EMPLOYMENT MONTHLY

December 2024

Feature Article:

Heading into 2025, How Rapidly Might Virginia Businesses Adopt Artificial Intelligence?

November 2024 Monthly Indicators

(Seasonally Adjusted)

Total Nonfarm Employment
⬆ **4,260,100**

Unemployment
⬆ **137,033**

Labor Force Participation Rate
= **66.0%**

Unemployment Rate
⬆ **3.0%**

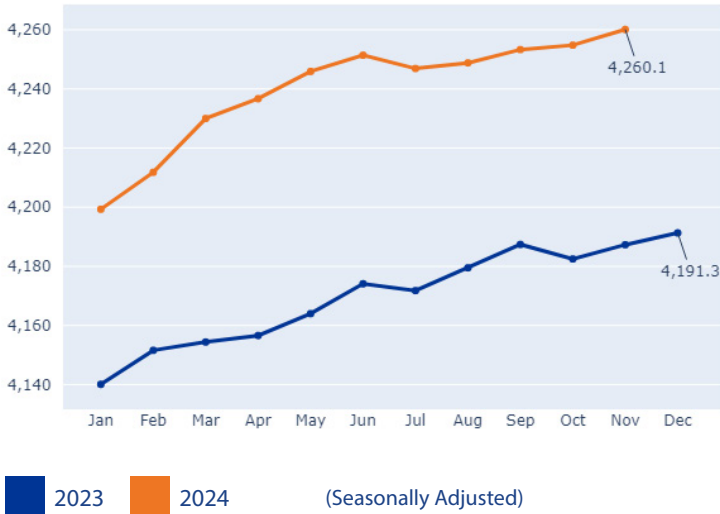Note: Arrows indicate movement from previous month.

Current Employment Indicators

Nonagricultural Wage and Salary Employment (Thousands)

4,260.1

4,191.3

| 2023 | 2024 | (Seasonally Adjusted) |

Employment Highlights

- Virginia's seasonally adjusted unemployment rate in November increased by 0.1 percentage points to 3.0 percent, which is 0.1 percentage points below the rate from a year ago.

- Virginia's labor force participation rate remained unchanged at 66.0 percent in November.

- In November, the labor force increase by 3,327 to 4,578,676 as the number of unemployed residents increased by 3,431 to 137,033.

- Virginia's nonagricultural employment, from the monthly establishment survey increased by 5,300 to 4,260,100.
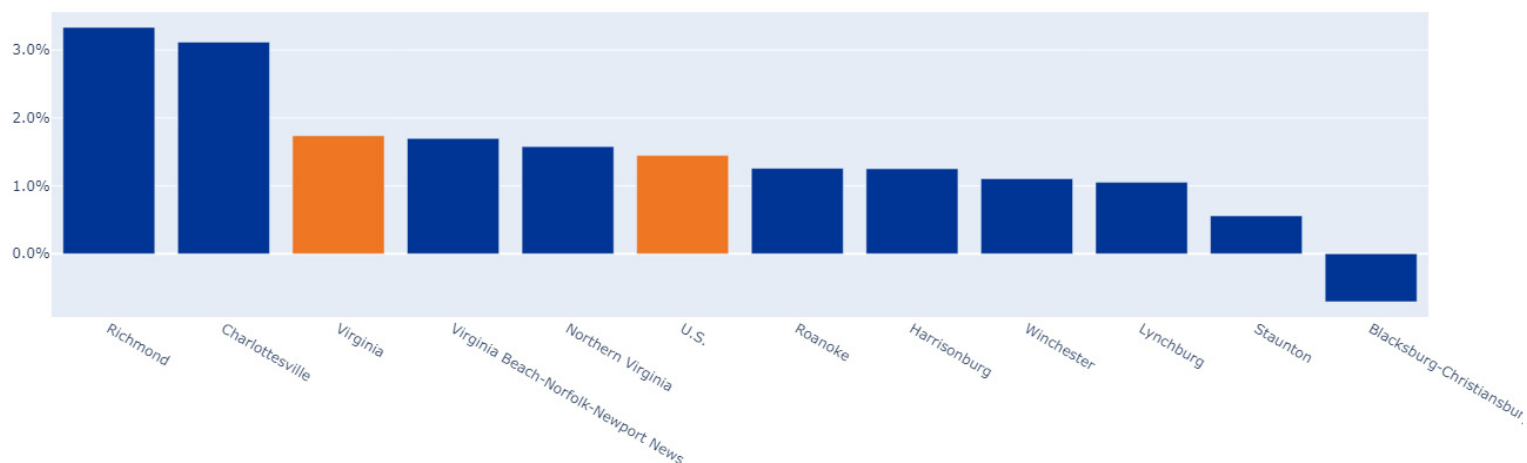
Total Nonfarm Employment by Metropolitan Statistical Area (MSA)
(Seasonally Adjusted)

MSA	Employment			November 2023 to November 2024	
	November 2024	October 2024	November 2023	Change	% Change
Virginia	**4,260,100**	**4,254,800**	**4,187,300**	**72,800**	**1.7%**
Blacksburg-Christiansburg-Radford MSA	84,300	85,000	84,900	-600	-0.7%
Charlottesville MSA	129,000	128,500	125,100	3,900	3.1%
Harrisonburg MSA	72,800	72,800	71,900	900	1.3%
Lynchburg MSA	105,700	105,300	104,600	1,100	1.1%
Northern Virginia MSA	1,601,100	1,600,400	1,576,200	24,900	1.6%
Richmond MSA	737,700	734,800	713,900	23,800	3.3%
Roanoke MSA	168,900	168,900	166,800	2,100	1.3%
Staunton MSA	54,100	54,000	53,800	300	0.6%
Virginia Beach-Norfolk-Newport News MSA	826,700	826,300	812,900	13,800	1.7%
Winchester MSA	73,200	72,700	72,400	800	1.1%

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			November 2023 to November 2024	
	November 2024	October 2024	November 2023	Change	% Change
Total Nonfarm	**4,260,100**	**4,254,800**	**4,187,300**	**72,800**	**1.7%**
Total Private	3,506,300	3,501,900	3,447,100	59,200	1.7%
Goods Producing	486,100	485,100	471,800	14,300	3.0%
Mining and Logging	7,400	7,300	7,300	100	1.4%
Construction	230,700	229,200	217,900	12,800	5.9%
Manufacturing	248,000	248,600	246,600	1,400	0.6%
Service-Providing	3,774,000	3,769,700	3,715,500	58,500	1.6%
Private Service Providing	3,020,200	3,016,800	2,975,300	44,900	1.5%
Trade, Transportation, and Utilities	678,200	676,900	674,500	3,700	0.5%
Information	70,000	69,800	69,300	700	1.0%
Financial Activities	220,400	221,200	222,200	-1,800	-0.8%
Professional and Business Services	816,800	817,500	801,600	15,200	1.9%
Education and Health Services	608,700	605,800	589,800	18,900	3.2%
Leisure and Hospitality	422,400	423,600	416,600	5,800	1.4%
Miscellaneous Services	203,700	202,000	201,300	2,400	1.2%
Government	753,800	752,900	740,200	13,600	1.8%
Federal Government	190,900	191,200	190,100	800	0.4%
State Government	168,500	167,800	157,300	11,200	7.1%
Local Government	394,400	393,900	392,800	1,600	0.4%

Current month's estimates are preliminary.

