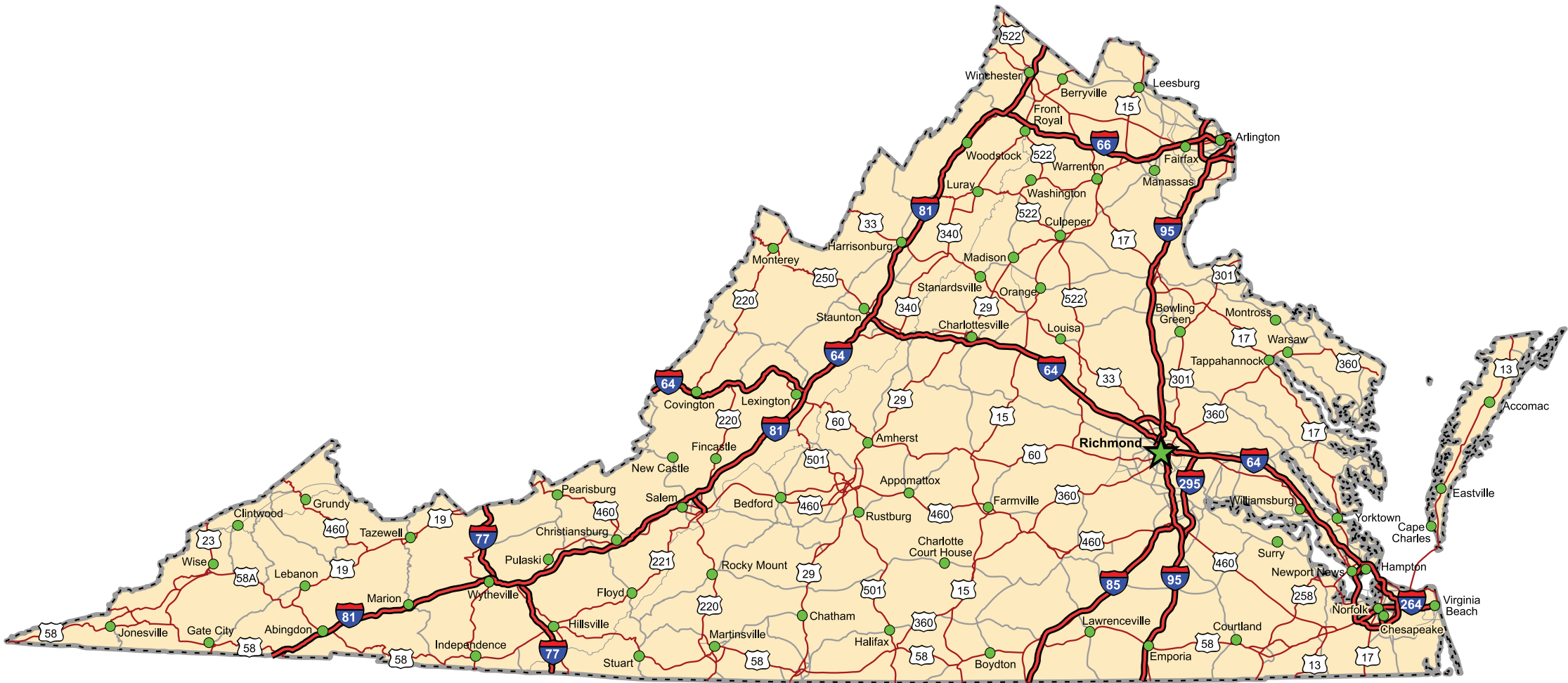


# 2025 State of the Commonwealth Report

■ DRAGAS CENTER FOR ECONOMIC ANALYSIS AND POLICY ■ STROME COLLEGE OF BUSINESS ■ OLD DOMINION UNIVERSITY





Dear Reader:

This is Old Dominion University's 11th annual State of the Commonwealth Report. While it represents the work of many people connected in various ways to the university, the report does not constitute an official viewpoint of Old Dominion, its president, Brian Hemphill, Ph.D., the Board of Visitors, the Strome College of Business or the generous donors who support the activities of the Dragas Center for Economic Analysis and Policy.

Our work seeks to contribute to the conversation about how Virginia can foster growth across the Commonwealth without glossing over the challenges we face. We want to encourage difficult conversations to improve economic outcomes for all of Virginia's residents, now is the time to have the hard discussions about where Virginia goes over the next decade. Our task is more difficult this year due to the lapse in appropriations for the federal government from October 1, 2025 to November 12, 2025. The shutdown not only delayed data, it highlighted Virginia's distinctive relationship with the federal government.

The 2025 State of the Commonwealth Report is divided into four parts:

### **Virginia's Economy Slows as Challenges to Growth Rise**

As we near the end of 2025, we now have sufficient evidence that economic activity has slowed in Virginia. The civilian labor force and the number of individuals reporting they are at work has fallen in 2025. Weekly continued unemployment claims, which capture individuals who are unemployed, looking for work, but have not found work, have been higher for each week of 2025 when compared to 2024. Job growth has continued, but the economy is buffeted by tariffs and declines in federal employment.

### **The State of Virginia's GO Virginia Regions**

In this chapter, we discuss the economic performance of the nine GO Virginia regions relative to the state and nation. We examine a number of measures of economic performance: population, employment, jobs, wages, personal income, and establishments. Each of these measures is available on a more frequent basis than Gross Domestic Product (GDP), providing a more current picture of the economic activity in each GO Virginia region. In aggregate, these data allow us to construct a clearer picture of the health of Virginia's regional economies.

### **Virginia's Workforce: Understanding Apprenticeships**

This chapter examines the state of apprenticeship programs in the United States and Virginia, assessing their role in the labor market. We begin with an overview of national apprenticeship policy, tracing major laws and initiatives that have influenced the system's evolution and expansion. We then review trends in apprenticeship participation, highlighting the states that lead in registrations and program growth. The discussion pivots to Virginia, where we analyze current occupation, wage and demographic data, and regional apprenticeship examples that connect education and industry. Finally, we consider whether apprenticeships represent a sustainable and scalable solution to the Commonwealth's workforce challenges.

### **Is It Better to Give Than Receive? Exploring the Distributional Dimension of Virginia's Budget**

This chapter focuses on the distribution of intergovernmental finances in Virginia. Specifically, it analyzes the distribution of state-level public resources in the Commonwealth of Virginia that takes place as a result of state-to-local intergovernmental transfers. The analysis suggests that, as a result of the manner in which state revenues are collected and allocated back to localities, some Virginians contribute significantly more to the Commonwealth budget in taxes than they receive back in local benefits, while other state residents receive more in benefits than they pay in taxes.

The Strome College of Business and Old Dominion University continue to provide support for the State of the Commonwealth Report. However, it would not appear without the vital backing of the private donors whose names appear below. They believe in Virginia and the power of rational discussion to improve our circumstances but are not responsible for the views expressed in the report. We would like to thank our donors for their investments in the work of the Dragas Center for Economic Analysis and Policy.

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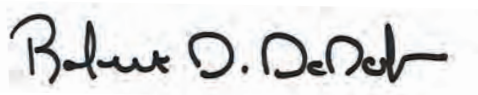
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All 11 State of the Commonwealth Reports are available at [www.ceapodu.com](http://www.ceapodu.com).

If you have comments or suggestions, please email us at [dragascenter@odu.edu](mailto:dragascenter@odu.edu).

Sincerely,



Robert M. McNab  
Director, Dragas Center for Economic Analysis and Policy  
Chair and Professor of Economics, Department of Economics  
Strome College of Business  
Old Dominion University



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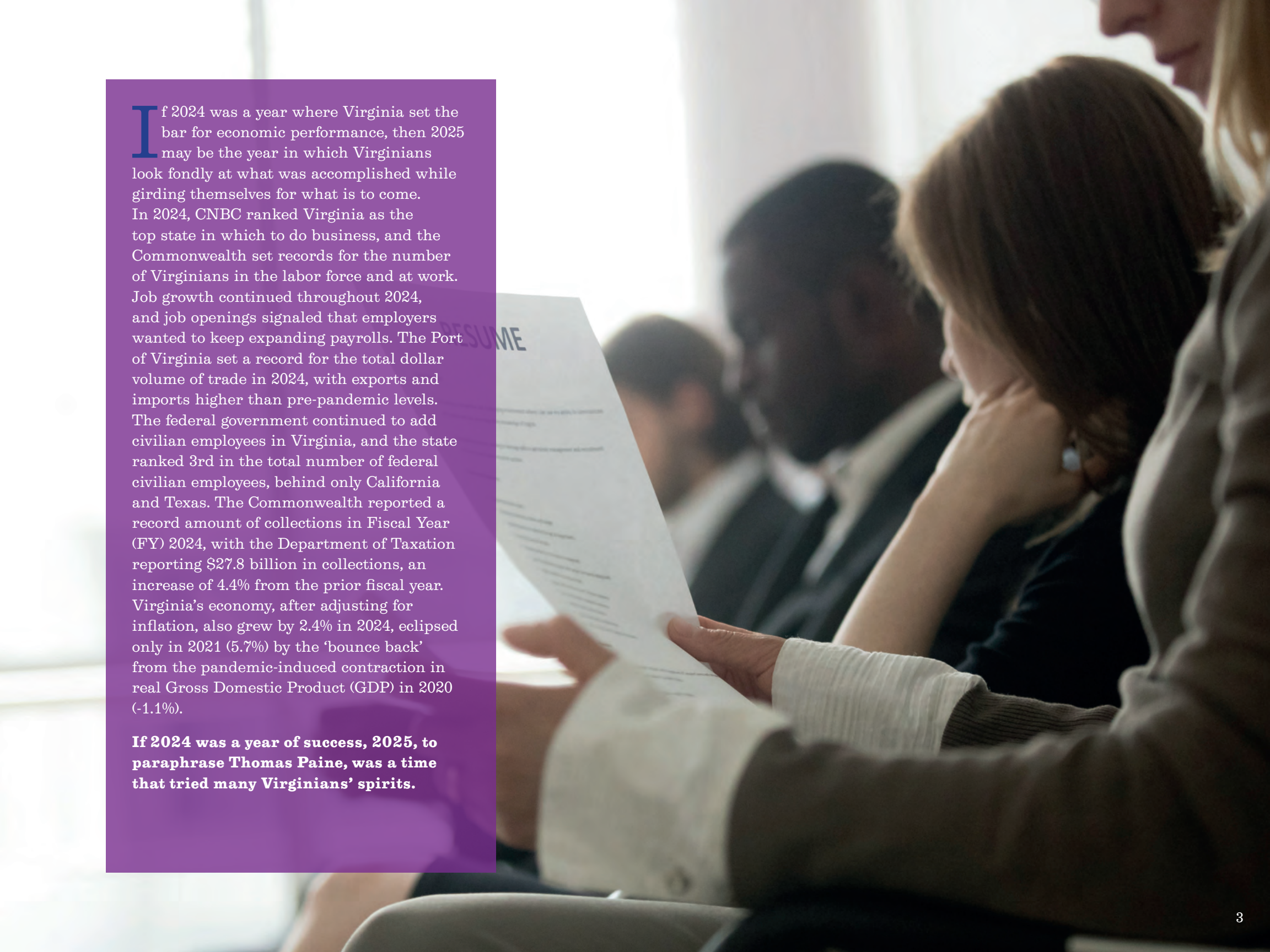
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# VIRGINIA'S ECONOMY SLOWS AS CHALLENGES TO GROWTH RISE

*“The world breaks everyone, and  
afterward, some are strong at the broken  
places.”*

*– Ernest Hemingway*





If 2024 was a year where Virginia set the bar for economic performance, then 2025 may be the year in which Virginians look fondly at what was accomplished while girding themselves for what is to come. In 2024, CNBC ranked Virginia as the top state in which to do business, and the Commonwealth set records for the number of Virginians in the labor force and at work. Job growth continued throughout 2024, and job openings signaled that employers wanted to keep expanding payrolls. The Port of Virginia set a record for the total dollar volume of trade in 2024, with exports and imports higher than pre-pandemic levels. The federal government continued to add civilian employees in Virginia, and the state ranked 3rd in the total number of federal civilian employees, behind only California and Texas. The Commonwealth reported a record amount of collections in Fiscal Year (FY) 2024, with the Department of Taxation reporting \$27.8 billion in collections, an increase of 4.4% from the prior fiscal year. Virginia's economy, after adjusting for inflation, also grew by 2.4% in 2024, eclipsed only in 2021 (5.7%) by the 'bounce back' from the pandemic-induced contraction in real Gross Domestic Product (GDP) in 2020 (-1.1%).

**If 2024 was a year of success, 2025, to paraphrase Thomas Paine, was a time that tried many Virginians' spirits.**

As we near the end of 2025, we now have sufficient evidence that economic activity has slowed in Virginia. The civilian labor force and the number of individuals reporting they are at work has fallen in 2025. As the labor force has declined, the number of unemployed rose, leading to an increase in the statewide unemployment rate. Weekly continued unemployment claims, which capture individuals who are unemployed, looking for work, but have not found work, have been higher for each week of 2025 when compared to 2024. As former federal civilian employees who took the ‘fork in the road’ became unemployed on October 1, 2025, the number of unemployed Virginians is expected to rise into 2026. Compared to 2024, the value of exports and imports flowing through the Port of Virginia was lower in every month of 2025 through the latest available data. If there is a modicum of good news, it is that Virginia reported surplus revenues at the end of FY 2025, with general fund revenues rising by \$1.8 billion (6.1%) over the previous fiscal year. The state, however, is now grappling with the projected impacts of H.R.1 (“One Big Beautiful Bill”) which will negatively impact funding for Medicaid, higher education, and other functions across the Commonwealth.

To paraphrase John F. Kennedy, a robust economic performance has a hundred fathers and anemic economic activity is an orphan. Data from the Rockefeller Institute of Government highlights the challenge facing the Commonwealth.<sup>1</sup> The Rockefeller Institute estimates the balance of payments for states with respect to the federal government. The **balance of payments** is equal to the level of federal funding distributed in a state minus the amount paid by individuals and businesses in that state to the federal government. In 2023, Virginians paid approximately \$119.4 billion in taxes to the federal government and the state, and its residents received \$264.8 billion in federal grants, contracts, transfers, and payments. In per capita terms, Virginia’s net receipts of \$16,650 per resident ranked first in the nation. This positive balance of payments fueled growth, but has also left Virginia relatively vulnerable to changes in federal employment, trade, and immigration policy when compared to its neighbors to the south.

The state of the economy is reflected nationally and statewide in surveys of consumer sentiment. Roanoke College’s survey of consumer sentiment measures how Virginians perceive the current state of the economy and their expectations about the future.<sup>2</sup> In the August 2024 survey, the Index of Consumer Sentiment (ICS) for Virginia was 74.2. In the August 2025 survey, the ICS was 64.6, a decline of 12.9% from August 2024 and a 16.8% decline from the post-pandemic peak of 77.6 observed in November 2024. If there is any consolidation in this news, it is that Virginians were somewhat more optimistic relative to the nation as a whole, however, consumers nationally and statewide were relatively more pessimistic about the state of the economy when compared to pre-pandemic levels.<sup>3</sup>

Why might consumers be unsatisfied about the state of the economy in 2025? While inflation has moderated from its peak in 2022, prices remain elevated compared to pre-pandemic levels, and inflation accelerated in the latter half of 2025. Consumers and businesses expect prices to rise as increased tariffs wind their way through supply chains. As labor markets softened nationally and across Virginia, workers became increasingly reluctant to leave their current jobs. Housing prices may also play a role as rents and single-family home values continued to rise across most of the Commonwealth in 2025. While this may have been good news for landlords and homeowners, the cost of shelter, coupled with increases in the prices of groceries, electricity, natural gas, and insurance, only served to increase the financial headwinds facing Virginians of modest means.

<sup>1</sup> We refer the interested reader to the Rockefeller Institute of Government’s report on the balance of payments at <https://rockinst.org/issue-area/bop-2025/>

<sup>2</sup> Roanoke College, “Virginia Consumer Sentiment and Inflation Expectations Report for August 2025.” August 28, 2025. Available at: [https://www.roanoke.edu/news/rc\\_poll\\_consumer\\_sentiment\\_august\\_2025](https://www.roanoke.edu/news/rc_poll_consumer_sentiment_august_2025)

<sup>3</sup> In August 2025, the University of Michigan Index of Consumer Sentiment was 58.2, 6.4 points lower than the reported value for Virginia (64.6).



Now, as the Commonwealth prepares to enter 2026, is the time to objectively assess the state of our economy. While Virginia slipped in the CNBC rankings to the 4th best state in which to do business (setting aside arguments about the subjective valuation of what is ‘best for business’), this can be viewed as an opportunity to modernize Virginia’s antiquated tax system. How can we foster growth in an environment where long held assumptions about the federal government’s presence in Virginia are under stress, if not being abandoned outright? These are serious questions that need serious discussions, and we must emerge from our enclaves to rationally discuss how to move forward.

This chapter reviews the performance of the Virginia economy this decade and identifies challenges to growth in 2026 and beyond. We first discuss consumer sentiment, inflation, and interest rates to set the stage for our examination of the performance of the Virginia economy in 2024 and 2025. We examine the performance of Virginia’s labor market before turning to the impact of tariffs on international trade and Virginia’s relationship with the federal government. We then conclude with thoughts on the prospects for growth in 2026.

## Consumer Sentiment Declines Nationally

Graph 1 presents the University of Michigan’s Consumer Sentiment Index for the United States from January 2000 to October 2025. In February 2020, the consumer sentiment index reached 101, only 0.4 points below the post-Great Recession peak observed in March 2018. Two months later, the index fell to 71.8, a decline of 28.9% before rising to 80.7 in December 2020, and reaching 85.5 in June 2021. Consumers became decidedly more pessimistic in 2021 and 2022, with the index falling to 50 in June 2022, a decline of 50.5% relative to February 2020. As inflation ebbed in 2023 and into 2024, consumer sentiment rebounded off its June 2022 low, reaching 79.4 in March 2024.

Sentiment declined in the summer of 2024 before increasing to 74.0 in December 2024.

Two observations stand out from the consumer sentiment data for 2025: (1) consumers were more pessimistic than during the peak of inflation in 2022, and (2) consumer sentiment remains well below pre-pandemic levels. Sentiment declined sharply in the spring of 2025, bottoming at 52.2 in April 2025. While sentiment recovered slightly in the summer of 2025, it fell again in September and October. In October 2025, the sentiment index fell to 53.6, reflecting how unhappy consumers were about economic conditions.

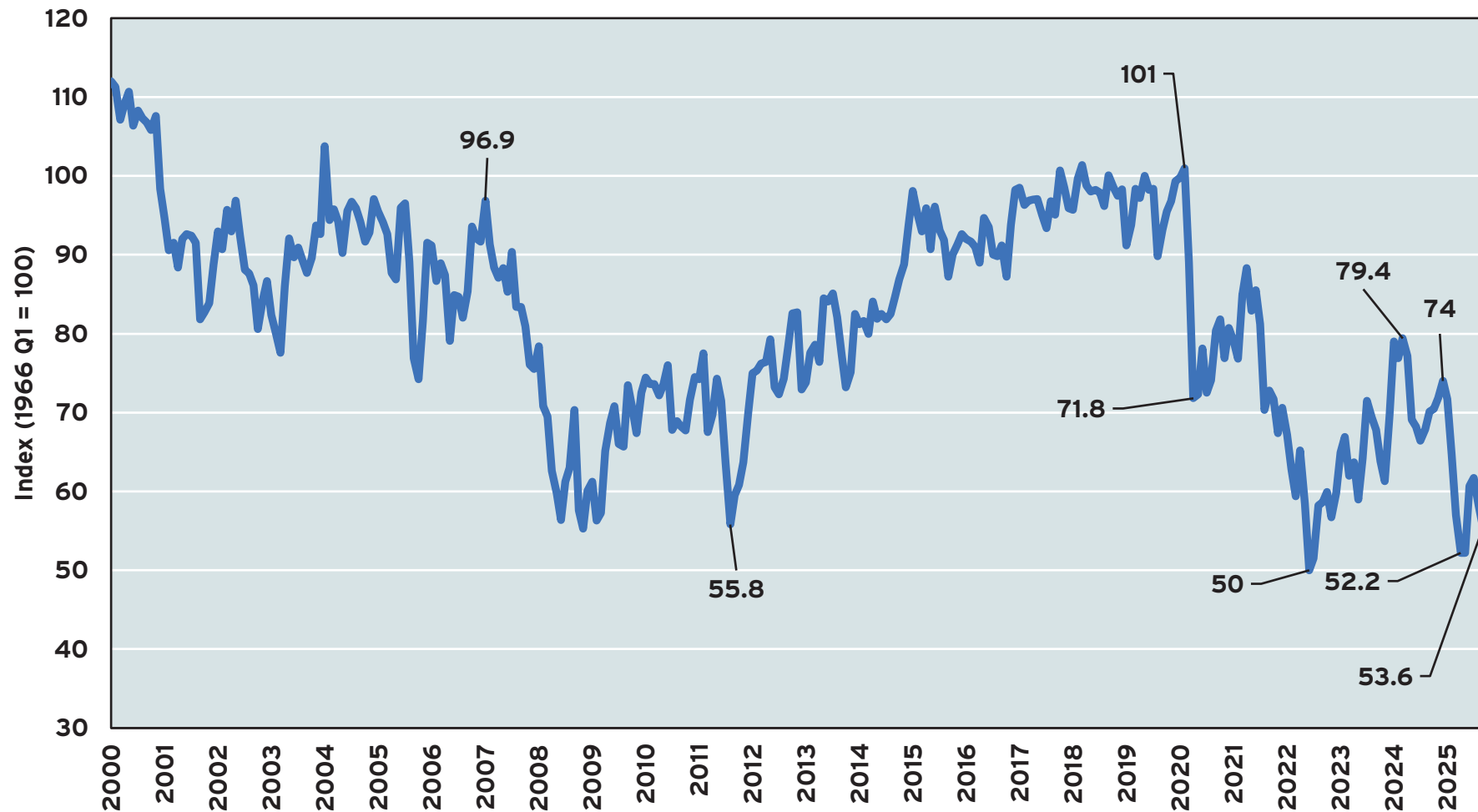
Since 2017, the University of Michigan’s Survey of Consumers has asked respondents about their political affiliation. To avoid bias, the question about political affiliation is typically asked at the end of the survey. Researchers have found that consumers identifying with the political party in the White House tend to have higher levels of sentiment and more favorable expectations about future economic conditions.<sup>4</sup> Graph 2 illustrates this phenomenon, as respondents appeared to shift sentiment based on which party was in control of the White House.

**While Graph 2 shows how one views the economy is influenced by political affiliation, it also illustrates how sentiment has changed in the aftermath of the COVID-19 pandemic. Regardless of political affiliation, consumer sentiment was lower in the summer of 2025 than prior to the onset of the COVID-19 pandemic. A recurrent theme is vulnerability. In 2021 and 2022, consumers perceived rising inflation as a threat to their pocketbooks. In 2023 and 2024, consumer sentiment was weighed down by the cumulative impacts of inflation. In 2025, trade policy entered the fray, as consumers expressed concerns about trade policy and its impact on inflation. Some respondents noted they have shifted spending forward in anticipation of higher future prices as the result of higher tariffs.<sup>5</sup>**

<sup>4</sup> For more discussion, see <https://www.sca.isr.umich.edu/files/partisaneconomy202504.pdf>

<sup>5</sup> See, “Trade Policy and Expected Consumer Spending,” *University of Michigan, Surveys of Consumers*, August 15, 2025. Available at: <https://www.sca.isr.umich.edu/files/consumptionresponse202508.pdf>

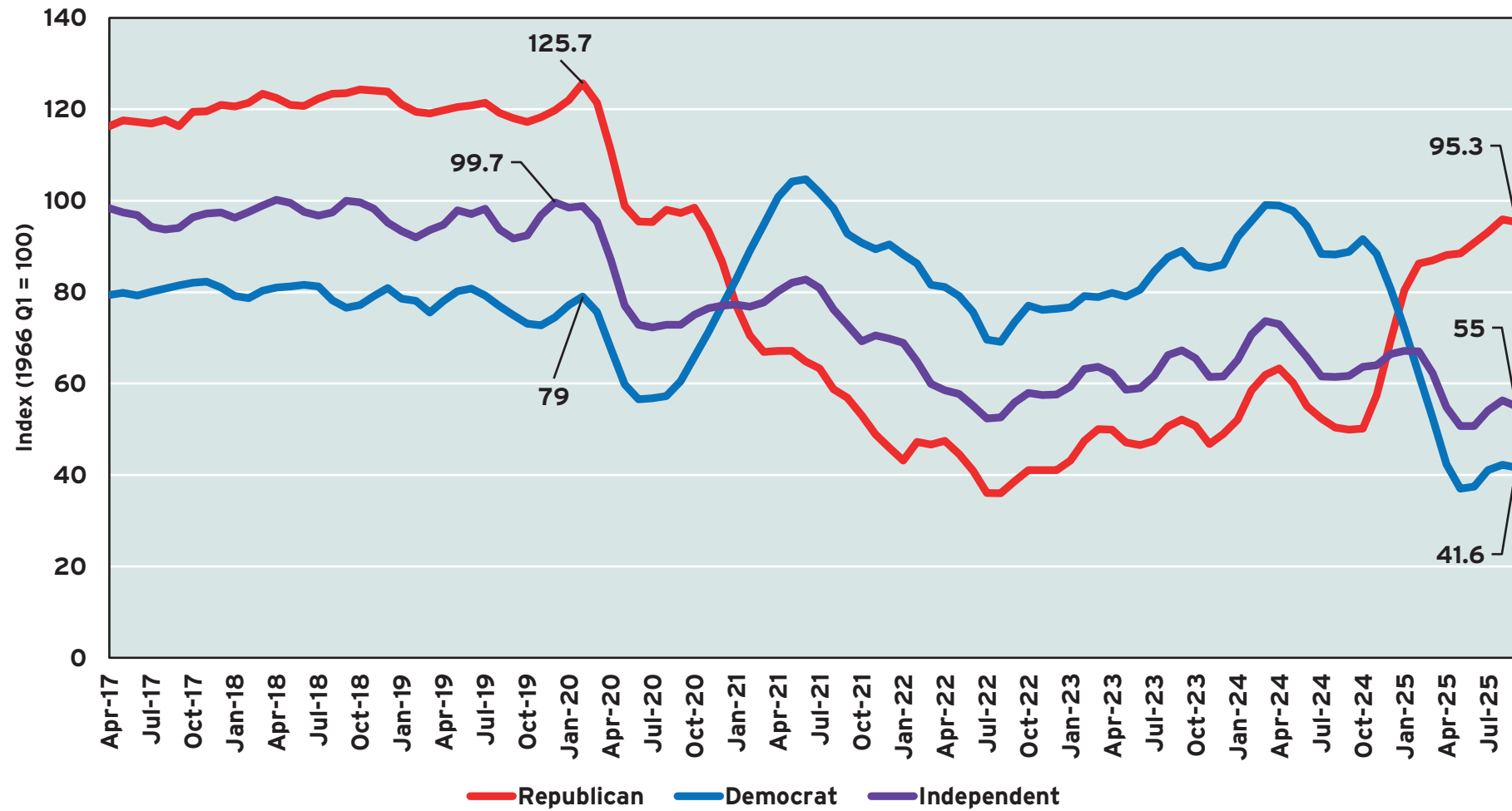
GRAPH 1

**UNIVERSITY OF MICHIGAN, CONSUMER SENTIMENT  
UNITED STATES, JANUARY 2000 - OCTOBER 2025**

Source: University of Michigan, Surveys of Consumers.

GRAPH 2

UNIVERSITY OF MICHIGAN, CONSUMER SENTIMENT BY POLITICAL AFFILIATION  
UNITED STATES, APRIL 2017 - SEPTEMBER 2025



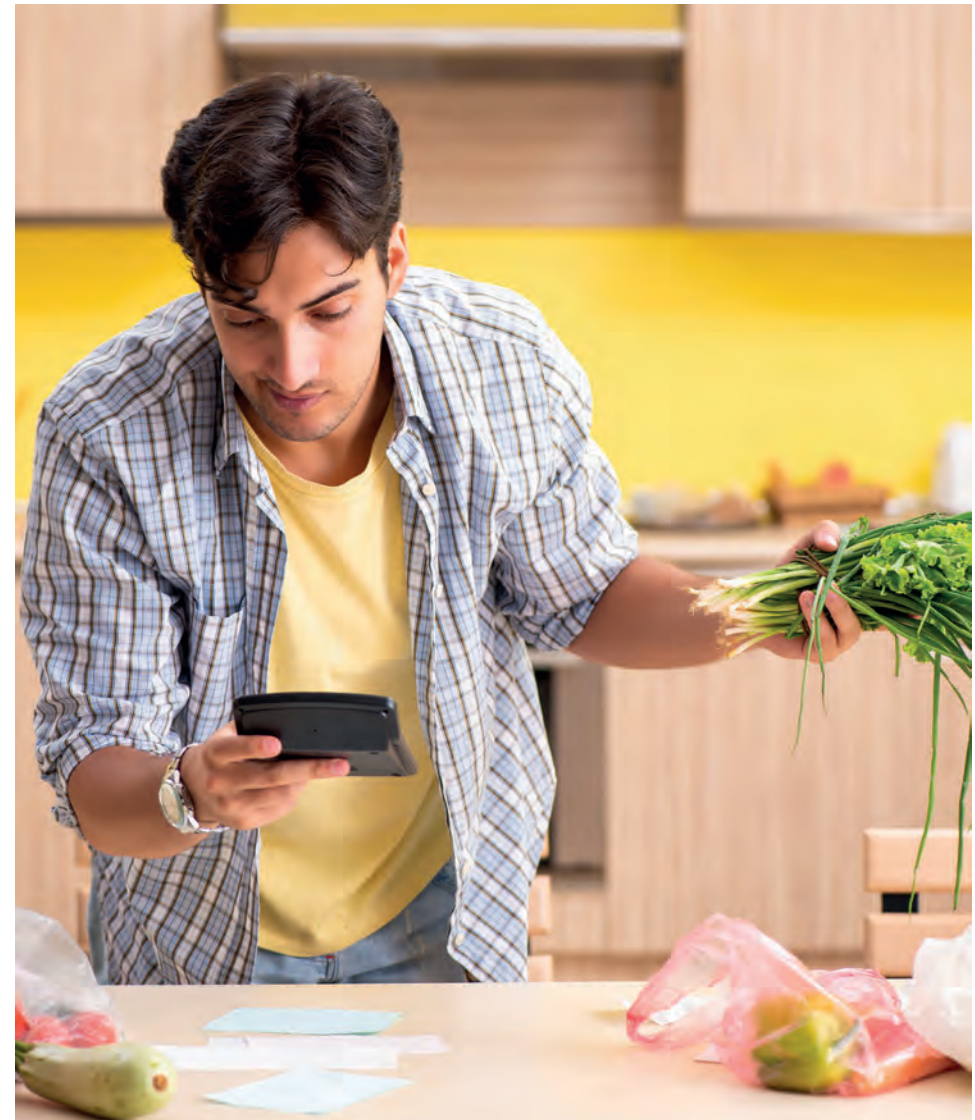
Source: University of Michigan, Surveys of Consumers. Each series is the three-month moving average.



## Are Virginians as Unhappy as the Rest of America?

Graph 3 presents the Virginia Index of Consumer Sentiment from the Institute of Policy and Opinion Research (IPOR) at Roanoke College.<sup>6</sup> IPOR conducts a quarterly survey of Virginians' sentiment and expectations regarding economic conditions across the Commonwealth. The resulting indices are comparable with the University of Michigan's national level estimates. Our first observation is that consumer sentiment across Virginia mirrors that of the nation, with some differences. In February 2020, the Virginia Index of Consumer Sentiment was 97.2, only 1.5 points lower than the post-Great Recession peak observed in 2019. Like the nation, Virginians' sentiment fell in the spring of 2020, partially recovered in the summer of 2020, and then declined to its lowest level (58.2) in May 2022. The index then rebounded off its lows and reached a value of 77.6 in November 2024. From November 2024 to February 2025, the Virginia Consumer Sentiment Index dropped 12.9 points from 77.6 to 64.7. This was the second largest recorded quarterly decline in consumer sentiment in the history of the index, second only to the decline from February 2020 (97.2) to May 2020 (81.5).

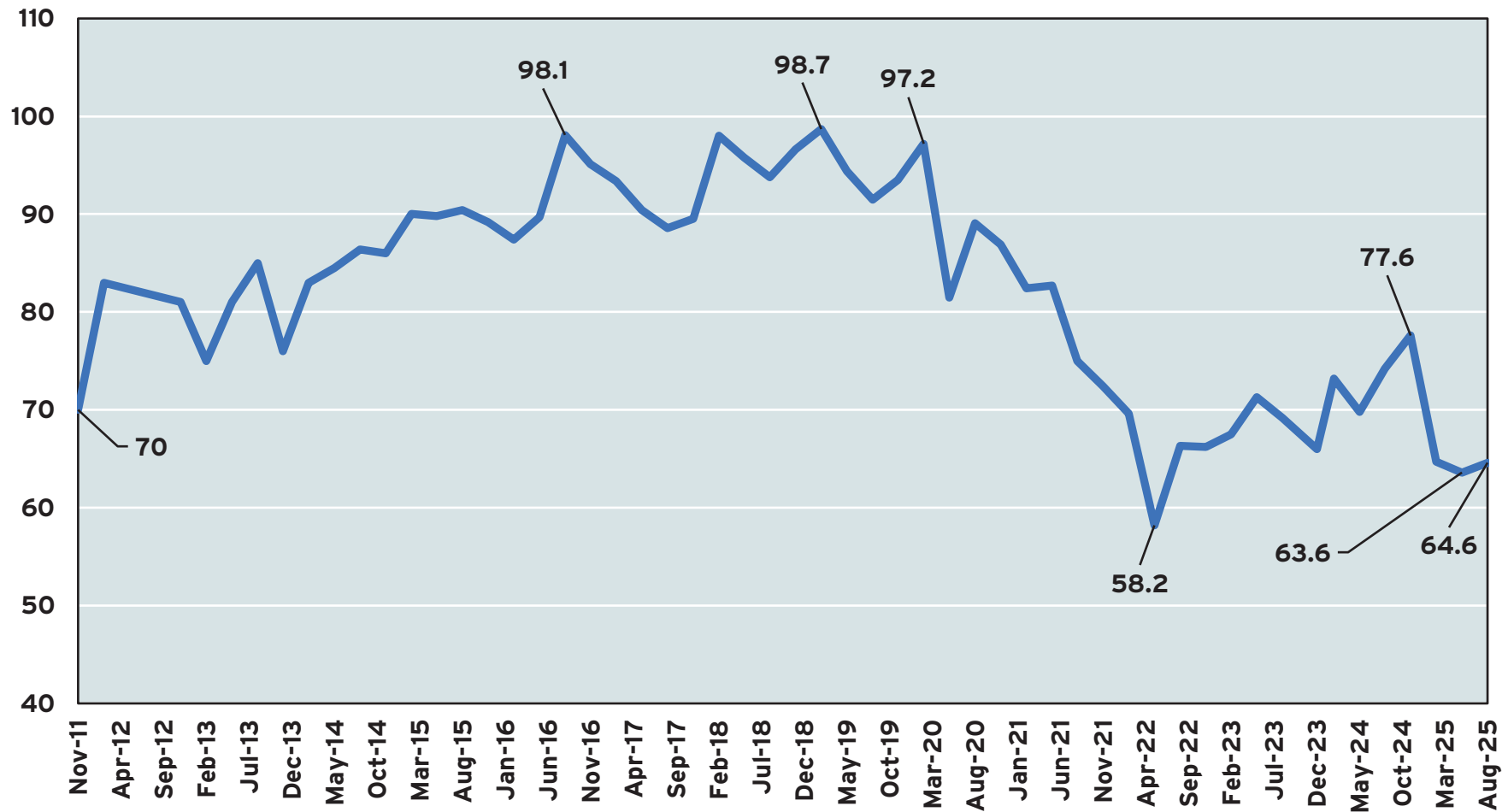
Relative to the national mood, Virginians were more positive about economic conditions in August 2025. Nationally, the index was at 58.2, 6.4 points lower than Virginia's 64.6. However, Virginians echoed similar concerns about the state of the economy as found in the national surveys. Persistent inflation negatively impacted household finances, and Virginians also expected prices to rise in the future. If prices continue to rise and federal employment continues to fall, there is a distinct possibility that Virginia's sentiment will sour in 2026 and near lows not seen since the peak of inflation in 2022.



