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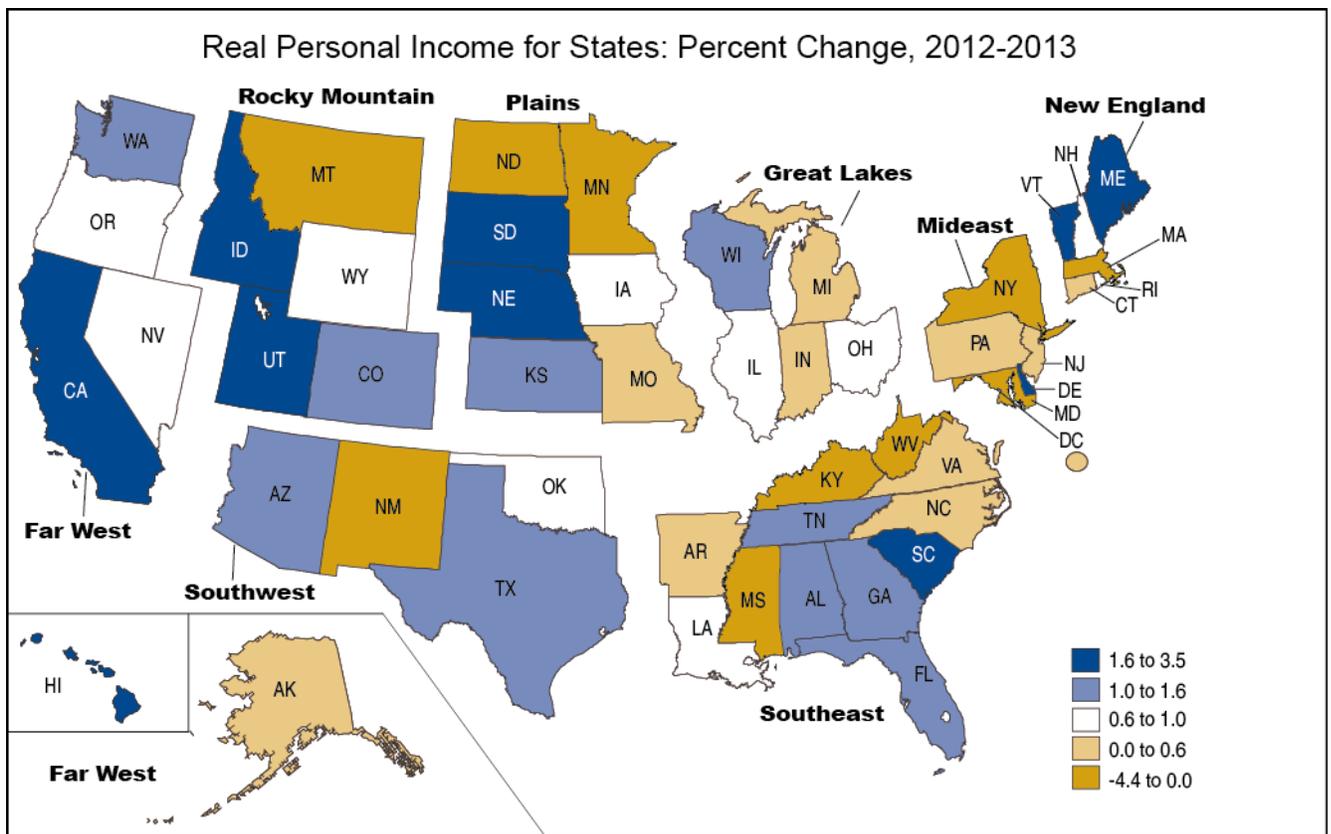
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Real Personal Income for States and Metropolitan Areas, 2013

Real personal income across all regions rose by an average of 0.8 percent in 2013. This growth rate reflects the year-over-year change in nominal personal income across all regions adjusted by the change in the national personal consumption expenditures (PCE) price index. On a nominal basis, personal income across all regions grew an average of 2.0 percent in 2013. In 2013, the U.S. PCE price index grew 1.2 percent.



