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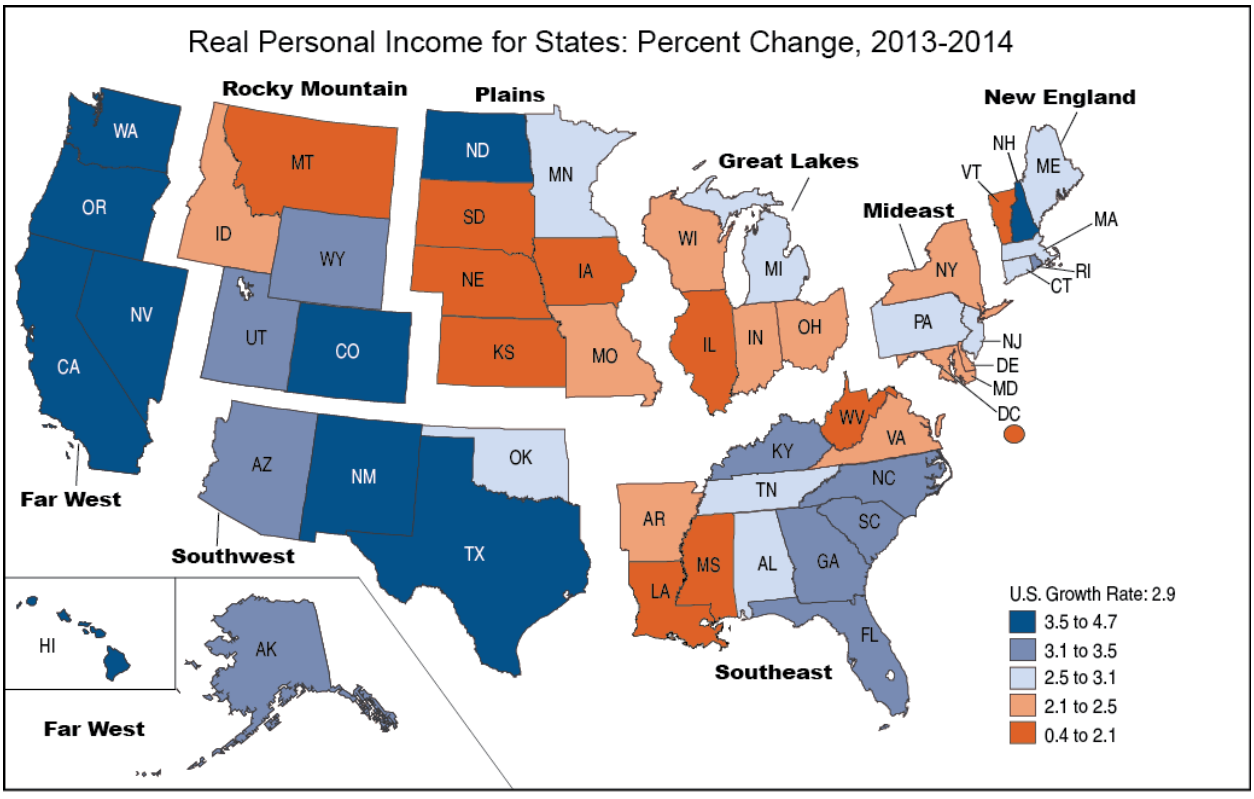
Real Personal Income for States and Metropolitan Areas, 2014

Real personal income across all regions rose by an average of 2.9 percent in 2014. 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 4.4 percent in 2014. In 2014, the U.S. PCE price index grew 1.4 percent.



U.S. Bureau of Economic Analysis

Real Personal Income for States and Metropolitan Areas

Growth in real state personal income in 2014 ranged from 4.7 percent in Nevada to 0.4 percent in South Dakota (table 1). 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 state's regional price parity. After Nevada, the states with the highest growth rates were Colorado (4.5 percent), Texas (4.2 percent), Washington (4.0 percent), and Oregon (4.0 percent). After South Dakota, the states with the slowest rates of growth were Kansas (0.5 percent), West Virginia (0.7 percent), Illinois (1.0 percent), and Vermont (1.3 percent). States with growth rates close to the national average were Alaska (3.1 percent), Oklahoma (3.1 percent), Michigan (2.9 percent), New Jersey (2.9 percent), Massachusetts (2.8 percent), Connecticut (2.8 percent), and Tennessee (2.8 percent).

