

Personal Consumption Expenditures by State

New Statistics for 2015 and Revised Statistics for 2008–2014

By Christian Awuku-Budu, Mahsa Gholizadeh, Ledia Guci, Joshua S. Ingber, Christopher A. Lucas, and Levi J. Weible

ON OCTOBER 4, 2016, the Bureau of Economic Analysis (BEA) released current-dollar statistics on personal consumption expenditures (PCE) by state for 2015. Current-dollar PCE increased in 2015 in all states and the District of Columbia, according to the statistics. The average growth for PCE nationwide was 3.6 percent, ranging from a low of 1.5 percent in Wyoming to a high of 5.0 percent in Florida. The District of Columbia experienced the highest growth at 5.2 percent. The release also provided revised statistics for 2008–2014.

PCE by state is a comprehensive measure of household consumption at the state level and reflects the value of the goods and services purchased by, or on behalf of, households by state of residence. These statistics provide a general indication of the economic well-being of the households and information on household consumption patterns across states and over time. For example, the statistics show how households allocate their spending between goods and services or between necessities and discretionary items. PCE by state statistics can also be used to show how consumers adjust their spending in reaction to economic developments.

PCE by state statistics complement BEA's other regional statistics, including disposable personal income and GDP, to provide a greater understanding of past and current regional economic conditions.

Additional highlights for 2015 include the following:

- PCE growth in most states was slower in 2015 than in 2014 with the exception of Alaska, Kentucky, and Missouri.
- States with high PCE growth in 2014 continued to experience high growth in PCE in 2015; North Dakota was a notable exception.
- The Far West, Rocky Mountain, and Southwest regions experienced the fastest growth in PCE, while the Great Lakes and Plains experienced the slowest growth.
- Health care, housing and utilities, and food services and accommodations were among the largest contributors to growth in PCE.

- Gasoline and other energy goods expenditures was the only category that subtracted from growth in PCE in all states and the District of Columbia.

The remainder of the article describes the 2015 statistics in greater detail, followed by descriptions of the data, methodology, and the annual revision. The article concludes with a brief discussion of planned areas for future improvements.

PCE by State, 2015

Regional and state growth

Average growth in state personal consumption expenditures (PCE) decelerated to 3.6 percent in 2015 from 4.4 percent in 2014 (table 1).¹ The deceleration was driven in part by a decline in gasoline prices that continued through 2015. Alaska, Kentucky, and Missouri were the only states that had higher growth rates in 2015 than in 2014. While the average PCE growth rate declined, there was a wide variation in growth among the states, ranging from 1.5 percent in Wyoming to 5.0 percent in Florida.

Similar to 2014, growth in PCE in 2015 was concentrated in the Far West region (4.5 percent) and the Rocky Mountain region (4.4 percent) (chart 1). California, Oregon, and Washington in the Far West region and Colorado and Utah in the Rocky Mountain region had growth rates of 4.5 percent or greater. Outside of these regions, rapid growth was observed in Massachusetts (3.9 percent), Florida (5.0 percent), and the District of Columbia (5.2 percent).

The slowest PCE growth was primarily concentrated in the Plains region (2.8 percent) and Great Lakes region (3.0 percent) (chart 1). Several states in the Southeast region also experienced relatively slow growth in 2015. Iowa, North Dakota, South Dakota, Indiana, Alabama, Arkansas, Mississippi, and West Virginia all had growth rates lower than 2.5 percent. Outside of these regions, slow growth was observed in New Mexico (2.3 percent), Maine (2.0 percent), and Wyoming (1.5 percent).

1. The growth rate reflects the year-over-year change in current-dollar PCE by state.

While North Dakota was the fastest growing state in 2014 with a growth rate of 7.7 percent, it was among the slowest growing states in 2015 with a growth rate of

1.9 percent. With the development of the Bakken Oil Field in western North Dakota, every sector of the economy saw unprecedented growth for several years

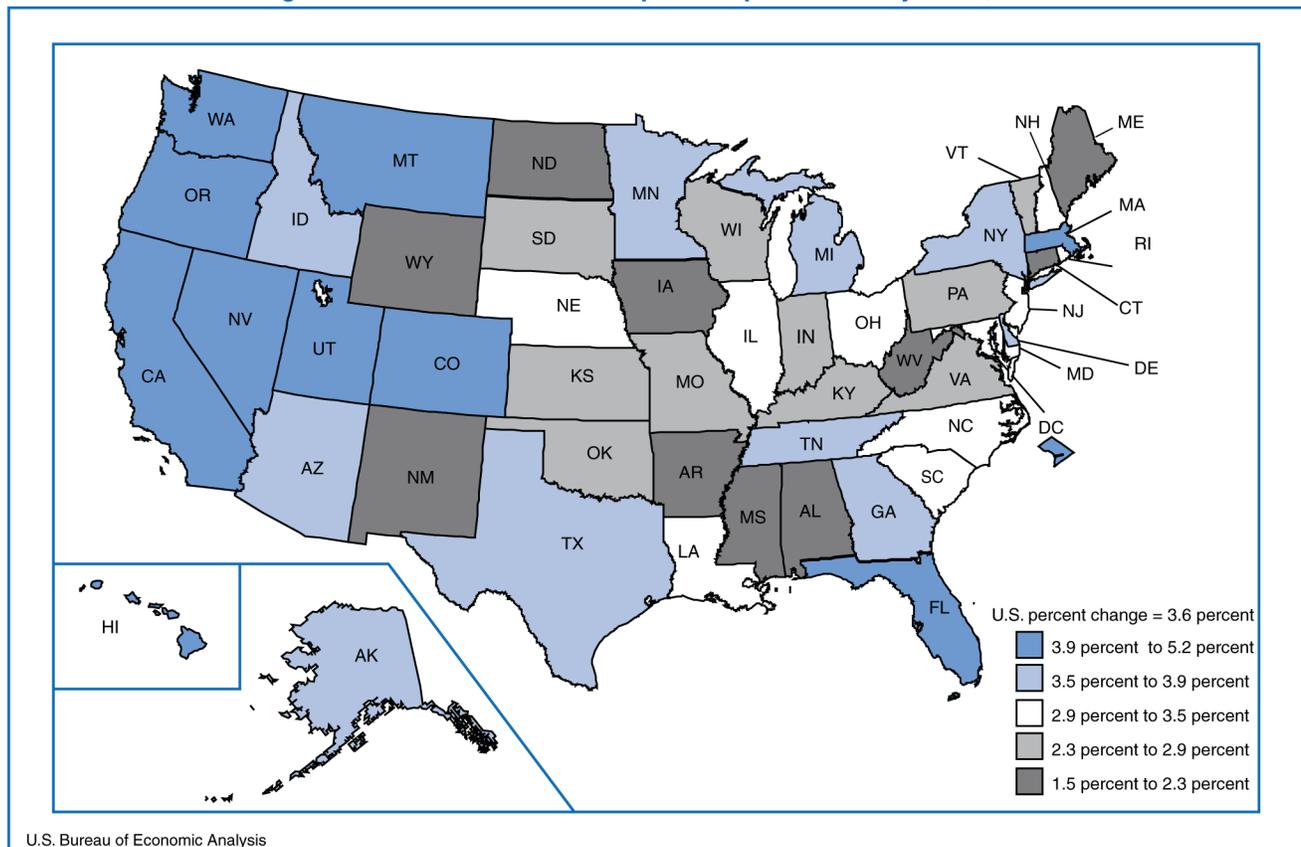
Table 1. Total Personal Consumption Expenditures by State, 2013–2015

| | Millions of dollars | | | Percent change | | | Millions of dollars | | | Percent change | |
|----------------------------------------|---------------------|-------------------|-------------------|----------------|------------|-----------------------------|---------------------|------------------|------------------|----------------|------------|
| | 2013 | 2014 | 2015 | 2014 | 2015 | | 2013 | 2014 | 2015 | 2014 | 2015 |
| United States¹ | 11,355,529 | 11,857,620 | 12,278,861 | 4.4 | 3.6 | Southeast | 2,607,771 | 2,717,993 | 2,814,155 | 4.2 | 3.5 |
| New England | 648,058 | 675,963 | 697,580 | 4.3 | 3.2 | Alabama..... | 140,835 | 144,697 | 148,022 | 2.7 | 2.3 |
| Connecticut..... | 158,498 | 165,027 | 168,787 | 4.1 | 2.3 | Arkansas..... | 84,737 | 86,948 | 88,737 | 2.6 | 2.1 |
| Maine..... | 52,504 | 54,146 | 55,207 | 3.1 | 2.0 | Florida..... | 678,158 | 714,791 | 750,615 | 5.4 | 5.0 |
| Massachusetts..... | 310,617 | 325,120 | 337,835 | 4.7 | 3.9 | Georgia..... | 314,823 | 329,065 | 340,740 | 4.5 | 3.5 |
| New Hampshire..... | 58,850 | 61,301 | 63,132 | 4.2 | 3.0 | Kentucky..... | 134,150 | 137,527 | 141,286 | 2.5 | 2.7 |
| Rhode Island..... | 40,374 | 42,026 | 43,486 | 4.1 | 3.5 | Louisiana..... | 146,164 | 152,500 | 157,031 | 4.3 | 3.0 |
| Vermont..... | 27,214 | 28,342 | 29,133 | 4.1 | 2.8 | Mississippi..... | 84,086 | 86,138 | 87,777 | 2.4 | 1.9 |
| Mideast | 2,005,456 | 2,091,862 | 2,160,595 | 4.3 | 3.3 | North Carolina..... | 301,342 | 315,735 | 326,451 | 4.8 | 3.4 |
| Delaware..... | 36,645 | 38,355 | 39,819 | 4.7 | 3.8 | South Carolina..... | 145,830 | 152,120 | 156,868 | 4.3 | 3.1 |
| District of Columbia..... | 33,432 | 35,207 | 37,032 | 5.3 | 5.2 | Tennessee..... | 202,730 | 210,891 | 218,250 | 4.0 | 3.5 |
| Maryland..... | 240,904 | 249,726 | 258,294 | 3.7 | 3.4 | Virginia..... | 316,384 | 327,567 | 336,993 | 3.5 | 2.9 |
| New Jersey..... | 395,886 | 410,536 | 423,383 | 3.7 | 3.1 | West Virginia..... | 58,533 | 60,015 | 61,385 | 2.5 | 2.3 |
| New York..... | 820,647 | 865,135 | 896,329 | 5.4 | 3.6 | Southwest | 1,286,266 | 1,358,759 | 1,407,445 | 5.6 | 3.6 |
| Pennsylvania..... | 477,942 | 492,903 | 505,738 | 3.1 | 2.6 | Arizona..... | 214,601 | 224,772 | 232,614 | 4.7 | 3.5 |
| Great Lakes | 1,642,423 | 1,701,602 | 1,752,572 | 3.6 | 3.0 | New Mexico..... | 67,889 | 70,380 | 72,022 | 3.7 | 2.3 |
| Illinois..... | 479,416 | 497,918 | 512,654 | 3.9 | 3.0 | Oklahoma..... | 118,850 | 123,823 | 126,736 | 4.2 | 2.4 |
| Indiana..... | 214,221 | 220,360 | 225,744 | 2.9 | 2.4 | Texas..... | 884,927 | 939,783 | 976,073 | 6.2 | 3.9 |
| Michigan..... | 347,817 | 362,062 | 374,871 | 4.1 | 3.5 | Rocky Mountain | 398,318 | 420,858 | 439,470 | 5.7 | 4.4 |
| Ohio..... | 397,768 | 411,526 | 423,481 | 3.5 | 2.9 | Colorado..... | 198,955 | 211,361 | 221,708 | 6.2 | 4.9 |
| Wisconsin..... | 203,201 | 209,736 | 215,823 | 3.2 | 2.9 | Idaho..... | 49,074 | 51,465 | 53,340 | 4.9 | 3.6 |
| Plains | 754,775 | 781,826 | 803,631 | 3.6 | 2.8 | Montana..... | 37,595 | 39,476 | 41,034 | 5.0 | 3.9 |
| Iowa..... | 105,501 | 109,080 | 111,289 | 3.4 | 2.0 | Utah..... | 90,714 | 95,566 | 100,044 | 5.3 | 4.7 |
| Kansas..... | 95,250 | 98,676 | 101,455 | 3.6 | 2.8 | Wyoming..... | 21,979 | 22,990 | 23,345 | 4.6 | 1.5 |
| Minnesota..... | 214,193 | 222,993 | 230,798 | 4.1 | 3.5 | Far West | 2,012,462 | 2,108,757 | 2,203,412 | 4.8 | 4.5 |
| Missouri..... | 209,664 | 214,591 | 220,159 | 2.3 | 2.6 | Alaska..... | 33,533 | 34,666 | 35,941 | 3.4 | 3.7 |
| Nebraska..... | 66,445 | 68,985 | 70,996 | 3.8 | 2.9 | California..... | 1,421,045 | 1,487,932 | 1,554,880 | 4.7 | 4.5 |
| North Dakota..... | 33,003 | 35,551 | 36,236 | 7.7 | 1.9 | Hawaii..... | 56,076 | 58,877 | 61,250 | 5.0 | 4.0 |
| South Dakota..... | 30,720 | 31,951 | 32,699 | 4.0 | 2.3 | Nevada..... | 92,817 | 97,244 | 101,052 | 4.8 | 3.9 |
| | | | | | | Oregon..... | 139,084 | 146,284 | 153,488 | 5.2 | 4.9 |
| | | | | | | Washington..... | 269,907 | 283,755 | 296,800 | 5.1 | 4.6 |