Current Unemployment Indicators

Virginia Unemployment Rate
(Percent)
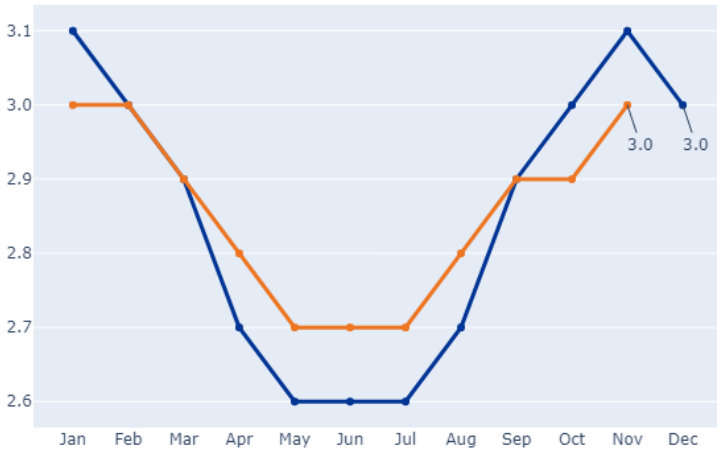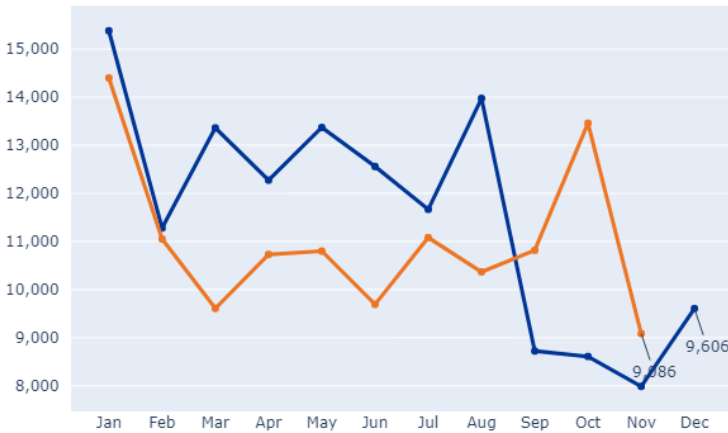

Unemployment Insurance - November 2024

Financial Data

- Trust Fund Balance (millions) $1,504.9
- Tax Revenue (Monthly) (millions) $1.9

Benefits Data

- Benefits Paid (Monthly) (millions) $24.1
- Average Weekly Benefit $397.12
- Initial Claims (YTD) 121,016
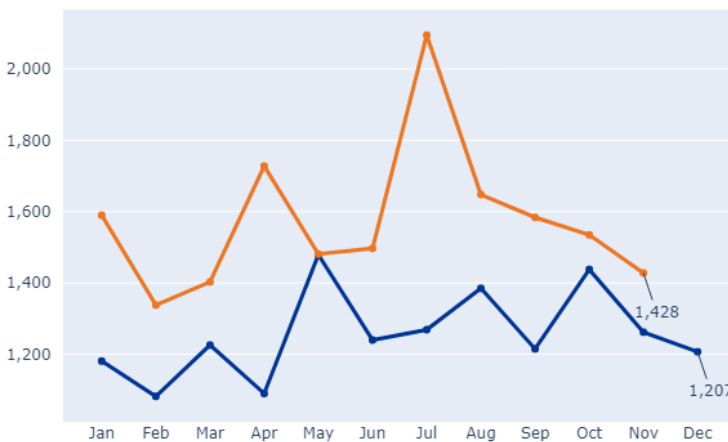
Initial and Continued Claims

Initial Claims:

- There were 9,086 initial claims in November 2024.
- Initial claims decreased by 32.5% over-the-month and increased by 13.7% over-the-year.
- Year-to-date initial claims were 6.3% lower in November 2024 compared to the same period in 2023.

Continued Claims:

- There were 76,509 continued claims in November 2024.
- This was a 5.2% decrease over-the-month and a 22.6% increase over-the-year.
- Year-to-date continued claims were 16.1% higher in November than during the same period in 2023.

*Note: Claims counts include interstate and intrastate.*

Average Weekly Initial Claims

Unemployment Insurance Final Payments

	Initial Claims	Continued Claims	Recipients	Final Payments
November 2024	9,086	76,509	1,428	1,535
October 2024	13,459	80,684	14,799	1,535
November 2023	7,988	62,381	11,728	1,252

■ 2023   ■ 2024   (Seasonally Adjusted)

