



# Virginia Healthcare Workforce Briefs

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

Series 3, Issue 34

March 2020

## Highlights

### 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

- ◆ In addition to the new income and compensation estimates for Quarter 4 (Q4) 2019 from the Bureau of Economic Analysis (BEA), this report also includes revised estimates from as far back as Q1 2010.
- ◆ Virginia's Health Care & Social Assistance (HC&SA) sector ended the year on a strong note as total HC&SA earnings in the state increased by \$481 million to \$32.6 billion in Q4 2019. In 2019, Virginia's total HC&SA earnings increased by \$1.3 billion.
- ◆ Total employee compensation in Virginia's HC&SA sector grew by \$431 million to \$29.7 billion in Q4 2019. This gain represents a three-month annualized earnings growth rate of 6.0%.
- ◆ Total compensation per employee in Virginia's HC&SA sector increased by \$440 in Q4 2019. With this gain, the HWDC estimates that employees in Virginia's HC&SA sector earn an average of \$64,075 per year.

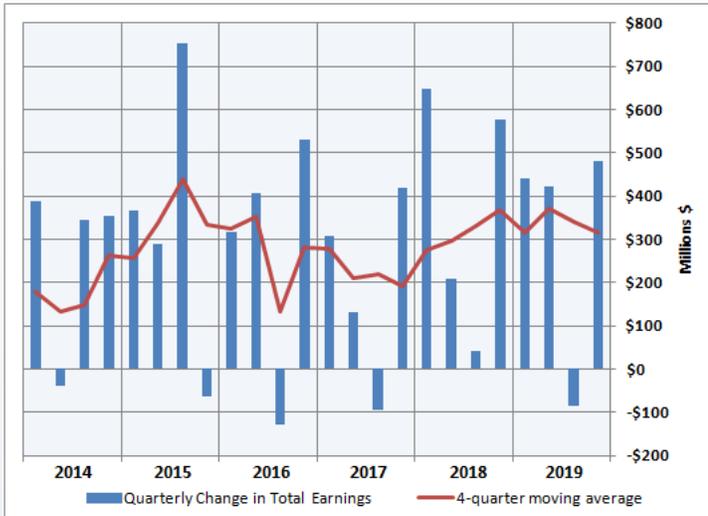
*The calendar year is the basis for data in this series. See Page 5 for additional information on this series.*

## Data in Brief

	Income (Millions of Dollars)				Growth Rate, Annualized		
	Q4 2018	Q2 2019	Q3 2019	Q4 2019	Annual	6-Month	Quarterly
<b>Earnings (Personal income less rents, interest, dividends and government payments)</b>							
<b>Virginia</b>	\$341,312	\$348,893	\$353,112	\$356,319	4.4%	4.3%	3.7%
<b>National</b>	\$12,676,199	\$13,013,797	\$13,124,867	\$13,239,952	4.4%	3.5%	3.6%
<b>Health Care &amp; Social Assistance Earnings</b>							
<b>Virginia</b>	\$31,371	\$32,234	\$32,149	\$32,630	4.0%	2.5%	6.1%
<b>National</b>	\$1,404,729	\$1,442,866	\$1,457,570	\$1,474,654	5.0%	4.5%	4.8%
<b>Health Care &amp; Social Assistance Employee Compensation (Earnings less proprietor's income, includes salaries, wages &amp; benefits)</b>							
<b>Virginia</b>	\$28,560	\$29,385	\$29,287	\$29,718	4.1%	2.3%	6.0%
<b>National</b>	\$1,265,961	\$1,302,242	\$1,316,311	\$1,330,910	5.1%	4.5%	4.5%
<b>Health Care &amp; Social Assistance Compensation per Employee (HWDC Estimate)</b>							
<b>Virginia</b>	\$62,728	\$64,342	\$63,635	\$64,075	2.1%	-0.8%	2.8%
<b>National</b>	\$62,859	\$64,005	\$64,334	\$64,373	2.4%	1.2%	0.2%