1. The U.S. values reported differ from the PCE values in the national accounts because PCE by state excludes net expenditures abroad by U.S. residents, which consist of government and private employees' expenditures abroad less personal remittances in kind to nonresidents.

Note. Percent change from preceding period was calculated from unrounded data. Expenditures may not sum to higher-level aggregates because of rounding.

Chart 1. Percent Change in Total Personal Consumption Expenditures by State, 2014–2015



through 2014. However, evidence of an economic slowdown emerged in 2015 as the mining sector faced sluggish oil prices abroad that depressed demand for the relatively expensive Bakken oil. That helped stall drilling and infrastructure development. The slowdown in North Dakota was also evident in other BEA regional data. In 2015, real GDP in North Dakota declined 2.1 percent, and personal income declined 1.2 percent.²

A limitation of current-dollar PCE statistics is that they reflect a joint price and demand effect. A decline in gasoline expenditures, for example, can be the result of both a decline in gasoline prices (price effect) as well as a partly offsetting increase in demand for gasoline as a result of the lower gasoline prices (a demand effect). In the absence of price-adjusted PCE statistics, a comparison of the current-dollar statistics with current-dollar personal income growth can provide useful insights. In 2015, California, Washington, Nevada, Hawaii, Oregon, Utah, Florida, Massachusetts, and the District of Columbia were among the states with rapid growth in both personal income and PCE. The fact that current-dollar personal income growth and current-dollar PCE were both high suggests that the growth in PCE might reflect more than price effects. In contrast, North Dakota, Wyoming, Mississippi, and Arkansas had the slowest growth in both personal income and PCE.

Category contributions to PCE growth

The fastest growing categories of PCE across states were food services and accommodations as well as health care (table 2). These categories along with housing and utilities were the three largest contributors to growth in total PCE by state. Each of these categories contributed 0.5 percentage point or more to growth in total PCE and collectively accounted for more than half of the overall growth (table 3). Expenditures on gasoline and other energy goods, on the other hand, declined and subtracted from growth in PCE in all states and the District of Columbia.

Health care as well as housing and utilities continued to account for the largest shares of spending in 2015. These categories were the leading contributors to growth in PCE in most states. Health care expenditures grew 6.0 percent and contributed, on average, 1.0 percentage point to growth in total PCE by state. Housing and utilities expenditures grew 4.2 percent and contributed, on average, 0.8 percentage point to growth in total PCE by state.

Health care as well as housing and utilities each contributed 1 percentage point or more to PCE growth in the Far West region and Rocky Mountain region. The contributions by these two categories were 1 percentage point or more in California, Hawaii, Oregon, Washington, and Colorado. Outside the Far West region and Rocky Mountain region, these categories were strong contributors to growth in the District of Columbia (1.3 percentage points for both health care and housing and utilities) and Florida (1.3 percentage points for health care and 1.1 percentage points for housing and utilities). North Dakota was also among these states despite its low overall growth.

Food services and accommodations was the fastest growing category in 2015; expenditures grew 7.3 percent and contributed, on average, 0.5 percentage point to growth in PCE by state. This category contributed 0.5 percentage point or more to the growth in PCE in the Far West, Rocky Mountain, Southwest, and Southeast regions and nearly half the states.

The rapid growth in expenditures on food services and accommodation contrasts with the sluggish

Data Availability

The statistics on [personal consumption expenditures](#) described in this article are available on the BEA Web site. Data are available for 1997–2015 for each state and the District of Columbia and for 16 expenditure categories. Per capita expenditures are also available.

Any inquiries about the data can be addressed to pcebystate@bea.gov.

Acknowledgments

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2. Regional [personal income](#) and [GDP data](#) are available on BEA's Web site (www.bea.gov).

growth in expenditures on food and beverages purchased for off-premises consumption (grocery items). The latter is a major component of total PCE by state, but it was the slowest growing category (1.0 percent) in 2015 and contributed little to growth in PCE by state, just 0.1 percentage point or less in all regions and all states except Vermont (0.2 percentage point) and the District of Columbia (0.2 percentage point).

Spending on gasoline and other energy goods declined 23.9 percent in 2015 and subtracted, on average,

0.8 percentage point from growth in total PCE by state. Expenditures declined in all states, ranging from 27.4 percent in Hawaii to 17.5 percent in New Mexico.

Per capita PCE by state

Per capita PCE by state measures average PCE spending per person in a state, enabling spending comparisons across states (chart 2 and table 4, page 6). In 2015, the average per capita PCE by state was \$38,196, ranging from a high of \$49,717 in Massachusetts to a low of

Table 2. Percent Change from Preceding Period of Personal Consumption Expenditures by State, 2014–2015

[Percent]

