



# Virginia Healthcare Workforce Briefs

Indicators from the Bureau of Economic Analysis

Regional Economic Accounts

**Series 3: Income & Compensation**

Series 3, Issue 36

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## Highlights

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- ◆ In addition to the new income and compensation estimates for Quarter 2 (Q2) 2020 from the Bureau of Economic Analysis (BEA), this report also includes revised estimates from Q1 2013 to Q1 2020.
- ◆ In Q2 2020, the statewide coronavirus lockdown led to a large decline in total earnings in Virginia's Health Care & Social Assistance (HC&SA) sector. Total HC&SA earnings fell by \$2.66 billion to \$30.07 billion in Q2 2020, which translates into a -28.7% annualized growth rate.
- ◆ Total employee compensation in Virginia's HC&SA sector fell by \$2.06 billion to \$27.87 billion in Q2 2020. This decline represents a three-month annualized earnings growth rate of -24.8%.
- ◆ Total HC&SA compensation per employee increased by \$2,460 in Q2 2020. With this gain, the HWDC estimates that employees in Virginia's HC&SA sector earn an average of \$67,419 per year.

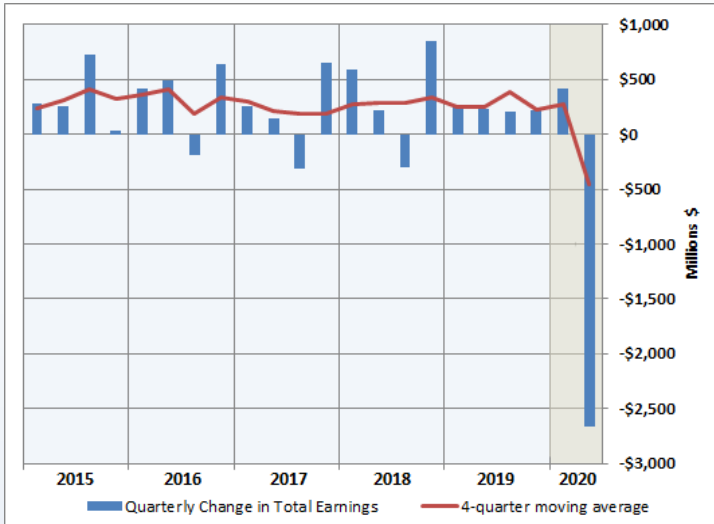
*The calendar year is the basis for data in this series. See Page 5 for additional information on this series.*

## Data in Brief

	Income (Millions of Dollars)				Growth Rate, Annualized		
	Q2 2019	Q4 2019	Q1 2020	Q2 2020	Annual	6-Month	Quarterly
<b>Earnings (Personal income less rents, interest, dividends and government payments)</b>							
<b>Virginia</b>	\$347,968	\$355,245	\$358,745	\$339,709	-2.4%	-8.6%	-19.6%
<b>National</b>	\$13,009,523	\$13,252,381	\$13,369,657	\$12,378,002	-4.9%	-12.8%	-26.5%
<b>Health Care &amp; Social Assistance Earnings</b>							
<b>Virginia</b>	\$31,884	\$32,317	\$32,729	\$30,070	-5.7%	-13.4%	-28.7%
<b>National</b>	\$1,432,004	\$1,461,668	\$1,478,447	\$1,370,521	-4.3%	-12.1%	-26.2%
<b>Health Care &amp; Social Assistance Employee Compensation (Earnings less proprietor's income, includes salaries, wages &amp; benefits)</b>							
<b>Virginia</b>	\$29,130	\$29,500	\$29,931	\$27,871	-4.3%	-10.7%	-24.8%
<b>National</b>	\$1,298,584	\$1,325,184	\$1,342,858	\$1,263,858	-2.7%	-9.0%	-21.5%
<b>Health Care &amp; Social Assistance Compensation per Employee (HWDC Estimate)</b>							
<b>Virginia</b>	\$63,784	\$63,605	\$64,959	\$67,419	5.7%	12.4%	16.0%
<b>National</b>	\$63,825	\$64,096	\$65,026	\$66,920	4.9%	9.0%	12.2%