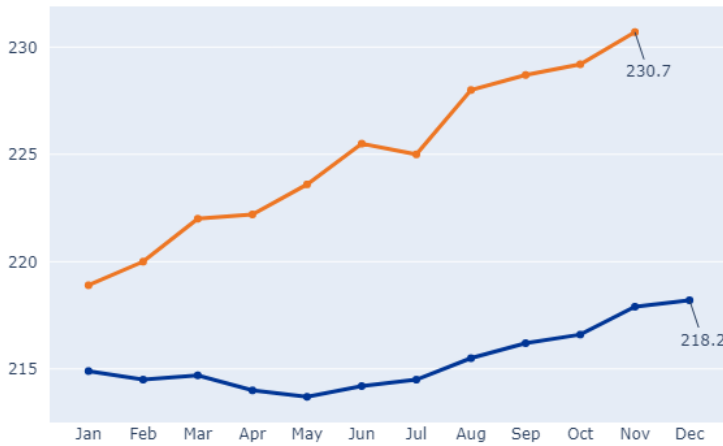# Current Industry Indicators

Mining and Logging Employment
(Thousands)
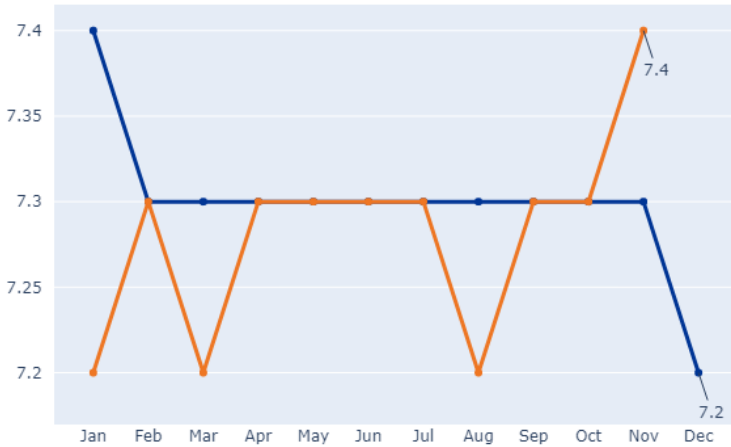
Wholesale Trade Employment
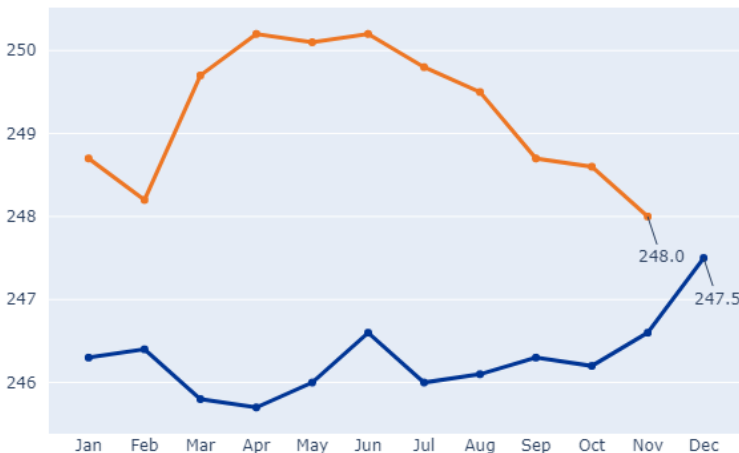### (Thousands)
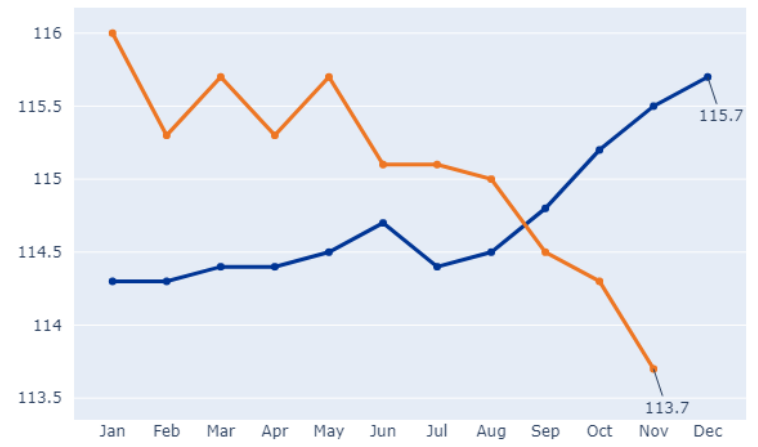
Construction Employment
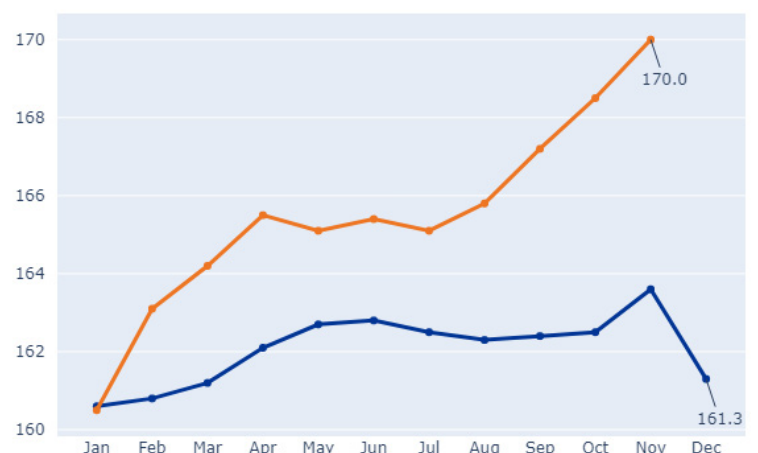### (Thousands)

Retail Trade Employment
(Thousands)
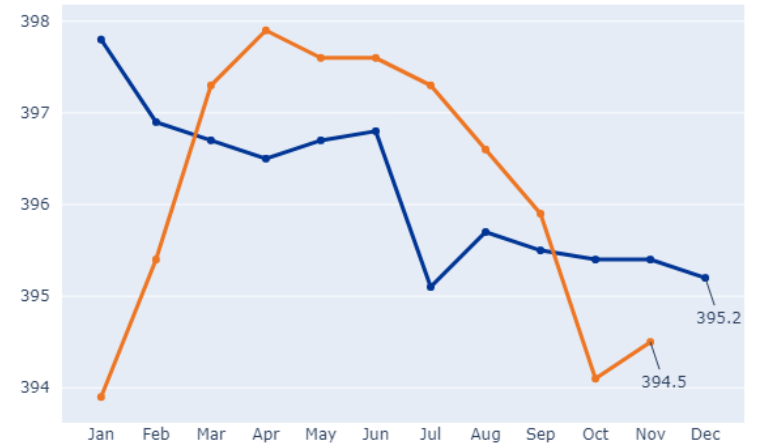
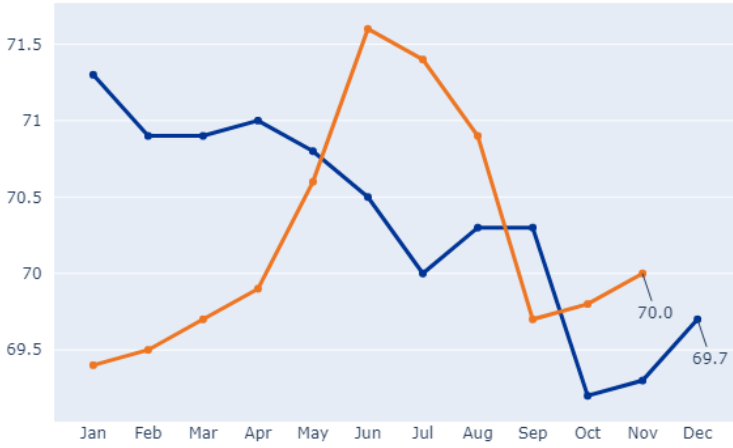### Manufacturing Employment
(Thousands)

Transportation, Warehousing, and Utilities Employment
(Thousands)
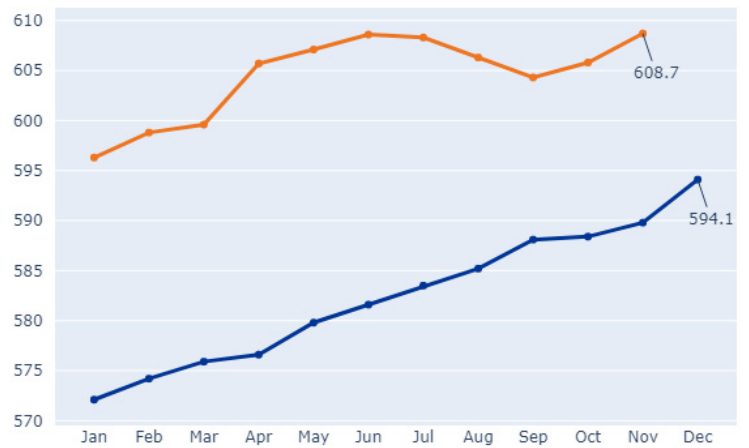