| | Total PCE by state | Durable goods | | | | Nondurable goods | | | | Services | | | | | | | |
|-----------------------------------------|--------------------|--------------------------|---------------------------------------------|---------------------------------|---------------------|---------------------------------|-----------------------|---------------------------------|------------------------|-----------------------|-------------|-------------------------|---------------------|----------------------------------|----------------------------------|----------------|------------------------------------------|
| | | Motor vehicles and parts | Furnishings and durable household equipment | Recreational goods and vehicles | Other durable goods | Off-premises food and beverages | Clothing and footwear | Gasoline and other energy goods | Other nondurable goods | Housing and utilities | Health care | Transportation services | Recreation services | Food services and accommodations | Financial services and insurance | Other services | Final consumption expenditures of NPISHs |
| United States ¹ | 3.6 | 5.0 | 4.5 | 5.0 | 3.7 | 1.0 | 2.3 | -23.9 | 5.9 | 4.2 | 6.0 | 4.0 | 3.3 | 7.3 | 4.0 | 3.7 | 4.6 |
| New England | 3.2 | 4.7 | 3.4 | 4.7 | 3.6 | 1.2 | 1.0 | -24.0 | 5.3 | 3.6 | 4.0 | 4.0 | 3.8 | 6.7 | 3.5 | 5.2 | 5.7 |
| Connecticut..... | 2.3 | 4.4 | 3.1 | 3.4 | 2.7 | 1.3 | 0.1 | -24.2 | 5.4 | 3.5 | 1.7 | 2.5 | 3.3 | 5.5 | 2.7 | 1.4 | 7.6 |
| Maine..... | 2.0 | 5.1 | 1.9 | 2.6 | 4.0 | 1.3 | 0.1 | -24.2 | 4.1 | 1.3 | 4.9 | 6.2 | 2.4 | 6.2 | 3.1 | 4.7 | 3.8 |
| Massachusetts..... | 3.9 | 4.8 | 3.8 | 5.7 | 4.3 | 1.2 | 1.3 | -23.4 | 5.7 | 3.9 | 4.7 | 4.5 | 4.6 | 7.2 | 4.0 | 6.8 | 5.6 |
| New Hampshire..... | 3.0 | 4.6 | 4.7 | 4.9 | 2.3 | 0.5 | 1.3 | -24.2 | 4.3 | 3.4 | 4.8 | 5.2 | 3.4 | 6.9 | 4.0 | 6.5 | 5.0 |
| Rhode Island..... | 3.5 | 4.6 | 3.5 | 3.0 | 3.4 | 0.9 | 2.5 | -23.7 | 5.2 | 4.3 | 3.9 | 4.0 | 2.1 | 6.9 | 3.4 | 6.2 | 5.1 |
| Vermont..... | 2.8 | 4.3 | 1.1 | 5.3 | 3.6 | 1.8 | 1.8 | -26.0 | 4.5 | 3.7 | 4.8 | 3.8 | 3.7 | 7.5 | 2.8 | 6.3 | 4.2 |
| Mideast | 3.3 | 4.8 | 2.6 | 3.0 | 3.7 | 1.0 | 1.8 | -23.3 | 6.3 | 3.9 | 4.5 | 2.9 | 2.9 | 5.5 | 3.4 | 4.8 | 3.7 |
| Delaware..... | 3.8 | 4.6 | 5.2 | 2.7 | 4.0 | 0.8 | 2.2 | -21.2 | 6.1 | 5.2 | 5.7 | 2.8 | 2.2 | 8.0 | 3.8 | 4.2 | 4.7 |
| District of Columbia..... | 5.2 | 5.3 | 4.3 | 3.7 | 4.8 | 2.3 | 1.9 | -24.3 | 7.8 | 6.8 | 6.6 | 2.8 | 1.4 | 8.4 | 3.8 | 8.0 | -0.4 |
| Maryland..... | 3.4 | 5.3 | 3.2 | 4.7 | 0.5 | 0.9 | 1.8 | -24.3 | 6.3 | 3.9 | 6.6 | 3.7 | 1.1 | 6.8 | 3.8 | 3.2 | 2.4 |
| New Jersey..... | 3.1 | 4.8 | 2.3 | 3.9 | 4.0 | 1.1 | 2.1 | -23.2 | 8.4 | 4.0 | 4.9 | 1.2 | 1.1 | 3.5 | 3.6 | 3.6 | 2.7 |
| New York..... | 3.6 | 4.3 | 2.8 | 2.8 | 4.8 | 1.4 | 2.1 | -23.3 | 6.1 | 3.9 | 3.6 | 3.6 | 4.5 | 5.8 | 3.4 | 6.1 | 4.4 |
| Pennsylvania..... | 2.6 | 5.0 | 2.2 | 1.7 | 2.9 | 0.3 | 0.7 | -22.9 | 5.0 | 3.3 | 4.5 | 2.7 | 2.8 | 5.2 | 3.0 | 4.0 | 4.4 |
| Great Lakes | 3.0 | 5.3 | 5.3 | 4.4 | 3.9 | 0.6 | 1.1 | -23.1 | 5.9 | 2.6 | 5.2 | 4.5 | 2.2 | 7.6 | 3.3 | 2.8 | 5.0 |
| Illinois..... | 3.0 | 5.9 | 5.8 | 4.9 | 4.8 | 0.7 | 1.7 | -25.0 | 5.7 | 2.0 | 4.7 | 4.3 | 2.6 | 8.5 | 3.2 | 2.4 | 2.8 |
| Indiana..... | 2.4 | 5.0 | 5.2 | 4.1 | 3.1 | 0.3 | 0.9 | -24.9 | 2.9 | 2.7 | 6.1 | 2.9 | 1.0 | 7.3 | 3.7 | 2.7 | 5.0 |
| Michigan..... | 3.5 | 5.1 | 5.1 | 3.7 | 4.8 | 0.9 | 0.8 | -22.6 | 7.7 | 2.8 | 5.5 | 6.6 | 3.0 | 7.8 | 4.0 | 3.1 | 5.7 |
| Ohio..... | 2.9 | 5.0 | 4.4 | 4.5 | 3.6 | 0.4 | 0.9 | -22.4 | 5.7 | 3.0 | 5.0 | 4.1 | 1.7 | 6.6 | 2.9 | 2.9 | 6.8 |
| Wisconsin..... | 2.9 | 4.8 | 6.4 | 4.3 | 1.3 | 0.8 | 0.9 | -20.2 | 5.8 | 2.5 | 5.3 | 3.1 | 2.5 | 7.7 | 3.1 | 3.2 | 4.6 |
| Plains | 2.8 | 4.9 | 3.6 | 3.1 | 3.3 | 0.8 | 1.9 | -22.8 | 5.3 | 3.5 | 6.0 | 2.9 | 3.4 | 7.4 | 2.0 | 3.8 | 5.3 |
| Iowa..... | 2.0 | 5.1 | 0.7 | 2.8 | 2.7 | 1.2 | 1.2 | -20.2 | 3.6 | 2.5 | 5.5 | 1.9 | 2.7 | 5.6 | 0.0 | 4.6 | 3.8 |
| Kansas..... | 2.8 | 4.4 | 3.5 | 3.6 | 4.3 | 0.7 | 1.1 | -22.0 | 6.9 | 2.5 | 5.2 | 2.0 | 3.3 | 6.6 | 2.1 | 4.6 | 4.0 |
| Minnesota..... | 3.5 | 5.0 | 5.2 | 2.1 | 4.5 | 0.5 | 2.1 | -22.8 | 6.7 | 2.9 | 6.5 | 3.5 | 3.5 | 8.6 | 3.2 | 5.4 | 6.0 |
| Missouri..... | 2.6 | 5.1 | 2.8 | 3.3 | 0.8 | 0.2 | 2.1 | -23.5 | 4.6 | 4.2 | 5.8 | 3.0 | 3.5 | 8.1 | 2.7 | 1.2 | 5.8 |
| Nebraska..... | 2.9 | 5.3 | 4.8 | 4.8 | 3.2 | 1.6 | 1.9 | -23.3 | 5.3 | 3.8 | 6.8 | 3.1 | 3.5 | 7.2 | 1.2 | 4.7 | 5.7 |
| North Dakota..... | 1.9 | 4.0 | 3.6 | 3.7 | 4.2 | 2.2 | 2.1 | -25.4 | 4.1 | 8.6 | 8.2 | 1.9 | 3.8 | 1.7 | 0.0 | 2.5 | 5.9 |
| South Dakota..... | 2.3 | 4.8 | 5.0 | 5.9 | 3.9 | 1.3 | 2.7 | -22.7 | 3.8 | 3.2 | 4.5 | 3.9 | 3.7 | 8.5 | 0.0 | 4.5 | 4.4 |
| Southeast | 3.5 | 5.0 | 4.3 | 5.7 | 3.6 | 1.0 | 2.4 | -25.1 | 5.3 | 4.7 | 6.5 | 5.0 | 3.2 | 6.8 | 4.4 | 3.5 | 4.1 |
| Alabama..... | 2.3 | 4.7 | 3.7 | 3.4 | 1.3 | 0.3 | 0.7 | -24.9 | 4.8 | 3.3 | 5.2 | 2.7 | 0.8 | 6.6 | 4.0 | 1.3 | 5.2 |
| Arkansas..... | 2.1 | 4.5 | 4.0 | 2.3 | 1.4 | 0.9 | 2.1 | -24.9 | 4.4 | 3.0 | 5.3 | 1.3 | 2.1 | 7.5 | 3.8 | 0.3 | 7.3 |
| Florida..... | 5.0 | 5.1 | 6.3 | 7.3 | 3.9 | 1.2 | 4.3 | -24.1 | 7.3 | 5.9 | 8.0 | 7.4 | 4.5 | 8.2 | 4.8 | 3.7 | -9.5 |
| Georgia..... | 3.5 | 5.5 | 4.9 | 6.7 | 6.0 | 1.2 | 2.6 | -24.3 | 5.8 | 4.7 | 7.7 | 5.7 | 1.7 | 3.5 | 5.0 | 3.1 | 3.8 |
| Kentucky..... | 2.7 | 5.2 | 2.6 | 7.1 | 4.7 | 0.3 | 0.9 | -25.7 | 2.7 | 3.5 | 6.7 | 3.5 | 1.0 | 6.9 | 4.4 | 3.3 | 6.1 |
| Louisiana..... | 3.0 | 4.6 | 1.5 | 4.4 | 4.4 | 0.8 | 1.4 | -26.0 | 4.8 | 3.8 | 6.8 | 1.1 | 4.2 | 6.6 | 3.4 | 3.9 | 4.1 |
| Mississippi..... | 1.9 | 4.7 | 0.5 | 2.4 | 3.0 | 0.3 | 1.3 | -25.6 | 5.4 | 2.9 | 3.7 | 1.5 | 0.6 | 5.2 | 2.9 | 4.3 | 8.6 |
| North Carolina..... | 3.4 | 5.3 | 3.9 | 7.0 | 3.3 | 1.1 | 2.8 | -25.6 | 5.5 | 5.0 | 4.3 | 6.2 | 3.0 | 7.2 | 4.6 | 5.3 | -2.4 |
| South Carolina..... | 3.1 | 3.6 | 3.6 | 6.1 | 2.3 | 1.2 | 1.9 | -25.5 | 3.7 | 4.0 | 7.0 | 3.3 | 4.8 | 8.0 | 4.9 | 4.5 | 5.8 |
| Tennessee..... | 3.5 | 5.8 | 5.4 | 3.0 | 2.2 | 0.9 | 1.3 | -25.1 | 3.8 | 4.0 | 7.0 | 5.5 | 7.1 | 7.3 | 4.6 | 3.2 | 5.6 |
| Virginia..... | 2.9 | 4.9 | 1.4 | 3.8 | 3.5 | 0.8 | 1.1 | -26.4 | 4.5 | 4.5 | 5.2 | 3.8 | 1.5 | 6.8 | 4.0 | 2.9 | 2.2 |
| West Virginia..... | 2.3 | 4.5 | 2.5 | 4.4 | 2.7 | 0.4 | 1.6 | -22.4 | 4.2 | 3.1 | 5.0 | 0.6 | 0.6 | 2.1 | 2.2 | 4.8 | 5.9 |
| Southwest | 3.6 | 5.0 | 5.2 | 4.8 | 3.6 | 1.5 | 3.0 | -23.9 | 5.0 | 5.4 | 6.8 | 2.7 | 3.1 | 7.3 | 3.9 | 3.4 | 5.3 |
| Arizona..... | 3.5 | 5.0 | 2.7 | 1.8 | 2.6 | 1.4 | 2.4 | -22.9 | 5.4 | 5.1 | 5.2 | 2.6 | 3.7 | 7.8 | 4.4 | 2.9 | 7.9 |
| New Mexico..... | 2.3 | 5.0 | 1.0 | 3.9 | 3.0 | 0.9 | 0.3 | -17.5 | 3.5 | 3.1 | 4.1 | 0.7 | 2.2 | 4.9 | 3.7 | 4.7 | 3.9 |
| Oklahoma..... | 2.4 | 4.6 | 2.7 | 0.6 | 3.0 | 1.5 | 1.1 | -23.2 | 4.9 | 4.4 | 5.6 | 2.2 | 0.6 | 5.9 | 2.2 | 3.2 | 5.1 |
| Texas..... | 3.9 | 5.0 | 6.4 | 6.1 | 3.9 | 1.6 | 3.5 | -24.8 | 5.0 | 5.7 | 7.6 | 2.9 | 3.4 | 7.6 | 4.1 | 3.5 | 4.9 |
| Rocky Mountain | 4.4 | 5.2 | 6.1 | 5.9 | 5.5 | 1.4 | 3.0 | -23.4 | 7.8 | 5.3 | 7.3 | 5.1 | 4.9 | 8.8 | 4.4 | 4.2 | 1.8 |
| Colorado..... | 4.9 | 5.3 | 6.2 | 5.2 | 5.0 | 1.4 | 2.9 | -24.0 | 7.5 | 5.9 | 8.9 | 5.6 | 4.5 | 9.1 | 4.7 | 3.3 | -1.3 |
| Idaho..... | 3.6 | 5.0 | 6.4 | 6.5 | 5.1 | 1.2 | 2.8 | -23.8 | 8.5 | 4.3 | 6.1 | 4.9 | 3.6 | 8.2 | 3.1 | 3.9 | 6.9 |
| Montana..... | 3.9 | 4.6 | 5.8 | 6.5 | 6.6 | 1.6 | 1.9 | -22.3 | 6.9 | 4.8 | 7.0 | 4.8 | 4.8 | 8.3 | 4.1 | 4.7 | 4.6 |
| Utah..... | 4.7 | 5.7 | 6.1 | 7.2 | 7.2 | 1.6 | 3.8 | -22.8 | 8.7 | 4.4 | 5.3 | 4.3 | 6.7 | 9.6 | 5.2 | 7.1 | 6.1 |
| Wyoming..... | 1.5 | 4.0 | 4.3 | 2.4 | 0.7 | 1.0 | 1.5 | -23.9 | 5.1 | 5.7 | 4.3 | 2.9 | 3.3 | 5.0 | 1.6 | 2.2 | 2.9 |
| Far West | 4.5 | 4.9 | 5.6 | 6.5 | 3.8 | 1.1 | 3.7 | -23.9 | 7.0 | 4.7 | 7.3 | 4.9 | 4.1 | 9.2 | 5.5 | 2.7 | 4.8 |
| Alaska..... | 3.7 | 4.4 | 0.5 | 3.2 | 5.5 | 0.3 | 1.8 | -25.5 | 7.6 | 5.5 | 7.7 | 1.7 | 4.0 | 6.3 | 3.7 | 1.1 | 2.8 |
| California..... | 4.5 | 4.9 | 5.8 | 6.9 | 4.4 | 1.1 | 4.0 | -23.9 | 7.4 | 4.6 | 7.2 | 5.2 | 3.8 | 9.6 | 5.8 | 1.4 | 5.5 |
| Hawaii..... | 4.0 | 4.5 | 3.8 | 4.7 | 1.7 | 1.0 | 2.6 | -27.4 | 4.5 | 4.7 | 7.3 | 4.8 | 3.7 | 6.3 | 4.4 | 5.4 | 0.9 |
| Nevada..... | 3.9 | 4.9 | 4.7 | 4.0 | 3.3 | 1.3 | 0.9 | -23.8 | 7.2 | 4.4 | 7.6 | 5.1 | 5.0 | 4.5 | 5.2 | 3.8 | 3.7 |
| Oregon..... | 4.9 | 5.0 | 6.1 | 6.4 | 3.0 | 1.5 | 3.4 | -23.0 | 6.6 | 4.9 | 9.2 | 4.5 | 4.8 | 9.9 | 5.4 | 4.0 | 4.7 |
| Washington..... | 4.6 | 4.8 | 5.4 | 5.9 | 1.2 | 1.0 | 3.2 | -23.8 | 6.1 | 5.1 | 6.7 | 4.0 | 4.6 | 8.0 | 4.4 | 8.0 | 3.7 |

1. The U.S. values reported may differ from the PCE values in the national accounts because PCE by state excludes net expenditures abroad by U.S. residents, which consist of government and private employees' expenditures abroad

less personal remittances in kind to nonresidents.