## 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.**

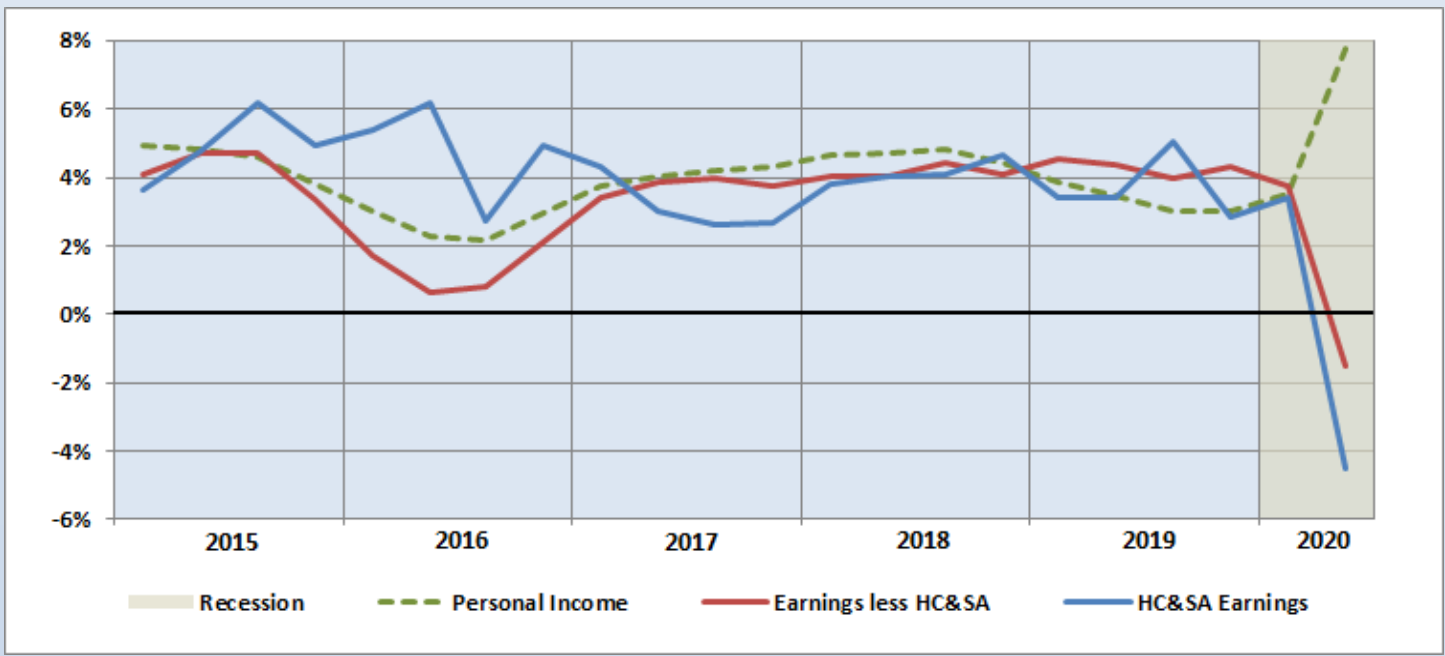


According to the preliminary data released on Thursday, September 24, 2020 by the U.S. Bureau of Economic Analysis, total earnings in Virginia's Health Care & Social Assistance (HC&SA) sector were impacted significantly by the statewide lockdown measures that were put in place during the quarter in order to combat the spread of the coronavirus. In Q2 2020, total earnings in Virginia's HC&SA sector fell by \$2.66 billion to \$30.07 billion. This decline represents a three-month annualized earnings growth rate of -28.7%. It also represents the first time in nearly two years in which total HC&SA earnings in Virginia have fallen. In fact, this quarter's decline in Virginia's total HC&SA earnings erased all of the accumulated gains for the prior six quarters. This led to a dramatic decline in the four-quarter moving average of the change in Virginia's total HC&SA earnings, which fell from \$268 million to -\$454 million in Q2 2020.