U.S. Bureau of Economic Analysis

Real Personal Income for States and Metropolitan Areas

Growth in real state personal income in 2013 ranged from an increase of 3.5 percent in Idaho to a decline of 4.4 percent in North Dakota. These growth rates reflect the year-over-year change in the state's nominal personal income, the change in the national PCE price index, and the change in the regional price parity for that state. After Idaho, the states with the largest growth rates were Utah (2.3 percent), California (2.2 percent), Nebraska (2.2 percent), and South Dakota (2.0 percent). After North Dakota, the states with the largest rates of decline were New Mexico (-0.6 percent), New York (-0.4 percent), Maryland (-0.3 percent), and Montana (-0.2 percent). States with growth rates close to the national average were Wyoming (0.8 percent), Oklahoma (0.7 percent), Ohio (0.7 percent), New Hampshire (0.7 percent), and Illinois (0.7 percent).

Growth in real metropolitan area personal income in 2013 ranged from an increase of 4.8 percent in Sioux City, IA-NE-SD to a decline of 3.1 percent in New Bern, NC. After Sioux City, IA-NE-SD, the metropolitan areas with the largest growth rates were Janesville-Beloit, WI (4.6 percent), Danville, IL (4.4 percent), Monroe, MI (4.4 percent), and Boise City, ID (3.9 percent). After New Bern, NC, the metropolitan areas with the largest declines were Beckley, WV (-3.0 percent), Fairbanks, AK (-2.9 percent), Peoria, IL (-2.9 percent), and Anniston-Oxford-Jacksonville, AL (-2.4 percent).

