

EMPLOYMENT MONTHLY

June 2024



VIRGINIA WORKS



Feature Article: Career Focus: Data Scientist

May 2024 Monthly Indicators

(Seasonally Adjusted)

Total Nonfarm Employment



4,245,500

Unemployment



124,379

Labor Force Participation Rate



66.3%

Unemployment Rate



2.7%

Note: Arrows indicate movement from previous month.

Virginia Works
Economic Information & Analytics Division
P.O. Box 25519, Richmond, VA 23260-5519

www.VirginiaWorks.com

Current Employment Indicators

Nonagricultural Wage and Salary Employment (Thousands)



Employment Highlights

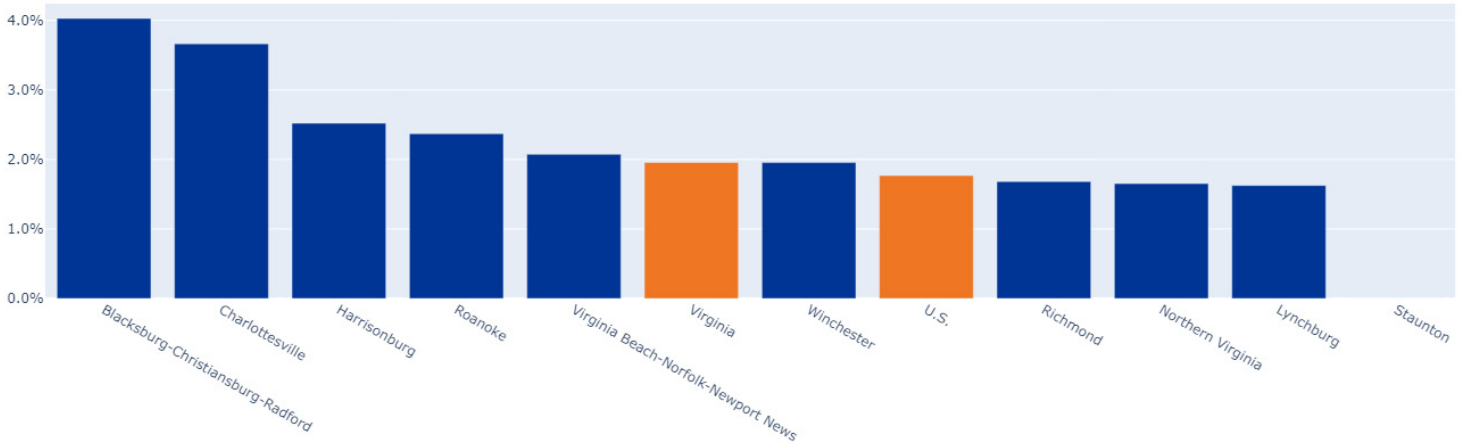
- Virginia’s seasonally adjusted unemployment rate in May decreased by 0.1 percentage points to 2.7 percent, which is 0.1 percentage points above the rate from a year ago.
- In May, seven MSAs experienced over-the-month job gains, one remained unchanged, and two experienced a decline. The largest job gain occurred in Northern Virginia (+6,100) to 1,599,600. The second largest job gain occurred in Richmond (+1,500) to 725,400. The third largest job gain occurred in Virginia Beach-Norfolk-Newport News (+1,000) to 821,600.
- The largest job gain occurred in Education and Health Services (+4,700) to 610,400. The second largest job gain occurred in Government (+2,700) to 750,300. The third largest job gain occurred in Construction (+1,600) to 223,800.

Total Nonfarm Employment by Metropolitan Statistical Area (MSA) (Seasonally Adjusted)

MSA	Employment			May 2023 to May 2024	
	May 2024	April 2024	May 2023	Change	% Change
Virginia	4,245,500	4,236,700	4,164,000	81,500	2.0%
Blacksburg-Christiansburg-Radford MSA	85,200	86,100	81,900	3,300	4.0%
Charlottesville MSA	127,300	126,700	122,800	4,500	3.7%
Harrisonburg MSA	73,200	73,200	71,400	1,800	2.5%
Lynchburg MSA	106,200	106,100	104,500	1,700	1.6%
Northern Virginia MSA	1,599,600	1,593,500	1,573,600	26,000	1.7%
Richmond MSA	725,400	723,900	713,400	12,000	1.7%
Roanoke MSA	168,300	168,200	164,400	3,900	2.4%
Staunton MSA	53,800	54,000	53,800	0	0.0%
Virginia Beach-Norfolk-Newport News MSA	821,600	820,600	804,900	16,700	2.1%
Winchester MSA	73,000	72,700	71,600	1,400	2.0%

*Current month's estimates are preliminary.

