



# Virginia Healthcare Workforce Briefs

Indicators from the Bureau of Economic Analysis  
Regional Economic Accounts  
**Series 3: Income & Compensation**

Series 3, Issue 8

November 2013

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*The calendar year is the basis for data in this series. See Page 5 for additional information on this series.*

## Highlights

- ◆ The Sept. release from the BEA included adjustments based on 5-year benchmark revisions to the National Income Product Accounts (NIPA).
- ◆ Total earnings in Virginia's Health Care & Social Assistance (HC&SA) sector increased by \$134 million to \$25.47 billion in Q2 2013, representing a three-month annualized growth rate of 2.1%.
- ◆ Employee compensation in Virginia's HC&SA sector increased by \$132 million to \$23.23 billion in Q2 2013. Employee compensation grew at a quarterly annualized growth rate of 2.3%
- ◆ Compensation per employee in Virginia's HC&SA sector declined by an insignificant \$21 to \$57,690 in Q2 2013.
- ◆ For Q1 2013, HC&SA earnings, total employee compensation and compensation per employee were revised upward by \$305 million, \$447 million and \$1,117, respectively.

## Data in Brief

	Income (Millions of Dollars)				Growth Rate, Annualized		
	Q2 2012	Q4 2012	Q1 2013	Q2 2013	Annual	6-Month	Quarterly
<b>Earnings (Personal income less rents, interest, dividends and government payments)</b>							
<b>Virginia</b>	\$281,062	\$287,733	\$288,065	\$289,918	3.2%	1.5%	2.6%
<b>National</b>	\$9,758,634	\$10,016,935	\$10,028,929	\$10,090,164	3.4%	1.5%	2.5%
<b>Health Care &amp; Social Assistance Earnings</b>							
<b>Virginia</b>	\$23,936	\$24,664	\$25,334	\$25,468	6.4%	6.6%	2.1%
<b>National</b>	\$1,068,938	\$1,088,641	\$1,106,888	\$1,113,685	4.2%	4.7%	2.5%
<b>Health Care &amp; Social Assistance Employee Compensation (Earnings less proprietor's income, includes salaries, wages &amp; benefits)</b>							
<b>Virginia</b>	\$21,732	\$22,430	\$23,094	\$23,226	6.9%	7.2%	2.3%
<b>National</b>	\$948,498	\$966,545	\$984,527	\$991,153	4.5%	5.2%	2.7%
<b>Health Care &amp; Social Assistance Compensation per Employee (HWDC Estimate)</b>							
<b>Virginia</b>	\$55,600	\$55,977	\$57,711	\$57,690	3.8%	6.2%	-0.1%
<b>National</b>	\$56,000	\$56,340	\$57,313	\$57,312	2.3%	3.5%	0.0%

## Health Care & Social Assistance Earnings

**Figure 1: Quarterly Change in Total Earnings from Virginia's Health Care & Social Assistance Sector. Includes proprietor's income, salaries and wages, and benefits.**



According to data released September 30, 2013 by the U.S. Bureau of Economic Analysis, earnings in Virginia's HC&SA sector increased by \$134 million in Q2 2013 to \$25.47 billion. In addition, the preliminary estimate for HC&SA earnings in Q1 2013 was revised upward by \$305 million. With these latest results, Virginia's HC&SA earnings have increased by more than \$1.5 billion over the past four quarters and by more than \$2 billion since 2011.

Given the four consecutive quarters of growth, the four-quarter moving average of Virginia's total HC&SA earnings jumped sharply in Q2 2013, increasing by \$160 million to \$383 million. This represents the highest level for the four-quarter moving average since the U.S. economy came out of the recession in Q3 2009. This also represents an increase of more than \$300 million since Q4 2010, when the four-quarter moving average reach a post-recessionary low of just \$61 million.

