



Regional Price Parities and Real Regional Income for the United States: 2008-2012

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In April 2014, the Bureau of Economic Analysis (BEA) published price-adjusted estimates of income in constant dollars, that is, real income, for states and metropolitan areas. These adjustments are based on Regional Price Parities (RPPs) that measure differences in price levels across regions, and on the national personal consumption expenditure (PCE) price index that measures price changes over time for the U.S. This paper describes the methodology used to estimate the regional price parities (RPPs) and the resulting real personal income series.¹

Introduction

The BEA, in a joint project with the BLS, first estimated regional price parities for 38 metropolitan and urban areas of the U.S. for 2003 and 2004 (Aten 2005, 2006). These areas, for which BLS produces the CPI, represent about 87% of the total population. The method was expanded to cover the remaining nonmetropolitan portions of each state. Estimates for 2005 and 2006 were reported in the Survey of Current Business in November 2008 (Aten 2008, and Aten & D’Souza 2008). More recent estimates incorporate the multi-year American Community Survey (ACS) from the Census Bureau that includes rent prices for all counties in the U.S. (Aten, Figueroa and Martin 2011, 2012, 2013; Aten and Figueroa 2014).

This paper is divided into three main sections. The first two describe the RPP data and methodology and the third section discusses how the RPPs are used to estimate real personal income. The conclusion includes a summary of the results and directions for future research.

The RPPs are constructed in two stages. The first stage uses price and expenditure inputs collected for the Bureau of Labor Statistics (BLS) Consumer Price Index (CPI) program and the BLS Consumer Expenditure Survey (CE). CPI price data are available for 38 urban areas, while CPI expenditure weights, derived from CE survey data², are available for the 38 urban areas plus four additional rural regions. In this stage, price levels are estimated for CPI areas.³

¹ RPPs are calculated for the 50 states and the District of Columbia, state metropolitan and nonmetropolitan portions, and metropolitan areas. Estimates for metropolitan areas include an estimate for the nonmetropolitan portion of the United States to provide complete coverage of all U.S. counties.

² For more information on the derivation of CPI expenditure weights, known as cost weights, see the “Consumer Price Index,” in the *BLS Handbook of Methods*, chapter 17 at www.bls.gov.

³ The 38 CPI sampling areas are designed to represent the U.S. urban and metropolitan population. Of the 38 areas, 31 represent large metropolitan areas, 4 represent small metropolitan regions, and 3 represent urban nonmetropolitan regions. For more information on these BLS-defined areas, see www.bls.gov/cpi. A list of the counties sampled in each area can be found in Aten (2005). The regional price parities presented in this report were produced by BEA using Bureau of Labor Statistics (BLS) Consumer Price Index microdata. These estimates do not reflect official estimates of the U.S. Bureau of Labor Statistics.

In the second stage, the price levels and expenditure weights are allocated from CPI areas to all counties in the United States⁴. They are then recombined for regions, such as states and metropolitan areas, together with data on rents from the Census Bureau’s American Community Survey (ACS). The ACS provides a broader geographic coverage than the CPI areas, including county-level data, thus allowing us to augment the CPI price levels with observed housing observations. The final RPPs are estimated for states on an annual basis and for metropolitan areas on a rolling multiyear basis.

The following sections describe in more detail the use of the price levels and expenditure data from the CPI and the housing data from the ACS, how their geographies are reconciled, and how the overall indexes are computed.

Section I. Price levels for CPI areas

CPI price data cover a wide array of consumer goods and services, ranging from high-expenditure goods, such as new automobiles, to low-expenditure services, such as haircuts. Over a million price quotes are collected each year and are classified into more than 200 item strata, each consisting of detailed entry level items (ELIs). The item strata can be combined into nine expenditure groups: apparel, education, food, housing, medical, recreation, rents, transportation and other goods and services.⁵

Because the CPI was not designed to measure geographic price level differences, items with identical characteristics are not always priced in all sampling areas. Therefore, for the ELIs in the 75 highest item strata (accounting for roughly 85 percent of expenditure weights), we estimate hedonic regressions which take into account the variation in the characteristics of the sampled items.⁶

For the “carbonated drinks” ELI, for example, we use a hedonic price model to adjust for the brand and manufacturer, the variety of the beverage (cola, club soda, tonic water, energy drink, or other), the individual container and unit size (number of ounces, and if it is a 6-pack or 12-pack, or other), and the type of outlet where it was purchased (such as a large retailer, a gas station, or convenience store, or other business). An example of an item-specific hedonic regression may be found in Aten (2006).

After the ELI price levels are estimated, they are aggregated to yield item strata price levels using a weighted country product dummy (CPD-W) approach, with weights corresponding to the importance of the ELIs within the item strata.⁷ Both the ELI and the item strata price levels undergo an outlier checking process described in detail in Aten, Figueroa and Martin (2011). Briefly, it is modeled after

⁴ For a description of input data and methods used to estimate RPP expenditure weights, see Figueroa, Aten, Martin (2014).

⁵ See the “Consumer Price Index,” in the *BLS Handbook of Methods*, chapter 17 at www.bls.gov.

⁶ The item strata price levels for the remaining ELIs are estimated using a shortcut approach described in Aten (2006).

⁷ The CPD-W is the weighted geometric mean when there are no missing observations. For a complete description, see Rao (2005).

the Quaranta tables.⁸ We flag observations that are i) either very large or small relative to the mean in that area and ELI; ii) that are either large or small relative to the variance of the ELI observations; or iii) are large or small once they have been adjusted for the relative price level of the area. It is an iterative process that looks at the raw price data as well as the prices after the hedonic adjustment.

Lastly, the item strata price and expenditure levels in each of the 38 areas are aggregated to 16 expenditure classes using the Geary multilateral index (see Balk 2012).⁹ One of the advantages of the Geary index is that it is additive at various levels of aggregation. Previous research on the RPPs (Aten and Marshall 2010) has shown that other methods such as the EKS-Törnqvist and Fisher indexes, the CPD-W approach, and a GAIA index, tend not to deviate greatly from the Geary.¹⁰

The Geary multilateral price level index, P_{Geary} , is given by:

$$P_{Geary}^C = \frac{\sum_{n=1}^N (pq)_n^C}{\sum_{n=1}^N \pi_n q_n^C}$$

$$\pi_n = \sum_{c=1}^M \frac{(pq)_n^C}{P_{Geary}^C \sum_{d=1}^M q_n^d}$$

Where: p is the relative price of the item stratum or expenditure class

π is the national average price of the item stratum or expenditure class

q is the notional quantity equal to $(pq)/p$

c and d are regions, which take a value of 1 through M

n is the item stratum or expenditure class, which takes a value of 1 through N

Stage II. Regional Price Parities for States and Metropolitan Areas

The second stage begins with the allocation of price levels and expenditure weights from CPI areas to counties. Price levels for each county are assumed to be those of the CPI sampling area in which the county is located. For example, counties in Pennsylvania are assigned price levels from either the Philadelphia or Pittsburgh areas or from the Northeast small metropolitan area. Rural counties are not included in any of the 38 urban areas for which stage one price levels are estimated, therefore these counties are assigned price levels of the urban area that (1) is located in the same region and (2) has the lowest population threshold.¹¹

⁸ The process is modeled after the Quaranta method used by the Organisation for Economic Co-operations and Development, Eurostat, and the International Comparison Program of the World Bank (www.worldbank.org).

⁹ The 16 expenditure classes are derived from the 9 groups subdivided into goods and services: apparel has only goods, rents has only services, and the other seven groups have both goods and services.

¹⁰ The Geary formula is solved simultaneously for the area RPPs and the expenditure class price levels (notation and formulas follow Deaton and Heston 2010).

¹¹ Price levels in rural counties in the South, Midwest and West regions are assumed to be the same as those in the BLS urban, nonmetropolitan area for the region. BLS has no urban, nonmetropolitan area for the Northeast so rural counties are assumed to have the same price levels as those in the BLS-defined small, metropolitan area for the Northeast.

Expenditure weights in the second stage include CPI data for rural regions and thus in combination with the 38 urban areas, cover all U.S. counties. Weights are allocated from each CPI area and rural region to the component counties in proportion to household income¹².

The county-level results then undergo two adjustments. First, rent weights are replaced with estimates derived from the 5-year ACS file. These are directly observed rent expenditures plus imputed owner-equivalent rent expenditures. The imputed owner-equivalent rent expenditures are estimated as follows.

1. The ratio of monthly tenants' rents to owner-equivalent rents in the BLS CPI housing file is estimated for several types of housing units, from studio apartments to detached houses with three or more bedrooms. This is done by taking the weighted geometric means of all the observations in the BLS CPI;
2. This ratio is applied to the observed unit rents in the ACS, resulting in an estimated monthly owner-equivalent rent value;^{13 14}
3. The estimated owner-equivalent rent value is multiplied by twelve and by the number of owner-occupied housing units in order to obtain an annual estimate of owner-occupied housing expenditures.

Note that the ratio of tenants' rents to owner-equivalent rents is across all 38 BLS areas, that is, there is only one vector of ratios, corresponding to each housing type. The same ratio is applied to different geographies in the ACS file, with only the distribution of rents and number of units varying across geographies.¹⁵ Total expenditures by tenants and owners is simply the sum of the observed annual rent expenditures and the estimated owner-occupied expenditures from step 3 above.

The second adjustment to the county level weights derived from the CPI data is to control the national shares of the 16 expenditure classes to BEA's personal consumption expenditure shares. This yields weights consistent with BEA's national accounts.¹⁶ The adjustment shifts the distribution of weights across expenditure classes, notably reducing the share of rents expenditures from total consumption in the United States from 29.7 percent to 20.6 percent (Chart 1).

¹² The allocation uses county-level ACS Money Income for 2008–2012. Census money income is defined as income received on a regular basis (exclusive of certain money receipts such as capital gains) before payments for personal income taxes, social security, union dues, Medicare deductions, etc. Therefore, money income does not reflect the fact that some families receive part of their income in the form of noncash benefits. For more information, see www.census.gov. In past papers, population was used to distribute the weights; for a comparison, see Figueroa, Aten, and Martin (2014).

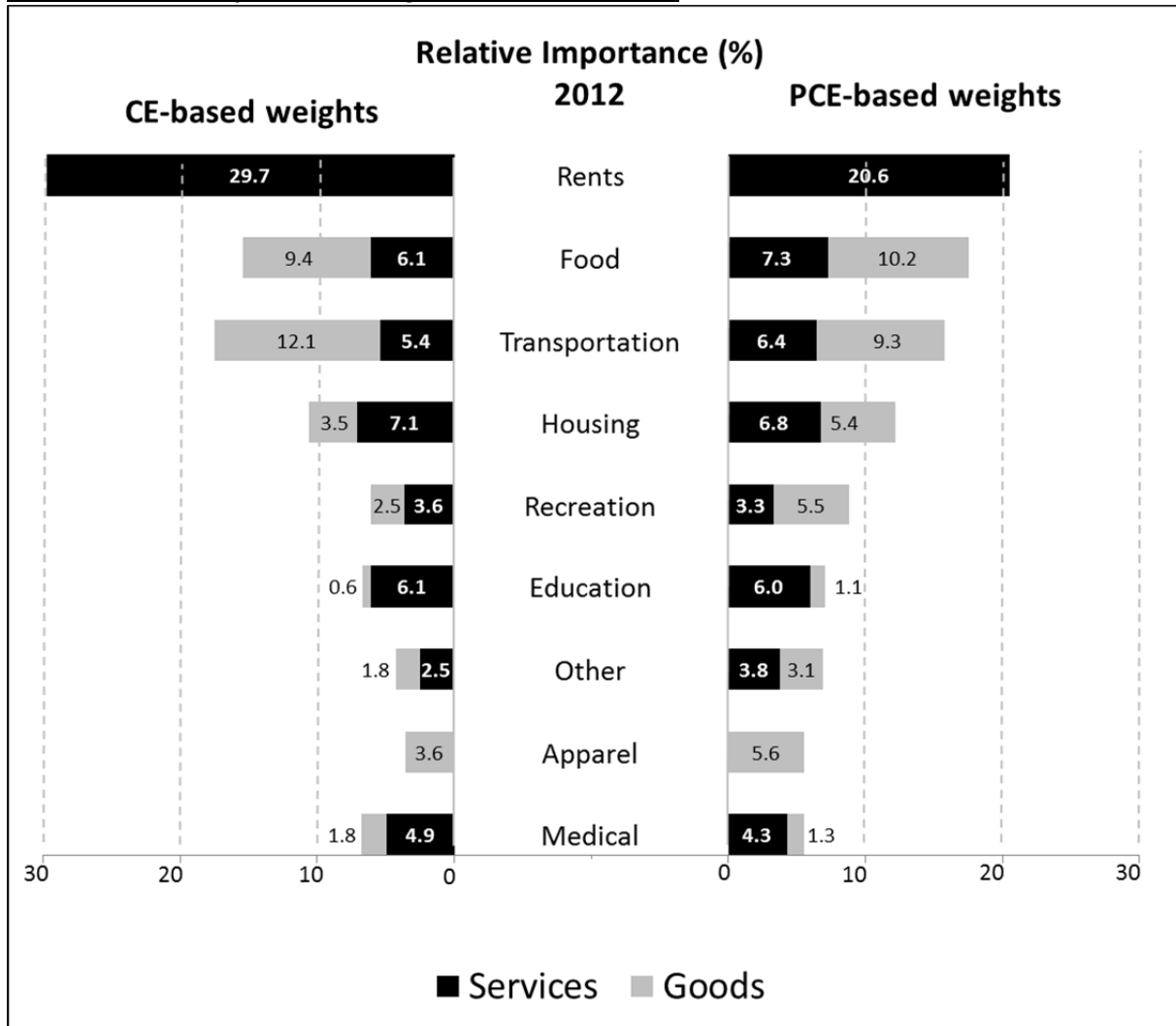
¹³ Unit rents are the sum of rent expenditures divided by the number of units of each housing type for each area.

¹⁴ In earlier work (Aten 2005, 2006), we imputed BLS owner-equivalent rent price levels to other geographies. Here, we only use the BLS data to obtain owner-equivalent rent expenditures; we do not impute owner-equivalent rent price levels.

¹⁵ For more information on how the RPP program estimates expenditures on owner-occupied rents, see Figueroa, Aten, and Martin (2014).

¹⁶ The adjustment is based on BLS research on providing PCE-valued weights for CPI item strata (Blair 2012).

Chart 1. Relative Expenditure Weights: CE and PCE-based



Once the county price levels and expenditure weights have been obtained for each class and for each year as outlined above, we take the weighted geometric mean of the price levels for states, state metropolitan and nonmetropolitan portions, and metropolitan areas. This weighted geometric mean is a 5-year average for goods and services other than rents.

Rent price levels are treated differently. They are estimated directly from tenant rent observations in the ACS: annually for states, and across 3 years for metropolitan areas. No imputation of owner-occupied rents is used in the price levels.^{17,18} The rent price level estimates are quality-adjusted

¹⁷ In Aten and D'Souza (2008), the imputation for county-level owner-occupied rent levels used owner's monthly housing cost data from the 5-year ACS housing file, together with the annual CPI Housing Survey from BLS. In more current work (Aten, Figueroa, and Martin 2011, 2012), only observed rent price levels from the ACS were used, making no imputations for the owner-occupied rent levels. The monthly housing costs in the ACS include mortgage payments, but do not specify the term or interest rate of the loan. The coverage and distribution of the reported payments was highly variable, and using that information has been postponed until more data or further research is completed.

using a hedonic model that controls for basic unit characteristics such as the type of structure, the number of bedrooms and total rooms, when the structure was built, whether it resides in an urban or rural location, and if utilities are included in the monthly rent. Additional research comparing rent estimates using the ACS and CPI Housing surveys is available in Martin, Aten, and Figueroa (2011).

The second and final aggregation is annual for states and over three years for metropolitan areas.¹⁹ It is similar to the first stage in that we use the Geary multilateral index, but this time we aggregate up to a single all items price level index from the 16 expenditure classes, and over multiple geographies.

Section III. Using RPPs to estimate real personal income

An important application of the RPPs is to control for price level differences across regions when measuring economic activity such as income levels. The price level differences measured by the RPPs are specific to one point in time. At BEA, we make an additional adjustment to convert the regional current dollar values to constant values, resulting in price-adjusted regional incomes at chained dollars, which we call “real” personal income.²⁰

Real personal income in chained (2008) dollars for a region is the current-dollar personal income divided by its RPP for a given year (equal to current dollar income in regional prices), divided by the U.S. PCE price index, which converts the current dollar value to 2008 chained dollars.²¹ For the U.S., the nominal and real personal income totals will equal in other in 2008, while the regional nominal and real personal incomes will differ only by the RPP of each region.

The implicit regional price growth rate is the change in RPPs between two years times the change in the U.S. PCE price index (see Box titled “Implicit Price Growth Rates”).

¹⁸ ACS data for 2012 did not incorporate a revision made by BEA to its MSA definitions (see Survey of Current Business, “Comprehensive Revision of Local Area Personal Income”, December 2013, page 17.) Among other changes, the revision designated 23 new MSAs. ACS rents for these MSAs were estimated from ACS data for state metropolitan and nonmetropolitan portions.

¹⁹ When RPPs for metropolitan areas are initially released, they use ACS rents data from 3-year files which end in the target year. These RPPs are revised the following year when 3-year files centered on the target year become available. For example, 2012 data in this release use 2010-2012 3-year files. Next year’s release of 2013 data will include revised 2012 RPPs using 2011-2013 3-year files.

²⁰ Personal income is defined as the income received by all persons from all sources. It is the sum of net earnings by place of residence, property income, and personal current transfer receipts. This article uses personal income estimates released by BEA’s Regional Income Division on November 21, 2013. For more information, see www.bea.gov/regional.

²¹ 2008 is the first year in our series. Subsequent RPP releases will use the same reference year as other BEA chained dollar statistics.

Implicit Price Growth Rates

The RPP indexes express a region's average price relative to the U.S. average, that is,²²

$RPP_{i,t} = (P_i / P_{US})_t$ where i is the region and t is the time period.

The implicit price growth or regional inflation may be calculated as:

$(P_{i,t} / P_{i,t-1}) = (RPP_{i,t} / RPP_{i,t-1}) * (P_{US,t} / P_{US,t-1})$, where the US price change is measured by the national PCE price index.

The real personal income statistics in this article use the national PCE price index to measure U.S. price change over time and RPPs to capture the change in price level differences across regions.

Section IV. Selected Results and Conclusions

Appendix Tables 1-4 at the end of the paper are constrained to the most recent years for which we have estimates, 2011 and 2012, and to states²³ and metropolitan areas. Additional geographies (non-metro and metro portions of states) and additional years (2008-2010) are available.²⁴

1) States

a) Total Personal Income

Appendix Table 1 shows the overall impact of applying RPPs to current dollar nominal incomes for states. It includes the resulting implicit price growth when we use the U.S. PCE price index to convert current values into constant chain dollars. The first three columns of Table 1 are the nominal personal incomes for 2011 and 2012 in millions of current dollars, and the percent change. The middle columns are the real incomes in constant 2008 dollars, together with the real percent growth for each state. The last column is the implicit regional price growth. The U.S. price index rose 1.8% between 2011 and 2012, while total personal incomes grew by 2.3% in real terms and 4.2% in nominal terms for the United States.