<sup>6</sup> More information about IPOR is available at: <https://www.roanoke.edu/ipor>

**GRAPH 3**

**ROANOKE COLLEGE, VIRGINIA'S INDEX OF CONSUMER SENTIMENT  
NOVEMBER 2011 - AUGUST 2025**



Source: Institute for Policy Opinion and Research (IPOR), Roanoke College.

## Inflation: Making a Comeback?

The Bureau of Labor Statistics (BLS) produces the Consumer Price Index (CPI) by surveying consumer prices across the nation. Each month, the BLS surveys more than 20,000 retail establishments as well as about 50,000 rental housing units to gather price data. The BLS uses housing rent data to form estimates of the cost of owner-occupied housing. The calculation of the CPI captures substitution effects (the tendency of consumers to shift away from relatively more expensive goods and services to cheaper alternatives) and changes in quality. More importantly, the weighting of specific categories in the CPI is dependent upon recent consumer spending patterns. In other words, weights are proportional to consumer spending on goods and services. The headline inflation rate represents the year-over-year change in the CPI index for a given month. The core inflation rate is equal to the year-over-year change in the CPI index less food and energy prices for a given month. Given that food and energy prices are more volatile than other goods and services, the core inflation rate provides a more accurate sense of the trajectory of prices in the economy.

Graph 4 presents the monthly rates of inflation and core inflation (inflation less food and energy prices) for the United States from January 2020 to September 2025. How one views inflation may depend on a matter of perspective. Relative to 2022, the headline and core rates of inflation were lower in 2023, 2024, and through the first eight months of 2025. If one, however, was looking for signals of accelerating inflation, then the summer months of 2025 did not hold good news. In April 2025, the headline inflation rate was 2.3% and the core inflation rate was 2.8%. By September, the headline and core inflation rates had risen to 3.0%. The consensus expectation is that inflation will continue to rise through the remainder of 2025 as a result of tariffs. The open question is whether this increase is transitory, reflecting a one-time adjustment in prices, or structural, reflecting an increase in price expectations.

Graph 5 presents data from the Federal Reserve Bank of Cleveland Survey of Firms' Inflation Expectations (SoFIE).<sup>7</sup> Each quarter, the SoFIE measures firms' beliefs for expected headline inflation over the next 12 months. The SoFIE interviews chief executive officers (CEOs) and other top executives nationally to obtain a representative sample. As one might expect, mean inflationary expectations are influenced by the contemporaneous inflation rate. In 2019 Q4, the expected inflation rate over the next 12 months was 1.9%, only slightly higher than the average annual rate of inflation for 2019 (1.8%).

As headline inflation accelerated in 2021 and 2022, inflationary expectations rose as well, though below the actual inflation rate. In 2022 Q4, the expected inflation rate for the next 12 months was 7.3%. By 2024 Q3, the expected inflation rate had declined to 3.4%. In 2025 Q1, the expected inflation rate further decreased to 3.2%, before increasing to 3.9% in 2025 Q2, then declining again to 3.5% in 2025 Q3. While the recent decline in inflationary expectations might be considered a positive sign, expectations remain high relative to levels observed prior to the pandemic. The respondents of the SoFIE echo the concerns of the University of Michigan Surveys of Consumers: inflation is expected to increase into 2026.

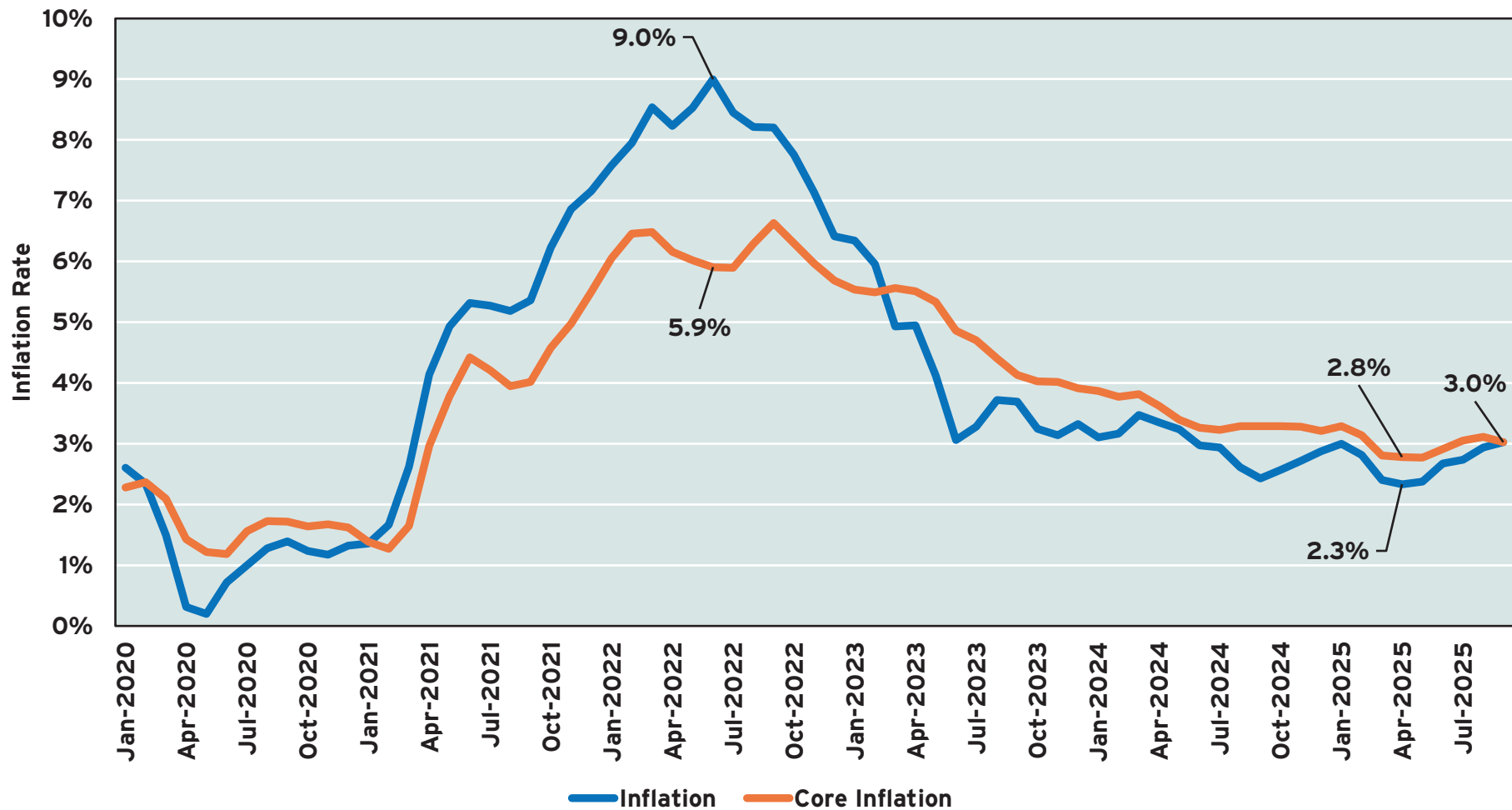
Why did inflation not accelerate in 2025 as expected? One possibility is that importers and businesses that purchase goods from importers, did not fully pass through the costs of higher tariffs to consumers. Uncertainty surrounding tariffs may have led businesses to, in the short term, accept lower profit margins to maintain market share. Goldman Sachs, for example, estimated that, through June 2025, foreign exporters absorbed approximately 14% of U.S. tariffs and U.S. importers and their business customers absorbed about 64% of the tariff burden.<sup>8</sup> Only 22% of higher tariffs were passed along to consumers in the form of higher prices. By October 2025, much of the burden (about 67%) will shift to fall on U.S. consumers.

<sup>7</sup> For more information, see <https://www.clevelandfed.org/indicators-and-data/survey-of-firms-inflation-expectations>

<sup>8</sup> U.S. Tariffs Passthrough to Consumers," CNN, August 24, 2025. Available at: <https://www.cnn.com/2025/08/24/economy/us-tariffs-passthrough-consumers>



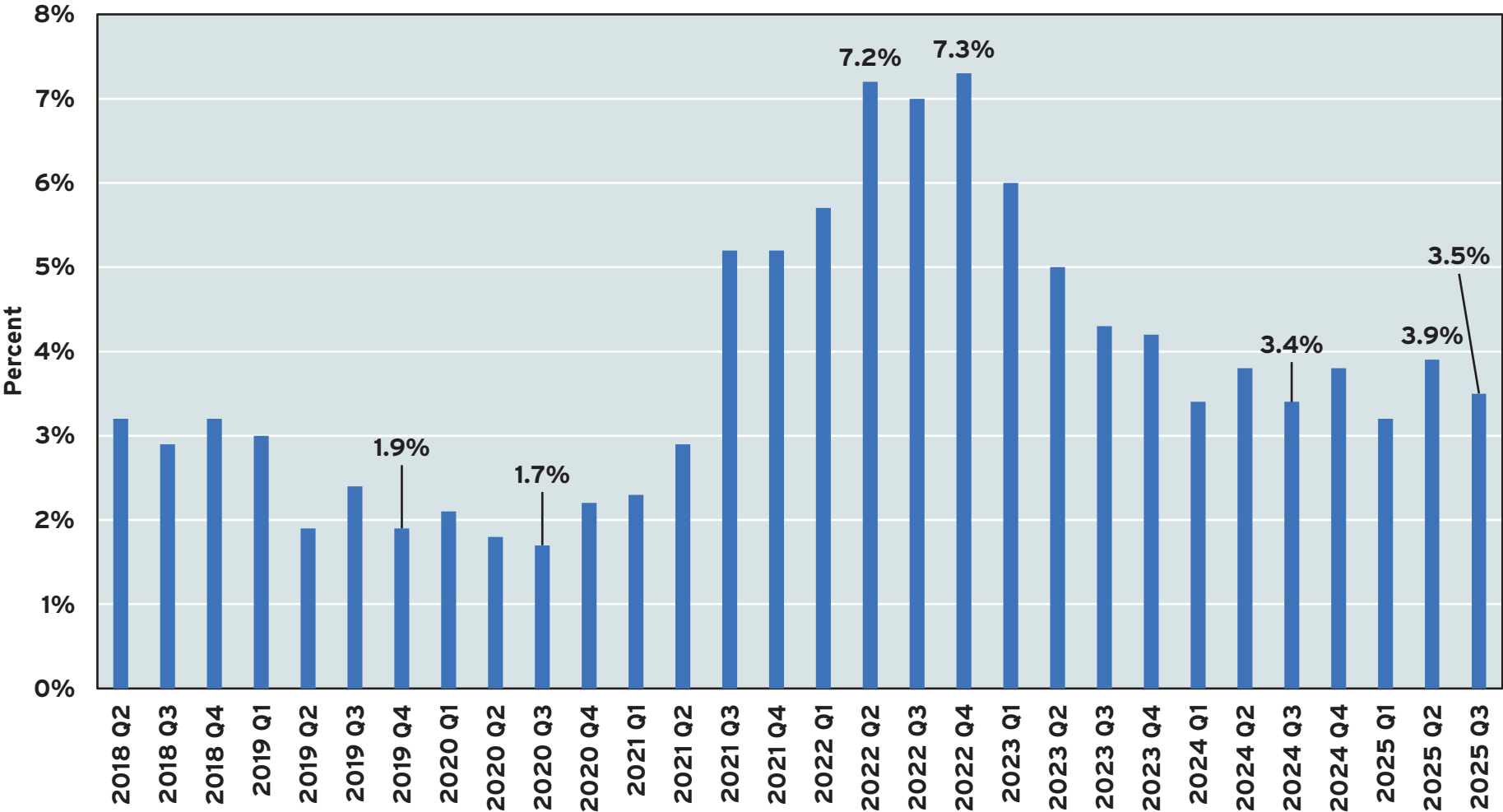
**GRAPH 4**  
**MONTHLY INFLATION**  
**UNITED STATES, JANUARY 2020 - SEPTEMBER 2025**



Source: Bureau of Labor Statistics (2025). Inflation is the year-over-year change in CPI-U while Core Inflation is the year-over-year change in CPI-U less food and energy. Data are seasonally adjusted. Both series were equal to 3.0% in September 2025.

GRAPH 5

MEAN EXPECTED CPI INFLATION OVER THE NEXT 12 MONTHS  
UNITED STATES, 2018 Q2 - 2025 Q3



Source: Federal Reserve Bank of Cleveland, Survey of Firms' Inflation Expectations.

# The Federal Reserve: A Change in Focus

The Federal Reserve's statutory mandate is "to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates."<sup>9</sup> In practice, the Federal Reserve has focused on a dual mandate of prompting maximum employment and maintaining price stability. The Federal Reserve lends to depository institutions through the "discount window." This lending facility helps depository institutions manage liquidity by providing ready access to funding. This credit program is the primary tool for ensuring liquidity, and the primary credit rate is set relative to the Federal Open Market Committee's (FOMC) target range for the federal funds rate.<sup>10</sup> Which part of the dual mandate carries heavier weight depends on economic conditions. During the Great Recession of 2007 – 2009 and the COVID-19 pandemic of 2020, the Federal Reserve engaged in actions to promote employment by the discount rate and increasing the money supply. As prices increased in 2021 and 2022, the Federal Reserve's stance switched to increasing the cost of money by increasing the discount rate to combat inflation.

Graph 6 highlights how the FOMC's target rate has changed from March 2024 to October 2025. After the Great Recession, the FOMC maintained an accommodative monetary policy, that is, a relatively low target rate combined with quantitative easing to promote employment growth. In 2016, the FOMC gradually increased its target rate, reaching 2.50% in December 2018. By June 2019, the FOMC lowered its target rate to 2.50%, and again to 2.25% (August 2019) and again to 2.00% (September 2019). In October 2019, the FOMC target rate was lowered again to 1.75% and remained there until March 2020. In March 2020, the FOMC target rate declined to 1.25% on March 4th and again to 0.25% on March 16th. It remained at 0.25% until March 17, 2022.

As inflation increased in 2022, the FOMC rapidly increased the target rate. Starting in March 2022, the FOMC increased the target rate from 0.25% to 5.50% by July 2023. The FOMC maintained this target rate until September 2024 when it was lowered to 5.00%. The target rate declined again to 4.75% in November 2024 and then to 4.50% in December 2024. While expectations were that the FOMC would continue to reduce the target rate in early 2025, tariff announcements produced an abundance of caution as inflationary expectations increased as a result. As job growth slowed in the summer of 2025, and with the preliminary benchmark revisions to nonfarm payrolls showing that job growth was slower than originally estimated from March 2024 to March 2025, the FOMC lowered the target rate to 4.25% in September 2025. In late October, the FOMC lowered the discount rate to 4.00% with an expectation that the rate would be lowered again December 2025.

Why, if economic growth is slowing, has the FOMC been reluctant (from some perspectives) to aggressively reduce its target rate? Graph 7 compares the inflation rate in the United States from January 1973 to December 1979 and from July 2020 to September 2025. The similarities at the beginning of each cycle are apparent. Inflation accelerates to a peak and then declines as interest rates rise. The lesson from the 1970s, however, is not to reduce interest rates until one is sure that inflationary expectations and pressures have been ameliorated. The uptick in inflationary expectations as a result of higher tariffs and the rise in inflation in the second half of 2025 served to limit the FOMC's aggressiveness. Simply put, if past is prologue, the FOMC was looking backwards when considering reducing the target federal funds rate. Only when labor market conditions softened did the FOMC shift its dual mandate in favor of maximizing employment instead of price stability.

<sup>9</sup> Congress has also tasked the Federal Reserve with promoting the stability of the financial system, promoting the safety and soundness of individual financial institutions, fostering the safety and efficiency of payment and settlement systems, and promoting consumer protection and community development. For more information, see Federal Reserve Bank Board of Governors (2016). The Federal Reserve System: Purposes and Functions, available at: <https://www.federalreserve.gov/aboutthefed/files/the-fed-explained.pdf>

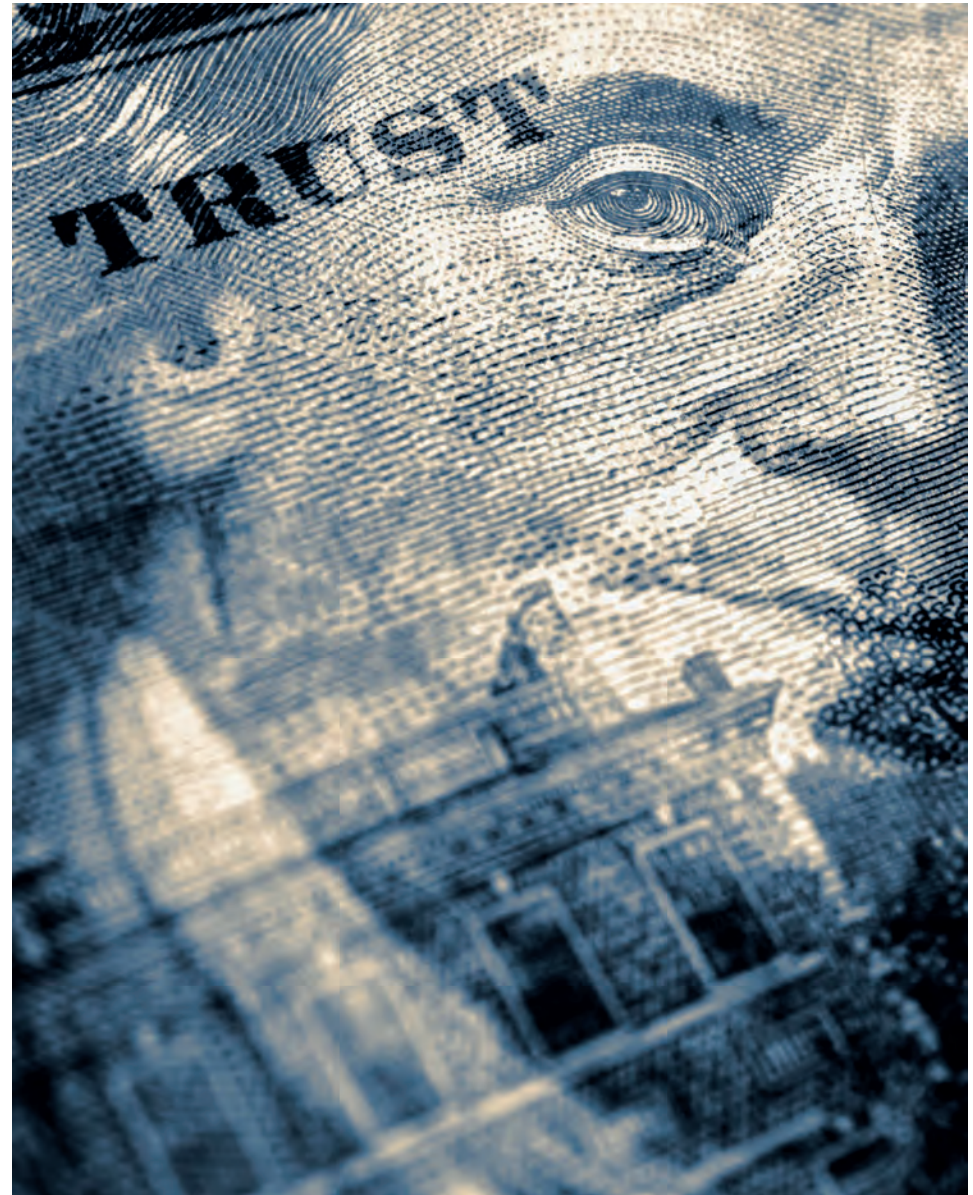
<sup>10</sup> The Federal Funds target rate is a band with a low and high value. The high value is typically used to refer to the target rate of the FOMC with respect to the discount rate.



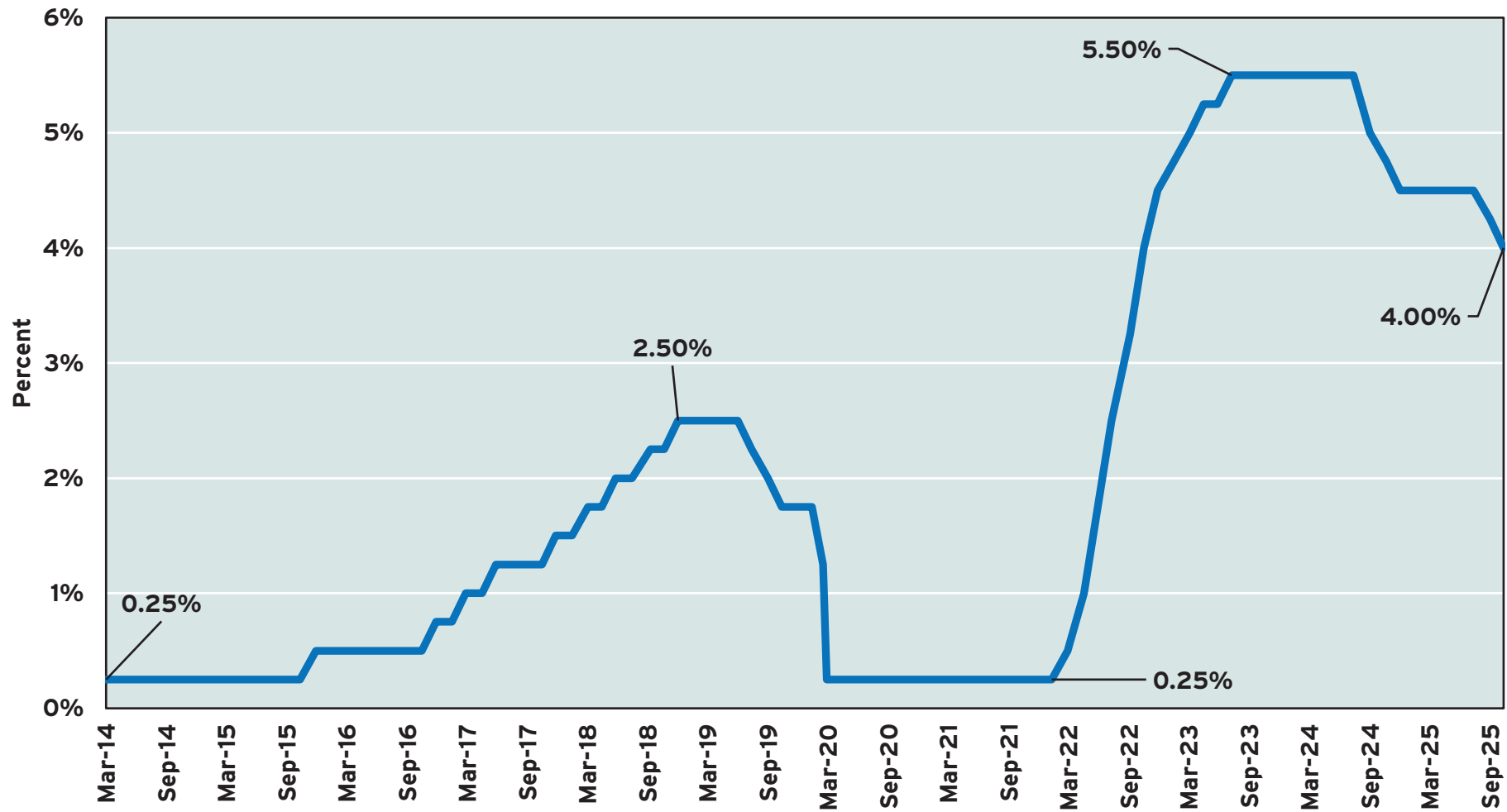
Graph 8 compares the average yield of 10-year U.S. Treasury bonds over the last four FOMC rate reduction cycles with the current cycle. Typically, the 10-year Treasury market prices in expectations of a FOMC rate reduction, that is, traders accept lower yields on treasuries in anticipation of a reduction in the federal funds target rate. By taking the average of the last four rate reduction cycles (1995, 2001, 2007, and 2019), we provide a basis of comparison for the current cycle which began on September 19, 2024, when the FOMC reduced its target rate from 5.50% to 5.00%.

Graph 8 illustrates that, prior to the first reduction of the current cycle, the yield on the 10-year U.S. Treasury declined in a similar fashion as the previous four cycles. In other words, prior to the first rate reduction of the current cycle, treasury markets had priced in the rate reduction much like previous cycles. A stark difference, however, emerges after the first rate reduction of the current cycle. Yields on 10-year Treasuries increased, departing from the behavior observed in previous cycles. In the current cycle, yields have been 50 to 100 basis points higher than the average of previous cycles. Yields remained persistently higher than the historical average even as job growth slowed nationally.

Graphs 7 and 8 reveal the FOMC was between the proverbial rock and hard place when trying to determine the appropriate course of monetary policy. Markets, consumer and business surveys, and forecasts were in consensus that higher tariffs would increase inflation. The expected increases in prices, however, were slower to materialize than forecast and, at the same time, labor market conditions deteriorated nationally. In the end, the FOMC decided to pivot to a more accommodative monetary stance based on the assumption that any increase in inflation would be transitory. The question is whether the FOMC is right or whether inflation will rise to unacceptable levels, requiring the FOMC to reverse course once again.

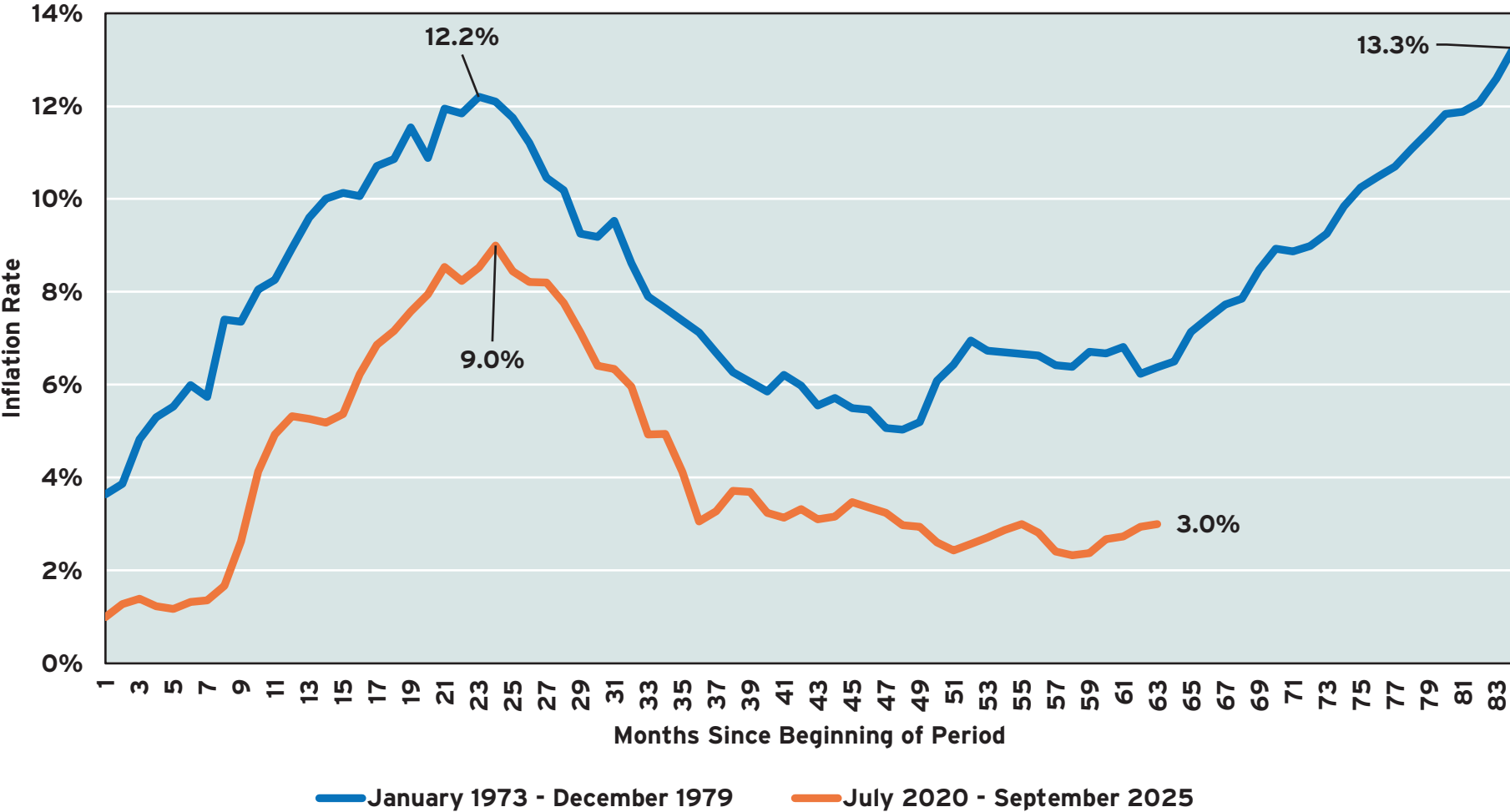


**GRAPH 6**  
**FED FUNDS TARGET RATE**  
**MARCH 20, 2014 - OCTOBER 30, 2025**



Source: Board of Governors of the Federal Reserve System (2025).

GRAPH 7  
MONTHLY INFLATION RATE  
UNITED STATES, JANUARY 1973 - DECEMBER 1979 AND JULY 2020 - SEPTEMBER 2025



Source: Bureau of Labor Statistics (2025). Inflation is the year-over-year change in CPI-U. Data are seasonally adjusted.

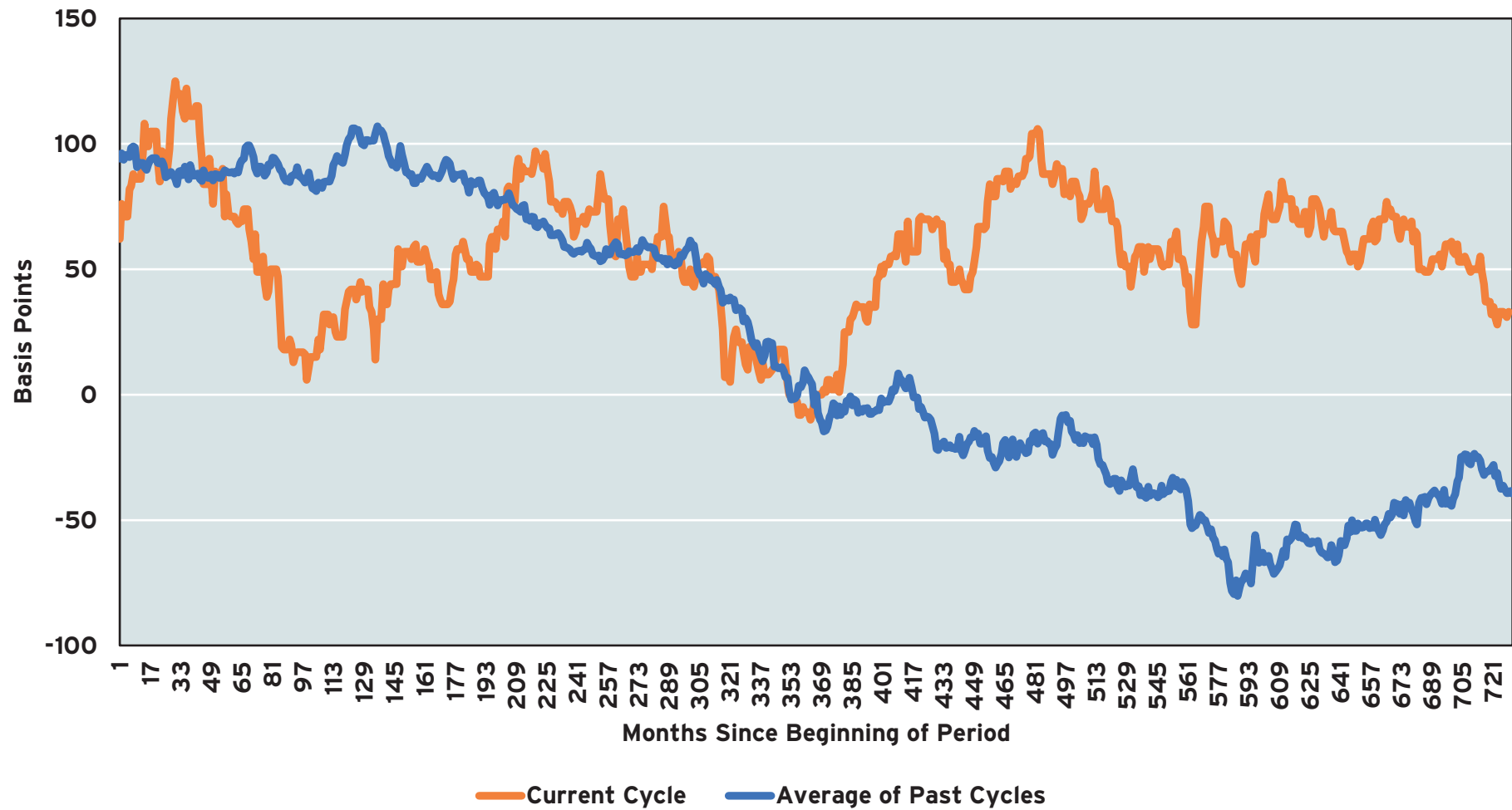


**GRAPH 8**

**10-YEAR U.S. TREASURY YIELD**

**CURRENT RATE REDUCTION CYCLE AND AVERAGE OF PREVIOUS CYCLES**

**JULY 5, 1995 - SEPTEMBER 19, 2025**



Source: Board of Governors, Federal Reserve (2025).

## Tariffs and International Trade

According to the U.S. International Trade Administration, a tariff is a tax levied on the value, including freight and insurance, of imported goods.<sup>11</sup> Tariffs are levied at the port of entry and are collected at the time of customs clearance. Tariffs may vary by good, that is, the tariff on imported steel may differ from the tariff on copper which may differ from the imported energy. Tariffs may also vary by country, that is, imported goods from Mexico may face a 25% tariff with the exception of goods covered under the United States-Mexico-Canada (USMCA) trade agreement. Goods imported from Vietnam face a 20% tariff unless they originate in China and are then subject to a 40% tariff rate. What good from what country faces what tariff is complicated by shifts in tariff policy and ambiguity surrounding the legality of the tariffs imposed by the President in 2025.

Given the evolving nature of the tariffs, we focus instead on how the tariffs have affected trade through the Port of Virginia. For the interested reader, detailed analyses of the composition of tariffs and the estimated impacts of tariffs on economic growth are available from the Yale Budget Lab (<https://budgetlab.yale.edu/>), the Peterson Institute for International Economics (<https://www.piie.com/>), the Tax Foundation (<https://taxfoundation.org/>), and numerous private investment firms. While the estimates of impact vary, the consensus is that higher tariffs will lower GDP growth, increase prices, and reduce employment.