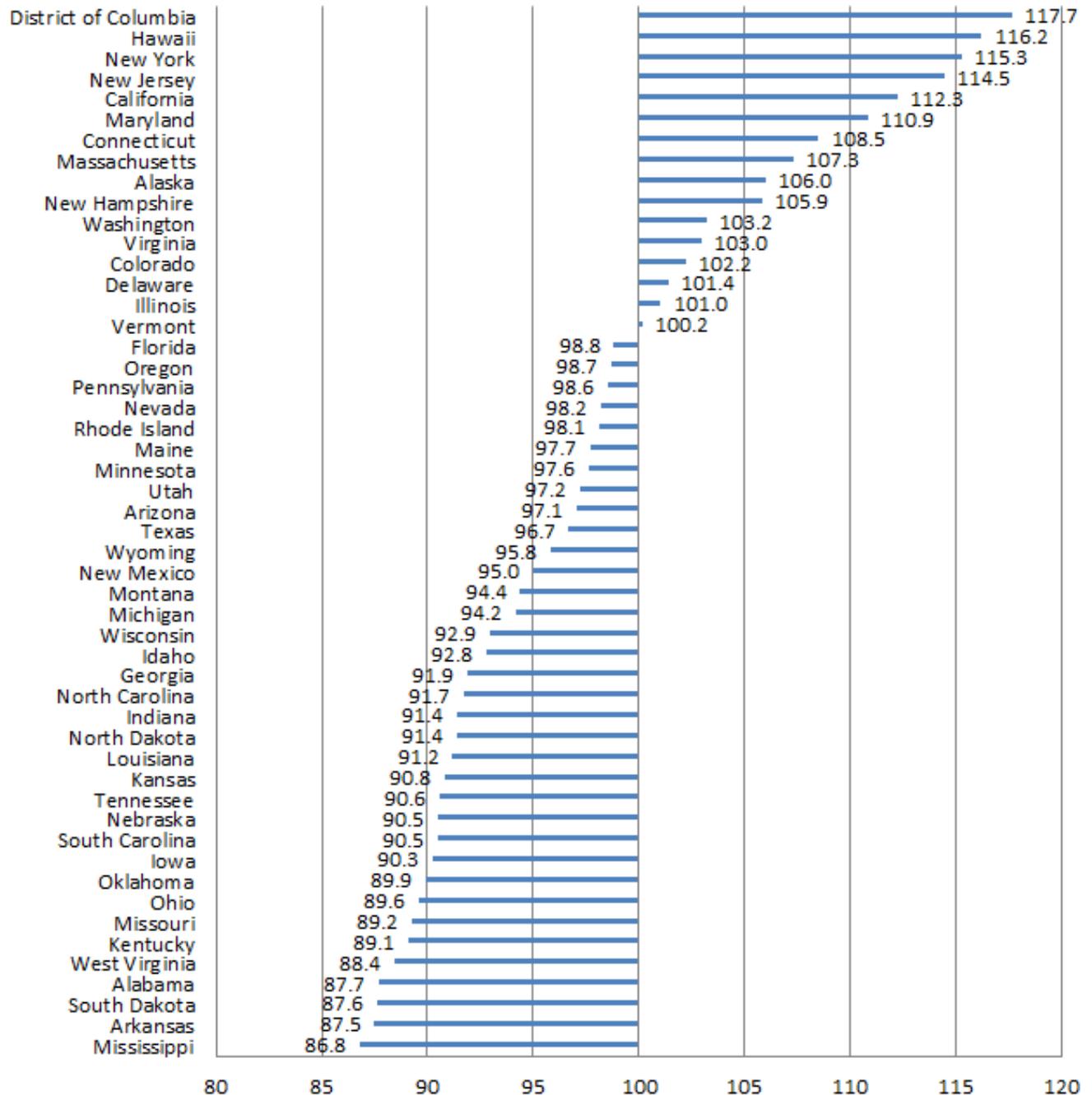
Regional Price Parities

Regional Price Parities (RPPs) measure the differences in the price levels of goods and services across states and metropolitan areas for a given year. RPPs are expressed as a percentage of the overall national price level for each year, which is equal to 100.0.

In 2013, the District of Columbia's RPP (117.7) was higher than that of any state. The states with the highest RPPs were Hawaii (116.2), New York (115.3), New Jersey (114.5), and California (112.3). Mississippi (86.8), Arkansas (87.5), South Dakota (87.6), Alabama (87.7), and West Virginia (88.4) had the lowest RPPs among the States. States with high (low) RPPs typically have relatively high (low) price levels for rents. States with RPPs closest to the national average price level were Vermont (100.2), Illinois (101.0), Florida (98.8), and Oregon (98.7).

In 2013, the metropolitan area with the highest RPP was Urban Honolulu, HI (122.5). Metropolitan areas with RPPs above 120.0 also included New York-Newark-Jersey City, NY-NJ-PA (122.3), San Jose-Sunnyvale-Santa Clara, CA (121.3), Bridgeport-Stamford-Norwalk, CT (120.8), Santa Cruz-Watsonville, CA (120.5), and San Francisco-Oakland-Hayward, CA (120.3). The metropolitan area with the lowest RPP was Beckley, WV (78.0), followed by Danville, IL (79.2), Rome, GA (81.3), Jonesboro, AR (81.7), and Valdosta, GA (81.8).

2013 Regional Price Parities by State (US = 100)



Technical Note on Regional Price Parities and Implicit Regional Price Deflators

Price indexes commonly measure price changes over time. The BEA's Personal Consumption Expenditure price index and the BLS' Consumer Price Index (CPI) are two examples. Spatial price indexes measure price level differences across regions for one time period. An example of these type of indexes are purchasing power parities (PPPs), which measure differences in price levels across countries for a given period, and can be used to convert estimates of per capita GDP into comparable levels in a common currency. The regional price parities (RPPs) that BEA has developed compare regions within the United States, but without the need for currency conversion. An implicit regional price deflator (IRPD) can be derived by combining the RPPs and the PCE price index.

Regional Price Parities. The RPPs are calculated using price quotes for a wide array of items from the CPI, which are aggregated into broader expenditure categories (such as food, transportation, or education)¹. Data on rents are obtained separately from the Census Bureau's American Community Survey (ACS). The expenditure weights for each category are constructed using CPI expenditure weights, BEA's Personal Consumption Expenditures, and ACS rents expenditures².

The broader categories and the data on rents are combined with the expenditure weights using a multilateral aggregation method that expresses a region's price level relative to the US³.

For example, if the RPP for area A is 120 and for area B is 90, then on average, prices are 20 percent higher and 10 percent lower than the US average for A and B, respectively. If the Personal Income for area A is \$12,000 and for area B is \$9,000, then RPP-adjusted incomes are \$10,000 ($\$12,000/1.20$) and \$10,000 ($\$9,000/0.90$), respectively. In other words, the purchasing power of the two incomes is equivalent when adjusted by their respective RPPs.

Implicit Regional Price Deflator. The IRPD is a regional price index derived as the product of two terms: the regional price parity and the US PCE price index.

The implicit regional price deflator will equal current dollar personal income divided by real personal income in chained dollars. The growth rate or year-to-year change in the IRPDs is a measure of regional inflation⁴.

¹ The BEA Regional Price Parity statistics are based in part on restricted access Consumer Price Index data from the Bureau of Labor Statistics (BLS). The BEA statistics expressed herein are products of BEA and not BLS.