Fastest Growing Metropolitan Statistical Areas by Employment - Year-over-Year



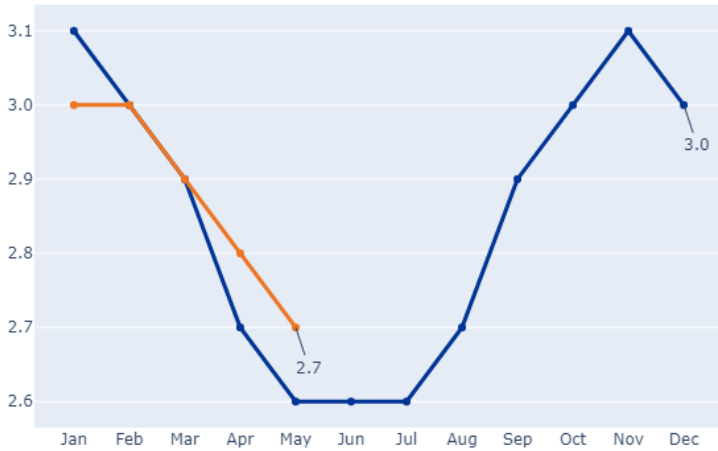
Total Nonfarm Employment by Industry (Seasonally Adjusted)

Industry	Employment			May 2023 to May 2024	
	May 2024	April 2024	May 2023	Change	% Change
Total Nonfarm	4,245,500	4,236,700	4,164,000	81,500	2.0%
Total Private	3,495,200	3,489,100	3,432,200	63,000	1.8%
Goods Producing	480,800	479,700	467,000	13,800	3.0%
Mining and Logging	7,300	7,300	7,300	0	0.0%
Construction	223,800	222,200	213,700	10,100	4.7%
Manufacturing	249,700	250,200	246,000	3,700	1.5%
Service-Providing	3,764,700	3,757,000	3,697,000	67,700	1.8%
Private Service Providing	3,014,400	3,009,400	2,965,200	49,200	1.7%
Trade, Transportation, and Utilities	678,500	678,700	673,900	4,600	0.7%
Information	69,800	69,900	70,800	-1,000	-1.4%
Financial Activities	222,000	221,300	221,100	900	0.4%
Professional and Business Services	814,500	816,700	811,500	3,000	0.4%
Education and Health Services	610,400	605,700	579,800	30,600	5.3%
Leisure and Hospitality	415,400	414,300	409,700	5,700	1.4%
Miscellaneous Services	203,800	202,800	198,400	5,400	2.7%
Government	750,300	747,600	731,800	18,500	2.5%
Federal Government	192,800	192,600	189,100	3,700	2.0%
State Government	162,600	161,100	152,500	10,100	6.6%
Local Government	394,900	393,900	390,200	4,700	1.2%

*Current month's estimates are preliminary.

Current Unemployment Indicators

Virginia Unemployment Rate (Percent)



Unemployment Insurance - May 2024

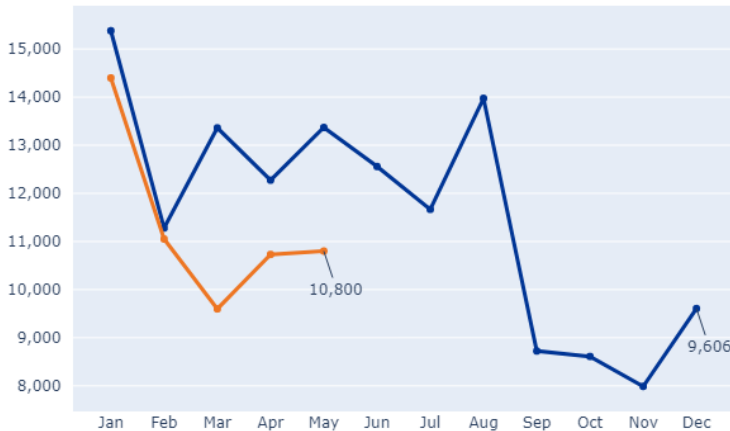
Financial Data

- Trust Fund Balance (millions) \$1,568.2
- Tax Revenue (Monthly) (millions) \$21.2