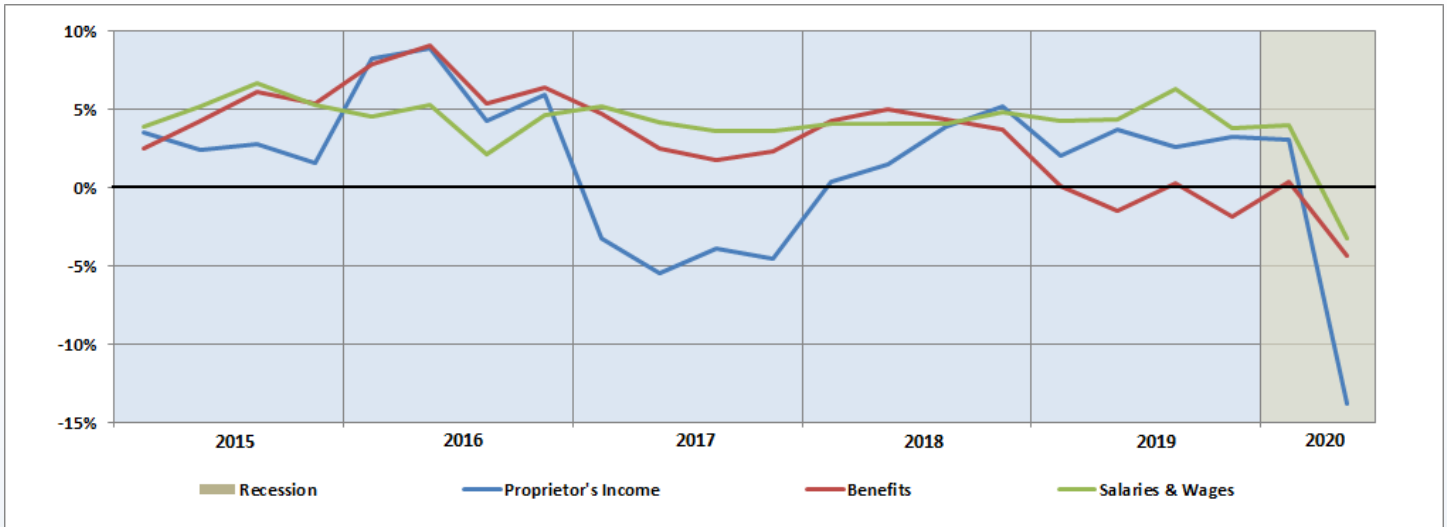
## Virginia HC&SA Earnings Growth Rate

Prior to Q2 2020, the four-quarter growth rate moving averages for HC&SA earnings, non-HC&SA earnings, and personal income tended to move together. However, this tight correlation was broken in Q2 2020 as the four-quarter growth rate moving average for Virginia's personal income diverged significantly from the comparable moving averages for the state's HC&SA and non-HC&SA earnings. Buoyed by a \$2 trillion federal stimulus package that was passed into law in late March, the four-quarter moving average of the growth rate for Virginia's personal income more than doubled in Q2 2020 from 3.51% to 7.76%, thereby reaching its highest value in more than one decade. On the other hand, the four-quarter moving average of the growth rate for Virginia's HC&SA earnings fell precipitously from 3.39% to -4.52%, while the comparable moving average for the state's non-HC&SA earnings fell from 3.76% to -1.50%.

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



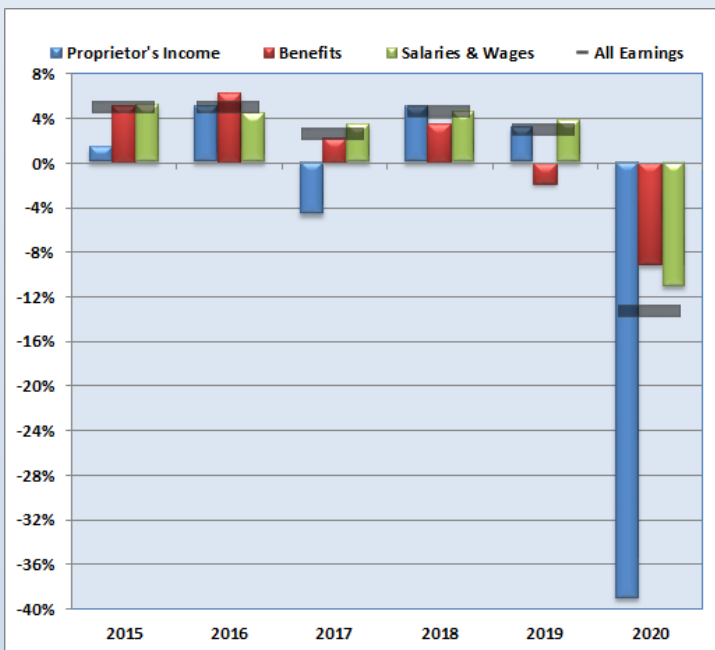
### Virginia HC&SA Earnings Growth Rate by Earnings Type