Regional price growth ranged from 0.7% in Nevada to 3.2% in North Dakota and 3.6% in South Dakota, while real personal income growth ranged from -1.2% in South Dakota to 15.1% in North Dakota. If we exclude the Dakotas, Maine had the lowest real income growth (0.3%) and Indiana and Montana the highest (3.7%).

The relationship between real income growth and price growth can be seen in **Chart 2**, where real personal income growth is plotted on the vertical axis and the implicit price growth is on the horizontal axis. There is a downward trend, as higher price growth is correlated with lower real

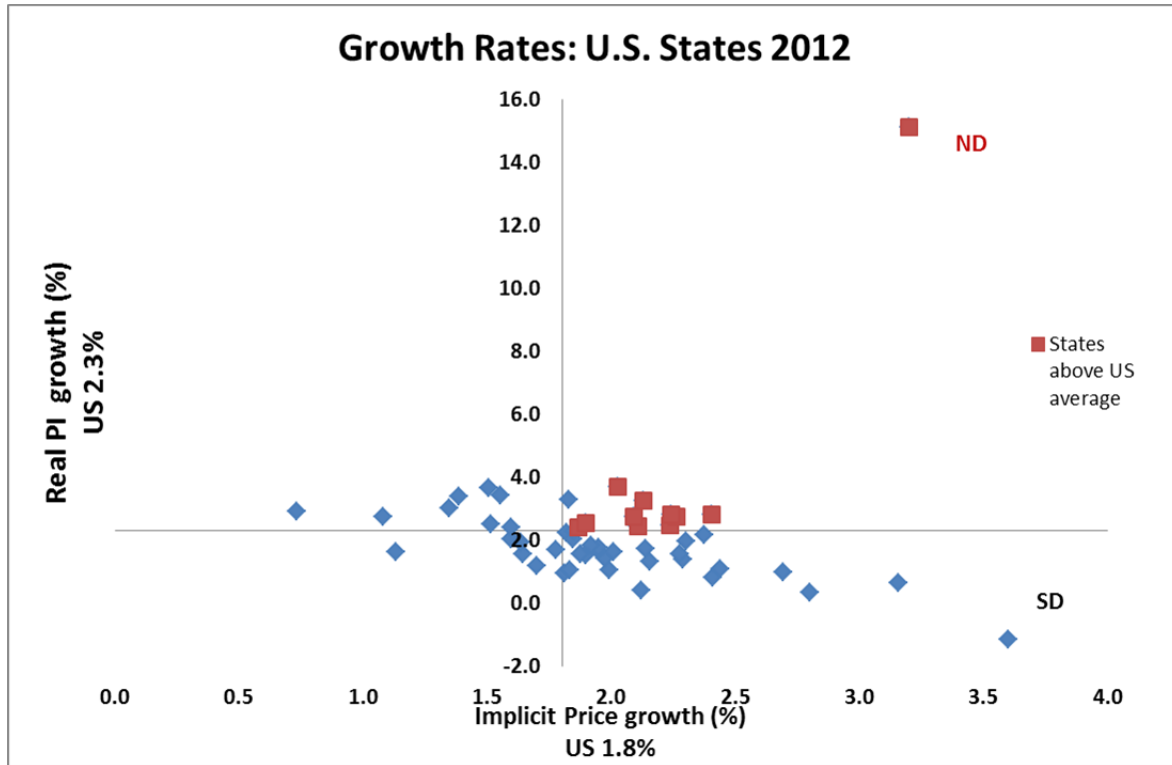
²² The Geary RPP indexes are multilateral indexes that compare area prices with national prices. National prices are defined as quantity-weighted averages of the local area prices of each good. The national prices and the RPPs are solved for simultaneously (see the section "Data and Methodology").

²³ 50 states and the District of Columbia (hereafter referred to as "states")

²⁴ www.bea.gov/regional under Data: Real Personal Income & RPPs.

personal income growth. The axes are centered on the average U.S. price growth of 1.8% and real income growth of 2.3%.

Chart 2. State Total Real Personal Income and Implicit Price Growth 2012



The states on the upper right quadrant of Chart 2, shown as red squares, are ones with both above average price growth and income growth. These are states where nominal growth was extremely high, such as North Dakota with a nominal growth of 18.7%, an implicit price growth of 3.2% and a real growth of 15.1%. Other states in red, which also have above average real income growth and relatively high implicit price growth rates are Arkansas, Colorado, Delaware, Montana, North Carolina, Oklahoma, Oregon, Tennessee, Texas, and Washington. Conversely, states with below average price growth and real income growth are Arizona, Ohio, New Mexico, Missouri and Rhode Island, shown on the lower left quadrant.

North and South Dakota are special cases in that the former has seen exceptional income growth and the latter has the highest implicit price growth of all states, 3.6%, while at the same time recording a below average increase in nominal incomes (2.4% compared with the U.S. average of 4.2%). South Dakota thus is the only state with a decline in real personal income totals (-1.2%).

The price level of rents in the Dakotas, relative to the U.S. average, has gone up between 2011 and 2012, even though their overall RPP has remained below 100. This is part because other goods and services are still much cheaper than in most other states, and the relative importance of rents in the consumption budget is also low, around 15%. In contrast, New York and D.C.'s rent weight is over

20%. Rent RPPs have a large impact on the all items results because their expenditure weights are larger than for any other class (see [Chart 1](#)).

b) Regional Price Parities: States

Appendix Table 2 shows the overall or All Items RPPs for 2012 for each state, broken down further into three groupings: Goods, Rents, and Services other than Rents. The highest RPP was for the District of Columbia (118.2), followed by Hawaii (117.2) and New York (115.4). Mississippi at 86.4 was the lowest. The range between highest and lowest RPP in 2012 is 31.8. Rents RPPs have a wider range: 96.9, from a low of 62.1, again in Mississippi, to 159.0 in Hawaii, while Goods has the smallest range, from 92.8 in Missouri to 108.1 in New York. Services exclude Rents, but have a slightly higher range than the Goods RPPs, from 90.5, also in Missouri, to 115.5 in New Jersey.

Recall that Goods and Services other than Rents are five-year averages of CPI price levels. Thus year to year differences during this five-year period (2008-2012), will only reflect shifts in the expenditure weights, and not actual price level differences of goods and services other than Rents.²⁵

Table A below summarizes the RPPs by dividing the 50 states and the District of Columbia, into thirds based on a ranking of their all items RPPs. Each tercile contains 17 states, and the RPPs are the unweighted geometric means of their 2012 RPPs.

Table A. Summary of State RPPs

<i>RPPs*</i>					
Tercile	All Items	Goods	Rents	Other Services	Ratio of Goods/ Other Services:
1 – Top	107.4	102.3	122.9	105.1	0.97
2 – Middle	95.9	98.2	89.5	96.8	1.01
3 – Bottom	89.3	95.2	71.6	92.3	1.03
United States	100.0	99.4	101.2	100.0	0.99

**RPPs are the unweighted geometric means of the states in each tercile*

The first row of **Table A** shows the breakdown of the mean RPPs for the top 17 states, and these are all above 100, with mean Rents RPPs reaching 122.9, much higher than the All Items RPP of 107.4. This is not true of the second and third rows, showing the middle and bottom terciles, where the Rents RPPs are lower than the All Items RPPs. If we look at the ratio of the Goods RPPs to Other Services RPPs, it is less than one for the top tercile and above one for the other two groups, a pattern that is also found in the international price comparisons literature: the price level of services tends to

²⁵ The main reason for using five-year averages of CPI price levels is for consistency and robustness of the estimates. In some cases, the number of observations for which we can obtain overlap across characteristics and item definition is small. Pooling the data was found to be an effective way to control for sparseness in the geographic coverage for the purposes of the RPPs (see Aten and Marshall 2010).

move in the same direction as that of rents, whereas goods will generally become relatively less expensive as the overall price level increases.

c) Per capita personal income: States

Appendix Table 3 shows the nominal and real per capita personal incomes and growth rates for states. The pattern mimics the total personal incomes tables (**Table 1**) in that the range for real incomes decreases and North Dakota is an outlier in both cases, with nominal per capita income growth of 16.2% and real per capita income growth of 12.7%. South Dakota drops from 1.2% to -2.3% in real terms, while the District of Columbia drops from 0.4% in nominal per capita terms to -1.7% in real terms. The District saw one of the largest population increases in 2012, so that in spite of a small positive growth in total real personal income, the per capita numbers show a decline in real income.

Table B highlights the highest and lowest per capita personal income states in 2011 and 2012. The range in nominal per capita incomes for states is \$41,116, between DC and Mississippi, and for real per capita incomes it is \$25,179 in 2008 dollars, between D.C. (\$59,759) and Utah (\$34,580).

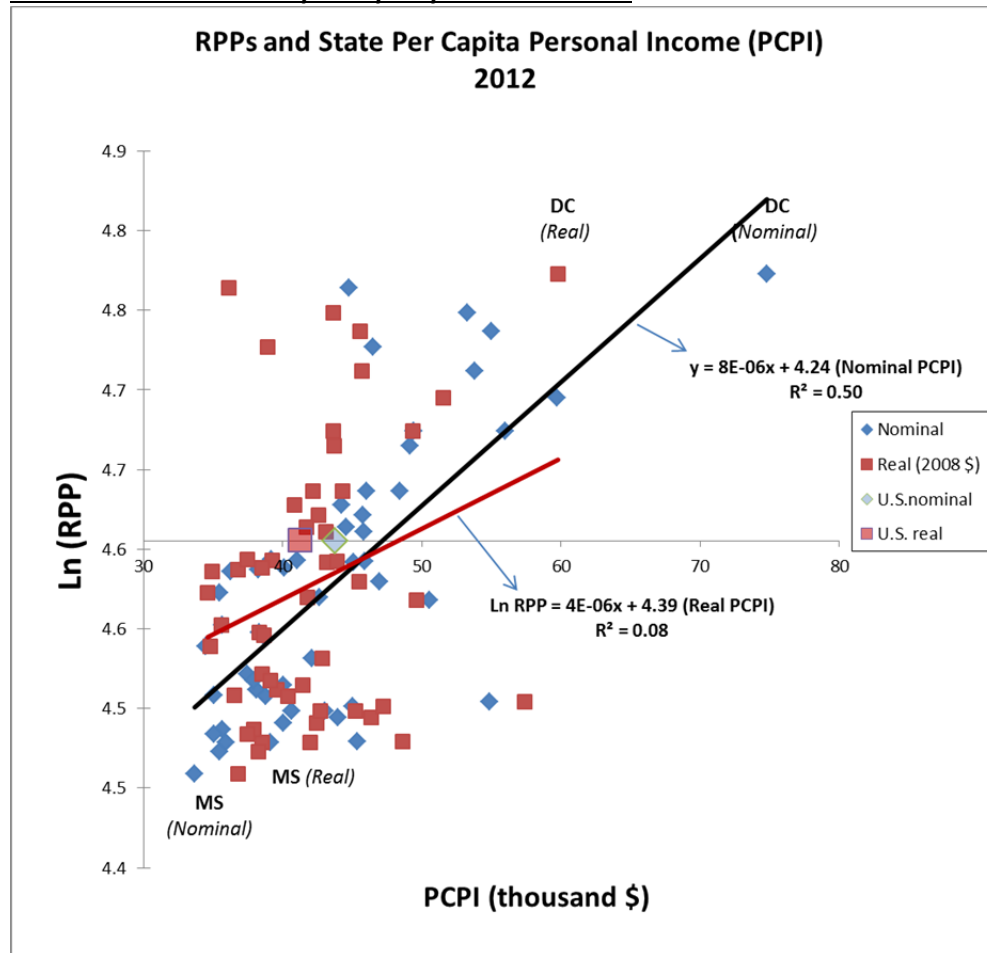
Table B. Highest and Lowest per capita Personal Income: States 2012

	Per Capita Personal Income Dollars			Real Per Capita Personal Income Chained (2008) dollars			RPP 2012
	2011	2012	Percent growth	2011	2012	Percent growth	
Highest Per Capita Personal Income							
District of Columbia	74,480	74,773	0.4	60,787	59,759	-1.7	118.2
Connecticut	57,758	59,687	3.3	50,877	51,559	1.3	109.4
Massachusetts	54,218	55,976	3.2	48,320	49,354	2.1	107.2
New Jersey	53,333	54,987	3.1	45,021	45,552	1.2	114.1
North Dakota	47,218	54,871	16.2	50,923	57,367	12.7	90.4
Lowest Per Capita Personal Income							
Utah	34,173	35,430	3.7	33,963	34,580	1.8	96.8
West Virginia	33,822	35,082	3.7	36,784	37,425	1.7	88.6
South Carolina	34,183	35,056	2.6	36,291	36,507	0.6	90.7
Idaho	33,436	34,481	3.1	34,485	34,818	1.0	93.6
Mississippi	32,193	33,657	4.5	35,690	36,803	3.1	86.4
United States	42,298	43,735	3.4	40,663	41,282	1.5	100.0

Chart 3 shows the relationship between the RPPs and per capita personal incomes for 2012. The RPPs are plotted on the vertical axis against the nominal and real per capita personal incomes. The RPPs are in natural logs to more easily interpret the regression coefficients on the trend lines (the

U.S. with an RPP = 100 is also plotted on the horizontal axis)²⁶. For nominal incomes, a dollar increase in per capita incomes is associated with a 0.8% change in the RPPs, while for real incomes, the effect is smaller (0.4%) but still positive.

Chart 3. State RPPs and per capita personal income



2) Metropolitan Statistical Areas (MSAs)

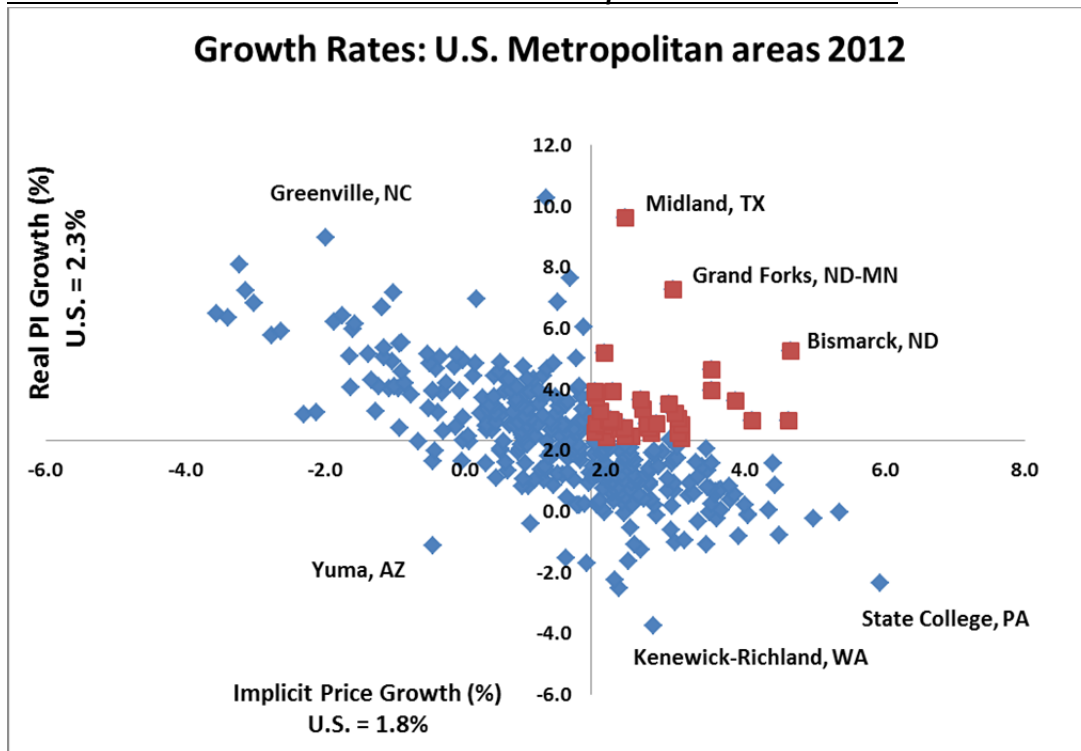
a) Total Personal Income and RPPs

Appendix Table 4 lists all the metropolitan statistical areas (MSAs) and the non-metropolitan portion of the U.S.. Similar to **Appendix Table 1**, it shows the nominal personal income totals in millions of dollars in the first columns, the real personal income totals in chained 2008 dollars in the next columns, the implicit price growth rates and the RPPs. The range of price growth is larger than across

²⁶ The leftward shift along the horizontal axis is equal to the difference between U.S. nominal (\$43,735) and real (\$41,282) per capita totals for 2012, and reflects the 5.9% increase in the U.S. PCE price index between 2012 and 2008.

states, from -3.6% in Danville, IL, to 5.9% in State College, PA. However, the range of real income growth is less, from -3.8% in Kennewick-Richland, WA, to 10.2% in Odessa, TX. **Chart 4**, like **Chart 2**, shows the relationship between the two growth rates, with personal income on the vertical and price growth on the horizontal axis.

Chart 4. MSAs Total Real Personal Income and Implicit Price Growth 2012



As expected, metro areas in North Dakota such as Bismarck, Grand Forks and Fargo have both high income growth and high price growth, while Yuma, AZ shows a decline in prices (-0.5%) and a decrease in its real personal income growth (-1.1%). The MSAs in the upper right hand quadrant, shown in red, have above U.S. average income and price growth.

The range of RPPs across MSAs is also higher than across states (43.5 versus 31.8), with Urban Honolulu, HI (122.9), New York-Newark-Jersey City, NY-NJ-PA (122.2) and San Jose-Sunnyvale-Santa Clara, CA (122.0) leading at the top, and Danville, IL (79.4), Jefferson City, MO (80.8) and Jackson, TN (81.5) at the lower end of the RPPs. The non-metropolitan portion of the U.S. has an RPP of 87.9.

Table C is a summary of the MSA RPPs, divided into quintiles, with about 74 MSAs in each group - there are a total of 366 MSAs, plus the non-metro portion of the United States.

Table C. Summary of MSA RPPs

Quintile	RPPs*				Ratio of Goods/ Other Services:
	All Items	Goods	Rents	Other Services	
1 – Top	106.2	101.2	122.0	103.4	0.98
2 – Upper Middle	96.4	97.9	93.0	96.7	1.01
3 – Middle	93.2	97.2	82.1	95.0	1.02
4 – Lower Middle	90.8	96.9	74.4	94.0	1.03
5 – Bottom	86.5	95.4	64.1	92.6	1.03
United States	100.0	99.4	101.2	100.0	0.99

Similar to the state-level results, the Rents RPP is higher than the All Items RPP for the top quintile (122.0 versus 106.2), but lower for the other quintiles. The ratio of the Goods RPP to the Other Services RPP is less than one for the top group but increases systematically to 1.03 for the bottom quintile as it did for the state terciles. That is, the price level of Goods tends to be higher than that of other services, and of rents, as the All Items RPPs decrease.

b) Per capita personal income: MSAs

Appendix Table 5 lists the nominal and real per capita personal incomes and growth rates for the MSAs. The income growth ranges from a high of 9.5% in nominal values for Grand Forks, ND-MN and 7.9% in real terms for Pine Bluff, AR, to a low of -2.8% and -5.4% in Kennewick-Richland, WA in nominal and real terms respectively.

