S. Census Bureau, no date), on the Internet at 2010.census.gov/partners/pdf/2010_acs_dropin.pdf (visited Mar. 8, 2011).