NOTE: Percent change from preceding period was calculated from unrounded data.

\$29,330 in Mississippi. The District of Columbia as a metropolitan area had the highest per capita spending of \$55,078.

More pronounced differences in spending across states were observed in detailed spending categories. Average per capita PCE on housing and utilities was \$6,947, ranging from a high of \$9,482 in New Jersey to a low of \$4,573 in West Virginia. States with high per capita spending on housing and utilities tend to correspond to those with high price levels for housing ser-

vices as measured by BEA's regional price parities.

The average per capita PCE on health care was \$6,436, ranging from a high of \$9,645 in Alaska to a low of \$4,796 in Utah. In 2015, per capita health care expenditures exceeded per capita expenditures on housing and utilities in more than half the states. States where health care expenditures accounted for a larger share of spending than expenditures on housing and utilities were located primarily in the Great Lakes, Plains, and Southeast regions.

Table 3. Category Contributions to Percent Change in Total Personal Consumption Expenditures by State, 2015

[Percentage points]

| | Total PCE by state | Durable goods | | | | Nondurable goods | | | | | Services | | | | | | |
|-----------------------------------------|--------------------|--------------------------|---------------------------------------------|---------------------------------|---------------------|---------------------------------|-----------------------|---------------------------------|------------------------|-----------------------|-------------|-------------------------|---------------------|----------------------------------|----------------------------------|----------------|------------------------------------------|
| | | Motor vehicles and parts | Furnishings and durable household equipment | Recreational goods and vehicles | Other durable goods | Off-premises food and beverages | Clothing and footwear | Gasoline and other energy goods | Other nondurable goods | Housing and utilities | Health care | Transportation services | Recreation services | Food services and accommodations | Financial services and insurance | Other services | Final consumption expenditures of NPISHs |
| United States ¹ | 3.6 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | -0.8 | 0.5 | 0.8 | 1.0 | 0.1 | 0.1 | 0.5 | 0.3 | 0.3 | 0.1 |
| New England | 3.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | -0.7 | 0.4 | 0.7 | 0.7 | 0.1 | 0.1 | 0.4 | 0.3 | 0.5 | 0.2 |
| Connecticut..... | 2.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | -0.7 | 0.4 | 0.7 | 0.3 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 |
| Maine..... | 2.0 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | -1.3 | 0.3 | 0.2 | 0.9 | 0.1 | 0.1 | 0.4 | 0.2 | 0.4 | 0.2 |
| Massachusetts..... | 3.9 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.0 | -0.6 | 0.4 | 0.7 | 0.9 | 0.1 | 0.2 | 0.4 | 0.3 | 0.7 | 0.2 |
| New Hampshire..... | 3.0 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -1.0 | 0.4 | 0.6 | 0.8 | 0.2 | 0.1 | 0.4 | 0.3 | 0.6 | 0.2 |
| Rhode Island..... | 3.5 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -0.6 | 0.4 | 0.8 | 0.7 | 0.1 | 0.1 | 0.5 | 0.3 | 0.6 | 0.2 |
| Vermont..... | 2.8 | 0.2 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | -1.2 | 0.3 | 0.6 | 0.8 | 0.1 | 0.1 | 0.4 | 0.2 | 0.7 | 0.2 |
| Mideast | 3.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -0.6 | 0.5 | 0.7 | 0.7 | 0.1 | 0.1 | 0.3 | 0.3 | 0.5 | 0.1 |
| Delaware..... | 3.8 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -0.6 | 0.3 | 0.9 | 1.1 | 0.1 | 0.1 | 0.5 | 0.3 | 0.5 | 0.1 |
| District of Columbia..... | 5.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | -0.4 | 0.4 | 1.3 | 1.3 | 0.1 | 0.0 | 0.5 | 0.3 | 1.1 | 0.0 |
| Maryland..... | 3.4 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | -0.6 | 0.5 | 0.8 | 1.0 | 0.1 | 0.0 | 0.4 | 0.3 | 0.3 | 0.1 |
| New Jersey..... | 3.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -0.6 | 0.6 | 0.8 | 0.7 | 0.0 | 0.0 | 0.2 | 0.3 | 0.4 | 0.1 |
| New York..... | 3.6 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -0.5 | 0.5 | 0.7 | 0.6 | 0.2 | 0.2 | 0.4 | 0.2 | 0.6 | 0.1 |
| Pennsylvania..... | 2.6 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -0.8 | 0.4 | 0.5 | 0.8 | 0.1 | 0.1 | 0.3 | 0.2 | 0.4 | 0.2 |
| Great Lakes | 3.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | -0.8 | 0.5 | 0.4 | 0.9 | 0.1 | 0.1 | 0.4 | 0.2 | 0.2 | 0.2 |
| Illinois..... | 3.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | -0.7 | 0.5 | 0.4 | 0.8 | 0.1 | 0.1 | 0.5 | 0.2 | 0.2 | 0.1 |
| Indiana..... | 2.4 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -1.1 | 0.3 | 0.4 | 1.1 | 0.1 | 0.0 | 0.4 | 0.3 | 0.2 | 0.2 |
| Michigan..... | 3.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | -0.8 | 0.9 | 0.5 | 0.9 | 0.3 | 0.1 | 0.4 | 0.3 | 0.2 | 0.3 |
| Ohio..... | 2.9 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | -0.8 | 0.5 | 0.5 | 1.0 | 0.1 | 0.1 | 0.4 | 0.2 | 0.2 | 0.3 |
| Wisconsin..... | 2.9 | 0.2 | 0.2 | 0.2 | 0.0 | 0.1 | 0.0 | -0.8 | 0.5 | 0.4 | 1.0 | 0.1 | 0.1 | 0.4 | 0.2 | 0.3 | 0.2 |
| Plains | 2.8 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -1.1 | 0.4 | 0.6 | 1.1 | 0.1 | 0.1 | 0.4 | 0.1 | 0.3 | 0.2 |
| Iowa..... | 2.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | -1.1 | 0.3 | 0.4 | 0.9 | 0.0 | 0.1 | 0.3 | 0.0 | 0.4 | 0.1 |
| Kansas..... | 2.8 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | -0.9 | 0.6 | 0.4 | 0.9 | 0.1 | 0.1 | 0.4 | 0.2 | 0.4 | 0.1 |
| Minnesota..... | 3.5 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | -0.9 | 0.5 | 0.5 | 1.1 | 0.1 | 0.2 | 0.5 | 0.2 | 0.5 | 0.2 |
| Missouri..... | 2.6 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | -1.1 | 0.4 | 0.7 | 1.1 | 0.1 | 0.2 | 0.5 | 0.2 | 0.1 | 0.2 |
| Nebraska..... | 2.9 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -1.3 | 0.5 | 0.6 | 1.2 | 0.1 | 0.1 | 0.4 | 0.1 | 0.4 | 0.2 |
| North Dakota..... | 1.9 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -2.2 | 0.3 | 1.1 | 1.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.2 |
| South Dakota..... | 2.3 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | -1.3 | 0.3 | 0.5 | 0.9 | 0.1 | 0.1 | 0.5 | 0.0 | 0.3 | 0.1 |
| Southeast | 3.5 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | -0.9 | 0.5 | 0.8 | 1.1 | 0.1 | 0.1 | 0.5 | 0.3 | 0.3 | 0.0 |
| Alabama..... | 2.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -1.1 | 0.5 | 0.5 | 0.9 | 0.1 | 0.0 | 0.4 | 0.3 | 0.1 | 0.1 |
| Arkansas..... | 2.1 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | -1.3 | 0.4 | 0.5 | 1.0 | 0.0 | 0.1 | 0.4 | 0.3 | 0.0 | 0.1 |
| Florida..... | 5.0 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | -0.7 | 0.6 | 1.1 | 1.3 | 0.2 | 0.1 | 0.7 | 0.3 | 0.3 | 0.0 |
| Georgia..... | 3.5 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | -0.9 | 0.6 | 0.8 | 1.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.3 | 0.0 |
| Kentucky..... | 2.7 | 0.2 | 0.1 | 0.2 | 0.1 | 0.0 | 0.0 | -1.2 | 0.3 | 0.5 | 1.2 | 0.1 | 0.0 | 0.4 | 0.3 | 0.2 | 0.2 |
| Louisiana..... | 3.0 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | -1.1 | 0.4 | 0.6 | 1.3 | 0.0 | 0.1 | 0.5 | 0.3 | 0.3 | 0.1 |
| Mississippi..... | 1.9 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | -1.3 | 0.6 | 0.5 | 0.7 | 0.0 | 0.0 | 0.3 | 0.2 | 0.3 | 0.2 |
| North Carolina..... | 3.4 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | -1.0 | 0.6 | 0.9 | 0.7 | 0.1 | 0.1 | 0.5 | 0.3 | 0.4 | 0.0 |
| South Carolina..... | 3.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 0.1 | -1.3 | 0.4 | 0.7 | 1.2 | 0.1 | 0.2 | 0.6 | 0.4 | 0.4 | 0.1 |
| Tennessee..... | 3.5 | 0.3 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | -0.9 | 0.3 | 0.7 | 1.3 | 0.1 | 0.2 | 0.5 | 0.4 | 0.2 | 0.1 |
| Virginia..... | 2.9 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | -0.9 | 0.4 | 0.9 | 0.7 | 0.1 | 0.1 | 0.4 | 0.3 | 0.3 | 0.0 |
| West Virginia..... | 2.3 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -1.0 | 0.4 | 0.4 | 1.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.4 | 0.3 |
| Southwest | 3.6 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -1.0 | 0.5 | 0.9 | 1.1 | 0.1 | 0.1 | 0.5 | 0.3 | 0.3 | 0.1 |
| Arizona..... | 3.5 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | -0.8 | 0.6 | 1.0 | 0.8 | 0.1 | 0.1 | 0.6 | 0.3 | 0.2 | 0.1 |
| New Mexico..... | 2.3 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | -0.8 | 0.4 | 0.5 | 0.7 | 0.0 | 0.1 | 0.3 | 0.3 | 0.3 | 0.1 |
| Oklahoma..... | 2.4 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | -1.3 | 0.4 | 0.7 | 1.0 | 0.0 | 0.0 | 0.4 | 0.2 | 0.3 | 0.0 |
| Texas..... | 3.9 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | -1.0 | 0.4 | 0.9 | 1.2 | 0.1 | 0.1 | 0.5 | 0.3 | 0.3 | 0.1 |
| Rocky Mountain | 4.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | -0.9 | 0.8 | 1.0 | 1.0 | 0.2 | 0.2 | 0.6 | 0.3 | 0.4 | 0.0 |
| Colorado..... | 4.9 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | -0.6 | 0.7 | 1.2 | 1.2 | 0.2 | 0.2 | 0.7 | 0.3 | 0.3 | 0.0 |
| Idaho..... | 3.6 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | -1.1 | 0.8 | 0.8 | 1.0 | 0.1 | 0.1 | 0.5 | 0.2 | 0.3 | 0.1 |
| Montana..... | 3.9 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.0 | -1.1 | 0.6 | 0.7 | 1.2 | 0.1 | 0.1 | 0.5 | 0.3 | 0.4 | 0.1 |
| Utah..... | 4.7 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | -0.9 | 0.9 | 0.8 | 0.8 | 0.1 | 0.3 | 0.6 | 0.4 | 0.5 | 0.1 |
| Wyoming..... | 1.5 | 0.2 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | -1.8 | 0.4 | 1.0 | 0.6 | 0.1 | 0.1 | 0.4 | 0.1 | 0.2 | 0.0 |
| Far West | 4.5 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | -0.6 | 0.5 | 1.0 | 1.1 | 0.2 | 0.2 | 0.6 | 0.4 | 0.2 | 0.1 |
| Alaska..... | 3.7 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | -0.8 | 0.6 | 0.9 | 1.5 | 0.0 | 0.1 | 0.4 | 0.3 | 0.1 | 0.1 |
| California..... | 4.5 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | -0.6 | 0.5 | 1.0 | 1.1 | 0.2 | 0.1 | 0.7 | 0.4 | 0.1 | 0.1 |
| Hawaii..... | 4.0 | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 0.1 | -0.5 | 0.4 | 1.0 | 1.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.5 | 0.0 |
| Nevada..... | 3.9 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | -0.8 | 0.8 | 0.9 | 1.0 | 0.1 | 0.2 | 0.2 | 0.4 | 0.3 | 0.1 |
| Oregon..... | 4.9 | 0.2 | 0.2 | 0.2 | 0.0 | 0.1 | 0.1 | -0.7 | 0.5 | 1.0 | 1.5 | 0.1 | 0.2 | 0.6 | 0.4 | 0.3 | 0.1 |
| Washington..... | 4.6 | 0.1 | 0.1 | 0.3 | 0.0 | 0.1 | 0.1 | -0.6 | 0.5 | 1.0 | 1.1 | 0.1 | 0.1 | 0.5 | 0.3 | 0.7 | 0.1 |