Table D shows the five highest and lowest per capita income MSAs. The range is higher than for states: \$60,649 in nominal terms and \$55,495 in 2008 dollars, with Midland TX at \$80,504 and McAllen-Edinburg-Mission, TX at \$25,008. These two metropolitan areas in Texas also mark the extremes in nominal per capita income levels.

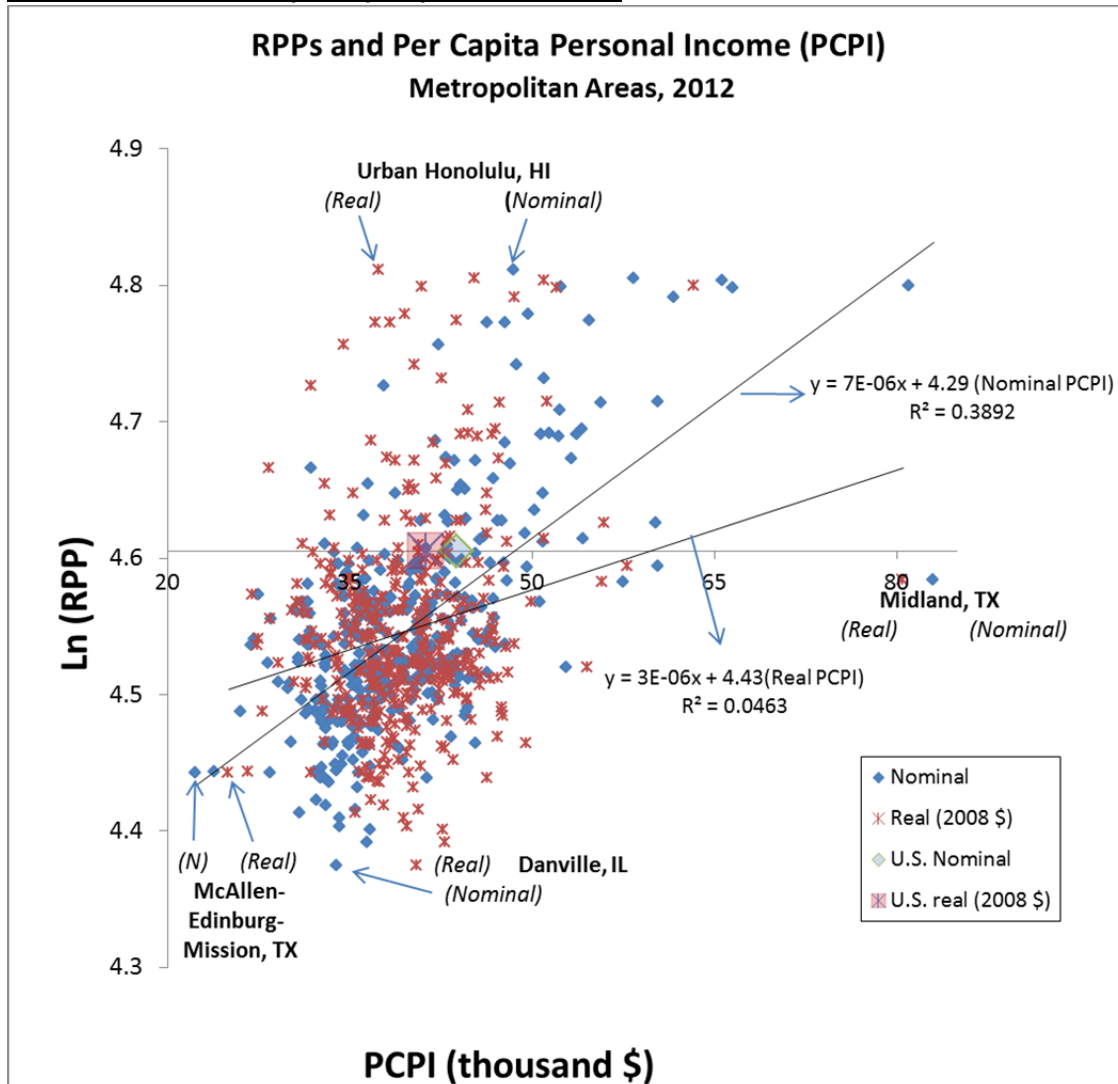
Table D. Highest and lowest per capita personal income for MSAs, 2012

	Per Capita Personal Income Dollars			Real Per Capita Personal Income Chained (2008) Dollars			RPP
	2011	2012	Percent growth	2011	2012	Percent growth	2012
Highest Per Capita Personal Income							
Midland, TX	77,495	83,049	7.2	76,841	80,504	4.8	97.9
Bridgeport-Stamford-Norwalk, CT	79,099	81,068	2.5	62,559	63,336	1.2	121.5
San Francisco-Oakland-Hayward, CA	62,954	66,591	5.8	51,279	52,105	1.6	121.3
San Jose-Sunnyvale-Santa Clara, CA	61,831	65,679	6.2	50,322	51,095	1.5	122.0
Washington-Arlington-Alexandria, DC-VA-MD-WV	60,834	61,743	1.5	49,804	48,645	-2.3	120.4
Lowest Per Capita Personal Income							
Lake Havasu City-Kingman, AZ	26,524	27,220	2.6	27,170	27,546	1.4	93.8
Yuma, AZ	27,385	26,995	-1.4	27,712	27,447	-1.0	93.3
Laredo, TX	25,612	26,120	2.0	26,949	27,871	3.4	88.9
Brownsville-Harlingen, TX	23,405	23,909	2.2	25,814	26,661	3.3	85.1
McAllen-Edinburg-Mission, TX	22,127	22,400	1.2	24,399	25,008	2.5	85.0
United States nonmetropolitan portion	34,018	35,324	3.8	36,911	38,125	3.3	87.9
United States	42,298	43,735	3.4	40,663	41,282	1.5	100.0

In **Chart 5**, all the MSA RPPs (in logs) are plotted on the vertical axis against the nominal and real per capita personal incomes. For nominal incomes, a dollar increase in per capita incomes is associated with a 0.7% change in the RPPs, while for real incomes, the effect is smaller (0.3%) but still positive. Both slopes are slightly flatter than the ones for states.

Midland, TX and McAllen-Edinburg-Mission, TX are shown as the highest and lowest per capita income MSAs, while Honolulu, HI and Danville, IL have the highest and lowest RPPs.

Chart 5. MSA RPPs and per capita personal income



Future research

The RPPs currently reflect differences in the price levels of consumer goods and services. They are constrained by the price data available from the CPI survey conducted by the BLS and by the rent data in the ACS from the Census Bureau. The CPI survey is designed for time-to-time comparisons, and the robustness of the RPPs would benefit from a place-to-place survey of the goods and services sampled by the CPI. This is particularly true for hard to measure items such as education, food and medical services, and in geographic areas that are sparsely populated and less well-represented in national survey samples. Augmenting the price observations, possibly by web-scraping and using third-party sources of information might also provide additional robustness checks on the consumptions data.

An important extension of this work is to explore the development of RPPs that reflect more than consumption goods and services, such as investment and government price differences. In international comparisons, the price level of consumption is often a good approximation for GDP price levels from the expenditure side. This is because the relative prices of investment and government change systematically in opposite directions when measured across per capita incomes. It is not clear whether this pattern would be found across states or metro areas within a country, but it seems worth examining. One approach to this would be to see if there is a geographic pattern in the prices of inputs and outputs related to construction, producers' durable equipment and government compensation.

A separate issue with respect to Rents is how to reconcile the Personal Consumption Expenditure (PCE) weights in the national accounts with the expenditure weights in the Consumer Expenditure (CE) survey. A partial concordance was done in by Blair in 2010, but it would be helpful to produce a full and updated mapping for use in the RPPs. Figueroa *et al* (2014) have compared the sensitivity of the RPPs to different relative weights, and because the national share of rents out of total expenditures is significantly lower in the PCE than in the CE, this has a significant impact on the RPPs.

Another important research area is the treatment of owner-occupied housing. There are no observed owner-occupied housing observations in the CPI, only imputed values derived from rental housing observations and adjustments for utility cost. These imputed values reflect the shelter flow-of-costs, a concept that has been extensively documented and explained elsewhere (Poole *et al* 2005, BLS 2011).

We have attempted to augment rental observations with the Census' ACS information on housing owner-costs, but the information of housing values is self-reported and extremely volatile. It is possible to obtain selected monthly owner costs that include mortgages and taxes and insurance, for example, but without knowing land prices, mortgage terms and rates, it is difficult to obtain house value estimates (Garner and Short 2009). Several online real estate companies do collect actual transaction values in many markets in the US, and if these values could be linked to broad geographies such as states and metropolitan areas, it might be possible to estimate actual owner-occupied housing price levels. At the very least, we would be able to track both the BLS and ACS rental price levels with owner-occupied housing estimates, and better understand and explain sources of differences.

Lastly, it is not clear whether prices in rural areas for items other than rents are higher or lower than in urban areas, but we currently assume they are the same. The expenditure weights vary, but the trade-off between for example, transport costs and rents, are not included in this analysis. Aten and Marshall (2010) looked at alternative estimates of RPPs using a demand-based model to allow for some substitution across expenditures goods, such as transportation and rents, but the theoretical gains in precision of such a model are offset by the need for broad assumptions about consumer behavior. More data on the prices of goods and services (other than rents) in rural or nonmetropolitan areas would add to the robustness of our current estimates.

Data Availability

Real personal income data, regional price parities, and implicit regional price deflators are available through the BEA website. Data are available for 2008 to 2012 for states, state metropolitan and nonmetropolitan portions, and metropolitan areas at www.bea.gov

To access the data, select the “Interactive Data” tab at the top of the homepage. At the next screen, select “GDP & Personal Income” under Regional Data. Data are available in two formats through these links:

- *Begin using the data:* interactive tables where users specify data type, region and time period.
- *Download complete data sets:* flat files accessed through State or Local Area Personal Income menus.

For further information about these data, email the Regional Prices Branch at rpp@bea.gov

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References

- Aten, Bettina (2005), 'Report on Interarea Price Levels, 2003', working paper 2005–11, *Bureau of Economic Analysis*, May. http://bea.gov/papers/working_papers.htm
- Aten, Bettina (2006), 'Interarea Price Levels: an experimental methodology', *Monthly Labor Review*, Vol. 129, No.9, Bureau of Labor Statistics, Washington, DC, September.
- Aten, Bettina (2008), 'Estimates of State and Metropolitan Price Parities for Consumption Goods and services in the United States, 2005', *Bureau of Economic Analysis*, April. <http://bea.gov/papers>
- Aten Bettina and Roger D'Souza (2008), 'Regional Price Parities: Comparing Price Level Differences Across Geographic Areas.' *Survey of Current Business*, November.
- Aten, Bettina and Marshall Reinsdorf (2010), 'Comparing the Consistency of Price Parities for Regions of the U.S. in an Economic Approach Framework.' *31st General Conference of the International Association for Research in Income and Wealth*, August. <http://www.bea.gov/papers>.
- Aten, Bettina, Eric Figueroa and Troy Martin (2011), '[Notes on Estimating the Multi-Year Regional Price Parities by 16 Expenditure Categories: 2005-2009](#)', *Bureau of Economic Analysis*, April. <http://bea.gov/papers>
- Aten, Bettina H., Eric B. Figueroa, and Troy M. Martin (2012), "Regional Price Parities for States and Metropolitan Areas, 2006–2010." *Survey of Current Business*, 92 (August): 229–242.
- Aten, Bettina H., Eric B. Figueroa, and Troy M. Martin (2013), "Real Personal Income and Regional Price Parities for States and Metropolitan Areas, 2007–2011." *Survey of Current Business*, 93 (August): 89-103.
- Aten, Bettina H., and Eric B. Figueroa (2014), "Real Personal Income and Regional Price Parities for State and Metropolitan Areas, 2008–2012." *Survey of Current Business*, 94 (June): 1=8.
- Blair, Caitlin (2012), 'Constructing a PCE-Weighted Consumer Price Index.' National Bureau of Economic Research (NBER) Working Paper (March); www.nber.org.
- BLS Handbook of Methods (2011), *Bureau of Labor Statistics*. <http://www.bls.gov/opub/hom/homtoc.htm>
- Deaton, Angus and Alan Heston (2010), 'Understanding PPPs and PPP-Based National Accounts', *American Economic Journal: Macroeconomics* 2, no.4 (October): 1-35.
- Figueroa, Eric, Bettina Aten and Troy Martin (2014), 'Expenditure Weights in the Regional Price Parities', *Bureau of Economic Analysis*, May. <http://bea.gov/papers>
- Garner, Thesia and Kathleen Short (2009), 'Accounting for Owner-occupied dwelling services: aggregates and distributions', *Journal of Housing Economics*, 18 233-248.

Martin, Troy, Bettina Aten and Eric Figueroa (2011), 'Estimating the Price of Rents in Regional Price Parities', *Bureau of Economic Analysis*, October. <http://bea.gov/papers>

Poole, Robert, Frank Ptacek and Randal Verbrugge (2005), 'Treatment of Owner-Occupied Housing in the CPI,' *Bureau of Labor Statistics*. <http://www.bls.gov/bls/fesacp1120905.pdf>

Rao, D.S. Prasada (2004), 'On the Equivalence of Weighted Country-Product-Dummy (CPD) Method and the Rao System for Multilateral Price Comparisons', *Review of Income and Wealth*, 51, 571-580.

Appendix Table 1. Real Personal Income and Implicit Regional Price Deflators by State, 2011 and 2012

	Personal Income Millions of dollars			Real Personal Income Millions of chained (2008) dollars			Implicit Regional Price Deflators (2008=100)		
	2011	2012	Percent growth	2011	2012	Percent growth	2011	2012	Percent growth
United States	13,179,561	13,729,063	4.2	12,670,133	12,958,961	2.3	104.0	105.9	1.8
Alabama	167,787	173,236	3.2	184,281	185,792	0.8	91.0	93.2	2.4
Alaska	34,827	36,160	3.8	31,686	31,892	0.7	109.9	113.4	3.2
Arizona	229,238	237,513	3.6	224,381	228,740	1.9	102.2	103.8	1.6
Arkansas	100,005	104,508	4.5	109,913	112,726	2.6	91.0	92.7	1.9
California	1,683,204	1,768,039	5.0	1,430,212	1,479,356	3.4	117.7	119.5	1.6
Colorado	226,032	237,461	5.1	214,906	220,778	2.7	105.2	107.6	2.3
Connecticut	207,162	214,297	3.4	182,483	185,116	1.4	113.5	115.8	2.0
Delaware	38,873	40,558	4.3	36,575	37,461	2.4	106.3	108.3	1.9
District of Columbia	46,104	47,281	2.6	37,628	37,787	0.4	122.5	125.1	2.1
Florida	761,303	792,255	4.1	739,169	757,737	2.5	103.0	104.6	1.5
Georgia	356,836	371,488	4.1	373,328	381,708	2.2	95.6	97.3	1.8
Hawaii	60,095	62,330	3.7	49,551	50,245	1.4	121.3	124.1	2.3
Idaho	52,954	55,022	3.9	54,616	55,561	1.7	97.0	99.0	2.1
Illinois	567,197	590,094	4.0	541,432	554,445	2.4	104.8	106.4	1.6
Indiana	236,815	249,198	5.2	249,422	258,572	3.7	94.9	96.4	1.5
Iowa	130,131	135,063	3.8	139,994	142,567	1.8	93.0	94.7	1.9
Kansas	120,783	124,137	2.8	129,263	130,490	0.9	93.4	95.1	1.8
Kentucky	150,850	156,131	3.5	163,899	166,058	1.3	92.0	94.0	2.2
Louisiana	176,690	184,340	4.3	186,955	190,667	2.0	94.5	96.7	2.3
Maine	51,653	53,283	3.2	51,018	51,195	0.3	101.2	104.1	2.8
Maryland	306,001	316,682	3.5	264,482	268,936	1.7	115.7	117.8	1.8
Massachusetts	358,218	372,026	3.9	319,250	328,017	2.7	112.2	113.4	1.1
Michigan	365,753	378,443	3.5	372,860	378,704	1.6	98.1	99.9	1.9
Minnesota	241,352	252,413	4.6	239,548	244,719	2.2	100.8	103.1	2.4
Mississippi	95,854	100,465	4.8	106,266	109,854	3.4	90.2	91.5	1.4
Missouri	228,270	235,661	3.2	248,780	252,687	1.6	91.8	93.3	1.6
Montana	36,630	38,753	5.8	37,479	38,864	3.7	97.7	99.7	2.0
Nebraska	80,420	83,521	3.9	86,224	87,558	1.5	93.3	95.4	2.3
Nevada	101,717	105,450	3.7	98,566	101,444	2.9	103.2	103.9	0.7
New Hampshire	62,651	64,885	3.6	57,116	57,745	1.1	109.7	112.4	2.4
New Jersey	471,188	487,437	3.4	397,749	403,804	1.5	118.5	120.7	1.9
New Mexico	72,300	74,416	2.9	73,263	74,147	1.2	98.7	100.4	1.7
New York	1,012,406	1,041,931	2.9	844,330	853,317	1.1	119.9	122.1	1.8
North Carolina	352,455	369,704	4.9	371,148	381,336	2.7	95.0	96.9	2.1
North Dakota	32,332	38,390	18.7	34,869	40,136	15.1	92.7	95.6	3.2
Ohio	446,136	462,424	3.7	480,076	489,788	2.0	92.9	94.4	1.6
Oklahoma	147,430	154,958	5.1	158,458	162,898	2.8	93.0	95.1	2.2
Oregon	146,001	152,722	4.6	142,547	146,033	2.4	102.4	104.6	2.1
Pennsylvania	558,345	575,425	3.1	545,333	551,039	1.0	102.4	104.4	2.0
Rhode Island	46,881	48,184	2.8	45,372	46,113	1.6	103.3	104.5	1.1
South Carolina	159,747	165,595	3.7	169,599	172,448	1.7	94.2	96.0	1.9
South Dakota	36,932	37,819	2.4	40,997	40,523	-1.2	90.1	93.3	3.6
Tennessee	237,618	250,189	5.3	253,494	260,645	2.8	93.7	96.0	2.4
Texas	1,053,552	1,111,110	5.5	1,053,124	1,087,533	3.3	100.0	102.2	2.1
Utah	96,175	101,163	5.2	95,583	98,737	3.3	100.6	102.5	1.8
Vermont	26,888	27,886	3.7	25,863	26,121	1.0	104.0	106.8	2.7
Virginia	381,930	396,005	3.7	356,882	362,744	1.6	107.0	109.2	2.0
Washington	303,088	317,575	4.8	283,739	290,802	2.5	106.8	109.2	2.2
West Virginia	62,737	65,091	3.8	68,230	69,438	1.8	91.9	93.7	1.9
Wisconsin	232,094	241,201	3.9	240,443	245,355	2.0	96.5	98.3	1.8
Wyoming	27,920	29,147	4.4	27,749	28,583	3.0	100.6	102.0	1.3
Maximum	1,683,204	1,768,039	18.7	1,430,212	1,479,356	15.1	122.5	125.1	3.6
Minimum	26,888	27,886	2.4	25,863	26,121	-1.2	90.1	91.5	0.7
Range	1,656,316	1,740,153	16.3	1,404,348	1,453,234	16.3	32.4	33.7	2.9

