



# Virginia Healthcare Workforce Briefs

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

Series 3, Issue 6

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## Highlights

- ◆ Total earnings in Virginia's Health Care & Social Assistance (HC&SA) sector rose by \$354 million to \$25.059 billion in Q4 2012, representing a three-month annualized growth rate of 5.9%.
- ◆ Total compensation in Virginia's HC&SA sector rose by \$344 million to \$22.707 billion in Q4 2012, which represents a three-month annualized growth rate of 6.3%.
- ◆ Compensation per Employee in Virginia's HC&SA sector fell by \$43 to \$56,668 in Q4 2012. This represents a three-month annualized growth rate of -0.3%.
- ◆ For Q3 2012, HC&SA Earnings were revised upward by \$415 million, HC&SA Employee Compensation was revised upward by \$420 million, and HC&SA Compensation per Employee was revised upward by \$1,150.

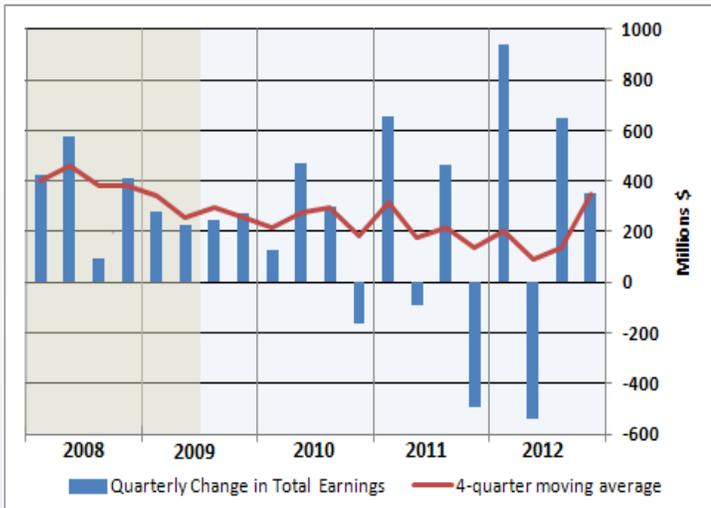
*The calendar year is the basis for data in this series. See Page 5 for additional information on this series.*

## Data in Brief

	Income (Millions of Dollars)				Growth Rate, Annualized		
	Q4 2011	Q2 2012	Q3 2012	Q4 2012	Annual	6-Month	Quarterly
<b>Earnings (Personal income less rents, interest, dividends and government payments)</b>							
<b>Virginia</b>	\$281,932	\$284,809	\$288,049	\$290,732	3.1%	4.2%	3.8%
<b>National</b>	\$9,505,459	\$9,717,251	\$9,777,337	\$9,882,357	4.0%	3.4%	4.4%
<b>Health Care &amp; Social Assistance Earnings</b>							
<b>Virginia</b>	\$23,657	\$24,058	\$24,705	\$25,059	5.9%	8.5%	5.9%
<b>National</b>	\$1,044,727	\$1,066,623	\$1,072,297	\$1,084,301	3.8%	3.3%	4.6%
<b>Health Care &amp; Social Assistance Employee Compensation (Earnings less proprietor's income, includes salaries,</b>							
<b>Virginia</b>	\$21,370	\$21,718	\$22,363	\$22,707	6.3%	9.3%	6.3%
<b>National</b>	\$922,695	\$941,758	\$947,342	\$958,807	3.9%	3.7%	4.9%
<b>Health Care &amp; Social Assistance Compensation per Employee (HWDC Estimate)</b>							
<b>Virginia</b>	\$55,101	\$55,564	\$56,711	\$56,668	2.8%	4.0%	-0.3%
<b>National</b>	\$54,923	\$55,602	\$55,807	\$55,878	1.7%	1.0%	0.5%

