

VIRGINIA



EMPLOYMENT MONTHLY

May 2023



Virginia's April Unemployment Rate Decreased to 3.1 Percent

Participation Rate Rose to 66.2% with Employment Up by Over 25,000

- **Virginia's seasonally adjusted unemployment rate** edged downward in April to **3.1 percent**, which is a half of a percentage point above the rate from a year ago. According to household survey data in April, the labor force increased by 21,687 to 4,550,748 as the number of unemployed residents decreased by 3,440 to 140,129. The number of employed residents rose by 25,127 to 4,410,619.
- Virginia's seasonally adjusted unemployment rate continues to be below the national rate, which declined to 3.4 percent.
- The Commonwealth's **labor force participation rate** rose to **66.2 percent** in April.
- Virginia's **nonagricultural employment**, from the monthly establishment survey, rose by 1,400 jobs in April to **4,138,100**. March's preliminary estimate was revised down by 1,700, a subtraction from that month's job gain. In April, private sector employment increased by 1,000 jobs to 3,409,900 while public sector employment increased by 400 to 728,200. A decrease within that sector occurred in federal government (-100 jobs), while state government grew by 300 jobs and local government rose by 200 jobs over the month.
- The largest job loss during April occurred in professional and business services (-4,600 jobs) to 810,200. The second largest decrease occurred in construction, with a decrease of 1,300 jobs to 212,100. The third largest loss occurred in trade, transportation, and utilities with a decrease of 500 jobs to 665,000.
- From April 2022 to April 2023, the VEC estimates that **establishments** in Virginia **gained 87,000 jobs**, an increase of 2.1 percent. In April, the private sector recorded an over-the-year gain of 71,200 jobs, while employment in the public sector increased by 15,800 jobs.
- In April, four metropolitan areas experienced over-the-month job gains, two were unchanged, and four experienced a decline. The largest absolute job increase occurred in Virginia Beach-Norfolk-Newport News (+800 jobs). The next largest absolute job gain occurred in Richmond (+600 jobs). The third largest increase occurred in Harrisonburg (+200 jobs).
- The largest decrease occurred in Northern Virginia (-1,100 jobs). Other decreases include Staunton-Waynesboro (-300 jobs), with Blacksburg-Christiansburg-Radford and Winchester losing 100 jobs apiece.

Virginia Employment - April 2023

(seasonally adjusted)

United States Unemployment Rate (April 2022 - April 2023 percentage point)	3.4% (-0.2)
Virginia Unemployment Rate (April 2022 - April 2023 percentage point)	3.1% (0.5)
Civilian Labor Force (April 2022 - April 2023 Change)	4,550,748 (2.8%)
Labor Force Participation Rate (April 2022 - April 2023 percentage point)	66.2% (1.4)
Total Nonfarm Employment (April 2022 - April 2023 Change)	4,138,100 (2.1%)
Number of Establishments, 4th Quarter 2022 (4th Quarter 2021 - 4th Quarter 2022 Change)	307,995 (5.6%)
Average Weekly Wage, 4th Quarter 2022 (4th Quarter 2021 - 4th Quarter 2022 Change)	\$1,416 (-0.6%)

MSA Unemployment Rates (percent) March 2023

(not seasonally adjusted)

(March 2022 - March 2023 percentage point)

Blacksburg-Christiansburg-Radford MSA	2.8 (-0.1)
Bristol MSA (VA part)	3.1 (0.3)
Charlottesville MSA	2.6 (0.1)
Harrisonburg MSA	2.8 (0.2)
Lynchburg MSA	3.3 (0.3)
Northern VA MSA (VA part)	2.5 (0.1)
Richmond MSA	3.0 (0.3)
Roanoke MSA	2.8 (0.2)
Staunton-Waynesboro MSA	2.6 (0.1)
Virginia Beach-Norfolk-Newport News, Virginia/NC MSA (VA part)	3.1 (0.2)
Winchester, Virginia/WV MSA (VA part)	2.5 (0.2)