Benefits Data

- Benefits Paid (Monthly) (millions) \$23.1
- Average Weekly Benefit \$349.31
- Initial Claims (YTD) 56,588

Average Weekly Initial Claims



Initial and Continued Claims

Initial Claims:

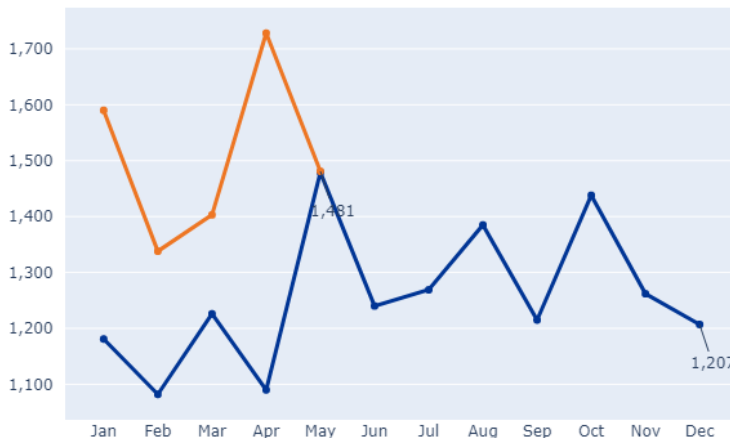
- There were 10,800 initial claims in May 2024.
- Initial claims increased by 0.7% over-the-month and decreased by 19.2% over-the-year.
- Year-to-date initial claims were 13.8% lower in May 2024 compared to the same period in 2023.

Continued Claims:

- There were 81,491 continued claims in May 2024.
- This was a 4.9% decrease over-the-month and a 8.2% increase over-the-year.
- Year-to-date continued claims were 14.6% higher in May than during the same period in 2023.

Note: Claims counts include interstate and intrastate.

Unemployment Insurance Final Payments

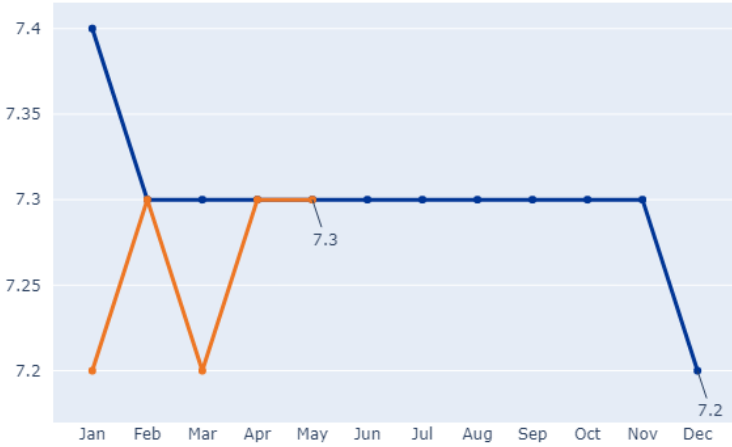


Monthly Claims Data

	Initial Claims	Continued Claims	Recipients	Final Payments
May 2024	10,800	81,491	14,522	1,481
April 2024	10,703	85,695	17,072	1,728
May 2023	13,369	75,342	13,992	1,479

Current Industry Indicators

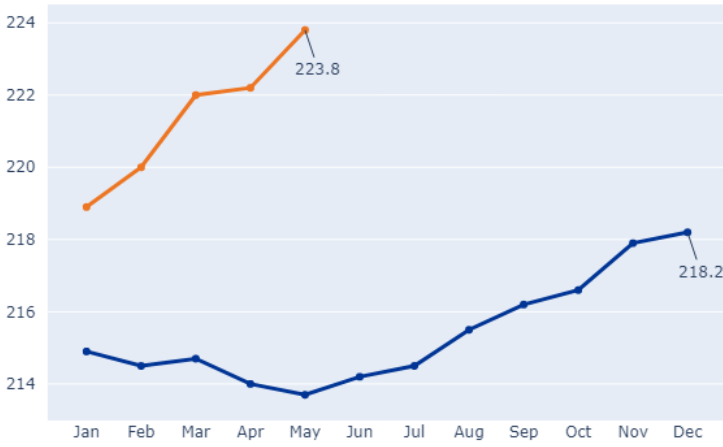
Mining and Logging Employment (Thousands)