² To estimate RPPs, CPI price quotes are quality adjusted and pooled over 5 years. The ACS rents are also quality adjusted and are either annual for states or pooled over 3 years for metropolitan areas. The expenditure weights are specific to each year.

³ The multilateral system that is used is the Geary additive method. Any region or combination of regions may be used as the base or reference region without loss of consistency.

⁴ The growth rate of the implicit regional price deflators will not necessarily equal the region or metro area price deflators published by the BLS. This is because the CPI deflators are calculated directly while the IRPDs are indirect estimates, and because of differences in the source data and the methodology. For a complete description see the BEA working paper titled "Notes on estimating the Multi-year regional price parities by 16 expenditure categories: 2005-2009" (http://www.bea.gov/papers/pdf/notes_on_estimating_the_multi_year_rpps_and_appendix_tables.pdf)

Detailed information on the methodology used to estimate the RPPs may be found in the article, “Real Personal Income and Regional Price Parities for States and Metropolitan Areas, 2008-2012”, in the June 2014 issue of the *Survey of Current Business*.

Definitions

Personal income is the income received by all persons from all sources. Personal income is the sum of net earnings by place of residence, property income, and personal current transfer receipts. These are current dollar estimates. Comparisons for different regions and time periods reflect changes in both the price and quantity components of regional personal income.

Estimates of personal income in the United States are derived as the sum of the regional estimates. These differ from the estimates of personal income in the national income and product account (NIPAs) because of differences in coverage, in the methodologies used to prepare the estimates, and in the timing of the availability of source data.

Regional price parities (RPPs) are regional price levels expressed as a percentage of the overall national price level for a given year. The price level is determined by the average prices paid by consumers for the mix of goods and services consumed in each region.

Detailed CPI price data are adjusted to obtain average price levels for BLS-defined areas⁵. These are allocated to counties in combination with direct price and expenditure data on rents from the ACS. County data are then aggregated to states and metropolitan areas.

Personal income at RPPs is current-dollar personal income divided by the price parity⁶ for a given year and region. A balancing factor is applied so that the sum of personal income at RPPs across regions equals the current dollar sum.

Real personal income is personal income at RPPs divided by the national PCE chain-type price index. The result is real personal income in chained dollars (using 2009 as the reference year). Using Alaska in 2013 as an example:

(1) Personal Income is divided by the RPP	(2) Personal income at RPPs is deflated by the US PCE Price Index	2013 Alaska Real Personal Income
$\$36.9 / 1.060 = \34.8	$\$34.8 / 1.073 = \32.4	\$32.4

Note. Dollar amounts are in billions.

⁵ The CPI represents about 87 percent of the total U.S. population, including almost all residents of urban or metropolitan areas. In the northeast region, rural area prices (exclusive of Rents) are assumed to be the same as those in the small metropolitan areas of the CPI; in the midwest, south, and west regions, they are assumed to be the same as those in the nonmetropolitan urban areas of the CPI.

⁶ RPP should first be divided by 100.

Estimates of real personal income in the United States are derived as the sum of the regional estimates divided by the U.S. PCE Price Index.

Implicit Regional Price Deflator (IRPD) is the product of the RPP times the national PCE price index. It is equal to personal income divided by real personal income. See also the Technical Note.

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The tables in this press release are also available on the BEA website. Additional tables showing estimates of real income and regional price parities can also be found there for state metropolitan and nonmetropolitan portions, and metropolitan areas. Supplemental tables are available upon request.

BEA's national, international, regional, and industry statistics; the *Survey of Current Business*; and BEA news releases are available without charge on BEA's web site at www.bea.gov. By visiting the site, you can also subscribe to receive free e-mail summaries of BEA releases and announcements.

Next real personal income release – July 2016 for states, state metropolitan and nonmetropolitan portions, and metropolitan areas.