## 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.**



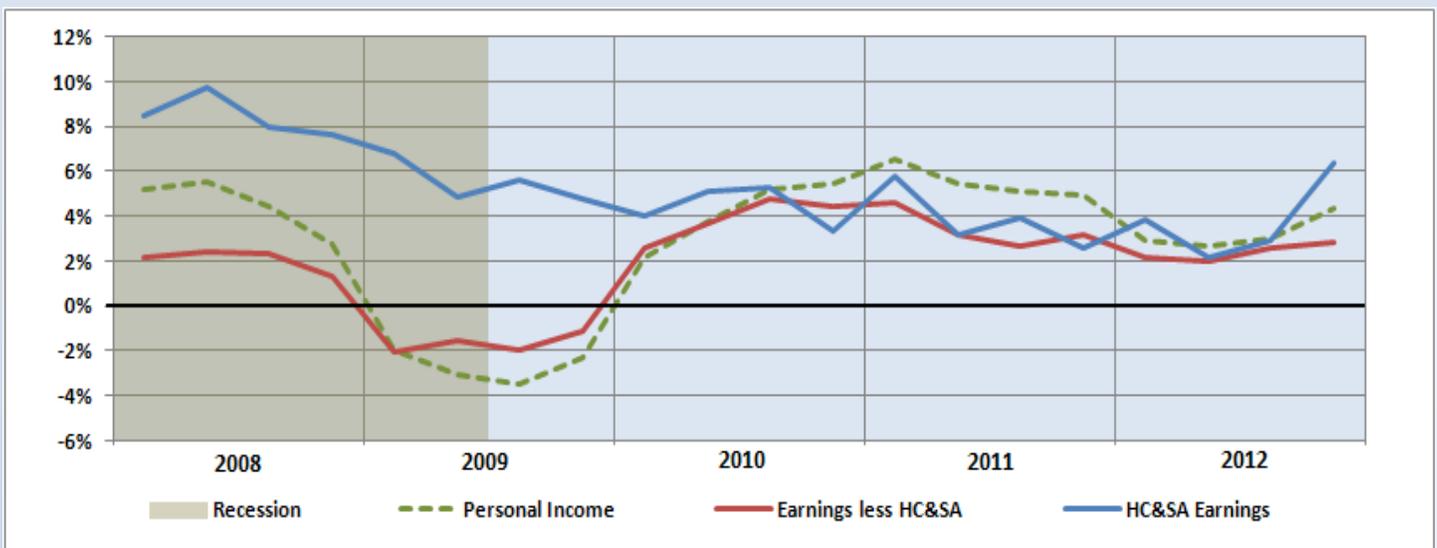
According to data released March 27, 2013 by the US Bureau of Economic Analysis, earnings in Virginia's HC&SA sector rose in Q4 2012 by \$354 million to \$25.059 billion. This represents the second consecutive quarter in which HC&SA earnings have increased. In addition, HC&SA earnings in Q3 2012 were revised upward by \$415 million to \$24.705 billion. With this revision, Virginia's HC&SA earnings have increased by more than \$1 billion in the past two quarters, reversing the losses suffered in Q2 2012.

HC&SA earnings have exhibited considerable volatility over the past two years, including three quarters of negative growth. However, two of the four strongest quarters for HC&SA earnings since 1990 took place in 2012. Thanks to these strong results, the four-quarter moving average has rebounded off its recent lows and has now reached its highest level (6.4%) since the 2007-2009 recession.

## Virginia HC&SA Earnings Growth Rate

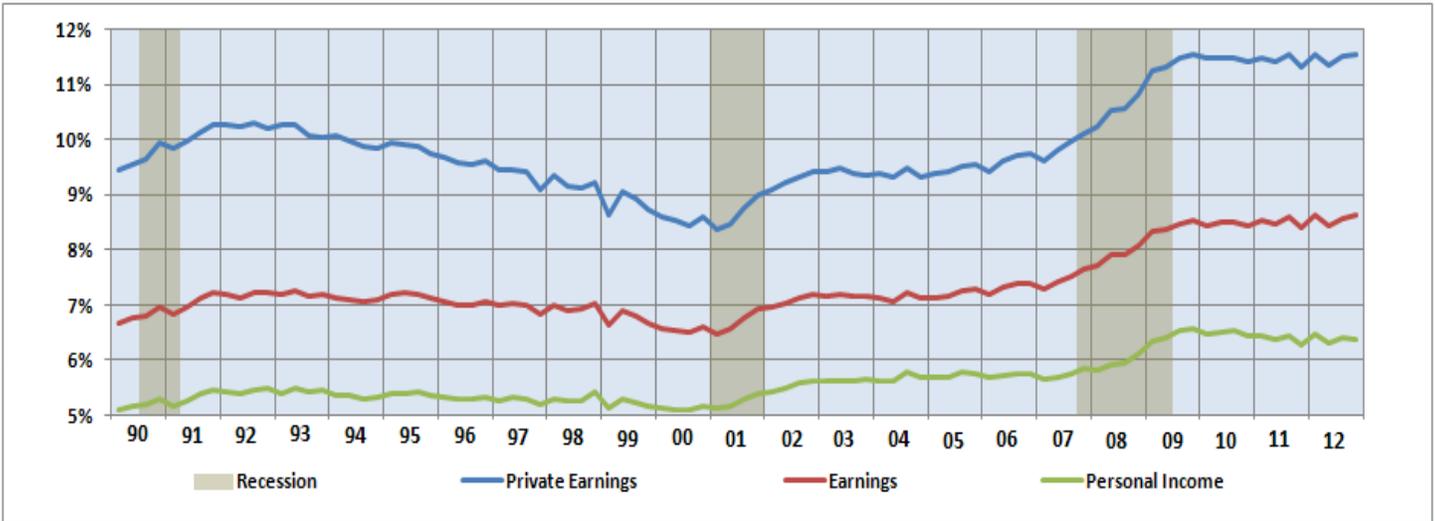
The four-quarter moving average of the HC&SA earnings growth rate has accelerated remarkably in the second half of 2012. In Q2 2012, this moving average reached a 14-year low of just 2.1%, but it has tripled to 6.4% over the previous two quarters. This is the highest four-quarter moving average of the HC&SA earnings growth rate since Q1 2009. Meanwhile, personal income and earnings less HC&SA also saw their four-quarter moving average growth rate increase in Q4 2012, although these increases were more modest. The personal income growth rate increased from 3.0% in Q3 2012 to 4.4% in Q4 2012, while the earnings less HC&SA growth rate increase from 2.6% to 2.9% during the same time period. Like HC&SA earnings, personal income and earnings less HC&SA have rebounded off the lows seen in Q2 2012, but the latter two have failed as yet to reach the post-recession highs seen in late 2010 and early 2011.

