



Virginia Healthcare Workforce Briefs

Indicators from the Bureau of Economic Analysis
Regional Economic Accounts

Series 3: Income & Compensation

Series 3, Issue 22

March 2017

Inside this Brief:

| | |
|--------------------------------|---|
| HC&SA Earnings | 2 |
| HC&SA Earnings Growth | 2 |
| Growth Rate by Earnings Type | 3 |
| Annual Growth by Earnings Type | 3 |
| Compensation per Employee | 4 |
| Compensation Growth | 4 |

Highlights

- ◆ In addition to the new income and compensation estimates for Quarter 3 (Q3) 2016 from the Bureau of Economic Analysis (BEA), this report also includes revised estimates for as far back as Q1 2010.
- ◆ Total earnings in Virginia's Health Care & Social Assistance (HC&SA) sector grew by \$247 million to \$29.31 billion in Q4 2016. In 2016, total HC&SA earnings in Virginia increased by \$1.00 billion.
- ◆ Total employee compensation in Virginia's HC&SA sector grew by \$214 million to \$26.70 billion in Q4 2016. In 2016, total HC&SA employee compensation in Virginia grew by \$853 million.
- ◆ Virginia's HC&SA compensation per employee increased by \$290 to \$60,790 in Q4 2016, which represents a three-month annualized growth rate of 1.9%. Over the past year, HC&SA compensation per employee in the state has grown by \$468.

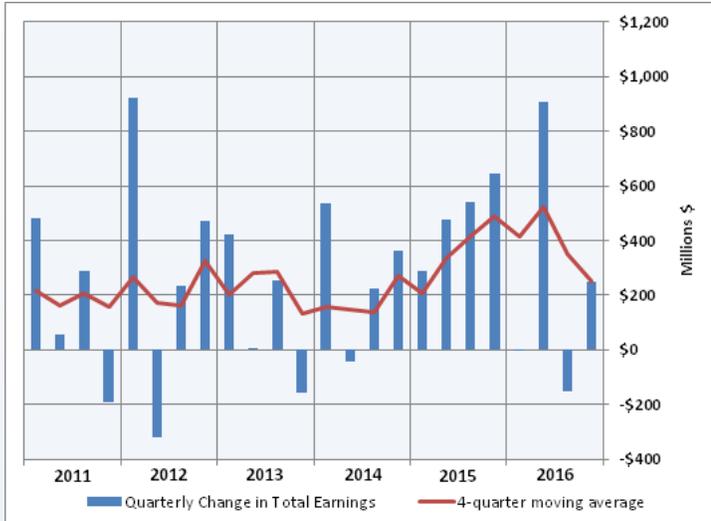
The calendar year is the basis for data in this series. See Page 5 for additional information on this series.

Data in Brief

| | Income (Millions of Dollars) | | | | Growth Rate, Annualized | | |
|---|------------------------------|-------------|-------------|-------------|-------------------------|---------|-----------|
| | Q4 2015 | Q2 2016 | Q3 2016 | Q4 2016 | Annual | 6-Month | Quarterly |
| Earnings (Personal income less rents, interest, dividends and government payments) | | | | | | | |
| Virginia | \$311,491 | \$314,186 | \$318,122 | \$321,018 | 3.1% | 4.4% | 3.7% |
| National | \$1,296,827 | \$1,460,631 | \$1,612,916 | \$1,721,216 | 3.8% | 4.6% | 3.8% |
| Health Care & Social Assistance Earnings | | | | | | | |
| Virginia | \$28,312 | \$29,217 | \$29,067 | \$29,314 | 3.5% | 0.7% | 3.4% |
| National | \$1,251,665 | \$1,280,691 | \$1,298,918 | \$1,314,601 | 5.0% | 5.4% | 4.9% |
| Health Care & Social Assistance Employee Compensation (Earnings less proprietor's income, includes salaries, wages & benefits) | | | | | | | |
| Virginia | \$25,846 | \$26,658 | \$26,485 | \$26,699 | 3.3% | 0.3% | 3.3% |
| National | \$1,122,657 | \$1,146,856 | \$1,163,886 | \$1,177,844 | 4.9% | 5.5% | 4.9% |
| Health Care & Social Assistance Compensation per Employee (HWDC Estimate) | | | | | | | |
| Virginia | \$60,322 | \$61,533 | \$60,500 | \$60,790 | 0.8% | -2.4% | 1.9% |
| National | \$59,654 | \$60,348 | \$60,948 | \$61,079 | 2.4% | 2.4% | 0.9% |

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.