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

In Q1 2020, the four-quarter growth rate moving averages for HC&SA proprietor’s income and both forms of HC&SA employee compensation were positive. However, this was no longer the case in Q2 2020 as all three of these moving averages turned negative during the quarter. HC&SA proprietor’s income experienced the most significant decline. Its four-quarter growth rate moving average fell from 3.09% to -13.80% in Q2 2020. At the same time, HC&SA employee salaries & wages and HC&SA employee benefits also experienced substantial declines in their respective moving averages during the quarter. HC&SA employee salaries & wages saw their four-quarter growth rate moving average fall from 4.03% to -3.25%, in Q2 2020, while HC&SA employee benefits saw their own moving average fall from 0.40% to -4.30% during the quarter.

### Annual Growth by Earnings Type



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

During the first half of 2020, total HC&SA earnings in Virginia have fallen at a 13.4% annualized rate. This represents a dramatic reversal in the growth rate of the state’s total HC&SA earnings, which had grown by 2.9% in 2019. If this present trend were to continue through the second half of the year, it would represent the first in more than one decade in which total earnings in Virginia’s HC&SA sector have fallen over the course of an entire year.

This substantial reversal in the growth rate of total earnings in Virginia’s HC&SA sector has been driven mainly by losses in HC&SA proprietor’s income, which has fallen at a 39.1% annualized rate over the first six months of 2020. Meanwhile, HC&SA employee salaries & wages have a six-month annualized earnings growth rate of -11.0%. At the same time, the comparable growth rate for HC&SA employee benefits is -9.1%.

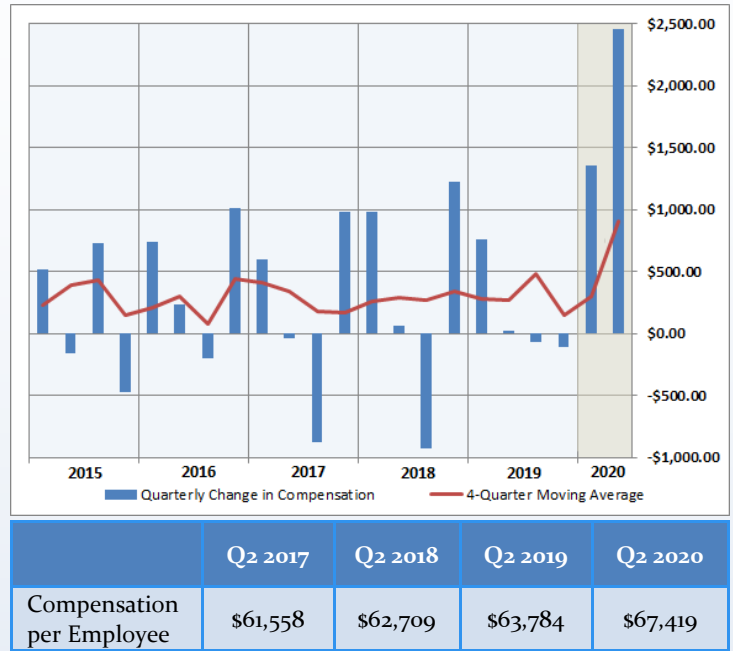
Earnings Type	Level (Millions)	Share
Proprietor's Income	\$2,199	7.3%
Benefits	\$4,525	15.0%
Salaries & Wages	\$23,346	77.6%
<b>Total</b>	<b>\$30,070</b>	<b>100%</b>

### 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 \$67,419 (annualized) in Q2 2020. 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.