Graph 9 presents the performance of the Port of Virginia with regards to the arrival and departure of loaded Twenty-Foot Equivalent Units (TEUs) containers. A single 20-foot container counts as 1 TEU while a 40-foot-long container counts as 2 TEUs. We focus on loaded TEUs in Graph 9 rather than total TEUs which include the shipping of empty TEUs to other destinations. In 2019, approximately 1.4 million inbound TEUs and 0.97 million outbound TEUs transited through the Port of Virginia. By 2022, the number of inbound loaded TEUs had increased 26.5% relative to 2019 while outbound TEUs has jumped by

11.4%. In 2023, however, inbound loaded TEU traffic declined by 11.7% relative to 2022 while outbound TEU traffic continued to increase by a modest 2.4%. In 2024, inbound TEU traffic partially recovered, and at the end of the year, inbound TEUs were 19.1% higher than 2019 while outbound TEUs were 17.9% higher than 2019.

Before discussing the changes in trade through the Port of Virginia in 2025, we must first recognize that trade volumes may have been influenced by external factors in 2024. On March 26, 2024, the container ship Dali struck the Francis Scott Key Bridge in Baltimore, Maryland. The resulting bridge collapse blocked most shipping to and from the Port of Baltimore for 11 weeks. As a result, major shipping companies rerouted traffic to other ports along the Eastern Seaboard, including the Port of Virginia. As a result, container traffic likely increased traffic through the Port of Virginia in April and May (and perhaps June) 2024. A second external factor was the port strike involving the International Longshoremen's Association and the U.S. Maritime Alliance in October 2024.<sup>12</sup> The strike began on October 1, 2024 and was suspended on October 3, 2024, before being settled on January 15, 2025. It is possible that, fearing a strike, traffic through the Port was 'moved forward' into August and September, although the short-lived nature of the strike suggests that such disruptions were likely relatively small.

Graph 10 examines the year-over-year percent change in inbound loaded TEUs by month for 2025 while Graph 11 presents similar data for outbound loaded TEUs. Through August 2025, inbound loaded TEUs have decreased at the Port of Virginia relative to the same month in 2024 with the exception of March (2.7% higher than March 2024) and August (0.7% higher than August 2024). Through August 2025, there were 1.024 million loaded inbound TEUs transiting through the Port of Virginia, a decrease of 7.5% when compared to inbound TEUs from January 2024 to August 2024.

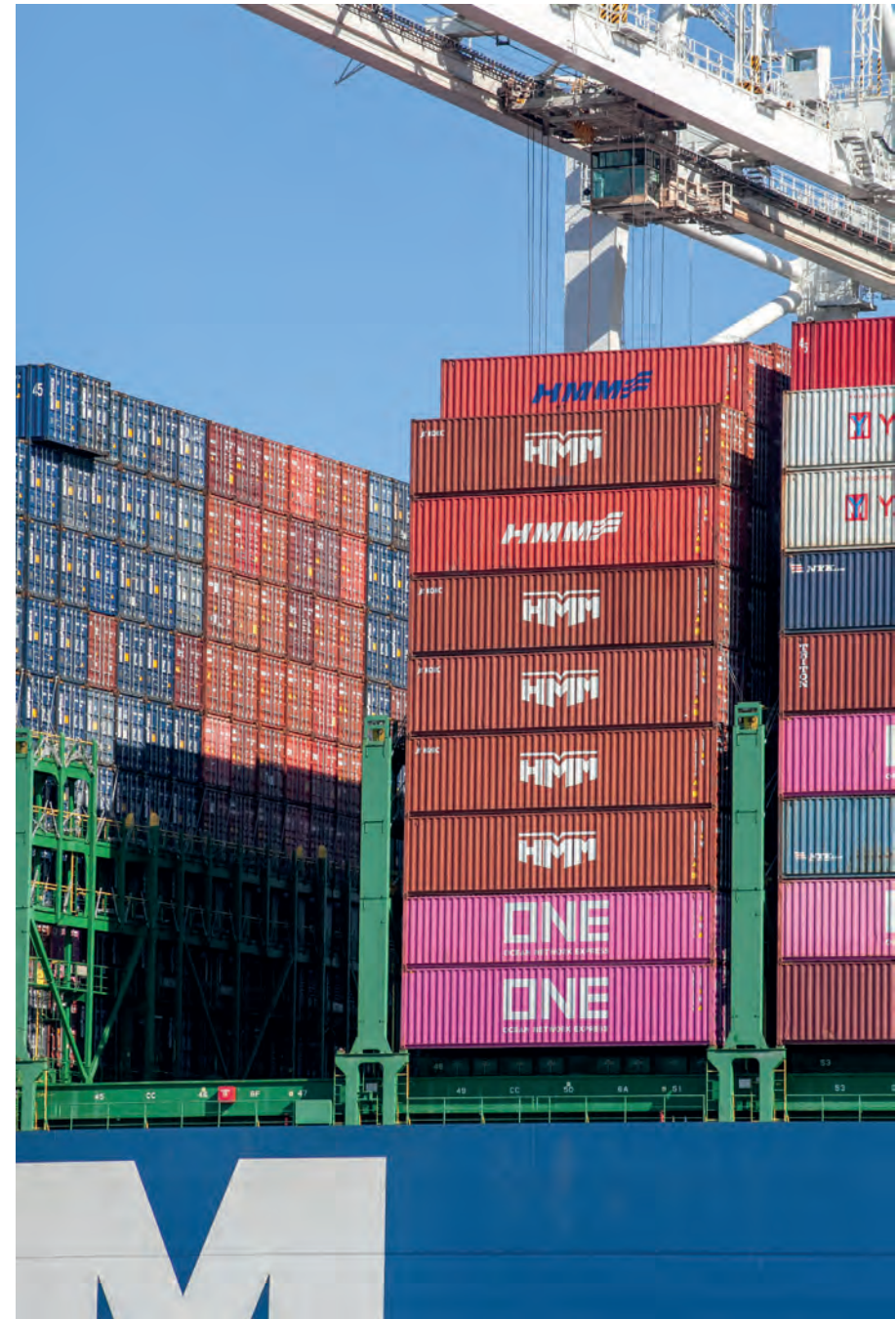
<sup>11</sup> For more information, see <https://www.trade.gov/import-tariffs-fees-overview-and-resources>

<sup>12</sup> For more information on the ILA port strike and tentative deal, see <https://www.supplychaindive.com/news/port-strike-usmx-ila-tentative-agreement/728901/>

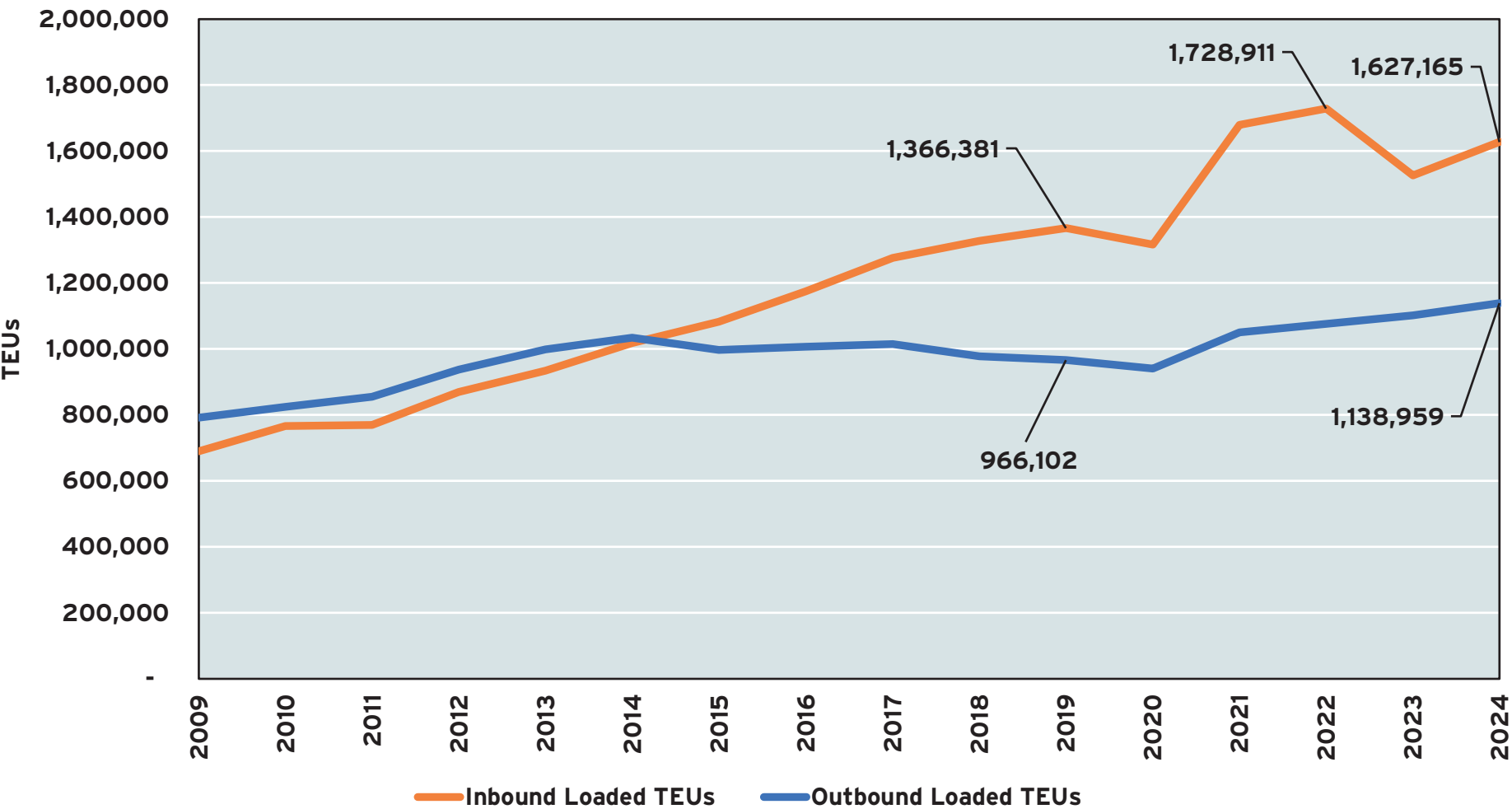
Graph 11 presents the monthly year-over-year percent change in outbound loaded TEUs for the Port of Virginia. From January 2025 to August 2025, outbound loaded TEU volumes were lower in every month in 2025 relative to 2024 with the exception of March. Through August 2025, there were 706,971 loaded outbound TEUs transiting through the Port of Virginia, a decrease of 9.3% when compared to a similar period in 2024.

**Tariffs, however, are not levied on TEUs. Tariffs are an import tax on the dollar value of goods imported into the United States. Businesses in the United States that import goods subject to tariffs directly pay the import taxes (customs duties) to the U.S. government. Graph 12 presents the dollar volume of international trade through the Port of Virginia from January 2010 to July 2025. What is clear from Graph 12 is that billions of dollars of goods through flow the Port of Virginia each month. If tariffs negatively impact trade flows, the impacts will be felt in Hampton Roads and throughout Virginia.**

Graphs 13 and 14 present the monthly year-over-year percent change in the dollar value of imported and exported goods through the Port of Virginia from January 2024 to July 2025. What is clear is that the dollar value of exported and imported goods declined in every month of 2025 compared to the same month of 2024. Even if we set aside the months likely impacted by the closure of the Port of Baltimore, the dollar volume of international trade has declined in 2025 when compared to 2024.



GRAPH 9  
INBOUND AND OUTBOUND LOADED TEUS  
PORT OF VIRGINIA, 2009 - 2024

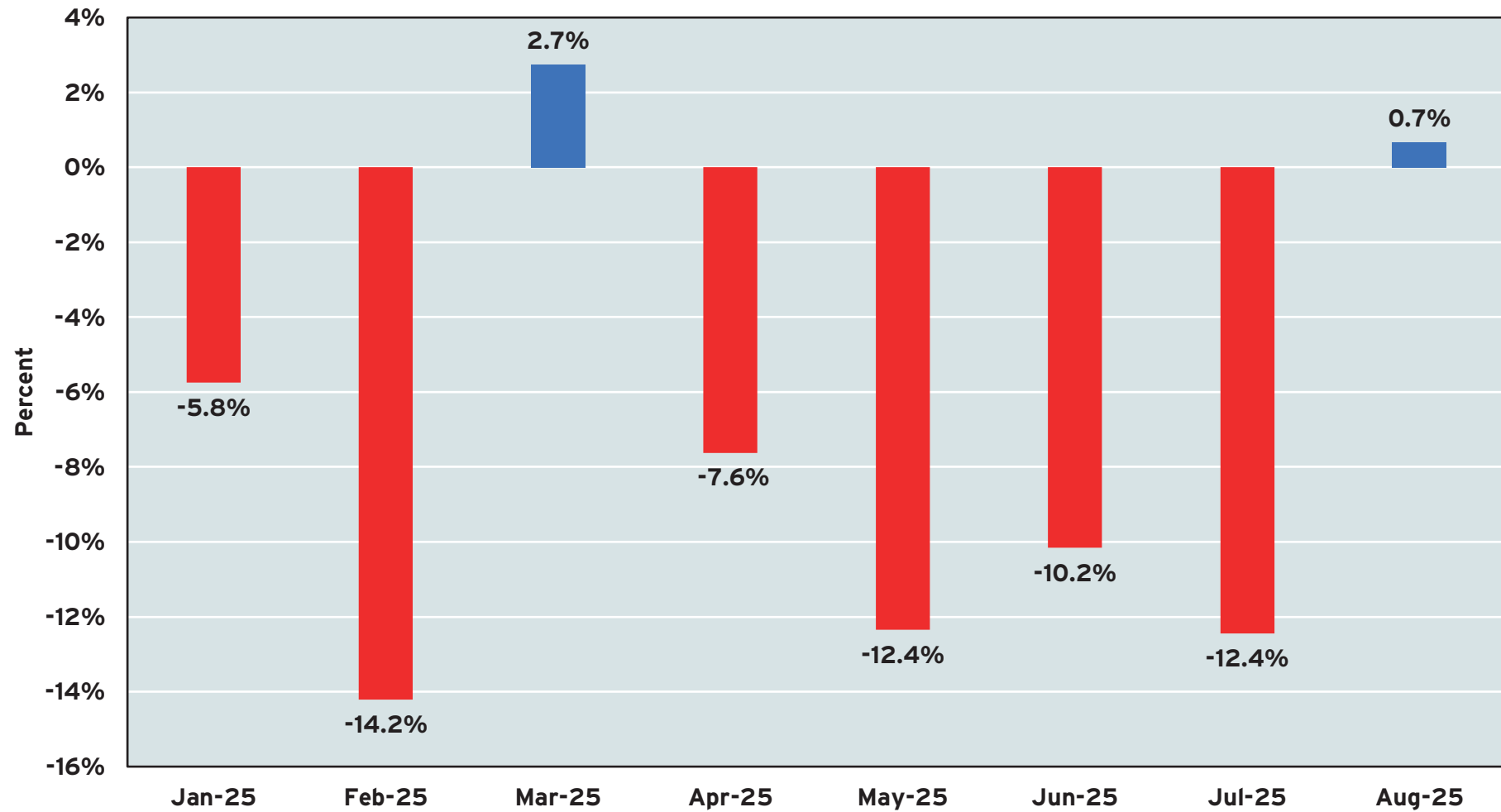


Sources: Port of Virginia and Dragas Center for Economic Analysis and Policy.



**GRAPH 10**

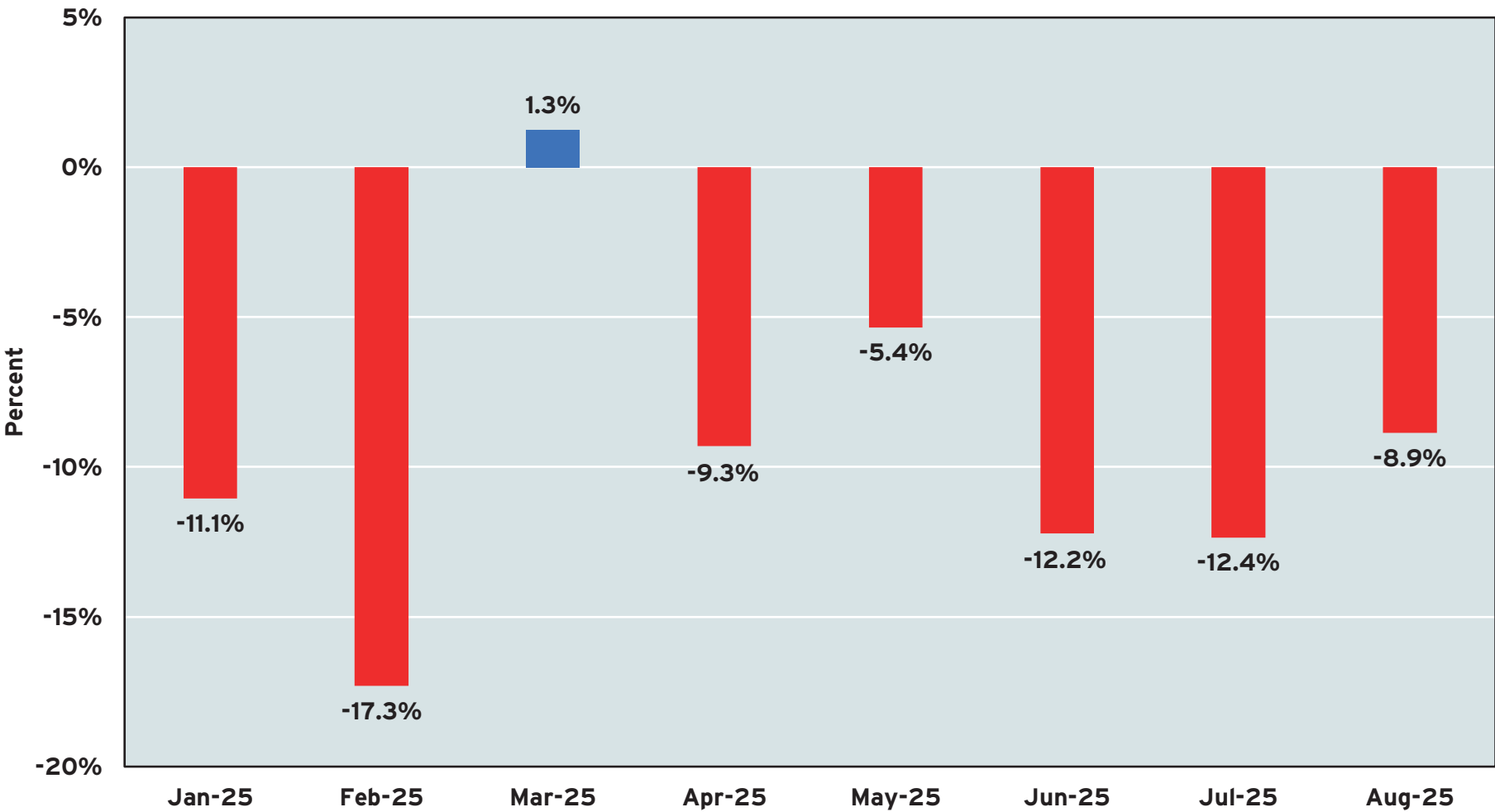
**YEAR-OVER-YEAR PERCENT CHANGE IN INBOUND LOADED TEUS  
PORT OF VIRGINIA, JANUARY 2025 - AUGUST 2025**



Sources: Port of Virginia and Dragas Center for Economic Analysis and Policy.

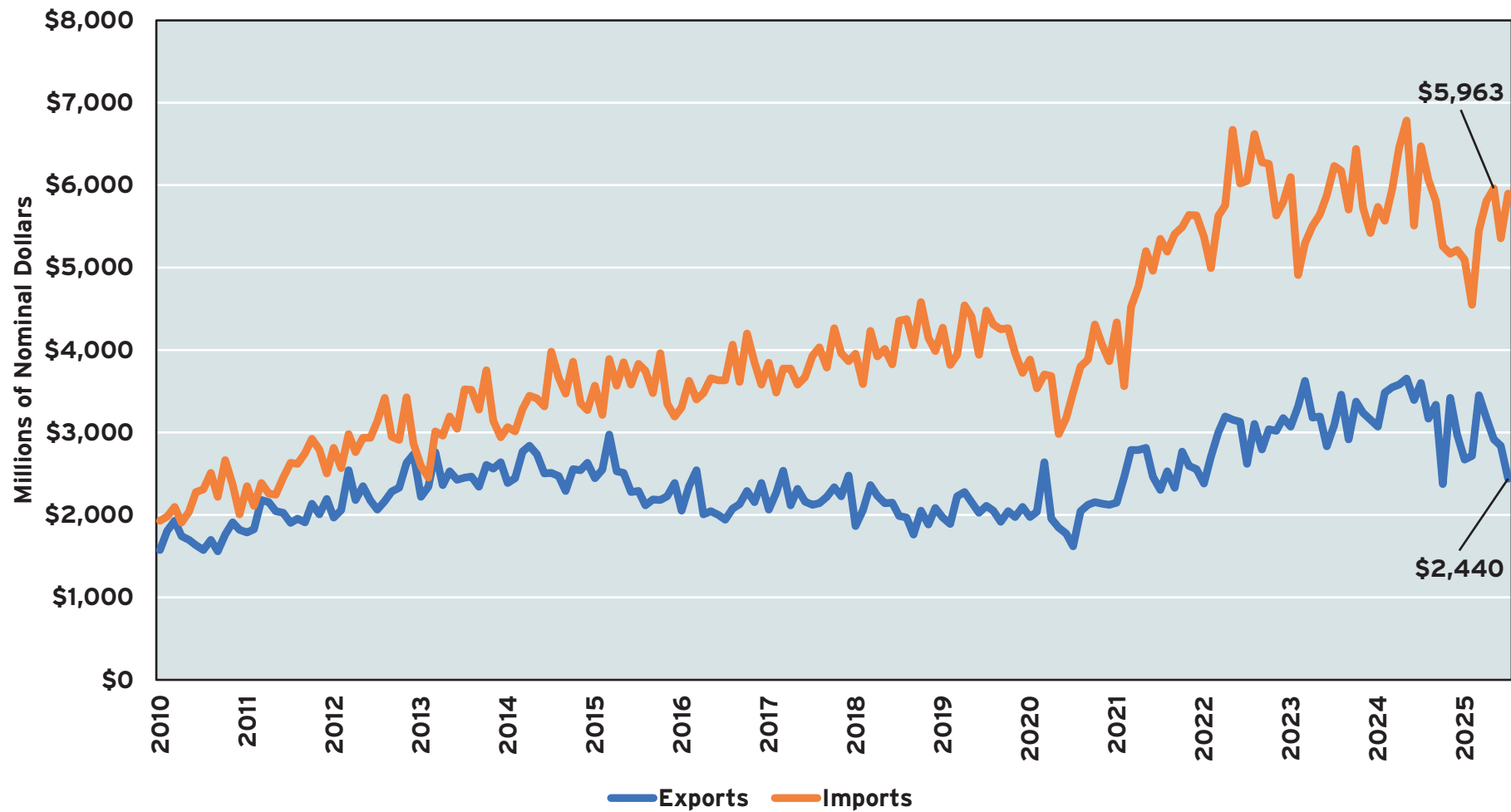
GRAPH 11

YEAR-OVER-YEAR PERCENT CHANGE IN OUTBOUND LOADED TEUS  
PORT OF VIRGINIA, JANUARY 2025 - AUGUST 2025



Sources: Port of Virginia and Dragas Center for Economic Analysis and Policy.

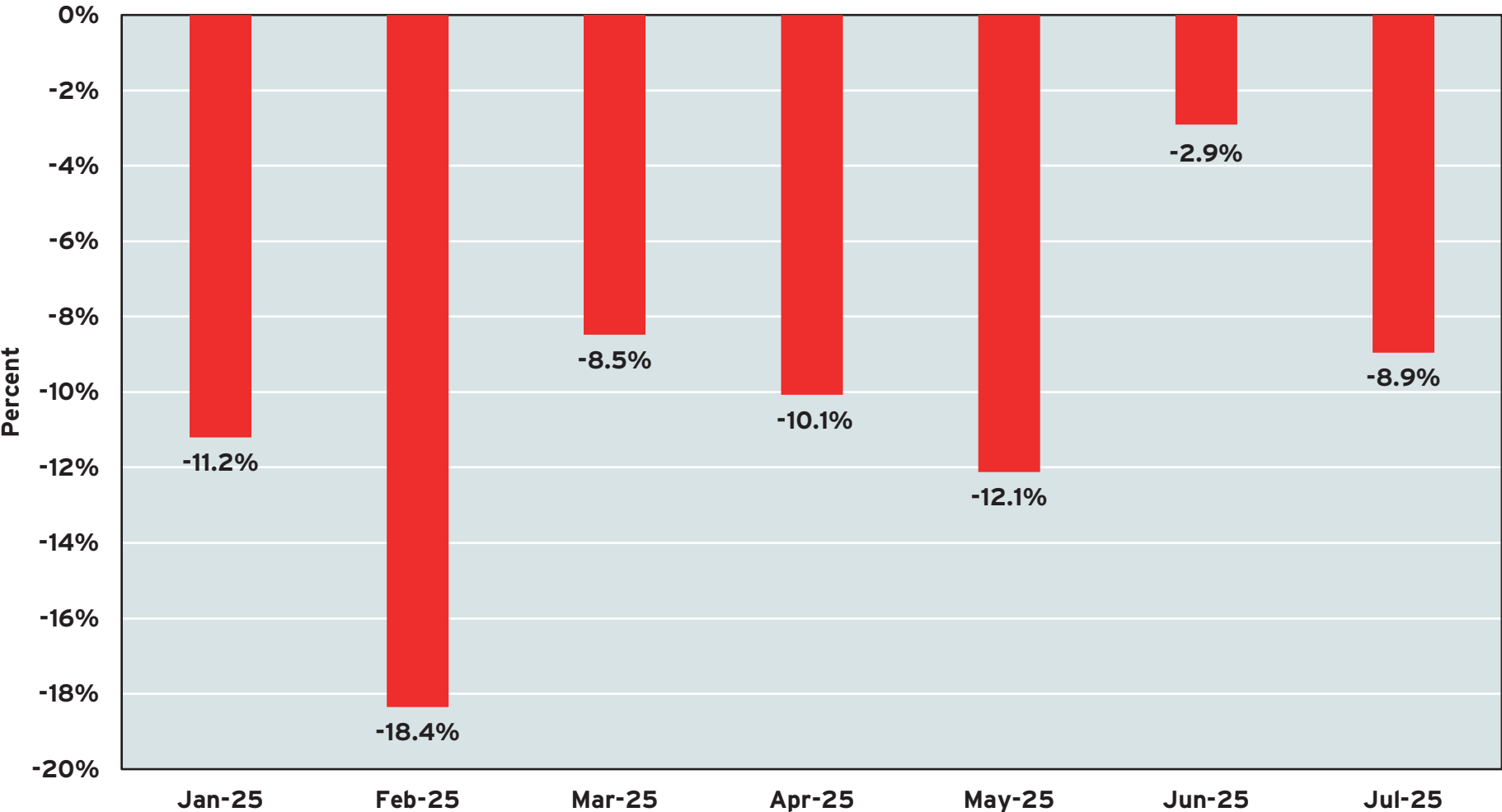
**GRAPH 12**  
**MONTHLY DOLLAR VALUE OF IMPORTS AND EXPORTS**  
**PORT OF VIRGINIA, JANUARY 2010 - JULY 2025**



Sources: U.S. Census Bureau, International Trade Online, and Dragas Center for Economic Analysis and Policy.

GRAPH 13

YEAR-OVER-YEAR PERCENT CHANGE IN DOLLAR VALUE OF IMPORTED GOODS  
PORT OF VIRGINIA, JANUARY 2025 - JULY 2025

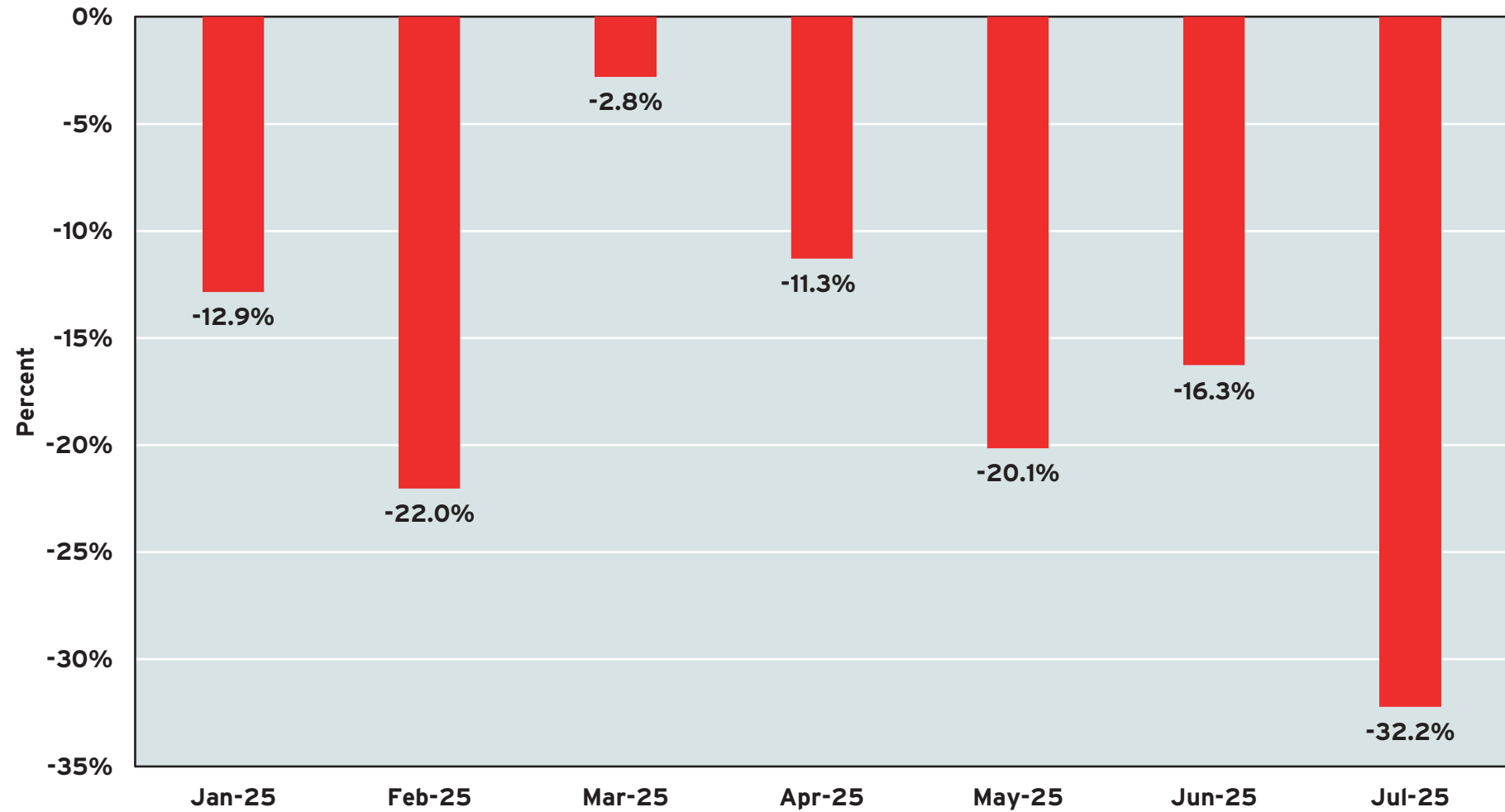


Sources: U.S. Census Bureau, International Trade Online, and Dragas Center for Economic Analysis and Policy.



**GRAPH 14**

**YEAR-OVER-YEAR PERCENT CHANGE IN DOLLAR VALUE OF EXPORTED GOODS  
PORT OF VIRGINIA, JANUARY 2025 - JULY 2025**



Sources: U.S. Census Bureau, International Trade Online, and Dragas Center for Economic Analysis and Policy.

Table 1 provides insight into how trade flows have changed in response to higher tariffs. In the first quarter of 2025, the dollar volume of imports surged for the west coast ports of Long Beach, Los Angeles, and Seattle. The ports at Newark and Oakland also observed small increases in imports relative to the first quarter of 2024. A number of east coast ports, including Charleston, and the Port of Virginia, experienced double-digit declines in the value of imports. Savannah saw a smaller decrease of 1.7% compared to the other east coast ports. At the national level, imports surged in the first quarter of 2025 as firms sought to increase inventories ahead of the imposition of higher tariffs. On the other hand, all the selected ports in Table 1 experienced declines in the value of imports in the second quarter of 2025 relative to the second quarter of 2024. As the inventories accumulated in the first quarter are exhausted, trade volumes may return to some semblance of normal but, in all likelihood, will remain lower than levels recorded in 2024.

Who pays the tariff is a matter of intense political debate, but there is ample evidence in the academic literature to suggest that American firms and consumers bear the burden of the higher tariffs. In a 2020 paper, economists examined tariffs imposed on China and the European Union in 2018 and 2019. They estimate that buyers of U.S. imports (producers and consumers) lost in aggregate \$114 billion on a 2016 annual basis. Protected producers gained \$24.3 billion and the U.S. government gained \$65 billion in tariff revenue. The estimated annualized loss was \$24.8 billion or 0.13% of GDP.<sup>13</sup> Another study found that 2018 tariffs on washing machines increased the price of washers by almost 12% and the price of dryers (which were not subject to tariffs) by almost the same amount.<sup>14</sup>

**Why then have prices not increased more rapidly? Here we must note the difference between announced and effective tariff rates. In the early months of the tariffs in 2025, there were announcements, revisions, and postponements. This uncertainty may have led foreign**

**exports and domestic importers to refrain from passing along the tariffs in the form of higher prices.<sup>15</sup> However, as noted by Goldman Sachs, as the duration of higher tariffs increases, the likelihood of foreign exporters and domestic importers accepting reduced profit margins declines, and tariffs will be more fully passed through to American businesses and consumers. Since tariffs ‘cascade’ through the supply chain, that is, the after-tariff price is subject to sales and other retail taxes, it is likely that prices will rise in response to this pass-through. As noted previously in this chapter, the open question is whether these price increases are transitory or structural. Here, only time will tell, but the impacts on international trade and the economy of Virginia are already materializing in the data.**

TABLE 1		
YEAR-OVER-YEAR QUARTERLY PERCENT CHANGE		
IN THE DOLLAR VALUE OF IMPORTS		
SELECTED MAJOR PORTS		
IN THE UNITED STATES, 2024 Q1 - 2025 Q2		
Port	Percent Change 2024 Q1 - 2025 Q1	Percent Change 2024 Q2 - 2025 Q2
Charleston	-12.9%	-14.0%
Long Beach	21.6%	-8.4%
Los Angeles	11.4%	-7.1%
Newark	1.5%	-4.8%
Port of Virginia	-12.6%	-8.7%
Oakland	0.7%	16.8%
Savannah	-1.7%	-0.2%
Seattle	17.5%	-6.7%
Sources: U.S. Census Bureau, International Trade Online, and Dragas Center for Economic Analysis and Policy.		

13 Fajgelbaum, P. D., P. K. Goldberg, P. J. Kennedy, and A. K. Khandelwal (2020): "The Return to Protectionism," The Quarterly Journal of Economics, 135, 1-55. Also, see the update at: [http://www.econ.ucla.edu/pfajgelbaum/rtp\\_update.pdf](http://www.econ.ucla.edu/pfajgelbaum/rtp_update.pdf).  
14 Flaaen, A., A. Hortaçsu, and F. Tintelnot (2020): "The Production Relocation and Price Effects of US Trade Policy: The Case of Washing Machines," American Economic Review, 110, 2103-27. Available at: <https://pubs.aeaweb.org/doi/pdfplus/10.1257/aer.20190611>  
15 See [https://www.nber.org/system/files/working\\_papers/w26396/w26396.pdf](https://www.nber.org/system/files/working_papers/w26396/w26396.pdf) for evidence of this effect.

