# Construction, Extraction, Maintenance, and Repair Occupations: 2007 and 2008 American Community Surveys 

## American Community Survey Reports

## Introduction

This report is one of a series produced to highlight results from the 2008 American Community Survey (ACS), focusing on changes between the 2007 ACS and the 2008 ACS. The report series is designed to cover a variety of economic topics, such as poverty, occupation, home values, and labor force participation. This series provides information about the changing economic characteristics of the nation and states, the District of Columbia, and Puerto Rico. The ACS also provides detailed estimates of demographic, social, economic, and housing characteristics for congressional districts, counties, places, and other localities every year. A description of the ACS is provided in the text box "What Is the American Community Survey?"

This report presents data on the construction, extraction, maintenance, and repair occupation group at the national and state levels based on the 2007 ACS and 2008 ACS. Occupational categories are based on the Standard Occupational Classification (SOC) 2000. The six major occupational categories based on this classification are management, professional, and related occupations; service occupations; sales and office occupations; farming, fishing, and forestry occupations; construction, extraction, maintenance, and repair occupations;

## What Is the American Community Survey?

The American Community Survey (ACS) is a nationwide survey designed to provide communities with reliable and timely demographic, social, economic, and housing data every year. It has an annual sample size of about 3 million addresses across the United States and Puerto Rico and includes both housing units and group quarters. The ACS is conducted in every county throughout the nation and every municipio in Puerto Rico, where it is called the Puerto Rico Community Survey.

Beginning in 2006, ACS data for 2005 were released for geographic areas with populations of 65,000 and greater. In 2008, the first set of multiyear estimates was released for data collected between January 2005 and December 2007. These 3 -year estimates were published for geographic areas with populations of 20,000 and greater. The U.S. Census Bureau is planning to release the first 5 -year estimates in late 2010 for the smallest geographic areas based on data collected between January 2005 and December 2009.

The data contained in this report are based on the ACS sample interviewed in 2007 and 2008. For information on the ACS sample design and other topics, visit <www.census.gov/acs/www>.

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and production, transportation, and material-moving occupations. ${ }^{1}$

This report features the major occupational category construction, extraction, maintenance, and repair occupations in order to highlight changes in the occupational composition of the employed workforce in each state during the 2007 to 2008 time period. ${ }^{2}$

The data contained in this report are based on ACS samples that were selected for interview in 2007 and 2008 and are estimates of the

[^0]actual figures that could have been obtained by interviewing the entire population using the same methodology. All comparisons presented in this report have taken sampling error into account and are significant at the 90 percent confidence level unless noted otherwise. Due to rounding, some details may not sum to totals. For information on sampling and estimation methods, confidentiality protection, and sampling and nonsampling errors, please see the "2008 ACS Accuracy of the Data" document located at <www.census.gov/acs/www /Downloads/ACS/accuracy2008 .pdf>.

## Occupation

In 2008, 9.3 percent of the United States' employed workforce, or 13.6 million people, worked in the construction, extraction, maintenance, and repair occupationsdown from 9.7 percent (13.8 million) the previous year. At the national level, the job losses in this occupation group were concentrated in the construction and extraction occupations. ${ }^{3}$

Decreases in these occupations occurred primarily in the South (Florida, Georgia, South Carolina, and Virginia) and the West (Arizona, California, Idaho, and Utah).

[^1]Michigan also experienced a loss of workers in these occupations. Florida and California had the largest number of job losses in these occupations with about 80,000 each. ${ }^{4}$ In contrast, the number of workers in these occupations increased in Kansas, Oklahoma, and Texas, with Texas
${ }^{4}$ California's estimate was not statistically different from Florida's estimate.
showing the largest increase (about 67,000).

In 2008, the share of the employed workforce in construction, extraction, maintenance, and repair occupations ranged from 15.5 percent in Wyoming to 3.0 percent in the District of Columbia. The map illustrates the relative change in the distribution of this occupation group in each
state over the last year. Thirteen states showed a percentage-point decline between 2007 and 2008: Arizona, Arkansas, California, Florida, Georgia, Idaho, Michigan, Minnesota, New York, Pennsylvania, South Carolina, Utah, and Virginia. Notably, Oklahoma was the only state with an increase in the proportion of workers in these occupations.