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Economic Information & Analytics Division
6606 West Broad St., Richmond, VA 23230

Trust Fund Data - April 2023

Financial Data

- Trust Fund Balance (millions) \$1,500.0
- Tax Revenue (Monthly) (millions) \$69.4

Benefits Data

- Benefits Paid (Monthly) (millions) \$18.7
- Average Weekly Benefit \$341.05
- Initial Claims (YTD) 52,140

Initial and Continued Claims

Initial Claims:

- There were 12,214 initial claims in April 2023.
- Initial claims decreased by 8.5% over the month.
- Year-to-date initial claims were 17.8% higher in April 2023 compared to the same period in 2022.

Continued Claims:

- There were 69,125 continued claims in April 2023.
- This was a 1.3% decrease over-the-month and a 54.3% increase over-the-year.
- Year-to-date continued claims were 51.7% higher than during the same period in 2022.

Note: Claims counts include interstate and intrastate.

Monthly Claims Data			
	Initial Claims	Recipients	Final Payments
April 2023	12,214	14,496	1,101
March 2023	13,349	13,992	1,243
April 2022	10,203	8,256	2,061

Virginia Unemployment Insurance Weekly Initial Claims at 2,621; Professional, Scientific and Technical Services Leading Industry for Claims

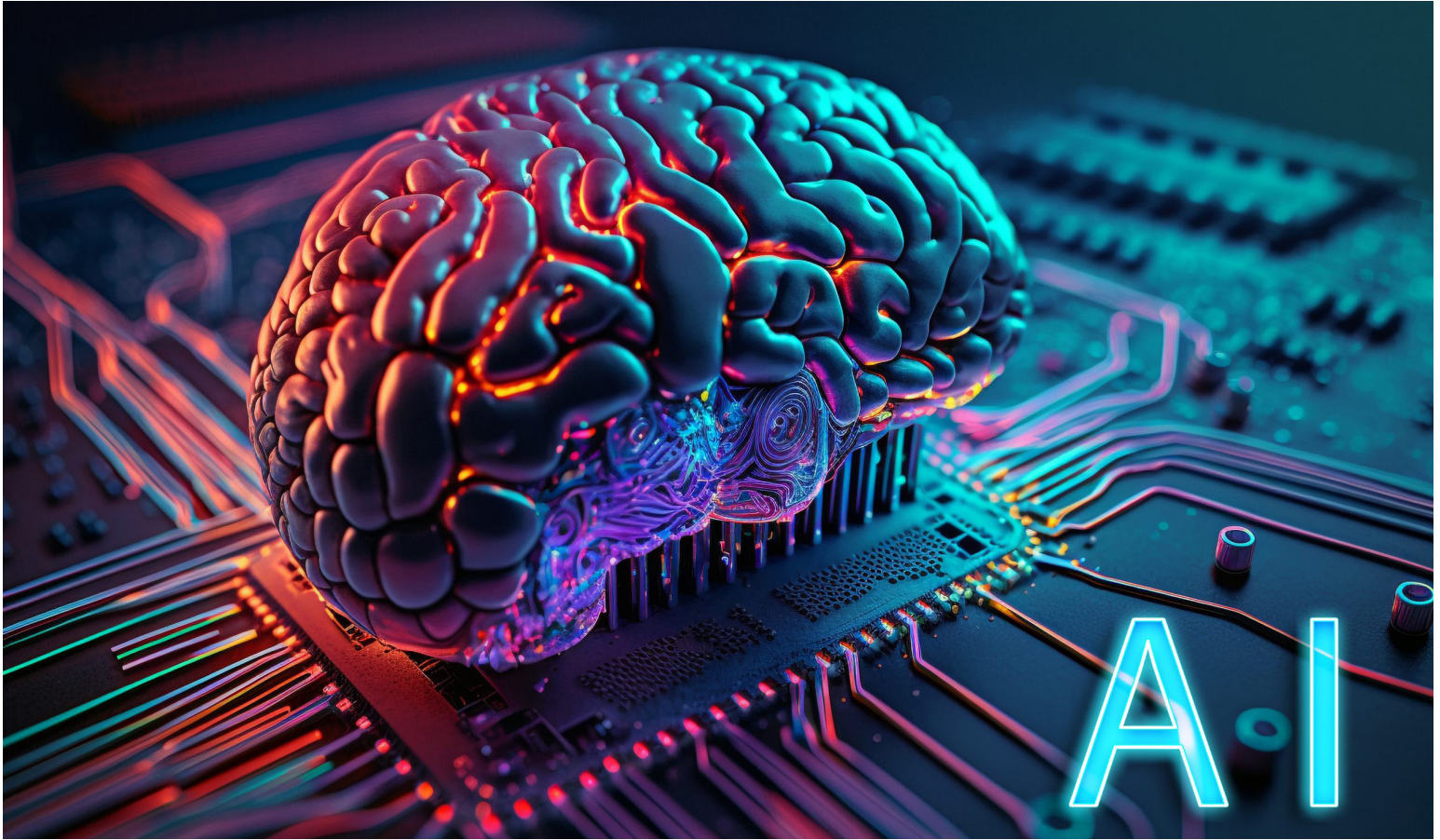


The number of initial claims decreased in the latest filing week to 2,621 and remained at the typical pre-Pandemic volumes experienced in 2019.

For the filing week ending May 13, the figure for seasonally unadjusted initial claims in Virginia was 2,621, which was a decrease of 715 claimants from the previous week. Over half of initial claims with a self-reported industry were from professional, scientific, and technical services; manufacturing; administrative and support services and waste management; and accommodation and food services. Continued weeks claimed totaled 12,724, which was essentially unchanged from the previous week but an increase of 50% from the 8,511 continued claims from the comparable week last year.