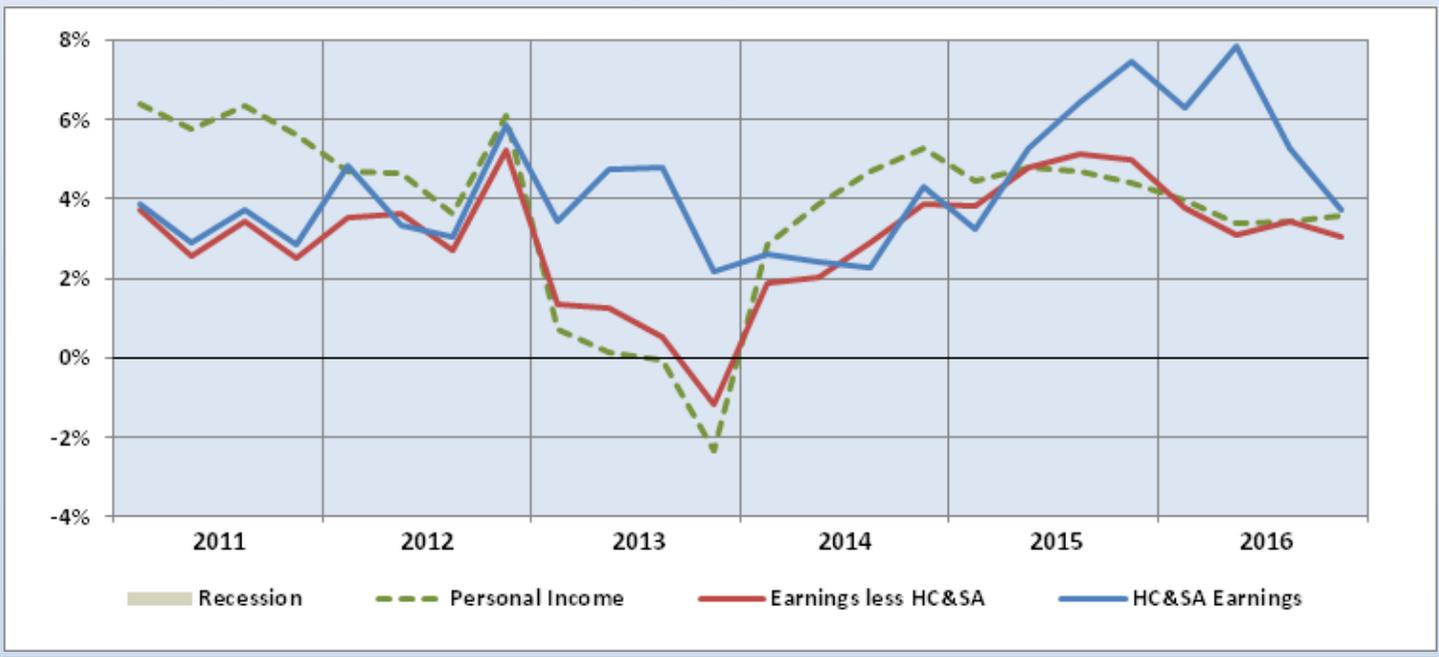
According to data released on Tuesday, March 28, 2017 by the U.S. Bureau of Economic Analysis, total earnings in Virginia’s Health Care & Social Assistance (HC&SA) sector increased by \$247 million in Q4 2016 to \$29.31 billion. This gain represents a three-month annualized growth rate of 3.4%, which is below the national average of 4.9% during the quarter.

In 2016, total earnings in Virginia’s HC&SA sector increased by \$1.00 billion, which represents a 12-month growth rate of 3.5%. This represents a slowdown relative to the \$1.95 billion increase in total HC&SA earnings in 2015. The full-year results for Virginia’s total HC&SA earnings growth in 2016 were also below the national average for the HC&SA sector. In 2016, total earnings in the national HC&SA sector increased by \$62.94 billion to \$1.31 trillion, which represents a 12-month growth rate of 5.0%.