## 2013 Comprehensive Revision of the National Product Income Accounts

The September 30 release of second quarter state personal income by the BEA included comprehensive revisions to the National Income and Product Accounts (NIPA). The comprehensive revisions, occurring every five years, affect BEA estimates as far back as early as 1929. The revisions include changes to classifications of existing data as well as incorporating new or improved data sources. The revisions affected all data used in this Series and in some cases created in meaningful changes to results and analysis. Changes with particular impact include:

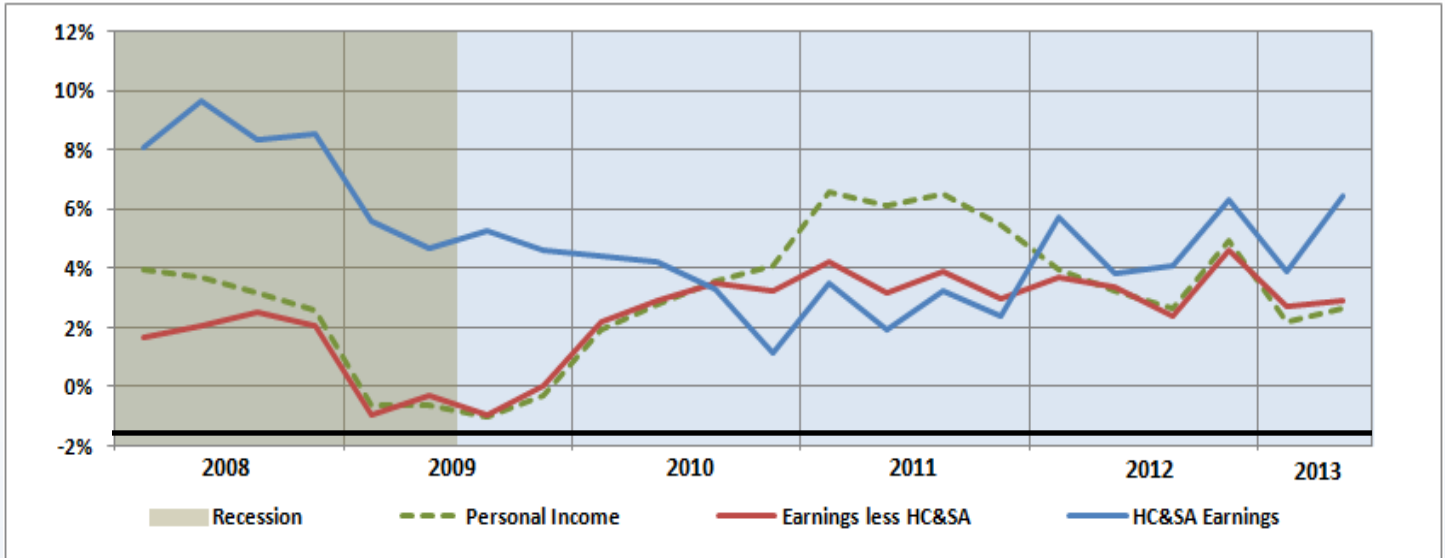
- ◆ Reclassified Research and Development (R&D) spending, spending on artistic originals, and certain real estate fees as fixed investment, rather than as consumption or one-time use inputs.
- ◆ Switched measurement of defined benefit pensions from a cash accounting basis to an accrual accounting basis.
- ◆ Various statistical changes that include new and improved sources and better accounting of existing sources.

HWDC Series 3 Briefs are mainly concerned with changes to HC&SA earnings (employee compensation and proprietor's income) in Virginia. The chart to the right is from our August Series 3 Brief, the last brief we published before the comprehensive revision. When compared to the new chart above, shifts are apparent for all years. In particular, Q1 2009 and all of 2010 look very different for Virginia's HC&SA industry. As a result, the 4-quarter trend line hints at a steady decline in earnings growth since 2008—mainly because growth around the 2010 period was better than previously thought.

For more information on these changes, see [“Initial Results of the 2013 Comprehensive Revision of the National Income and Product Accounts”](#) by Robert Kornfeld in the August 2013 *Survey of Current Business*. Additionally, readers may want to compare charts in the current brief to earlier ones.