Source: U.S. Bureau of Economic Analysis

Appendix Table 2. Regional Price Parities by State, 2012

	Regional Price Parities			
	All Items	Goods	Services	
			Rents	Other
United States	100.0	99.4	101.2	100.0
Alabama	88.1	96.7	64.3	93.1
Alaska	107.1	103.0	142.1	99.6
Arizona	98.1	100.6	93.6	98.0
Arkansas	87.6	95.6	63.0	92.4
California	112.9	103.1	147.4	105.6
Colorado	101.6	101.7	106.5	98.8
Connecticut	109.4	104.9	118.9	109.5
Delaware	102.3	102.3	98.9	104.4
District of Columbia	118.2	107.0	157.2	112.0
Florida	98.8	98.3	104.8	95.9
Georgia	92.0	97.1	79.8	93.8
Hawaii	117.2	107.5	159.0	104.2
Idaho	93.6	98.7	78.8	96.7
Illinois	100.6	101.4	100.5	99.7
Indiana	91.1	96.6	75.8	93.9
Iowa	89.5	93.7	74.8	91.3
Kansas	89.9	94.7	75.0	91.7
Kentucky	88.8	95.3	68.1	92.5
Louisiana	91.4	96.9	77.4	93.2
Maine	98.3	98.6	99.5	97.5
Maryland	111.3	103.4	125.1	111.0
Massachusetts	107.2	98.0	121.4	110.9
Michigan	94.4	97.7	82.4	97.2
Minnesota	97.5	98.5	95.7	97.2
Mississippi	86.4	95.1	62.1	92.0
Missouri	88.1	92.8	74.1	90.5
Montana	94.2	99.2	80.3	95.6
Nebraska	90.1	94.5	76.2	91.9
Nevada	98.2	97.4	98.8	98.9
New Hampshire	106.2	98.1	123.4	107.3
New Jersey	114.1	101.4	136.8	115.5
New Mexico	94.8	97.9	83.2	98.1
New York	115.4	108.1	134.9	113.2
North Carolina	91.6	96.7	79.1	93.1
North Dakota	90.4	93.5	79.3	91.1
Ohio	89.2	95.1	73.9	91.9
Oklahoma	89.9	96.2	70.3	92.8
Oregon	98.8	98.3	99.1	99.3
Pennsylvania	98.7	100.0	89.8	102.1
Rhode Island	98.7	98.4	101.6	97.3
South Carolina	90.7	96.9	76.3	93.3
South Dakota	88.2	93.2	70.8	90.8
Tennessee	90.7	96.6	75.5	93.1
Texas	96.5	97.9	89.3	99.0
Utah	96.8	97.7	92.1	98.4
Vermont	100.9	98.6	116.6	97.1
Virginia	103.2	100.2	114.6	100.8
Washington	103.2	103.1	111.0	99.9
West Virginia	88.6	95.7	63.3	93.6
Wisconsin	92.9	95.7	87.6	92.1
Wyoming	96.4	99.0	90.6	95.9
Maximum	118.2	108.1	159.0	115.5
Minimum	86.4	92.8	62.1	90.5
Range	31.8	15.3	96.9	25.0

Source: U.S. Bureau of Economic Analysis

Appendix Table 3. Real Per Capita Personal Income by State, 2011 and 2012

	Per Capita Personal Income Dollars			Real Per Capita Personal Income Chained (2008) dollars		
	2011	2012	Percent growth	2011	2012	Percent growth
United States	42,298	43,735	3.4	40,663	41,282	1.5
Alabama	34,929	35,926	2.9	38,362	38,530	0.4
Alaska	48,114	49,436	2.7	43,773	43,601	-0.4
Arizona	35,446	36,243	2.3	34,695	34,905	0.6
Arkansas	34,032	35,437	4.1	37,403	38,223	2.2
California	44,666	46,477	4.1	37,953	38,888	2.5
Colorado	44,179	45,775	3.6	42,004	42,559	1.3
Connecticut	57,758	59,687	3.3	50,877	51,559	1.3
Delaware	42,805	44,224	3.3	40,275	40,848	1.4
District of Columbia	74,480	74,773	0.4	60,787	59,759	-1.7
Florida	39,896	41,012	2.8	38,736	39,225	1.3
Georgia	36,366	37,449	3.0	38,046	38,479	1.1
Hawaii	43,606	44,767	2.7	35,955	36,087	0.4
Idaho	33,436	34,481	3.1	34,485	34,818	1.0
Illinois	44,106	45,832	3.9	42,103	43,063	2.3
Indiana	36,342	38,119	4.9	38,276	39,553	3.3
Iowa	42,470	43,935	3.4	45,688	46,376	1.5
Kansas	42,079	43,015	2.2	45,033	45,216	0.4
Kentucky	34,545	35,643	3.2	37,533	37,909	1.0
Louisiana	38,623	40,057	3.7	40,867	41,432	1.4
Maine	38,880	40,087	3.1	38,402	38,516	0.3
Maryland	52,401	53,816	2.7	45,291	45,702	0.9
Massachusetts	54,218	55,976	3.2	48,320	49,354	2.1
Michigan	37,032	38,291	3.4	37,751	38,317	1.5
Minnesota	45,135	46,925	4.0	44,798	45,494	1.6
Mississippi	32,193	33,657	4.5	35,690	36,803	3.1
Missouri	37,988	39,133	3.0	41,401	41,961	1.4
Montana	36,716	38,555	5.0	37,566	38,665	2.9
Nebraska	43,654	45,012	3.1	46,804	47,188	0.8
Nevada	37,396	38,221	2.2	36,237	36,769	1.5
New Hampshire	47,542	49,129	3.3	43,342	43,722	0.9
New Jersey	53,333	54,987	3.1	45,021	45,552	1.2
New Mexico	34,782	35,682	2.6	35,245	35,553	0.9
New York	51,914	53,241	2.6	43,295	43,603	0.7
North Carolina	36,520	37,910	3.8	38,457	39,103	1.7
North Dakota	47,218	54,871	16.2	50,923	57,367	12.7
Ohio	38,657	40,057	3.6	41,597	42,427	2.0
Oklahoma	38,960	40,620	4.3	41,874	42,701	2.0
Oregon	37,744	39,166	3.8	36,851	37,451	1.6
Pennsylvania	43,813	45,083	2.9	42,792	43,173	0.9
Rhode Island	44,621	45,877	2.8	43,185	43,905	1.7
South Carolina	34,183	35,056	2.6	36,291	36,507	0.6
South Dakota	44,843	45,381	1.2	49,779	48,626	-2.3
Tennessee	37,129	38,752	4.4	39,610	40,371	1.9
Texas	41,103	42,638	3.7	41,087	41,733	1.6
Utah	34,173	35,430	3.7	33,963	34,580	1.8
Vermont	42,911	44,545	3.8	41,276	41,726	1.1
Virginia	47,126	48,377	2.7	44,036	44,313	0.6
Washington	44,420	46,045	3.7	41,584	42,164	1.4
West Virginia	33,822	35,082	3.7	36,784	37,425	1.7
Wisconsin	40,648	42,121	3.6	42,110	42,846	1.7
Wyoming	49,212	50,567	2.8	48,909	49,587	1.4
Maximum	74,480	74,773	16.2	60,787	59,759	12.7
Minimum	32,193	33,657	0.4	33,963	34,580	-2.3
Range	42,287	41,116	15.8	26,824	25,179	15.0

Source: U.S. Bureau of Economic Analysis

Appendix Table 4. Real Personal Income and Implicit Regional Price Deflators by Metropolitan Area, 2011 and 2012

	Personal Income Millions of dollars			Real Personal Income Millions of chained (2008) dollars			Implicit Regional Price Deflators (2008=100)			Regional Price Parities
	2011	2012	Percent growth	2011	2012	Percent growth	2011	2012	Percent growth	2012
Abilene, TX	6,070	6,331	4.3	6,360	6,575	3.4	95.4	96.3	0.9	91.4
Akron, OH	28,363	29,482	3.9	30,733	31,650	3.0	92.3	93.2	0.9	88.4
Albany, GA	5,147	5,345	3.8	5,557	5,958	7.2	92.6	89.7	-3.1	85.1
Albany, OR	3,530	3,667	3.9	3,646	3,714	1.9	96.8	98.8	2.0	93.7
Albany-Schenectady-Troy, NY	40,684	41,776	2.7	39,636	39,992	0.9	102.6	104.5	1.8	99.1
Albuquerque, NM	31,881	32,707	2.6	32,078	32,143	0.2	99.4	101.8	2.4	96.6
Alexandria, LA	5,554	5,783	4.1	5,940	6,258	5.4	93.5	92.4	-1.2	87.7
Allentown-Bethlehem-Easton, PA-NJ	34,225	35,457	3.6	32,996	33,665	2.0	103.7	105.3	1.5	99.9
Altoona, PA	4,562	4,649	1.9	4,804	4,826	0.5	95.0	96.3	1.5	91.4
Amarillo, TX	9,583	9,876	3.1	9,969	10,095	1.3	96.1	97.8	1.8	92.8
Ames, IA	3,826	4,062	6.2	4,220	4,347	3.0	90.7	93.4	3.0	88.7
Anchorage, AK	19,711	20,553	4.3	17,454	17,590	0.8	112.9	116.8	3.5	110.9
Ann Arbor, MI	14,380	15,162	5.4	13,709	14,083	2.7	104.9	107.7	2.6	102.2
Anniston-Oxford-Jacksonville, AL	3,817	3,857	1.0	4,179	4,314	3.2	91.3	89.4	-2.1	84.8
Appleton, WI	9,110	9,549	4.8	9,445	9,707	2.8	96.5	98.4	2.0	93.3
Asheville, NC	14,906	15,621	4.8	15,667	16,117	2.9	95.1	96.9	1.9	92.0
Athens-Clarke County, GA	6,228	6,496	4.3	6,527	6,711	2.8	95.4	96.8	1.4	91.8
Atlanta-Sandy Springs-Roswell, GA	214,363	223,569	4.3	214,235	221,843	3.6	100.1	100.8	0.7	95.6
Atlantic City-Hammonton, NJ	11,319	11,595	2.4	10,014	10,150	1.4	113.0	114.2	1.1	108.4
Auburn-Opelika, AL	4,258	4,452	4.6	4,639	4,858	4.7	91.8	91.6	-0.2	87.0
Augusta-Richmond County, GA-SC	20,134	20,703	2.8	21,192	21,876	3.2	95.0	94.6	-0.4	89.8
Austin-Round Rock, TX	74,169	78,696	6.1	72,970	75,828	3.9	101.6	103.8	2.1	98.5
Bakersfield, CA	27,836	29,497	6.0	27,834	28,764	3.3	100.0	102.5	2.5	97.3
Baltimore-Columbia-Towson, MD	143,281	149,222	4.1	125,880	129,483	2.9	113.8	115.2	1.2	109.4
Bangor, ME	5,355	5,513	3.0	5,411	5,391	-0.4	99.0	102.3	3.3	97.0
Barnstable Town, MA	12,475	12,977	4.0	11,861	12,063	1.7	105.2	107.6	2.3	102.1
Baton Rouge, LA	31,228	32,811	5.1	32,213	33,414	3.7	96.9	98.2	1.3	93.2
Battle Creek, MI	4,644	4,813	3.6	4,911	5,044	2.7	94.6	95.4	0.9	90.5
Bay City, MI	3,660	3,717	1.5	3,892	3,969	2.0	94.0	93.6	-0.4	88.9
Beaumont-Port Arthur, TX	14,936	15,510	3.8	15,702	16,248	3.5	95.1	95.5	0.4	90.6
Beckley, WV	4,292	4,420	3.0	4,868	4,887	0.4	88.2	90.4	2.6	85.8
Bellingham, WA	7,721	8,029	4.0	7,594	7,675	1.1	101.7	104.6	2.9	99.3
Bend-Redmond, OR	5,965	6,239	4.6	6,078	6,127	0.8	98.1	101.8	3.8	96.6
Billings, MT	6,423	6,766	5.3	6,569	6,723	2.3	97.8	100.6	2.9	95.5
Binghamton, NY	9,334	9,535	2.2	9,555	9,464	-1.0	97.7	100.8	3.1	95.6
Birmingham-Hoover, AL	45,623	47,569	4.3	47,235	50,056	6.0	96.6	95.0	-1.6	90.2
Bismarck, ND	5,043	5,554	10.1	5,328	5,607	5.2	94.7	99.1	4.6	94.0
Blacksburg-Christiansburg-Radford, VA	5,363	5,629	5.0	5,767	6,016	4.3	93.0	93.6	0.6	88.8
Bloomington, IL	7,950	8,196	3.1	8,131	8,224	1.1	97.8	99.7	1.9	94.6
Bloomington, IN	5,104	5,333	4.5	5,310	5,420	2.1	96.1	98.4	2.4	93.4
Bloomsburg-Berwick, PA	2,961	3,059	3.3	3,111	3,157	1.5	95.2	96.9	1.8	92.0
Boise City, ID	21,677	22,552	4.0	22,296	22,604	1.4	97.2	99.8	2.6	94.7
Boston-Cambridge-Newton, MA-NH	269,576	280,244	4.0	235,321	238,363	1.3	114.6	117.6	2.6	111.6
Boulder, CO	15,487	16,418	6.0	14,081	14,300	1.6	110.0	114.8	4.4	108.9
Bowling Green, KY	5,032	5,221	3.8	5,694	5,822	2.2	88.4	89.7	1.5	85.1
Bremerton-Silverdale, WA	10,975	11,359	3.5	10,214	10,301	0.8	107.4	110.3	2.6	104.6
Bridgeport-Stamford-Norwalk, CT	73,370	75,704	3.2	58,028	59,145	1.9	126.4	128.0	1.2	121.5
Brownsville-Harlingen, TX	9,656	9,936	2.9	10,650	11,079	4.0	90.7	89.7	-1.1	85.1
Brunswick, GA	3,781	3,911	3.4	4,201	4,311	2.6	90.0	90.7	0.8	86.1
Buffalo-Cheektowaga-Niagara Falls, NY	47,125	48,530	3.0	48,037	49,080	2.2	98.1	98.9	0.8	93.8
Burlington, NC	4,848	5,068	4.5	5,119	5,346	4.4	94.7	94.8	0.1	90.0
Burlington-South Burlington, VT	9,691	10,105	4.3	9,205	9,376	1.9	105.3	107.8	2.4	102.3
California-Lexington Park, MD	5,061	5,189	2.5	4,800	4,814	0.3	105.4	107.8	2.2	102.3

Appendix Table 4. Real Personal Income and Implicit Regional Price Deflators by Metropolitan Area, 2011 and 2012

	Personal Income Millions of dollars			Real Personal Income Millions of chained (2008) dollars			Implicit Regional Price Deflators (2008=100)			Regional Price Parities
	2011	2012	Percent growth	2011	2012	Percent growth	2011	2012	Percent growth	2012
Canton-Massillon, OH	14,472	14,974	3.5	15,465	15,899	2.8	93.6	94.2	0.6	89.4
Cape Coral-Fort Myers, FL	26,624	27,856	4.6	27,019	27,815	2.9	98.5	100.1	1.6	95.0
Cape Girardeau, MO-IL	3,326	3,451	3.8	3,834	3,957	3.2	86.7	87.2	0.5	82.8
Carbondale-Marion, IL	4,406	4,530	2.8	5,080	5,112	0.6	86.7	88.6	2.2	84.1
Carson City, NV	2,251	2,316	2.9	2,226	2,243	0.8	101.1	103.2	2.1	98.0
Casper, WY	4,246	4,522	6.5	4,241	4,389	3.5	100.1	103.0	2.9	97.8
Cedar Rapids, IA	11,134	11,552	3.7	11,770	12,014	2.1	94.6	96.2	1.6	91.2
Chambersburg-Waynesboro, PA	5,393	5,558	3.1	5,438	5,502	1.2	99.2	101.0	1.9	95.9
Champaign-Urbana, IL	8,853	9,138	3.2	9,115	9,234	1.3	97.1	99.0	1.9	93.9
Charleston, WV	9,253	9,564	3.4	9,819	10,105	2.9	94.2	94.7	0.4	89.8
Charleston-North Charleston, SC	26,461	27,510	4.0	26,448	27,263	3.1	100.0	100.9	0.9	95.7
Charlotte-Concord-Gastonia, NC-SC	87,827	92,931	5.8	89,990	93,485	3.9	97.6	99.4	1.9	94.3
Charlottesville, VA	9,894	10,400	5.1	9,672	9,955	2.9	102.3	104.5	2.1	99.1
Chattanooga, TN-GA	19,146	20,025	4.6	20,296	21,005	3.5	94.3	95.3	1.1	90.5
Cheyenne, WY	4,573	4,796	4.9	4,612	4,725	2.4	99.1	101.5	2.4	96.3
Chicago-Naperville-Elgin, IL-IN-WI	439,698	459,981	4.6	401,710	409,308	1.9	109.5	112.4	2.7	106.6
Chico, CA	7,591	7,908	4.2	7,461	7,489	0.4	101.7	105.6	3.8	100.2
Cincinnati, OH-KY-IN	88,581	92,497	4.4	92,498	95,888	3.7	95.8	96.5	0.7	91.5
Clarksville, TN-KY	10,460	10,672	2.0	11,032	11,146	1.0	94.8	95.8	1.0	90.9
Cleveland, TN	3,682	3,906	6.1	4,166	4,464	7.2	88.4	87.5	-1.0	83.0
Cleveland-Elyria, OH	88,962	92,395	3.9	96,482	98,289	1.9	92.2	94.0	1.9	89.2
Coeur d'Alene, ID	4,745	4,934	4.0	4,916	5,012	2.0	96.5	98.4	2.0	93.4
College Station-Bryan, TX	7,098	7,454	5.0	7,226	7,502	3.8	98.2	99.4	1.2	94.3
Colorado Springs, CO	26,460	27,389	3.5	26,128	26,354	0.9	101.3	103.9	2.6	98.6
Columbia, MO	6,333	6,667	5.3	6,574	6,860	4.3	96.3	97.2	0.9	92.2
Columbia, SC	28,091	29,267	4.2	29,047	30,139	3.8	96.7	97.1	0.4	92.1
Columbus, GA-AL	11,649	12,178	4.5	12,197	12,978	6.4	95.5	93.8	-1.8	89.0
Columbus, IN	3,145	3,436	9.2	3,471	3,736	7.6	90.6	92.0	1.5	87.3
Columbus, OH	79,024	83,062	5.1	81,085	83,996	3.6	97.5	98.9	1.5	93.8
Corpus Christi, TX	16,920	17,832	5.4	17,422	18,270	4.9	97.1	97.6	0.5	92.6
Corvallis, OR	3,306	3,447	4.3	3,335	3,359	0.7	99.1	102.6	3.5	97.4
Crestview-Fort Walton Beach-Destin, FL	10,098	10,669	5.7	10,073	10,448	3.7	100.2	102.1	1.9	96.9
Cumberland, MD-WV	3,415	3,511	2.8	3,654	3,776	3.4	93.5	93.0	-0.5	88.2
Dallas-Fort Worth-Arlington, TX	293,169	309,155	5.5	279,881	290,332	3.7	104.7	106.5	1.7	101.0
Dalton, GA	3,948	4,075	3.2	4,470	4,548	1.7	88.3	89.6	1.5	85.0
Danville, IL	2,668	2,740	2.7	3,074	3,273	6.5	86.8	83.7	-3.6	79.4
Daphne-Fairhope-Foley, AL	7,121	7,355	3.3	7,748	7,842	1.2	91.9	93.8	2.0	89.0
Davenport-Moline-Rock Island, IA-IL	16,330	16,777	2.7	17,180	17,293	0.7	95.1	97.0	2.1	92.1
Dayton, OH	31,029	31,952	3.0	32,453	33,317	2.7	95.6	95.9	0.3	91.0
Decatur, AL	4,960	5,109	3.0	5,372	5,577	3.8	92.3	91.6	-0.8	86.9
Decatur, IL	4,538	4,657	2.6	4,796	4,929	2.8	94.6	94.5	-0.1	89.7
Deltona-Daytona Beach-Ormond Beach, FL	19,802	20,634	4.2	19,990	20,502	2.6	99.1	100.6	1.6	95.5
Denver-Aurora-Lakewood, CO	127,635	134,735	5.6	120,117	122,571	2.0	106.3	109.9	3.4	104.3
Des Moines-West Des Moines, IA	26,208	27,537	5.1	26,845	27,639	3.0	97.6	99.6	2.1	94.5
Detroit-Warren-Dearborn, MI	174,844	181,388	3.7	171,120	175,953	2.8	102.2	103.1	0.9	97.8
Dothan, AL	5,093	5,287	3.8	5,618	5,901	5.0	90.7	89.6	-1.2	85.0
Dover, DE	5,799	6,061	4.5	5,882	6,113	3.9	98.6	99.1	0.6	94.1
Dubuque, IA	3,646	3,839	5.3	3,824	3,922	2.6	95.4	97.9	2.7	92.9
Duluth, MN-WI	10,398	10,667	2.6	10,911	11,039	1.2	95.3	96.6	1.4	91.7
Durham-Chapel Hill, NC	22,155	23,158	4.5	22,628	23,122	2.2	97.9	100.2	2.3	95.0
East Stroudsburg, PA	5,585	5,702	2.1	5,403	5,414	0.2	103.4	105.3	1.9	99.9
Eau Claire, WI	6,115	6,403	4.7	6,396	6,586	3.0	95.6	97.2	1.7	92.3
El Centro, CA	5,358	5,467	2.0	5,622	5,626	0.1	95.3	97.2	2.0	92.2