Virginia HC&SA Earnings Growth Rate

After trending upward for most of the past two years, the four-quarter moving average of the growth rate in total HC&SA earnings underwent a significant reversal in 2016. In Q2 2016, this moving average reached a seven-year high of 7.84%. However, over the past two quarters, it has fallen by more than half to 3.71%, thereby reaching a low not seen in nearly two years. As for non-HC&SA earnings and personal income, there were only modest changes in their respective four-quarter moving averages. The four-quarter non-HC&SA earnings growth rate moving average fell from 3.42% to 3.05% in Q4 2016. This moving average has been drifting downward since mid-2015 when it reached a high of 5.14% in Q3 2015. The same can also be said of the four-quarter moving average of the growth rate in the state’s personal income. Although this moving average did increase slightly to 3.56% during the quarter, it has been trending downward since Q4 2014.

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



Virginia HC&SA Earnings Growth Rate by Earnings Type

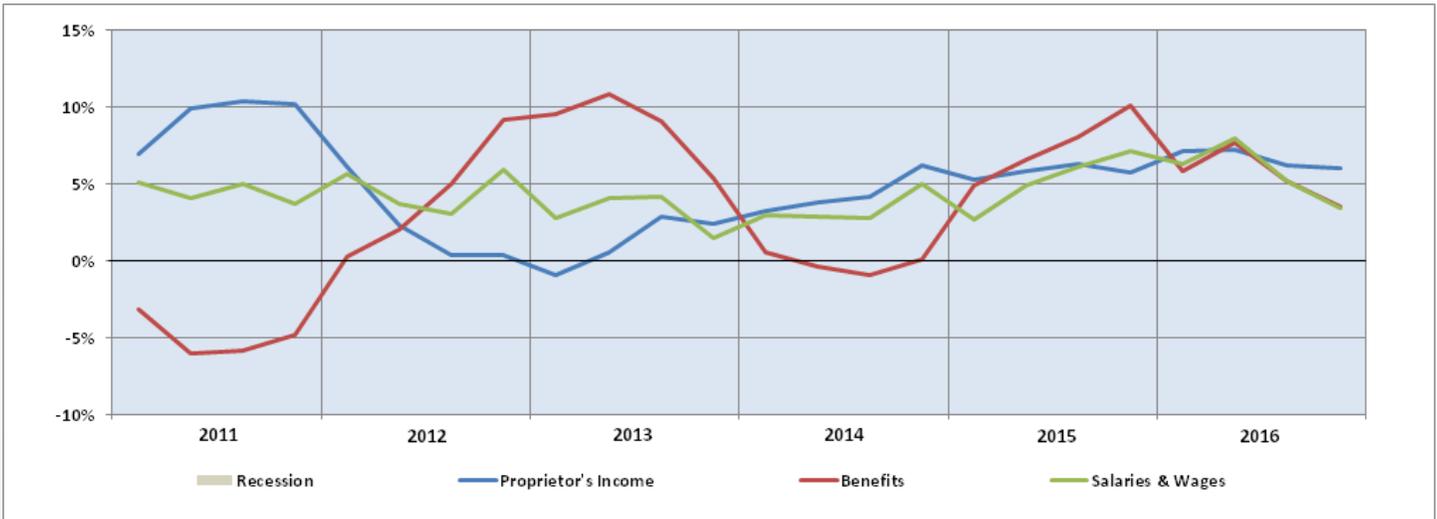


Figure 3: Earnings Growth Rate by Type of Earnings, 4-Quarter Moving Average (Annualized)

Although the four-quarter moving average of the growth rate in HC&SA proprietor’s income has slowed slightly over the course of 2016, it still remains the main driver of total HC&SA earnings growth in the state. After reaching a high of 7.25% in Q2 2016, this moving average fell to 6.06% in Q4 2016. The four-quarter moving averages of both HC&SA employee benefits and salaries & wages also fell during the quarter. The four-quarter moving average of the growth rate in HC&SA employee benefits fell from 5.22% to 3.57% in Q4 2016. This represents a two-year low for HC&SA employee benefits. The decline in four-quarter moving average of the growth rate in HC&SA salaries & wages was nearly identical, falling from 5.20% to 3.48% during the quarter, which represents a nearly two-year low.