Growth in real metropolitan area personal income in 2014 ranged from an increase of 8.1 percent in Odessa, TX to a decline of 3.9 percent in Danville, IL. After Odessa, TX, the metropolitan areas with the largest growth rates were Hanford-Corcoran, CA (7.0 percent), Midland, TX (7.0 percent), Myrtle Beach-Conway-North Myrtle Beach, SC-NC (6.0 percent), Salem, OR (5.8 percent), and Beaumont-Port Arthur, TX (5.6 percent). After Danville, IL, the metropolitan areas with the largest declines were Beckley, WV (-3.3 percent), Bloomington, IL (-3.2 percent), Grand Forks, ND-MN (-1.4 percent), Peoria, IL (-1.1 percent), and Yuma, AZ (-1.1 percent).

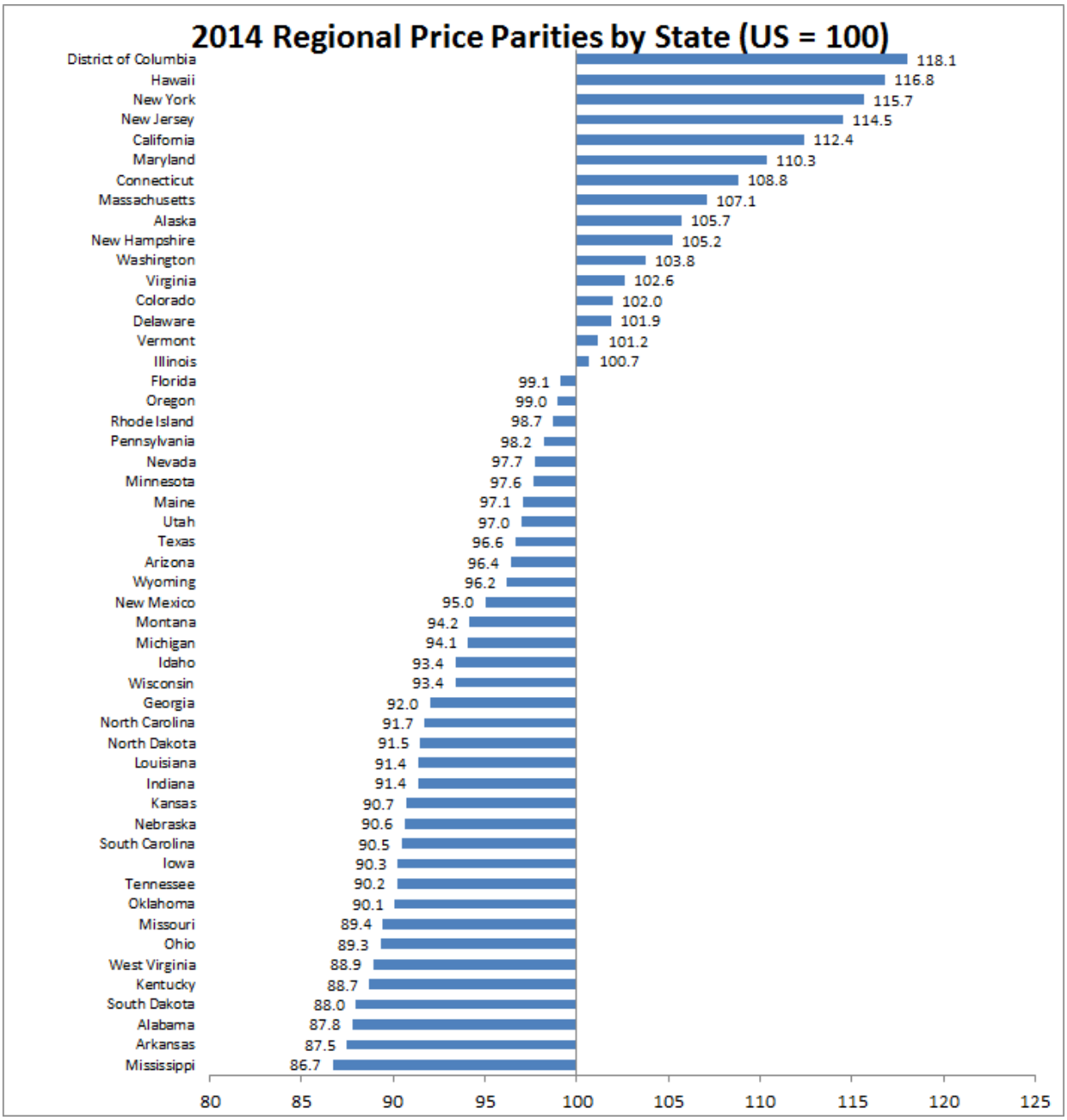
Regional Price Parities

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.