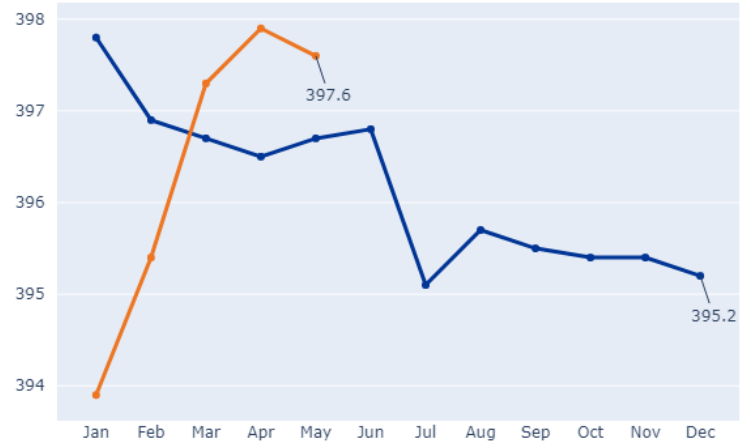
Wholesale Trade Employment (Thousands)



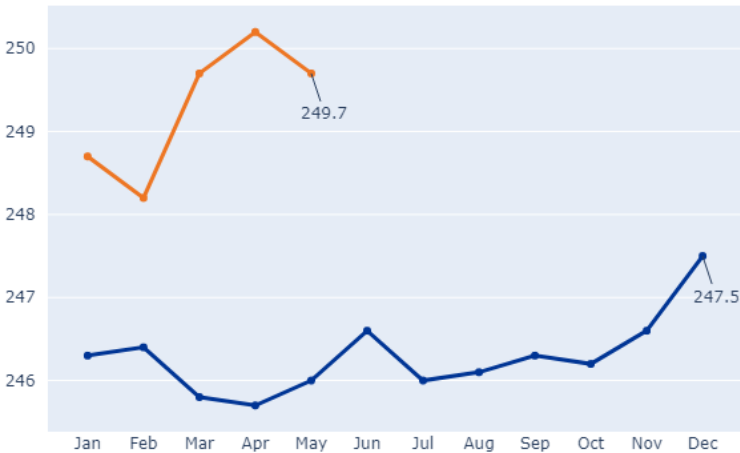
Construction Employment (Thousands)



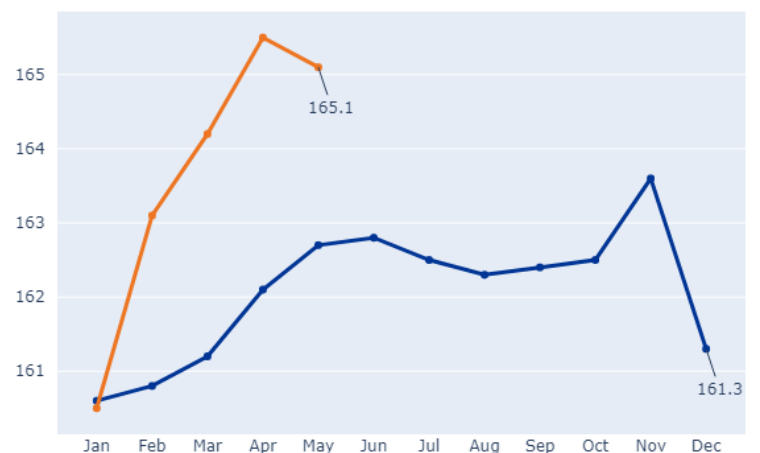
Retail Trade Employment (Thousands)



Manufacturing Employment (Thousands)

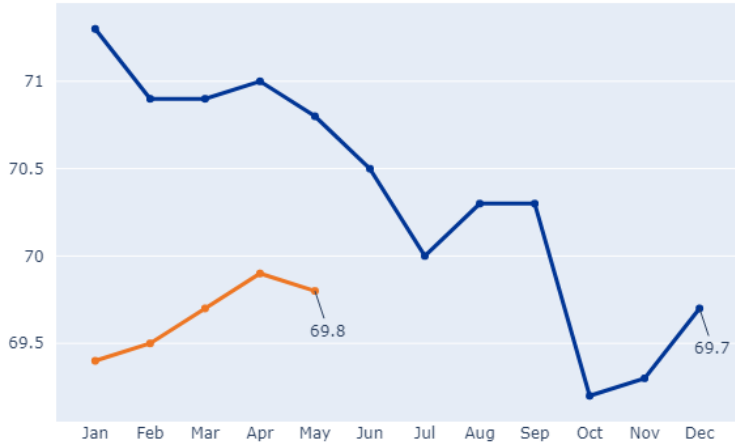


Transportation, Warehousing, and Utilities Employment (Thousands)