2023   2024   (Seasonally Adjusted)

Information Employment
(Thousands)

Private Education and Health Services Employment
(Thousands)

608.7

594.1

Finance Employment
(Thousands)

222.6

220.4
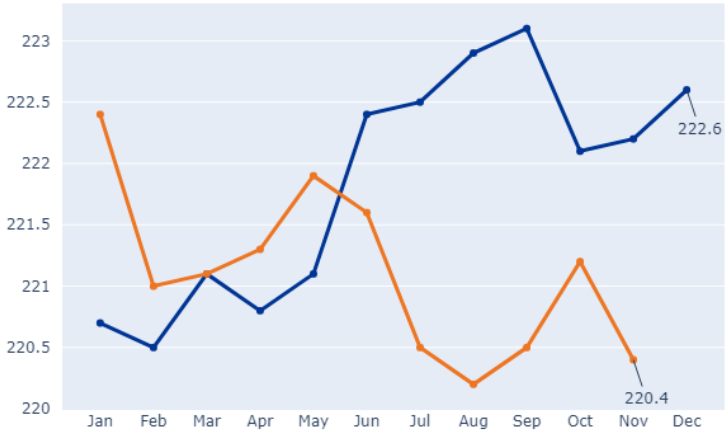
Leisure and Hospitality Services Employment
(Thousands)

422.4

418.8
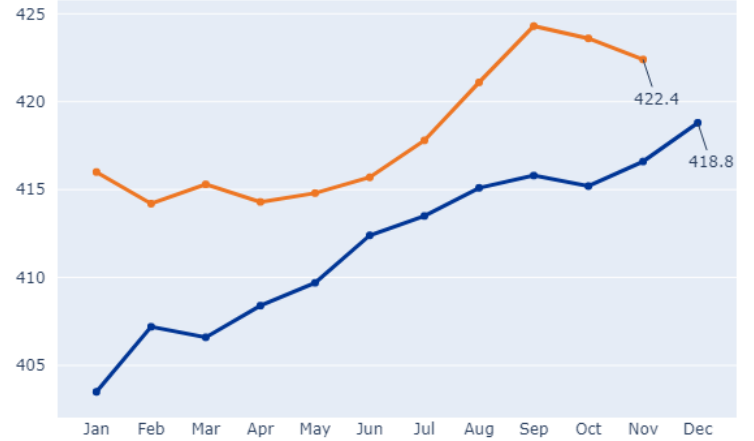
Professional and Business Services Employment
(Thousands)

816.8

802.8
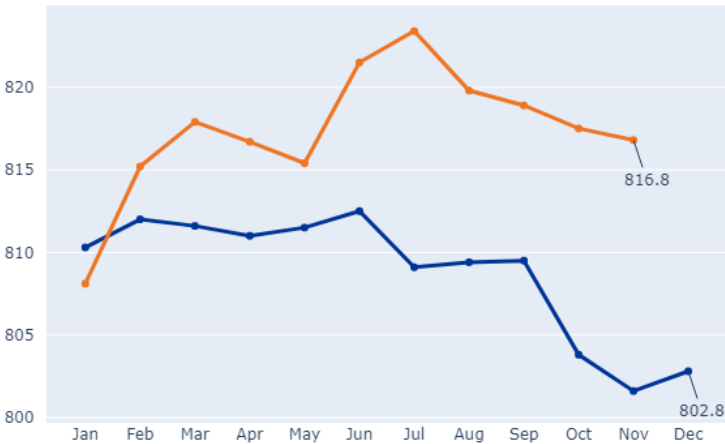
Miscellaneous Services Employment
(Thousands)

203.7

201.2

■ 2023   ■ 2024   (Seasonally Adjusted)
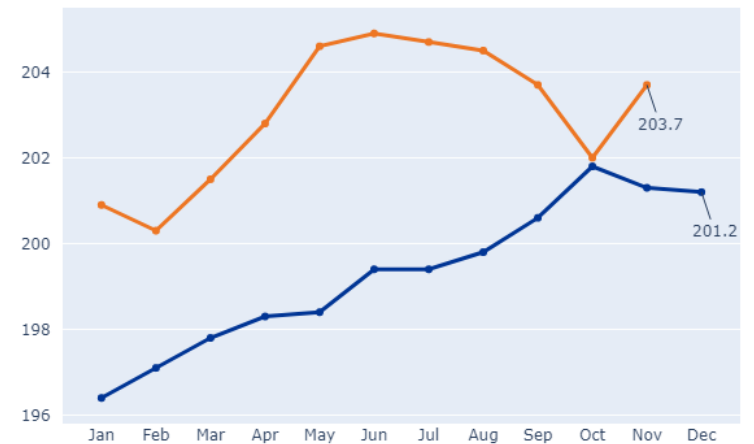
Federal Government Employment
(Thousands)
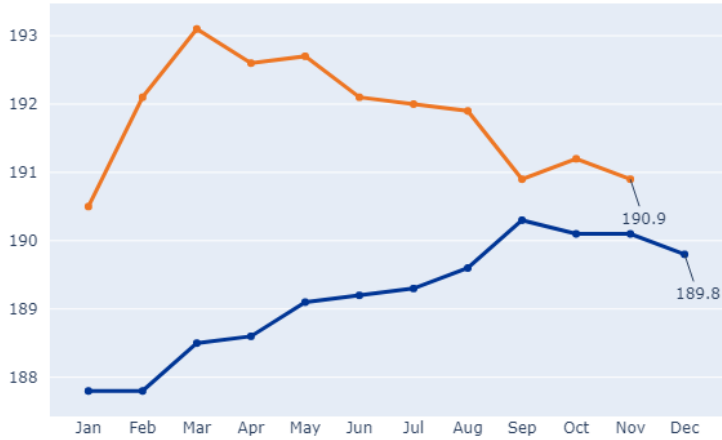
State Government Employment
(Thousands)
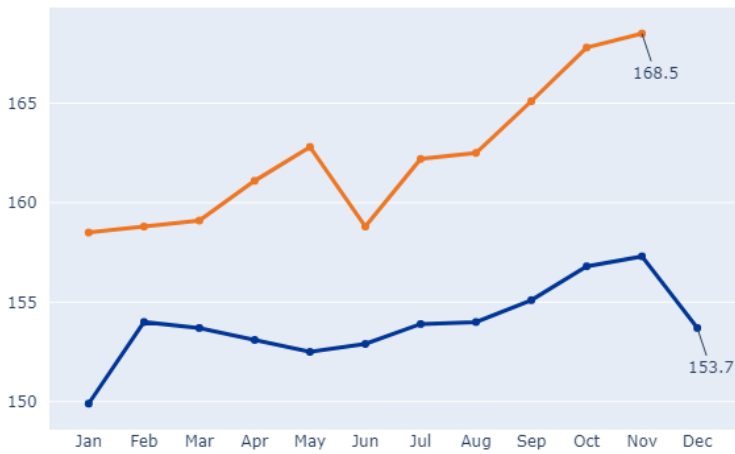
Local Government Employment
(Thousands)
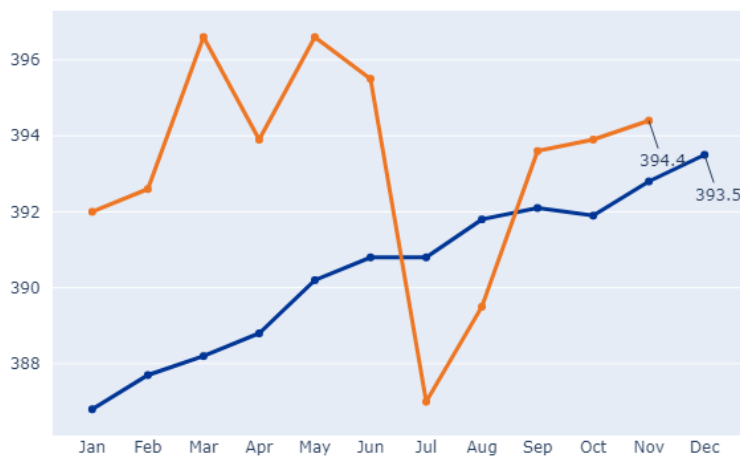
Industry Highlights