Table 1. Real Personal Income and Implicit Regional Price Deflators by State, 2012-2013

	Personal income Millions of dollars			Real personal income Millions of chained (2009) dollars			Implicit regional price deflators		
	2012	2013	Percent growth	2012	2013	Percent growth	2012	2013	Percent growth
United States	13,873,161	14,151,427	2.0	13,080,227	13,184,554	0.8	106.1	107.3	1.2
Alabama	173,150	176,341	1.8	185,633	187,518	1.0	93.3	94.0	0.8
Alaska	36,447	36,867	1.2	32,374	32,430	0.2	112.6	113.7	1.0
Arizona	239,929	245,070	2.1	231,829	235,490	1.6	103.5	104.1	0.6
Arkansas	107,443	108,603	1.1	115,748	115,766	0.0	92.8	93.8	1.1
California	1,805,194	1,856,614	2.8	1,508,765	1,542,356	2.2	119.6	120.4	0.6
Colorado	240,350	247,069	2.8	223,083	225,414	1.0	107.7	109.6	1.7
Connecticut	216,308	218,132	0.8	187,255	187,451	0.1	115.5	116.4	0.7
Delaware	40,379	41,487	2.7	37,503	38,143	1.7	107.7	108.8	1.0
District of Columbia	48,109	48,697	1.2	38,489	38,585	0.3	125.0	126.2	1.0
Florida	792,950	811,377	2.3	757,474	765,662	1.1	104.7	106.0	1.2
Georgia	369,149	378,156	2.4	379,388	383,845	1.2	97.3	98.5	1.3
Hawaii	61,968	63,468	2.4	49,941	50,920	2.0	124.1	124.6	0.5
Idaho	56,072	58,272	3.9	56,605	58,586	3.5	99.1	99.5	0.4
Illinois	592,057	605,201	2.2	554,793	558,626	0.7	106.7	108.3	1.5
Indiana	249,326	253,779	1.8	257,810	258,873	0.4	96.7	98.0	1.4
Iowa	135,346	138,337	2.2	142,041	142,922	0.6	95.3	96.8	1.6
Kansas	125,168	128,541	2.7	130,578	132,021	1.1	95.9	97.4	1.6
Kentucky	157,043	159,172	1.4	166,995	166,652	-0.2	94.0	95.5	1.6
Louisiana	186,923	190,590	2.0	193,140	194,937	0.9	96.8	97.8	1.0
Maine	52,958	54,359	2.6	50,914	51,878	1.9	104.0	104.8	0.7
Maryland	315,776	319,125	1.1	269,264	268,459	-0.3	117.3	118.9	1.4
Massachusetts	376,874	383,152	1.7	333,305	332,925	-0.1	113.1	115.1	1.8
Michigan	381,314	386,471	1.4	380,625	382,627	0.5	100.2	101.0	0.8
Minnesota	254,870	257,466	1.0	246,497	246,002	-0.2	103.4	104.7	1.2
Mississippi	99,886	101,442	1.6	109,112	109,003	-0.1	91.5	93.1	1.7
Missouri	240,578	245,771	2.2	255,656	256,882	0.5	94.1	95.7	1.7
Montana	39,357	39,963	1.5	39,577	39,484	-0.2	99.4	101.2	1.8
Nebraska	85,187	88,114	3.4	88,886	90,810	2.2	95.8	97.0	1.2
Nevada	108,050	109,471	1.3	103,388	103,987	0.6	104.5	105.3	0.7
New Hampshire	66,155	67,513	2.1	59,058	59,479	0.7	112.0	113.5	1.3
New Jersey	487,127	492,897	1.2	401,344	401,477	0.0	121.4	122.8	1.2
New Mexico	74,602	74,996	0.5	74,070	73,596	-0.6	100.7	101.9	1.2
New York	1,059,053	1,070,236	1.1	868,645	865,578	-0.4	121.9	123.6	1.4
North Carolina	375,683	380,954	1.4	387,104	387,429	0.1	97.0	98.3	1.3
North Dakota	39,493	38,472	-2.6	41,074	39,252	-4.4	96.2	98.0	1.9
Ohio	464,780	474,973	2.2	490,999	494,615	0.7	94.7	96.0	1.4
Oklahoma	157,971	161,188	2.0	165,991	167,222	0.7	95.2	96.4	1.3
Oregon	153,097	156,605	2.3	146,536	147,961	1.0	104.5	105.8	1.3
Pennsylvania	581,772	590,171	1.4	558,105	558,402	0.1	104.2	105.7	1.4
Rhode Island	48,584	49,410	1.7	46,526	46,971	1.0	104.4	105.2	0.7
South Carolina	166,959	171,088	2.5	173,613	176,383	1.6	96.2	97.0	0.9
South Dakota	38,096	38,897	2.1	40,561	41,390	2.0	93.9	94.0	0.1
Tennessee	251,752	256,969	2.1	262,076	264,634	1.0	96.1	97.1	1.1
Texas	1,127,675	1,160,079	2.9	1,104,217	1,118,896	1.3	102.1	103.7	1.5
Utah	102,464	106,289	3.7	99,613	101,940	2.3	102.9	104.3	1.4
Vermont	27,819	28,501	2.5	26,099	26,530	1.6	106.6	107.4	0.8
Virginia	398,812	403,425	1.2	365,297	365,386	0.0	109.2	110.4	1.1
Washington	324,458	332,655	2.5	296,951	300,529	1.2	109.3	110.7	1.3
West Virginia	65,245	65,889	1.0	69,563	69,485	-0.1	93.8	94.8	1.1
Wisconsin	243,148	248,335	2.1	246,383	249,190	1.1	98.7	99.7	1.0
Wyoming	30,255	30,779	1.7	29,729	29,955	0.8	101.8	102.8	1.0
Maximum	1,805,194	1,856,614	3.9	1,508,765	1,542,356	3.5	125.0	126.2	1.9
Minimum	27,819	28,501	-2.6	26,099	26,530	-4.4	91.5	93.1	0.1
Range	1,777,375	1,828,113	6.5	1,482,666	1,515,826	7.9	33.4	33.1	1.9