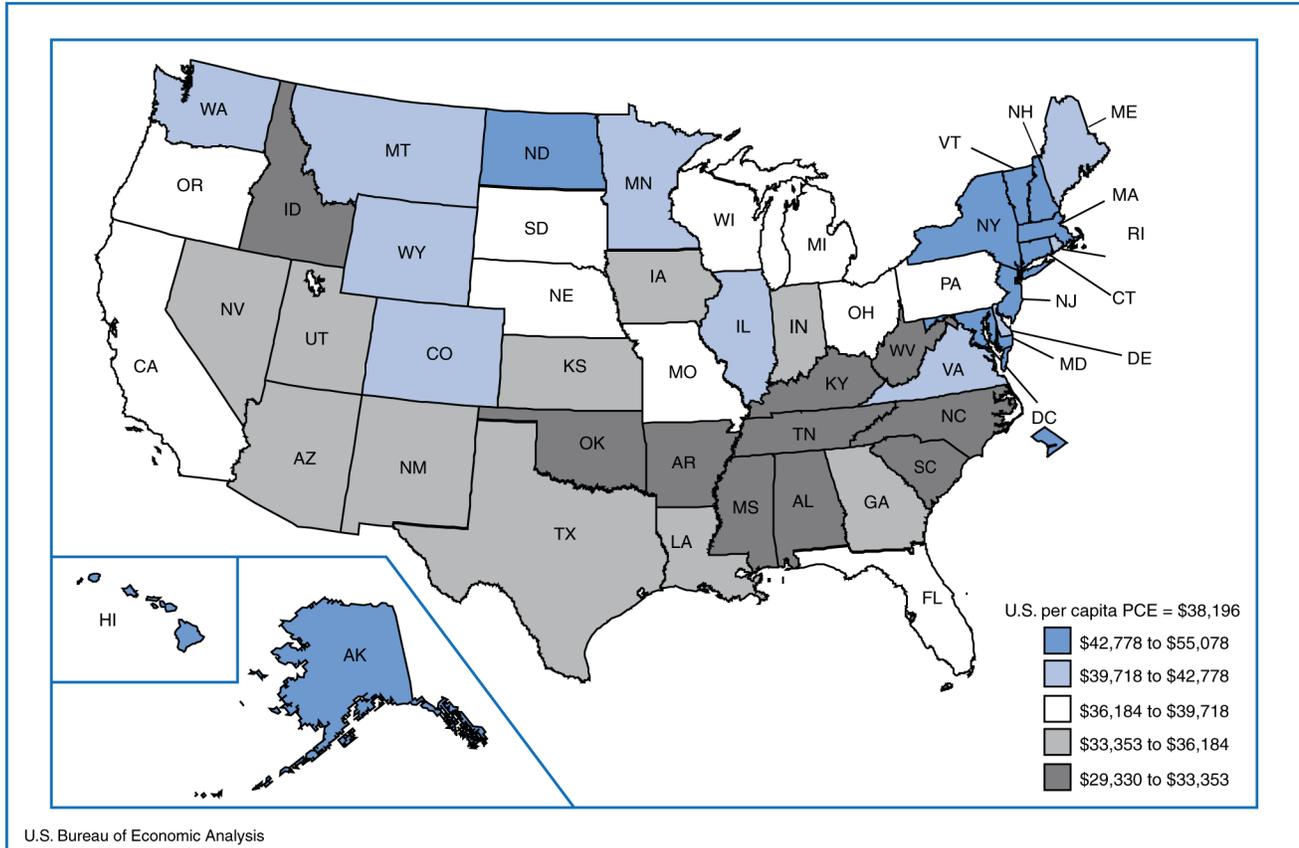
1. The U.S. values reported may differ from the PCE values in the national accounts because PCE by state excludes net expenditures abroad by U.S. residents, which consist of government and private employees' expenditures abroad

less personal remittances in kind to nonresidents.

NOTE: Category contributions were calculated from unrounded data and may not sum up due to rounding.

Per capita expenditures on food and beverages for off-premises consumption (grocery items) and gasoline and energy goods accounted for a smaller share of total PCE than either housing and utilities or health

Chart 2. Per Capita Total Personal Consumption Expenditures by State, 2015



U.S. Bureau of Economic Analysis

Table 4. Per Capita Personal Consumption Expenditures by State for Select Categories, 2015

[Dollars]

| | Total personal consumption expenditures | Housing and utilities | Health care | Off-premises food and beverages | Gasoline and other energy goods | All other personal consumption expenditures | | Total personal consumption expenditures | Housing and utilities | Health care | Off-premises food and beverages | Gasoline and other energy goods | All other personal consumption expenditures |
|----------------------------------------|-----------------------------------------|-----------------------|--------------|---------------------------------|---------------------------------|---------------------------------------------|-----------------------------|-----------------------------------------|-----------------------|--------------|---------------------------------|---------------------------------|---------------------------------------------|
| United States¹ | 38,196 | 6,947 | 6,436 | 2,802 | 945 | 21,067 | Southeast | 34,239 | 6,098 | 5,880 | 2,750 | 930 | 18,582 |
| New England | 47,360 | 8,653 | 8,320 | 3,403 | 1,066 | 25,918 | Alabama..... | 30,459 | 5,032 | 5,457 | 2,493 | 983 | 16,493 |
| Connecticut..... | 46,998 | 9,348 | 7,458 | 3,264 | 966 | 25,961 | Arkansas..... | 29,791 | 4,606 | 5,499 | 2,360 | 1,143 | 16,183 |
| Maine..... | 41,525 | 6,322 | 7,691 | 3,814 | 1,654 | 22,044 | Florida..... | 37,020 | 7,018 | 6,351 | 2,880 | 723 | 20,048 |
| Massachusetts..... | 49,717 | 8,948 | 9,187 | 3,367 | 921 | 27,294 | Georgia..... | 33,353 | 5,904 | 5,187 | 2,747 | 945 | 18,570 |
| New Hampshire..... | 47,441 | 8,653 | 7,866 | 3,635 | 1,450 | 25,836 | Kentucky..... | 31,925 | 5,052 | 5,981 | 2,862 | 1,036 | 16,994 |
| Rhode Island..... | 41,163 | 7,872 | 7,418 | 2,831 | 793 | 22,248 | Louisiana..... | 33,616 | 5,494 | 6,387 | 2,673 | 1,047 | 18,015 |
| Vermont..... | 46,531 | 7,727 | 7,661 | 4,196 | 1,600 | 25,347 | Mississippi..... | 29,330 | 4,735 | 5,677 | 2,531 | 1,075 | 15,312 |
| Mideast | 43,925 | 8,086 | 7,324 | 2,866 | 816 | 24,832 | North Carolina..... | 32,501 | 5,653 | 5,513 | 2,683 | 948 | 17,704 |
| Delaware..... | 42,088 | 7,327 | 8,070 | 3,247 | 919 | 22,526 | South Carolina..... | 32,033 | 5,331 | 5,517 | 2,759 | 1,157 | 17,270 |
| District of Columbia..... | 55,078 | 10,569 | 11,021 | 3,883 | 708 | 28,897 | Tennessee..... | 33,062 | 5,672 | 6,169 | 2,743 | 906 | 17,572 |
| Maryland..... | 42,997 | 9,390 | 6,897 | 2,772 | 837 | 23,100 | Virginia..... | 40,195 | 8,288 | 5,848 | 2,877 | 954 | 22,228 |
| New Jersey..... | 47,256 | 9,482 | 6,778 | 3,181 | 876 | 26,939 | West Virginia..... | 33,282 | 4,573 | 7,126 | 2,716 | 1,119 | 17,750 |
| New York..... | 45,272 | 8,133 | 7,571 | 2,755 | 655 | 26,159 | Southwest | 34,924 | 5,975 | 5,652 | 2,657 | 1,079 | 19,560 |
| Pennsylvania..... | 39,498 | 6,352 | 7,278 | 2,781 | 1,011 | 22,076 | Arizona..... | 34,061 | 6,569 | 5,216 | 2,655 | 900 | 18,720 |
| Great Lakes | 37,454 | 6,210 | 6,784 | 2,663 | 981 | 20,815 | New Mexico..... | 34,535 | 5,626 | 6,146 | 2,691 | 1,339 | 18,734 |
| Illinois..... | 39,859 | 7,054 | 6,569 | 2,552 | 758 | 22,926 | Oklahoma..... | 32,397 | 5,062 | 6,306 | 2,282 | 1,309 | 17,438 |
| Indiana..... | 34,098 | 5,442 | 6,501 | 2,566 | 1,108 | 18,481 | Texas..... | 35,527 | 5,984 | 5,629 | 2,709 | 1,071 | 20,133 |
| Michigan..... | 37,775 | 6,202 | 6,625 | 2,722 | 1,015 | 21,211 | Rocky Mountain | 37,471 | 6,995 | 5,538 | 2,863 | 1,009 | 21,067 |
| Ohio..... | 36,460 | 5,685 | 7,146 | 2,732 | 1,027 | 19,871 | Colorado..... | 40,625 | 8,105 | 5,719 | 2,972 | 783 | 23,047 |
| Wisconsin..... | 37,391 | 6,282 | 7,135 | 2,782 | 1,187 | 20,006 | Idaho..... | 32,226 | 5,653 | 5,507 | 2,803 | 1,141 | 17,122 |
| Plains | 38,045 | 6,145 | 6,866 | 2,746 | 1,366 | 20,923 | Montana..... | 39,718 | 6,115 | 6,739 | 3,356 | 1,481 | 22,027 |
| Iowa..... | 35,621 | 5,457 | 6,175 | 2,815 | 1,499 | 19,675 | Utah..... | 33,389 | 5,991 | 4,796 | 2,468 | 932 | 19,202 |
| Kansas..... | 34,840 | 5,683 | 6,301 | 2,863 | 1,045 | 18,948 | Wyoming..... | 39,825 | 7,136 | 5,628 | 3,164 | 2,291 | 21,607 |
| Minnesota..... | 42,038 | 7,323 | 7,482 | 2,768 | 1,179 | 23,285 | Far West | 39,763 | 8,365 | 6,275 | 2,892 | 746 | 21,485 |
| Missouri..... | 36,184 | 5,856 | 6,758 | 2,596 | 1,314 | 19,659 | Alaska..... | 48,666 | 8,221 | 9,645 | 3,965 | 1,070 | 25,765 |
| Nebraska..... | 37,437 | 5,687 | 6,678 | 2,713 | 1,561 | 20,799 | California..... | 39,715 | 8,612 | 6,217 | 2,750 | 739 | 21,397 |
| North Dakota..... | 47,864 | 6,544 | 7,710 | 3,111 | 2,994 | 27,504 | Hawaii..... | 42,778 | 8,945 | 6,542 | 3,605 | 509 | 23,178 |
| South Dakota..... | 38,085 | 5,378 | 7,783 | 2,760 | 1,672 | 20,492 | Nevada..... | 34,949 | 6,787 | 4,885 | 2,796 | 812 | 19,670 |
| | | | | | | | Oregon..... | 38,090 | 7,393 | 6,473 | 3,318 | 805 | 20,101 |
| | | | | | | | Washington..... | 41,386 | 8,096 | 6,645 | 3,212 | 740 | 22,693 |