# The Federal Government and the Commonwealth

To say that changes have come to the federal government in 2025 would be characterized by some as quite the understatement. Shifts in spending policy, immigration policy, and levels of federal employment will impact the Commonwealth. To understand how, we focus on the federal government's presence in Virginia before examining shifts in federal civilian employment.

Graph 15 displays federal government outlays (promises to pay from a federal government account) for the top 10 states in total outlays for Fiscal Year (FY) 2024. The federal government obligated \$189.0 billion for spending in the Commonwealth in FY 2024. Of the \$189.0 billion in obligations, \$109.9 billion was for contracts, \$52.1 billion was for direct payments to individuals and businesses, \$26.8 billion was for grants, and \$204.9 million was for other types of financial assistance.<sup>16</sup>

Graph 16 presents the top 5 awarding agencies from the federal government for Virginia for FY 2024. The Department of Defense (DoD) ranked first, with \$50.6 billion in obligations in the Commonwealth in FY 2024, followed by the Social Security Administration, Department of Veterans Affairs, and the Department of Health and Human Services. The Department of Homeland Security rounded out the top 5 awarding agencies with \$6.7 billion in obligations in Virginia for FY 2024. What makes Virginia stand out among its neighboring states is that the DoD was the top awarding agency in FY 2024, not the Social Security Administration. For Maryland, North Carolina and West Virginia, the Social Security Administration was the top awarding agency. For Pennsylvania, the Department of Health and Human Services was ranked first, followed by the Social Security Administration.

Spending on awards, grants, contracts, and transfers is not the only contribution of the federal government to the economy of the Commonwealth. Graph 17 illustrates the number of federal government civilian jobs in Virginia from January 2010 to August 2025. For most of the last decade, there were between 175,000 and 180,000 federal civilian employees in the Commonwealth. This decade, the number of employees increased and peaked at 196,700 in December 2024. This year, however, the number of federal civilian employees has declined, falling from the recent peak to 185,200 in August 2025.

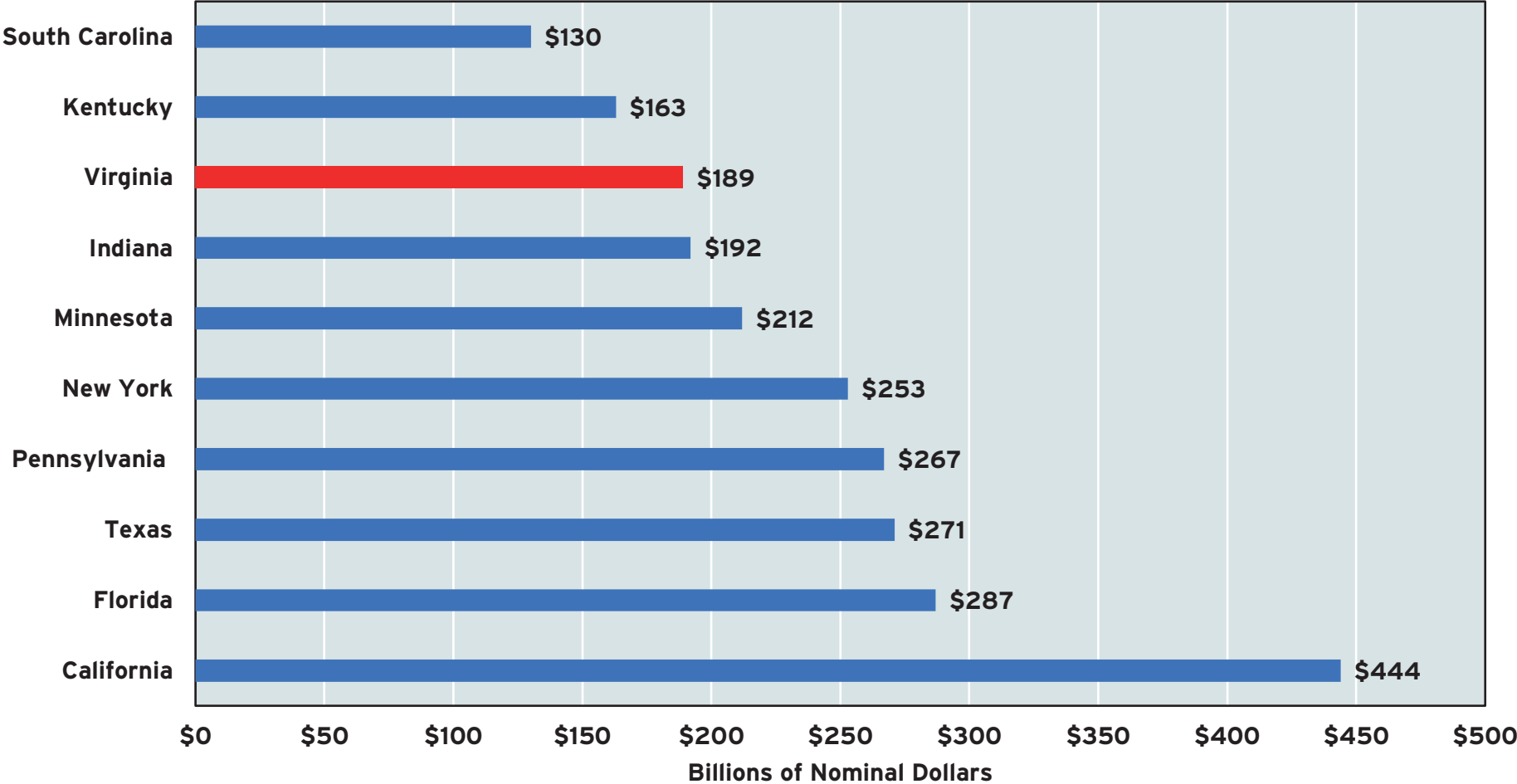
It is important to note, however, that the data in Graph 17 does not capture federal civilian employees who took the 'fork in the road.' This program offered federal civilian employees pay through the end of FY 2025 if they resigned their positions effective September 30, 2025. These employees became unemployed on October 1, 2025. We recognize that some proportion of these unemployed individuals will retire, some will find another job, and some will become unemployed, but we will not know how many for months. The government shutdown of October and November 2025 and subsequent delays in the release of economic data also added to the uncertainties surrounding federal employment in Virginia.

**Why are federal civilian employees important for the Commonwealth? These employees represent 'fiscal gold' for Virginia. Federal civilian employees tend to be older, more educated, and relatively more experienced than their private sector counterparts. The compensation of federal civilian employees is also higher. In 2023, the average wage of a federal civilian employee was 1.6 times that of the average wage of a private sector employee in Virginia. This means that for every lost federal civilian job in the Commonwealth, the private sector would need to generate 1.6 jobs to make up for the lost wages associated with the federal job. Given that federal civilian employee benefits tend to be higher than private sector benefits, in terms of total compensation, this ratio is likely closer to 2.0, a signal of the challenge that awaits Virginia in 2026.**

<sup>16</sup> See [USAspending.gov](https://www.usaspending.gov) for more information.

GRAPH 15

FEDERAL GOVERNMENT OBLIGATIONS  
TOP 10 STATES, UNITED STATES, FISCAL YEAR 2024

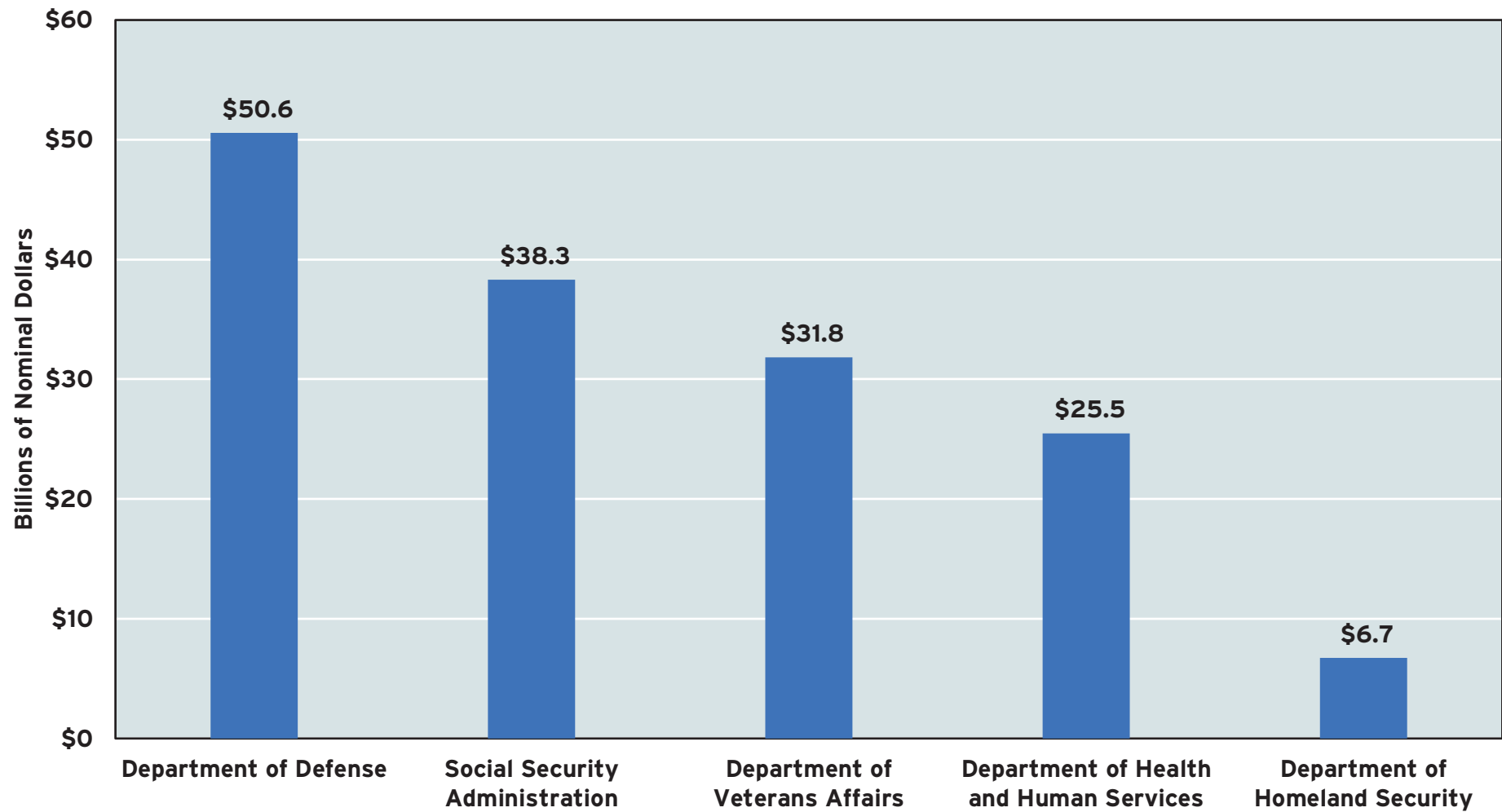


Sources: USAspending.gov and Dragas Center for Economic Analysis and Policy.



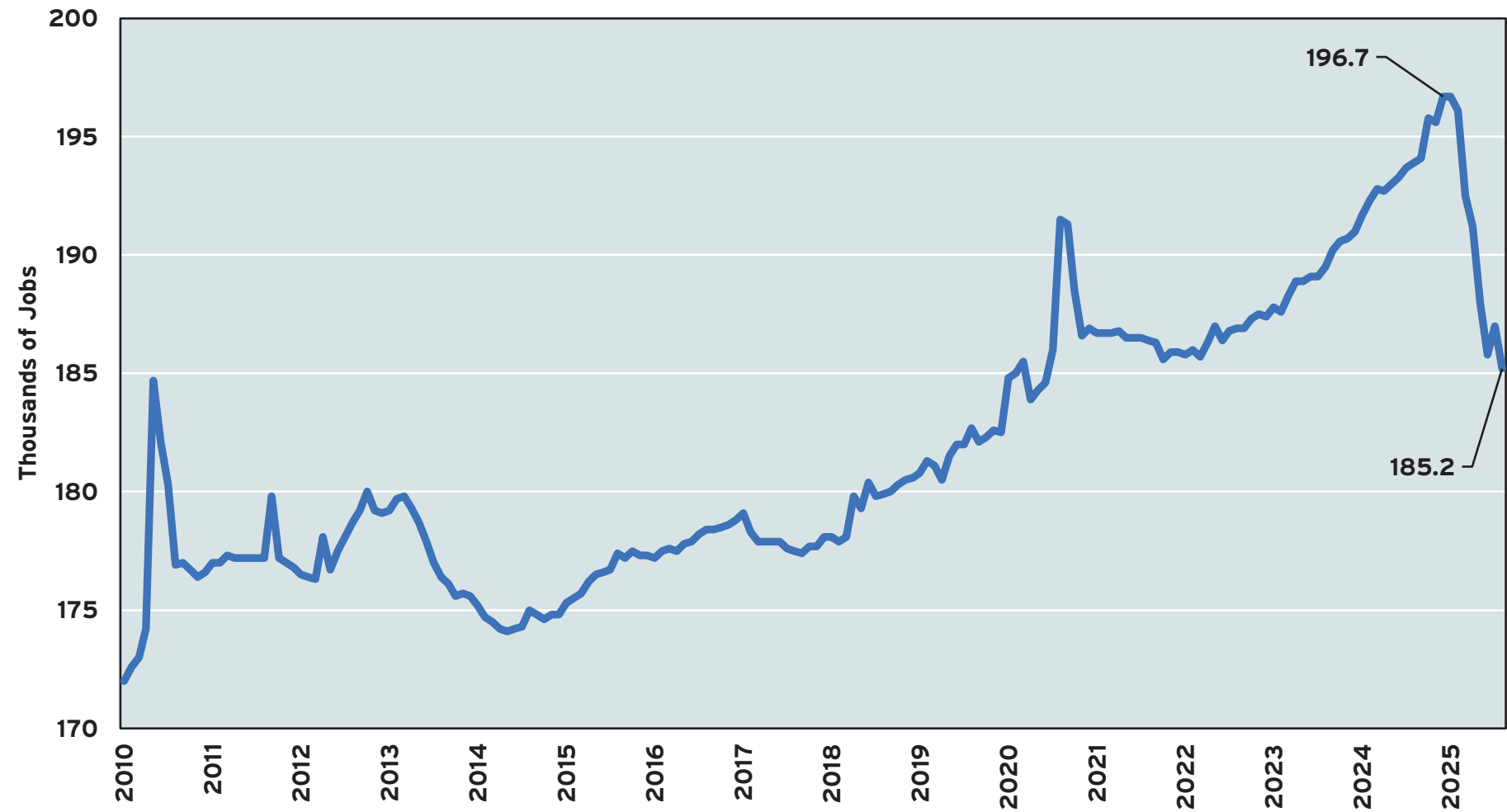
**GRAPH 16**

**TOP 5 AWARDING AGENCIES BY OBLIGATIONS  
VIRGINIA, FISCAL YEAR 2024**



Sources: USAspending.gov and Dragas Center for Economic Analysis and Policy.

GRAPH 17  
FEDERAL GOVERNMENT CIVILIAN EMPLOYEES  
VIRGINIA, JANUARY 2010 - AUGUST 2025



Source: Bureau of Labor Statistics (2025).

## Virginia's Economic Growth Slows

Gross domestic product (GDP) is one of the headline measures of economic performance, as it estimates the dollar value of final goods and services produced in an area during a given period. GDP is an imperfect measure in that it does not capture nonmarket transactions such as barter, may understate the extent of the 'gig economy,' and does not place a value on household production. National data typically lag two to three months from the end of the most recent quarter. State data can lag four to six months from the end of the previous quarter. Quarterly data are also somewhat noisy (the data tend to have greater variation than annual data) and are subject to revisions.

In Graph 18 and Table 2, we present data for nominal and real (inflation-adjusted) GDP for Virginia from 2000 to 2025. We focus on real GDP expressed in 2017 constant dollars. Here, we can see that in 2017, Virginia's real GDP was approximately \$515.2 billion. By 2019, the Commonwealth's real GDP had reached \$541.0 billion before dipping to \$535.2 billion in 2020. The recovery from the short-lived recession of 2020 occurred quickly with the state's real GDP reaching \$565.8 billion in 2021 and continuing to expand in 2022 and 2023. In 2024, the Bureau of Economic Analysis (BEA) estimated that Virginia's GDP reached \$613.7 billion.

What can we expect for 2025? The declines in trade volumes for the Port of Virginia will slow growth in the Hampton Roads region and through the Commonwealth. Reductions in federal civilian employment and the cancelation of non-defense grants and contracts will also serve to diminish the rate of economic growth. Changes in immigration policy appear to have reduced the number of international arrivals, key to the travel and tourism industry, especially in Northern Virginia. On the other hand, increases in defense spending may boost economic activity across the state.

We opine that the total of these effects will be a slowdown in real GDP growth in 2025. We forecast that the Commonwealth economy will grow by 1.5% in 2025. If so, the nominal value of economic activity in Virginia will approach \$800.0 billion at the end of 2025 and the real value of GDP (in 2017 dollars) will be approximately \$622.9 billion. Virginia will grow in 2025, albeit at a much slower pace than in recent years.

In Graph 19, we highlight the more recent performance of the Virginia economy, inclusive of our forecast for 2025. During the first five years of the previous decade (2010 – 2014), the real growth rate of the Commonwealth economy averaged 1.2%. In the second half of the previous decade, however, the real GDP growth in Virginia averaged 2.0%. How has Virginia fared this decade? To answer this question, we exclude 2020 and 2021 as we can reasonably argue that the growth rates in these years were influenced by the COVID-19 pandemic. If we focus on 2022 to 2024, we note that Virginia's growth accelerated from 2.4% in 2022 to 3.4% in 2023 but slowed to 2.4% in 2024. We forecast, however, that Virginia's real GDP growth will slow to 1.5% in 2025 as tariffs and reductions in federal spending and civilian employment impact the Commonwealth.

In Graph 20, we focus on the most recent quarterly data for Virginia's GDP. We do not include 2020, as the quarterly growth rates in this year were significantly impacted by the pandemic and government ordered restrictions on personal and business activity. After contracting in 2022 Q1, Virginia experienced 11 straight quarters of growth until real GDP contracted by -0.6% in 2025 Q1. The contraction of economic activity in the first quarter of 2025 mirrored that of the nation. In 2025 Q2 Virginia's real GDP grew by 1.7%, however, it is likely that Virginia's economic growth will not return to previously observed levels due to changes in trade, federal spending, and federal civilian employment policy.

TABLE 2

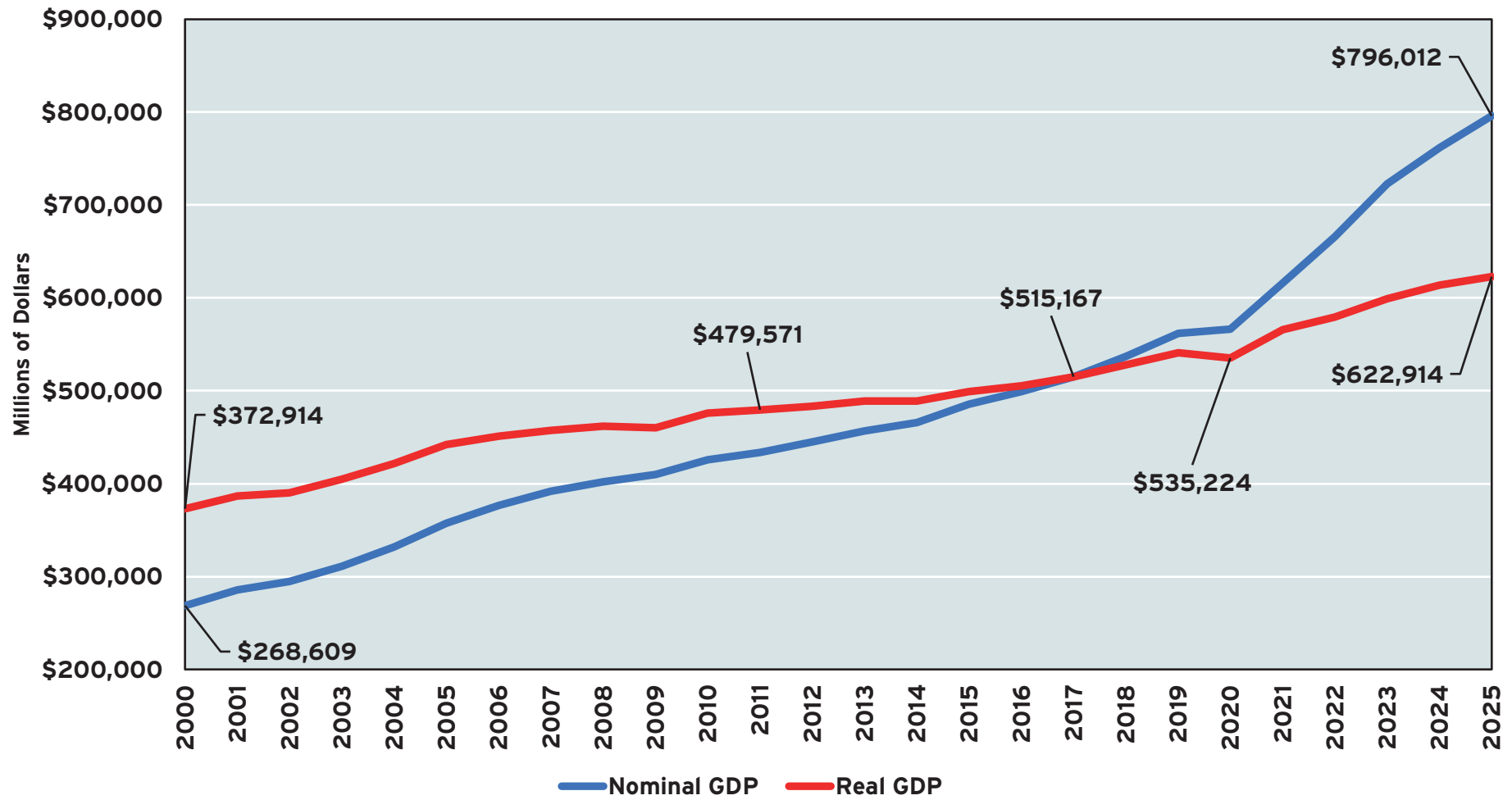
**NOMINAL AND REAL GROSS DOMESTIC PRODUCT  
VIRGINIA, 2000 - 2025\***

Year	Nominal GDP (Millions)	Nominal GDP Growth	Real GDP (Millions)	Real GDP Growth
2000	\$268,609	7.4%	\$372,914	4.6%
2001	\$285,663	6.3%	\$386,445	3.6%
2002	\$294,929	3.2%	\$390,242	1.0%
2003	\$311,093	5.5%	\$404,522	3.7%
2004	\$331,816	6.7%	\$421,744	4.3%
2005	\$357,427	7.7%	\$442,090	4.8%
2006	\$376,429	5.3%	\$451,263	2.1%
2007	\$391,596	4.0%	\$457,569	1.4%
2008	\$402,158	2.7%	\$462,035	1.0%
2009	\$409,935	1.9%	\$460,075	-0.4%
2010	\$425,491	3.8%	\$475,699	3.4%
2011	\$433,684	1.9%	\$479,571	0.8%
2012	\$445,009	2.6%	\$483,041	0.7%
2013	\$456,912	2.7%	\$488,741	1.2%
2014	\$465,602	1.9%	\$488,919	0.0%
2015	\$485,541	4.3%	\$498,944	2.1%
2016	\$499,032	2.8%	\$505,108	1.2%
2017	\$515,167	3.2%	\$515,167	2.0%
2018	\$537,158	4.3%	\$527,768	2.4%
2019	\$561,702	4.6%	\$541,028	2.5%
2020	\$566,102	0.8%	\$535,224	-1.1%
2021	\$616,188	8.8%	\$565,791	5.7%
2022	\$665,625	8.0%	\$579,302	2.4%
2023	\$722,767	8.6%	\$599,261	3.4%
2024	\$761,734	5.4%	\$613,709	2.4%
2025*	\$795,639	4.5%	\$622,915	1.5%

Source: Bureau of Economic Analysis (2025). Real GDP is measured in millions of chained 2017 dollars. \*2025 represents our forecast.



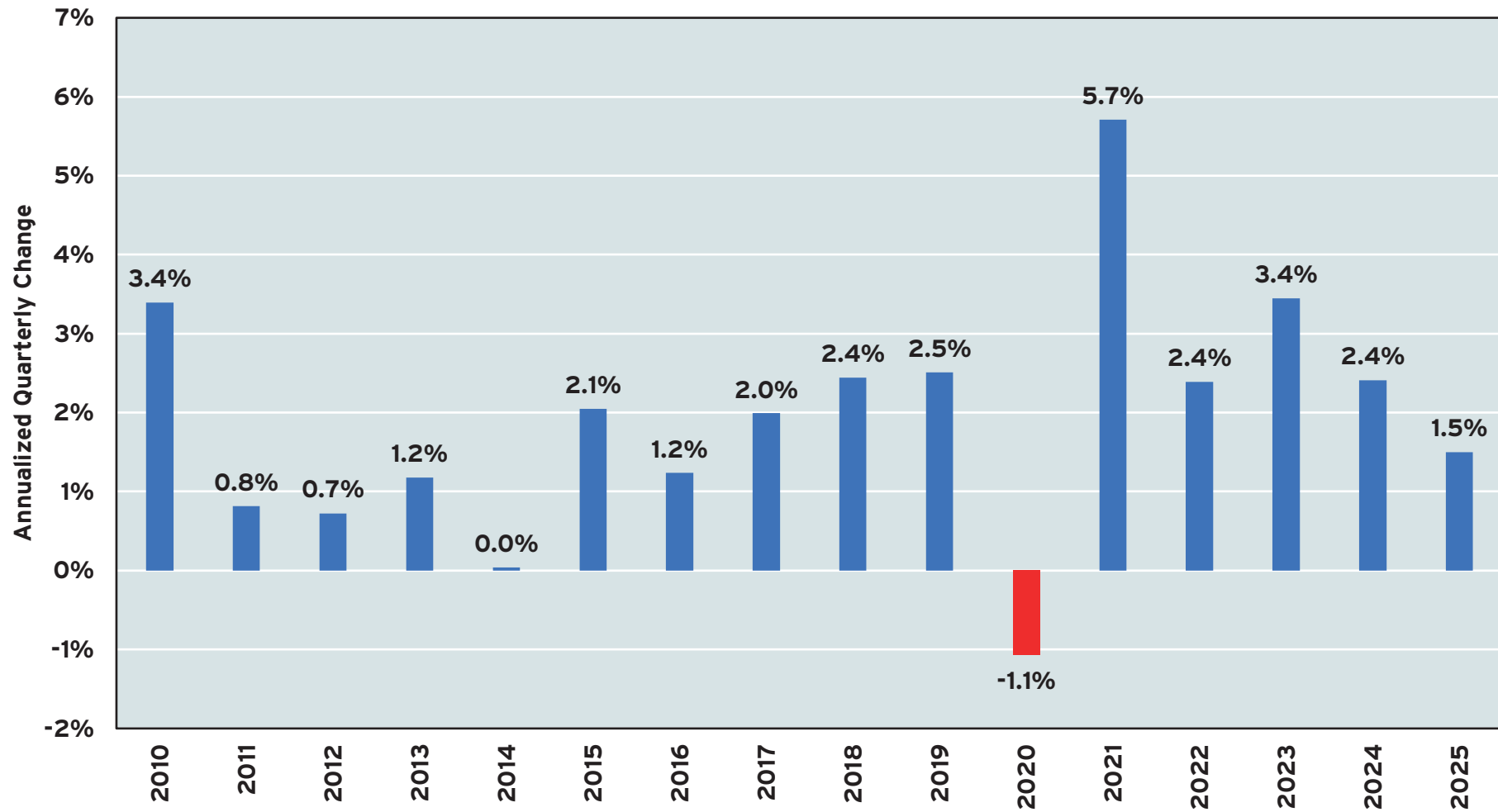
**GRAPH 18**  
**NOMINAL AND REAL GROSS DOMESTIC PRODUCT**  
**VIRGINIA, 2000 - 2025\***



Source: Bureau of Economic Analysis (2025). Real GDP is measured in millions of chained 2017 dollars. \*2025 represents our forecast.

GRAPH 19

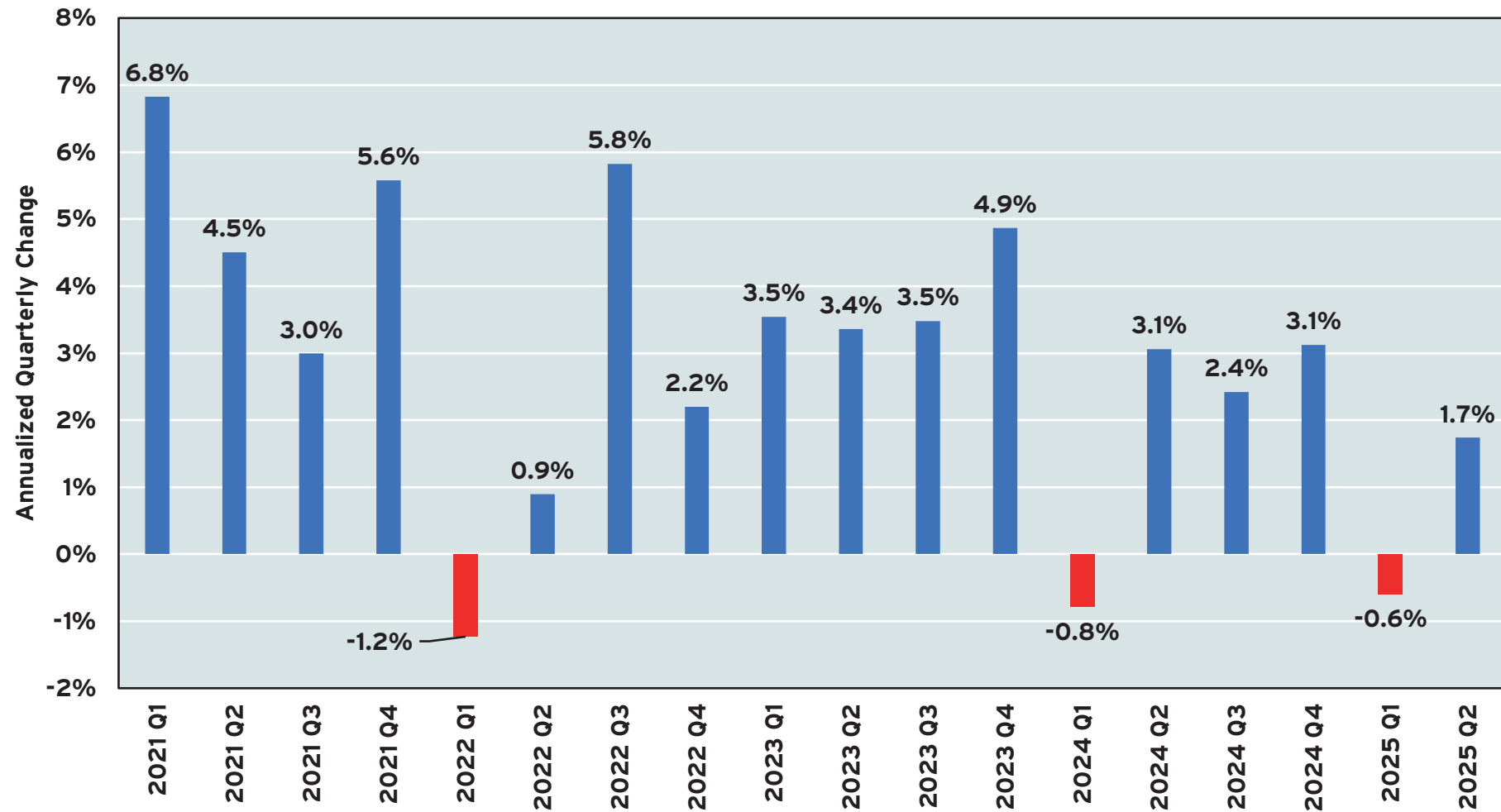
**PERCENT CHANGE IN REAL ANNUAL GROSS DOMESTIC PRODUCT  
VIRGINIA, 2010 - 2025\***



Sources: Bureau of Economic Analysis, 2025, and the Dragas Center for Economic Analysis and Policy. Table SQGDP9, real GDP by state. \*2025 represents our forecast for Virginia's real GDP and national inflation rate.

GRAPH 20

ANNUALIZED PERCENTAGE CHANGE IN QUARTERLY REAL GROSS DOMESTIC PRODUCT  
VIRGINIA, Q1 2021 - Q2 2025



Sources: Bureau of Economic Analysis, 2025, and the Dragas Center for Economic Analysis and Policy. Table SQGDP9, real GDP by state. Annualized change in seasonally adjusted real quarterly GDP in millions of chained 2017 dollars.

What might 2026 hold for the Commonwealth? Here, the question depends on a number of federal government policies. If tariffs remain in place and there are further reductions to federal civilian employment, then the prospects for growth in Virginia diminish considerably. If, on the other hand, tariffs are lowered or return to 2024 levels and federal civilian employment stabilizes, then increases in defense spending may help push growth higher in 2026. Our forecast is also clouded by inflation, that is, it remains an open question whether the increases in the inflation rate in the second half of 2025 are transitory. If so, then as inflation eases in 2026, growth will likely tick upward in Virginia.

Recognizing that forecasting is an exercise in uncertainty, we opine that 2026 will look much like the later half of 2025. Continued reductions in non-defense spending and federal civilian employment will lower growth in Northern Virginia and, by extension, Virginia. Continued uncertainty surrounding international trade will slow international trade through the Port of Virginia. International tourism is likely to decline and international migration to the Commonwealth is likely to slow as well. Increases in defense spending will be insufficient to overcome these headwinds. The prospects for continued growth for Virginia in 2026 are diminished, and this is before the impacts of the One Big Beautiful Bill materialize in state and local coffers.

## Virginia's Civilian Labor Force and Individual Employment

Individual employment and establishment employment data attempt to measure how many people are working at a given time. These data are from two different surveys: the Current Population Survey (CPS) and the Current Employment Statistics (CES). The CPS asks the civilian noninstitutionalized population whether they are working, looking for work, or not attached to the labor force. The civilian labor force represents the civilian noninstitutionalized population that is either working or actively looking for work, while individual employment reflects those in the labor force who are working. The CES asks employers about their employees. There is an important difference between the CPS and CES. An individual can only be employed once in the CPS – that is, an individual either is working, unemployed, or not seeking to work. In the CES, an individual can show up multiple times if he or she has different jobs with different employers. For clarity, we present the CPS data as “individual employment” and the CES data as “jobs.”

Graph 21 presents data for Virginia's civilian labor force and individual employment from January 2010 to August 2025. Virginia's civilian labor force had reached a post-recession low of approximately 4.2 million individuals in September 2010, followed by a post-recession low of individual employment in January 2010 of about 3.9 million individuals. In November 2019, individual employment peaked at 4.3 million Virginians, followed by the civilian labor force reaching a record 4.4 million Virginians. After a sharp decline in the first half of 2020, individual employment recovered more quickly than the civilian labor force. In January 2025, the civilian labor force peaked at 4.6 million Virginians while individual employment reached a record of approximately 4.5 million Virginians in the same month.



Graph 22 traces the trajectories of the civilian labor force and individual employment from January 2024 to August 2025. This graph allows us to discern whether each series has grown or fallen relative to January 2024. In January 2025, there were 24,996 more Virginians in the labor force. In the same month, individual employment was 18,296 higher than January 2024. Since January 2025, however, both series have declined as an increasing number of individuals have found themselves unemployed or have left the labor force entirely. In August 2025, there were 28,525 fewer Virginians in the civilian labor force than in January 2024. In other words, there were 53,521 fewer individuals looking for work or at work in August 2025 than January 2025.