## Employment in Construction, Extraction, Maintenance, and Repair Occupations Among the Civilian Employed Population Aged 16 and Older by State and Puerto Rico: 2007 and 2008

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)

| Area | 2007 |  |  |  | 2008 |  |  |  | Change in construction, extraction, maintenance, and repair occupations (2008 less 2007) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Construction, extraction, maintenance, and repair occupations |  |  |  | Construction, extraction, maintenance, and repair occupations |  |  |  |  |  |  |  |
|  | Estimate | Margin of error ${ }^{1}$ ( $\pm$ | Per-centage of employed population | Margin of error ${ }^{1}$ ( $\pm$ ) | Estimate | Margin of error ${ }^{1}$ ( $\pm$ | Per- <br> cent- <br> age of employed population | Margin of error ${ }^{1}$ $\pm$ ) | Estimate | Margin of error ${ }^{1}$ $\pm$ ) | Per- <br> cent- <br> age <br> point change | Margin of error ${ }^{1}$ $\pm$ ) |
| United States | 13,795,740 | 57,727 | 9.7 | 0.1 | 13,612,976 | 63,859 | 9.3 | 0.1 | *-182,764 | 86,084 | *-0.4 | 0.1 |
| Alabama | 228,784 | 7,742 | 11.3 | 0.4 | 224,851 | 7,686 | 10.8 | 0.4 | -3,933 | 10,909 | -0.5 | 0.5 |
| Alaska | 39,692 | 3,175 | 12.0 | 1.0 | 43,006 | 3,663 | 12.7 | 1.0 | 3,314 | 4,848 | 0.6 | 1.4 |
| Arizona | 345,088 | 10,550 | 12.2 | 0.4 | 328,873 | 11,038 | 11.2 | 0.4 | *-16,215 | 15,269 | *-1.0 | 0.5 |
| Arkansas | 131,129 | 6,119 | 10.6 | 0.5 | 124,730 | 5,114 | 9.8 | 0.4 | -6,399 | 7,975 | *-0.8 | 0.6 |
| California | 1,554,074 | 22,605 | 9.2 | 0.1 | 1,470,289 | 21,812 | 8.6 | 0.1 | *-83,785 | 31,412 | *-0.6 | 0.2 |
| Colorado | 274,821 | 10,318 | 11.0 | 0.4 | 279,047 | 9,399 | 10.8 | 0.4 | 4,226 | 13,957 | -0.2 | 0.6 |
| Connecticut | 144,196 | 6,571 | 8.2 | 0.4 | 137,490 | 6,655 | 7.7 | 0.4 | -6,706 | 9,353 | -0.5 | 0.5 |
| Delaware | 42,881 | 3,319 | 10.3 | 0.8 | 39,860 | 3,051 | 9.5 | 0.7 | -3,021 | 4,508 | -0.8 | 1.1 |
| District of Columbia | 10,767 | 1,914 | 3.7 | 0.7 | 9,100 | 1,645 | 3.0 | 0.5 | -1,667 | 2,523 | -0.7 | 0.8 |
| Florida | 921,418 | 18,661 | 11.0 | 0.2 | 843,666 | 16,807 | 10.0 | 0.2 | *-77,752 | 25,114 | *-1.0 | 0.3 |
| Georgia | 468,734 | 12,500 | 10.6 | 0.3 | 445,086 | 12,995 | 9.8 | 0.3 | *-23,648 | 18,031 | *-0.8 | 0.4 |
| Hawaii . | 64,633 | 4,461 | 10.7 | 0.7 | 65,347 | 4,447 | 10.4 | 0.7 | 714 | 6,299 | -0.3 | 1.0 |
| Idaho | 86,225 | 4,457 | 12.1 | 0.6 | 79,772 | 4,299 | 11.0 | 0.6 | *-6,453 | 6,192 | *-1.1 | 0.9 |