In 2014, the District of Columbia's RPP (118.1) was higher than that of any state (table 3). The states with the highest RPPs were Hawaii (116.8), New York (115.7), New Jersey (114.5), and California (112.4). Mississippi (86.7), Arkansas (87.5), Alabama (87.8), South Dakota (88.0), and Kentucky (88.7) had the lowest RPPs among the states. States with high (low) RPPs typically have high (low) price levels for rents. States with RPPs closest to the national average price level were Vermont (101.2), Illinois (100.7), Florida (99.1), Oregon (99.0), and Rhode Island (98.7).

In 2014, the metropolitan area with the highest RPP was Urban Honolulu, HI (123.5). Metropolitan areas with RPPs above 120.0 also included San Jose-Sunnyvale-Santa Clara, CA (122.9), New York-Newark-Jersey City, NY-NJ-PA (122.3), Santa Cruz-Watsonville, CA (121.8), San Francisco-Oakland-Hayward, CA (121.3), and Bridgeport-Stamford-Norwalk, CT (120.4). The metropolitan area with the lowest RPP was Beckley, WV (79.7), followed by Rome, GA (80.7), Danville, IL (81.1), Morristown, TN (81.9), and Jonesboro, AR (82.0).

Additional tables showing estimates of real personal income and regional price parities for state metropolitan and nonmetropolitan portions, and metropolitan areas can be found at www.bea.gov/regional/index.htm. Supplemental tables are available upon request.


2014 Regional Price Parities by State (US = 100)
District of Columbia 118.1
Hawaii 116.8
New York 115.7
New Jersey 114.5
California 112.4
Maryland 110.3
Connecticut 108.8
Massachusetts 107.1
Alaska 105.7
New Hampshire 105.2
Washington 103.8
Virginia 102.6
Colorado 102.0
Delaware 101.9
Vermont 101.2
Illinois 100.7
Florida 99.1
Oregon 99.0
Rhode Island 98.7
Pennsylvania 98.2
Nevada 97.7
Minnesota 97.6
Maine 97.1
Utah 97.0
Texas 96.6
Arizona 96.4
Wyoming 96.2
New Mexico 95.0
Montana 94.2
Michigan 94.1
Idaho 93.4
Wisconsin 93.4
Georgia 92.0
North Carolina 91.7
North Dakota 91.5
Louisiana 91.4
Indiana 91.4
Kansas 90.7
Nebraska 90.6
South Carolina 90.5
Iowa 90.3
Tennessee 90.2
Oklahoma 90.1
Missouri 89.4
Ohio 89.3
West Virginia 88.9
Kentucky 88.7
South Dakota 88.0
Alabama 87.8
Arkansas 87.5
Mississippi 86.7
80
85
90
95
100
105
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115
120
125

Technical Notes 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 U.S. 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 expenditures[2].

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 U.S[3].

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 U.S. 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 U.S. 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 inflation[4].

Detailed information on the methodology used to estimate the RPPs may be found on the regional methodology page of the BEA website: www.bea.gov/regional/methods.cfm.

[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 for 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.

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Next real personal income release – July 2017 for states, state metropolitan and nonmetropolitan portions, and metropolitan areas.

Additional Information

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 accounts (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 areas[5]. 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 parity[6] 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 2014 as an example:

(1) Personal Income is divided by the RPP	(2) Personal Income at RPPs is deflated by the U.S. PCE Price Index	**2014 Alaska Real Personal Income**
$39.8 / 1.057 = $37.6	$37.6 / 1.091 = $34.5	**$34.5**

Note: Dollar amounts are in billions.

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.

[5] The CPI represents about 89 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.