Appendix Table 4. Real Personal Income and Implicit Regional Price Deflators by Metropolitan Area, 2011 and 2012

	Personal Income Millions of dollars			Real Personal Income Millions of chained (2008) dollars			Implicit Regional Price Deflators (2008=100)			Regional Price Parities
	2011	2012	Percent growth	2011	2012	Percent growth	2011	2012	Percent growth	2012
El Paso, TX	24,080	25,077	4.1	25,756	26,204	1.7	93.5	95.7	2.4	90.8
Elizabethtown-Fort Knox, KY	5,871	5,863	-0.1	6,518	6,417	-1.5	90.1	91.4	1.4	86.7
Elkhart-Goshen, IN	6,555	7,096	8.3	6,877	7,349	6.9	95.3	96.6	1.3	91.6
Elmira, NY	3,313	3,384	2.1	3,378	3,407	0.9	98.1	99.3	1.3	94.2
Erie, PA	10,108	10,292	1.8	10,478	10,497	0.2	96.5	98.0	1.6	93.0
Eugene, OR	12,236	12,743	4.1	12,259	12,370	0.9	99.8	103.0	3.2	97.7
Evansville, IN-KY	12,250	12,674	3.5	12,799	13,304	3.9	95.7	95.3	-0.5	90.4
Fairbanks, AK	4,453	4,556	2.3	4,091	4,046	-1.1	108.8	112.6	3.4	106.8
Fargo, ND-MN	9,262	10,033	8.3	9,728	10,179	4.6	95.2	98.6	3.5	93.5
Farmington, NM	4,103	4,253	3.7	4,327	4,356	0.7	94.8	97.6	3.0	92.7
Fayetteville, NC	16,102	16,455	2.2	16,795	17,064	1.6	95.9	96.4	0.6	91.5
Fayetteville-Springdale-Rogers, AR-MO	16,383	17,348	5.9	17,421	18,234	4.7	94.0	95.1	1.2	90.3
Flagstaff, AZ	4,617	4,736	2.6	4,572	4,565	-0.1	101.0	103.7	2.7	98.4
Flint, MI	13,264	13,565	2.3	13,417	13,726	2.3	98.9	98.8	0.0	93.8
Florence, SC	6,889	7,099	3.0	7,565	7,875	4.1	91.1	90.1	-1.0	85.5
Florence-Muscle Shoals, AL	4,741	4,887	3.1	5,183	5,487	5.9	91.5	89.1	-2.6	84.5
Fond du Lac, WI	3,849	4,019	4.4	4,326	4,444	2.7	89.0	90.4	1.6	85.8
Fort Collins, CO	12,201	12,827	5.1	11,954	12,140	1.6	102.1	105.7	3.5	100.3
Fort Smith, AR-OK	9,171	9,503	3.6	10,078	10,539	4.6	91.0	90.2	-0.9	85.6
Fort Wayne, IN	14,930	15,687	5.1	15,815	16,343	3.3	94.4	96.0	1.7	91.1
Fresno, CA	31,174	32,298	3.6	31,027	31,392	1.2	100.5	102.9	2.4	97.6
Gadsden, AL	3,322	3,415	2.8	3,618	3,826	5.7	91.8	89.3	-2.8	84.7
Gainesville, FL	9,819	10,205	3.9	9,794	10,055	2.7	100.3	101.5	1.2	96.3
Gainesville, GA	5,908	6,080	2.9	6,353	6,367	0.2	93.0	95.5	2.7	90.6
Gettysburg, PA	3,516	3,625	3.1	3,545	3,588	1.2	99.2	101.0	1.9	95.9
Glens Falls, NY	4,979	5,146	3.4	4,941	4,999	1.2	100.8	102.9	2.2	97.7
Goldsboro, NC	3,963	4,177	5.4	4,283	4,569	6.7	92.5	91.4	-1.2	86.8
Grand Forks, ND-MN	3,932	4,343	10.5	4,140	4,441	7.3	95.0	97.8	3.0	92.8
Grand Island, NE	3,293	3,455	4.9	3,811	3,872	1.6	86.4	89.2	3.3	84.7
Grand Junction, CO	5,115	5,282	3.3	5,169	5,269	1.9	98.9	100.2	1.3	95.1
Grand Rapids-Wyoming, MI	35,718	37,474	4.9	37,363	38,509	3.1	95.6	97.3	1.8	92.3
Grants Pass, OR	2,515	2,601	3.4	2,597	2,634	1.4	96.8	98.8	2.0	93.7
Great Falls, MT	3,225	3,336	3.5	3,359	3,358	0.0	96.0	99.3	3.5	94.3
Greeley, CO	7,854	8,348	6.3	7,862	8,112	3.2	99.9	102.9	3.0	97.6
Green Bay, WI	12,504	12,944	3.5	13,146	13,339	1.5	95.1	97.0	2.0	92.1
Greensboro-High Point, NC	25,857	26,973	4.3	27,402	28,323	3.4	94.4	95.2	0.9	90.4
Greenville, NC	5,775	6,168	6.8	6,078	6,623	9.0	95.0	93.1	-2.0	88.4
Greenville-Anderson-Mauldin, SC	29,056	30,086	3.5	30,554	31,419	2.8	95.1	95.8	0.7	90.9
Gulfport-Biloxi-Pascagoula, MS	13,300	13,456	1.2	13,861	14,088	1.6	95.9	95.5	-0.5	90.6
Hagerstown-Martinsburg, MD-WV	9,041	9,276	2.6	8,489	8,577	1.0	106.5	108.2	1.6	102.6
Hammond, LA	3,926	4,035	2.8	4,287	4,308	0.5	91.6	93.7	2.3	88.9
Hanford-Corcoran, CA	4,827	4,819	-0.2	4,898	4,787	-2.3	98.6	100.7	2.1	95.5
Harrisburg-Carlisle, PA	23,869	24,665	3.3	23,829	24,223	1.7	100.2	101.8	1.7	96.6
Harrisonburg, VA	4,054	4,236	4.5	4,262	4,365	2.4	95.1	97.0	2.0	92.1
Hartford-West Hartford-East Hartford, CT	63,597	65,910	3.6	60,971	61,954	1.6	104.3	106.4	2.0	100.9
Hattiesburg, MS	4,553	4,780	5.0	5,104	5,351	4.8	89.2	89.3	0.1	84.8
Hickory-Lenoir-Morganton, NC	11,311	11,725	3.7	12,113	12,500	3.2	93.4	93.8	0.4	89.0
Hilton Head Island-Bluffton-Beaufort, SC	7,581	7,921	4.5	7,968	8,174	2.6	95.1	96.9	1.9	91.9
Hinesville, GA	2,267	2,311	1.9	2,405	2,380	-1.0	94.3	97.1	3.0	92.1
Homosassa Springs, FL	4,619	4,764	3.1	4,984	5,040	1.1	92.7	94.5	2.0	89.7
Hot Springs, AR	3,418	3,566	4.3	3,779	3,962	4.9	90.5	90.0	-0.5	85.4
Houma-Thibodaux, LA	8,677	9,116	5.1	9,091	9,339	2.7	95.4	97.6	2.3	92.6
Houston-The Woodlands-Sugar Land, TX	295,382	315,056	6.7	282,692	296,824	5.0	104.5	106.1	1.6	100.7

Appendix Table 4. Real Personal Income and Implicit Regional Price Deflators by Metropolitan Area, 2011 and 2012

	Personal Income Millions of dollars			Real Personal Income Millions of chained (2008) dollars			Implicit Regional Price Deflators (2008=100)			Regional Price Parities
	2011	2012	Percent growth	2011	2012	Percent growth	2011	2012	Percent growth	2012
Huntington-Ashland, WV-KY-OH	12,425	12,785	2.9	13,414	13,989	4.3	92.6	91.4	-1.3	86.7
Huntsville, AL	17,423	17,917	2.8	18,211	18,626	2.3	95.7	96.2	0.5	91.3
Idaho Falls, ID	4,683	4,803	2.6	4,943	5,001	1.2	94.7	96.0	1.4	91.1
Indianapolis-Carmel-Anderson, IN	77,294	81,676	5.7	79,323	82,497	4.0	97.4	99.0	1.6	93.9
Iowa City, IA	6,779	7,155	5.5	6,917	7,082	2.4	98.0	101.0	3.1	95.9
Ithaca, NY	3,824	3,984	4.2	3,617	3,624	0.2	105.7	110.0	4.0	104.3
Jackson, MI	5,098	5,237	2.7	5,400	5,467	1.2	94.4	95.8	1.5	90.9
Jackson, MS	21,721	22,786	4.9	22,649	23,626	4.3	95.9	96.4	0.6	91.5
Jackson, TN	4,580	4,790	4.6	5,159	5,576	8.1	88.8	85.9	-3.2	81.5
Jacksonville, FL	55,394	57,731	4.2	55,270	56,907	3.0	100.2	101.4	1.2	96.3
Jacksonville, NC	8,236	8,422	2.3	8,298	8,324	0.3	99.3	101.2	1.9	96.0
Janesville-Beloit, WI	5,487	5,752	4.8	5,688	5,883	3.4	96.5	97.8	1.3	92.8
Jefferson City, MO	5,401	5,486	1.6	6,343	6,446	1.6	85.1	85.1	0.0	80.8
Johnson City, TN	6,708	6,940	3.5	7,292	7,457	2.3	92.0	93.1	1.2	88.3
Johnstown, PA	4,956	5,043	1.8	5,344	5,490	2.7	92.7	91.9	-0.9	87.2
Jonesboro, AR	4,032	4,250	5.4	4,627	4,935	6.7	87.2	86.1	-1.2	81.7
Joplin, MO	5,594	5,777	3.3	5,993	6,243	4.2	93.3	92.5	-0.9	87.8
Kahului-Wailuku-Lahaina, HI	5,767	6,002	4.1	4,943	5,044	2.0	116.7	119.0	2.0	112.9
Kalamazoo-Portage, MI	11,802	12,184	3.2	12,329	12,470	1.1	95.7	97.7	2.1	92.7
Kankakee, IL	3,815	3,956	3.7	3,665	3,788	3.3	104.1	104.4	0.3	99.1
Kansas City, MO-KS	87,741	91,266	4.0	90,626	93,377	3.0	96.8	97.7	1.0	92.7
Kennewick-Richland, WA	10,072	9,954	-1.2	10,105	9,725	-3.8	99.7	102.4	2.7	97.1
Killeen-Temple, TX	16,343	16,592	1.5	16,849	17,031	1.1	97.0	97.4	0.4	92.4
Kingsport-Bristol-Bristol, TN-VA	10,424	10,807	3.7	11,465	11,796	2.9	90.9	91.6	0.8	86.9
Kingston, NY	7,599	7,806	2.7	7,164	7,216	0.7	106.1	108.2	2.0	102.6
Knoxville, TN	30,808	32,122	4.3	32,346	33,265	2.8	95.2	96.6	1.4	91.6
Kokomo, IN	2,702	2,826	4.6	2,890	3,039	5.1	93.5	93.0	-0.5	88.2
La Crosse-Onalaska, WI-MN	5,304	5,523	4.1	5,495	5,594	1.8	96.5	98.7	2.3	93.7
Lafayette, LA	19,237	20,423	6.2	20,134	21,108	4.8	95.5	96.8	1.3	91.8
Lafayette-West Lafayette, IN	6,682	6,981	4.5	6,888	7,054	2.4	97.0	99.0	2.0	93.9
Lake Charles, LA	7,134	7,490	5.0	7,640	8,030	5.1	93.4	93.3	-0.1	88.5
Lake Havasu City-Kingman, AZ	5,373	5,535	3.0	5,504	5,601	1.8	97.6	98.8	1.2	93.8
Lakeland-Winter Haven, FL	21,118	22,025	4.3	21,508	22,253	3.5	98.2	99.0	0.8	93.9
Lancaster, PA	20,437	21,119	3.3	20,385	20,336	-0.2	100.3	103.9	3.6	98.5
Lansing-East Lansing, MI	16,162	16,515	2.2	16,609	16,595	-0.1	97.3	99.5	2.3	94.4
Laredo, TX	6,530	6,770	3.7	6,871	7,223	5.1	95.0	93.7	-1.4	88.9
Las Cruces, NM	6,492	6,618	1.9	6,775	6,790	0.2	95.8	97.5	1.7	92.5
Las Vegas-Henderson-Paradise, NV	70,641	73,379	3.9	68,214	70,132	2.8	103.6	104.6	1.0	99.3
Lawrence, KS	3,959	4,100	3.6	3,997	4,075	1.9	99.0	100.6	1.6	95.5
Lawton, OK	4,877	4,903	0.5	5,108	5,087	-0.4	95.5	96.4	0.9	91.5
Lebanon, PA	5,433	5,582	2.7	5,547	5,581	0.6	97.9	100.0	2.1	94.9
Lewiston, ID-WA	2,208	2,277	3.1	2,353	2,357	0.2	93.9	96.6	2.9	91.7
Lewiston-Auburn, ME	3,894	3,983	2.3	4,002	3,977	-0.6	97.3	100.2	2.9	95.0
Lexington-Fayette, KY	18,600	19,365	4.1	19,432	19,940	2.6	95.7	97.1	1.5	92.2
Lima, OH	3,387	3,474	2.6	3,657	3,703	1.2	92.6	93.8	1.3	89.0
Lincoln, NE	12,268	12,905	5.2	12,912	13,184	2.1	95.0	97.9	3.0	92.9
Little Rock-North Little Rock-Conway, AR	28,684	29,899	4.2	29,754	31,145	4.7	96.4	96.0	-0.4	91.1
Logan, UT-ID	3,659	3,752	2.5	3,866	3,919	1.4	94.6	95.7	1.2	90.8
Longview, TX	8,586	9,089	5.9	9,034	9,389	3.9	95.0	96.8	1.8	91.9
Longview, WA	3,407	3,556	4.4	3,560	3,585	0.7	95.7	99.2	3.6	94.1
Los Angeles-Long Beach-Anaheim, CA	579,532	604,832	4.4	485,327	485,464	0.0	119.4	124.6	4.3	118.2
Louisville/Jefferson County, KY-IN	48,847	51,268	5.0	51,510	53,496	3.9	94.8	95.8	1.1	90.9
Lubbock, TX	10,200	10,738	5.3	10,520	10,865	3.3	97.0	98.8	1.9	93.8

Appendix Table 4. Real Personal Income and Implicit Regional Price Deflators by Metropolitan Area, 2011 and 2012