Individual employment has declined even more precipitously than the civilian labor force in 2025. In August 2025, there were 60,840 fewer individuals reporting they were employed in Virginia than January 2024, that is, the gains in 2024 were erased in 2025. In total, individual employment declined by 79,126 Virginians from January 2025 to August 2025. It would appear that the economic expansion of the last four years has, at least from the perspective of the labor force and individual employment, come to an end in 2025.

The labor force participation rate is equal to the number of individuals in the labor force as a percentage of the civilian noninstitutional population and represents the percentage of the population that is either working or actively looking for work.<sup>17</sup> Graph 23 presents the labor force participation rate for Virginia from January 2010 to August 2025. Prior to the onset of the COVID-19 pandemic, the labor force participation rate reached 65.9% in November 2019. The labor force fell in 2020 but had completely recovered by the end of 2022. After peaking at 66.3% from March 2023 to August 2023, civilian labor force participation declined slowly to 65.8% in December 2024, a 0.5 percentage point decline. In 2025, however, the fall in labor force participation has been more pronounced, reaching 64.7% in August 2025.

The headline unemployment rate measures the ratio of unemployed individuals to the civilian labor force. In January 2010, as shown in Graph 24, the headline unemployment rate in the Commonwealth was 7.1%. Over the next decade, the unemployment rate declined steadily and reached a low of 2.5% in the summer months of 2019. After increasing slightly during the fall of 2019 and winter of 2020, the unemployment rate jumped from 3.2% in March 2020 to 11.9% in April 2020.

The recovery in the unemployment rate was relatively swift when compared to the period after the Great Recession of 2007 – 2009. By December 2020, the unemployment rate in Virginia had fallen to 5.0%. A year later, in December 2021, the unemployment rate stood at 2.8%. By June 2023, the unemployment rate had declined to 2.5%. The unemployment rate then increased, reaching 2.9% in December 2023. In 2024, the unemployment rate vacillated between 2.8% and 2.9% and was 2.9% in December 2024.

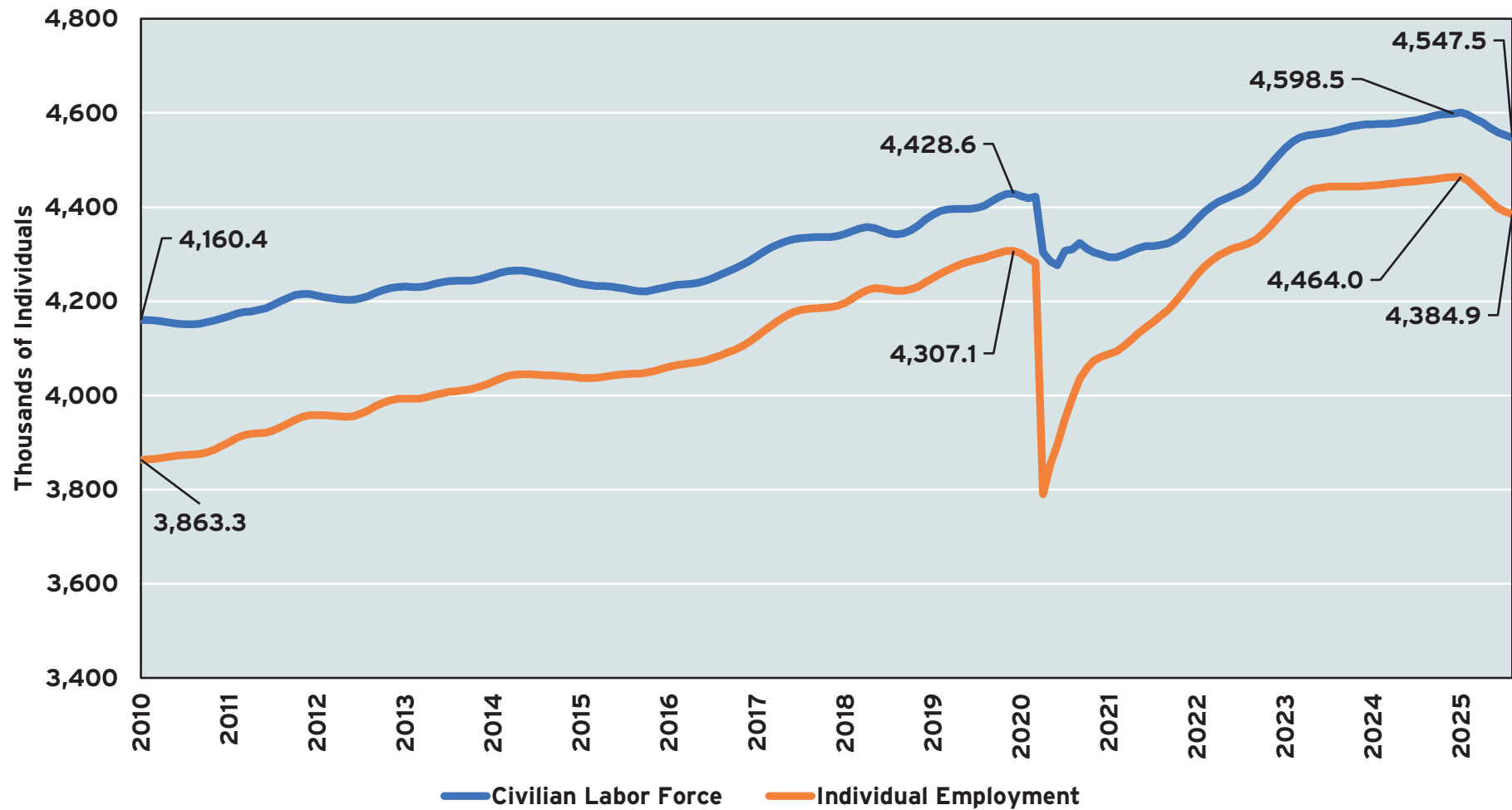
**In 2025, the unemployment rate has increased even while the number of individuals in the civilian labor force fell, that is, Virginians were becoming unemployed faster than they were leaving the labor force. In January 2025, the unemployment rate was 3.0%. By June, the unemployment rate was 3.5%, and it was at 3.6% in July and August 2025. We expect, as federal workers who took the ‘fork in the road’ become unemployed on October 1, 2025, that Virginian’s unemployment rate will increase and may approach 4.0% by the end of 2025.**

How has Virginia fared relative to neighboring states and the nation? In Graph 25, we present the change in the civilian labor force from January 2025 to August 2025 for Virginia, a number of selected neighboring states, and the nation. Nationally, the civilian labor force was essentially unchanged over this period. Virginia’s labor force, however, declined by 1.2% from January to August 2025, a decline that was significantly more pronounced than its neighboring states. It would appear that Virginia’s residents were more adversely impacted by changing economic conditions in 2025 than the residents of Maryland, North Carolina, and West Virginia.

<sup>17</sup> The civilian noninstitutional population age 16 or older excludes active-duty members of the U.S. Armed Forces, people confined to, or living in, institutions or facilities such as prisons, jails, and residential care facilities, to include skilled nursing homes.

GRAPH 21

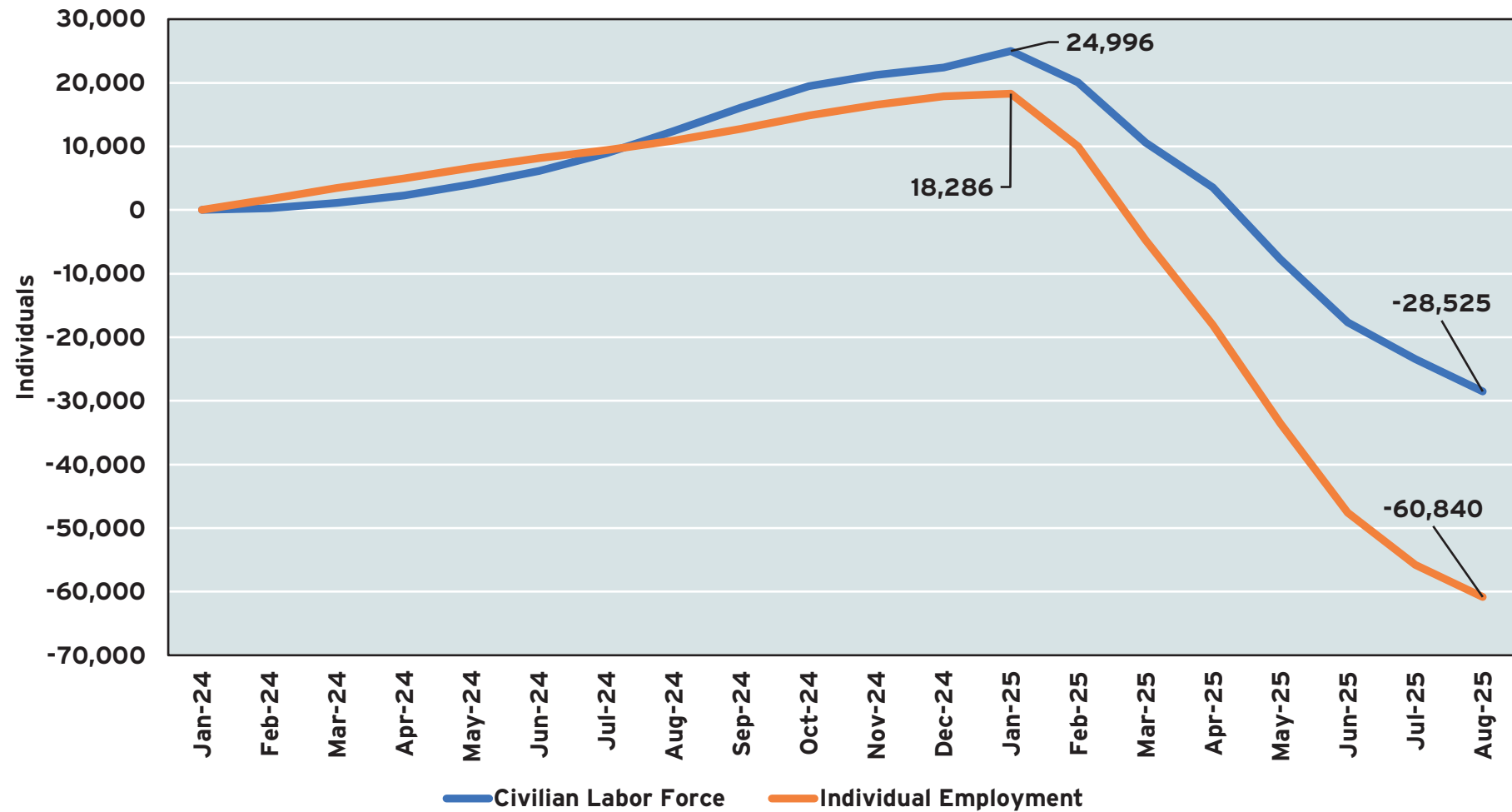
**CIVILIAN LABOR FORCE AND INDIVIDUAL EMPLOYMENT  
VIRGINIA, JANUARY 2010 - AUGUST 2025**



Sources: Bureau of Labor Statistics (2025) and the Dragas Center for Economic Analysis and Policy. Data are seasonally adjusted.

GRAPH 22

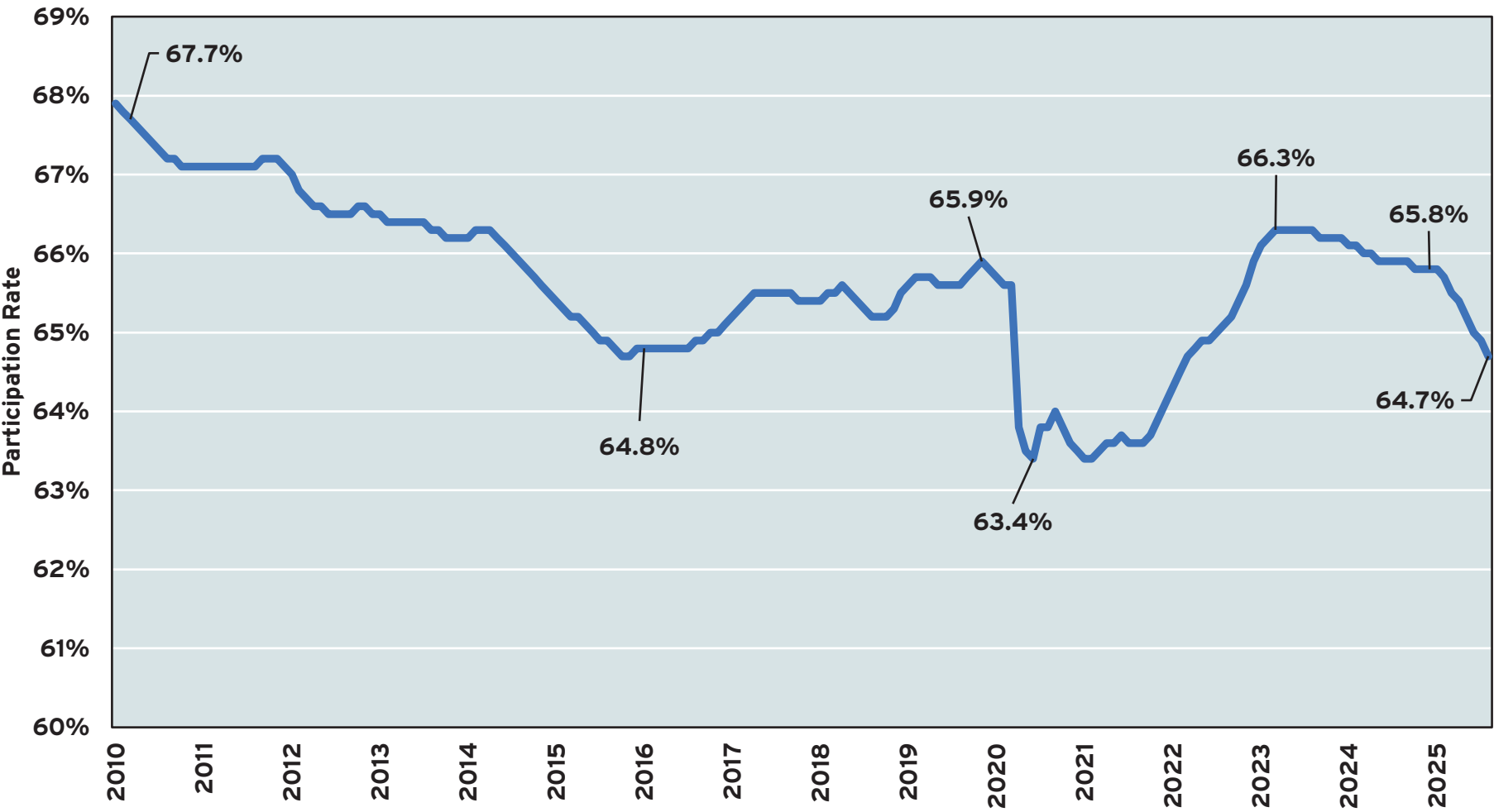
CUMULATIVE CHANGE IN CIVILIAN LABOR FORCE AND INDIVIDUAL EMPLOYMENT  
VIRGINIA, JANUARY 2024 - AUGUST 2025



Sources: Bureau of Labor Statistics (2025) and Dragas Center for Economic Analysis and Policy. Data are seasonally adjusted.

GRAPH 23

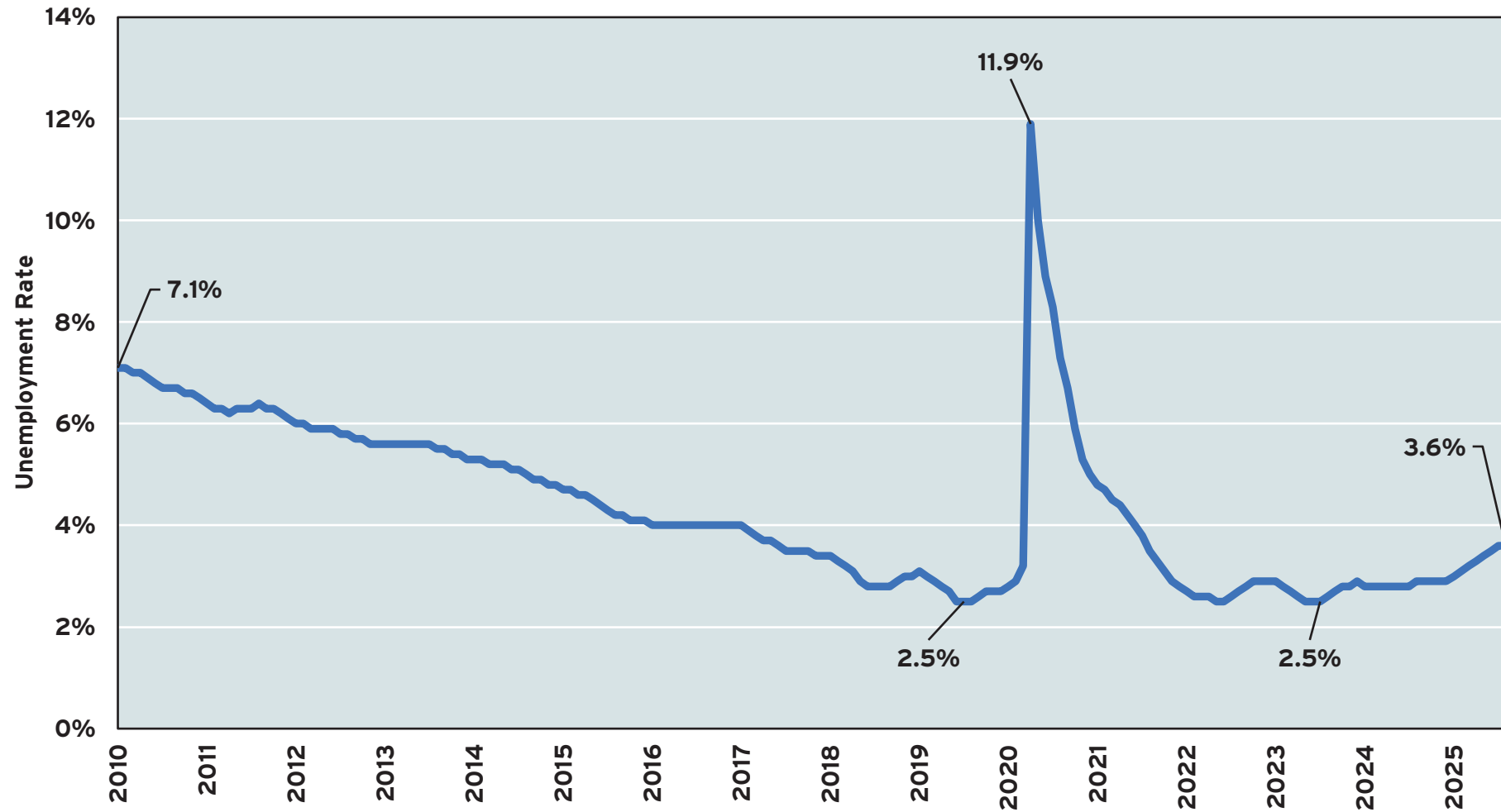
LABOR FORCE PARTICIPATION RATE  
VIRGINIA, JANUARY 2010 - AUGUST 2025



Sources: Bureau of Labor Statistics (2025) and Dragas Center for Economic Analysis and Policy. Data are seasonally adjusted.

**GRAPH 24**

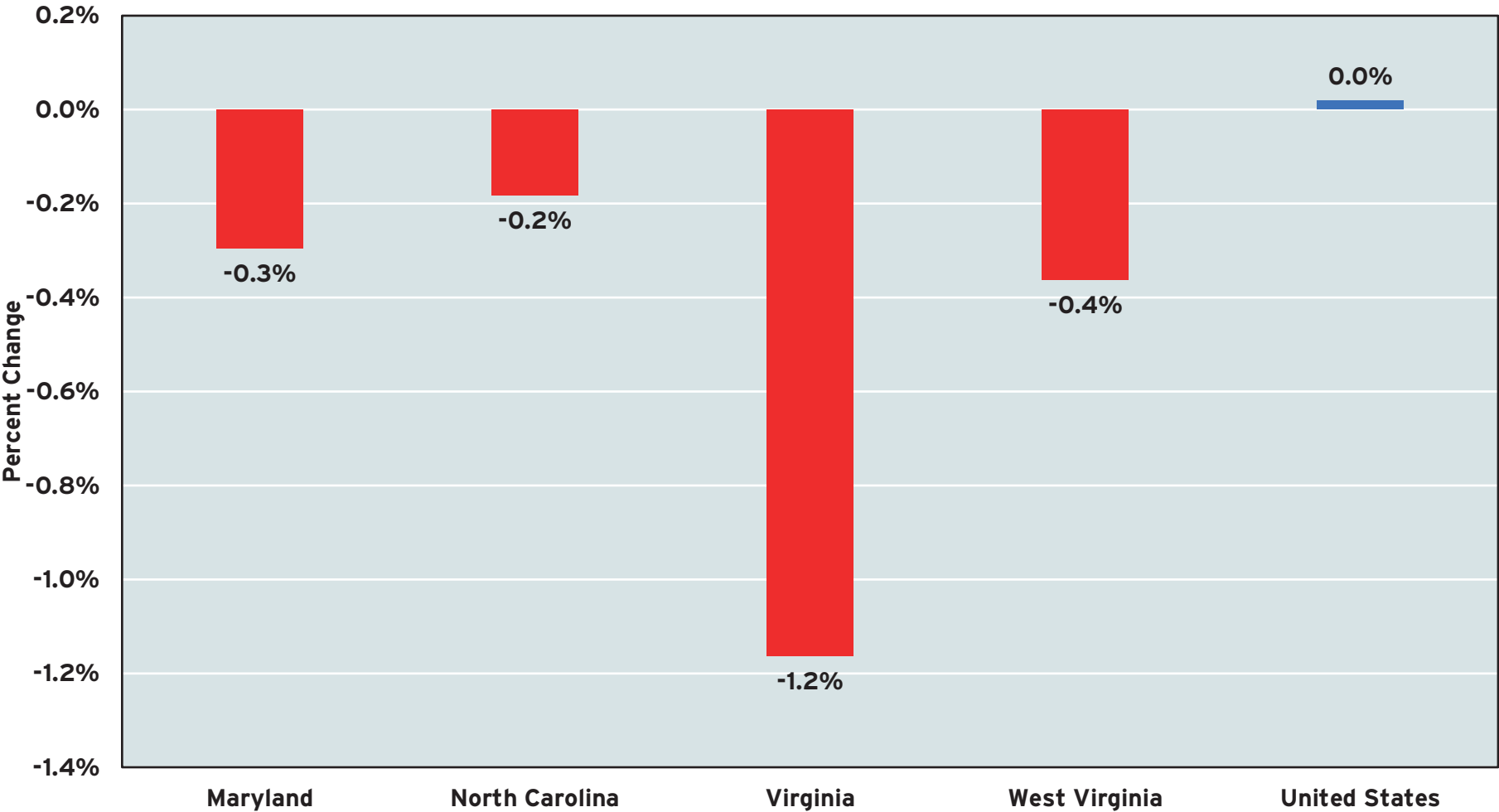
**HEADLINE UNEMPLOYMENT RATE (U3)  
VIRGINIA, JANUARY 2010 - AUGUST 2025**



Sources: Bureau of Labor Statistics (2025) and Dragas Center for Economic Analysis and Policy. Data are seasonally adjusted.



**GRAPH 25**  
**PERCENT CHANGE IN CIVILIAN LABOR FORCE**  
**VIRGINIA, SELECTED STATES, AND THE UNITED STATES**  
**JANUARY 2025 - AUGUST 2025**



Sources: Bureau of Labor Statistics (2025) and Dragas Center for Economic Analysis and Policy. Data are seasonally adjusted.

## Virginia Adds More Jobs, but Growth Slows

Graph 26 displays nonfarm payrolls (jobs) for the Commonwealth of Virginia from January 2010 to August 2025. Following the Great Recession of 2007 – 2009, the number of jobs in Virginia fell to a low of 3,598 thousand in February 2010. From February 2010 to January 2020 (the pre-pandemic peak), Virginia added approximately 492,000 jobs, an approximate 13.7% increase in the number of jobs across the Commonwealth. By April 2020, employers had shed 478,800 jobs. The recovery, however, was swift. In August 2022, employers had not only brought the number of jobs back to the pre-pandemic high, but they also started to add new jobs to the Virginia economy.

Nonfarm payrolls continued to climb through 2024. In December 2024, there were 4,273.9 thousand jobs across the Commonwealth. In 2025, however, job growth has been less consistent than previous years (Graph 27). The number of jobs declined in January and February 2025, increased in March, April, and May, declined again in June, and increased in July and August 2025. While the total number of jobs was higher in August 2025 than December 2024, job growth has slowed. In 2024, employers added an average of 6,167 jobs a month. From January to August 2025, average monthly job growth was only 963 jobs a month. For an economy with almost 4.3 million jobs, one would not be wrong as characterizing the monthly job growth in 2025 as anemic.

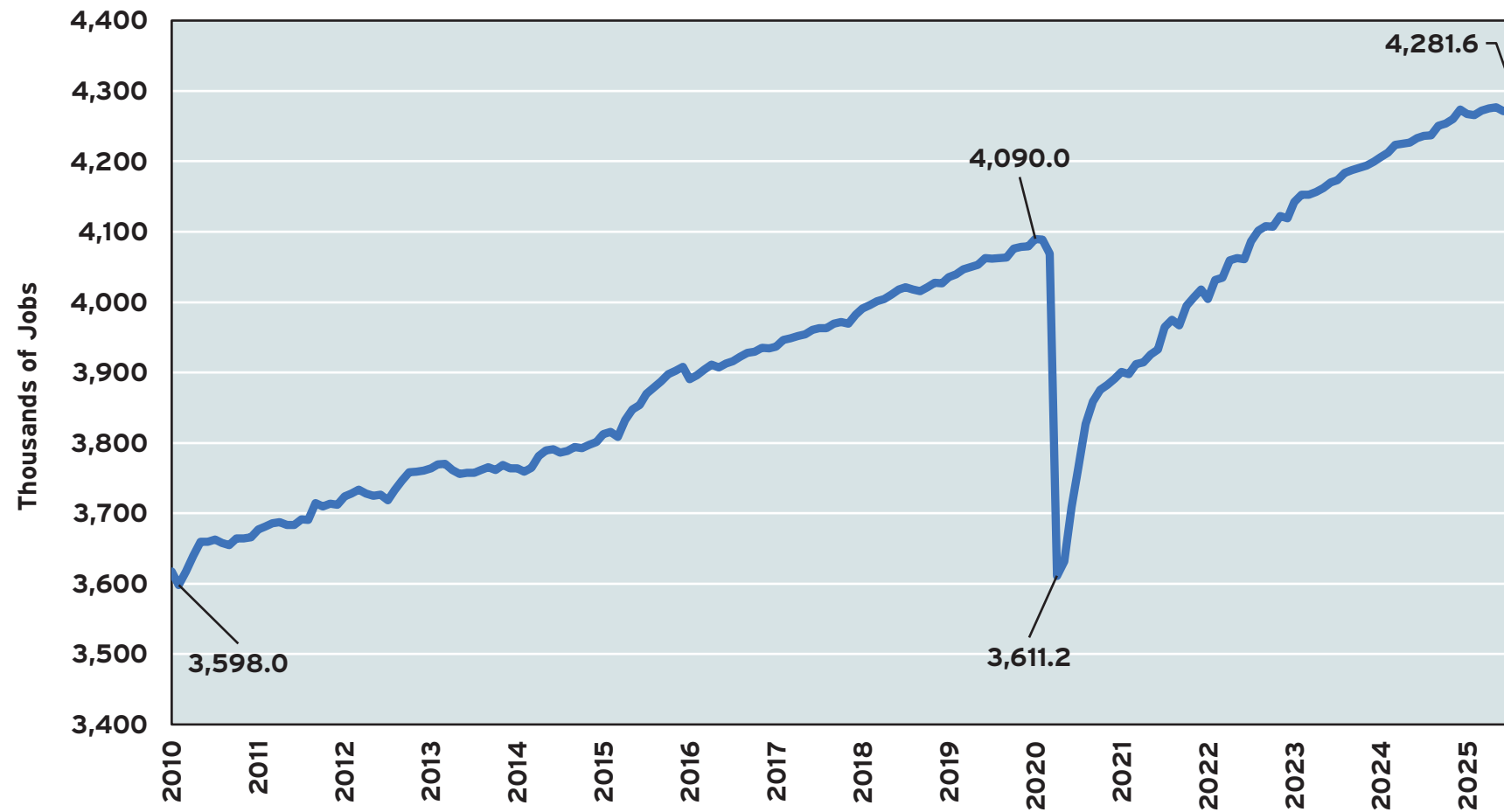
Graph 28 compares the performance of Virginia and national economies in terms of creating jobs. If we benchmark ourselves to the trough in jobs in February 2010, we find that the Virginia economy had 13.7% more jobs in January 2020 than it did in February 2010. For the United States, the index peaked in February 2020, when the national economy had 17.4% more jobs than February 2010. In August 2025, the nation had 23.0% more jobs than February 2010. For Virginia, there were 19.0% more jobs in August 2025 than February 2010. For Virginia, this is a mixture of good and bad economic news.

First, Virginia has recovered all the jobs lost during the pandemic and set a new record for nonfarm payrolls in 2024. Second, when compared to the nation, the Commonwealth has not generated the same level of job growth since 2010. Third, while Virginia added jobs through August 2025, the government shutdown obscured whether jobs were added in late summer and early fall of 2025. It is possible that job growth, for all intents and purposes, stalled in early fall and we will not know where and by how much until 2026.



GRAPH 26

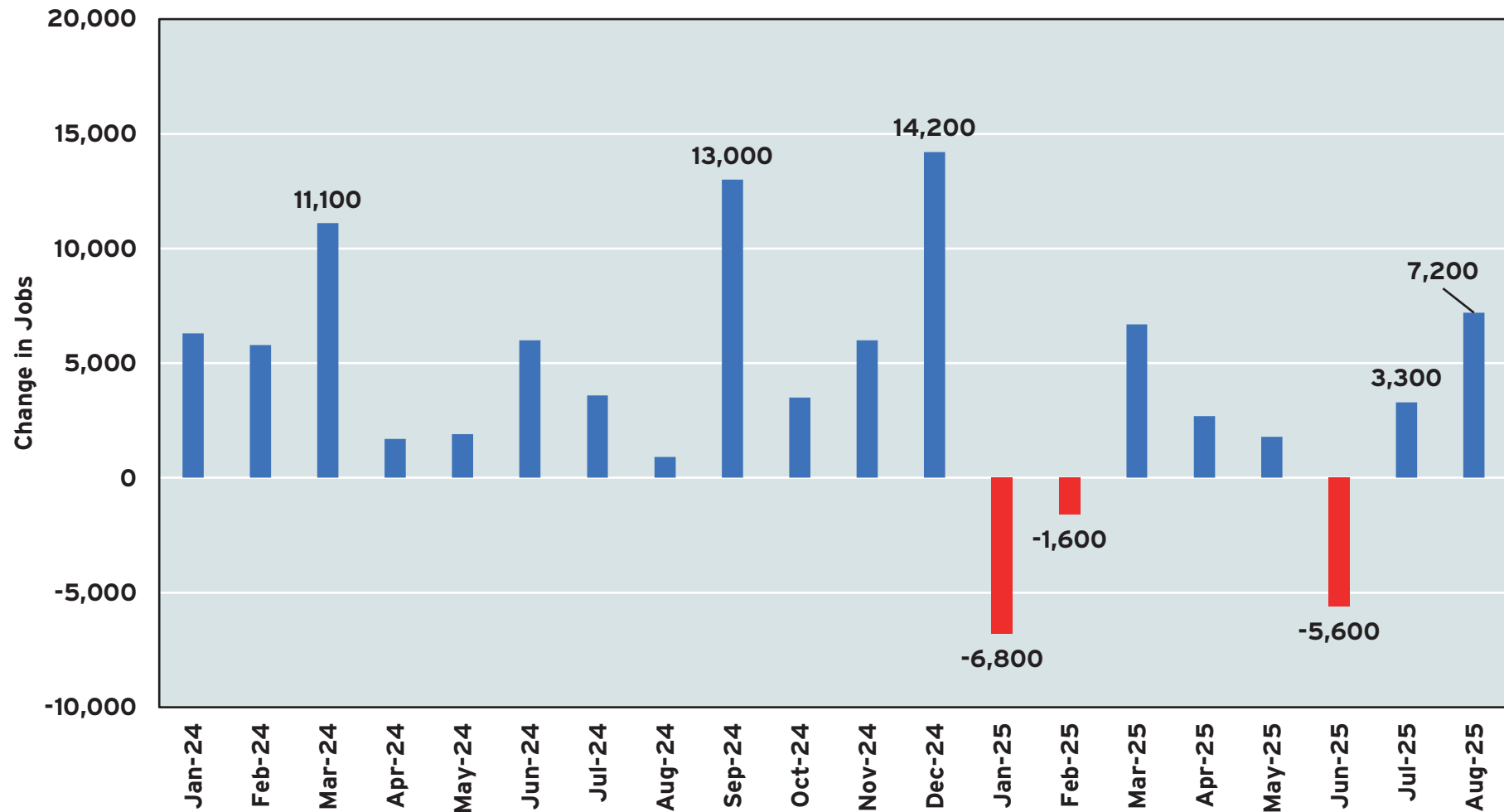
**NONFARM PAYROLLS (JOBS)**  
**VIRGINIA, JANUARY 2010 - AUGUST 2025**



Sources: Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy. Data are seasonally adjusted.

**GRAPH 27**

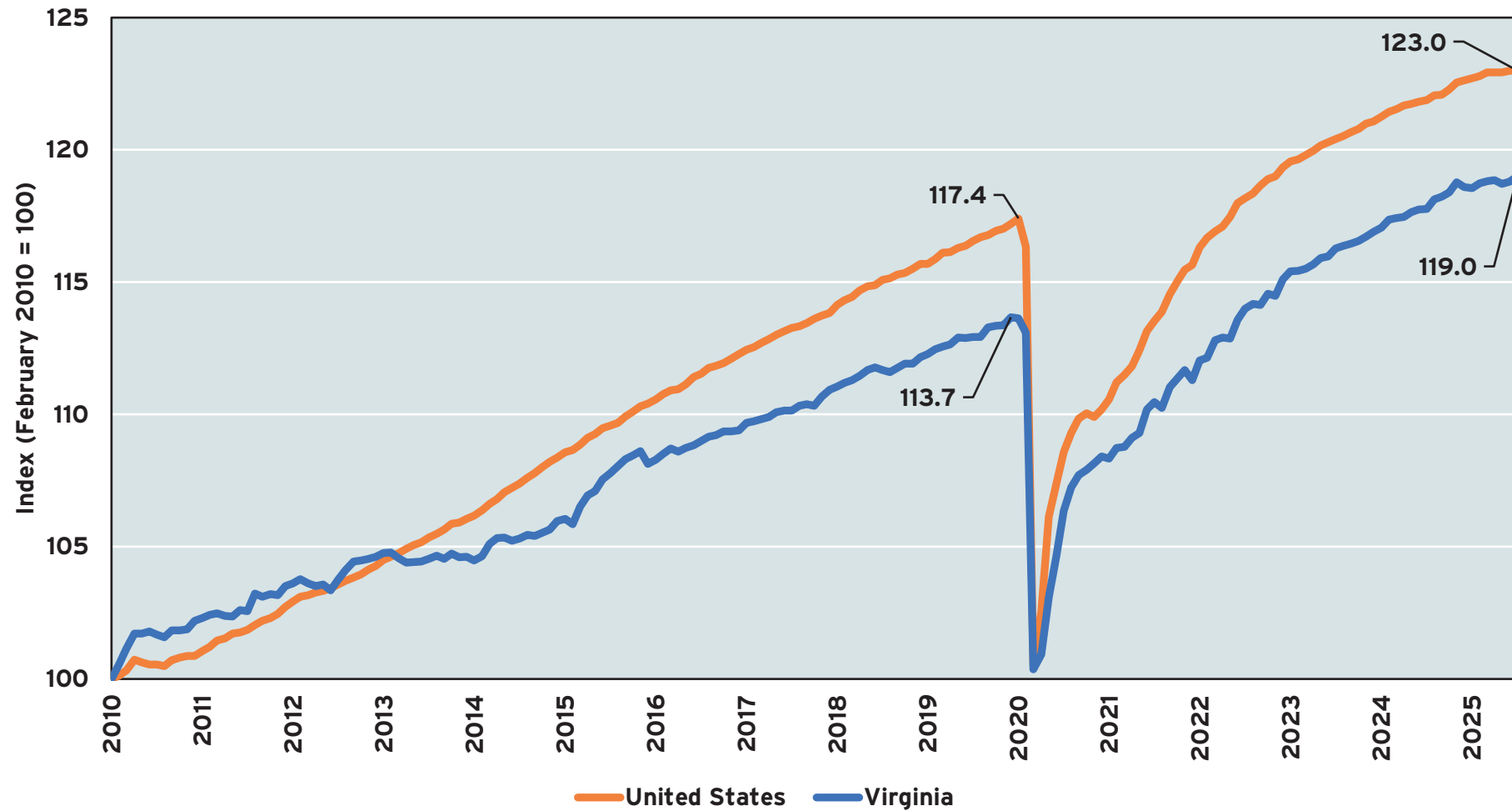
**MONTHLY CHANGE IN NONFARM PAYROLLS (JOBS)  
VIRGINIA, JANUARY 2024 - AUGUST 2025**



Sources: Bureau of Labor Statistics (2025) and Dragas Center for Economic Analysis and Policy. Data are seasonally adjusted.