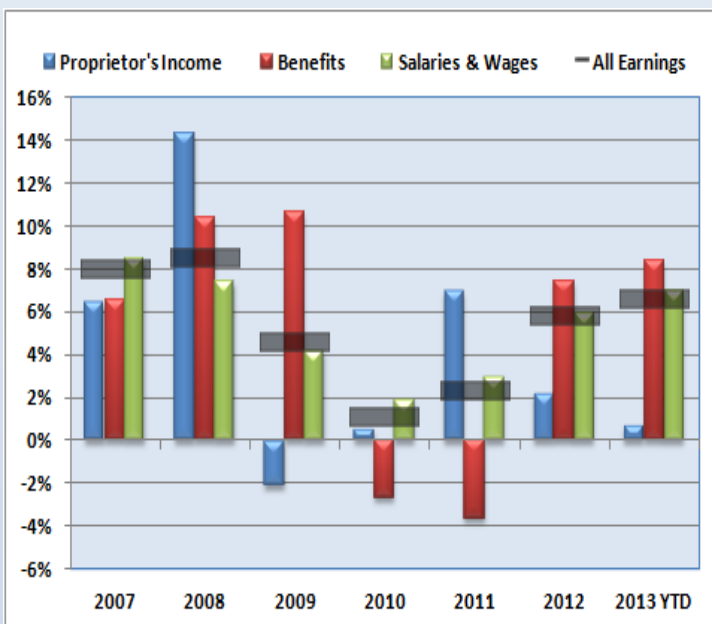
### Virginia HC&SA Earnings Growth Rate



**Figure 2: Earnings Growth Rate, 4-Quarter Moving Average (Annualized)**

Since Q1 2012, the defining trend in the four-quarter moving average of Virginia’s HC&SA earnings growth rate has been its convergence with the rest of the state’s economy. This pattern, which remained largely unchanged with the comprehensive revision, shifted considerably in Q2 2013. During the quarter, the four-quarter moving average of Virginia’s HC&SA annualized growth rate increased from 3.9% to 6.5%. With this increase, Virginia’s four-quarter moving average of the HC&SA earning growth rate is more than double the equivalent rates for personal income and non-HC&SA earnings.

### Growth by Earnings Type



**Figure 3: Virginia HC&SA Earnings Growth Rate by Type of Earnings (Annualized)**

One of the most striking changes resulting from the comprehensive revision is the shift in earnings away from proprietor’s income to salaries and wages. Previous Briefs noted that about 9.5% of HC&SA earnings accrued to proprietors—small businesses and partnerships, which in the HC&SA field may largely consist of practitioners in private practice. With the comprehensive revision, that figure declined to 8.8%. Meanwhile, the proportion going to salaries and wages increased from 75.0% to 76.2%, while the share going to benefits decreased slightly.

Changes to the annual growth rate chart are even more stark. Previous Briefs emphasized strong growth in proprietor’s income through the recession and the recovery. The new data has proprietor’s income *declining* in 2009 and stagnating for the most of the recovery. Although the reason is unclear, it may be related to the new accounting system for pension benefits.

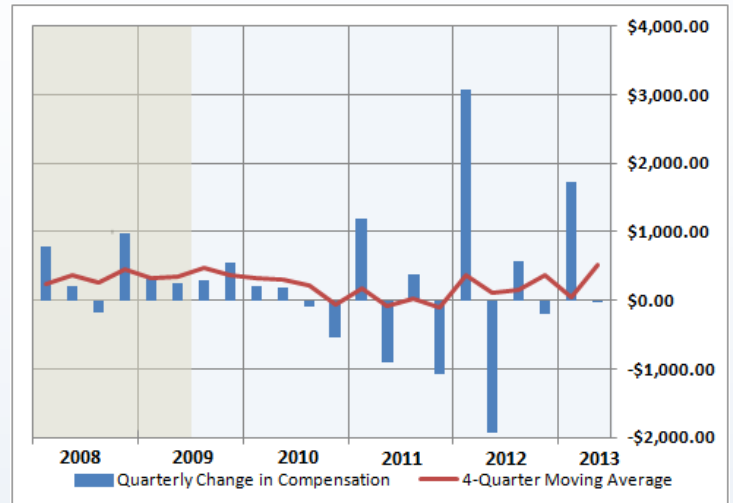
Earnings Type	Level (Millions)	Share
Proprietor's Income	\$2,242	8.8%
Benefits	\$3,811	15.0%
Salaries & Wages	\$19,415	76.2%
<b>Total</b>	<b>\$25,468</b>	<b>100%</b>

### HC&SA Compensation per Employee

According to Healthcare Workforce Data Center estimates (see methodology, next page), employees in Virginia’s HC&SA sector earned an average of \$57,690 (annualized) in Q2 2013. Note this figure includes salaries & wages plus the cost of benefits for employed persons only. Practitioners in private practice, which includes a large number of the sector’s highly paid professionals, are not included in this figure.