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



### Share of Earnings

**Figure 3: The Health Care and Social Assistance Sector’s Share of Earnings and Income in Virginia**



Since the end of the 2007-2009 recession, the share of Virginia’s earnings and income that is attributable to the HC&SA sector has remained relatively stable, and Q4 2012 was no different. Virginia’s HC&SA sector increased its share of private earnings from 11.53% to 11.56%, while its share of total earnings increased from 8.58% to 8.62%. However, its share of private income decreased slightly from 6.40% to 6.38%. Since Q3 2009, which was officially the first quarter of the post-recession recovery, the HC&SA share of private earnings has increased by 0.07%, while its share of total earnings has increased by 0.15%. Meanwhile, its share of personal income has decreased by 0.14%.

**Personal Income** includes all income from all sources.

**Earnings** includes employee compensation and proprietors income. They do not include unearned income, such as non-business related interest, dividends, and rents, government payments, payments from pension funds, lawsuits, etc.

**Private Earnings** is all earnings less incomes from federal, state or local governments or the military. Private earnings include earnings from non-profits.

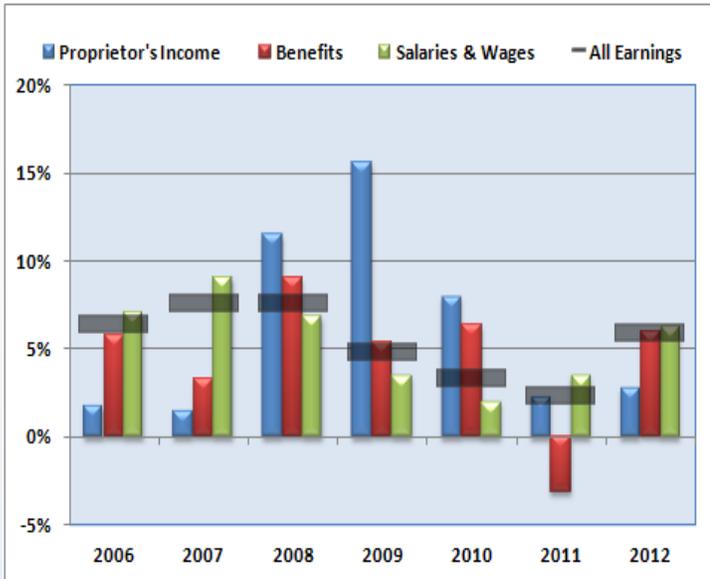
### Historical Growth Rate of Employee Compensation

Virginia has seen a significant shift in employee compensation growth across industries over the past decade. Prior to the recession, employee compensation growth was concentrated in industries like Professional, Scientific, & Technical Services and Education Services, which sported five-year annualized growth rates of more than 10%. In Q4 2012, however, compensation growth has shifted toward two main industries: the Federal Government and the HC&SA sector.