Annual Growth by Earnings Type

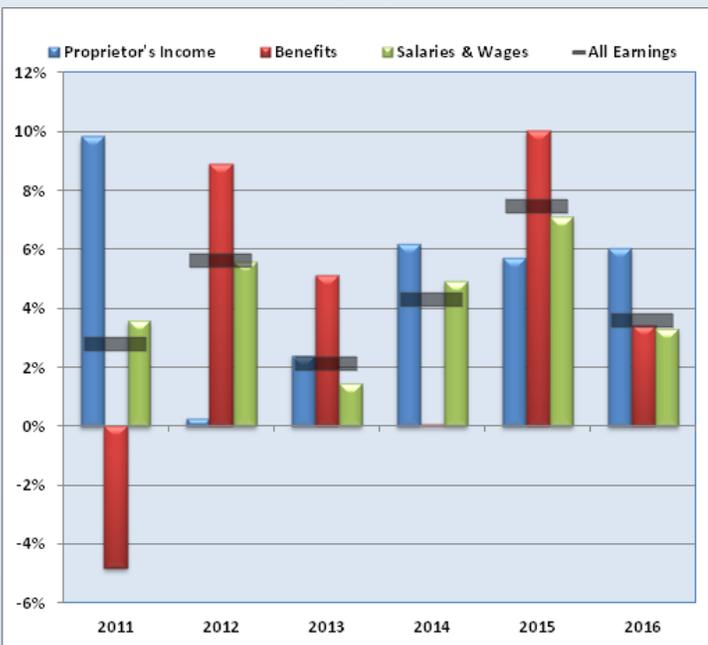


Figure 4: Virginia HC&SA Earnings Growth Rate by Type of Earnings (Annualized)

In 2015, total HC&SA earnings in Virginia grew by 7.4%, but this growth rate fell by more than half in 2016 to 3.5%. Most of this decline was due to a growth slowdown in employee compensation. HC&SA employee benefits grew by 10.0% in 2015, which represented its highest full-year growth rate since 2009. However, HC&SA employee benefits only grew by 3.4% in 2016. At the same time, HC&SA salaries & wages in the state had a growth rate of 7.1% in 2015, thereby growing at its fastest annual rate since 2008. In 2016, the growth rate of HC&SA salaries & wages was only 3.3%. This represents the lowest full-year growth rate for HC&SA salaries & wages since 2013. As for HC&SA proprietor’s income, its full-year earnings growth rate actually experienced a slight uptick in 2016 from 5.7% to 6.0%. In fact, the full-year earnings growth of HC&SA proprietor’s income in the state has been very consistent at approximately 6.0% over the past three years.

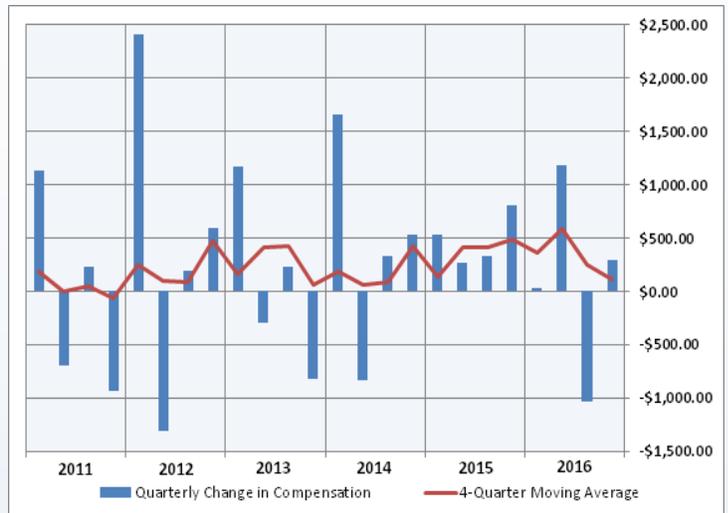
| Earnings Type | Level (Millions) | Share |
|---------------------|------------------|-------------|
| Proprietor's Income | \$2,615 | 8.9% |
| Benefits | \$4,532 | 15.5% |
| Salaries & Wages | \$22,167 | 75.6% |
| Total | \$29,314 | 100% |

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 \$60,790 (annualized) in Q4 2016. 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.

In Q4 2016, Virginia’s total HC&SA compensation per employee increased by \$290, but this quarterly gain could not completely reverse the \$1,032 decline in total HC&SA compensation per employee in Q3 2016. Regardless, total HC&SA compensation per employee still grew by \$468 in 2016, which represents a 12-month growth rate of 0.8%. However, not only is this well below the 2.4% national average for total HC&SA compensation per employee in 2016, but it is also well below the \$1,938 increase in Virginia’s total HC&SA compensation per employee in 2015.