1. The U.S. values reported may differ from the PCE values in the national accounts because PCE by state excludes net expenditures abroad by U.S. residents, which consist of government and private employees' expenditures abroad less

personal remittances in kind to nonresidents.
NOTE: Per capita values were calculated from unrounded data.

care. The average per capita PCE on food and beverages purchased for off-premises consumption was \$2,802, ranging from a high of \$4,196 in Vermont to a low of \$2,282 in Oklahoma.

The average per capita PCE on gasoline and other energy goods was \$945, ranging from a high of \$2,994 in North Dakota to a low of \$509 in Hawaii. Per capita expenditures on gasoline and other energy goods declined in 2015, reflecting a decline in oil prices and therefore a decline in gasoline prices.

Data and Methodology

The PCE by state statistics are created with detailed state-level source data in three main steps:

- An initial set of annual expenditure estimates is created for 77 detailed categories.³
- These initial estimates are then scaled across states to match the national PCE category totals and

3. This is the level of category detail published in table 2.4.5 in the national income and product accounts (NIPAs).

aggregated to the 16 categories for publication.⁴

- The expenditures are adjusted with household survey-based data when evaluation indicates out-of-state spending is present.

The methods used to prepare the detailed estimates fall into three main categories, depending on the data that are available for each spending category.

Receipts and expenditures. State-level receipts from the economic census are used for almost all categories of goods and for many categories of services, accounting for approximately 60 percent of PCE by state in a given census year.⁵

The total receipts for the industries that provide goods and services to consumers are first adjusted with state-level information on class of customer to remove

4. The category detail in the PCE by state statistics corresponds to the category detail published in NIPA table 2.3.5.

5. Economic census receipts of nonstore retailers introduce bias and are excluded from the estimation of PCE by state. The resulting distribution of receipts implicitly assumes that the online and mail order sales are geographically distributed in the same pattern as the store-based sales.

Personal Consumption Expenditures (PCE) by State Statistics: Concepts and Definitions

PCE by state is the state counterpart of national PCE, which measures the value of the goods and services purchased by, and on behalf of, households. PCE by state measures household consumption based on households' state of residence in the 50 states and the District of Columbia. Examples of purchases made on behalf of households include health care services paid for by Medicare and Medicaid and education services provided by nonprofit institutions or the government.

In addition to out-of-pocket household purchases and purchases made by third parties on behalf of households, PCE by state also includes imputations for the consumption of goods and services without market transactions. The two main imputations in PCE by state are owner-occupied housing and financial services with no explicit charge.

The housing imputation approximates the value of housing services provided by owner-occupied housing. This imputation ensures that the treatment of owner-occupied housing is comparable with that of tenant-occupied housing, which is valued by rent paid. Because homeowners consume the service of shelter whether or not they owe a mortgage, this imputation represents the rent that homeowners would pay if they rented the home that they own.

The financial services imputation approximates the value of financial services that households receive either without payment or for a small fee, which does not reflect the full value of the service. Examples of these services include no-additional-fee checking accounts, record keeping, and safekeeping of deposits.

Finally, PCE by state includes the net expenditures of

nonprofit institutions serving households (NPISHs). Since the services by NPISHs are typically provided to households for less than the cost of the service, these net expenditures represent the value of the services that is unaccounted for by households' out-of-pocket purchases.¹

PCE by state statistics are consistent with BEA's national PCE statistics with respect to concepts and definitions and with BEA's regional income statistics with respect to residency. The latter allows for meaningful comparisons of household income and consumption within a given geography.

There are minor differences in coverage between the regional and national PCE statistics, which stem from differences in residency definitions across these statistics.² PCE by state excludes the net expenditures abroad by U.S. residents, which consist of government and private employees' expenditures abroad less personal remittances in kind to nonresidents.³ These expenditures are included in national PCE, but they cannot be attributed to a particular state. However, PCE by state does include the travel expenditures abroad by U.S. residents.

1. For more information on PCE concepts and definitions, see "Chapter 5. Personal Consumption Expenditures" in *Concepts and Methods of the U.S. National Income and Product Accounts*.

2. For a more detailed discussion on residency in the national and regional economic accounts, see Christian Awuku-Budu, Ledia Gucci, Christopher A. Lucas, and Charles Ian Mead, "Prototype Personal Consumption Expenditures by State," SURVEY OF CURRENT BUSINESS 94 (September 2014).

3. In 2015, the net expenditures abroad by U.S. residents accounted for less than 0.04 percent of national total PCE.

non-household purchases such as purchases by businesses and government. When state-level information on class of customer is not available, national information from BEA's input-output tables is used to make a similar adjustment. The receipts attributed to households are then broken out into purchases of goods and services and mapped to various PCE categories using the economic census product and service line information.

For the intercensal years, the industry receipts are extended using wage and salary information for the workers employed in the establishments within the state that provide the goods and services to consumers. These data comes from the quarterly census of employment and wages collected by the Bureau of Labor Statistics.

For some subcategories within health care, annual expenditure data are used in addition to economic census receipts. These estimates use data on health spending by state of residence tabulated by the Center for Medicare and Medicaid Services. Because these statistics are available on an annual basis, wage and salary data are only used to create statistics for years that source data has not yet become available.

Price times quantity. This method is used to generate expenditures on tenant-occupied and owner-occupied housing, utilities, higher education, and foreign travel by U.S. residents.

For tenant-occupied housing, rental housing units and average monthly rent data from the 1-year files of the American Community Survey are used to generate estimates for the years 2000 to 2014. For other years, the growth in tenant-occupied housing expenditures is extrapolated using state population growth as a correlated indicator.

Owner-occupied housing expenditures are imputed using the tenant-occupied rent expenditures and state-level owner-to-renter expenditure ratios. This allows for the value of the services of owner-occupied housing to be imputed based on the rents charged for similar tenant-occupied housing. The owner-to-renter ratios are based on directly observed rent expenditure data and imputed owner-equivalent data used to estimate the regional price parities.⁶

6. For more information on these expenditures and the methodology for regional price parities, see Bettina H. Aten and Eric B. Figueroa, "Real Personal Income and Regional Price Parities," SURVEY OF CURRENT BUSINESS 95 (July 2015).

Residency Adjustments in PCE by State

Residency definitions are important to the regional economic accounts to align measures of income and consumption within a given geography. PCE by state statistics use the residency concept of regional income statistics so state expenditures correspond to the same population used to measure state personal income.

For regional income statistics, a resident is considered to be a participant in a regional economy regardless of national allegiance or duration of residence. Regional income statistics exclude the income earned by U.S. residents living abroad, but include the income earned by foreign nationals working in the U.S. PCE by state also excludes net expenditures of U.S. residents abroad. PCE by state, however, does include the travel expenditures abroad by U.S. residents.

Residency adjustments are made to both regional income and PCE statistics; however, these adjustments serve different purposes. For regional income statistics, a residence adjustment is made to reallocate income earned in places of work other than the recipients' place of residence. For the PCE by state statistics, a residency adjustment is made to reallocate expenditures made in states other than the households' state of residence.

The PCE by state statistics based on the economic census data need to be adjusted to reflect spending by place of residence because the census data are collected based on point of sale. Travel, tourism, and differences in sales

tax in neighboring states are examples of why consumers make purchases outside of their home state. For instance, many New York City residents defer gasoline purchases to coincide with trips to New Jersey since New Jersey has lower taxes on gasoline making it considerably cheaper than in New York.

The residency adjustments are based on comparisons of the estimates with independent data sources related to state-level household spending. These sources include state population, state disposable personal income, and consumer expenditure survey-based data from the Bureau of Labor Statistics.¹ Residency adjustments are made with category-specific state-level ratios of survey-based household expenditures to the expenditures derived from the economic census receipts.

The estimated expenditures are adjusted when nonresident spending is present. Residency adjustments are applied mainly to travel- and tourism-related categories and states. Examples of these are transportation services, recreation services, and tourist destination states, such as Hawaii, Nevada, Florida, New York, and the District of Columbia.

1. The consumer expenditure survey-based data are expenditure weights created as part of BEA's regional price parities; for details, see Bettina H. Aten, Eric B. Figueroa, and Troy M. Martin, "Real Personal Income and Regional Price Parities for States and Metropolitan Areas, 2007–2011," SURVEY OF CURRENT BUSINESS 93 (August 2013).

For utilities, three main data sources are used. State-level household water usage data from the U.S. Geological Survey and regional water price data from the National Association of Clean Water Agencies are used for estimates of water whereas state-level household usage and price data from the Energy Information Agency are used for estimates of electricity and natural gas.

For higher education, enrollment and average in-state and out-of-state tuition data by state of residence from the National Center for Education Statistics are used. Finally, for estimates of foreign travel by U.S. residents, passenger counts from the Department of Homeland Security (I-94 departure and arrival data) and average expenditures per passenger from the survey of international travelers are used.

Other methods. Various methods are used for the remaining categories, the largest of which is financial services and insurance. For financial services and insurance, disposable personal income by state is used as an indicator to allocate the national expenditures to states. Other sources include Bureau of Transportation Statistics data on enplanement passenger revenue for air transportation, Amtrak data on ridership for rail transportation, charitable contributions to religious institutions and grantmaking from the National Center for Charitable Statistics, and BEA employment data for military clothing and food furnished to employees.

Annual Update of PCE by State

BEA's October release of PCE by state included updated statistics for 2008–2014. The updated statistics incorporate the results of the 2015 annual update of national income and product accounts and the incorporation of newly available and revised source data, most notably the incorporation of the 2012 economic census data. Data from the 2012 economic census were only partly incorporated in the previous release based on availability.

Other data sources that were either revised or newly released include revised data from the quarterly census of employment and wages for 2013–2014, new 2014 data from the American Community Survey, revised 2013 and new 2014 price and volume data for electricity and natural gas from the Energy Information Administration, and revised 2013–2014 data on state disposable personal income.

The annual revision of PCE by state also reflects a slight modification of the methodology for owner-occupied housing and rail transportation. In the previous release, an average owner-to-renter ratio was applied to the tenant-occupied expenditures to gener-

ate an imputed measure of owner-occupied housing. This average ratio was replaced with a moving average of more recent ratios to account for any recent changes in the owners and renters markets. For the rail transportation statistics, the Amtrak ridership data was supplemented with data from the National Association of Railroad Passengers.