## 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.**



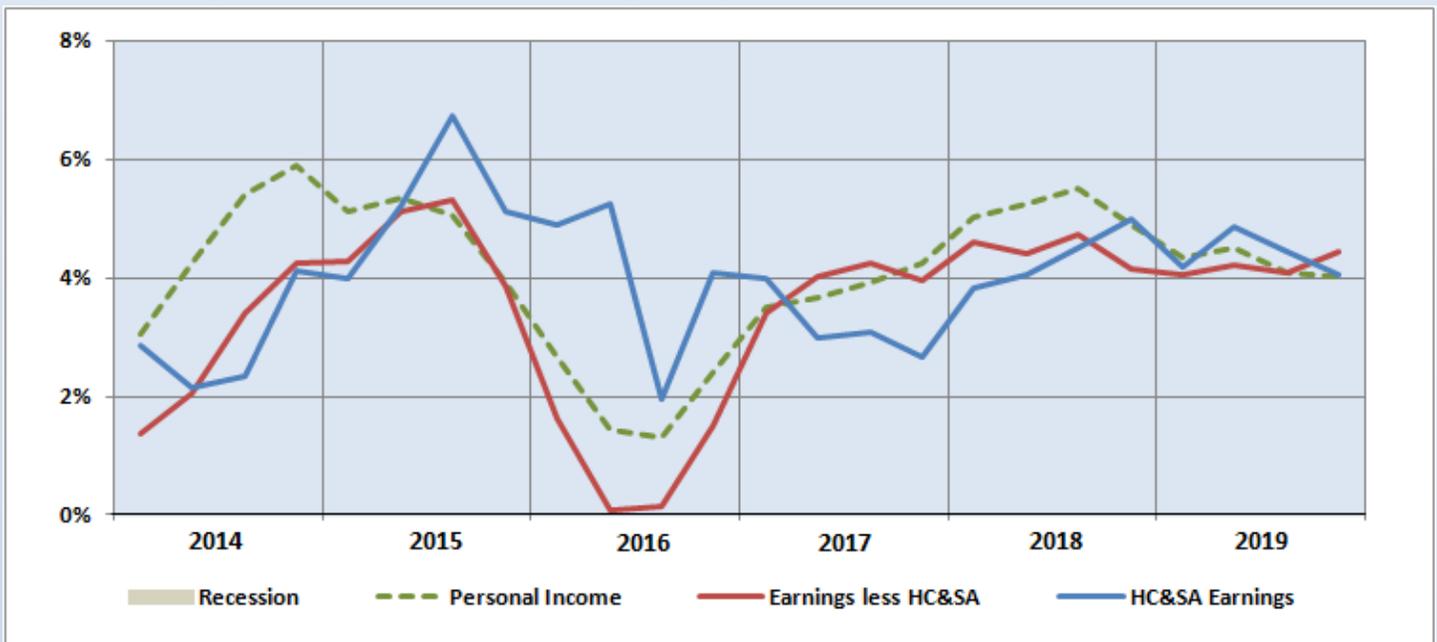
According to data released on Tuesday, March 24, 2020 by the U.S. Bureau of Economic Analysis, Virginia's Health Care & Social Assistance (HC&SA) sector increased total earnings by \$481 million to \$32.6 billion in Q4 2019. This gain represents a three-month annualized earnings growth rate of 6.1%. It also represents the largest quarterly gain in Virginia's total HC&SA earnings since Q4 2018.

With this quarter's gain, total earnings in Virginia's HC&SA sector increased by \$1.3 billion in 2019, which translates into a 4.0% growth rate. This represents a slightly smaller full-year gain relative to 2018 when total HC&SA earnings in the state increased by \$1.5 billion. This was due to a loss of \$85 million in the state's total HC&SA earnings in Q3 2019. In every other quarter of 2019, the increase in Virginia's total HC&SA earnings was greater than its four-quarter moving average, which fell to \$315 million in Q4 2019.