	Personal Income Millions of dollars			Real Personal Income Millions of chained (2008) dollars			Implicit Regional Price Deflators (2008=100)			Regional Price Parities
	2011	2012	Percent growth	2011	2012	Percent growth	2011	2012	Percent growth	2012
Lynchburg, VA	8,722	8,999	3.2	9,164	9,421	2.8	95.2	95.5	0.4	90.6
Macon, GA	8,386	8,582	2.3	8,897	9,258	4.1	94.3	92.7	-1.6	88.0
Madera, CA	4,531	4,745	4.7	4,581	4,672	2.0	98.9	101.6	2.7	96.4
Madison, WI	28,535	29,813	4.5	28,589	28,909	1.1	99.8	103.1	3.3	97.9
Manchester-Nashua, NH	19,758	20,471	3.6	17,660	17,829	1.0	111.9	114.8	2.6	108.9
Manhattan, KS	4,104	4,153	1.2	4,344	4,289	-1.3	94.5	96.8	2.5	91.9
Mankato-North Mankato, MN	3,704	3,926	6.0	4,103	4,219	2.8	90.3	93.1	3.1	88.3
Mansfield, OH	3,896	3,979	2.1	4,211	4,253	1.0	92.5	93.6	1.1	88.8
McAllen-Edinburg-Mission, TX	17,573	18,067	2.8	19,377	20,170	4.1	90.7	89.6	-1.2	85.0
Medford, OR	7,146	7,490	4.8	7,128	7,252	1.7	100.3	103.3	3.0	98.0
Memphis, TN-MS-AR	51,518	54,054	4.9	53,050	55,679	5.0	97.1	97.1	0.0	92.1
Merced, CA	7,798	8,034	3.0	7,919	7,962	0.5	98.5	100.9	2.5	95.8
Miami-Fort Lauderdale-West Palm Beach, FL	245,185	254,838	3.9	228,178	230,294	0.9	107.5	110.7	3.0	105.0
Michigan City-La Porte, IN	3,563	3,716	4.3	4,049	4,175	3.1	88.0	89.0	1.1	84.4
Midland, MI	3,759	3,807	1.3	4,205	4,159	-1.1	89.4	91.6	2.4	86.9
Midland, TX	11,233	12,595	12.1	11,138	12,209	9.6	100.9	103.2	2.3	97.9
Milwaukee-Waukesha-West Allis, WI	71,010	73,558	3.6	72,487	73,289	1.1	98.0	100.4	2.5	95.2
Minneapolis-St. Paul-Bloomington, MN-WI	165,580	172,004	3.9	157,506	158,436	0.6	105.1	108.6	3.3	103.0
Missoula, MT	3,892	4,060	4.3	3,966	3,994	0.7	98.1	101.7	3.6	96.5
Mobile, AL	13,460	13,565	0.8	14,147	14,594	3.2	95.1	93.0	-2.3	88.2
Modesto, CA	17,095	17,811	4.2	16,716	17,062	2.1	102.3	104.4	2.1	99.1
Monroe, LA	6,033	6,308	4.6	6,501	6,860	5.5	92.8	92.0	-0.9	87.3
Monroe, MI	5,492	5,800	5.6	5,435	5,693	4.7	101.1	101.9	0.8	96.7
Montgomery, AL	14,023	14,296	1.9	14,577	15,054	3.3	96.2	95.0	-1.3	90.1
Morgantown, WV	4,726	4,954	4.8	5,107	5,314	4.1	92.6	93.2	0.7	88.5
Morristown, TN	3,448	3,554	3.1	4,000	4,087	2.2	86.2	87.0	0.9	82.5
Mount Vernon-Anacortes, WA	4,608	4,783	3.8	4,545	4,599	1.2	101.4	104.0	2.6	98.7
Muncie, IN	3,611	3,793	5.0	3,860	4,013	3.9	93.5	94.5	1.1	89.7
Muskegon, MI	5,234	5,392	3.0	5,577	5,747	3.1	93.9	93.8	0.0	89.0
Myrtle Beach-Conway-North Myrtle Beach, SC	12,032	12,498	3.9	12,284	12,709	3.5	97.9	98.3	0.4	93.3
Napa, CA	7,082	7,621	7.6	5,891	6,104	3.6	120.2	124.8	3.9	118.5
Naples-Immokalee-Marco Island, FL	19,321	20,075	3.9	18,970	19,251	1.5	101.8	104.3	2.4	99.0
Nashville-Davidson--Murfreesboro--Franklin, TN	72,398	78,069	7.8	74,228	78,706	6.0	97.5	99.2	1.7	94.1
New Bern, NC	4,779	5,016	5.0	5,356	5,500	2.7	89.2	91.2	2.2	86.5
New Haven-Milford, CT	42,362	44,028	3.9	35,707	36,800	3.1	118.6	119.6	0.8	113.5
New Orleans-Metairie, LA	52,183	53,914	3.3	51,613	52,895	2.5	101.1	101.9	0.8	96.7
New York-Newark-Jersey City, NY-NJ-PA	1,123,064	1,158,247	3.1	890,753	899,654	1.0	126.1	128.7	2.1	122.2
Niles-Benton Harbor, MI	5,798	5,894	1.7	6,157	6,208	0.8	94.2	94.9	0.8	90.1
North Port-Sarasota-Bradenton, FL	34,324	35,784	4.3	33,872	34,366	1.5	101.3	104.1	2.8	98.8
Norwich-New London, CT	13,204	13,563	2.7	12,625	12,704	0.6	104.6	106.8	2.1	101.3
Ocala, FL	11,472	11,921	3.9	11,802	12,297	4.2	97.2	96.9	-0.3	92.0
Ocean City, NJ	4,895	5,034	2.8	4,304	4,392	2.0	113.7	114.6	0.8	108.8
Odessa, TX	5,526	6,162	11.5	5,661	6,241	10.2	97.6	98.7	1.2	93.7
Ogden-Clearfield, UT	20,997	22,038	5.0	21,134	21,703	2.7	99.4	101.5	2.2	96.4
Oklahoma City, OK	53,223	56,197	5.6	55,306	57,753	4.4	96.2	97.3	1.1	92.3
Olympia-Tumwater, WA	10,967	11,361	3.6	10,241	10,309	0.7	107.1	110.2	2.9	104.6
Omaha-Council Bluffs, NE-IA	39,228	41,248	5.1	40,275	41,485	3.0	97.4	99.4	2.1	94.3
Orlando-Kissimmee-Sanford, FL	77,138	80,969	5.0	75,787	78,421	3.5	101.8	103.2	1.4	98.0
Oshkosh-Neenah, WI	6,622	6,848	3.4	6,929	7,025	1.4	95.6	97.5	2.0	92.5
Owensboro, KY	4,106	4,252	3.5	4,478	4,651	3.9	91.7	91.4	-0.3	86.7
Oxnard-Thousand Oaks-Ventura, CA	39,295	40,827	3.9	33,847	33,803	-0.1	116.1	120.8	4.0	114.6
Palm Bay-Melbourne-Titusville, FL	21,241	21,766	2.5	21,491	21,566	0.3	98.8	100.9	2.1	95.8
Panama City, FL	6,870	6,987	1.7	6,831	6,886	0.8	100.6	101.5	0.9	96.3

Appendix Table 4. Real Personal Income and Implicit Regional Price Deflators by Metropolitan Area, 2011 and 2012

	Personal Income Millions of dollars			Real Personal Income Millions of chained (2008) dollars			Implicit Regional Price Deflators (2008=100)			Regional Price Parities
	2011	2012	Percent growth	2011	2012	Percent growth	2011	2012	Percent growth	2012
Parkersburg-Vienna, WV	2,984	3,118	4.5	3,205	3,402	6.1	93.1	91.6	-1.6	87.0
Pensacola-Ferry Pass-Brent, FL	16,735	17,314	3.5	17,062	17,384	1.9	98.1	99.6	1.5	94.5
Peoria, IL	16,764	17,657	5.3	17,562	18,319	4.3	95.5	96.4	1.0	91.5
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	300,996	310,081	3.0	268,938	269,888	0.4	111.9	114.9	2.7	109.0
Phoenix-Mesa-Scottsdale, AZ	158,054	164,547	4.1	153,144	156,533	2.2	103.2	105.1	1.9	99.7
Pine Bluff, AR	3,065	3,194	4.2	3,345	3,553	6.2	91.6	89.9	-1.9	85.3
Pittsburgh, PA	108,840	112,990	3.8	112,308	114,759	2.2	96.9	98.5	1.6	93.4
Pittsfield, MA	5,931	6,102	2.9	5,955	5,993	0.6	99.6	101.8	2.2	96.6
Pocatello, ID	2,467	2,512	1.8	2,630	2,635	0.2	93.8	95.3	1.6	90.5
Port St. Lucie, FL	16,320	16,908	3.6	16,401	16,756	2.2	99.5	100.9	1.4	95.8
Portland-South Portland, ME	22,897	23,705	3.5	22,091	22,309	1.0	103.6	106.3	2.5	100.8
Portland-Vancouver-Hillsboro, OR-WA	93,406	98,698	5.7	90,888	93,208	2.6	102.8	105.9	3.0	100.5
Prescott, AZ	6,449	6,723	4.3	6,580	6,623	0.6	98.0	101.5	3.6	96.3
Providence-Warwick, RI-MA	70,561	72,690	3.0	67,878	69,107	1.8	104.0	105.2	1.2	99.8
Provo-Orem, UT	14,305	15,197	6.2	14,359	14,882	3.6	99.6	102.1	2.5	96.9
Pueblo, CO	5,140	5,343	4.0	5,293	5,489	3.7	97.1	97.3	0.2	92.4
Punta Gorda, FL	5,766	6,005	4.1	5,879	5,978	1.7	98.1	100.5	2.4	95.3
Racine, WI	7,658	7,891	3.0	7,937	8,015	1.0	96.5	98.5	2.0	93.4
Raleigh, NC	47,992	50,763	5.8	48,628	50,609	4.1	98.7	100.3	1.6	95.2
Rapid City, SD	5,684	5,920	4.2	6,047	6,081	0.6	94.0	97.3	3.6	92.4
Reading, PA	16,225	16,727	3.1	16,218	16,397	1.1	100.0	102.0	2.0	96.8
Redding, CA	6,499	6,714	3.3	6,397	6,461	1.0	101.6	103.9	2.3	98.6
Reno, NV	18,258	18,793	2.9	17,737	17,930	1.1	102.9	104.8	1.8	99.5
Richmond, VA	53,462	55,678	4.1	53,633	54,812	2.2	99.7	101.6	1.9	96.4
Riverside-San Bernardino-Ontario, CA	133,772	138,767	3.7	123,217	123,856	0.5	108.6	112.0	3.2	106.3
Roanoke, VA	12,173	12,643	3.9	12,825	13,144	2.5	94.9	96.2	1.4	91.3
Rochester, MN	9,140	9,579	4.8	9,467	9,700	2.5	96.5	98.8	2.3	93.7
Rochester, NY	45,787	47,382	3.5	45,473	46,027	1.2	100.7	102.9	2.2	97.7
Rockford, IL	12,164	12,580	3.4	12,591	12,994	3.2	96.6	96.8	0.2	91.9
Rocky Mount, NC	4,826	4,999	3.6	5,114	5,463	6.8	94.4	91.5	-3.0	86.8
Rome, GA	3,204	3,292	2.7	3,571	3,798	6.3	89.7	86.7	-3.4	82.2
Sacramento--Roseville--Arden-Arcade, CA	93,793	98,054	4.5	89,485	90,870	1.5	104.8	107.9	2.9	102.4
Saginaw, MI	6,459	6,561	1.6	6,808	6,963	2.3	94.9	94.2	-0.7	89.4
Salem, OR	13,312	13,757	3.3	13,366	13,492	0.9	99.6	102.0	2.4	96.8
Salinas, CA	17,668	18,365	3.9	16,280	16,264	-0.1	108.5	112.9	4.0	107.1
Salisbury, MD-DE	14,144	14,689	3.9	14,901	15,488	3.9	94.9	94.8	-0.1	90.0
Salt Lake City, UT	43,045	45,425	5.5	42,284	43,493	2.9	101.8	104.4	2.6	99.1
San Angelo, TX	4,403	4,561	3.6	4,607	4,701	2.0	95.6	97.0	1.5	92.1
San Antonio-New Braunfels, TX	83,555	87,169	4.3	85,756	88,099	2.7	97.4	98.9	1.6	93.9
San Diego-Carlsbad, CA	150,841	157,961	4.7	126,299	125,992	-0.2	119.4	125.4	5.0	119.0
San Francisco-Oakland-Hayward, CA	276,804	296,700	7.2	225,469	232,158	3.0	122.8	127.8	4.1	121.3
San Jose-Sunnyvale-Santa Clara, CA	115,499	124,422	7.7	94,000	96,794	3.0	122.9	128.5	4.6	122.0
San Luis Obispo-Paso Robles-Arroyo Grande, CA	11,503	12,008	4.4	10,609	10,664	0.5	108.4	112.6	3.8	106.9
Santa Cruz-Watsonville, CA	13,285	13,990	5.3	10,940	10,936	0.0	121.4	127.9	5.4	121.4
Santa Fe, NM	6,261	6,455	3.1	6,114	6,173	1.0	102.4	104.6	2.1	99.2
Santa Maria-Santa Barbara, CA	19,690	20,641	4.8	17,857	18,094	1.3	110.3	114.1	3.5	108.2
Santa Rosa, CA	22,357	23,548	5.3	18,741	18,903	0.9	119.3	124.6	4.4	118.2
Savannah, GA	14,343	14,730	2.7	14,444	14,722	1.9	99.3	100.1	0.8	94.9
Scranton--Wilkes-Barre--Hazleton, PA	21,535	22,039	2.3	22,213	22,718	2.3	97.0	97.0	0.1	92.1
Seattle-Tacoma-Bellevue, WA	179,262	189,431	5.7	163,295	167,982	2.9	109.8	112.8	2.7	107.0
Sebastian-Vero Beach, FL	7,091	7,430	4.8	7,496	7,679	2.4	94.6	96.8	2.3	91.8
Sebring, FL	2,991	3,049	1.9	3,228	3,226	-0.1	92.7	94.5	2.0	89.7
Sheboygan, WI	4,927	5,150	4.5	5,200	5,366	3.2	94.7	96.0	1.3	91.1

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	Personal Income Millions of dollars			Real Personal Income Millions of chained (2008) dollars			Implicit Regional Price Deflators (2008=100)			Regional Price Parities
	2011	2012	Percent growth	2011	2012	Percent growth	2011	2012	Percent growth	2012
Sherman-Denison, TX	4,075	4,226	3.7	4,244	4,382	3.2	96.0	96.4	0.4	91.5
Shreveport-Bossier City, LA	17,884	18,439	3.1	18,670	19,193	2.8	95.8	96.1	0.3	91.2
Sierra Vista-Douglas, AZ	4,838	4,838	0.0	4,962	4,877	-1.7	97.5	99.2	1.7	94.1
Sioux City, IA-NE-SD	6,802	7,008	3.0	7,320	7,380	0.8	92.9	95.0	2.2	90.1
Sioux Falls, SD	10,769	11,164	3.7	11,362	11,364	0.0	94.8	98.2	3.7	93.2
South Bend-Mishawaka, IN-MI	11,582	12,083	4.3	12,277	12,600	2.6	94.3	95.9	1.7	91.0
Spartanburg, SC	10,084	10,392	3.1	10,860	11,149	2.7	92.9	93.2	0.4	88.4
Spokane-Spokane Valley, WA	18,987	19,650	3.5	19,241	19,436	1.0	98.7	101.1	2.5	95.9
Springfield, IL	8,658	8,820	1.9	8,968	9,061	1.0	96.5	97.3	0.8	92.4
Springfield, MA	25,529	26,466	3.7	25,410	25,934	2.1	100.5	102.1	1.6	96.8
Springfield, MO	14,407	15,092	4.7	15,465	16,060	3.8	93.2	94.0	0.9	89.2
Springfield, OH	4,906	5,018	2.3	5,190	5,325	2.6	94.5	94.2	-0.3	89.4
St. Cloud, MN	6,857	7,192	4.9	7,236	7,341	1.5	94.8	98.0	3.4	93.0
St. George, UT	3,951	4,141	4.8	4,051	4,130	1.9	97.5	100.3	2.8	95.2
St. Joseph, MO-KS	4,460	4,614	3.4	4,783	4,971	3.9	93.3	92.8	-0.5	88.1
St. Louis, MO-IL	120,030	124,763	3.9	128,937	133,109	3.2	93.1	93.7	0.7	88.9
State College, PA	6,135	6,345	3.4	6,033	5,891	-2.4	101.7	107.7	5.9	102.2
Staunton-Waynesboro, VA	4,152	4,344	4.6	4,514	4,597	1.9	92.0	94.5	2.7	89.7
Stockton-Lodi, CA	22,369	23,203	3.7	21,597	21,896	1.4	103.6	106.0	2.3	100.6
Sumter, SC	3,405	3,563	4.6	3,657	3,801	4.0	93.1	93.7	0.6	88.9
Syracuse, NY	26,678	27,610	3.5	26,825	27,314	1.8	99.5	101.1	1.6	95.9
Tallahassee, FL	13,681	14,032	2.6	13,718	13,999	2.0	99.7	100.2	0.5	95.1
Tampa-St. Petersburg-Clearwater, FL	111,325	116,166	4.3	108,475	110,941	2.3	102.6	104.7	2.0	99.4
Terre Haute, IN	5,526	5,774	4.5	5,880	6,202	5.5	94.0	93.1	-0.9	88.3
Texarkana, TX-AR	5,079	5,212	2.6	5,468	5,548	1.5	92.9	93.9	1.1	89.1
The Villages, FL	3,319	3,560	7.3	3,581	3,766	5.2	92.7	94.5	2.0	89.7
Toledo, OH	22,397	22,944	2.4	23,877	24,253	1.6	93.8	94.6	0.9	89.8
Topeka, KS	9,185	9,413	2.5	9,724	9,961	2.4	94.5	94.5	0.0	89.7
Trenton, NJ	19,567	20,519	4.9	16,717	17,459	4.4	117.0	117.5	0.4	111.5
Tucson, AZ	34,932	36,059	3.2	34,866	35,275	1.2	100.2	102.2	2.0	97.0
Tulsa, OK	41,077	43,167	5.1	42,981	44,947	4.6	95.6	96.0	0.5	91.1
Tuscaloosa, AL	7,876	8,138	3.3	8,294	8,713	5.1	95.0	93.4	-1.6	88.6
Tyler, TX	8,554	8,889	3.9	8,677	8,906	2.6	98.6	99.8	1.3	94.7
Urban Honolulu, HI	45,663	47,382	3.8	36,494	36,583	0.2	125.1	129.5	3.5	122.9
Utica-Rome, NY	11,104	11,311	1.9	11,360	11,538	1.6	97.7	98.0	0.3	93.0
Valdosta, GA	4,502	4,673	3.8	5,072	5,320	4.9	88.8	87.8	-1.0	83.3
Vallejo-Fairfield, CA	16,560	17,821	7.6	13,985	14,539	4.0	118.4	122.6	3.5	116.3
Victoria, TX	3,945	4,226	7.1	4,135	4,422	7.0	95.4	95.6	0.2	90.7
Vineland-Bridgeton, NJ	5,590	5,767	3.2	5,066	5,210	2.8	110.3	110.7	0.3	105.0
Virginia Beach-Norfolk-Newport News, VA-NC	72,627	75,342	3.7	70,647	71,962	1.9	102.8	104.7	1.8	99.3
Visalia-Porterville, CA	13,898	14,150	1.8	14,123	14,048	-0.5	98.4	100.7	2.4	95.6
Waco, TX	8,584	8,883	3.5	8,977	9,197	2.4	95.6	96.6	1.0	91.6
Walla Walla, WA	2,373	2,388	0.6	2,410	2,370	-1.6	98.5	100.8	2.3	95.6
Warner Robins, GA	6,453	6,613	2.5	6,766	6,899	2.0	95.4	95.9	0.5	91.0
Washington-Arlington-Alexandria, DC-VA-MD-DE	351,085	361,836	3.1	287,430	285,079	-0.8	122.1	126.9	3.9	120.4
Waterloo-Cedar Falls, IA	6,659	6,976	4.8	7,105	7,226	1.7	93.7	96.5	3.0	91.6
Watertown-Fort Drum, NY	5,348	5,328	-0.4	5,417	5,280	-2.5	98.7	100.9	2.2	95.7
Wausau, WI	5,119	5,308	3.7	5,370	5,449	1.5	95.3	97.4	2.2	92.4
Weirton-Steubenville, WV-OH	3,932	4,050	3.0	4,255	4,426	4.0	92.4	91.5	-1.0	86.8
Wenatchee, WA	4,041	4,190	3.7	4,161	4,129	-0.8	97.1	101.5	4.5	96.3
Wheeling, WV-OH	5,054	5,290	4.7	5,540	5,820	5.0	91.2	90.9	-0.4	86.3
Wichita Falls, TX	5,886	6,090	3.5	6,234	6,349	1.8	94.4	95.9	1.6	91.0
Wichita, KS	25,358	26,177	3.2	26,590	27,221	2.4	95.4	96.2	0.8	91.3

Appendix Table 4. Real Personal Income and Implicit Regional Price Deflators by Metropolitan Area, 2011 and 2012

	Personal Income Millions of dollars			Real Personal Income Millions of chained (2008) dollars			Implicit Regional Price Deflators (2008=100)			Regional Price Parities
	2011	2012	Percent growth	2011	2012	Percent growth	2011	2012	Percent growth	2012
Williamsport, PA	4,298	4,480	4.3	4,481	4,578	2.2	95.9	97.9	2.0	92.9
Wilmington, NC	9,322	9,619	3.2	9,594	9,716	1.3	97.2	99.0	1.9	93.9
Winchester, VA-WV	4,641	4,838	4.2	4,899	4,998	2.0	94.7	96.8	2.2	91.9
Winston-Salem, NC	23,241	24,370	4.9	24,486	25,439	3.9	94.9	95.8	0.9	90.9
Worcester, MA-CT	41,926	43,326	3.3	38,619	38,982	0.9	108.6	111.1	2.4	105.5
Yakima, WA	8,311	8,567	3.1	8,513	8,572	0.7	97.6	99.9	2.4	94.8
York-Hanover, PA	17,188	17,568	2.2	17,264	17,316	0.3	99.6	101.5	1.9	96.3
Youngstown-Warren-Boardman, OH-PA	19,308	19,682	1.9	20,735	21,010	1.3	93.1	93.7	0.6	88.9
Yuba City, CA	5,606	5,838	4.2	5,605	5,635	0.5	100.0	103.6	3.6	98.3
Yuma, AZ	5,487	5,400	-1.6	5,553	5,490	-1.1	98.8	98.4	-0.5	93.3
United States nonmetropolitan portion	1,574,840	1,633,732	3.7	1,708,781	1,763,271	3.2	92.2	92.7	0.5	87.9
United States	13,179,561	13,729,063	4.2	12,670,133	12,958,961	2.3	104.0	105.9	1.8	100.0
Maximum	13,179,561	13,729,063	12.1	12,670,133	12,958,961	10.2	126.4	129.5	5.9	122.9
Minimum	2,208	2,277	-1.6	2,226	2,243	-3.8	85.1	83.7	-3.6	79.4
Range	13,177,353	13,726,786	13.7	12,667,907	12,956,717	14.0	41.3	45.8	9.5	43.5

Note: The maximum and the minimum only include metropolitan areas.