The revisions in level in current-dollar PCE were generally small. For 2008–2012, they ranged from a downward revision of 2.3 percent in Idaho to an upward revision of 1.5 percent in Alaska (table 5, panel 1). Current-dollar PCE was revised downward in 25 states and the District of Columbia and revised upwards in 25 states. The relative size and symmetry of the adjustments corresponds with the 0.0 percent change in national PCE over the period.

For 2013, national current-dollar PCE was revised downward 0.3 percent (table 5, panel 2). At the state level, current-dollar PCE was revised downward in 30 states as well as the District of Columbia. The remaining 20 states were revised upward. Idaho and Alaska continued to have the largest revisions, with a 3.8 percent downward revision in Idaho and a 1.7 percent upward revision in Alaska. After Idaho, the three states with the highest absolute revisions were South Carolina (–3.4 percent), the District of Columbia (–3.3 percent), and Alabama (–2.1 percent).

For 2014, national current-dollar PCE was revised downward 0.02 percent (table 5, panel 3). At the state level, current-dollar PCE was revised downward in 24 states and the District of Columbia. The remaining 26 states had upward revisions. Idaho received the largest downward revision (3.3 percent), and Alaska had the largest positive revision (1.8 percent). After Idaho, the three states with the largest absolute revisions were the District of Columbia (–3.1 percent), South Carolina (–2.5 percent), and Alabama (–2.2 percent).

The revisions in growth were also very small. For 2008–2012 (table 6, panel 1), there were no revisions to the national average annual growth in current-dollar PCE. At the state level, the absolute revisions to the average growth were less than 1.0 percentage point across all states. They ranged from a downward revision of 0.9 percentage point in Idaho to an upward revision of 0.4 percentage point in Alaska. The growth rates of 19 states and the District of Columbia were revised downward, the growth rates of 8 states remained unchanged, whereas the growth rates of the remaining 23 states were revised upward. After Idaho, the states with the largest absolute revision in average growth were Delaware (–0.5 percentage point), South Carolina (–0.5 percentage point), the District of Columbia (–0.5 percentage point).

For 2013, the national growth rate in current-dollar PCE was revised downward 0.3 percentage point (table 6, panel 2). At the state level, the revision in growth ranged from a downward revision of 1.1 percentage points in South Carolina to an upward revision of 0.4 percentage point in Delaware and Idaho. Growth in current-dollar PCE was revised downward in 44 states and the District of Columbia, remained unchanged in 2 states, and was revised upward in 4 states. After South Carolina, the states with the highest absolute revision in growth were the District of Columbia (-1.0 percentage point), Kansas (-0.8 percentage point), and Mississippi (-0.7 percentage point).

For 2014, the national growth rate in current-dollar PCE was revised upward 0.2 percentage point (table 6, panel 3). At the state level, the revision in growth ranged from a downward revision of 0.5 percentage point in Mississippi to an upward revision of 1.0 percentage point in Louisiana. The annual growth rate in current-dollar PCE was revised upward in 37 states and the District of Columbia, remained unchanged in 5 states, and revised downward in 8 states. After Louisiana, the states with the largest absolute revision in growth were South Carolina (0.9 percentage point), Rhode Island (0.7 percentage point), and Nevada (0.7 percentage point).

Table 5. Revisions to Personal Consumption Expenditures by State, 2008–2014

| | 2008–2012 average | | | 2013 | | | 2014 | | |
|----------------------------------|---------------------|----------------|-------------------------------|---------------------|----------------|-------------------------------|---------------------|----------------|-------------------------------|
| | Millions of dollars | | Percent revision ² | Millions of dollars | | Percent revision ² | Millions of dollars | | Percent revision ² |
| | Revised | Revision | | Revised | Revision | | Revised | Revision | |
| United States¹ | 10,354,363 | 0 | 0.0 | 11,355,529 | -31,043 | -0.3 | 11,857,620 | -2,630 | 0.0 |
| New England | 600,668 | -846 | -0.1 | 648,058 | -806 | -0.1 | 675,963 | 539 | 0.1 |
| Connecticut | 149,005 | -446 | -0.3 | 158,498 | -439 | -0.3 | 165,027 | 142 | 0.1 |
| Maine | 49,283 | -9 | 0.0 | 52,504 | -351 | -0.7 | 54,146 | -584 | -1.1 |
| Massachusetts | 284,808 | -209 | -0.1 | 310,617 | 512 | 0.2 | 325,120 | 1,204 | 0.4 |
| New Hampshire | 54,583 | -201 | -0.4 | 58,850 | -523 | -0.9 | 61,301 | -573 | -0.9 |
| Rhode Island | 38,185 | -70 | -0.2 | 40,374 | -210 | -0.5 | 42,026 | 57 | 0.1 |
| Vermont | 24,804 | 90 | 0.4 | 27,214 | 204 | 0.8 | 28,342 | 292 | 1.0 |
| Mideast | 1,842,271 | 3,469 | 0.2 | 2,005,456 | 192 | 0.0 | 2,091,862 | 4,931 | 0.2 |
| Delaware | 33,516 | -309 | -0.9 | 36,645 | -757 | -2.0 | 38,355 | -661 | -1.7 |
| District of Columbia | 29,847 | -605 | -2.0 | 33,432 | -1,128 | -3.3 | 35,207 | -1,125 | -3.1 |
| Maryland | 221,385 | 1,191 | 0.5 | 240,904 | 1,419 | 0.6 | 249,726 | 1,946 | 0.8 |
| New Jersey | 367,810 | 2,319 | 0.6 | 395,886 | 3,293 | 0.8 | 410,536 | 3,884 | 1.0 |
| New York | 746,935 | 166 | 0.0 | 820,647 | -1,522 | -0.2 | 865,135 | 1,688 | 0.2 |
| Pennsylvania | 442,778 | 708 | 0.2 | 477,942 | -1,112 | -0.2 | 492,903 | -801 | -0.2 |
| Great Lakes | 1,520,377 | 4,155 | 0.3 | 1,642,423 | 3,718 | 0.2 | 1,701,602 | 5,083 | 0.3 |
| Illinois | 445,643 | 1,284 | 0.3 | 479,416 | 293 | 0.1 | 497,918 | 1,605 | 0.3 |
| Indiana | 197,914 | -552 | -0.3 | 214,221 | -1,740 | -0.8 | 220,360 | -2,336 | -1.0 |
| Michigan | 321,809 | 1,606 | 0.5 | 347,817 | 2,377 | 0.7 | 362,062 | 3,146 | 0.9 |
| Ohio | 366,129 | 1,228 | 0.3 | 397,768 | 1,756 | 0.4 | 411,526 | 1,873 | 0.5 |
| Wisconsin | 188,882 | 589 | 0.3 | 203,201 | 1,032 | 0.5 | 209,736 | 796 | 0.4 |
| Plains | 685,643 | 1,414 | 0.2 | 754,775 | -96 | 0.0 | 781,826 | 23 | 0.0 |
| Iowa | 96,730 | 52 | 0.1 | 105,501 | -179 | -0.2 | 109,080 | -471 | -0.4 |
| Kansas | 87,765 | -630 | -0.7 | 95,250 | -1,882 | -1.9 | 98,676 | -1,983 | -2.0 |
| Minnesota | 194,961 | 340 | 0.2 | 214,193 | -91 | 0.0 | 222,993 | 71 | 0.0 |
| Missouri | 192,956 | 1,377 | 0.7 | 209,664 | 1,898 | 0.9 | 214,591 | 2,049 | 1.0 |
| Nebraska | 60,129 | -63 | -0.1 | 66,445 | -395 | -0.6 | 68,985 | -361 | -0.5 |
| North Dakota | 25,705 | 141 | 0.6 | 33,003 | 148 | 0.4 | 35,551 | 249 | 0.7 |
| South Dakota | 27,398 | 197 | 0.7 | 30,720 | 406 | 1.3 | 31,951 | 470 | 1.5 |
| Southeast | 2,374,191 | -10,879 | -0.5 | 2,607,771 | -31,667 | -1.2 | 2,717,993 | -23,739 | -0.9 |
| Alabama | 130,798 | -1,147 | -0.9 | 140,835 | -3,079 | -2.1 | 144,697 | -3,182 | -2.2 |
| Arkansas | 78,112 | 58 | 0.1 | 84,737 | -151 | -0.2 | 86,948 | -352 | -0.4 |
| Florida | 613,258 | -6,934 | -1.1 | 678,158 | -11,918 | -1.7 | 714,791 | -9,275 | -1.3 |
| Georgia | 285,235 | -500 | -0.2 | 314,823 | -2,423 | -0.8 | 329,065 | -2,283 | -0.7 |
| Kentucky | 124,174 | -748 | -0.6 | 134,150 | -2,803 | -2.0 | 137,527 | -2,713 | -1.9 |
| Louisiana | 132,671 | -490 | -0.4 | 146,164 | -2,234 | -1.5 | 152,500 | -842 | -0.5 |
| Mississippi | 77,651 | -304 | -0.4 | 84,086 | -1,457 | -1.7 | 86,138 | -1,847 | -2.1 |
| North Carolina | 271,131 | -1,575 | -0.6 | 301,342 | -4,214 | -1.4 | 315,735 | -3,025 | -0.9 |
| South Carolina | 133,714 | -1,979 | -1.5 | 145,830 | -5,064 | -3.4 | 152,120 | -3,871 | -2.5 |
| Tennessee | 185,061 | -463 | -0.2 | 202,730 | -1,807 | -0.9 | 210,891 | -980 | -0.5 |
| Virginia | 288,802 | 3,104 | 1.1 | 316,384 | 3,500 | 1.1 | 327,567 | 4,403 | 1.4 |
| West Virginia | 53,584 | 101 | 0.2 | 58,533 | -15 | 0.0 | 60,015 | 230 | 0.4 |
| Southwest | 1,139,140 | 3,162 | 0.3 | 1,286,266 | -1,105 | -0.1 | 1,358,759 | 4,839 | 0.4 |
| Arizona | 197,183 | -1,392 | -0.7 | 214,601 | -3,984 | -1.8 | 224,772 | -3,651 | -1.6 |
| New Mexico | 62,473 | -61 | -0.1 | 67,889 | -504 | -0.7 | 70,380 | -410 | -0.6 |
| Oklahoma | 106,468 | -865 | -0.8 | 118,850 | -1,841 | -1.5 | 123,823 | -1,308 | -1.0 |
| Texas | 773,016 | 5,480 | 0.7 | 884,927 | 5,224 | 0.6 | 939,783 | 10,207 | 1.1 |
| Rocky Mountain | 358,714 | 24 | 0.0 | 398,318 | -1,609 | -0.4 | 420,858 | -6 | 0.0 |
| Colorado | 179,629 | 916 | 0.5 | 198,955 | 204 | 0.1 | 211,361 | 1,324 | 0.6 |
| Idaho | 44,658 | -1,050 | -2.3 | 49,074 | -1,937 | -3.8 | 51,465 | -1,741 | -3.3 |
| Montana | 33,641 | 160 | 0.5 | 37,595 | -33 | -0.1 | 39,476 | 50 | 0.1 |
| Utah | 80,743 | -103 | -0.1 | 90,714 | 115 | 0.1 | 95,566 | 197 | 0.2 |
| Wyoming | 20,042 | 102 | 0.5 | 21,979 | 41 | 0.2 | 22,990 | 164 | 0.7 |
| Far West | 1,833,360 | -501 | 0.0 | 2,012,462 | 332 | 0.0 | 2,108,757 | 5,700 | 0.3 |
| Alaska | 30,017 | 440 | 1.5 | 33,533 | 548 | 1.7 | 34,666 | 607 | 1.8 |
| California | 1,297,970 | -1,215 | -0.1 | 1,421,045 | 1,701 | 0.1 | 1,487,932 | 5,455 | 0.4 |
| Hawaii | 50,258 | 452 | 0.9 | 56,076 | 375 | 0.7 | 58,877 | 645 | 1.1 |
| Nevada | 85,321 | -426 | -0.5 | 92,817 | -1,168 | -1.2 | 97,244 | -616 | -0.6 |
| Oregon | 126,533 | 136 | 0.1 | 139,084 | 510 | 0.4 | 146,284 | 311 | 0.2 |
| Washington | 243,260 | 113 | 0.0 | 269,907 | -1,635 | -0.6 | 283,755 | -701 | -0.2 |

1. The U.S. values reported differ from the PCE values in the national accounts because PCE by state excludes net expenditures abroad by U.S. residents, which consist of government and private employees'

expenditures abroad less personal remittances in kind to nonresidents.
2. Revision is a percentage of the previously published statistic.