GRAPH 28

**INDEX OF CUMULATIVE GROWTH IN NONFARM PAYROLLS (JOBS)  
VIRGINIA AND THE UNITED STATES, FEBRUARY 2010 - AUGUST 2025**



Sources: Bureau of Labor Statistics (2025) and Dragas Center for Economic Analysis and Policy. Data are seasonally adjusted.



## Job Openings and Job Quits in Virginia

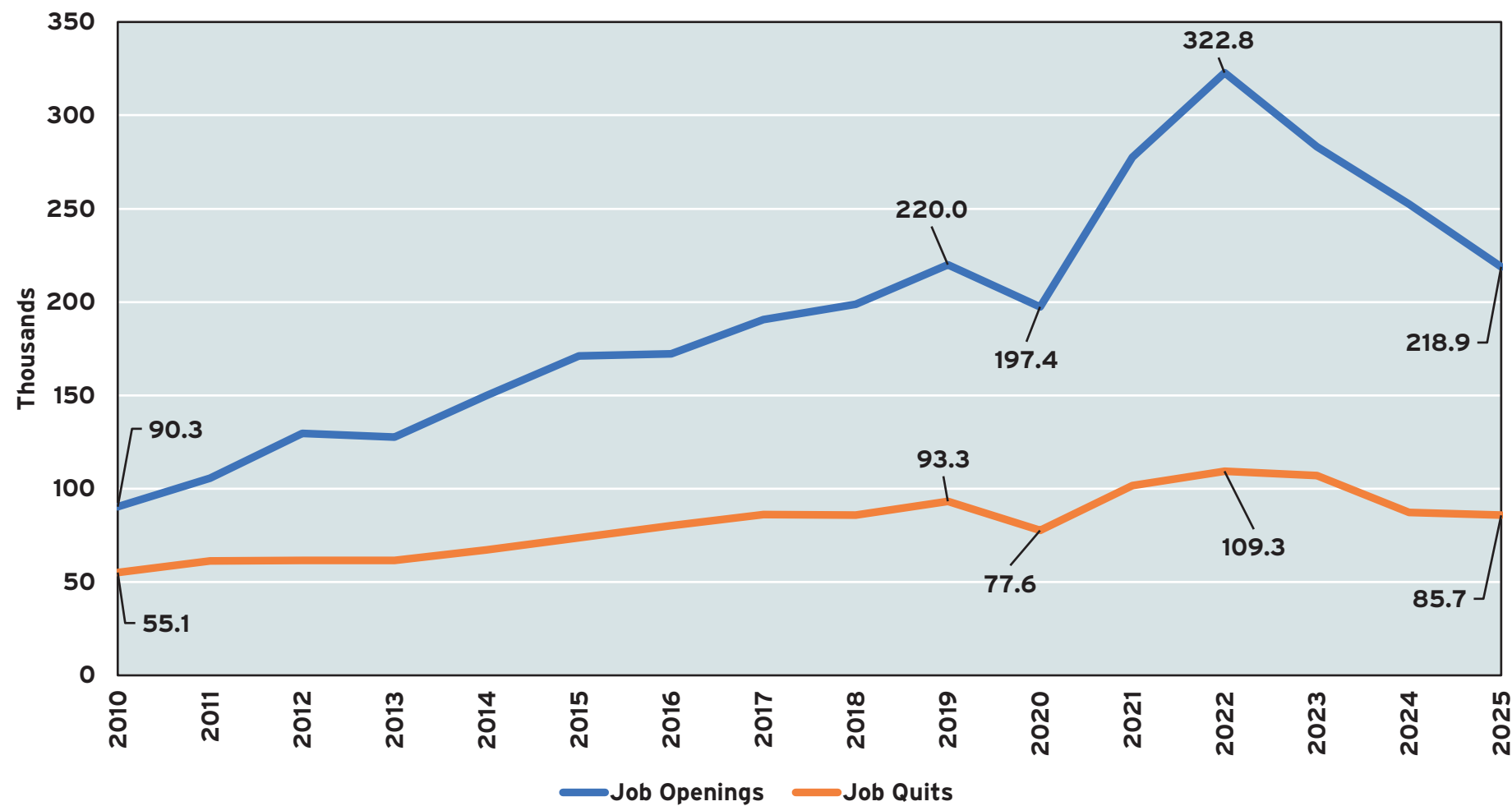
Graph 29 illustrates the average monthly job openings and job quits for Virginia by year from 2010 to 2025. The data illustrate the demand of employers for employees (job openings) and the willingness of employees to depart from their current workplace (job quits). It should be no surprise that in 2010, in the aftermath of the Great Recession of 2007 – 2009, employees were reluctant to quit their jobs, and thus job quits were relatively few.

From 2010 to 2019, the average annual number of monthly job openings in Virginia increased at a higher pace than job quits. At the same time, the number of unemployed individuals in the Commonwealth declined, so employers found themselves with fewer applicants (on average) for each open position. After the economic shock of 2020, both employers and employees demonstrated a willingness to hire and to quit, as average monthly job openings increased to 322,800, and average monthly job quits reached a record of 109,300 in 2022. Since 2022, however, the average number of job openings steadily declined and, for the first seven months of 2025, the average number of job openings in the Commonwealth were 218,900, roughly equal to the amount observed in the first seven months of 2019.

While the data in Graph 29 suggests that employer demand for labor has recently fallen in Virginia, we need to place the data in context. First, while the number of job openings declined in 2023 and 2024, this decline is relative to the post-pandemic peak in 2022. The average number of monthly job openings in 2023 and 2024 was still higher than the pre-pandemic record observed in 2019. Second, Graph 29 shows that the average monthly job openings for the first seven months of 2025 was 218,857. For the first seven months of 2019, the average number of monthly job openings was 217,571. In other words, job openings were roughly equivalent to those observed prior to the COVID-19 pandemic.

Job quits are a reflection of how confident workers feel about finding another position. In times of optimism, quits rise. When workers are concerned about the future, quits fall. After peaking in 2022 at an average of 109,300 a month, quits in Virginia fell by 2.1% in 2023 and 18.6% in 2024. Job quits for the first seven months of 2025 were lower than any recent year with the exception of 2020 and were below the level of quits observed in the first seven months of 2019. It would appear that workers were increasingly concerned about their job prospects given the deterioration of economic conditions in the first seven months of 2025.

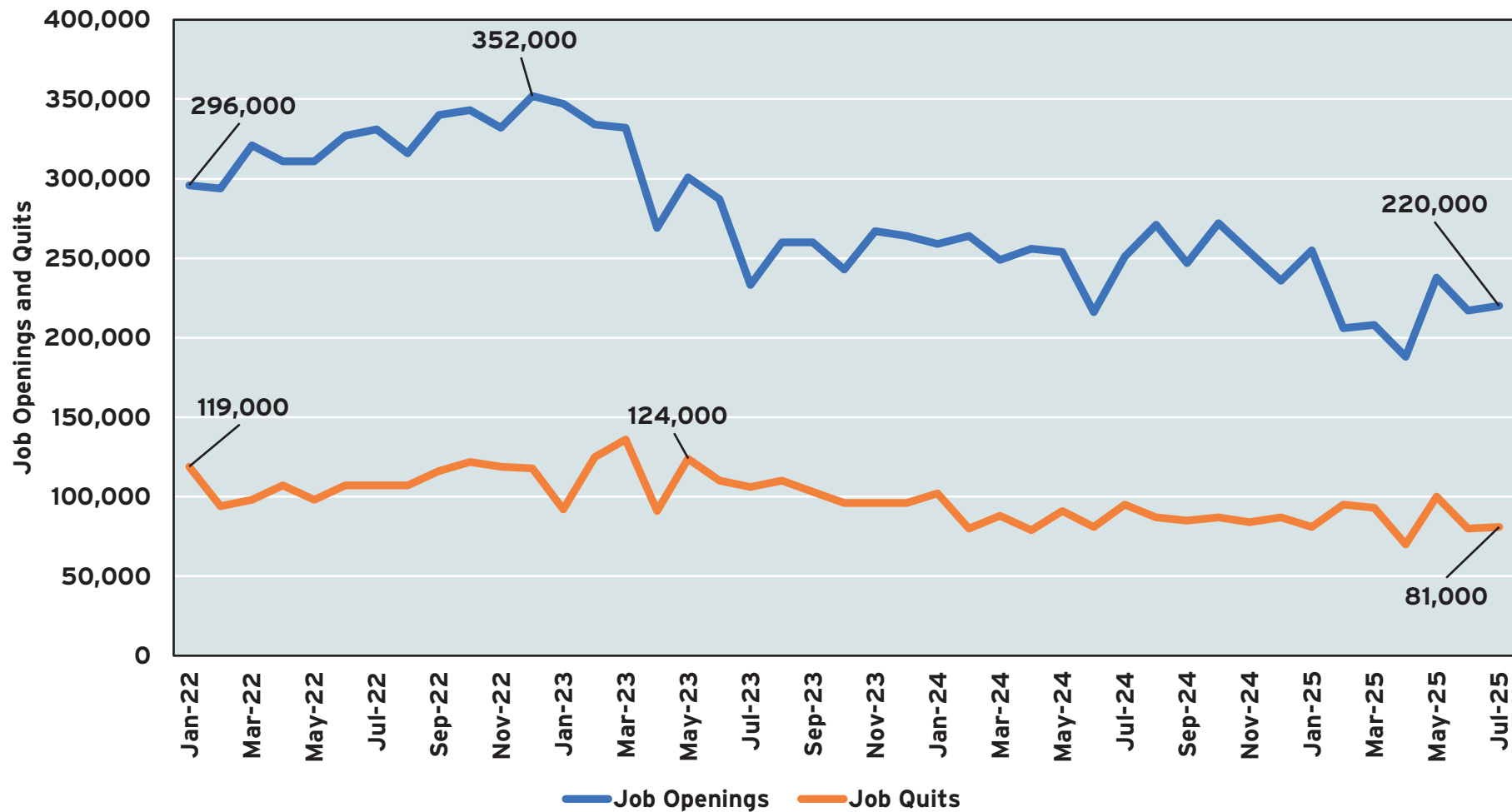
GRAPH 29  
AVERAGE MONTHLY JOB OPENINGS AND JOB QUILTS BY YEAR  
VIRGINIA, 2010 - 2025\*



Source: Bureau of Labor Statistics (2025). Data are seasonally adjusted. \*2025 data are the average of monthly data from January to July 2025.

**GRAPH 30**

**JOB OPENINGS AND JOB QUILTS  
VIRGINIA, JANUARY 2022 - JULY 2025**



Source: Bureau of Labor Statistics, Job Openings and Labor Turnover (JOLTS) Survey (2025). Job openings for total nonfarm payrolls. Quits include employees who left voluntarily, with the exception of retirements. Data are seasonally adjusted.

## Final Thoughts

With 2025 drawing to a close, what can we say about the economic performance of the Commonwealth? There is some good news to report. Economic activity increased in 2023 and into 2024. A record number of Virginians were at work earlier in 2024, and labor force participation remains above pre-pandemic levels. Employers continue to seek out employees as evidenced by the number of job openings throughout the state.

Yet, for all this good news, we must recognize there are underlying economic currents that manifest in consumer sentiment. The cumulative increases in prices over the last three years have reshaped consumer perspectives. While a number of surveys suggest that consumers view their own personal financial situation as improving, the same consumers believe that the economy is in a recession, inflation is at an all-time high, and that unemployment is significantly higher than any previous recession. Housing prices are likely to contribute to this sentiment as the number of cost-burdened households continues to rise across the state.

**We now have sufficient evidence to conclude that economic growth in the Commonwealth slowed in the first half of 2025 and is likely to decelerate further in the second half of 2025. While the state government enjoyed a surplus of tax receipts at the end of FY 2025, economic headwinds will likely slow the growth of tax collections in the current fiscal year. Higher prices and economic uncertainty are also likely to depress consumer and business sentiment in 2026, creating an environment that is less conducive to growth.**

What can be done? In the short term, we continue to opine that the Commonwealth is best served by embracing fiscal discipline. State surpluses can become deficits. If there is a desire to spend surpluses, we recommend focusing on public infrastructure projects that would otherwise not be completed for decades, including the interstate corridor I-87 in southeastern Virginia. The withdrawal of federal support for renewable energy projects will change the return-on-investment calculus and undermine the state's efforts to lean into this

sector. While the temptation may be for the state to abandon its efforts in renewable energy, we note the rising demand for electricity from data centers and the need for additional energy sources to address this demand. Here we opine that consumers should not shoulder the burden of the need for improved electricity generation capacity, and the state should work to craft policy to protect consumers.

Virginia's decline in the CNBC rankings should be a proverbial wake up call for policymakers. Virginia cannot remain complacent and forgo reforming its antiquated tax and regulatory climate. We recommend a holistic approach that first asks how to improve Virginia's tax competitiveness and then look at the entire tax system. If we take a tax-by-tax approach, reform will fall apart as changes in specific taxes will result in winners and losers. If we, on the other hand, take a system view, how each individual tax changes becomes less important relative to the incidence of the entire tax system.

We must also recognize that we cannot control the decisions of policymakers at the federal level and that Virginia's relationship with the federal government is both a strength and weakness. In terms of uncertainty, we can 'hunker down' and forgo important conversations, hoping instead that things change for the better. We can retreat to our partisan enclaves and only listen to views that affirm how we feel about the economy. The harder and, we argue, necessary choice is to avoid this behavior and to seek Virginian solutions to Virginia's problems. It is not naïve to suggest that we all want to foster better lives for all Virginians, and using that as a common ground, we can have the difficult conversations on how to make it happen. To do otherwise, is to abandon our collective fates to others who do not have Virginians best interests at heart.







# THE STATE OF VIRGINIA'S GO VIRGINIA REGIONS

*"If you do not expect the unexpected, you  
will not recognize it when it arrives."*

*– Heraclitus*





# WELCOME TO VIRGINIA

## VIRGINIA IS FOR LOVERS

As we draw near to the end of 2025, we can reflect upon the progress, or lack thereof, of Virginia's cities and counties through the lens of GO Virginia, an initiative to improve economic growth across the Commonwealth. The nine GO Virginia regions fully capture the state's population and economy, avoiding the limitations of Metropolitan Statistical Areas (MSAs), which may either cross state lines or exclude smaller localities that do not fall within the MSA definition.<sup>1</sup> This chapter provides a more nuanced view of economic conditions in the Commonwealth through 2024 and allows us to discuss how the Commonwealth may fare at the regional level in 2025 and beyond.

In this chapter, we discuss the economic performance of the nine GO Virginia regions relative to the state and nation. We examine a number of measures of economic performance: population, employment, jobs, wages, personal income, and establishments. Each of these measures is available on a more frequent basis than Gross Domestic Product (GDP), providing a more current picture of the economic activity in each GO Virginia region. In aggregate, these data allow us to construct a clearer picture of the health of Virginia's regional economies.

<sup>1</sup> Metropolitan Statistical Areas (MSAs) have at least one urbanized area with a population of 50,000 or more residents and include the adjacent counties that are economically associated with the urban center through commuting ties. For more information see link: <https://www.govinfo.gov/content/pkg/FR-2010-06-28/pdf/2010-15605.pdf>



In the summer of 2015, a bipartisan coalition of business leaders across Virginia formed the GO Virginia Coalition with the intent of coordinating and promoting economic development across the Commonwealth. As noted by GO Virginia, this effort was driven by the realization that Virginia is relatively dependent on federal government spending and that private-sector job growth was needed to diversify the state's economic base. To spur private-sector job growth, however, requires coordination and collaboration between the public and private sectors, and the economic development needs vary across the state. In 2016, authorizing legislation and funding passed through the General Assembly, and the first regional Growth and Diversification Plans were approved by regional boards in the fall of 2017. Table 1 provides the names and localities in each of the nine GO Virginia regions.

**In 2024, Virginia's population grew by 0.9%, GDP increased by 3.1%, and individual employment rose by 0.5%. At the regional level, seven of nine GO Virginia regions saw positive population growth and six experienced growth in individual employment. Economic performance, however, continued to be unevenly distributed across Virginia. Population and economic activity, for example, have become increasingly concentrated in the 'urban crescent' which includes Northern Virginia, Richmond, and Hampton Roads. Domestic outmigration from Northern Virginia and Hampton Roads continued in 2024, offsetting gains by smaller regions. Changes in federal immigration policy and the political landscape will adversely affect the regions relying on international migration to mitigate the effects of domestic outmigration. Federal spending continued to flow into the state; however, Virginia remains relatively vulnerable to shifts in federal spending and federal employment policy. While growth may continue in 2025, it will likely slow due to economic uncertainty, declines in federal employment, and the increasing impacts of tariffs on international trade.**



**FIGURE 1**  
**GO VIRGINIA REGIONS**



Source: GO Virginia, Regional Council Information, <https://govirginia.org/regions/>

TABLE 1

## GO VIRGINIA REGIONS AND LOCALITIES

Region 1: Southwest	Region 2: West Central	Region 3: Southside	Region 4: South Central	Region 5: Hampton Roads
Bland	Alleghany	Amelia	Charles City (County)	Accomack
Bristol City	Amherst	Brunswick	Chesterfield	Chesapeake City
Buchanan	Appomattox	Buckingham	Colonial Heights City	Franklin City
Carroll	Bedford	Charlotte	Dinwiddie	Hampton City
Dickenson	Botetourt	Cumberland	Emporia City	Isle Of Wight
Galax City	Campbell	Danville City	Goochland	James City (County)
Grayson	Covington City	Halifax	Greensville	Newport News City
Lee	Craig	Henry	Hanover	Norfolk City
Norton City	Floyd	Lunenburg	Henrico	Northampton
Russell	Franklin	Martinsville City	Hopewell City	Poquoson City
Scott	Giles	Mecklenburg	New Kent	Portsmouth City
Smyth	Lynchburg City	Nottoway	Petersburg City	Southampton
Tazewell	Montgomery	Patrick	Powhatan	Suffolk City
Washington	Pulaski	Pittsylvania	Prince George	Virginia Beach City
Wise	Radford City	Prince Edward	Richmond City	Williamsburg City
Wythe	Roanoke City		Surry	York
	Roanoke		Sussex	
	Salem City			



**TABLE 1 (CONTINUED)**

**GO VIRGINIA REGIONS AND LOCALITIES**

<b>Region 6: Eastern</b>	<b>Region 7: Northern</b>	<b>Region 8: Valley</b>	<b>Region 9: Central</b>
Caroline	Alexandria City	Augusta	Albemarle
Essex	Arlington	Bath	Charlottesville City
Fredericksburg City	Fairfax City	Buena Vista City	Culpeper
Gloucester	Fairfax	Clarke	Fauquier
King and Queen	Falls Church City	Frederick	Fluvanna
King George	Loudoun	Harrisonburg City	Greene
King William	Manassas City	Highland	Louisa
Lancaster	Manassas Park City	Lexington City	Madison
Mathews	Prince William	Page	Nelson
Middlesex		Rockbridge	Orange
Northumberland		Rockingham	Rappahannock
Richmond		Shenandoah	
Spotsylvania		Staunton City	
Stafford		Warren	
Westmoreland		Waynesboro City	
		Winchester City	

## Population Growth: GO Virginia Regions

One signal of economic vitality is population growth. Jobs attract people, and people attract jobs. Rapid population growth may strain public school systems, infrastructure, and the capacity of local public services, but these challenges are often offset by a growing tax base, increasing revenues, and an influx of new employers. On the other hand, areas with sluggish growth or declining population often observe slow to negative job growth, stagnant or declining tax bases, and mismatches between public services and the population.

The United States Census Bureau's Population Estimates Program (PEP) provides estimates of the population for the nation, states, cities, counties, and towns. The PEP's annual estimates begin with the most recent decennial census and extend to the most recent year available. Estimates are provided for July 1st of the corresponding year, except for the decennial census year, where estimates are provided on April 1st and July 1st. Each decennial census 'resets' the population estimates to the new population base, thus care must be taken when comparing population levels prior to and during a census year.

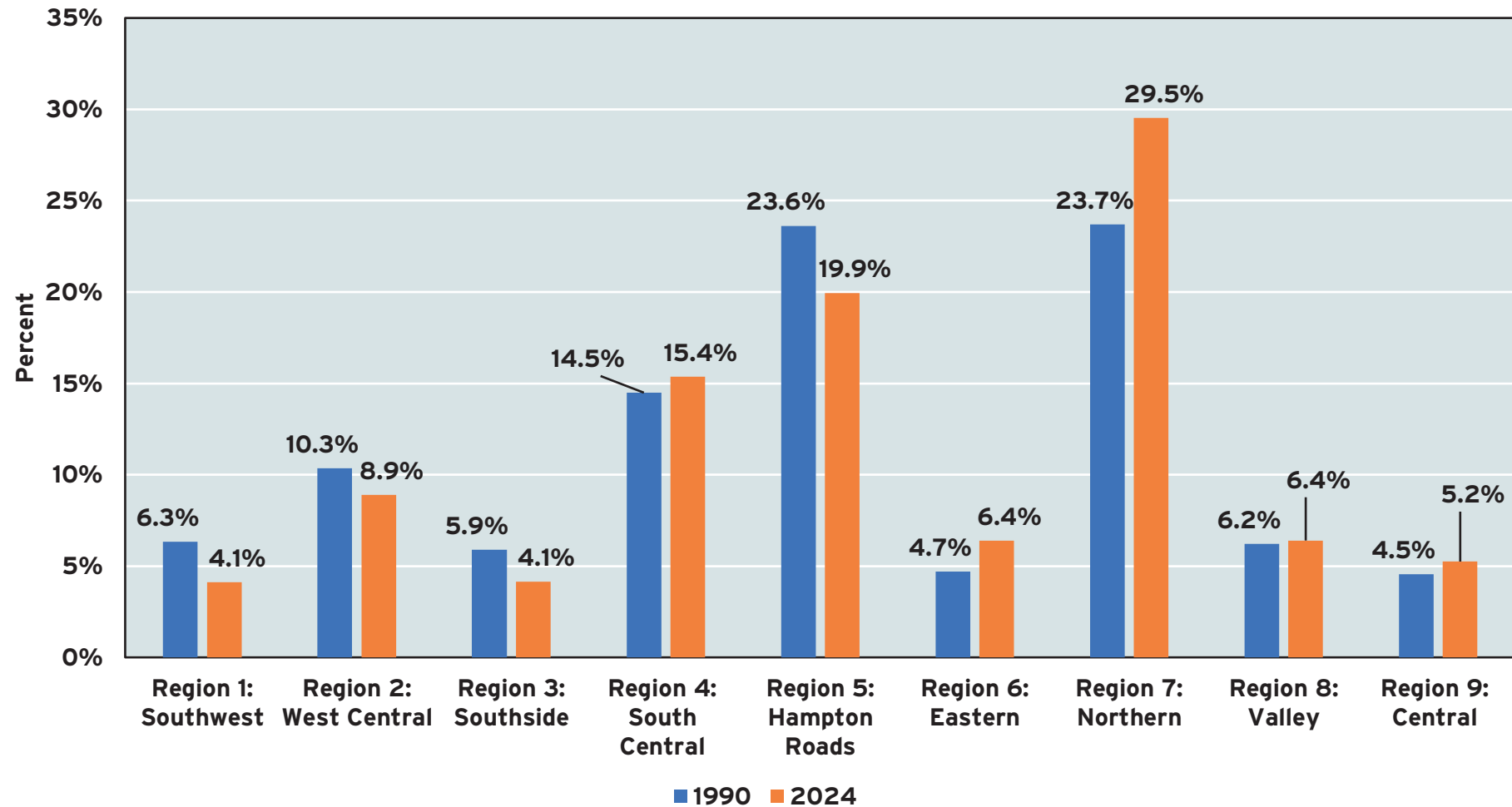
Graph 1 displays each GO Virginia region's share of Virginia's population in 1990 and 2024. The 'urban crescent' of Virginia is formed by Region 4 (cities and counties located in and around the Richmond region), Region 5 (Hampton Roads), and Region 7 (Northern Virginia). In 1990, these regions accounted for approximately 61.8% of the Commonwealth's population. In 2024, Regions 4, 5, and 7 contained 64.8% of the state's total population. However, this increase masks the shifts in population within the urban crescent. The resident populations of Regions 4 and 7 increased more rapidly than the state's average from 1990 to 2024, and as a result their shares of the population grew from 14.5% to 15.4% (Region 4) and from 23.7% to 29.5% (Region 7). The resident population of Region 5, however, grew slower than the state's average, thus its share of the state's population fell from 23.6% in 1990 to 19.9% in 2024.

Table 2 presents the resident population and the average annual growth rate of the resident population for each GO Virginia region, Virginia, and the United States for 1990, 2000, 2010, 2020, and 2024. Average annual population growth in the United States and Virginia were positive over the last three decades and have remained positive into the current one, although the rate of growth has slowed with each decade. The United States grew at an average annual rate of 1.2% in the 1990s, and growth has decelerated to 0.6% in the current decade. Virginia's resident population growth mirrors the nation from 1990 to 1999 (1.3% per annum), 2000 to 2009 (1.2% per annum), 2010 to 2019 (0.7% per annum), and 2020 to 2024 (0.5% per annum).

Although all nine GO Virginia regions have experienced slower growth in the current decade compared to the 1990s, the extent of that slowdown varies by region. Regions 1 and 3 experienced negative annual population growth this decade, averaging -0.5% and -0.1%, respectively. Regions 2 and 5's populations have grown more slowly than the state and national averages over the past three decades and have only modest growth this decade, averaging 0.2% annually for Region 2 and 0.1% for Region 5. On the other hand, Region 4, Region 6, and Region 9 have consistently grown faster, on average, than both the state and nation since 1990. In the current decade, they have each grown at annual rates of 1.0%, 1.6%, and 1.1% respectively. Region 8 has also maintained steady growth, averaging 1.4% in both 1990s and 2000s, and 0.7% in both the 2010s and the current decade. Of note is that Region 7, which grew well above the state's average in each of the last three decades (2.1%, 2.0%, and 1.3%), is now growing at pace with the Commonwealth at 0.5% per year.

**GRAPH 1**

**SHARE OF VIRGINIA'S POPULATION  
GO VIRGINIA REGIONS, 1990 AND 2024**



Source: U.S. Census Bureau, Population Estimates Program, various years. Population estimates as of July 1st of the corresponding year. Regional estimates are aggregated from county-level population estimates to ensure consistency with city and county-level estimates and GO Virginia region definitions.

TABLE 2									
AVERAGE ANNUAL GROWTH OF RESIDENT POPULATION BY DECADE GO VIRGINIA REGIONS, VIRGINIA, AND THE UNITED STATES, 1990 TO 2024									
Region	1990	2000	2010	2020	2024	Annual Growth			
						1990-1999	2000-2009	2010-2019	2020-2024
Region 1: Southwest	393,511	398,740	401,784	370,639	363,040	0.2%	0.1%	-0.7%	-0.5%
Region 2: West Central	643,350	700,085	762,197	779,594	784,517	0.8%	0.8%	0.3%	0.2%
Region 3: Southside	366,116	387,778	383,733	365,714	364,071	0.6%	-0.1%	-0.6%	-0.1%
Region 4: South Central	900,854	1,036,200	1,177,724	1,302,605	1,353,601	1.4%	1.4%	0.9%	1.0%
Region 5: Hampton Roads	1,468,905	1,589,071	1,670,831	1,750,429	1,756,911	0.8%	0.5%	0.3%	0.1%
Region 6: Eastern	291,414	376,459	470,994	527,256	561,501	2.6%	2.3%	1.0%	1.6%
Region 7: Northern	1,472,561	1,829,631	2,245,500	2,550,954	2,601,818	2.1%	2.0%	1.3%	0.5%
Region 8: Valley	386,523	445,222	509,080	547,649	563,584	1.4%	1.4%	0.7%	0.7%
Region 9: Central	282,699	336,206	401,856	442,775	462,152	1.7%	1.9%	1.0%	1.1%
Virginia	6,216,884	7,105,817	8,023,699	8,637,615	8,811,195	1.3%	1.2%	0.7%	0.5%
United States	248,790,925	282,162,411	309,321,666	331,577,720	340,110,988	1.2%	0.9%	0.7%	0.6%
Sources: U.S. Census Bureau, Annual Intercensal Population Estimates 1990-2019, Vintage 2024 Population Estimates and Dragas Center for Economic Analysis and Policy. Percentages may not sum to 100 percent due to rounding. Estimated annual growth is the Compound Annual Growth Rate. Estimates, where possible, are for July 1st for comparison purposes. Resident population of the United States.									

# Components of Population Change Across GO Virginia Regions

Population change is driven by three components: the natural increase in the population (births minus deaths), net domestic migration (domestic arrivals minus domestic departures), and net international migration (international arrivals minus international departures). Regions that are growing typically have more births than deaths and inflows of new residents that are greater than outflows of current residents.

We review the components of population change for the previous decade before focusing on the data for the current decade.<sup>2</sup> As illustrated in Table 3, from April 1, 2010, to June 30, 2019, the Commonwealth experienced domestic outmigration of 71,103 individuals, that is domestic individuals leaving the state for other domestic locations. However, the natural increase of 343,322 people and positive net international migration of 261,541 were more than sufficient for Virginia to experience an overall population gain of 534,470 over this period. Nevertheless, two regions in Virginia, Region 1 and Region 3, experienced a total population decline over this period as deaths outnumbered births (negative natural increase), and domestic departures outnumbered domestic arrivals (negative domestic migration). Net international migration for Regions 1 and 3 added new residents, however, it was not enough to offset the losses from the other components.

From April 1, 2010, to June 30, 2019, there were 13,186 more deaths than births in Region 1 as well as 12,834 more domestic departures than arrivals. In Region 3, there were 11,331 more deaths than births and 9,788 more domestic departures than arrivals. While there were 1,324 more international arrivals than departures for Region 3, these paled in comparison to the net negative natural change in

the population as well as the net outmigration of residents to other domestic locations. On the other hand, from April 1, 2010, to June 30, 2019, Region 2 experienced 594 more deaths than births, but the negative natural increase in the population was offset by 5,206 more domestic arrivals than departures and 14,430 more international arrivals than departures. As a result, the population of Region 2 increased by 18,680 during this period.

Among the larger regions in Virginia, Region 5 was joined by Region 7 in experiencing negative net domestic migration from April 1, 2010, to June 30, 2019. Combined, Region 5 and Region 7 saw over 151,000 more domestic departures than arrivals over this period. While some of these departures were for other locations in the Commonwealth, some residents left the state entirely, as evidenced by Virginia's net negative domestic migration of -71,103 over this period. Specifically, Region 7's net negative domestic migration of -85,840 from April 1, 2010, to June 30, 2019, was completely offset by its net positive international migration of 160,069.

Table 4 highlights the components of population change for the GO Virginia regions and the Commonwealth from April 1, 2020, to June 30, 2024. Region 1 and Region 3 have lost 7,936 and 1,978 residents, respectively thus far in the current decade. Regions 1, 2, 3, and 8 observed more deaths than births over the period, with natural population declines of 13,934 in Region 1, 10,673 in Region 2, 11,378 in Region 3, and 3,343 in Region 8. However, in the case of Regions 2 and 8, net positive domestic and international migration offset the negative natural change in the population. As a result, these two regions saw their population grow during this period by 4,852 in Region 2 and 16,560 in Region 8. Regions 5 and 7 continued to observe negative net domestic migration of -23,325 and -115,569 but were offset partially by positive net international migration of 16,491 and 95,640 respectively. At the state level, Virginia saw its population increase by 179,807 as negative net domestic migration (-34,497) was fully offset by net positive international migration flow (158,813) and a positive natural increase in the population (53,818).

<sup>2</sup> We remind the reader that the Population Estimates Program 'resets' with each decennial Census and present the data from 2019 and 2024 Population Estimates program in one figure for presentation purposes. The components of population change estimate the change in population from July 1 to June 30, thus, the estimates for 2019 represent the change in the population components from July 1, 2018, to June 30, 2019.

TABLE 3

**COMPONENTS OF POPULATION CHANGE  
APRIL 1, 2010 - JUNE 30, 2019**

Region	Natural Increase	Domestic Migration	International Migration	Population Residual	Population Change
Region 1: Southwest	-13,186	-12,834	441	-51	-25,630
Region 2: West Central	-594	5,206	14,430	-362	18,680
Region 3: Southside	-11,331	-9,788	1,324	-58	-19,853
Region 4: South Central	38,569	35,256	27,806	-88	101,543
Region 5: Hampton Roads	78,144	-66,007	36,675	-220	48,592
Region 6: Eastern	16,744	26,138	5,525	-79	48,328
Region 7: Northern	218,310	-85,840	160,069	1,741	294,280
Region 8: Valley	6,141	17,934	7,802	-43	31,834
Region 9: Central	10,525	18,832	7,469	-130	36,696
Virginia	343,322	-71,103	261,541	710	534,470

Sources: U.S. Census Bureau, 2019 Components of Change Estimates and Dragas Center for Economic Analysis and Policy. According to the U.S. Census Bureau, the population residual is equal to the change that cannot be attributed to any specific demographic component of population change.

TABLE 4

**COMPONENTS OF POPULATION CHANGE  
APRIL 1, 2020 - JUNE 30, 2024**

Region	Natural Increase	Domestic Migration	International Migration	Population Residual	Population Change
Region 1: Southwest	-13,934	5,454	493	51	-7,936
Region 2: West Central	-10,673	7,884	7,603	38	4,852
Region 3: Southside	-11,378	7,940	1,403	57	-1,978
Region 4: South Central	5,857	26,938	20,051	269	53,115
Region 5: Hampton Roads	13,983	-23,325	16,491	581	7,730
Region 6: Eastern	2,216	28,080	5,766	-216	35,846
Region 7: Northern	70,336	-115,569	95,640	1,051	51,458
Region 8: Valley	-3,343	13,974	5,918	11	16,560
Region 9: Central	754	14,127	5,448	-169	20,160
Virginia	53,818	-34,497	158,813	1,673	179,807

Sources: U.S. Census Bureau, 2024 Components of Change Estimates and Dragas Center for Economic Analysis and Policy. According to the U.S. Census Bureau, the population residual is equal to the change that cannot be attributed to any specific demographic component of population change.