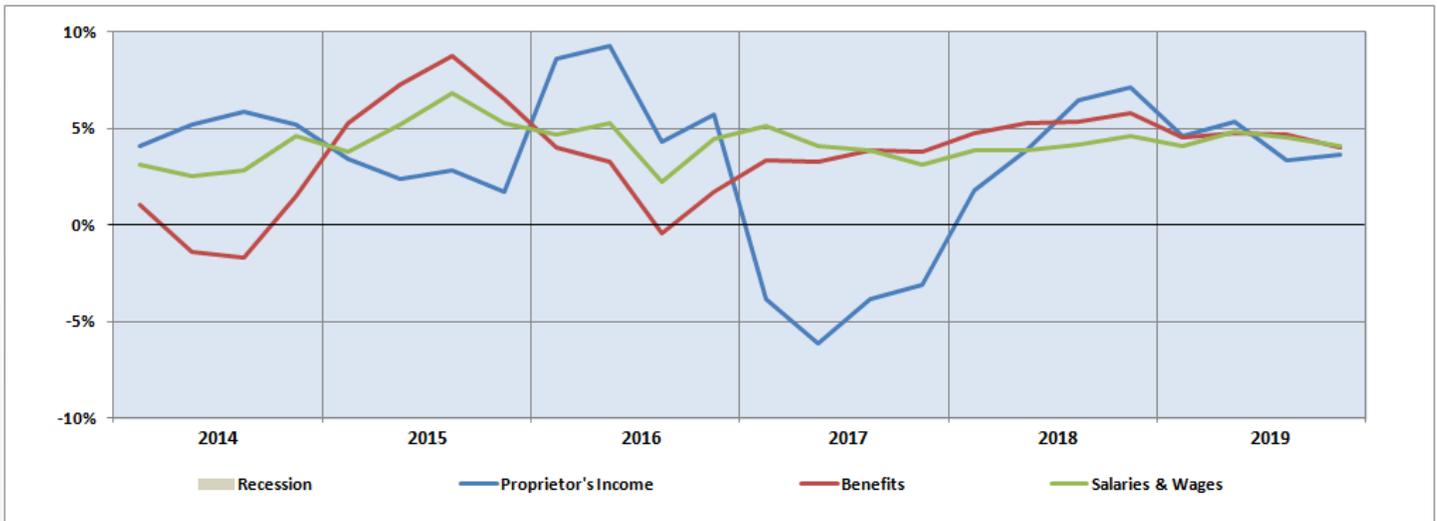
### Virginia HC&SA Earnings Growth Rate

Throughout 2019, the four-quarter growth rate moving averages of Virginia's total HC&SA earnings, non-HC&SA earnings, and personal income have all fluctuated within a narrow range of between 4% and 5%, and this trend continued in Q4 2019. The four-quarter moving average of the growth rate for Virginia's total HC&SA earnings fell from 4.45% to 4.06%, thereby dropping to its lowest value in one-and-a-half years. It also represents the first time in more than one year in which the four-quarter growth rate moving average for Virginia's total HC&SA earnings has fallen below the comparable moving average for the state's non-HC&SA earnings. In Q4 2019, the four-quarter moving average of the growth rate for Virginia's non-HC&SA earnings increased from 4.09% to 4.44%. As for the state's personal income, its four-quarter growth rate moving average dipped slightly from 4.07% to 4.01% in Q4 2019.

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



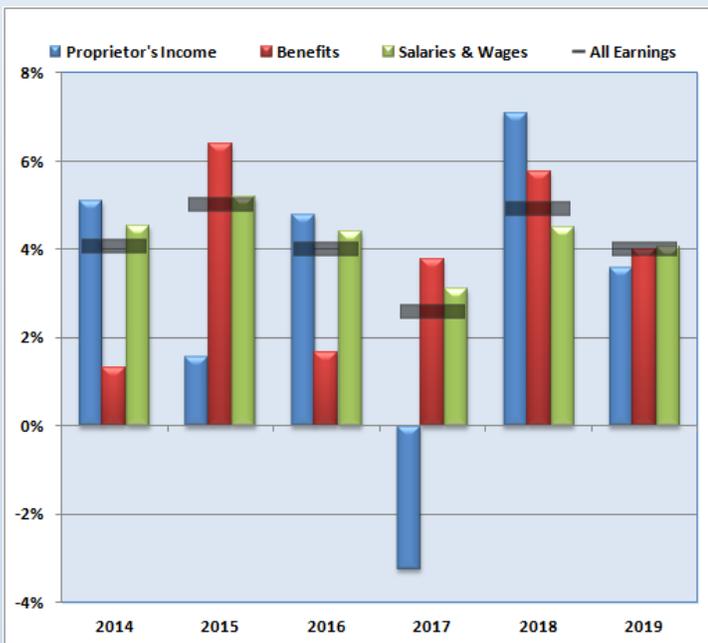
### Virginia HC&SA Earnings Growth Rate by Earnings Type