In the week ending May 13, the advance U.S. figure for seasonally adjusted initial claims was 242,000, a decrease of 22,000 from the previous week's unrevised level of 264,000. The advance number of actual initial claims under state programs, unadjusted, totaled 215,810 in the week ending May 13, a decrease of 18,605 (or -7.9 percent) from the previous week. There were 199,631 initial claims in the comparable week in 2022. Looking at preliminary data, most U.S. states reported decreases on a seasonally unadjusted basis. Massachusetts's preliminary weekly change (-14,042) was the largest decrease. Missouri's weekly change (-2,328) was the second largest decrease. New Jersey's preliminary weekly change (-1,134) was the third largest decrease. Arizona's weekly change (-844) was the fourth largest decrease. Virginia's preliminary weekly change (-609) was the eighth largest decrease.

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What is the difference between Artificial Intelligence, Machine Learning, and Automation, and how could it impact the Virginia Workforce?

Artificial intelligence (AI), machine learning (ML), and automation are all related but distinct concepts in computer science. While they share some similarities, they have different goals, applications, and techniques.

Artificial Intelligence (AI): AI refers to the development of computer systems that can perform tasks that typically require human intelligence, such as perception, reasoning, learning, and decision-making. The goal of AI is to create machines that can mimic human cognitive abilities and behave intelligently in different scenarios. AI can be categorized into several types, including:

1. *Rule-based systems:* These are AI systems that use if-then rules to make decisions or perform tasks based on a set of predefined rules. For example, a spam filter that blocks emails containing specific keywords uses a rule-based system.
2. *Expert systems:* These are AI systems that emulate the decision-making ability of human experts in a specific domain. They use knowledge representation and inference techniques to reason about a problem and generate solutions.
3. *Neural networks:* These are AI systems that are inspired by the structure and function of the human brain. They learn to perform tasks by training on large datasets and adjusting their internal parameters to minimize the error between the predicted output and the actual output.