Table 1. Real Personal Income and Implicit Regional Price Deflators by State, 2013-2014

	Personal income Millions of dollars			Real personal income Millions of chained (2009) dollars			Implicit regional price deflators		
	2013	2014	Percent growth	2013	2014	Percent growth	2013	2014	Percent growth
United States	**14,064,468**	**14,683,147**	**4.4**	**13,074,510**	**13,457,845**	**2.9**	**107.6**	**109.1**	**1.4**
Alabama	174,877	181,909	4.0	185,465	190,171	2.5	94.3	95.7	1.4
Alaska	37,791	39,793	5.3	33,500	34,542	3.1	112.8	115.2	2.1
Arizona	243,657	255,093	4.7	234,753	242,833	3.4	103.8	105.0	1.2
Arkansas	108,081	112,076	3.7	114,713	117,558	2.5	94.2	95.3	1.2
California	1,849,505	1,939,528	4.9	1,527,644	1,583,118	3.6	121.1	122.5	1.2
Colorado	246,448	261,735	6.2	225,442	235,538	4.5	109.3	111.1	1.7
Connecticut	223,561	233,293	4.4	191,439	196,749	2.8	116.8	118.6	1.5
Delaware	41,468	43,392	4.6	38,224	39,071	2.2	108.5	111.1	2.4
District of Columbia	44,533	46,016	3.3	35,231	35,765	1.5	126.4	128.7	1.8
Florida	809,665	850,178	5.0	761,000	786,786	3.4	106.4	108.1	1.6
Georgia	375,758	393,594	4.7	380,077	392,474	3.3	98.9	100.3	1.4
Hawaii	62,437	65,348	4.7	49,407	51,354	3.9	126.4	127.3	0.7
Idaho	57,484	60,041	4.4	57,701	58,997	2.2	99.6	101.8	2.2
Illinois	599,119	613,672	2.4	553,566	559,163	1.0	108.2	109.7	1.4
Indiana	251,599	261,092	3.8	256,028	262,222	2.4	98.3	99.6	1.3
Iowa	135,242	139,625	3.2	139,133	141,927	2.0	97.2	98.4	1.2
Kansas	128,315	130,364	1.6	131,208	131,904	0.5	97.8	98.8	1.1
Kentucky	158,238	165,044	4.3	165,170	170,729	3.4	95.8	96.7	0.9
Louisiana	188,965	195,426	3.4	192,829	196,248	1.8	98.0	99.6	1.6
Maine	52,566	54,195	3.1	49,894	51,230	2.7	105.4	105.8	0.4
Maryland	312,054	323,778	3.8	263,303	269,226	2.2	118.5	120.3	1.5
Massachusetts	379,381	396,206	4.4	330,207	339,496	2.8	114.9	116.7	1.6
Michigan	387,978	403,726	4.1	382,519	393,741	2.9	101.4	102.5	1.1
Minnesota	257,058	267,389	4.0	245,194	251,362	2.5	104.8	106.4	1.5
Mississippi	100,626	103,091	2.4	107,630	109,092	1.4	93.5	94.5	1.1
Missouri	243,592	252,482	3.6	252,926	259,037	2.4	96.3	97.5	1.2
Montana	39,462	40,844	3.5	39,016	39,803	2.0	101.1	102.6	1.5
Nebraska	86,447	89,479	3.5	88,795	90,608	2.0	97.4	98.8	1.4
Nevada	109,490	115,672	5.6	103,727	108,602	4.7	105.6	106.5	0.9
New Hampshire	66,839	70,020	4.8	58,959	61,050	3.5	113.4	114.7	1.2
New Jersey	491,865	515,020	4.7	400,949	412,540	2.9	122.7	124.8	1.8
New Mexico	73,571	77,356	5.1	72,091	74,698	3.6	102.1	103.6	1.5
New York	1,055,803	1,098,103	4.0	851,321	871,141	2.3	124.0	126.1	1.6
North Carolina	372,031	389,513	4.7	377,386	389,649	3.2	98.6	100.0	1.4
North Dakota	39,358	41,265	4.8	39,996	41,388	3.5	98.4	99.7	1.3
Ohio	471,547	489,695	3.8	490,995	503,038	2.5	96.0	97.3	1.4
Oklahoma	161,686	169,228	4.7	167,240	172,374	3.1	96.7	98.2	1.5
Oregon	154,869	163,653	5.7	145,945	151,720	4.0	106.1	107.9	1.6
Pennsylvania	588,296	609,679	3.6	555,030	569,724	2.6	106.0	107.0	1.0
Rhode Island	48,607	51,027	5.0	45,969	47,425	3.2	105.7	107.6	1.8
South Carolina	169,269	177,242	4.7	174,068	179,763	3.3	97.2	98.6	1.4
South Dakota	37,855	38,631	2.0	40,124	40,300	0.4	94.3	95.9	1.6
Tennessee	255,422	264,965	3.7	262,264	269,504	2.8	97.4	98.3	0.9
Texas	1,161,134	1,231,085	6.0	1,121,730	1,168,858	4.2	103.5	105.3	1.7
Utah	106,073	110,842	4.5	101,508	104,881	3.3	104.5	105.7	1.1
Vermont	28,108	29,090	3.5	26,049	26,378	1.3	107.9	110.3	2.2
Virginia	404,886	419,185	3.5	366,411	374,847	2.3	110.5	111.8	1.2
Washington	331,031	350,322	5.8	297,835	309,793	4.0	111.1	113.1	1.7
West Virginia	65,178	66,857	2.6	68,520	69,014	0.7	95.1	96.9	1.8
Wisconsin	245,438	254,405	3.7	244,961	250,000	2.1	100.2	101.8	1.6
Wyoming	30,206	31,885	5.6	29,419	30,411	3.4	102.7	104.8	2.1
Maximum	1,849,505	1,939,528	6.2	1,527,644	1,583,118	4.7	126.4	128.7	2.4
Minimum	28,108	29,090	1.6	26,049	26,378	0.4	93.5	94.5	0.4
Range	1,821,398	1,910,438	4.6	1,501,595	1,556,740	4.3	32.9	34.2	2.0