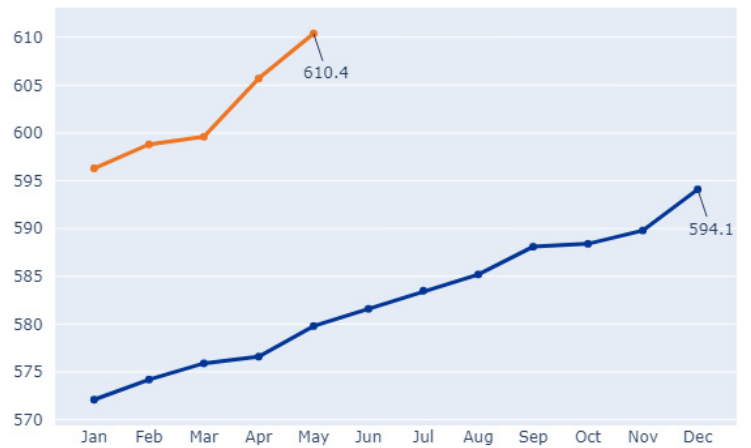


2023 2024 (Seasonally Adjusted)

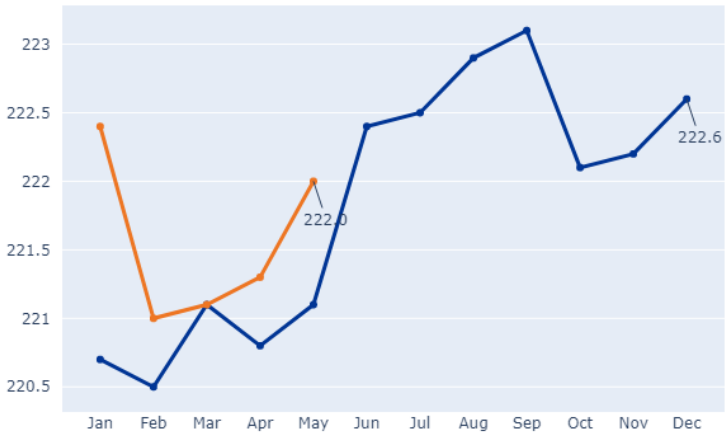
Information Employment
(Thousands)



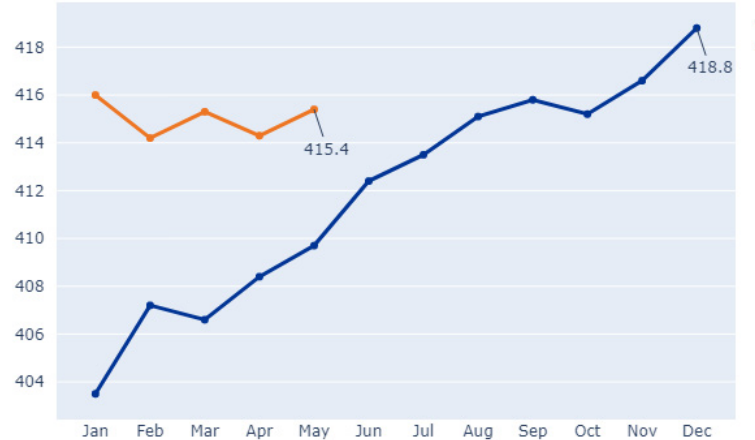
Private Education and Health Services Employment
(Thousands)