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

Although the four-quarter moving average of the earnings growth rate for Virginia’s HC&SA proprietor’s income has been trending downward over the course of the past year, it experienced a slight uptick in Q4 2019 from 3.35% to 3.63%. On the other hand, both forms of HC&SA employee compensation experienced declines in their respective moving averages during the quarter. The more significant decline came from HC&SA employee benefits. Its four-quarter growth rate moving average fell from 4.68% to 4.01% in Q4 2019, thereby reaching its lowest value in two years. Meanwhile, there was a slightly more modest decline in the four-quarter moving average of the growth rate for HC&SA employee salaries & wages, which fell from 4.55% to 4.12% in Q4 2019.

### Annual Growth by Earnings Type



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

The overall annual growth rate of Virginia’s total HC&SA earnings fell from 4.9% in 2018 to 4.0% in 2019, and all three forms of HC&SA earnings compensation contributed to this year’s decline. This slowdown was most noticeable with respect to the state’s HC&SA proprietor’s income, which saw its annual growth rate cut nearly in half. In 2018, HC&SA proprietor’s income grew by 7.1%. This represented the fastest annual earnings growth rate for Virginia’s HC&SA proprietor’s income in seven years. However, HC&SA proprietor’s income grew by only 3.6% in 2019. At the same time, HC&SA employee benefits experienced a decline in their growth rate from 5.8% to 4.0%, while HC&SA salaries & wages saw their growth rate fall from 4.5% to 4.1%. Regardless, this represents the first time in more than one decade in which HC&SA salaries & wages have enjoyed the fastest annual growth rate among the three different types of HC&SA compensation.

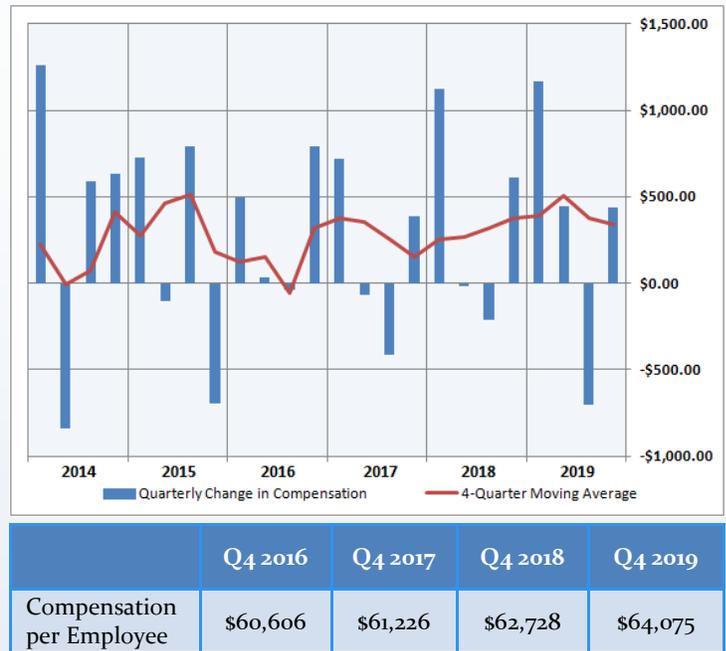
Earnings Type	Level (Millions)	Share
Proprietor's Income	\$2,912	8.9%
Benefits	\$5,044	15.5%
Salaries & Wages	\$24,674	75.6%
<b>Total</b>	<b>\$32,630</b>	<b>100%</b>

### HC&SA Compensation per Employee

According to the Healthcare Workforce Data Center’s estimates (see methodology, next page), employees in Virginia’s HC&SA sector earned an average of \$64,075 (annualized) in Q4 2019. Note that 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 2019, total HC&SA compensation per employee in Virginia increased by \$440, a gain that represents a three-month annualized earnings growth rate of 2.8%. This growth rate is well above the overall national HC&SA average of 0.2% during the quarter. With this gain, Virginia’s total HC&SA compensation per employee recovered more than half of its losses from the previous quarter. In 2019, Virginia’s total HC&SA compensation per employee increased by \$1,347. This full-year gain translates into a 12-month earnings growth rate of 2.1%.