Rank	Q4 2002		Q4 2007		Q4 2012	
	Industry	Five-Year Annualized Growth Rate	Industry	Five-Year Annualized Growth Rate	Industry	Five-Year Annualized Growth Rate
1	Professional, Scientific, and Technical Services	10.17%	Professional, Scientific, and Technical Services	10.79%	Federal Government, Civilian	5.35%
2	Educational Services	10.14%	Management of Companies and Enterprises	9.71%	Health Care & Social Assistance	4.48%
3	Finance & Insurance	9.47%	Educational Services	8.69%	Professional, Scientific, and Technical Services	4.26%

### Growth by Earnings Type

**Figure 4: Virginia HC&SA Earnings Growth Rate by Type of Earnings (Annualized)**



HC&SA earnings are distributed among proprietors (which includes practitioners in private practice), employee benefits and employee salaries & wages. Growth of each earning type tends to vary dramatically and can represent a growth in the number of workers, a growth in individual incomes, or some combination of both.

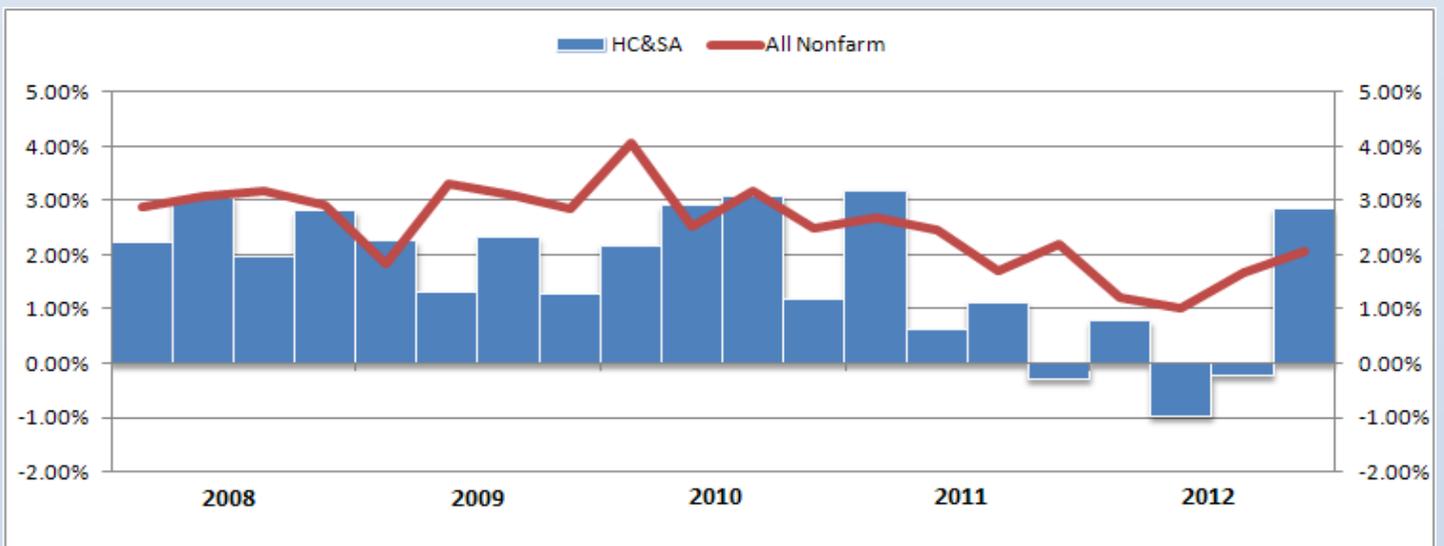
In 2012, HC&SA earnings growth was driven mainly by employee salaries, wages and benefits. During the year, salaries and wages grew by a respectable 6.3%, while benefits rose at a 6.0% annual rate. Proprietor's income was the laggard for the year, growing at just 2.8%, which was less than half the rate from employee compensation. Regardless, all three earning types experienced an uptick in growth compared to 2011, when total earnings grew at just 2.3%.

Earnings Type	Level (Millions)	Share
Proprietor's Income	\$2,352	9.4%
Benefits	\$3,869	15.4%
Salaries & Wages	\$18,838	75.2%
<b>Total</b>	<b>\$25,059</b>	<b>100%</b>

### 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 \$56,668 (annualized) in Q4 2012. 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. The year-over-year growth in HC&SA compensation per employee rebounded strongly in Q4 2012. After experiencing negative growth in three of the last four quarters, HC&SA compensation per employee grew by 2.8% in Q4 2012. The same trend is also seen in total nonfarm compensation per employee, which has seen its year-over-year growth rate more than double to 2.1% over the past two quarters.

**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 are 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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