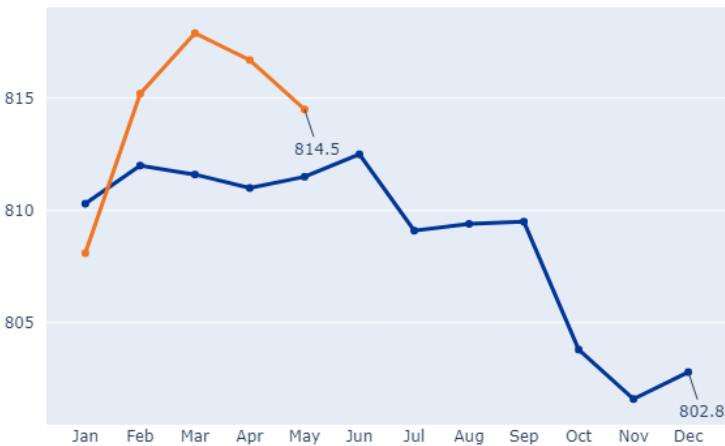
Finance Employment
(Thousands)



Leisure and Hospitality Services Employment
(Thousands)



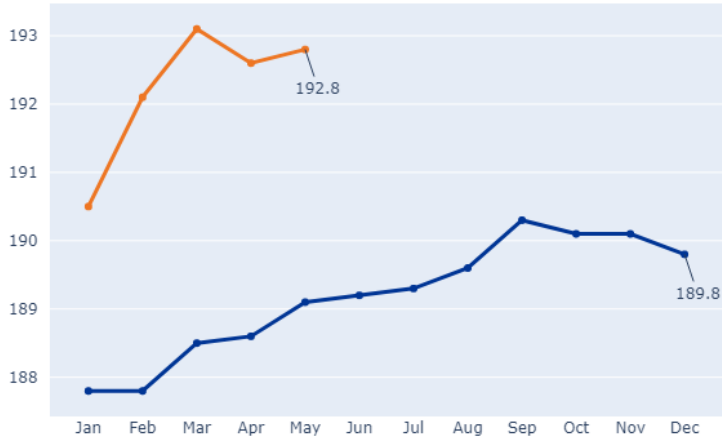
Professional and Business Services Employment
(Thousands)



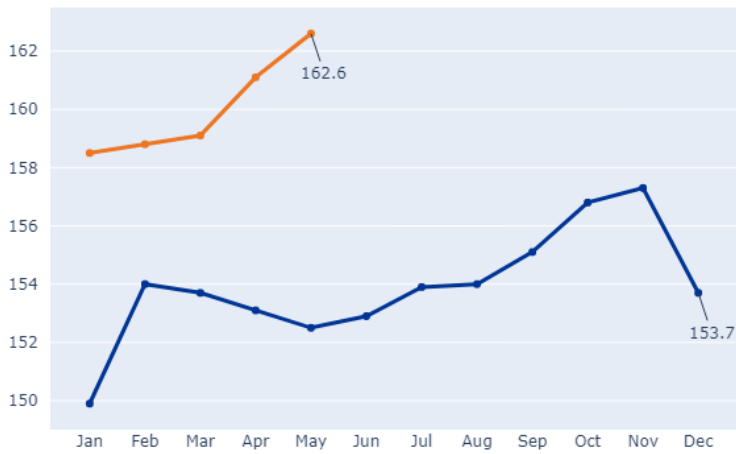
Miscellaneous Services Employment
(Thousands)



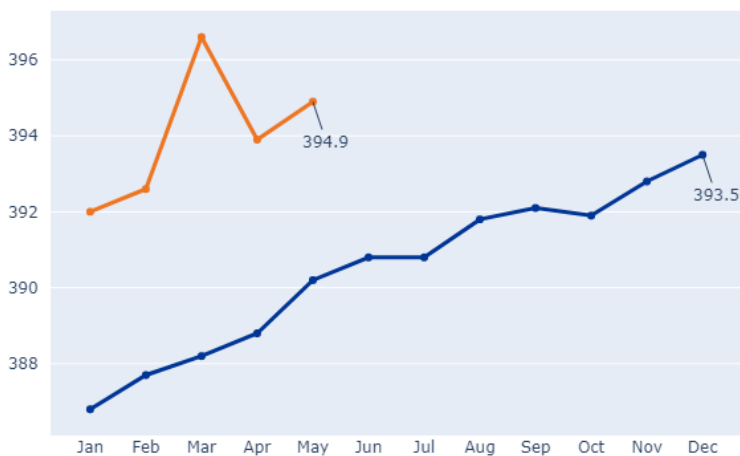
Federal Government Employment
(Thousands)



State Government Employment
(Thousands)



Local Government Employment
(Thousands)



Industry Highlights

- In May, six out of eleven industry sectors experienced over-the-month job gains, one remained unchanged, and four experienced a decline.
- Education and Health Services had the largest gain (+4,700) to 610,400. The second largest job gain occurred in Government (+2,700) to 750,300. The third largest job gain occurred in Construction (+1,600) to 223,800.
- The other gains were in Leisure and Hospitality (+1,100) to 415,400; Miscellaneous Services (+1,000) to 203,800; and Financial Activities (+700) to 222,000.
- Professional and Business Services had the largest job loss in May, (-2,200) to 814,500. The second largest job loss occurred in Manufacturing (-500) to 249,700, and the third largest job loss occurred in Trade, Transportation, and Utilities (-200) to 678,500.