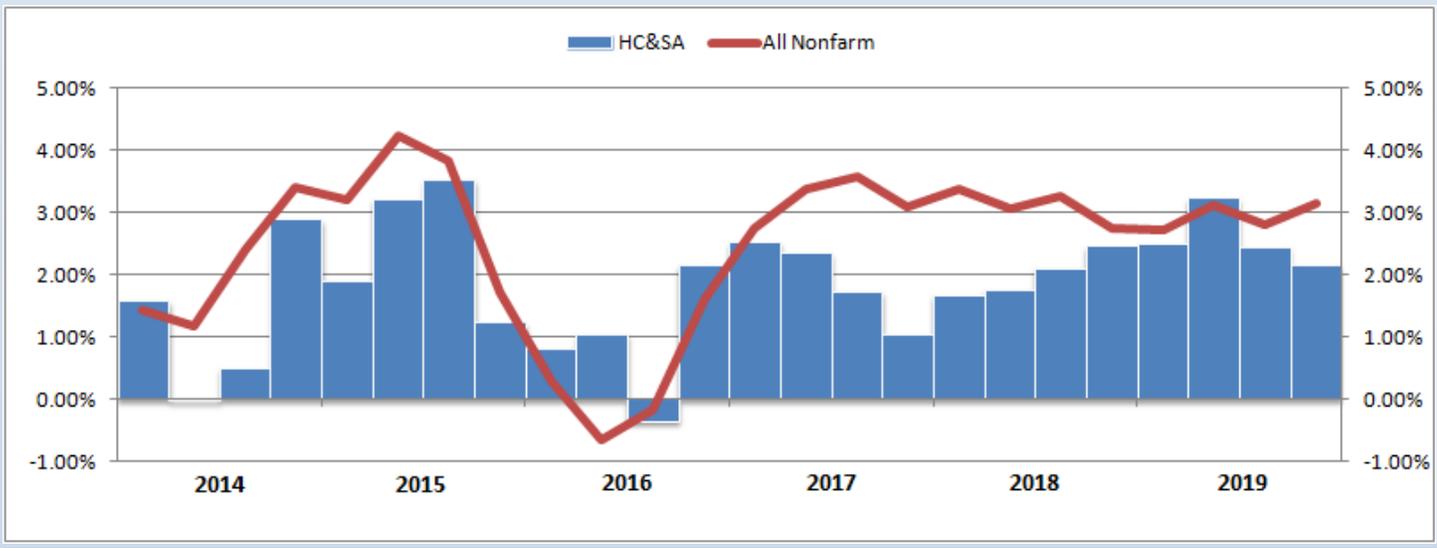
**Figure 5: Quarterly Change in Employee Compensation from Virginia’s Health Care & Social Assistance Sector.**



### Compensation per Employee Growth Rate

After falling to its lowest value in more than one year in Q4 2017, the year-over-year growth rate of Virginia’s total HC&SA compensation per employee increased for six consecutive quarters, reaching a nearly four-year high of 3.23% in Q2 2019. At that moment, the year-over-year growth rate of Virginia’s total HC&SA compensation per employee exceeded the comparable growth rate for Virginia’s total nonfarm payroll compensation per employee for the first time since 2016. However, the year-over-year growth rate of Virginia’s total HC&SA compensation per employee has since been cut in half to 2.15%. Meanwhile, the year-over-year growth rate of Virginia’s total nonfarm payroll compensation per employee increased from 2.81% to 3.14% in Q4 2019, thereby reaching its highest value during the year.

**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](mailto:hwdc@dhp.virginia.gov)  
Website: [www.dhp.virginia.gov/PublicResources/HealthcareWorkforceDataCenter/](http://www.dhp.virginia.gov/PublicResources/HealthcareWorkforceDataCenter/)

*HWDC Staff:*

Elizabeth Carter, PhD <i>Executive Director</i>	Yetty Shobo, PhD <i>Deputy Director</i>
Laura Jackson, MSHSA <i>Operations Manager</i>	Rajana Siva, MBA <i>Research Analyst</i>
Christopher Coyle <i>Research Assistant</i>	

Follow us on Tumblr:

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

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/PublicResources/HealthcareWorkforceDataCenter/](http://www.dhp.virginia.gov/PublicResources/HealthcareWorkforceDataCenter/).

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)

---

## About the Data

Data used in creating this report is from the U.S. 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.

---