

CTPP Workers-at-Work Compared to Other Employment Estimates

Counts of workers-at-work obtained from CTPP 2000 will differ from other employment data sources. While examining CTPP worker counts in Part 2 against other data sources, please note that:

1. Total jobs in your area will be **HIGHER** than CTPP worker counts.
2. CTPP 2000 uses NAICS industry codes, while your source may be SIC-based.
3. Multi-site businesses and some job types are not reported consistently by employers or employees.
4. Census 2000 employment estimates differ considerably from the Current Population Survey estimates for April 2000.¹

1. Total jobs in your area will be HIGHER than CTPP worker counts.

The number of workers shown in CTPP Part 2 will be approximately 91 to 93 percent of the number of jobs counted by establishment inventories.²

There are two reasons for this difference:

- a. Census 2000 counts employed persons, not jobs. For persons with more than one job, characteristics on only the principal job are collected. Nationally, about 6 percent of workers have second jobs.
- b. CTPP 2000 reports "Workers," people 16 years or older who were AT WORK during the reference week (including people in the Armed Forces). About 2 percent of workers are absent from work in any given week.

CTPP includes both full-time and part-time workers, of all classes (wage and salary, self-employed, private or public). By contrast, most other employment data sources count jobs. Some sources omit the self-employed, some count only wage and salary jobs, and some exclude most public sector jobs.

Because the decennial census questions on employment are designed to capture the workplace at which the respondent worked the most hours, workers who worked two or more jobs are captured at only one of their workplaces.³ The local effect is that CTPP data may show substantially fewer workers in those areas/zones where second jobs and part-time employment are more the norm. Examples of such areas include:

- a. Areas where retail trade and similar service industries are predominant.
- b. Colleges and university areas. Typically colleges/universities employ considerable numbers of part-time adjunct teachers, a trend that increased during the 1990s. Therefore, tracts or TAZs with colleges and universities may reflect lower worker totals than the institution's own figures.

2. CTPP 2000 uses NAICS industry codes, while your source may be SIC based.

CTPP 2000 (and all Census 2000 employment data) uses the 1997 North American Industry Classification System (NAICS). The 1990 CTPP used codes consistent with the Standard Industrial Classification (SIC) system. Many local employment data sources still use SIC codes. Differences

¹ Planners in New York (as well as some other areas) have conveyed their concern to the Census Bureau that the low counts of workers from Census 2000 are inconsistent with local knowledge, and have asked the Census Bureau to conduct further research. See the discussion under topic 4 at the end of this document.

² CTPP Status Report, July 2003 (<http://www.fhwa.dot.gov/ctpp/sr0503.htm>).

³ The data on workers in CTPP 2000 are derived from questions 21, 22, 27, 28, and 29 of the decennial "long form." The long form questionnaire is available at: <http://www.census.gov/dmd/www/pdf/d02p.pdf>.

between these classifications can cause the CTPP 2000 numbers to be substantially different from SIC-based estimates for some categories.

For example, under NAICS “eating and drinking establishments” are classified under “Arts, entertainment, recreation, accommodation and food services.” Under SIC, “eating and drinking establishments” were included under retail trade. The result is that retail trade employment in CTPP 2000 is significantly lower than SIC-based estimates. In San Francisco, retail trade workers in CTPP 2000 were about 40 percent less than local estimates based on ES-202 files using SIC.

This issue is compounded by classification differences in SIC and NAICS for auxiliary establishments of large companies. In SIC, workers are assigned their industry based on the industrial classification of the entire company. In NAICS, the industry class of the auxiliary of the company (as reported by the respondent) is used. For example, NAICS requires that workers in a construction company headquarters be classed "Management of companies and enterprises," while SIC would call them “Construction.” However, actual Census 2000 counts will show most such workers in “Construction,” because most respondents working in auxiliaries gave the overall industrial class of their employer.

The spreadsheet found at <http://www.census.gov/epcd/ec97brdg/summary.htm> shows the differences for the nation using SIC codes and NAICS codes, based on employer-reported data. There is a large employment shift from wholesale to retail between SIC and NAICS. This shift occurs across all wholesale SICs with a retail aspect. (However as noted above, these shifts may not be evident in data based on employee responses.)