Career Focus: DATA SCIENTIST

As more companies and industries are relying on data to analyze how their company is performing, or what are the needs of their customers, the demand for skilled workers who understand how to collect, disseminate, and analyze various data that could aid an organization in their business is growing. Those skilled employees are Data Scientists.

According to the Bureau of Labor Statistics (BLS) [Occupational Outlook Handbook](#), data scientists use analytical tools and techniques to extract meaningful insights from data.

Data scientists typically do the following:

- ◆ Determine which data are available and useful for the project
- ◆ Collect, categorize, and analyze data
- ◆ Create, validate, test, and update algorithms and models
- ◆ Use data visualization software to present findings
- ◆ Make business recommendations to stakeholders based on data analysis

Quick Facts: Data Scientists	
2023 Median Pay	\$108,020 per year \$51.93 per hour
Typical Entry-Level Education	Bachelor's degree
Number of Jobs, 2023	192,710
Job Outlook, 2022-32	35% (Much faster than average)
Employment Change, 2022-32	59,400

Data scientists often begin a project by gathering or identifying relevant data sources, such as surveys. They may use a variety of methods to obtain data, including through access to other organizations' databases or by using web-scraping tools (software that extracts specific information from websites). They may start with large, unstructured datasets, commonly referred to as raw data. To properly analyze the data, these scientists must "clean" the raw data, a process by which they structure the data to make them readable by software programs.

Data scientists develop algorithms (sets of instructions that tell computers what to do) and models to support programs for machine learning. They use machine learning to classify or categorize data or to make predictions related to the models. Data scientists also must test the algorithms and models for accuracy, including for updates with newly collected data.

Data scientists often use data visualization software to present their findings as charts, maps, and other graphics. Visualization techniques allow data scientists to clearly communicate their analyses to technical and nontechnical audiences, including colleagues, managers, and clients. Ensuring that audiences understand the information helps data scientists make recommendations for business decisions or process changes based on the results of their analysis.

Some data scientists choose to focus on a particular area of work. For example, data scientists who have a strong coding or engineering background may develop or recommend systems, build machine learning algorithms, and devise ways to enhance web-browsing functions. Others conduct research for reports or academic journals. Still others focus on improving business strategy for activities such as marketing, sales and user engagement.

Nationwide

States with the highest employment level in Data Scientists:

State	Employment (1)	Hourly mean wage	Annual mean wage (2)
California	33,220	\$ 67.54	\$ 140,490
Texas	20,560	\$ 52.40	\$ 109,000
New York	16,390	\$ 64.82	\$ 134,830
Florida	8,400	\$ 51.20	\$ 106,490
Pennsylvania	7,490	\$ 49.22	\$ 102,370

Top paying states for Data Scientists:

State	Employment (1)	Hourly mean wage	Annual mean wage (2)
Washington	5,640	\$ 71.50	\$ 148,730
California	33,220	\$ 67.54	\$ 140,490
Virginia	4,810	\$ 66.87	\$ 139,080
New York	16,390	\$ 64.82	\$ 134,830
New Jersey	4,340	\$ 64.49	\$ 134,140

Metropolitan areas with the highest employment level in Data Scientists:

Metropolitan area	Employment (1)	Hourly mean wage	Annual mean wage (2)
New York-Newark-Jersey City, NY-NJ-PA	16,330	\$ 68.01	\$ 141,460
Los Angeles-Long Beach-Anaheim, CA	9,220	\$ 59.84	\$ 124,460
San Francisco-Oakland-Hayward, CA	8,870	\$ 76.42	\$ 158,940
Washington-Arlington-Alexandria, DC-VA-MD-WV	6,840	\$ 66.87	\$ 139,080
Dallas-Fort Worth-Arlington, TX	6,760	\$ 55.92	\$ 116,320

(1) Estimates for detailed occupations do not sum to the totals because the totals include occupations not shown separately. Estimates do not include self-employed workers.