Although HC&SA annualized compensation per employee actually decreased slightly in Q2 2012 by \$21, this modest decrease was more than balanced by an increase of \$1,734 in Q1 2013, which represents the second highest quarterly increase in the past five years. In addition, HC&SA compensation per employee has increased by more than \$2,000 over the past year and by more than \$3,000 since 2010. With this growth, the four-quarter moving average of the quarterly change in HC&SA compensation per employee increased to \$523, reaching its highest value since 2005.

**Figure 5: Quarterly Change in Employee Compensation from Virginia’s Health Care & Social Assistance Sector.**

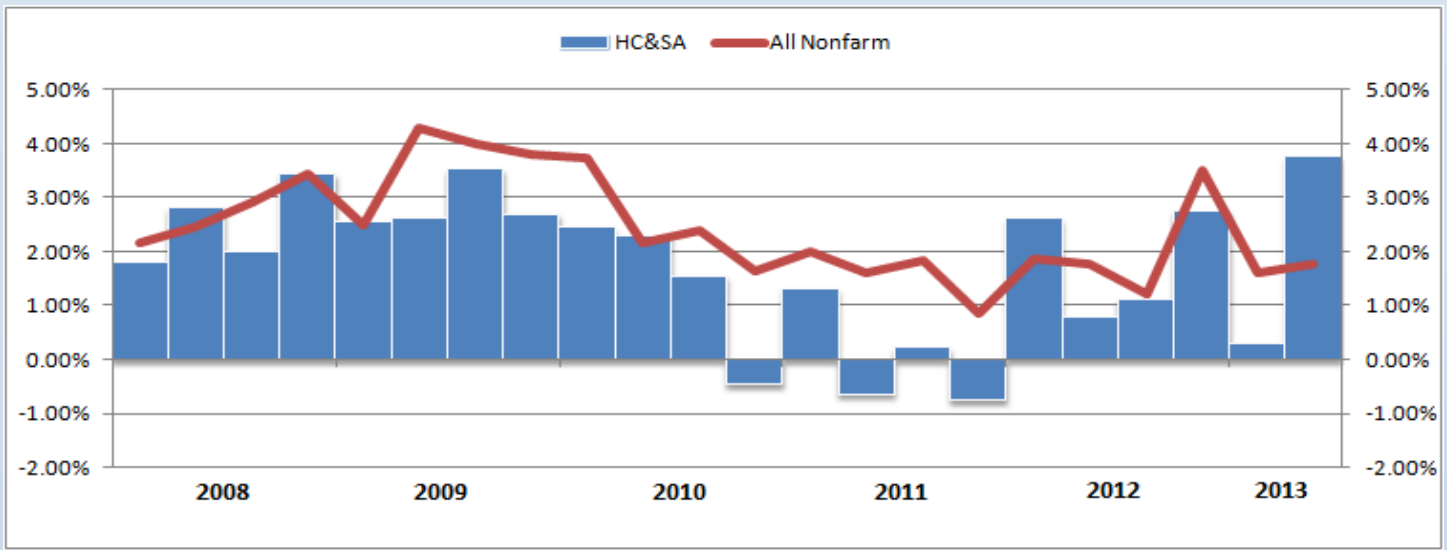


	Q2 2010	Q2 2011	Q2 2012	Q2 2013
Compensation per Employee	\$54,280	\$55,171	\$55,600	\$57,690

### Compensation per Employee Growth Rate

Despite the small decline in HC&SA compensation per employee in Q2 2012, its year-over-year growth rate increased substantially during the quarter from 0.3% to 3.8%. With this dramatic increase, the year-over-year growth rate in HC&SA compensation per employee exceeded the overall average for the state, which currently stands at 1.8%. This represents just the second time since 2011 that year-over-year growth in compensation per employee was faster in the HC&SA sector than in the rest of the state’s economy. In addition, the 3.8% year-over-year growth in compensation per employee represents the fastest rate for Virginia’s HC&SA sector since 2006. The comprehensive revision did result in changes to HWDC’s compensation growth estimates, notably increasing estimates for 2009 and early 2010, and decreasing them for 2011 & 2012.