Source: U.S. Bureau of Economic Analysis

Appendix Table 5. Real Per Capita Personal Income by Metropolitan Area, 2011 and 2012

	Per Capita Personal Income Dollars			Real Per Capita Personal Income Dollars		
	2011	2012	Percent growth	2011	2012	Percent growth
Abilene, TX	36,459	37,918	4.0	38,202	39,378	3.1
Akron, OH	40,354	41,981	4.0	43,726	45,068	3.1
Albany, GA	32,642	33,956	4.0	35,245	37,850	7.4
Albany, OR	29,882	30,984	3.7	30,862	31,375	1.7
Albany-Schenectady-Troy, NY	46,599	47,763	2.5	45,398	45,724	0.7
Albuquerque, NM	35,529	36,272	2.1	35,749	35,647	-0.3
Alexandria, LA	35,974	37,442	4.1	38,479	40,522	5.3
Allentown-Bethlehem-Easton, PA-NJ	41,469	42,865	3.4	39,979	40,699	1.8
Altoona, PA	35,853	36,570	2.0	37,759	37,964	0.5
Amarillo, TX	37,464	38,340	2.3	38,975	39,190	0.6
Ames, IA	42,134	44,568	5.8	46,467	47,697	2.6
Anchorage, AK	50,796	52,360	3.1	44,979	44,811	-0.4
Ann Arbor, MI	41,247	43,202	4.7	39,320	40,130	2.1
Anniston-Oxford-Jacksonville, AL	32,401	32,883	1.5	35,473	36,782	3.7
Appleton, WI	40,077	41,799	4.3	41,548	42,491	2.3
Asheville, NC	34,775	36,125	3.9	36,548	37,272	2.0
Athens-Clarke County, GA	32,000	33,073	3.4	33,537	34,168	1.9
Atlanta-Sandy Springs-Roswell, GA	39,884	40,963	2.7	39,860	40,647	2.0
Atlantic City-Hammonton, NJ	41,187	42,099	2.2	36,440	36,851	1.1
Auburn-Opelika, AL	29,653	30,236	2.0	32,307	32,992	2.1
Augusta-Richmond County, GA-SC	35,254	35,949	2.0	37,107	37,985	2.4
Austin-Round Rock, TX	41,651	42,902	3.0	40,978	41,339	0.9
Bakersfield, CA	32,769	34,453	5.1	32,766	33,597	2.5
Baltimore-Columbia-Towson, MD	52,413	54,201	3.4	46,048	47,031	2.1
Bangor, ME	34,790	35,860	3.1	35,150	35,066	-0.2
Barnstable Town, MA	57,844	60,238	4.1	54,998	55,995	1.8
Baton Rouge, LA	38,614	40,245	4.2	39,832	40,983	2.9
Battle Creek, MI	34,267	35,623	4.0	36,238	37,337	3.0
Bay City, MI	34,123	34,757	1.9	36,285	37,119	2.3
Beaumont-Port Arthur, TX	36,876	38,374	4.1	38,767	40,200	3.7
Beckley, WV	34,308	35,389	3.2	38,905	39,130	0.6
Bellingham, WA	37,928	39,117	3.1	37,307	37,391	0.2
Bend-Redmond, OR	37,263	38,448	3.2	37,968	37,754	-0.6
Billings, MT	39,933	41,546	4.0	40,840	41,284	1.1
Binghamton, NY	37,292	38,365	2.9	38,175	38,079	-0.3
Birmingham-Hoover, AL	40,289	41,850	3.9	41,712	44,038	5.6
Bismarck, ND	42,999	46,262	7.6	45,427	46,704	2.8
Blacksburg-Christiansburg-Radford, VA	30,023	31,460	4.8	32,286	33,623	4.1
Bloomington, IL	42,452	43,429	2.3	43,422	43,578	0.4
Bloomington, IN	31,584	32,837	4.0	32,857	33,372	1.6
Bloomsburg-Berwick, PA	34,771	35,887	3.2	36,534	37,031	1.4
Boise City, ID	34,537	35,354	2.4	35,524	35,435	-0.3
Boston-Cambridge-Newton, MA-NH	58,561	60,387	3.1	51,120	51,362	0.5
Boulder, CO	51,554	53,772	4.3	46,875	46,836	-0.1
Bowling Green, KY	31,320	32,183	2.8	35,446	35,888	1.2
Bremerton-Silverdale, WA	43,117	44,547	3.3	40,130	40,397	0.7
Bridgeport-Stamford-Norwalk, CT	79,099	81,068	2.5	62,559	63,336	1.2

Appendix Table 5. Real Per Capita Personal Income by Metropolitan Area, 2011 and 2012

	Per Capita Personal Income Dollars			Real Per Capita Personal Income Dollars		
	2011	2012	Percent growth	2011	2012	Percent growth
Brownsville-Harlingen, TX	23,405	23,909	2.2	25,814	26,661	3.3
Brunswick, GA	33,428	34,478	3.1	37,139	37,996	2.3
Buffalo-Cheektowaga-Niagara Falls, NY	41,501	42,788	3.1	42,305	43,272	2.3
Burlington, NC	31,730	32,929	3.8	33,504	34,732	3.7
Burlington-South Burlington, VT	45,525	47,285	3.9	43,241	43,876	1.5
California-Lexington Park, MD	46,997	47,609	1.3	44,579	44,170	-0.9
Canton-Massillon, OH	35,896	37,115	3.4	38,358	39,407	2.7
Cape Coral-Fort Myers, FL	42,153	43,169	2.4	42,779	43,104	0.8
Cape Girardeau, MO-IL	34,292	35,545	3.7	39,532	40,758	3.1
Carbondale-Marion, IL	34,710	35,745	3.0	40,021	40,332	0.8
Carson City, NV	41,033	42,236	2.9	40,585	40,909	0.8
Casper, WY	55,608	57,522	3.4	55,543	55,828	0.5
Cedar Rapids, IA	42,678	44,131	3.4	45,112	45,895	1.7
Chambersburg-Waynesboro, PA	35,743	36,743	2.8	36,036	36,369	0.9
Champaign-Urbana, IL	37,987	39,086	2.9	39,110	39,495	1.0
Charleston, WV	40,945	42,329	3.4	43,453	44,721	2.9
Charleston-North Charleston, SC	38,818	39,444	1.6	38,799	39,090	0.8
Charlotte-Concord-Gastonia, NC-SC	38,911	40,465	4.0	39,869	40,706	2.1
Charlottesville, VA	44,748	46,667	4.3	43,745	44,671	2.1
Chattanooga, TN-GA	35,899	37,228	3.7	38,054	39,051	2.6
Cheyenne, WY	49,443	50,755	2.7	49,868	50,004	0.3
Chicago-Naperville-Elgin, IL-IN-WI	46,305	48,305	4.3	42,304	42,984	1.6
Chico, CA	34,477	35,696	3.5	33,884	33,802	-0.2
Cincinnati, OH-KY-IN	41,738	43,454	4.1	43,583	45,047	3.4
Clarksville, TN-KY	39,527	38,902	-1.6	41,690	40,627	-2.5
Cleveland, TN	31,544	33,148	5.1	35,687	37,891	6.2
Cleveland-Elyria, OH	43,010	44,775	4.1	46,646	47,631	2.1
Coeur d'Alene, ID	33,631	34,656	3.0	34,837	35,205	1.1
College Station-Bryan, TX	30,664	31,788	3.7	31,219	31,990	2.5
Colorado Springs, CO	40,105	40,980	2.2	39,601	39,431	-0.4
Columbia, MO	38,171	39,557	3.6	39,624	40,701	2.7
Columbia, SC	36,163	37,294	3.1	37,394	38,406	2.7
Columbus, GA-AL	38,589	39,216	1.6	40,404	41,793	3.4
Columbus, IN	40,417	43,419	7.4	44,603	47,209	5.8
Columbus, OH	41,048	42,728	4.1	42,119	43,208	2.6
Corpus Christi, TX	39,262	40,796	3.9	40,427	41,797	3.4
Corvallis, OR	38,439	39,880	3.7	38,773	38,864	0.2
Crestview-Fort Walton Beach-Destin, FL	42,246	43,078	2.0	42,141	42,184	0.1
Cumberland, MD-WV	33,277	34,431	3.5	35,605	37,035	4.0
Dallas-Fort Worth-Arlington, TX	44,628	46,136	3.4	42,606	43,327	1.7
Dalton, GA	27,701	28,548	3.1	31,368	31,861	1.6
Danville, IL	32,791	33,937	3.5	37,776	40,538	7.3
Daphne-Fairhope-Foley, AL	38,115	38,548	1.1	41,470	41,103	-0.9
Davenport-Moline-Rock Island, IA-IL	42,836	43,847	2.4	45,065	45,196	0.3
Dayton, OH	38,736	39,891	3.0	40,513	41,596	2.7
Decatur, AL	32,185	33,127	2.9	34,859	36,162	3.7
Decatur, IL	41,021	42,287	3.1	43,356	44,757	3.2

Appendix Table 5. Real Per Capita Personal Income by Metropolitan Area, 2011 and 2012

	Per Capita Personal Income Dollars			Real Per Capita Personal Income Dollars		
	2011	2012	Percent growth	2011	2012	Percent growth
Deltona-Daytona Beach-Ormond Beach, FL	33,475	34,661	3.5	33,793	34,439	1.9
Denver-Aurora-Lakewood, CO	49,119	50,936	3.7	46,226	46,337	0.2
Des Moines-West Des Moines, IA	45,130	46,753	3.6	46,227	46,925	1.5
Detroit-Warren-Dearborn, MI	40,776	42,261	3.6	39,907	40,995	2.7
Dothan, AL	34,727	35,816	3.1	38,307	39,975	4.4
Dover, DE	35,077	36,155	3.1	35,580	36,468	2.5
Dubuque, IA	38,610	40,371	4.6	40,489	41,240	1.9
Duluth, MN-WI	37,156	38,171	2.7	38,990	39,502	1.3
Durham-Chapel Hill, NC	43,111	44,294	2.7	44,031	44,226	0.4
East Stroudsburg, PA	32,857	33,781	2.8	31,786	32,075	0.9
Eau Claire, WI	37,602	39,138	4.1	39,330	40,255	2.4
El Centro, CA	30,459	30,894	1.4	31,960	31,795	-0.5
El Paso, TX	29,315	30,186	3.0	31,356	31,544	0.6
Elizabethtown-Fort Knox, KY	38,831	38,981	0.4	43,110	42,660	-1.0
Elkhart-Goshen, IN	32,988	35,550	7.8	34,611	36,813	6.4
Elmira, NY	37,313	38,056	2.0	38,042	38,319	0.7
Erie, PA	35,972	36,671	1.9	37,288	37,403	0.3
Eugene, OR	34,614	35,941	3.8	34,681	34,891	0.6
Evansville, IN-KY	39,176	40,437	3.2	40,930	42,446	3.7
Fairbanks, AK	44,851	45,432	1.3	41,207	40,354	-2.1
Fargo, ND-MN	43,570	46,384	6.5	45,761	47,059	2.8
Farmington, NM	32,039	33,092	3.3	33,789	33,889	0.3
Fayetteville, NC	43,192	43,928	1.7	45,054	45,555	1.1
Fayetteville-Springdale-Rogers, AR-MO	34,569	35,977	4.1	36,758	37,815	2.9
Flagstaff, AZ	34,430	34,820	1.1	34,095	33,566	-1.5
Flint, MI	31,426	32,421	3.2	31,789	32,804	3.2
Florence, SC	33,491	34,445	2.8	36,775	38,211	3.9
Florence-Muscle Shoals, AL	32,233	33,249	3.2	35,236	37,331	5.9
Fond du Lac, WI	37,788	39,459	4.4	42,475	43,637	2.7
Fort Collins, CO	39,992	41,311	3.3	39,183	39,100	-0.2
Fort Smith, AR-OK	32,651	33,876	3.8	35,883	37,570	4.7
Fort Wayne, IN	35,584	37,226	4.6	37,693	38,782	2.9
Fresno, CA	33,132	34,074	2.8	32,977	33,118	0.4
Gadsden, AL	31,851	32,717	2.7	34,689	36,647	5.6
Gainesville, FL	36,858	38,045	3.2	36,766	37,486	2.0
Gainesville, GA	32,288	32,789	1.6	34,724	34,338	-1.1
Gettysburg, PA	34,628	35,720	3.2	34,912	35,357	1.3
Glens Falls, NY	38,680	40,058	3.6	38,381	38,911	1.4
Goldsboro, NC	32,003	33,620	5.1	34,587	36,774	6.3
Grand Forks, ND-MN	40,093	43,916	9.5	42,216	44,907	6.4
Grand Island, NE	39,835	41,395	3.9	46,110	46,387	0.6
Grand Junction, CO	34,681	35,726	3.0	35,049	35,640	1.7
Grand Rapids-Wyoming, MI	35,845	37,264	4.0	37,496	38,293	2.1
Grants Pass, OR	30,416	31,361	3.1	31,413	31,756	1.1
Great Falls, MT	39,435	40,822	3.5	41,084	41,094	0.0
Greeley, CO	30,400	31,657	4.1	30,430	30,765	1.1
Green Bay, WI	40,497	41,609	2.7	42,576	42,877	0.7

Appendix Table 5. Real Per Capita Personal Income by Metropolitan Area, 2011 and 2012

	Per Capita Personal Income Dollars			Real Per Capita Personal Income Dollars		
	2011	2012	Percent growth	2011	2012	Percent growth
Greensboro-High Point, NC	35,395	36,645	3.5	37,510	38,479	2.6
Greenville, NC	33,831	35,743	5.7	35,601	38,381	7.8
Greenville-Anderson-Mauldin, SC	34,879	35,696	2.3	36,676	37,278	1.6
Gulfport-Biloxi-Pascagoula, MS	35,380	35,448	0.2	36,874	37,115	0.7
Hagerstown-Martinsburg, MD-WV	35,509	36,196	1.9	33,343	33,467	0.4
Hammond, LA	32,047	32,687	2.0	34,994	34,897	-0.3
Hanford-Corcoran, CA	31,771	31,835	0.2	32,238	31,626	-1.9
Harrisburg-Carlisle, PA	43,271	44,523	2.9	43,199	43,726	1.2
Harrisonburg, VA	31,999	32,998	3.1	33,640	34,003	1.1
Hartford-West Hartford-East Hartford, CT	52,338	54,274	3.7	50,177	51,017	1.7
Hattiesburg, MS	31,346	32,567	3.9	35,138	36,457	3.8
Hickory-Lenoir-Morganton, NC	31,060	32,243	3.8	33,262	34,375	3.3
Hilton Head Island-Bluffton-Beaufort, SC	39,953	40,853	2.3	41,995	42,161	0.4
Hinesville, GA	28,136	28,348	0.8	29,851	29,200	-2.2
Homosassa Springs, FL	33,026	34,184	3.5	35,638	36,166	1.5
Hot Springs, AR	35,369	36,796	4.0	39,101	40,886	4.6
Houma-Thibodaux, LA	41,584	43,631	4.9	43,569	44,699	2.6
Houston-The Woodlands-Sugar Land, TX	48,809	51,004	4.5	46,712	48,053	2.9
Huntington-Ashland, WV-KY-OH	34,065	35,059	2.9	36,778	38,362	4.3
Huntsville, AL	40,974	41,595	1.5	42,827	43,243	1.0
Idaho Falls, ID	34,726	35,292	1.6	36,658	36,745	0.2
Indianapolis-Carmel-Anderson, IN	40,467	42,342	4.6	41,529	42,767	3.0
Iowa City, IA	43,631	45,222	3.6	44,520	44,757	0.5
Ithaca, NY	37,579	38,852	3.4	35,541	35,334	-0.6
Jackson, MI	31,902	32,670	2.4	33,787	34,100	0.9
Jackson, MS	37,861	39,505	4.3	39,479	40,960	3.7
Jackson, TN	35,276	36,721	4.1	39,737	42,744	7.6
Jacksonville, FL	40,701	41,900	2.9	40,610	41,301	1.7
Jacksonville, NC	46,418	45,953	-1.0	46,766	45,422	-2.9
Janesville-Beloit, WI	34,282	35,855	4.6	35,533	36,673	3.2
Jefferson City, MO	35,939	36,537	1.7	42,207	42,928	1.7
Johnson City, TN	33,591	34,582	2.9	36,513	37,156	1.8
Johnstown, PA	34,749	35,620	2.5	37,471	38,776	3.5
Jonesboro, AR	32,849	34,266	4.3	37,688	39,789	5.6
Joplin, MO	31,662	33,139	4.7	33,921	35,813	5.6
Kahului-Wailuku-Lahaina, HI	36,790	37,909	3.0	31,534	31,859	1.0
Kalamazoo-Portage, MI	35,944	36,916	2.7	37,548	37,783	0.6
Kankakee, IL	33,603	34,997	4.1	32,283	33,512	3.8
Kansas City, MO-KS	43,330	44,766	3.3	44,755	45,802	2.3
Kennewick-Richland, WA	38,195	37,109	-2.8	38,318	36,255	-5.4
Killeen-Temple, TX	39,630	39,471	-0.4	40,857	40,514	-0.8
Kingsport-Bristol-Bristol, TN-VA	33,781	34,975	3.5	37,155	38,173	2.7
Kingston, NY	41,619	42,937	3.2	39,235	39,693	1.2
Knoxville, TN	36,537	37,864	3.6	38,361	39,211	2.2
Kokomo, IN	32,626	34,107	4.5	34,894	36,676	5.1
La Crosse-Onalaska, WI-MN	39,456	40,824	3.5	40,878	41,347	1.1
Lafayette, LA	40,871	43,049	5.3	42,777	44,493	4.0