Source: U.S. Bureau of Economic Analysis

Table 2. Real Per Capita Personal Income by State, 2012-2013

	Per capita personal income Dollars			Real per capita personal income Chained (2009) dollars		
	2012	2013	Percent growth	2012	2013	Percent growth
United States	44,200	44,765	1.3	41,674	41,706	0.1
Alabama	35,942	36,481	1.5	38,533	38,794	0.7
Alaska	49,906	50,150	0.5	44,330	44,114	-0.5
Arizona	36,624	36,983	1.0	35,388	35,537	0.4
Arkansas	36,423	36,698	0.8	39,239	39,119	-0.3
California	47,505	48,434	2.0	39,704	40,236	1.3
Colorado	46,315	46,897	1.3	42,988	42,786	-0.5
Connecticut	60,223	60,658	0.7	52,135	52,126	0.0
Delaware	44,031	44,815	1.8	40,895	41,202	0.8
District of Columbia	75,950	75,329	-0.8	60,763	59,688	-1.8
Florida	41,041	41,497	1.1	39,205	39,159	-0.1
Georgia	37,229	37,845	1.7	38,262	38,415	0.4
Hawaii	44,578	45,204	1.4	35,927	36,267	0.9
Idaho	35,142	36,146	2.9	35,476	36,340	2.4
Illinois	46,009	46,980	2.1	43,113	43,364	0.6
Indiana	38,136	38,622	1.3	39,434	39,397	-0.1
Iowa	44,014	44,763	1.7	46,192	46,247	0.1
Kansas	43,380	44,417	2.4	45,255	45,619	0.8
Kentucky	35,857	36,214	1.0	38,129	37,916	-0.6
Louisiana	40,617	41,204	1.4	41,968	42,144	0.4
Maine	39,863	40,924	2.7	38,325	39,056	1.9
Maryland	53,659	53,826	0.3	45,755	45,280	-1.0
Massachusetts	56,713	57,248	0.9	50,156	49,744	-0.8
Michigan	38,585	39,055	1.2	38,515	38,666	0.4
Minnesota	47,377	47,500	0.3	45,820	45,385	-0.9
Mississippi	33,446	33,913	1.4	36,536	36,441	-0.3
Missouri	39,933	40,663	1.8	42,436	42,501	0.2
Montana	39,142	39,366	0.6	39,360	38,895	-1.2
Nebraska	45,914	47,157	2.7	47,908	48,600	1.4
Nevada	39,229	39,235	0.0	37,536	37,269	-0.7
New Hampshire	50,056	51,013	1.9	44,687	44,942	0.6
New Jersey	54,932	55,386	0.8	45,259	45,113	-0.3
New Mexico	35,805	35,965	0.4	35,550	35,293	-0.7
New York	54,099	54,462	0.7	44,373	44,047	-0.7
North Carolina	38,538	38,683	0.4	39,710	39,341	-0.9
North Dakota	56,310	53,182	-5.6	58,564	54,261	-7.3
Ohio	40,230	41,049	2.0	42,500	42,747	0.6
Oklahoma	41,399	41,861	1.1	43,501	43,428	-0.2
Oregon	39,258	39,848	1.5	37,575	37,648	0.2
Pennsylvania	45,577	46,202	1.4	43,723	43,715	0.0
Rhode Island	46,257	46,989	1.6	44,298	44,670	0.8
South Carolina	35,347	35,831	1.4	36,756	36,940	0.5
South Dakota	45,676	46,039	0.8	48,631	48,989	0.7
Tennessee	39,002	39,558	1.4	40,601	40,738	0.3
Texas	43,271	43,862	1.4	42,371	42,305	-0.2
Utah	35,891	36,640	2.1	34,892	35,141	0.7
Vermont	44,443	45,483	2.3	41,695	42,337	1.5
Virginia	48,715	48,838	0.3	44,621	44,233	-0.9
Washington	47,055	47,717	1.4	43,066	43,109	0.1
West Virginia	35,140	35,533	1.1	37,467	37,473	0.0
Wisconsin	42,475	43,244	1.8	43,040	43,392	0.8
Wyoming	52,469	52,826	0.7	51,557	51,410	-0.3
Maximum	75,950	75,329	2.9	60,763	59,688	2.4
Minimum	33,446	33,913	-5.6	34,892	35,141	-7.3
Range	42,504	41,416	8.4	25,871	24,547	9.8