# Gross Domestic Product

Nominal and real (inflation-adjusted) Gross Domestic Product (GDP) is a measure of the final value of goods and services produced in a city, county, region, state, or nation during a given period of time. GDP is a broad measure of economic activity but does not capture non-market transactions, including household labor, volunteer work, and informal economic transactions. GDP per capita is another broad measure of the value of economic activity per person but does not capture how income and wealth are distributed among the population. The Bureau of Economic Analysis (BEA) produces national and state-level estimates of GDP on a quarterly basis, with lags of one (national) to six months (state). At the metropolitan statistical area and county level, GDP estimates are typically lagged one year and are subject to significant revisions with each release. Due to the 2025 government shutdown, the BEA has postponed the release of the advance estimates for county-level GDP from December 2025 to sometime in 2026. We present the most recent estimates, published by the BEA in December 2024.

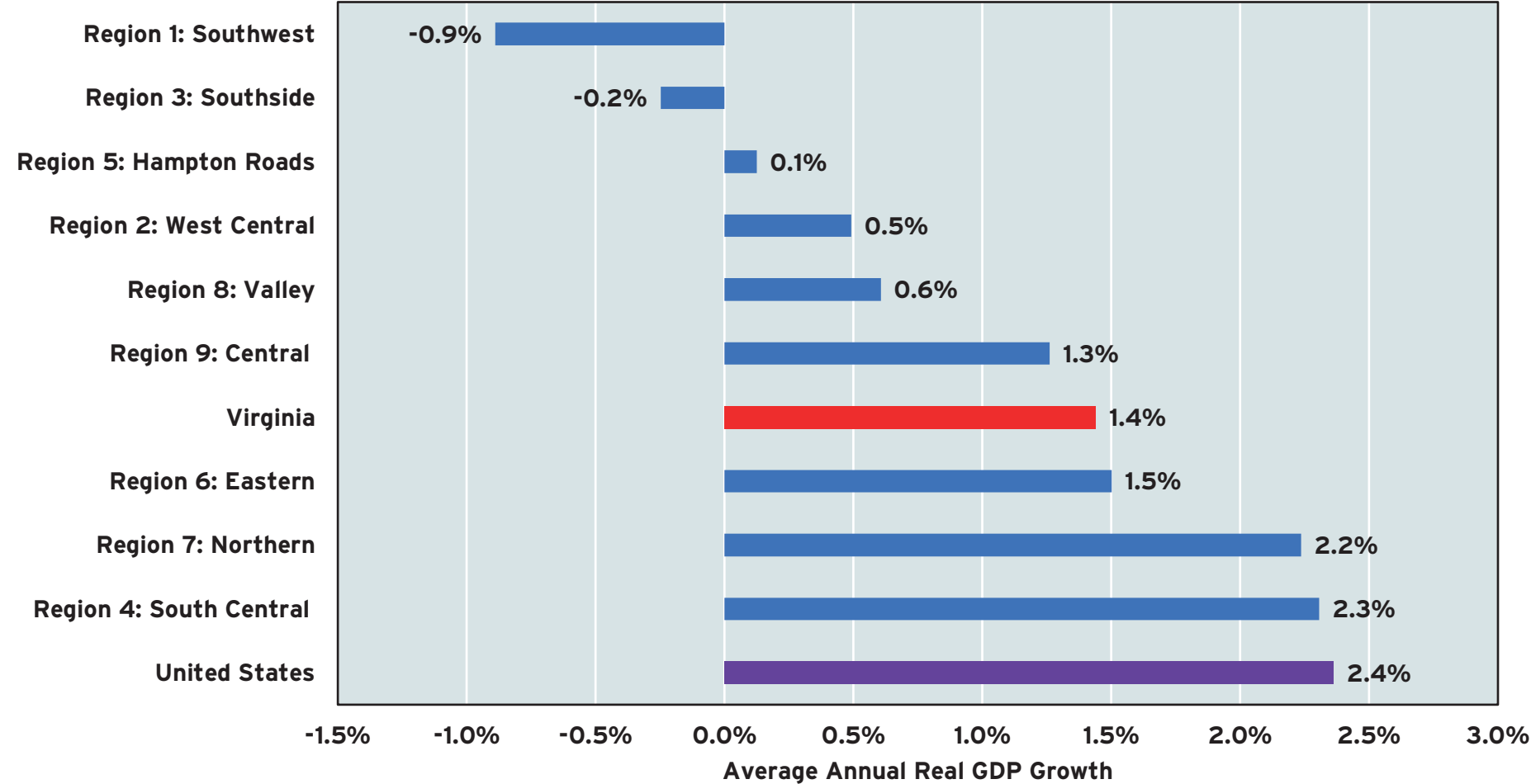
We review the nine GO Virginia Regions' real average annual GDP growth for the previous decade before focusing on the data for the current decade. Graph 2 highlights how the nine GO Virginia Regions' real average annual GDP growth compares to the Commonwealth and the nation from 2010 to 2019. In the previous decade, Virginia's growth lagged the national rate (with 1.4% annually compared to the national with 2.4%). When we compare each region to the state average, we find that Regions 4, 7, and 6 performed above this average, effectively 'pulling-up' the state's average, while Regions 9, 8, 2, 5, 3, and 1 lagged behind. Region 1 and Region 3 experienced negative real average annual GDP growth of -0.9% and -0.2%, respectively, while all other regions experienced positive real average annual growth during this time period.

Graph 3 displays the average real annual GDP growth of the nine GO Virginia Regions, the state, and nation from 2019 to 2023. When discussing real GDP data for the current decade, we baseline as 2019 to avoid biasing the estimates upward due to the pandemic-related economic shock in 2020. Unlike the previous decade, real GDP has grown faster annually, on average, in Virginia (2.5%) than the nation (2.3%). Both the nation and Region 4, with 1.7% average annual growth in real GDP, have experienced a deceleration in growth compared to the previous decade. Region 7 (3.4% per annum) and Region 6 (2.9% per annum) were the only regions to outperform both the state and nation during this period. However, Region 9, which experienced 2.4% real average annual GDP growth, also outpaced the nation, but lagged behind the state. Regions 3, 8, 1, 4, and 2 saw average annual growth under 2.0% this decade.

In Table 5, we use BEA estimates of county-level GDP to estimate GDP for each GO Virginia Region. While lagged, the estimates allow us to compare economic performance across GO Virginia regions, and, expectedly, a similar picture emerges. Region 1's share of Virginia's GDP fell to 2.3%, compared to its 2010 share of 2.9%, helping demonstrate how GDP growth portends share. The other GO Virginia regions that shed some of their share of the state's GDP, despite real GDP growth, included Regions 2, 3, 5, 8, and 9. Region 7 led the regions in its share of Virginia's GDP, accounting for more than \$2.0 of every \$5 made in the Commonwealth, and garnered an increased share of the state's GDP from 2010 to 2023. Aside from Region 7, the only other region that saw an increase in its share of the state's GDP over that period was Region 4 (15.4% in 2010 and 16.1% in 2023), with Region 6 remaining flat at 3.5%.

GRAPH 2

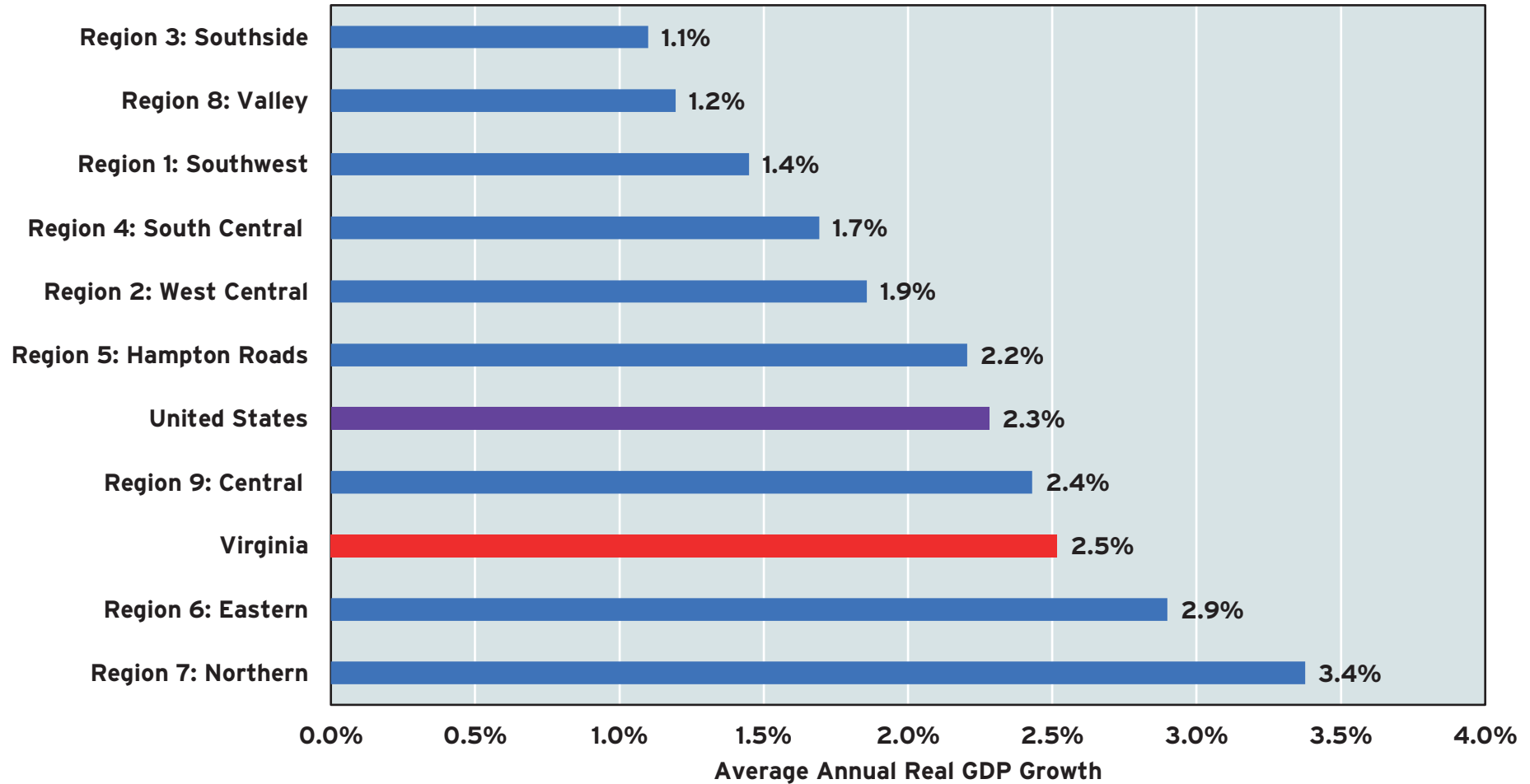
AVERAGE ANNUAL REAL GDP GROWTH,  
GO VIRGINIA REGIONS, VIRGINIA, AND THE UNITED STATES, 2010 - 2019



Sources: U.S. Bureau of Economic Analysis, Gross Domestic Product by County, 2023 and Dragas Center for Economic Analysis and Policy. Real GDP is in 2017 chained dollars. Estimated annual growth is the Compound Annual Growth Rate.

**GRAPH 3**

**AVERAGE ANNUAL REAL GDP GROWTH,  
GO VIRGINIA REGIONS, VIRGINIA, AND THE UNITED STATES, 2019 - 2023**



Sources: U.S. Bureau of Economic Analysis, Gross Domestic Product by County, 2023 and Dragas Center for Economic Analysis and Policy. Real GDP in 2017 chained dollars. Estimated annual growth is the Compound Annual Growth Rate.

TABLE 5				
REAL GROSS DOMESTIC PRODUCT				
GO VIRGINIA REGIONS, VIRGINIA, AND THE UNITED STATES, 2010 AND 2023				
Region	2010 (Millions)	Share of Virginia's 2010 GDP	2023 (Millions)	Share of Virginia's 2023 GDP
Region 1: Southwest	\$14,006	2.9%	\$13,689	2.3%
Region 2: West Central	\$33,567	7.1%	\$37,759	6.3%
Region 3: Southside	\$12,067	2.5%	\$12,327	2.1%
Region 4: South Central	\$73,470	15.4%	\$96,465	16.1%
Region 5: Hampton Roads	\$93,970	19.8%	\$103,695	17.3%
Region 6: Eastern	\$16,546	3.5%	\$21,212	3.5%
Region 7: Northern	\$187,409	39.4%	\$261,153	43.7%
Region 8: Valley	\$24,711	5.2%	\$27,360	4.6%
Region 9: Central	\$19,992	4.2%	\$24,636	4.1%
Virginia	\$475,737	—	\$598,296	—
United States	\$1,678,975	—	\$2,267,109	—
Sources: U.S. Bureau of Economic Analysis (2024), Gross Domestic Product by County and Dragas Center for Economic Analysis and Policy. Real GDP in 2017 chained dollars. Percentages may not sum to 100 percent due to rounding. United States estimates represent the reported level data for the nation. Virginia estimates represent the sum of county-level GDP estimates and may not equal reported state-level data for Virginia.				

# Military Employment, and Federal Employment in GO Virginia Regions

How many active-duty servicemembers were there across the GO Virginia regions in 2023? The Census Bureau conducts three American Community Survey (ACS) programs, the 1-year, 5-year, and annual supplements on special topics.<sup>3</sup> The Census asks respondents 16 years and older whether they were in the labor force or not in a given year. Respondents self-identify whether they were in the civilian labor force, armed forces, or not in the labor force. We note that the ACS estimates of the civilian labor force, employment, and unemployment may significantly differ from those produced by the BLS due to differences in sampling frequency and methodology.<sup>4</sup> The 5-year ACS combines survey responses collected over a five-year period, providing more reliable estimates for smaller geographic areas such as some GO Virginia regions' counties. These estimates reflect average conditions over 2019 - 2023, rather than a single point in time, which makes them useful for analyzing regional military employment where annual sample sizes may be insufficient for accurate reporting.

At the state level, Virginia averaged 130,751 individuals employed in the Armed Forces during the 2019 - 2023 period. Graph 4 presents the 5-year ACS estimates of Armed Forces employment across the GO Virginia Regions for the same period. According to the 2023 5-year ACS, an estimate of 84,252 individuals were employed in the Armed Services in Region 5, followed by 27,216 in Region 7. Other notable regions include Region 4 (8,316), Region 6 (7,198), Region 2 (1,484) and Region 8 (1,008).

How much do the individuals in Graph 4 contribute to the Virginia economy? We do not have a breakdown of individuals by pay grade, so we construct a lower-bound estimate of wages. To do this, we use estimates of average Basic Pay (BP) from the Department of Defense (DoD). BP differs from Regular Military Compensation (RMC) as RMC includes cash allowances and tax advantages.<sup>5</sup> On January 1, 2024, for example, the average BP for all Commissioned Officers was \$94,031, \$82,308 for Warrant Officers, and \$93,035 for Commissioned and Warrant Officers combined. For enlisted personnel, average BP was \$42,471. For the same date, the average RMC for all Commissioned Officers was \$138,920, \$137,497 for all Warrant Officers, and \$77,331 for all enlisted personnel.

Because we do not have information on the pay grade or time in service for the self-identified military personnel in Graph 4, we assume the distribution of enlisted and officers across Virginia follows the aggregate distributions of active duty personnel nationally. In December 2023, for example, the DoD reported 232,763 active duty Warrant and Commissioned Officers (18.5%) and 1,022,323 enlisted personnel (81.5%). We assume that this ratio is representative of military personnel stationed in Virginia.

Graph 5 displays estimates of military BP (wages) for GO Virginia regions in 2023 using 2023 ACS 5-year estimates data. We estimate that military personnel stationed in the Commonwealth received approximately \$6.8 billion in Basic Pay. Region 5 accounted for the largest share, with an estimate of \$4.4 billion in military BP. Region 7 followed with approximately \$1.4 billion, while other regions such as Region 4, Region 6, and Region 2 contributed \$431 million, \$373 million, and \$77 million, respectively. Regions with smaller military populations received comparatively smaller amounts of Basic Pay which include Region 8 (\$52.2 million), Region 9 (\$39.1 million), Region 3 (\$21.0 million), and Region 1 (\$6.1 million).

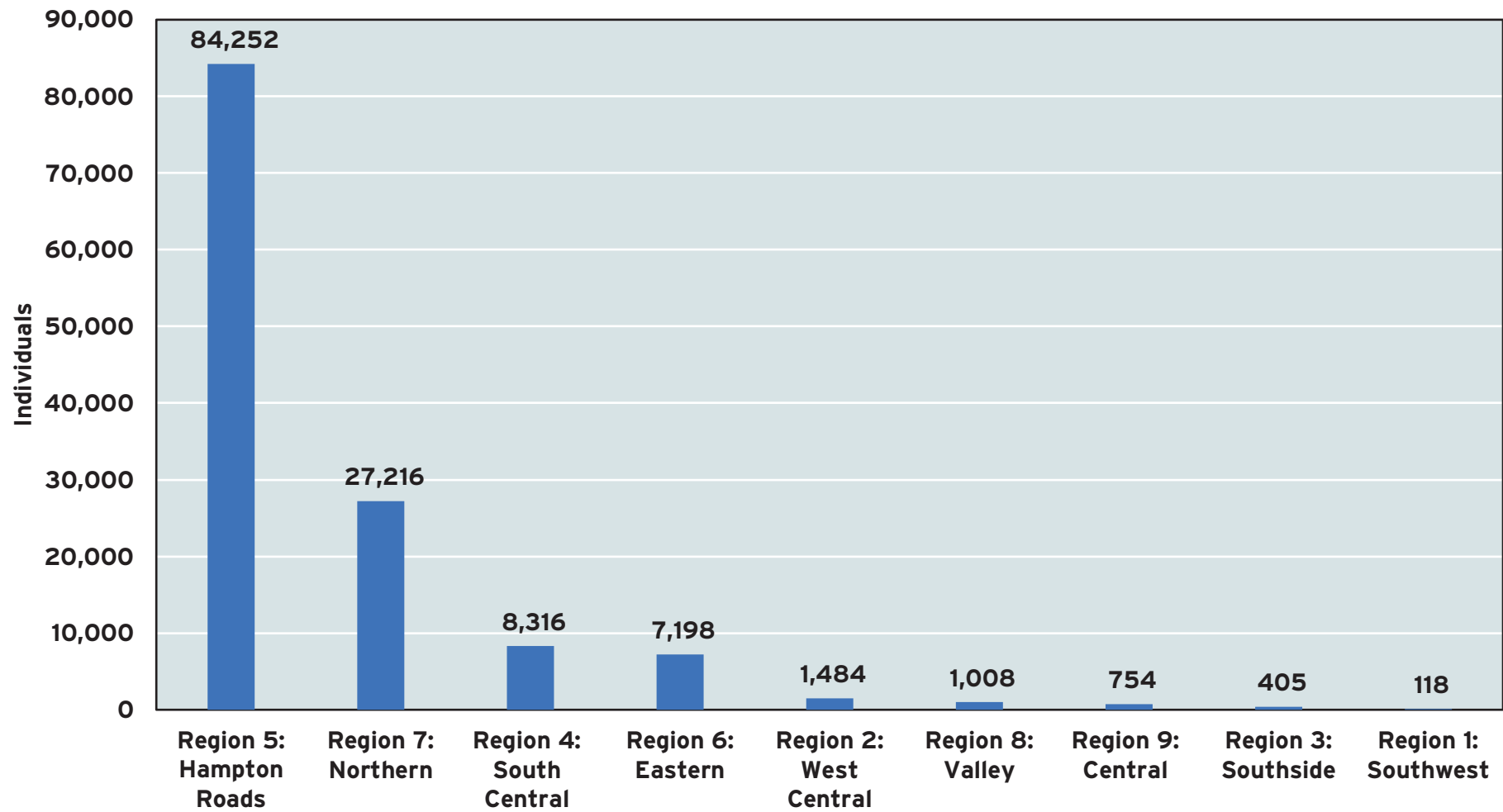
<sup>3</sup> The COVID-19 pandemic disrupted the collecting of survey data for the 1-year program in 2020. The Census Bureau determined that the estimates generated by the 2020 surveys did not meet the statistical quality standards and should not be released to the public. Instead, a set of experimental results were made available only for the nation, all 50 states, and the District of Columbia. The absence of estimates for metropolitan areas and counties, along with the existing concerns about data quality, means that we do not report the 2020 ACS 1-year experimental estimates.

<sup>4</sup> For more information about the differences between the ACS and estimates produced by the BLS, see <https://www.bls.gov/lau/acsqa.htm>.

<sup>5</sup> According to the DoD, RMC is defined as the sum of basic pay, average basic allowance for housing, basic allowance for subsistence, and the federal income tax advantage that accrues because these allowances are not subject to federal income tax. RMC represents a basic level of compensation for every service member. For more information, see <https://militarypay.defense.gov/>

GRAPH 4

EMPLOYMENT IN THE ARMED SERVICES  
GO VIRGINIA REGIONS, 2019 - 2023

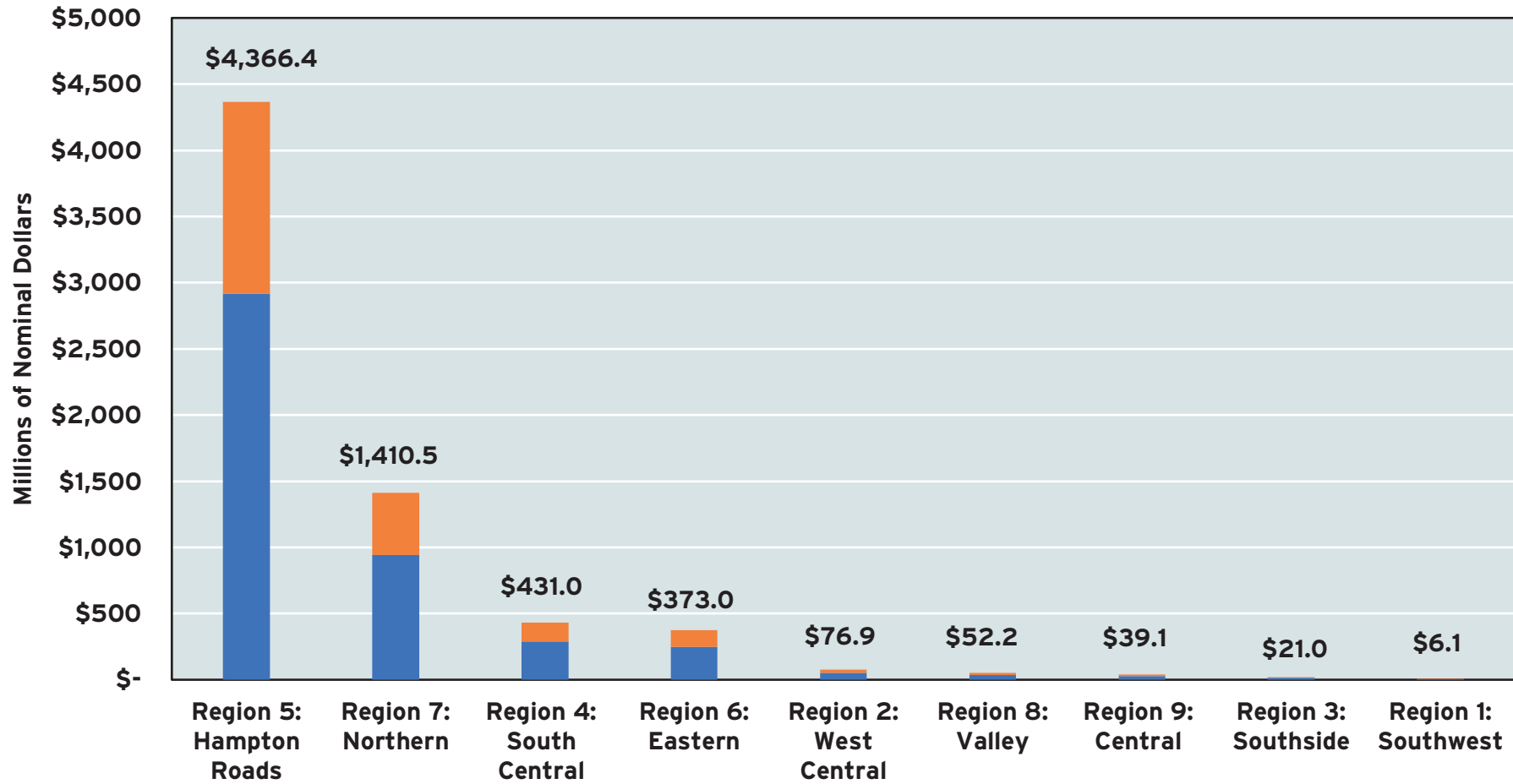


Source: United States Census Bureau, American Community Survey 5-Year estimates (2019-2023).



**GRAPH 5**

**ESTIMATED TOTAL BASIC PAY FOR MILITARY PERSONNEL  
GO VIRGINIA REGIONS, 2019 - 2023**



Sources: United States Census Bureau, American Community Survey 5-Year estimates, 2019-2023, Department of Defense, and Dragas Center for Economic Analysis and Policy.

A second element of the federal government impact in the regions of the Commonwealth is federal civilian jobs. As with military employment, estimates of federal civilian employment and compensation are no longer published by the BEA. Alternatively, we can obtain estimates of federal civilian employment and wages from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW). The QCEW program publishes quarterly and annual counts of employment and wages reported by more than 95% of jobs covered by state unemployment insurance or, in the case of federal jobs, the Unemployment Compensation for Federal Employees (UCFE) program.<sup>6</sup>

At the state level, Virginia's total annual average wages for federal civilian jobs in 2024 were \$22.3 billion. Graph 6 illustrates the total annual average wages of federal civilian jobs across the GO Virginia regions in 2024. Region 7 ranked first with an estimated \$11.0 billion in federal wages, followed by Region 5 with \$5.7 billion. Region 4 and Region 6 each contributed around \$1.75 billion. Additional contributions were made from Region 2 (\$446 million), Region 8 (\$370 million), Region 9 (\$336 million), Region 1 (\$108 million) and Region 3 (\$70 million).

The importance of federal civilian jobs to the economy of the Commonwealth is highlighted in Graph 7. We estimate the ratio of federal civilian jobs annual average wages to private sector annual average wages. In 2024, the ratio ranged from a low of 1.31 in Region 7 to a high of 2.41 in Region 6. These ratios reflect how much higher average wages are allocated in the federal civilian sector relative to the private sector in each region. For example, in Region 6, a lost federal civilian job would require the creation of 2.41 private sector jobs to match the lost wages.

Table 6 illustrates, not surprisingly, that Regions 4, 5, and 7, which form the 'urban crescent', accounted for 82.6% of all federal civilian jobs in the Commonwealth in 2024. In other words, more than 8 out of 10 federal jobs were in the urban crescent. In 2024, the annual average wage of private sector jobs in the Commonwealth was \$77,660. In the same year, the annual average wage of federal civilian job was \$115,235. The average federal civilian job in Virginia made approximately 1.5 times more than the average private sector employee in 2024.

In 2024, we estimate that military service members stationed in the GO Virginia Regions earned approximately \$6.8 billion in wages while federal civilian jobs earned about \$22.2 billion in wages. We note that wages do not include cash allowances, including Basic Allowance for Housing (BAH) and Basic Allowance for Subsistence (BAS). Wages also do not include health or retirement benefits for military and federal civilian jobs. In other words, the approximate \$29.0 billion in wages is a conservative approach on the direct contribution of these jobs to the economy of the Commonwealth.

<sup>6</sup> For more information about the QCEW, see: <https://www.bls.gov/cew/overview.htm>

**TABLE 6**

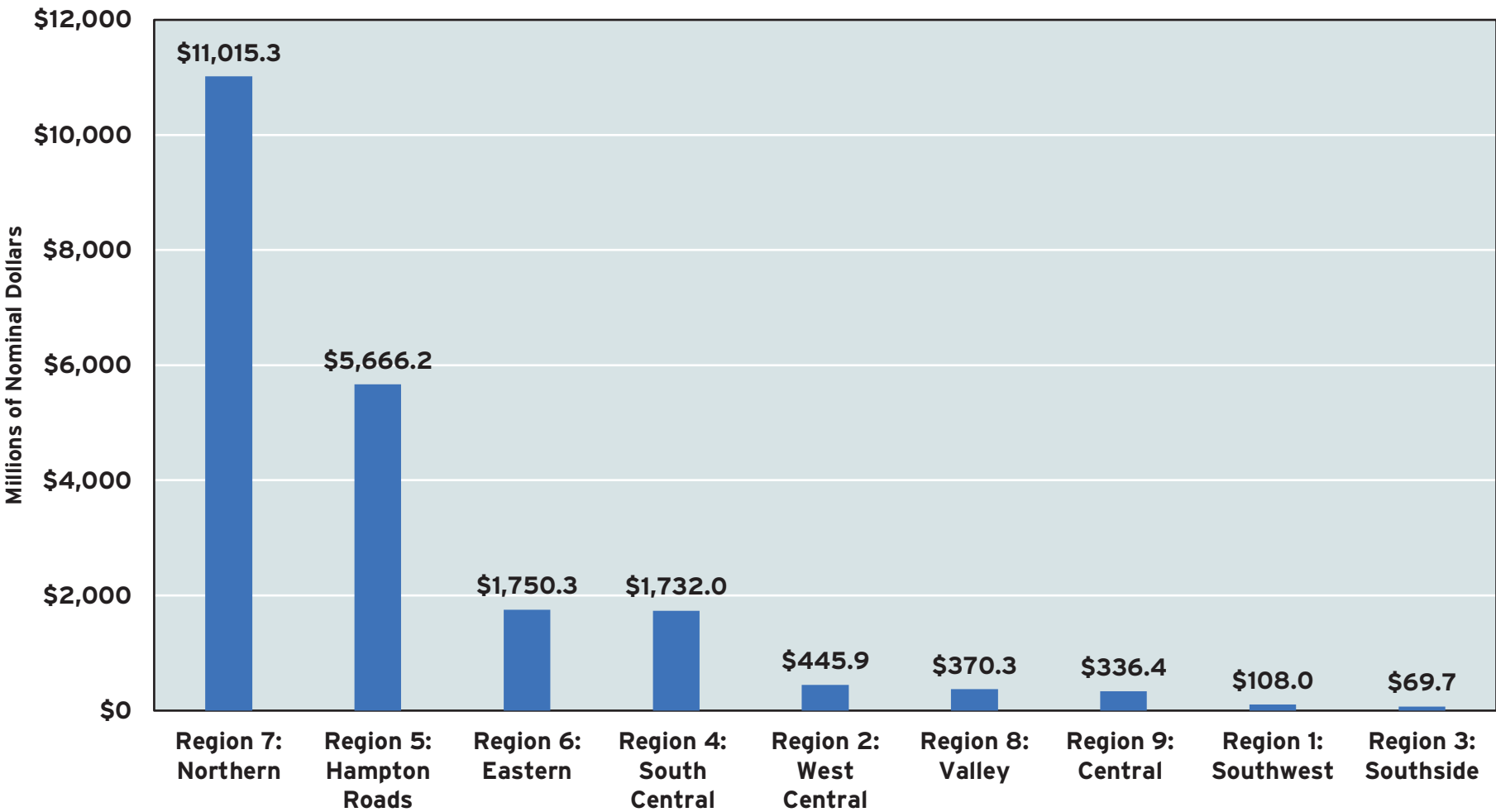
**FEDERAL CIVILIAN EMPLOYMENT  
GO VIRGINIA REGIONS AND VIRGINIA, 2024**

Region	Federal Civilian Employment	Share of Virginia Total	Average Federal Annual Wage	Average Private Sector Annual Wage
Region 1: Southwest	1,411	0.7%	\$76,522	\$46,871
Region 2: West Central	4,889	2.5%	\$91,200	\$56,698
Region 3: Southside	1,010	0.5%	\$68,961	\$47,756
Region 4: South Central	17,937	9.3%	\$96,559	\$70,285
Region 5: Hampton Roads	60,363	31.2%	\$93,870	\$59,915
Region 6: Eastern	13,274	6.9%	\$131,856	\$54,780
Region 7: Northern	81,484	42.1%	\$135,184	\$102,967
Region 8: Valley	3,781	2.0%	\$97,938	\$55,035
Region 9: Central	2,779	1.4%	\$121,050	\$62,484
Unknown or Unidentified	6,503	3.4%	\$122,452	\$113,886
Virginia	193,431	---	\$115,235	\$77,660

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Annual Estimates, 2025. Statewide estimates aggregated from county-level data.

GRAPH 6

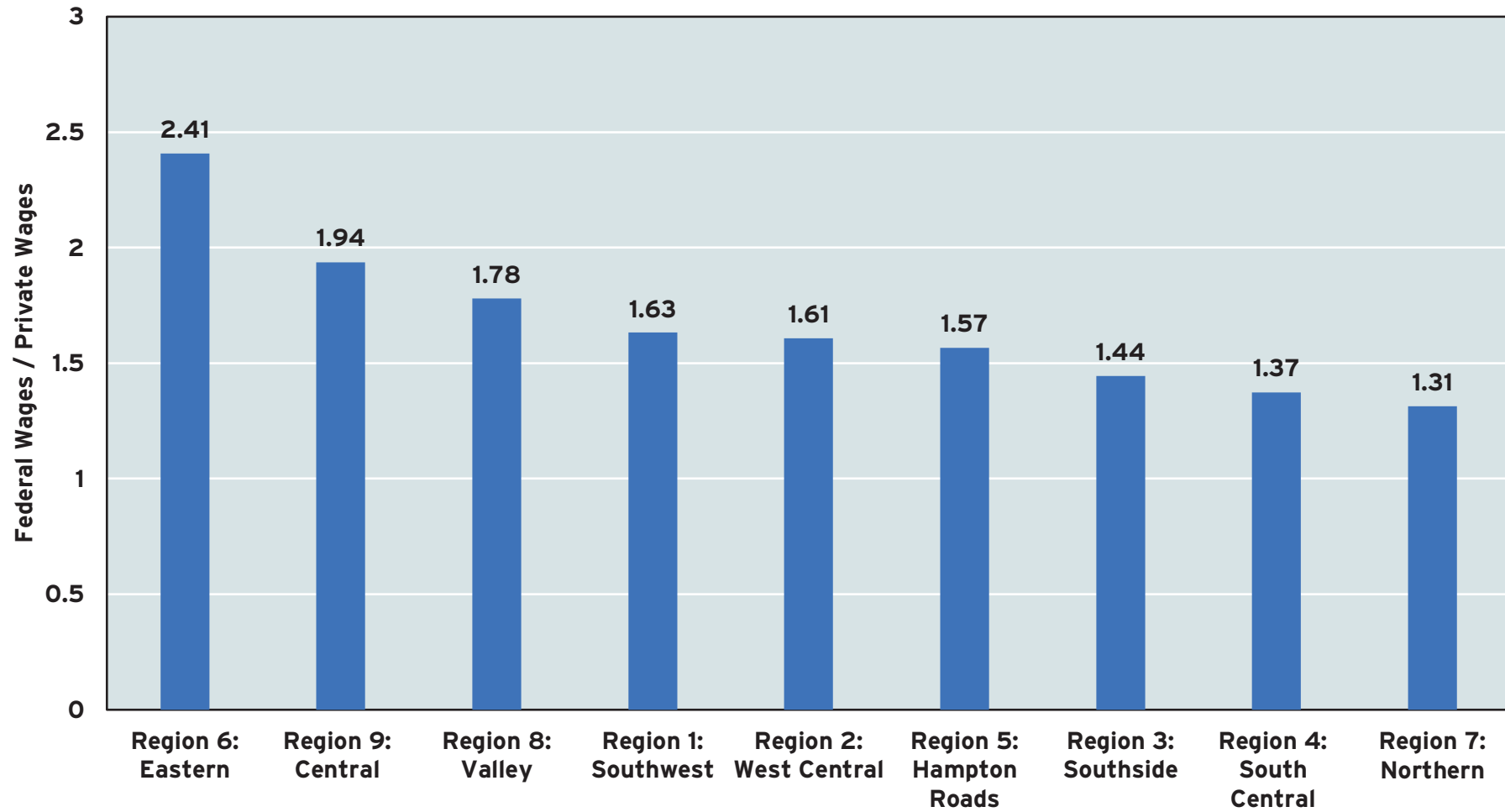
TOTAL ANNUAL WAGES FOR FEDERAL CIVILIAN JOBS  
GO VIRGINIA REGIONS, 2024



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Annual Estimates, 2024. Rounded for county level data. Unknown/Unidentified accounts for 3.6% of Virginia total.