Machine Learning (ML): ML is a subfield of AI that focuses on the development of algorithms that can learn from data and make predictions or decisions based on that data. ML is based on the idea that machines can learn from experience and improve their performance over time. ML algorithms can be divided into three categories:

1. *Supervised learning:* In this type of ML, the algorithm learns from labeled data, which is data that has been annotated with the correct output. The algorithm tries to find patterns in the data that can be used to predict the output for new, unseen data.
2. *Unsupervised learning:* In this type of ML, the algorithm learns from unlabeled data, which is data that has not been annotated with the correct output. The algorithm tries to find patterns and structures in the data without any prior knowledge of the output.
3. *Reinforcement learning:* In this type of ML, the algorithm learns from interaction with an environment by receiving rewards or punishments for certain actions. The algorithm tries to find the optimal policy that maximizes the reward over time.

Automation: Automation refers to the use of technology to automate tasks that are typically performed by humans. The goal of automation is to increase efficiency, reduce errors, and improve productivity by using machines, software, and other tools to carry out tasks with minimal human intervention. Automation can be applied to various fields such as manufacturing, healthcare, finance, and transportation. Some examples of automation include:

1. *Robotic process automation (RPA):* This involves using software bots to perform repetitive and mundane tasks, such as data entry and invoice processing.
2. *Industrial automation:* This involves using machines and robots to perform tasks in manufacturing, such as assembling parts and welding.
3. *Intelligent automation:* This involves using AI and ML techniques to automate complex tasks that require cognitive abilities, such as natural language processing and decision-making.

AI has been in the news a lot lately with the introduction of ChatGPT to the world. ChatGPT is a language model developed by OpenAI. It is based on the GPT-3.5 architecture, which stands for "Generative Pre-trained Transformer 3.5." GPT-3.5 is a state-of-the-art language model that uses deep learning techniques to generate human-like text responses based on the input it receives.

ChatGPT is specifically designed for conversational interactions and can engage in dialogue with users, providing information, answering questions, and generating text-based responses. It has been trained on a wide range of internet text data to learn patterns, context, and language structure, enabling it to generate coherent and contextually relevant responses.

This new technology has the potential to significantly impact the Virginia workforce, as it is expected to transform various industries and create new job opportunities while displacing some existing jobs. Here are some ways in which AI could affect the Virginia workforce in detail:

1. *Automation of routine tasks:* AI technologies such as robotic process automation (RPA) and cognitive automation can automate routine tasks such as data entry, customer service, and administrative tasks. This could lead to job displacement for workers who perform these tasks. Occupations such as office and administrative support, transportation, and production occupations are at higher risk of automation.
2. *Increased demand for high-skilled workers:* While AI may replace some low-skilled jobs, it will also create new job opportunities that require high-skilled workers. For example, AI could increase demand for workers with expertise in data analysis, machine learning, and natural language processing. Occupations such as computer and mathematical, management, and healthcare practitioners and technical occupations are at lower risk of automation and may experience higher demand for workers.
3. *Improved efficiency and productivity:* AI technologies can improve efficiency and productivity in various industries such as manufacturing, healthcare, and transportation. For example, AI can be used to optimize supply chains, improve patient outcomes, and enhance safety in transportation. This could lead to increased demand for workers who can operate and maintain these technologies. Industries such as transportation, manufacturing, and healthcare may experience the greatest impact from automation.
4. *Changes in job roles and tasks:* AI could lead to changes in job roles and tasks. For example, some tasks that were previously done by humans may be automated, while new tasks may be created that require human oversight and decision-making. For example, the use of AI in healthcare could lead to the creation of new roles such as healthcare data analysts, while also automating some tasks such as medical coding and billing.
5. *Need for up-skilling and re-skilling:* To adapt to the changes brought about by AI, workers may need to up-skill or re-skill to remain employable. This could include learning new technical skills or developing soft skills such as critical thinking and creativity. Education and training programs will be crucial in preparing the workforce for the changes ahead.

In summary, AI is likely to have a significant impact on the Virginia workforce, with some occupations facing higher risks of automation than others. To mitigate the negative effects of AI and ensure a smooth transition, it is crucial for businesses, policymakers, and workers to adapt and prepare for the changes ahead. This may involve investing in education and training programs, fostering innovation, and creating new opportunities for workers to transition into new roles.