Source: U.S. Bureau of Economic Analysis

Table 3. Regional Price Parities by State, 2013

	Regional price parities			
	All items	Goods	Services	
			Rents	Other
Alabama	87.7	96.4	63.4	93.4
Alaska	106.0	101.9	138.8	98.2
Arizona	97.1	99.5	91.5	97.9
Arkansas	87.5	95.3	62.9	92.9
California	112.3	103.0	146.1	105.7
Colorado	102.2	101.4	109.5	99.4
Connecticut	108.5	104.3	116.1	109.0
Delaware	101.4	101.4	97.8	103.8
District of Columbia	117.7	107.9	157.0	110.2
Florida	98.8	98.2	104.5	96.2
Georgia	91.9	96.8	79.3	93.9
Hawaii	116.2	108.3	158.7	102.8
Idaho	92.8	98.5	76.4	96.4
Illinois	101.0	101.4	100.8	100.8
Indiana	91.4	97.0	76.0	94.2
Iowa	90.3	94.5	76.0	91.6
Kansas	90.8	95.5	76.6	92.7
Kentucky	89.1	94.9	69.4	92.9
Louisiana	91.2	96.6	76.8	93.5
Maine	97.7	98.1	97.6	97.4
Maryland	110.9	104.0	125.9	109.2
Massachusetts	107.3	99.1	123.7	108.7
Michigan	94.2	98.0	82.2	97.0
Minnesota	97.6	99.4	95.6	96.6
Mississippi	86.8	94.7	63.8	92.6
Missouri	89.2	94.1	75.4	91.3
Montana	94.4	98.7	83.3	95.0
Nebraska	90.5	95.2	75.9	92.1
Nevada	98.2	97.6	96.9	99.7
New Hampshire	105.9	98.8	122.7	105.6
New Jersey	114.5	102.2	135.4	115.9
New Mexico	95.0	98.0	83.4	98.5
New York	115.3	107.7	135.8	112.5
North Carolina	91.7	96.5	79.6	93.5
North Dakota	91.4	94.3	82.6	91.4
Ohio	89.6	95.5	73.8	91.9
Oklahoma	89.9	95.9	70.7	93.2
Oregon	98.7	98.6	99.5	98.5
Pennsylvania	98.6	99.6	90.7	101.6
Rhode Island	98.1	98.0	100.1	97.1
South Carolina	90.5	96.7	75.5	93.6
South Dakota	87.6	94.1	66.6	91.1
Tennessee	90.6	96.4	75.1	93.4
Texas	96.7	97.5	90.3	99.2
Utah	97.2	97.8	92.9	99.0
Vermont	100.2	98.0	113.2	97.0
Virginia	103.0	100.4	113.8	100.4
Washington	103.2	102.9	110.9	99.9
West Virginia	88.4	95.5	63.0	94.1
Wisconsin	92.9	95.8	86.2	92.8
Wyoming	95.8	98.6	89.7	95.4
All States	100.0	99.4	101.1	100.1
Maximum	117.7	108.3	158.7	115.9
Minimum	86.8	94.1	62.9	91.1
Range	30.9	14.2	95.8	24.8

Source: U.S. Bureau of Economic Analysis