Appendix Table 5. Real Per Capita Personal Income by Metropolitan Area, 2011 and 2012

	Per Capita Personal Income Dollars			Real Per Capita Personal Income Dollars		
	2011	2012	Percent growth	2011	2012	Percent growth
Lafayette-West Lafayette, IN	32,739	33,822	3.3	33,746	34,175	1.3
Lake Charles, LA	35,568	37,226	4.7	38,090	39,912	4.8
Lake Havasu City-Kingman, AZ	26,524	27,220	2.6	27,170	27,546	1.4
Lakeland-Winter Haven, FL	34,630	35,746	3.2	35,269	36,116	2.4
Lancaster, PA	39,013	40,088	2.8	38,913	38,600	-0.8
Lansing-East Lansing, MI	34,712	35,459	2.2	35,671	35,633	-0.1
Laredo, TX	25,612	26,120	2.0	26,949	27,871	3.4
Las Cruces, NM	30,488	30,862	1.2	31,814	31,663	-0.5
Las Vegas-Henderson-Paradise, NV	35,896	36,676	2.2	34,663	35,053	1.1
Lawrence, KS	35,268	36,331	3.0	35,610	36,103	1.4
Lawton, OK	36,969	36,992	0.1	38,716	38,380	-0.9
Lebanon, PA	40,427	41,268	2.1	41,275	41,267	0.0
Lewiston, ID-WA	36,011	37,080	3.0	38,369	38,376	0.0
Lewiston-Auburn, ME	36,246	37,018	2.1	37,249	36,956	-0.8
Lexington-Fayette, KY	38,836	39,925	2.8	40,574	41,112	1.3
Lima, OH	32,034	33,044	3.2	34,589	35,215	1.8
Lincoln, NE	40,015	41,584	3.9	42,115	42,482	0.9
Little Rock-North Little Rock-Conway, AR	40,346	41,662	3.3	41,851	43,397	3.7
Logan, UT-ID	28,731	29,243	1.8	30,358	30,545	0.6
Longview, TX	39,788	41,945	5.4	41,864	43,332	3.5
Longview, WA	33,261	34,867	4.8	34,756	35,153	1.1
Los Angeles-Long Beach-Anaheim, CA	44,768	46,337	3.5	37,491	37,192	-0.8
Louisville/Jefferson County, KY-IN	39,241	40,970	4.4	41,380	42,751	3.3
Lubbock, TX	34,545	36,074	4.4	35,630	36,502	2.4
Lynchburg, VA	34,334	35,243	2.6	36,072	36,896	2.3
Macon, GA	36,015	36,879	2.4	38,211	39,781	4.1
Madera, CA	29,790	31,169	4.6	30,124	30,692	1.9
Madison, WI	46,479	48,026	3.3	46,566	46,570	0.0
Manchester-Nashua, NH	49,169	50,806	3.3	43,948	44,249	0.7
Manhattan, KS	43,129	42,464	-1.5	45,659	43,852	-4.0
Mankato-North Mankato, MN	38,055	40,052	5.2	42,156	43,041	2.1
Mansfield, OH	31,642	32,437	2.5	34,199	34,669	1.4
McAllen-Edinburg-Mission, TX	22,127	22,400	1.2	24,399	25,008	2.5
Medford, OR	34,907	36,289	4.0	34,818	35,135	0.9
Memphis, TN-MS-AR	38,637	40,288	4.3	39,786	41,499	4.3
Merced, CA	29,995	30,630	2.1	30,461	30,355	-0.3
Miami-Fort Lauderdale-West Palm Beach, FL	43,106	44,222	2.6	40,116	39,963	-0.4
Michigan City-La Porte, IN	32,026	33,399	4.3	36,388	37,534	3.1
Midland, MI	44,739	45,423	1.5	50,049	49,615	-0.9
Midland, TX	77,495	83,049	7.2	76,841	80,504	4.8
Milwaukee-Waukesha-West Allis, WI	45,477	46,943	3.2	46,424	46,771	0.7
Minneapolis-St. Paul-Bloomington, MN-WI	48,857	50,260	2.9	46,475	46,296	-0.4
Missoula, MT	35,342	36,584	3.5	36,022	35,986	-0.1
Mobile, AL	32,580	32,772	0.6	34,242	35,256	3.0
Modesto, CA	33,005	34,138	3.4	32,274	32,704	1.3
Monroe, LA	34,014	35,482	4.3	36,653	38,587	5.3
Monroe, MI	36,227	38,401	6.0	35,846	37,687	5.1

Appendix Table 5. Real Per Capita Personal Income by Metropolitan Area, 2011 and 2012

	Per Capita Personal Income Dollars			Real Per Capita Personal Income Dollars		
	2011	2012	Percent growth	2011	2012	Percent growth
Montgomery, AL	37,044	37,905	2.3	38,507	39,916	3.7
Morgantown, WV	35,752	36,928	3.3	38,630	39,607	2.5
Morristown, TN	30,084	30,925	2.8	34,896	35,558	1.9
Mount Vernon-Anacortes, WA	39,107	40,456	3.4	38,569	38,897	0.9
Muncie, IN	30,656	32,318	5.4	32,774	34,190	4.3
Muskegon, MI	30,785	31,685	2.9	32,801	33,772	3.0
Myrtle Beach-Conway-North Myrtle Beach, SC-NC	31,177	31,678	1.6	31,832	32,212	1.2
Napa, CA	51,325	54,807	6.8	42,696	43,898	2.8
Naples-Immokalee-Marco Island, FL	58,991	60,391	2.4	57,920	57,911	0.0
Nashville-Davidson--Murfreesboro--Franklin, TN	42,629	45,213	6.1	43,706	45,582	4.3
New Bern, NC	37,315	39,151	4.9	41,818	42,932	2.7
New Haven-Milford, CT	49,098	51,028	3.9	41,385	42,652	3.1
New Orleans-Metairie, LA	43,002	43,936	2.2	42,533	43,106	1.3
New York-Newark-Jersey City, NY-NJ-PA	56,922	58,403	2.6	45,147	45,364	0.5
Niles-Benton Harbor, MI	37,049	37,764	1.9	39,345	39,778	1.1
North Port-Sarasota-Bradenton, FL	48,410	49,697	2.7	47,772	47,727	-0.1
Norwich-New London, CT	48,176	49,468	2.7	46,061	46,335	0.6
Ocala, FL	34,505	35,570	3.1	35,498	36,694	3.4
Ocean City, NJ	50,695	52,276	3.1	44,574	45,607	2.3
Odessa, TX	39,585	42,698	7.9	40,555	43,242	6.6
Ogden-Clearfield, UT	34,660	35,984	3.8	34,886	35,437	1.6
Oklahoma City, OK	41,717	43,343	3.9	43,349	44,543	2.8
Olympia-Tumwater, WA	42,774	43,977	2.8	39,940	39,907	-0.1
Omaha-Council Bluffs, NE-IA	44,721	46,575	4.1	45,915	46,843	2.0
Orlando-Kissimmee-Sanford, FL	35,466	36,412	2.7	34,844	35,267	1.2
Oshkosh-Neenah, WI	39,485	40,569	2.7	41,319	41,619	0.7
Owensboro, KY	35,585	36,641	3.0	38,802	40,086	3.3
Oxnard-Thousand Oaks-Ventura, CA	47,279	48,837	3.3	40,724	40,435	-0.7
Palm Bay-Melbourne-Titusville, FL	39,023	39,770	1.9	39,482	39,404	-0.2
Panama City, FL	37,033	37,241	0.6	36,826	36,700	-0.3
Parkersburg-Vienna, WV	32,214	33,685	4.6	34,598	36,757	6.2
Pensacola-Ferry Pass-Brent, FL	36,742	37,538	2.2	37,461	37,690	0.6
Peoria, IL	44,151	46,412	5.1	46,253	48,151	4.1
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	50,187	51,519	2.7	44,842	44,841	0.0
Phoenix-Mesa-Scottsdale, AZ	37,171	38,006	2.2	36,016	36,155	0.4
Pine Bluff, AR	30,964	32,776	5.9	33,794	36,455	7.9
Pittsburgh, PA	46,117	47,862	3.8	47,586	48,612	2.2
Pittsfield, MA	45,465	46,930	3.2	45,652	46,097	1.0
Pocatello, ID	29,540	29,972	1.5	31,485	31,440	-0.1
Port St. Lucie, FL	38,095	39,078	2.6	38,283	38,726	1.2
Portland-South Portland, ME	44,367	45,752	3.1	42,806	43,059	0.6
Portland-Vancouver-Hillsboro, OR-WA	41,313	43,103	4.3	40,200	40,706	1.3
Prescott, AZ	30,543	31,617	3.5	31,166	31,145	-0.1
Providence-Warwick, RI-MA	44,093	45,392	2.9	42,417	43,155	1.7
Provo-Orem, UT	26,470	27,588	4.2	26,570	27,016	1.7
Pueblo, CO	32,055	33,218	3.6	33,009	34,123	3.4
Punta Gorda, FL	36,161	36,964	2.2	36,868	36,798	-0.2

Appendix Table 5. Real Per Capita Personal Income by Metropolitan Area, 2011 and 2012

	Per Capita Personal Income Dollars			Real Per Capita Personal Income Dollars		
	2011	2012	Percent growth	2011	2012	Percent growth
Racine, WI	39,268	40,510	3.2	40,702	41,146	1.1
Raleigh, NC	41,276	42,709	3.5	41,824	42,580	1.8
Rapid City, SD	41,675	42,669	2.4	44,339	43,832	-1.1
Reading, PA	39,330	40,453	2.9	39,311	39,654	0.9
Redding, CA	36,507	37,593	3.0	35,931	36,180	0.7
Reno, NV	42,524	43,317	1.9	41,312	41,329	0.0
Richmond, VA	43,856	45,194	3.1	43,997	44,491	1.1
Riverside-San Bernardino-Ontario, CA	31,096	31,900	2.6	28,643	28,472	-0.6
Roanoke, VA	39,394	40,769	3.5	41,506	42,382	2.1
Rochester, MN	43,846	45,702	4.2	45,417	46,278	1.9
Rochester, NY	42,313	43,780	3.5	42,022	42,527	1.2
Rockford, IL	34,962	36,359	4.0	36,191	37,555	3.8
Rocky Mount, NC	31,754	32,964	3.8	33,649	36,021	7.1
Rome, GA	33,322	34,230	2.7	37,142	39,491	6.3
Sacramento--Roseville--Arden-Arcade, CA	43,094	44,641	3.6	41,115	41,371	0.6
Saginaw, MI	32,457	33,079	1.9	34,214	35,105	2.6
Salem, OR	33,801	34,711	2.7	33,940	34,041	0.3
Salinas, CA	41,906	43,034	2.7	38,613	38,111	-1.3
Salisbury, MD-DE	37,402	38,467	2.8	39,405	40,558	2.9
Salt Lake City, UT	38,883	40,424	4.0	38,197	38,705	1.3
San Angelo, TX	38,845	39,711	2.2	40,645	40,931	0.7
San Antonio-New Braunfels, TX	38,124	39,019	2.3	39,128	39,436	0.8
San Diego-Carlsbad, CA	48,066	49,719	3.4	40,246	39,657	-1.5
San Francisco-Oakland-Hayward, CA	62,954	66,591	5.8	51,279	52,105	1.6
San Jose-Sunnyvale-Santa Clara, CA	61,831	65,679	6.2	50,322	51,095	1.5
San Luis Obispo-Paso Robles-Arroyo Grande, CA	42,394	43,698	3.1	39,097	38,806	-0.7
Santa Cruz-Watsonville, CA	50,138	52,442	4.6	41,288	40,992	-0.7
Santa Fe, NM	43,086	44,098	2.3	42,072	42,172	0.2
Santa Maria-Santa Barbara, CA	46,210	47,862	3.6	41,908	41,956	0.1
Santa Rosa, CA	45,805	47,879	4.5	38,397	38,433	0.1
Savannah, GA	40,306	40,697	1.0	40,591	40,676	0.2
Scranton--Wilkes-Barre--Hazleton, PA	38,188	39,101	2.4	39,389	40,306	2.3
Seattle-Tacoma-Bellevue, WA	51,250	53,328	4.1	46,685	47,290	1.3
Sebastian-Vero Beach, FL	51,041	52,855	3.6	53,959	54,625	1.2
Sebring, FL	30,434	31,076	2.1	32,841	32,879	0.1
Sheboygan, WI	42,748	44,779	4.8	45,123	46,656	3.4
Sherman-Denison, TX	33,595	34,655	3.2	34,987	35,936	2.7
Shreveport-Bossier City, LA	40,199	41,234	2.6	41,966	42,918	2.3
Sierra Vista-Douglas, AZ	36,437	36,625	0.5	37,370	36,922	-1.2
Sioux City, IA-NE-SD	40,261	41,485	3.0	43,328	43,687	0.8
Sioux Falls, SD	46,329	47,057	1.6	48,880	47,897	-2.0
South Bend-Mishawaka, IN-MI	36,279	37,929	4.5	38,458	39,549	2.8
Spartanburg, SC	32,025	32,784	2.4	34,488	35,172	2.0
Spokane-Spokane Valley, WA	35,831	36,918	3.0	36,311	36,517	0.6
Springfield, IL	40,901	41,606	1.7	42,366	42,740	0.9
Springfield, MA	40,823	42,298	3.6	40,633	41,446	2.0
Springfield, MO	32,721	33,943	3.7	35,123	36,121	2.8

Appendix Table 5. Real Per Capita Personal Income by Metropolitan Area, 2011 and 2012

	Per Capita Personal Income Dollars			Real Per Capita Personal Income Dollars		
	2011	2012	Percent growth	2011	2012	Percent growth
Springfield, OH	35,609	36,572	2.7	37,670	38,812	3.0
St. Cloud, MN	36,080	37,756	4.6	38,075	38,540	1.2
St. George, UT	27,920	28,597	2.4	28,629	28,518	-0.4
St. Joseph, MO-KS	34,943	36,068	3.2	37,470	38,855	3.7
St. Louis, MO-IL	42,969	44,625	3.9	46,158	47,610	3.1
State College, PA	39,651	40,894	3.1	38,991	37,962	-2.6
Staunton-Waynesboro, VA	34,918	36,597	4.8	37,954	38,734	2.1
Stockton-Lodi, CA	32,157	33,024	2.7	31,047	31,163	0.4
Sumter, SC	31,725	32,973	3.9	34,066	35,180	3.3
Syracuse, NY	40,273	41,774	3.7	40,494	41,327	2.1
Tallahassee, FL	36,874	37,382	1.4	36,973	37,294	0.9
Tampa-St. Petersburg-Clearwater, FL	39,387	40,862	3.7	38,379	39,024	1.7
Terre Haute, IN	32,021	33,473	4.5	34,072	35,954	5.5
Texarkana, TX-AR	33,949	34,819	2.6	36,546	37,062	1.4
The Villages, FL	33,782	35,032	3.7	36,453	37,064	1.7
Toledo, OH	36,758	37,693	2.5	39,186	39,843	1.7
Topeka, KS	39,130	40,132	2.6	41,426	42,467	2.5
Trenton, NJ	53,271	55,714	4.6	45,513	47,404	4.2
Tucson, AZ	35,371	36,335	2.7	35,304	35,545	0.7
Tulsa, OK	43,450	45,350	4.4	45,464	47,220	3.9
Tuscaloosa, AL	34,012	34,870	2.5	35,816	37,335	4.2
Tyler, TX	40,185	41,379	3.0	40,765	41,458	1.7
Urban Honolulu, HI	47,252	48,529	2.7	37,764	37,468	-0.8
Utica-Rome, NY	37,166	37,949	2.1	38,024	38,710	1.8
Valdosta, GA	31,636	32,372	2.3	35,640	36,855	3.4
Vallejo-Fairfield, CA	39,719	42,354	6.6	33,542	34,554	3.0
Victoria, TX	41,666	43,735	5.0	43,675	45,771	4.8
Vineland-Bridgeton, NJ	35,560	36,551	2.8	32,225	33,021	2.5
Virginia Beach-Norfolk-Newport News, VA-NC	43,051	44,321	2.9	41,878	42,332	1.1
Visalia-Porterville, CA	31,027	31,307	0.9	31,531	31,081	-1.4
Waco, TX	33,576	34,657	3.2	35,115	35,882	2.2
Walla Walla, WA	37,371	37,674	0.8	37,951	37,390	-1.5
Warner Robins, GA	35,139	35,654	1.5	36,841	37,194	1.0
Washington-Arlington-Alexandria, DC-VA-MD-WV	60,834	61,743	1.5	49,804	48,645	-2.3
Waterloo-Cedar Falls, IA	39,587	41,339	4.4	42,234	42,824	1.4
Watertown-Fort Drum, NY	45,260	44,301	-2.1	45,844	43,907	-4.2
Wausau, WI	38,048	39,399	3.5	39,911	40,439	1.3
Weirton-Steubenville, WV-OH	31,881	33,052	3.7	34,506	36,116	4.7
Wenatchee, WA	36,069	37,067	2.8	37,137	36,526	-1.6
Wheeling, WV-OH	34,349	36,131	5.2	37,651	39,748	5.6
Wichita Falls, TX	39,217	40,379	3.0	41,536	42,092	1.3
Wichita, KS	40,039	41,152	2.8	41,983	42,793	1.9
Williamsport, PA	36,833	38,239	3.8	38,401	39,070	1.7
Wilmington, NC	35,933	36,514	1.6	36,979	36,885	-0.3
Winchester, VA-WV	35,725	36,955	3.4	37,714	38,176	1.2
Winston-Salem, NC	36,067	37,625	4.3	37,999	39,277	3.4
Worcester, MA-CT	45,473	46,902	3.1	41,886	42,199	0.7

Appendix Table 5. Real Per Capita Personal Income by Metropolitan Area, 2011 and 2012

	Per Capita Personal Income Dollars			Real Per Capita Personal Income Dollars		
	2011	2012	Percent growth	2011	2012	Percent growth
Yakima, WA	33,763	34,686	2.7	34,582	34,707	0.4
York-Hanover, PA	39,329	40,124	2.0	39,502	39,549	0.1
Youngstown-Warren-Boardman, OH-PA	34,374	35,260	2.6	36,914	37,638	2.0
Yuba City, CA	33,467	34,763	3.9	33,460	33,553	0.3
Yuma, AZ	27,385	26,995	-1.4	27,712	27,447	-1.0
United States nonmetropolitan portion	34,018	35,324	3.8	36,911	38,125	3.3
United States	42,298	43,735	3.4	40,663	41,282	1.5
Maximum	79,099	83,049	9.5	76,841	80,504	7.9
Minimum	22,127	22,400	-2.8	24,399	25,008	-5.4
Range	56,972	60,649	12.4	52,442	55,495	13.3

Source: U.S. Bureau of Economic Analysis