- In November, private sector employment increased by 4,400 to 3,506,300 while government employment increased by 900 to 753,800. Within that sector, federal government jobs decreased by 300 to 190,900, state government employment increased by 700 to 168,500, and local government increased by 500 to 394,400 over the month.

- In November, the largest job gain occurred in Education and Health Services (+2,900) to 608,700. The second largest job gain occurred in Miscellaneous Services (+1,700) to 203,700. The third largest job gain occurred in Construction (+1,500) to 230,700.

- The largest job loss occurred in Leisure and Hospitality (-1,200) to 422,400. The second largest job loss occurred in Financial Activities (-800) to 220,400. The third largest job loss occurred in Professional and Business Services (-700) to 816,800.
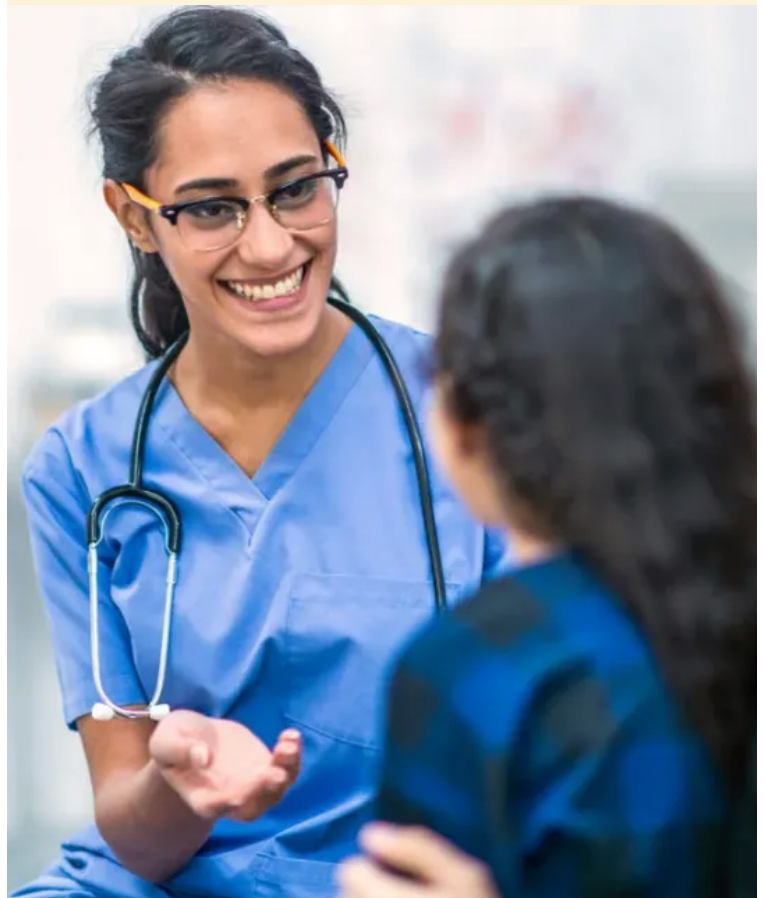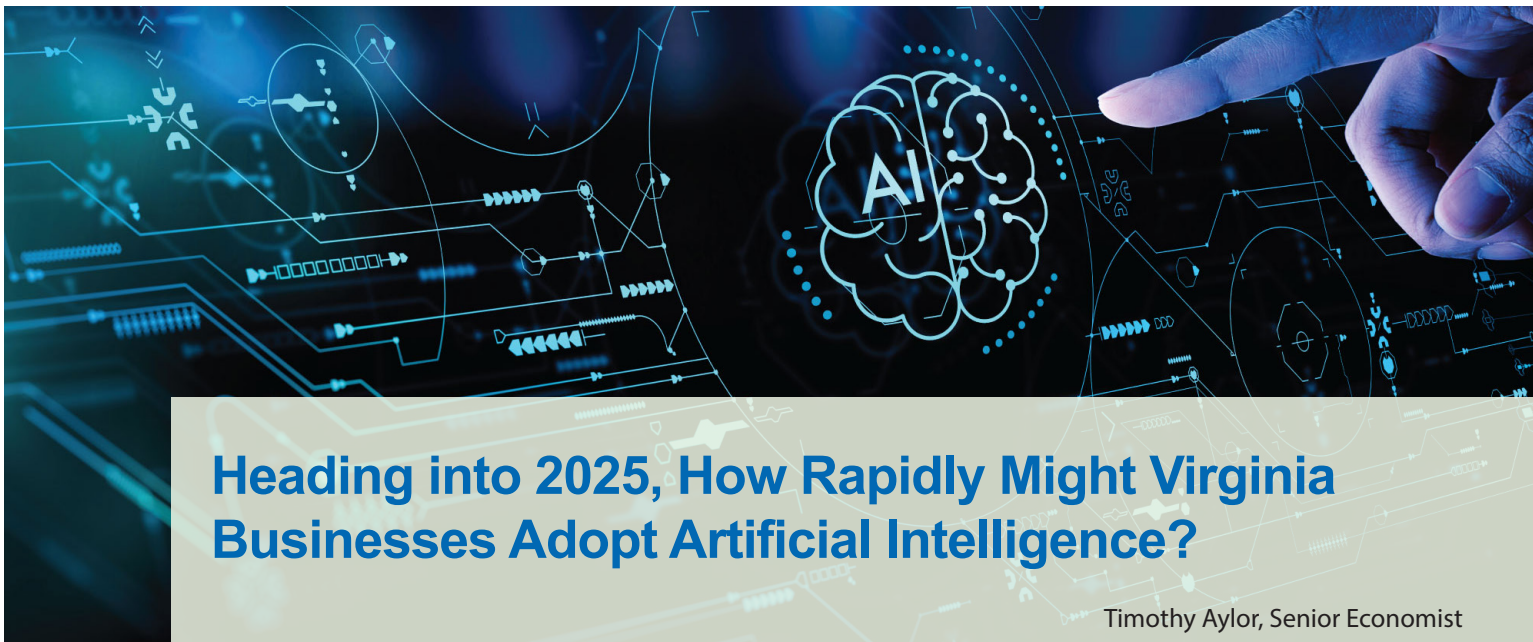
Heading into 2025, How Rapidly Might Virginia Businesses Adopt Artificial Intelligence?