(2) Annual wages have been calculated by multiplying the corresponding hourly wage by 2,080 hours.

Virginia is in the top five category with other states for top pay and metro areas with highest employment levels.

Virginia

Employment and Wages by MSAs:

Area Name	Employment	Hourly mean wage	Annual mean wage
Virginia	4,810	\$66.87	\$139,080
Blacksburg-Christiansburg-Radford	40	\$48.90	\$101,720
Charlottesville	140	\$57.65	\$119,910
Richmond	750	\$60.85	\$126,570
Roanoke	60	\$45.47	\$94,570
Virginia Beach-Norfolk-Newport News, VA-NC	420	\$53.39	\$111,050

Industries with the highest levels of employment in Data Scientists:

Occupation	Employment	Hourly mean wage	Annual mean wage
Professional, Scientific, and Technical Services	60,800	\$58.59	\$121,870
Finance and Insurance	33,620	\$58.76	\$122,230
Computer Systems Design and Related Services	23,150	\$60.72	\$126,310
Information	22,240	\$68.84	\$143,180

Source: <https://www.bls.gov/oes/current/oes152051.htm>



Upcoming News and Events



2024 Military / Business Career Fair

July 16, 2024 - Hampton Roads

Open to the Public, Active-Duty/Retired Military, Reservists, DOD Civilians, Dependents, and Veterans)

Register at: <https://bit.ly/2024-VPC-CareerFair>

[Learn more about this event](#)

Department of Defense Summer Hiring Event

July 25, 2024 - Northern Virginia / Northern Valley

Washington Headquarters Services (WHS) is excited to launch our DOD Invitational Hiring Event on Thursday, July 25, 2024. Registration is required to attend.

[Learn more about this event](#)

Medical Assistants, Front Desk Representatives and Sleep Technicians!

July 31, 2024 - Capital/Crater

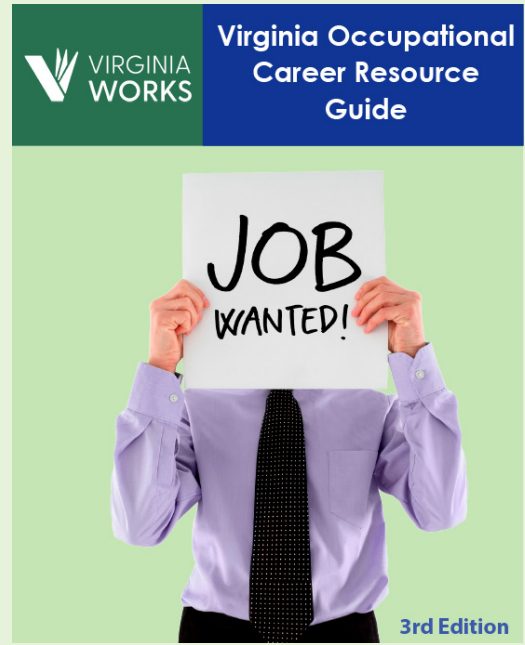
Hiring Medical Assistants, Front Desk Representatives and Sleep Technicians!

Pulmonary Associates of Richmond is hiring several candidates to fill multiple positions for Patient Care Representative (Front Desk), Medical Assistants, and Sleep Technicians (Day, Night, and Night PRN)

[Learn more about this event](#)

**For more Info on Upcoming Job Fairs,
Visit the Job fair page at**

<https://www.vec.virginia.gov/job-fairs>



Virginia Occupational Career Resource Guide

3rd Edition

The Virginia Occupational Career Resource Guide is produced by the Virginia Works to assist students and job seekers who are looking for information to aid them in researching and finding a new career. Information is provided on a variety of career choices; how to plan for a career; education needed to qualify for various jobs; projected job growth and median wages for various careers; how to apply and interview for jobs; and much more.

(The 3rd edition has been updated to include the 2021-2031 occupational projections and the latest wage data from May 2021)

https://virginiaworks.com/_docs/Publications/Career-Information/Occupational-Career-Guide/PDF/Occupational-Career-Resource-2023-DWDA.pdf

This monthly newsletter and other LMI publications can be found on the Virginia Works LMI website at:

<https://virginiaworks.com/Publications/index>

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