Source: U.S. Bureau of Economic Analysis

Table 2. Real Per Capita Personal Income by State, 2013-2014

	Per capita personal income Dollars			Real per capita personal income Chained (2009) dollars		
	2013	2014	Percent growth	2013	2014	Percent growth
United States	**44,438**	**46,049**	**3.6**	**41,310**	**42,207**	**2.2**
Alabama	36,176	37,512	3.7	38,367	39,216	2.2
Alaska	51,259	54,012	5.4	45,438	46,886	3.2
Arizona	36,723	37,895	3.2	35,381	36,074	2.0
Arkansas	36,529	37,782	3.4	38,771	39,630	2.2
California	48,125	49,985	3.9	39,750	40,799	2.6
Colorado	46,746	48,869	4.5	42,761	43,978	2.8
Connecticut	62,112	64,864	4.4	53,187	54,703	2.9
Delaware	44,819	46,378	3.5	41,312	41,760	1.1
District of Columbia	68,606	69,838	1.8	54,275	54,280	0.0
Florida	41,309	42,737	3.5	38,826	39,550	1.9
Georgia	37,596	38,980	3.7	38,028	38,869	2.2
Hawaii	44,314	46,034	3.9	35,065	36,176	3.2
Idaho	35,641	36,734	3.1	35,776	36,096	0.9
Illinois	46,477	47,643	2.5	42,944	43,411	1.1
Indiana	38,291	39,578	3.4	38,965	39,750	2.0
Iowa	43,735	44,937	2.7	44,993	45,678	1.5
Kansas	44,311	44,891	1.3	45,310	45,421	0.2
Kentucky	35,967	37,396	4.0	37,542	38,684	3.0
Louisiana	40,819	42,030	3.0	41,654	42,207	1.3
Maine	39,562	40,745	3.0	37,551	38,516	2.6
Maryland	52,545	54,176	3.1	44,336	45,048	1.6
Massachusetts	56,549	58,737	3.9	49,219	50,330	2.3
Michigan	39,197	40,740	3.9	38,645	39,732	2.8
Minnesota	47,410	48,998	3.3	45,222	46,061	1.9
Mississippi	33,629	34,431	2.4	35,970	36,436	1.3
Missouri	40,297	41,639	3.3	41,841	42,720	2.1
Montana	38,884	39,903	2.6	38,445	38,886	1.1
Nebraska	46,254	47,557	2.8	47,510	48,157	1.4
Nevada	39,223	40,742	3.9	37,158	38,252	2.9
New Hampshire	50,535	52,773	4.4	44,578	46,013	3.2
New Jersey	55,194	57,620	4.4	44,992	46,155	2.6
New Mexico	35,254	37,091	5.2	34,545	35,817	3.7
New York	53,606	55,611	3.7	43,224	44,117	2.1
North Carolina	37,774	39,171	3.7	38,318	39,184	2.3
North Dakota	54,373	55,802	2.6	55,254	55,969	1.3
Ohio	40,749	42,236	3.7	42,430	43,387	2.3
Oklahoma	41,962	43,637	4.0	43,404	44,449	2.4
Oregon	39,426	41,220	4.5	37,154	38,214	2.9
Pennsylvania	46,028	47,679	3.6	43,425	44,554	2.6
Rhode Island	46,145	48,359	4.8	43,641	44,946	3.0
South Carolina	35,472	36,677	3.4	36,477	37,199	2.0
South Dakota	44,772	45,279	1.1	47,456	47,235	-0.5
Tennessee	39,312	40,457	2.9	40,365	41,150	1.9
Texas	43,807	45,669	4.2	42,320	43,360	2.5
Utah	36,542	37,664	3.1	34,969	35,639	1.9
Vermont	44,839	46,428	3.5	41,555	42,099	1.3
Virginia	48,956	50,345	2.8	44,304	45,020	1.6
Washington	47,468	49,610	4.5	42,708	43,871	2.7
West Virginia	35,163	36,132	2.8	36,966	37,298	0.9
Wisconsin	42,737	44,186	3.4	42,654	43,421	1.8
Wyoming	51,791	54,584	5.4	50,442	52,059	3.2
Maximum	68,606	69,838	5.4	55,254	55,969	3.7
Minimum	33,629	34,431	1.1	34,545	35,639	-0.5
Range	34,976	35,407	4.3	20,710	20,330	4.1