A way to check the effects of the change in classification systems at the local level is to compare employment estimates by industry group using the Census Bureau’s County Business Patterns files for 1997 (SIC-based), and 1998 (NAICS-based) for your region.⁴

3. Multi-site businesses and some job types are not reported consistently by employers or employees.

Multi-site businesses and some job types are not reported consistently by employers or employees, and as a result are difficult to geocode and likely to show variability from one source to another. In business and establishment surveys, companies with more than one work location may still report all their workers at a single location, typically a corporate office building. The state unemployment insurance agencies that maintain ES-202 files vary in their efforts to distribute job counts to the company’s individual work locations.

Additionally, while most workers have only a single work location, there are industries where the majority of jobs do not follow this pattern. Examples include:

- ? Transportation, communication, and utility employees
- ? Construction workers
- ? Janitorial workers
- ? Security guards

In a survey of workers with these jobs, some people will give the address of their current assignment, some will give the headquarters’ address appearing on their mail or paycheck, and some may give no answer.

⁴ <http://www.census.gov/epcd/cbp/view/cbpview.html>

4. Census 2000 employment estimates differ considerably from the Current Population Survey estimates for April 2000.

This note is to inform users of findings and other developments in the ongoing evaluation of the Census 2000 employment estimates that may have implications for the quality and usability of the data in the CTPP. The note cites reports and other materials that may help users assess how possible errors in the Census 2000 labor force data may affect the conclusions drawn from them or from any data they underlie, such as the CTPP data.

(1) Comparisons of Census 2000 labor force estimates with estimates from the Current Population Survey (CPS) reveal that, at the national level, the Census 2000 estimate of employed people is about 7 million lower than the comparable estimate from the CPS, and the unemployed estimate is about 2.7 million higher. The estimates from the two sources for the civilian labor force are closer, but still about 4.5 million apart with the CPS being higher. Employment estimates at the state level from Census 2000 are also generally lower, and unemployment estimates generally higher, than annual-average estimates from the CPS. The existence of these gaps is in line with historical census-CPS experience, but their magnitudes are surprising large. These and other findings are discussed in the Census 2000 auxiliary evaluation study *Comparing Employment, Income, and Poverty: Census 2000 and the Current Population Survey*, available at <http://www.census.gov/hhes/www/laborfor.html>.

(2) So far, the evaluation has mostly involved national and state-level estimates. Nevertheless, the above findings raise concerns that for many smaller areas, the employment-status estimates from Census 2000, and their changes from 1990, may differ from what would be expected, given the characteristics of their populations or economies.

(3) An anomaly in the data-collection process in Census 2000 for people who lived in group quarters (such as college dorms and nursing homes) may have introduced some biases into the census labor force data, particularly at the local level. Data Note 4 for Census 2000 Summary File 3 at <http://www.census.gov/prod/cen2000/notes/errata.pdf> discusses the issue at length.

To help users gauge the impact of this potential problem on their applications, and possibly to adjust for it, the Census Bureau recently released a tabulation of employment status for the nation, states, counties, and places, for the population residing in households (available at <http://www.census.gov/population/www/cen2000/phc-t28.html>). The tabulation excludes people in group quarters, so the absolute estimates are generally lower than the published figures for the entire population, but the relative measures, such as the employment-population ratio, are probably closer to expectations than their published analogues. For example, the employment-population ratio for Bronx County, New York, in the household-only tabulation is approximately 2 percentage points higher than the ratio for the total population.

(4) The Census Bureau will shortly release a study that evaluates census labor force data via an exact-match comparison of Census 2000 records with corresponding CPS records for identical people. When released, the study will be available at <http://www.census.gov/hhes/www/laborfor.htm>.

(5) As resources allow, the Census Bureau will continue to evaluate the Census 2000 labor force estimates through a variety of methods, including modeling studies and additional benchmarking studies against the CPS, the Census 2000 Supplementary Survey, the American Community Survey, and the local areas estimates of the Bureau of Labor Statistics. The results will appear at <http://www.census.gov/hhes/www/laborfor.html>.