During the first half of 2020, there has been a dramatic increase in total compensation per employee in Virginia’s HC&SA sector. In Q1 2020, total HC&SA compensation per employee increased by \$1,354, which represented its largest quarterly gain in eight years. However, this quarter’s increase of \$2,460 was considerably larger. This gain represents a three-month annualized earnings growth rate of 16.0%. This quarter’s gain occurred despite the fall in total HC&SA employee compensation due to the even larger decline in overall HC&SA employment in Q2 2020.

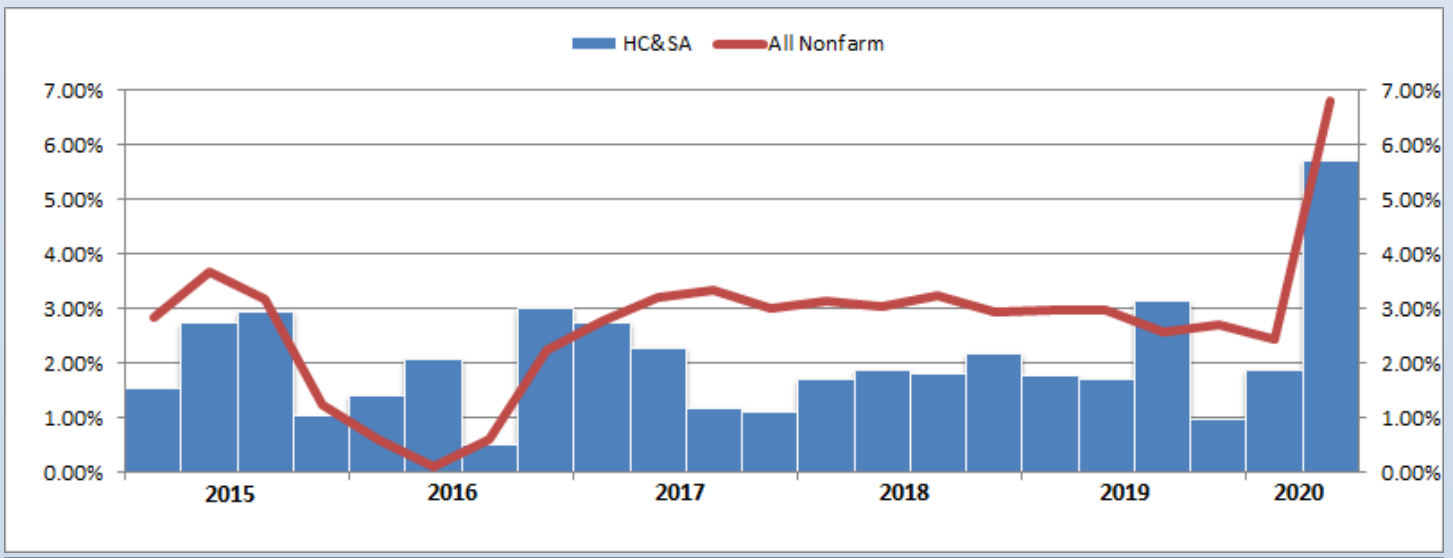
**Figure 5: Quarterly Change in Employee Compensation from Virginia’s Health Care & Social Assistance Sector.**



### Compensation per Employee Growth Rate

In 2019 and Q1 2020, the year-over-year growth rate of Virginia’s total nonfarm payroll compensation per employee remained within a narrow range of between 2% and 3%. However, this situation changed entirely in Q2 2020 as the year-over-year growth rate of Virginia’s total nonfarm payroll compensation per employee more than doubled during the quarter from 2.43% to 6.83%, thereby reaching its highest value since 2003. A similar surge also occurred with respect to total compensation per employee in Virginia’s HC&SA sector. In Q2 2020, the year-over-year growth rate of Virginia’s total HC&SA compensation per employee tripled from 1.87% to 5.70%. This represents the highest value for the year-over-year growth rate of total HC&SA compensation per employee in the state in fifteen years.

**Figure 6: 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/  
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)

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## 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.

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