Source: U.S. Bureau of Economic Analysis

Table 3. Regional Price Parities by State, 2014

	Regional price parities			
	All items	Goods	Services	
			Rents	Other
Alabama	87.8	96.3	63.6	93.8
Alaska	105.7	101.0	144.1	97.1
Arizona	96.4	98.5	91.1	97.3
Arkansas	87.5	95.1	62.5	93.5
California	112.4	103.0	147.7	105.6
Colorado	102.0	100.4	111.0	99.0
Connecticut	108.8	104.3	116.9	109.3
Delaware	101.9	100.4	101.6	103.6
District of Columbia	118.1	107.6	162.5	109.4
Florida	99.1	98.3	104.9	96.7
Georgia	92.0	96.8	78.7	94.7
Hawaii	116.8	108.9	158.4	103.6
Idaho	93.4	98.1	79.2	96.2
Illinois	100.7	101.2	99.6	100.7
Indiana	91.4	97.3	75.4	94.1
Iowa	90.3	95.1	74.9	91.6
Kansas	90.7	95.7	75.5	92.8
Kentucky	88.7	94.6	67.8	93.4
Louisiana	91.4	96.5	77.5	93.8
Maine	97.1	98.1	93.0	97.9
Maryland	110.3	104.0	126.6	107.5
Massachusetts	107.1	100.3	123.5	106.7
Michigan	94.1	97.9	82.1	96.8
Minnesota	97.6	100.1	95.7	95.7
Mississippi	86.7	94.4	63.2	93.4
Missouri	89.4	95.0	74.3	91.6
Montana	94.2	98.4	83.6	94.4
Nebraska	90.6	95.6	75.8	92.1
Nevada	97.7	97.2	94.6	100.4
New Hampshire	105.2	99.7	119.9	104.3
New Jersey	114.5	102.3	136.7	115.4
New Mexico	95.0	97.6	83.6	98.8
New York	115.7	108.2	136.6	112.5
North Carolina	91.7	96.3	79.5	93.8
North Dakota	91.5	94.9	81.9	91.4
Ohio	89.3	95.6	72.9	91.7
Oklahoma	90.1	95.7	71.2	93.7
Oregon	99.0	98.8	100.7	98.3
Pennsylvania	98.2	99.6	89.0	101.7
Rhode Island	98.7	98.0	102.0	97.6
South Carolina	90.5	96.6	75.4	93.8
South Dakota	88.0	94.6	67.1	91.2
Tennessee	90.2	96.2	73.6	93.8
Texas	96.6	97.0	91.1	99.2
Utah	97.0	97.5	91.6	99.4
Vermont	101.2	98.0	118.4	97.5
Virginia	102.6	100.2	112.1	100.4
Washington	103.8	103.3	112.3	100.3
West Virginia	88.9	95.1	64.5	94.8
Wisconsin	93.4	95.8	86.6	93.8
Wyoming	96.2	98.3	93.3	95.0
All States	100.0	99.4	101.1	100.1
Maximum	118.1	108.9	162.5	115.4
Minimum	86.7	94.4	62.5	91.2
Range	31.3	14.5	100.0	24.2

Source: U.S. Bureau of Economic Analysis