| Illinois. | 508,263 | 10,146 | 8.2 | 0.2 | 509,343 | 11,850 | 8.0 | 0.2 | 1,080 | 15,600 | -0.2 | 0.3 |
| Indiana. | 290,278 | 9,066 | 9.6 | 0.3 | 284,205 | 7,612 | 9.2 | 0.2 | -6,073 | 11,838 | -0.4 | 0.4 |
| lowa. | 137,843 | 4,243 | 8.9 | 0.3 | 138,675 | 4,700 | 8.7 | 0.3 | 832 | 6,332 | -0.2 | 0.4 |
| Kansas. | 127,502 | 5,491 | 9.1 | 0.4 | 137,389 | 6,076 | 9.5 | 0.4 | *9,887 | 8,190 | 0.4 | 0.6 |
| Kentucky | 194,064 | 7,839 | 10.2 | 0.4 | 191,161 | 7,546 | 10.0 | 0.4 | -2,903 | 10,881 | -0.2 | 0.5 |
| Louisiana | 243,445 | 8,666 | 12.9 | 0.4 | 249,659 | 8,237 | 12.5 | 0.4 | 6,214 | 11,956 | -0.3 | 0.6 |
| Maine. | 67,361 | 3,169 | 10.2 | 0.5 | 66,769 | 3,929 | 10.1 | 0.6 | -592 | 5,048 | -0.1 | 0.8 |
| Maryland | 255,696 | 9,374 | 9.0 | 0.3 | 259,810 | 7,816 | 8.8 | 0.3 | 4,114 | 12,205 | -0.2 | 0.4 |
| Massachusetts. | 239,874 | 8,432 | 7.3 | 0.3 | 246,362 | 7,580 | 7.3 | 0.2 | 6,488 | 11,339 | -0.1 | 0.3 |
| Michigan | 367,852 | 8,612 | 8.1 | 0.2 | 347,258 | 8,650 | 7.6 | 0.2 | *-20,594 | 12,206 | *-0.5 | 0.3 |
| Minnesota | 228,846 | 6,445 | 8.3 | 0.2 | 225,120 | 6,164 | 8.0 | 0.2 | -3,726 | 8,918 | *-0.4 | 0.3 |
| Mississippi | 137,148 | 6,424 | 11.4 | 0.5 | 142,119 | 6,560 | 11.3 | 0.5 | 4,971 | 9,181 | -0.1 | 0.7 |
| Missouri. | 269,834 | 7,999 | 9.6 | 0.3 | 272,856 | 8,081 | 9.4 | 0.3 | 3,022 | 11,370 | -0.2 | 0.4 |
| Montana. | 56,056 | 3,013 | 11.9 | 0.6 | 55,525 | 3,459 | 11.5 | 0.7 | -531 | 4,587 | -0.5 | 1.0 |
| Nebraska | 84,683 | 4,262 | 9.2 | 0.5 | 83,009 | 3,932 | 8.7 | 0.4 | -1,674 | 5,799 | -0.5 | 0.6 |
| Nevada | 152,350 | 6,599 | 12.2 | 0.5 | 148,914 | 7,086 | 11.7 | 0.6 | -3,436 | 9,683 | -0.5 | 0.8 |
| New Hampshire | 66,503 | 3,623 | 9.5 | 0.5 | 64,064 | 3,735 | 8.9 | 0.5 | -2,439 | 5,204 | -0.6 | 0.7 |
| New Jersey | 342,257 | 9,627 | 8.1 | 0.2 | 345,531 | 10,770 | 7.9 | 0.2 | 3,274 | 14,446 | -0.2 | 0.3 |
| New Mexico | 109,862 | 5,438 | 12.4 | 0.6 | 108,160 | 5,905 | 12.0 | 0.6 | -1,702 | 8,028 | -0.4 | 0.9 |
| New York | 713,099 | 14,671 | 7.8 | 0.2 | 705,220 | 15,272 | 7.5 | 0.2 | -7,879 | 21,177 | *-0.4 | 0.2 |
| North Carolina | 456,451 | 10,842 | 10.8 | 0.3 | 464,885 | 11,882 | 10.6 | 0.3 | 8,434 | 16,085 | -0.2 | 0.4 |
| North Dakota | 36,459 | 2,406 | 10.7 | 0.7 | 35,865 | 2,720 | 10.3 | 0.8 | -594 | 3,631 | -0.4 | 1.0 |
| Ohio. | 443,454 | 10,531 | 8.2 | 0.2 | 446,679 | 10,415 | 8.0 | 0.2 | 3,225 | 14,811 | -0.1 | 0.3 |
| Oklahoma | 180,758 | 6,591 | 10.9 | 0.4 | 196,009 | 5,530 | 11.5 | 0.3 | *15,251 | 8,604 | *0.6 | 0.5 |