Timothy Aylor, Senior Economist

Artificial intelligence (AI) has loomed on the horizon for a while but now it's here. More businesses are incorporating it into their business processes every day and its wide-ranging impacts on the economy and the workforce remain uncertain, so measuring its adoption and impacts is crucial. The adoption of artificial intelligence by business is considered by many to be an important driver of innovation and economic growth in the Commonwealth. Virginia Governor Glenn Youngkin recently signed an executive order[1] that formed a new task force to advise on AI policies and will pull in experts from universities, non-profits, and businesses. Governor Youngkin said, "When I signed my artificial intelligence executive order, I was very clear that while there are amazing opportunities with AI, there are also inherent risks that we must tackle head-on."

The Census Bureau has published up-to-date estimates of current and expected future use of AI for business purposes based on the Business Trends and Outlook Survey (BTOS) for September 2023 through the first week of December 2024.[3] The BTOS collection included two questions about the use of AI in the production of goods and services. These "core" AI questions asked about two time periods: current (previous two weeks) use and anticipated use six months in the future. Supplemental content was added to the BTOS from December 2023 to February 2024 to provide more detailed U.S. information about businesses' use of AI.[4]

"The ultimate impact of generative AI on the economy depends on how quickly and intensively the technology is adopted. Yet there is little systematic evidence of the extent to which generative AI is used at work and at home. Who uses generative AI, how much do they use it, and what do they use it for?"[2]

- National Bureau of Economic Research

"Looking forward to the first half of 2025, ten percent of Virginia businesses anticipated using AI in producing their goods and services, a significant increase over the beginning of 2024."

These new survey questions on artificial intelligence indicate that adoption accelerated over the summer in Virginia; both in recent use for business purposes (6.7 percent in the most recent survey) and anticipated use during the first half of the new year (10.1 percent in the most recent survey). These are higher rates than nationwide, where current use stood at five percent and anticipated use at 6.5 percent. At the beginning of 2024, Virginia business current use stood at around four percent with anticipated use at six percent. Examples of this AI include machine learning, natural language processing, virtual agents, and voice recognition, among other applications.

Although technology like artificial intelligence is used throughout the Commonwealth, Northern Virginia businesses rely even more on it. The BTOS survey produced estimates for the largest 25 metro areas and the Washington metro area reported a significantly higher rate of use than nationwide—10.6 percent current use and 14.1 percent anticipated use in the next six months.

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1 "Governor Glenn Youngkin Announces a New Artificial Intelligence Task Force." Office of the Governor, October 16, 2024. www.governor.virginia.gov/newsroom/news-releases/2024/october/name-1035371-en.
2 Bick, A., A. Blandin, and D. Deming (Sept. 2024). "*NBER Working Papers: The Rapid Adoption of Generative AI.*" National Bureau of Economic Research.
3 Buffington, C., L. Foster, and C. Shevlin (May 2023). "*Measuring Business Trends and Outlook through a New Survey.*" American Economic Association.
4 U.S. Census Bureau, Business Trends and Outlook Survey (BTOS). The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data.

"In the last two weeks, did this business use Artificial Intelligence (AI) in producing goods or services?"
"During the next six months, do you think this business will be using Artificial Intelligence (AI) in producing goods or services?"
Source: U.S. Census Bureau, Business Trends and Outlook Survey, Virginia responses. September 24, 23- December 1, 2024
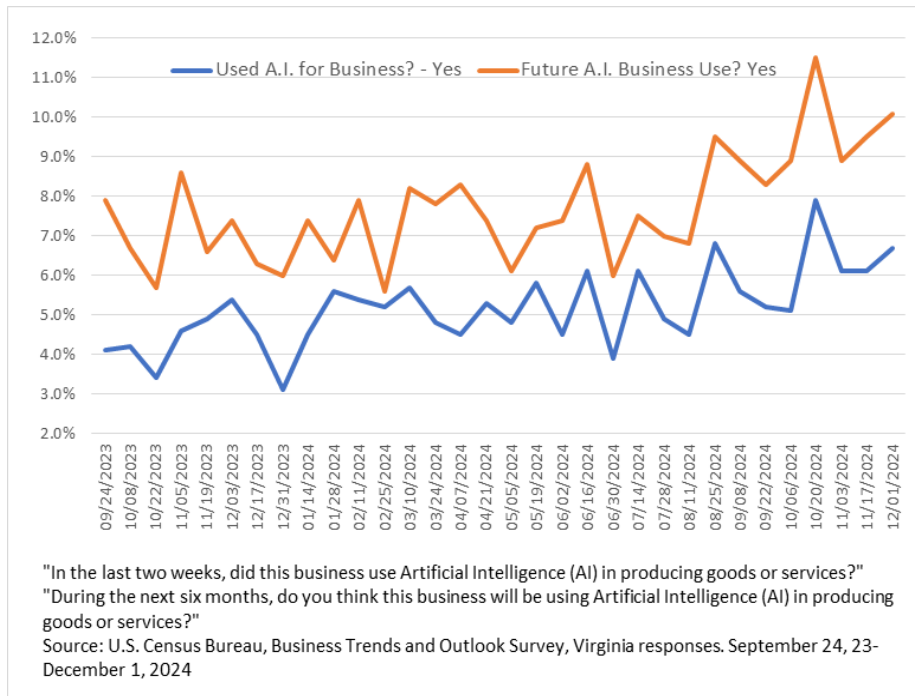
The special detailed AI supplement produced in February 2024 provides more insights into what is driving AI adoption across the United States. Results indicate that every major industry has utilized AI, but some have adopted it more than others. As one might expect, the Information industry[5] led in current use. Eighteen percent of respondents said that their business had, in the past two weeks, used AI in goods or services production. Examples of IT services found within the Information industry include publishing, data processing, and web search portals. The second largest using industry was Professional, Scientific, and Technical Services, with a twelve percent usage rate. Activities in this industry often require a high degree of expertise and training. Examples of the types of services provided include design, consulting, research, advertising, and translation services.[6]

Source: U.S. Census Bureau, Business Trends and Outlook AI Supplement, February 2024.