Next Steps

Multiple research projects related to regional PCE statistics are ongoing at BEA. These projects aim to introduce further methodological improvements, to assess the feasibility of the potential expansion of category and geography detail of these statistics, and to assess the feasibility of developing related new statistics.

In the near term, the focus is on the use of alternative source data and on the introduction of methodological improvements for several PCE categories, in particular, the development of residency-based data

sources for the measurement of financial services and insurance.

Longer term considerations include the development of real PCE by state statistics, which would account for differences in prices both across states and over time. Much of the groundwork has been laid out from the development of the regional price parities statistics. Another long-term consideration is supplementing the survey data with transaction data to improve the residency adjustments as well as to potentially provide more geographic detail for PCE estimates.

Table 6. Revisions to Growth in Personal Consumption Expenditures by State, 2008–2014

| | Average annual growth 2008–2012 | | | Annual growth 2012–2013 | | | Annual growth 2013–2014 | | |
|-----------------------------------------|---------------------------------|------------|--------------------------------|-------------------------|------------|--------------------------------|-------------------------|------------|--------------------------------|
| | Previously published | Revised | Difference (percentage points) | Previously published | Revised | Difference (percentage points) | Previously published | Revised | Difference (percentage points) |
| United States ¹ | 2.6 | 2.6 | 0.0 | 3.1 | 2.8 | -0.3 | 4.2 | 4.4 | 0.2 |
| New England | 2.1 | 2.2 | 0.1 | 2.7 | 2.5 | -0.2 | 4.1 | 4.3 | 0.2 |
| Connecticut..... | 1.6 | 1.6 | 0.0 | 2.4 | 2.1 | -0.3 | 3.7 | 4.1 | 0.4 |
| Maine..... | 2.1 | 2.1 | 0.0 | 2.5 | 1.9 | -0.6 | 3.5 | 3.1 | -0.4 |
| Massachusetts..... | 2.5 | 2.6 | 0.1 | 2.8 | 2.7 | -0.1 | 4.5 | 4.7 | 0.2 |
| New Hampshire..... | 2.2 | 2.0 | -0.2 | 2.9 | 2.8 | -0.1 | 4.2 | 4.2 | 0.0 |
| Rhode Island..... | 1.5 | 1.4 | -0.1 | 2.4 | 2.2 | -0.2 | 3.4 | 4.1 | 0.7 |
| Vermont..... | 2.5 | 2.7 | 0.2 | 3.7 | 3.6 | -0.1 | 3.9 | 4.1 | 0.2 |
| Midwest | 2.5 | 2.5 | 0.0 | 2.9 | 2.6 | -0.3 | 4.1 | 4.3 | 0.2 |
| Delaware..... | 3.1 | 2.6 | -0.5 | 2.9 | 3.3 | 0.4 | 4.3 | 4.7 | 0.4 |
| District of Columbia..... | 4.1 | 3.6 | -0.5 | 4.2 | 3.2 | -1.0 | 5.1 | 5.3 | 0.2 |
| Maryland..... | 2.4 | 2.6 | 0.2 | 2.8 | 2.4 | -0.4 | 3.5 | 3.7 | 0.2 |
| New Jersey..... | 1.7 | 1.9 | 0.2 | 2.5 | 2.4 | -0.1 | 3.6 | 3.7 | 0.1 |
| New York..... | 2.7 | 2.8 | 0.1 | 3.5 | 3.0 | -0.5 | 5.0 | 5.4 | 0.4 |
| Pennsylvania..... | 2.6 | 2.6 | 0.0 | 2.3 | 2.0 | -0.3 | 3.1 | 3.1 | 0.0 |
| Great Lakes | 2.0 | 2.1 | 0.1 | 2.5 | 2.2 | -0.3 | 3.5 | 3.6 | 0.1 |
| Illinois..... | 1.9 | 2.0 | 0.1 | 2.5 | 2.0 | -0.5 | 3.6 | 3.9 | 0.3 |
| Indiana..... | 2.4 | 2.3 | -0.1 | 2.2 | 2.0 | -0.2 | 3.1 | 2.9 | -0.2 |
| Michigan..... | 2.0 | 2.1 | 0.1 | 2.5 | 2.5 | 0.0 | 3.9 | 4.1 | 0.2 |
| Ohio..... | 2.0 | 2.2 | 0.2 | 2.6 | 2.3 | -0.3 | 3.4 | 3.5 | 0.1 |
| Wisconsin..... | 2.0 | 2.1 | 0.1 | 2.9 | 2.6 | -0.3 | 3.3 | 3.2 | -0.1 |
| Plains | 2.9 | 3.0 | 0.1 | 3.1 | 2.8 | -0.3 | 3.6 | 3.6 | 0.0 |
| Iowa..... | 3.0 | 3.0 | 0.0 | 2.5 | 2.4 | -0.1 | 3.7 | 3.4 | -0.3 |
| Kansas..... | 2.7 | 2.5 | -0.2 | 3.1 | 2.3 | -0.8 | 3.6 | 3.6 | 0.0 |
| Minnesota..... | 2.5 | 2.6 | 0.1 | 3.4 | 3.0 | -0.4 | 4.0 | 4.1 | 0.1 |
| Missouri..... | 2.7 | 2.9 | 0.2 | 2.2 | 2.1 | -0.1 | 2.3 | 2.3 | 0.0 |
| Nebraska..... | 3.1 | 3.1 | 0.0 | 3.3 | 3.0 | -0.3 | 3.7 | 3.8 | 0.1 |
| North Dakota..... | 7.5 | 7.7 | 0.2 | 7.8 | 7.3 | -0.5 | 7.4 | 7.7 | 0.3 |
| South Dakota..... | 3.5 | 3.8 | 0.3 | 3.5 | 3.5 | 0.0 | 3.8 | 4.0 | 0.2 |
| Southeast | 2.7 | 2.5 | -0.2 | 3.3 | 2.9 | -0.4 | 3.9 | 4.2 | 0.3 |
| Alabama..... | 2.5 | 2.1 | -0.4 | 2.8 | 2.4 | -0.4 | 2.8 | 2.7 | -0.1 |
| Arkansas..... | 2.2 | 2.3 | 0.1 | 2.6 | 2.3 | -0.3 | 2.8 | 2.6 | -0.2 |
| Florida..... | 2.5 | 2.1 | -0.4 | 3.7 | 3.6 | -0.1 | 4.9 | 5.4 | 0.5 |
| Georgia..... | 2.4 | 2.3 | -0.1 | 3.7 | 3.4 | -0.3 | 4.4 | 4.5 | 0.1 |
| Kentucky..... | 3.1 | 2.8 | -0.3 | 2.1 | 1.6 | -0.5 | 2.4 | 2.5 | 0.1 |
| Louisiana..... | 3.2 | 2.9 | -0.3 | 3.4 | 3.2 | -0.2 | 3.3 | 4.3 | 1.0 |
| Mississippi..... | 2.8 | 2.6 | -0.2 | 2.9 | 2.2 | -0.7 | 2.9 | 2.4 | -0.5 |
| North Carolina..... | 3.1 | 2.9 | -0.2 | 3.9 | 3.6 | -0.3 | 4.3 | 4.8 | 0.5 |
| South Carolina..... | 3.3 | 2.8 | -0.5 | 3.7 | 2.6 | -1.1 | 3.4 | 4.3 | 0.9 |
| Tennessee..... | 2.8 | 2.7 | -0.1 | 2.7 | 2.3 | -0.4 | 3.6 | 4.0 | 0.4 |
| Virginia..... | 2.7 | 3.0 | 0.3 | 2.6 | 2.3 | -0.3 | 3.3 | 3.5 | 0.2 |
| West Virginia..... | 3.5 | 3.5 | 0.0 | 2.3 | 2.1 | -0.2 | 2.1 | 2.5 | 0.4 |
| Southwest | 3.5 | 3.5 | 0.0 | 4.1 | 3.7 | -0.4 | 5.2 | 5.6 | 0.4 |
| Arizona..... | 2.1 | 1.7 | -0.4 | 3.4 | 3.1 | -0.3 | 4.5 | 4.7 | 0.2 |
| New Mexico..... | 3.1 | 3.0 | -0.1 | 2.5 | 2.1 | -0.4 | 3.5 | 3.7 | 0.2 |
| Oklahoma..... | 3.8 | 3.6 | -0.2 | 3.2 | 3.0 | -0.2 | 3.7 | 4.2 | 0.5 |
| Texas..... | 3.8 | 4.0 | 0.2 | 4.5 | 4.1 | -0.4 | 5.7 | 6.2 | 0.5 |
| Rocky Mountain | 2.7 | 2.7 | 0.0 | 4.2 | 3.8 | -0.4 | 5.2 | 5.7 | 0.5 |
| Colorado..... | 2.6 | 2.7 | 0.1 | 3.9 | 3.3 | -0.6 | 5.7 | 6.2 | 0.5 |
| Idaho..... | 2.8 | 1.9 | -0.9 | 4.0 | 4.4 | 0.4 | 4.3 | 4.9 | 0.6 |
| Montana..... | 3.0 | 3.1 | 0.1 | 4.6 | 4.0 | -0.6 | 4.8 | 5.0 | 0.2 |
| Utah..... | 2.6 | 2.7 | 0.1 | 4.9 | 4.7 | -0.2 | 5.3 | 5.3 | 0.0 |
| Wyoming..... | 2.9 | 3.1 | 0.2 | 3.0 | 2.5 | -0.5 | 4.0 | 4.6 | 0.6 |
| Far West | 2.3 | 2.3 | 0.0 | 2.8 | 2.7 | -0.1 | 4.5 | 4.8 | 0.3 |
| Alaska..... | 3.6 | 4.0 | 0.4 | 3.6 | 3.3 | -0.3 | 3.3 | 3.4 | 0.1 |
| California..... | 2.2 | 2.2 | 0.0 | 2.4 | 2.5 | 0.1 | 4.4 | 4.7 | 0.3 |
| Hawaii..... | 3.1 | 3.3 | 0.2 | 4.0 | 3.6 | -0.4 | 4.5 | 5.0 | 0.5 |
| Nevada..... | 1.8 | 1.6 | -0.2 | 3.5 | 3.2 | -0.3 | 4.1 | 4.8 | 0.7 |
| Oregon..... | 2.0 | 2.1 | 0.1 | 3.5 | 3.6 | 0.1 | 5.3 | 5.2 | -0.1 |
| Washington..... | 2.9 | 2.9 | 0.0 | 4.0 | 3.5 | -0.5 | 4.8 | 5.1 | 0.3 |

1. The U.S. values reported may differ from the PCE values in the national accounts because PCE by state excludes net expenditures abroad by U.S. residents, which consist of government and private employees' expenditures abroad less personal remittances in kind to nonresidents.