| Oregon. | 164,927 | 6,075 | 9.1 | 0.3 | 162,761 | 6,502 | 8.8 | 0.4 | -2,166 | 8,899 | -0.3 | 0.5 |
| Pennsylvania | 522,899 | 9,917 | 8.8 | 0.2 | 513,919 | 9,624 | 8.5 | 0.2 | -8,980 | 13,819 | *-0.3 | 0.2 |
| Rhode Island | 40,159 | 3,699 | 7.7 | 0.7 | 41,017 | 2,822 | 7.9 | 0.5 | 858 | 4,652 | 0.2 | 0.9 |
| South Carolina. | 222,987 | 9,337 | 11.2 | 0.5 | 207,507 | 7,774 | 10.3 | 0.4 | *-15,480 | 12,150 | *-0.9 | 0.6 |
| South Dakota. | 35,696 | 2,313 | 8.6 | 0.6 | 39,375 | 3,047 | 9.3 | 0.7 | 3,679 | 3,825 | 0.7 | 0.9 |
| Tennessee | 283,959 | 8,919 | 10.0 | 0.3 | 281,371 | 8,874 | 9.6 | 0.3 | -2,588 | 12,581 | -0.3 | 0.4 |
| Texas. | 1,268,894 | 20,062 | 11.6 | 0.2 | 1,335,763 | 20,358 | 11.7 | 0.2 | *66,869 | 28,582 | 0.1 | 0.3 |
| Utah. | 145,487 | 6,678 | 11.4 | 0.5 | 128,556 | 6,475 | 9.8 | 0.5 | *-16,931 | 9,302 | *-1.6 | 0.7 |
| Vermont | 33,474 | 2,120 | 10.0 | 0.6 | 33,658 | 2,310 | 9.9 | 0.7 | 184 | 3,135 | -0.1 | 0.9 |
| Virginia. | 371,385 | 9,894 | 9.8 | 0.3 | 356,253 | 10,231 | 9.2 | 0.3 | *-15,132 | 14,233 | *-0.6 | 0.4 |
| Washington | 296,519 | 8,536 | 9.5 | 0.3 | 299,408 | 9,091 | 9.3 | 0.3 | 2,889 | 12,470 | -0.2 | 0.4 |
| West Virginia | 98,828 | 4,556 | 13.0 | 0.5 | 102,222 | 4,958 | 13.0 | 0.6 | 3,394 | 6,733 | 0.0 | 0.8 |
| Wisconsin | 245,104 | 6,625 | 8.5 | 0.2 | 251,529 | 6,412 | 8.5 | 0.2 | 6,425 | 9,220 | 0.0 | 0.3 |
| Wyoming . | 43,042 | 2,670 | 15.4 | 1.0 | 43,933 | 2,961 | 15.5 | 1.0 | 891 | 3,987 | 0.1 | 1.4 |
| Puerto Rico . . . | 127,466 | 5,492 | 10.8 | 0.5 | 132,319 | 5,097 | 10.6 | 0.4 | 4,853 | 7,493 | -0.2 | 0.6 |

[^2]Sources: U.S. Census Bureau, American Community Survey, 2007 and 2008; and Puerto Rico Community Survey, 2007 and 2008


[^0]:    ${ }^{1}$ Data on all occupational categories are available through the Economic Data Profile and Comparison Profile and Detailed Table B24010 "Sex by Occupation for the Civilian Employed Population 16 Years and Over" located on American FactFinder at [http://factfinder.census.gov](http://factfinder.census.gov).
    ${ }^{2}$ The employed workforce excludes the unemployed.

[^1]:    ${ }^{3}$ The number of workers in installation, maintenance, and repair occupations was not statistically different between 2007 and 2008.

[^2]:    * Statistically different from zero at the 90 percent confidence level.
    ${ }^{1}$ Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimate, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90 percent confidence interval.