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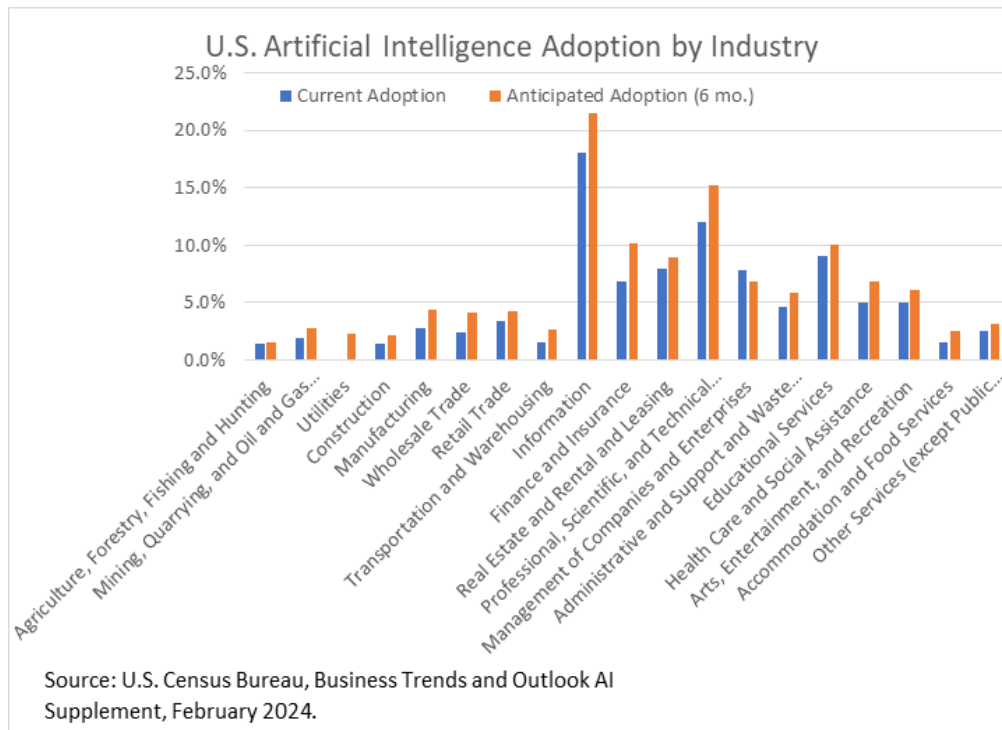
5   The Information industry comprises establishments engaged in the following processes: (a) producing and distributing information and cultural products, (b) providing the means to transmit or distribute these products as well as data or communications, and (c) processing data. The main components of this industry are motion picture and sound recording industries; publishing industries, including software publishing; broadcasting and content providers; telecommunications industries; computing infrastructure providers, data processing, Web hosting, and related services; and Web search portals, libraries, archives, and other information services.

Some industries that lead AI adoption have employment that is concentrated[7] in Virginia—especially in Northern Virginia, which may point to Virginia continuing to be a regional leader in artificial intelligence business adoption in the new year. Looking at payroll employment data[8,] private sector Information employment is not concentrated in Virginia, but state and local government Information employment is. With over 800,000 jobs in Virginia, Professional and Business Services jobs are highly concentrated in private business employment as well as in government. The Commonwealth is also well represented in other industries adopting artificial intelligence like Financial Activities, and Education and Health Services.

"Some industries that lead AI adoption have employment that is concentrated in Virginia—especially in Northern Virginia, which may point to Virginia continuing to be a regional leader in artificial intelligence business adoption in the new year. Among Southeastern states, Virginia reported the second highest "Yes" response rate to the question "During the next six months, do you think this business will be using artificial intelligence?"

Might this industry concentration in Virginia imply higher adoption trends compared to other states in the Southeast? Southeastern state responses from the December 2024 BTOS survey indicate that the Commonwealth more than holds its own in terms of business AI adoption. Looking at the averages of all the survey results published in 2024, Virginia reported the second highest "Yes" response rate to the question "During the next six months, do you think this business will be using artificial intelligence?" Florida reported the highest rate of anticipated use with South Carolina reporting the lowest. Results were similar regarding current use.

Source: U.S. Census Bureau, Business Trends and Outlook, December 2024.
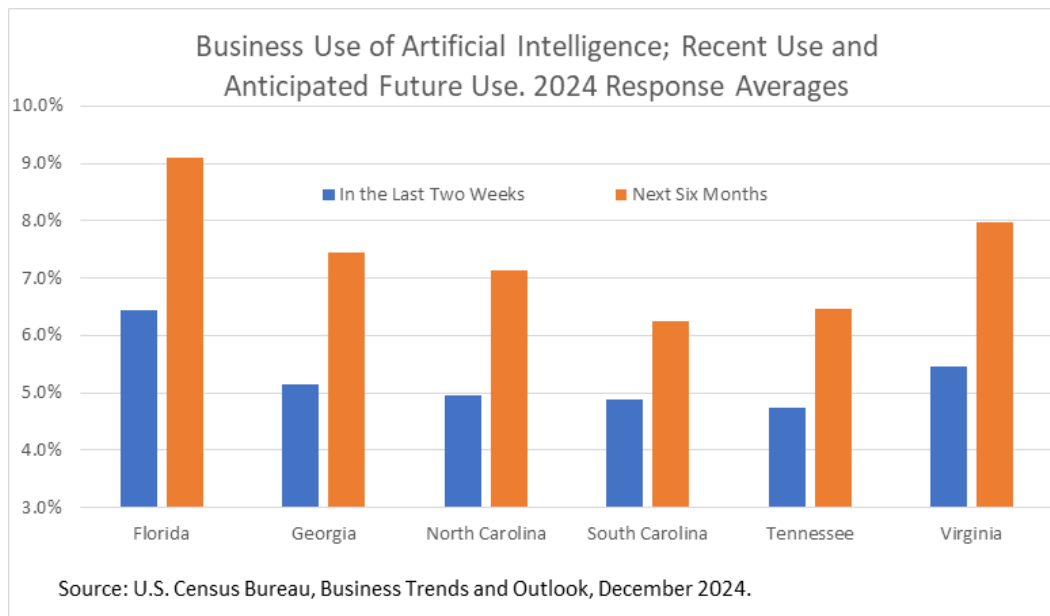
Although AI is broadly used among industries, the types most relied upon vary by industry. For example, survey responses nationwide indicate that businesses in the Information sector often utilize natural language processing, machine learning, and large language models—presumably to assist in programming and to improve website or search engine user experiences, etc. In contrast, businesses in the Finance industry often utilize marketing automation using AI, data analysis using AI, virtual agents or chat bots, and speech recognition software. These tools are likely implemented to increase efficiency in business activities like account servicing, financial product marketing, and portfolio management. Other industries have incorporated similar technologies into their businesses. For example, Professional and Business Services, Education, and Healthcare each utilize similar tools like marketing automation, language processing, virtual agents and chatbots, and data analytics.

The AI supplement also asked the question "In the last six months, did this business use Artificial Intelligence to perform tasks previously done by employees in producing goods or services? Many of the industries with the highest rate of "yes" responses are higher paying, white collar industries like Management of Companies, Utilities, Information, and Professional and Business Services. Workers in these businesses used AI for IT purposes like coding software and producing documentation. However, the most common business users were not really doing 'IT' tasks but rather white-collar tasks like business writing, performing administrative tasks, translating, and researching.[9] Conversely, most of the industries with the lowest rate of "yes" answers were in blue-collar industries like Construction and Transportation and Warehousing or in lower paying industries like Accommodation and Food Services.