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

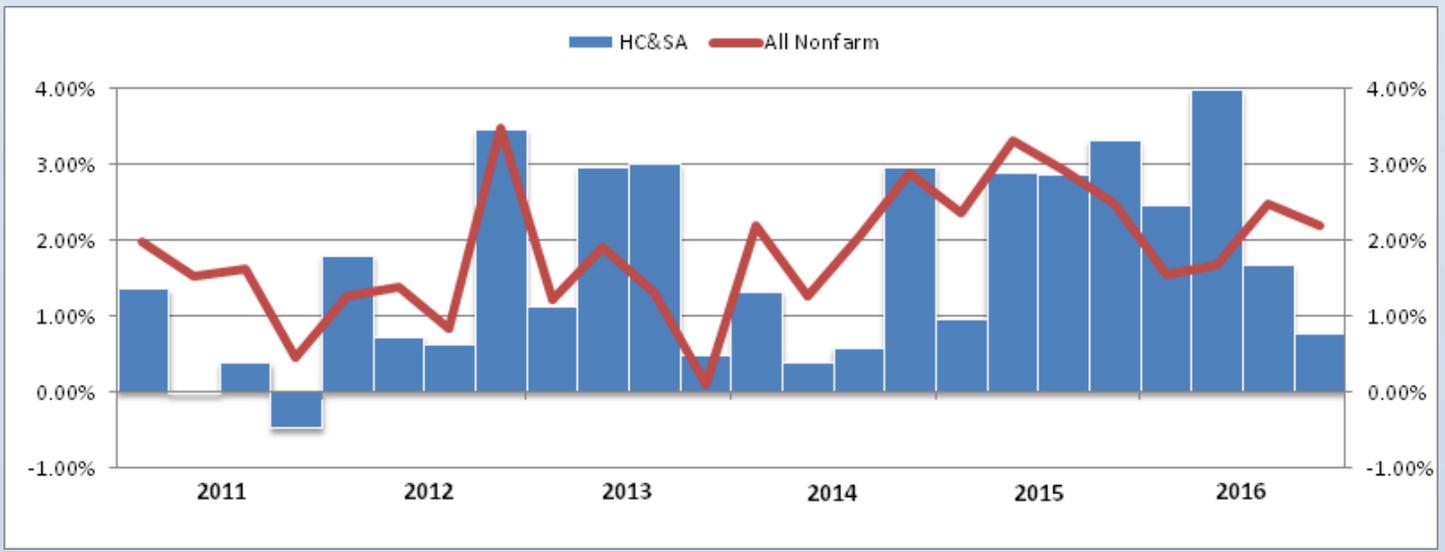


| | Q4 2013 | Q4 2014 | Q4 2015 | Q4 2016 |
|---------------------------|----------|----------|----------|----------|
| Compensation per Employee | \$56,699 | \$58,384 | \$60,322 | \$60,790 |

Compensation per Employee Growth Rate

Over the past two quarters, the year-over-year growth rate of Virginia’s total HC&SA compensation per employee has precipitously declined. In Q2 2016, the year-over-year growth rate of Virginia’s total HC&SA compensation reached a ten-year high of 3.98%. However, this growth rate fell to 1.66% in Q3 2016 before falling even further to 0.78% in Q4 2016. At its current level, the year-over-year growth rate of Virginia’s total HC&SA compensation per employee has fallen to a two-year low. On the other hand, after declining for most of 2015, the year-over-year growth rate of Virginia’s total nonfarm compensation per employee has experienced a modest rebound in 2016. Even after declining from 2.48% to 2.19% in Q4 2016, this value still remains above the 1.56% growth rate during the first quarter of 2016.

Figure 6: Year-Over-Year Change in Compensation Per Employee.



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.

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.

Healthcare Workforce
Data Center

Perimeter Center
9960 Mayland Drive, Suite 300
Henrico, VA 23233-1463

Phone: (804) 367-2115
Fax: (804) 527-4434
E-mail: hwdc@dhp.virginia.gov

www.dhp.virginia.gov/hwdc/

HWDC Staff:

| | |
|--|--|
| Elizabeth Carter, Ph.D. <i>Executive Director</i> | Yetty Shobo, Ph.D. <i>Deputy Director</i> |
| Laura Jackson <i>Operations Manager</i> | Christopher Coyle <i>Research Assistant</i> |

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/.

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)

Follow us on Tumblr:

<http://vahwdc.tumblr.com/>

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.