**Figure 5: Year-Over-Year Change in Compensation Per Employee.**



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## Definitions

Economic data in this briefing is from the US Bureau of Economic Analysis' Regional Economic Accounts. In particular, we use the Quarterly State Personal Income Accounts. The definitions provided here are written for a lay audience. More technical definitions and in-depth information on the Regional Economic Accounts are available on the BEA's website: <http://www.bea.gov/regional/about.cfm>.

**Personal Income:** Income received from all sources, including salaries & wages, benefits, business profits, rents, government payments or retirement and investment funds. Personal income is based on where recipients live.

**Earnings:** Earned income includes salaries & wages, benefits (aka supplements to wages and salaries) and proprietor's income. Earnings and its components are based on where recipients work.

**Proprietor's Income:** Income from small businesses (sole proprietorships & partnerships), corporate director's fees and tax-exempt cooperatives. It does NOT include dividends or interest received by non-financial businesses or rental income received by non-real estate businesses.

**Compensation:** Salaries & wages and benefits.

**Benefits:** Referred to as "supplements to wages and salaries by the BEA, benefits includes employer contributions to retirement funds, insurance (including health and life) and to government social insurance programs (e.g., unemployment insurance, Social Security, worker's compensation insurance, etc).

**Salaries & Wages:** Salaries, wages, commissions, bonuses and tips, before deductions, based on when payments are disbursed. The value of stock options are also included at the time the options are exercised.

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## Method of Estimating Compensation per Employee

The HWDC derives estimates of compensation per employee from two sources: 1) US Bureau of Economic Analysis' Regional Economic Accounts (REA), and, 2) the Current Establishment Survey (CES) administered jointly by the US Bureau of Labor Statistics and the US Census Bureau. These sources use different methodologies and different definitions. Although more vigorous estimates of employment are available, the HWDC uses these sources to provide the most timely indication of current trends possible at the state-industry level. The HWDC estimates are early indicators only.

To make the two data sources more comparable, the HWDC makes the following transformations:

**CES:** To obtain quarterly estimates of employment, monthly figures are averaged for the quarter. For nonfarm employment, we remove the latest available estimate of logging employment from the Quarterly Census of Employment and Wages, rounded to the nearest hundred, from nonfarm totals in the CES prior to averaging.

**REA:** From nonfarm compensation (or its components), we remove military earnings, agriculture, fishing and forestry earnings and an estimate of earnings from households. For household earnings estimates, we use the REA's Annual State Personal Income and Employment tables to develop current estimates of the proportion of "Other services, except public administration" compensation from employment in private households. We use the most recent data available for the current quarter. We apply this proportion to the current quarterly estimate of "Other services, except public administration".

Despite these transformations, the figures are not wholly comparable. The BEA makes additional adjustments to BLS data when creating its own, annual estimates of employment. Historical indicators are not adjusted by the HWDC, however adjustments made to REA or CES series are incorporated into historical data. For more information on employment data and the REA, see the BEA's *State Personal Income and Employment Methodology*, pages XI-1 to XI-11 & Table K.

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The Department of Health Professions Healthcare Workforce Data Center works to improve the data collection and measurement of Virginia's healthcare workforce through regular assessment of workforce supply and demand issues among the 80 professions and 350,000 practitioners licensed in Virginia by DHP.

The HWDC collects data on Virginia's licensed health professionals through surveys completed during the online license renewal and application process. Survey results and data may be accessed on our website: [www.dhp.virginia.gov/hwdc/](http://www.dhp.virginia.gov/hwdc/).

The HWDC also provides a series of Virginia Healthcare Workforce Briefs based on data collected by the US Department of Labor's Bureau of Labor Statistics and the US Department of Commerce' Bureau of Economic Analysis.

Virginia Healthcare Workforce Briefs:

Series 1: State & National Employment (Monthly)

Series 2: Virginia Regional Employment (Monthly)

Series 3: Income & Compensation (Quarterly)

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## About the Data

Data used in creating this report is from the US Department of Commerce' Bureau of Economic Analysis' Regional Economic Accounts. Unless otherwise noted, data is seasonally adjusted and annualized, and quarterly presentations are based on the calendar year. Data from recent quarters is preliminary and subject to revision in future releases from the BEA. Revisions will be reported in future editions of this series.

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