The rate of business use is anticipated to still be relatively small in 2025, with the greatest adoption remaining in the Information industry. But that doesn't tell the whole story. AI adoption by society overall has been faster than was the case with the personal computer and with the internet.[10] If the annual rate of growth in AI business adoption remains positive in coming years, most businesses in key industries will have incorporated AI into their business processes. And, unlike during the last wave of automation featuring robotics and software that performed repetitive tasks, AI has already taken hold in more professional occupations, often with the capability of performing high-skill, non-repetitive tasks.
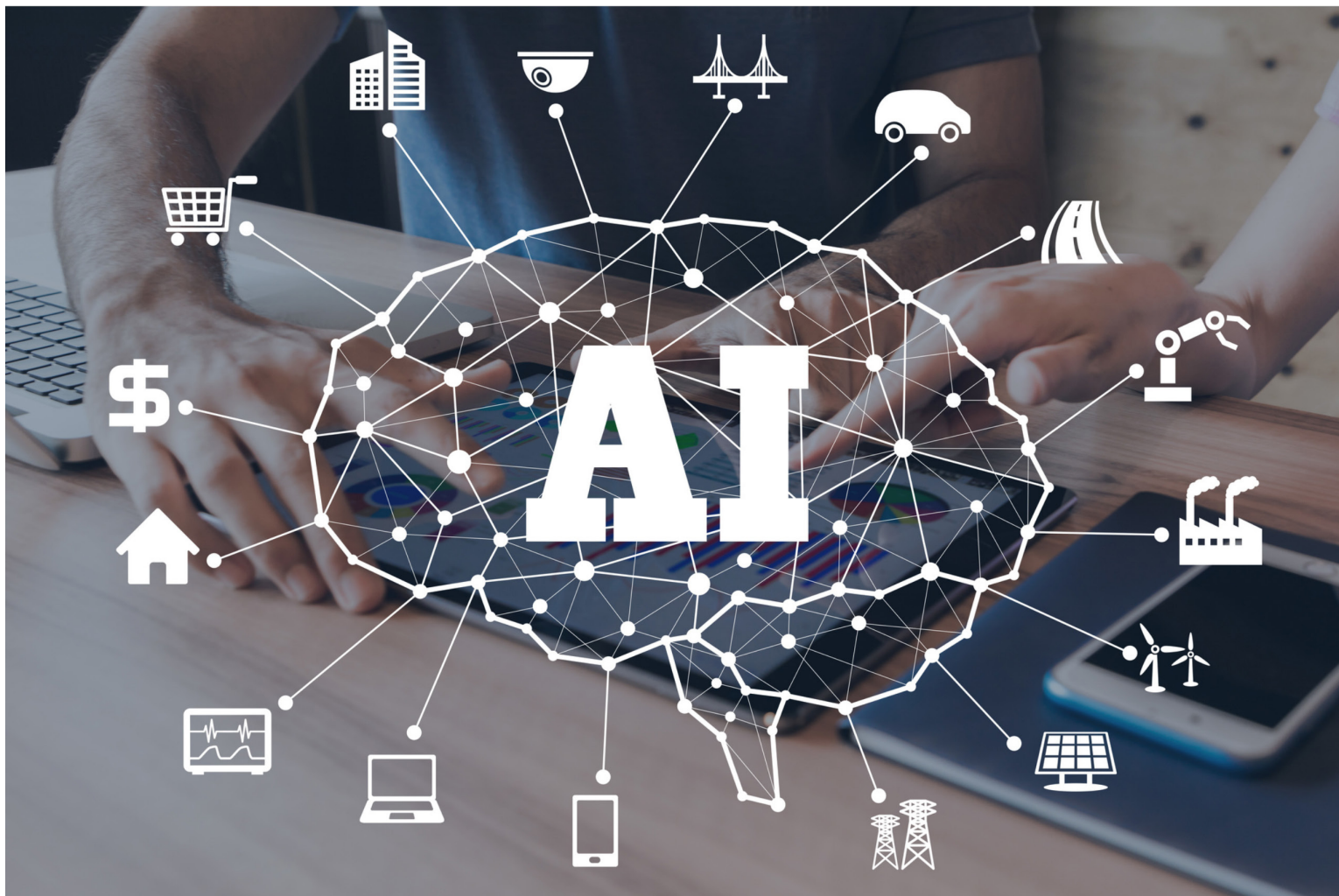
The good news is that BTOS survey results also indicate that, currently, this has not resulted in large reductions in employment. Looking at Virginia nonfarm payroll employment data for November indicates that jobs in most industries with AI exposure—Information, Professional and Business Services, Education and Healthcare for example—added jobs over the year.[11] However, Financial Activities reported a small decrease. Automation, including AI, likely played a roll in this trend as retail banking has migrated online or toward automated customer services and away from in-person retail branches.

Real-time estimates of current and expected future use of AI for business purposes from the Census Bureau's Business Trends and Outlook Survey provide a useful look into how Virginia businesses are incorporating this new technology. This new information indicates that the adoption of AI by Virginia business accelerated in the second half of 2024. But it also indicates that current and future business use of AI varies by industry, by type of work task, the variety of AI and other factors. These findings would seem to validate Governor Youngkin's focus placed on future standards, policies, and programs relating to artificial intelligence.

6 U.S. Census Bureau. North American Industry Classification System (NAICS). https://www.census.gov/naics/?input=54&year=2022&details=54
7 U.S. Dept. of Commerce. Bureau of Economic Analysis. "*What are Location Quotients?*" www.bea.gov/help/faq/478
8 Virginia Works analysis of Quarterly Census of Employment and Wages (QCEW) data. June 2024.
9 Bick, A., A. Blandin, and D. Deming (Sept. 2024). "*NBER Working Papers: The Rapid Adoption of Generative AI*". National Bureau of Economic Research.
10 Bick, A., A. Blandin, and D. Deming (Sept. 2024). "*NBER Working Papers: The Rapid Adoption of Generative AI*". National Bureau of Economic Research.
11 "Virginia Works, *Virginia's November Unemployment Rate increased by 0.1 percentage points to 3.0 percent; Labor Force Participation Rate remained unchanged at 66.0 percent and Employment decreased by 104 to 4,441,643.*" December 20, 2024.

WORK OPPORTUNITY TAX CREDIT FOR EMPLOYERS

WHAT WE DO:

Provide federal tax incentive to private sector and non-profit businesses for hiring job seekers from any one of ten targeted groups who have consistently faced barriers to employment

WHO WE SUPPORT:

Employers and Employer Representatives

Participants in Supplemental Nutritional Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), Vocational Rehabilitation, Ticket-to-Work, and individuals who may be justice impacted or long-term unemployed or with other barriers

For more Information: www.virginiaworks.gov