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Top 10 Careers that are high risk of being replaced by AI

by Total Number of Jobs

01	Cashier	3,318,020
02	Customer Service Representatives	2,787,070
03	Bookkeeper	991,047
04	IT Support Technician	690,525
05	Billing Clerk	477,349
06	HR Assistant	384,826
07	Paralegal Assistant	336,250
08	Compliance Officer	334,340
09	Claims Assessor	314,300
10	Executive Assistant	304,678

High

NetVoucherCodes

Full Data & Method: www.netvouchercodes.co.uk/blog/usa-ai-job-risk

Top 10 States with the most jobs that could be replaced by AI

Total Jobs by High & Medium Chance

			High	Med
01	California	CA	321,900	1,231,370
02	Texas	TX	237,000	1,071,420
03	New York	NY	200,060	726,620
04	Florida	FL	172,110	792,260
05	Pennsylvania	PA	120,790	430,790
06	Illinois	IL	109,560	462,230
07	Ohio	OH	107,080	411,470
08	Virginia	VA	92,200	344,160
09	North Carolina	NC	90,270	375,460
10	New Jersey	NJ	85,550	291,300

High

Med

NetVoucherCodes

Full Data & Method: www.netvouchercodes.co.uk/blog/usa-ai-job-risk



Upcoming Events

Allied Universal Hiring Event in Staunton, Virginia

May 31, 2023 - Valley / Roanoke

Allied Universal is hiring Security Officers for Allied Universal in the Staunton, Virginia Area!

[Learn more about this event](#)

Hiram W. Davis Medical Center in Petersburg, Virginia

May 31, 2023 - Capital Crater

We are having on the spot interviews and job offers for C.N.A, LPN, RN, Food Service and Housekeeping positions. Some of these positions have up to \$5,000 Sign On Bonus!! There will be vendors and giveaways at this event.

To apply for any positions visit www.jobs.virginia.gov

Orange County Public Schools Job Fair in Central Virginia

June 10, 2023 - Valley / Roanoke

Looking for a job that allows you to improve the future by empowering our students to value learning, reach their potential and achieve their dreams?

[Learn more about this event](#)

Western Virginia Water Authority Job Fair - Open House

June 14, 2023 - Valley / Roanoke

The Western Virginia Water Authority is hosting a Job Fair - Open House at our Field Operations location on June 14 from 7am - 6pm! Come learn about the positions we have to offer, from Customer Service to Field Operations and Water Treatment.

[Learn more about this event](#)

TECHEXPO Top Secret Returns In-Person on June 15th!

June 15, 2023 - Northern Virginia / Northern Valley

Don't miss your opportunity to interview with leading Defense Employers.

TECHEXPO Top Secret Hiring Event & Networking Reception

Thursday, June 15th

Location: BWI Marriott (1743 West Nursery Road, Linthicum Heights, MD 21090)

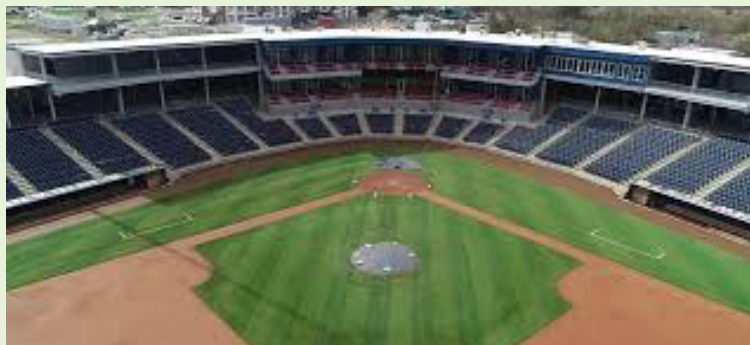
[Learn more about this event](#)

Career Fair at Fredericksburg Nationals Stadium (Annual Juneteenth Celebration)

June 17, 2023 - Northern Virginia / Northern Valley

Companies from across the region (planning district 16) will be present in the Executive Club Lounge at Virginia Credit Union Stadium (home of the Fredericksburg Nationals).

[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>