**GRAPH 7**

**RATIO OF FEDERAL CIVILIAN JOB WAGES TO PRIVATE SECTOR WAGES  
GO VIRGINIA REGIONS, 2024**



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Annual Estimates, 2025.

## Civilian Labor Force and Individual Employment

The civilian labor force includes all people aged 16 or older who are classified as employed or unemployed.<sup>7</sup> Graph 8 displays the percent change in the civilian labor force in the GO Virginia regions, Virginia, and the United States from 2019 to 2024 while Graph 9 illustrates the year-over-year change in the labor force from July 2024 to July 2025. We note that we have chosen to estimate employment data for the current decade using 2019 as the comparison base to avoid biasing the estimates upward due to the pandemic-related economic shock in 2020.

During this time, Virginia's civilian labor force increased by 4.1%, faster than that of the nation (2.8%). The civilian labor force in Regions 5, 2, 3, and 1 lagged behind both the nation and state in that order, with Region 1 experiencing the slowest growth of 0.2% and Region 5 slightly trailing the growth of the nation with an increase of 2.4%. Out of the nine GO Virginia Regions, Region 6 observed the largest increase (9.0%) in the labor force over this period. Regions 4, 9, 8 followed, each showing gains near 6.0%, outperforming both the state and the nation. Region 7 experienced growth in their civilian labor force by 4.1%, the same as the state and well above the nation.

Graph 9 displays the year-over-year percent change in the civilian labor force from August 2024 to August 2025 for the GO Virginia regions and the Commonwealth. During this period, Virginia's civilian labor force declined by 1.1%. The sharpest declines occurred in Region 5 (−1.7%) and Region 7 (−1.4%), followed by Region 8 (−1.3%). Regions 6 (−1.2%), 9 (−1.2%), and 2 (−1.1%) posted comparable decreases. While Region 1 also experienced a contraction in its civilian labor force, its decline was relatively modest at −0.6%. Regions 4 and 3 were the only two regions to expand their civilian labor force during this period, though only slightly, each growing by approximately 0.1%.

Graph 10 shows the percent change in individual employment across the GO Virginia regions, state, and nation from 2019 to 2024. The lowest percent changes in individual employment were observed in Regions 1, 3, and 2, with rates of 0.6%, 1.8% and 2.0% respectively, all falling below the nation (2.4%), the Commonwealth (4.0%), and the remaining GO Virginia regions. Region 6 grew the most at 9.0%, followed by Regions 4, 9 and 8, each with employment growth above the nation and state. Meanwhile, Region 7 saw an increase in individual employment of 3.9%, while Region 5 experienced a rise of 2.5%, both above the nation but below the state's growth. The growth in civilian labor force and individual employment are closely mirrored each other across the GO Virginia regions because both are affected by the same overall trends. Since most people in the labor force are also employed, the numbers grew at a similar rate.

Graph 11 displays the year-over-year percent change in individual employment from August 2024 to August 2025 for the GO Virginia regions and the Commonwealth as a whole. During this period, Virginia's individual employment declined by 1.7%. All nine GO Virginia regions also experienced contractions. The sharpest declines occurred in Region 5 (−2.2%) and Region 7 (−2.2%), followed by Regions 2 and 6, each with individual employment decreasing by 1.7%. Regions 8 (−1.6%) and 9 (−1.5%) posted similar decreases. More moderate declines were observed in Region 1 (−1.0%) and Region 3 (−0.5%), while Region 4 (−0.3%) experienced the smallest decrease.

<sup>7</sup> Individual employment estimates are obtained for the Current Population Survey's reference week. Individuals are considered employed if they meet any of the following criteria: (1) worked at least 1 hour as a paid employee, (2) worked at least 1 hour in their own business, profession, trade, or farm, (3) were temporarily absent from their job, business or farm, and (4) worked without pay for a minimum of 15 hours in a business or farm owned by a family member.



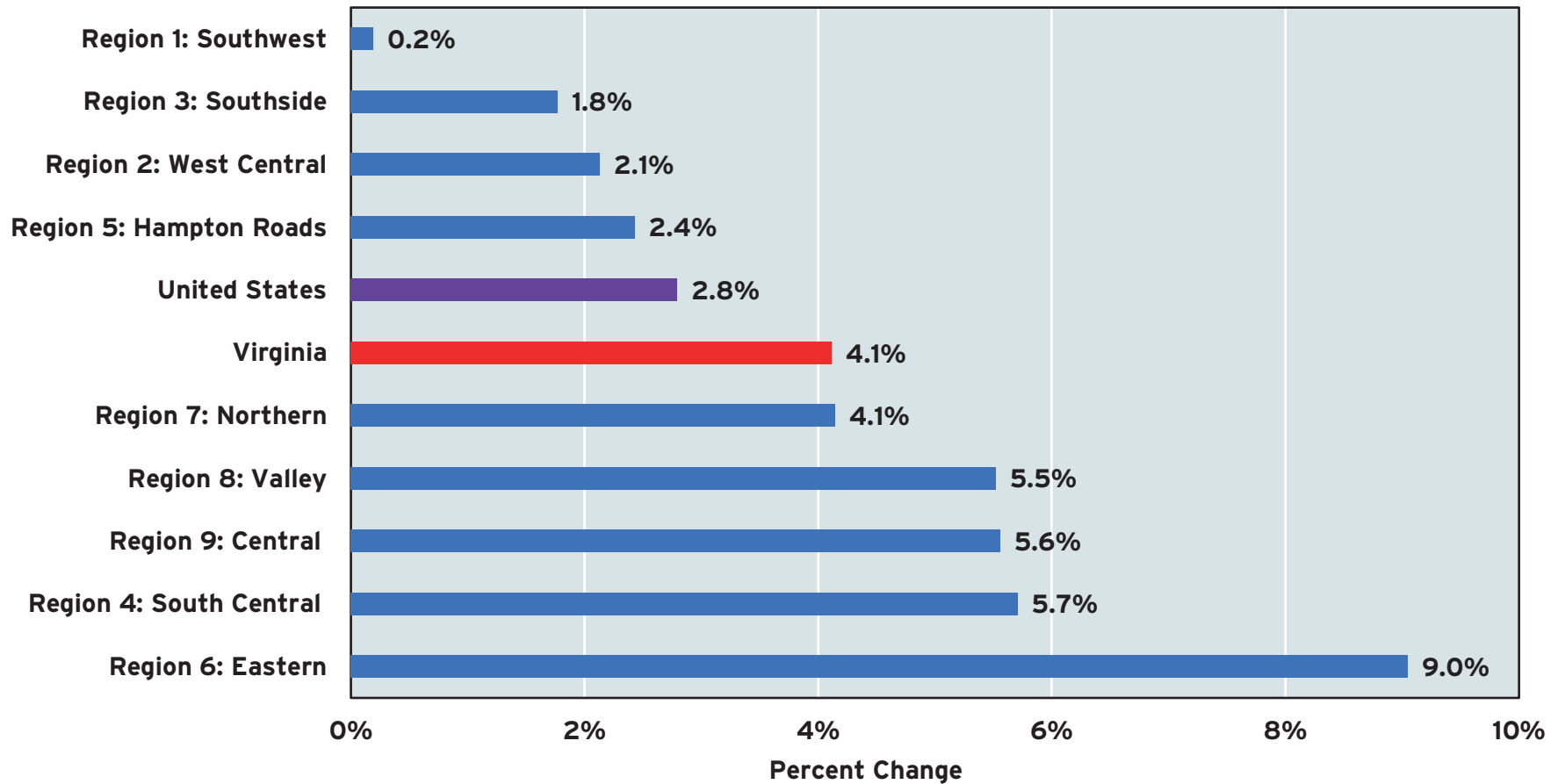
The headline unemployment rate is equal to the ratio of the number of unemployed people in the labor force to the overall labor force. Graph 12 demonstrates the average annual unemployment rate for each GO Virginia region in 2024. Graph 13 shows year-to-date average unemployment rates for each GO Virginia region through August 2025. Compared to 2024, each region has seen increased unemployment so far in 2025, and the state's average unemployment rate has also risen, from 2.9% in 2024 to 3.6% in 2025. Regions 9 (3.2%), 7 (3.3%), 8 (3.4%), 4 (3.5%), and 6 (3.5%) all have unemployment rates below the statewide average. Regions 5 (3.8%) and 2 (3.8%) are slightly above the state rate, while Region 1 (4.4%) and Region 3 (4.5%) have the highest unemployment rates. All regions remain below the national average unemployment rate of 4.0%, except Regions 1 and 3, which exceed it.

Table 7 illustrates the average annual rate of individual employment growth among GO Virginia regions, Virginia and the nation by decade from 1990 to 2024. We remind the reader that we have chosen to estimate the average annual rate of employment growth for the current decade using 2019 as the benchmark to avoid biasing the estimates upward due to the pandemic-related economic shock in 2020. In the current decade, Commonwealth employment grew at an average annual rate of 0.8%, compared to 0.5% for the nation. During this period, several regions outperformed the state and the nation, including Region 6 with the highest growth at 1.7%, followed by Regions 4, 8 and 9, all with a rate of 1.1%. Region 7 matched the state's average with 0.8% growth. In contrast, in the same decade, Region 1 (0.1%), Region 2 (0.4%), Region 3 (0.4%), and Region 5 (0.5%) underperformed both the state and national averages.



GRAPH 8

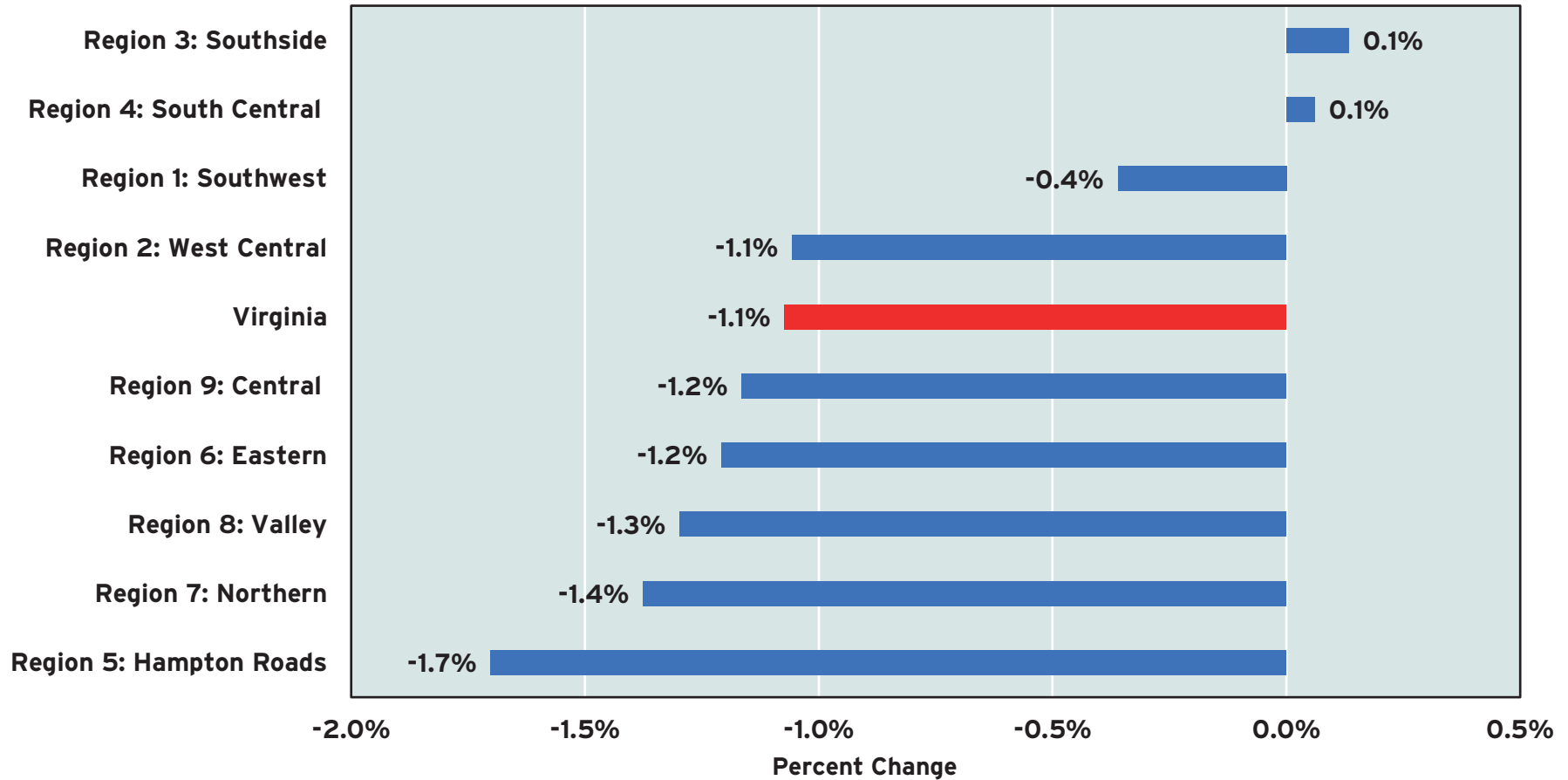
**PERCENT CHANGE IN CIVILIAN LABOR FORCE  
GO VIRGINIA REGIONS, VIRGINIA, AND THE UNITED STATES, 2019 - 2024**



Sources: Bureau of Labor Statistics, Local Area Unemployment Statistics, and the Dragas Center for Economic Analysis and Policy. Annual averages of non-seasonally adjusted data.

**GRAPH 9**

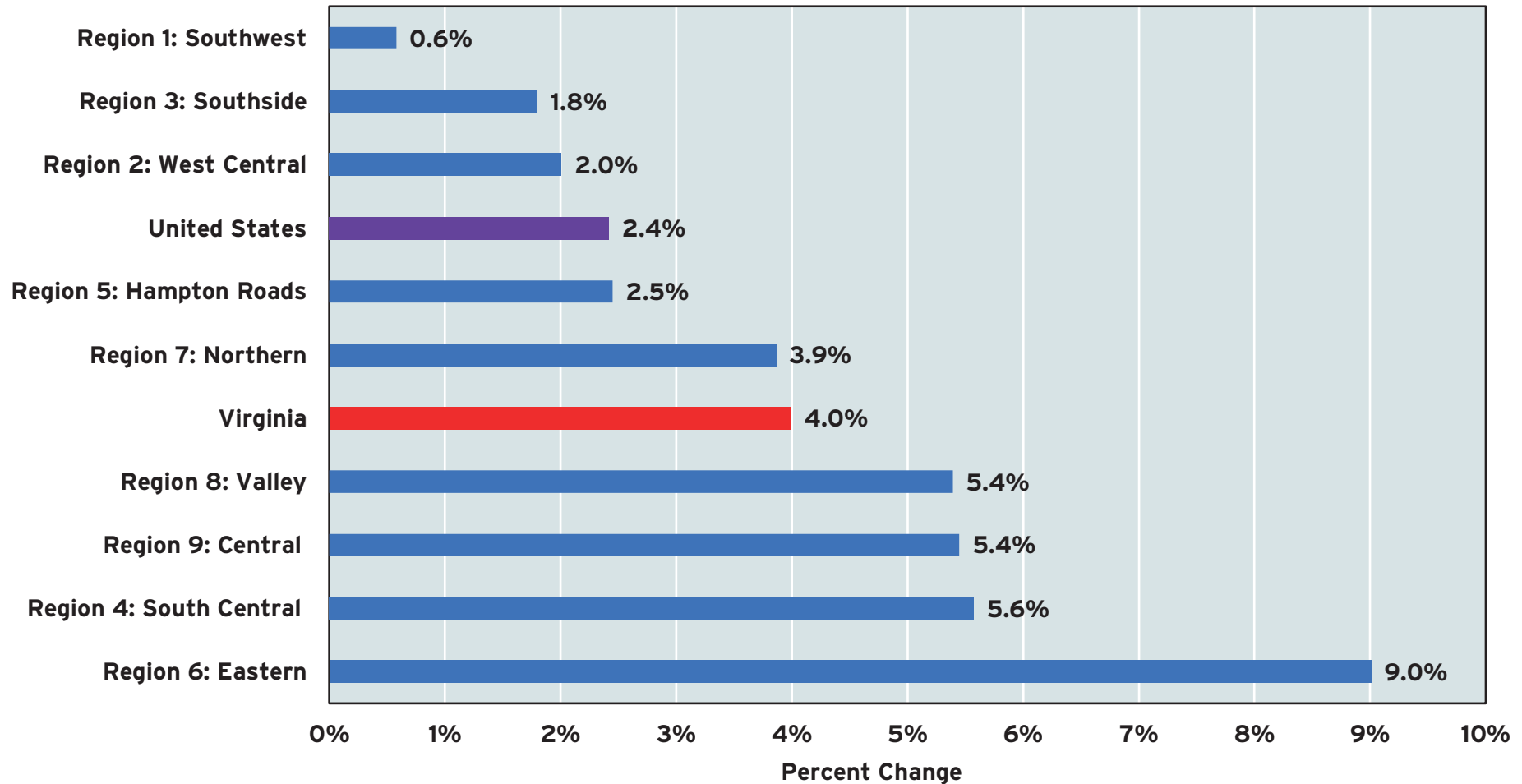
**YEAR-OVER-YEAR (YOY) PERCENT CHANGE IN CIVILIAN LABOR FORCE  
GO VIRGINIA REGIONS AND VIRGINIA, AUGUST 2024 - AUGUST 2025**



Sources: Bureau of Labor Statistics, Local Area Unemployment Statistics and the Dragas Center for Economic Analysis and Policy. Annual averages of non-seasonally adjusted data.

GRAPH 10

**PERCENT CHANGE IN INDIVIDUAL EMPLOYMENT  
GO VIRGINIA REGIONS, VIRGINIA, AND THE UNITED STATES, 2019 - 2024**



Sources: Bureau of Labor Statistics, Local Area Unemployment Statistics and the Dragas Center for Economic Analysis and Policy. Annual averages of non-seasonally adjusted data.

TABLE 7

**AVERAGE ANNUAL EMPLOYMENT GROWTH BY DECADES  
GO VIRGINIA REGIONS, VIRGINIA, AND THE UNITED STATES,  
1990 - 2024**

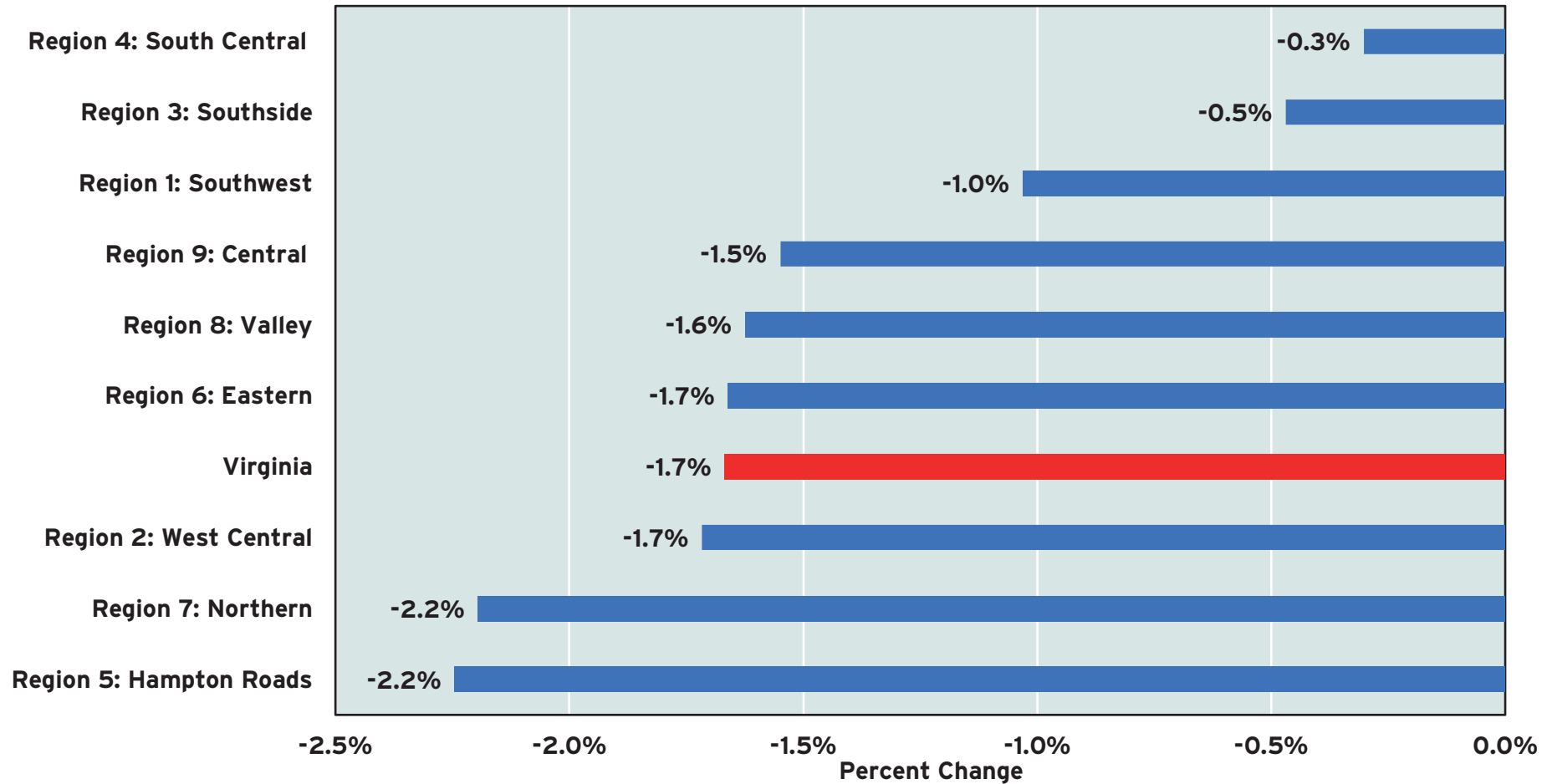
Region	Annual Growth			
	1990-1999	2000-2009	2010-2019	2019-2024
Region 1: Southwest	0.2%	0.2%	-1.0%	0.1%
Region 2: West Central	0.8%	0.0%	0.4%	0.4%
Region 3: Southside	0.0%	-0.9%	-0.1%	0.4%
Region 4: South Central	1.1%	0.7%	1.8%	1.1%
Region 5: Hampton Roads	1.0%	0.7%	0.7%	0.5%
Region 6: Eastern	2.6%	2.2%	1.5%	1.7%
Region 7: Northern	1.4%	1.6%	1.6%	0.8%
Region 8: Valley	1.5%	0.8%	1.2%	1.1%
Region 9: Central	1.3%	1.7%	1.5%	1.1%
Virginia	1.3%	1.1%	1.1%	0.8%
United States	1.3%	0.2%	1.4%	0.5%

Sources: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics, 1990 - 2024 and Dragas Center for Economic Analysis and Policy. Annual average of monthly non-seasonally adjusted data. Annual growth rate is the Compound Annual Growth Rate.



GRAPH 11

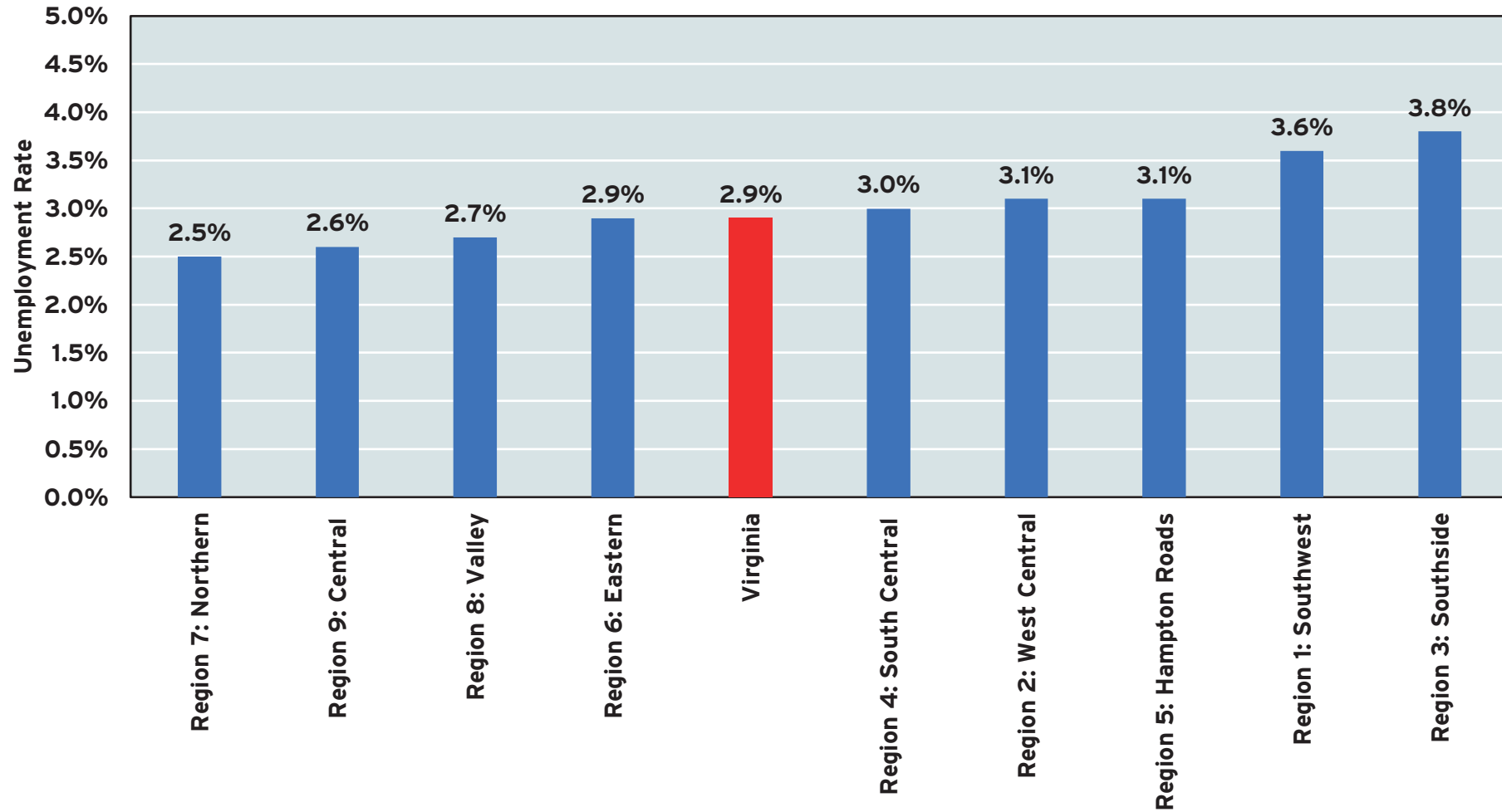
**YEAR-OVER-YEAR (YOY) PERCENT CHANGE IN INDIVIDUAL EMPLOYMENT  
GO VIRGINIA REGIONS AND VIRGINIA, AUGUST 2024 - AUGUST 2025**



Sources: Bureau of Labor Statistics, Local Area Unemployment Statistics and the Dragas Center for Economic Analysis and Policy. Annual averages of non-seasonally adjusted data.

**GRAPH 12**

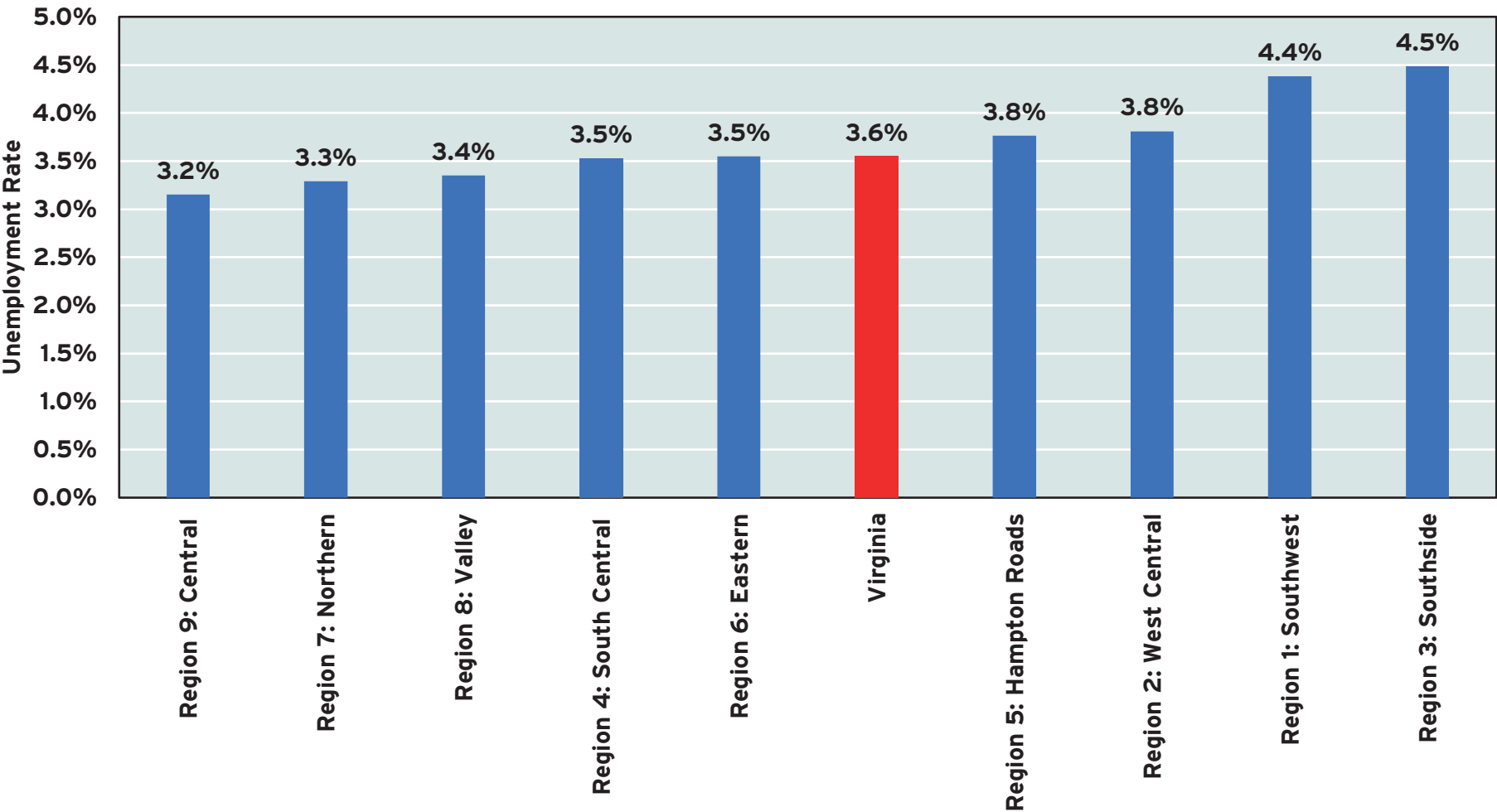
**AVERAGE ANNUAL UNEMPLOYMENT RATE  
GO VIRGINIA REGIONS AND VIRGINIA, 2024**



Sources: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics, and Dragas Center for Economic Analysis and Policy. Annual average of monthly non-seasonally adjusted data.

GRAPH 13

AVERAGE ANNUAL UNEMPLOYMENT RATE  
GO VIRGINIA REGIONS AND VIRGINIA, 2025\*



Sources: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics, and Dragas Center for Economic Analysis and Policy. \*Data are through August 2025. Annual average of monthly non-seasonally adjusted data.

## Nonfarm Payrolls (Jobs) in the GO Virginia Regions

Individual employment measures the number of people working across all GO Virginia Regions and nonfarm payrolls are a measure of the number of jobs in a region. To estimate the number of jobs across the regions, we rely on the Quarterly Census of Employment and Wages (QCEW) from the BLS. The QCEW provides estimates of wages and jobs at the city and country level, which we then aggregate to the regions' estimates summarized in Table 8.

Table 8 illustrates that Region 1 has lost jobs, on average, from 2000 to 2009, 2010 to 2019, and 2019 to 2024. Region 2 and Region 3 have also lost jobs from 2019 to 2024. Region 5's growth in jobs from 2019 to 2024 was, for all intents and purposes, zero. While the average annual growth rate for jobs was positive for other regions from 2019 to 2024, growth has slowed this decade relative to the previous decade.

Table 9 presents nominal average annual wages and growth in real wages by decade across the GO Virginia Regions from 1990 to 2024. Most regions saw modest real wage growth each decade, with Region 7 consistently leading in overall wage levels and early growth, though this growth has slowed in recent years. Regions 4 and 9 showed steady growth across all decades, while Regions 2, 5, 6 and 8 experienced consistent but slower gains. In contrast, Region 1 had two periods of, on average, negative annual growth in the 1990s and the 2010s. Despite setbacks in the early 2020s, real wages improved across all regions from 2019 to 2024.

TABLE 8				
NONFARM PAYROLLS GROWTH GO VIRGINIA REGIONS AND VIRGINIA, 1990 - 2024				
Region	Annual Growth			
	1990-1999	2000-2009	2010-2019	2019-2024
Region 1: Southwest	0.7%	-0.3%	-0.9%	-0.3%
Region 2: West Central	1.3%	-0.5%	0.7%	-0.1%
Region 3: Southside	0.6%	-1.9%	0.0%	-0.3%
Region 4: South Central	1.5%	0.2%	1.4%	0.5%
Region 5: Hampton Roads	1.6%	0.2%	0.7%	0.0%
Region 6: Eastern	3.8%	1.8%	1.3%	0.7%
Region 7: Northern	2.5%	1.2%	1.3%	0.6%
Region 8: Valley	2.2%	0.1%	1.3%	0.8%
Region 9: Central	2.0%	1.1%	1.7%	0.6%
Virginia	1.8%	0.4%	1.2%	0.8%
Sources: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages and Dragas Center for Economic Analysis and Policy. Annual growth rate is the Compound Annual Growth Rate.				

TABLE 9					
AVERAGE ANNUAL WAGES AND GROWTH IN REAL WAGES BY DECADE					
GO VIRGINIA REGIONS AND VIRGINIA, 1990 - 2024					
Region	Nominal Average Annual Wages in 2024	Real Wages Average Annual Growth			
		1990-1999	2000-2009	2010-2019	2019-2024
Region 1: Southwest	\$47,287	-0.2%	1.0%	-0.8%	1.0%
Region 2: West Central	\$57,323	0.7%	0.4%	0.3%	1.0%
Region 3: Southside	\$48,341	0.5%	0.1%	0.2%	1.6%
Region 4: South Central	\$70,527	1.1%	0.6%	0.2%	0.9%
Region 5: Hampton Roads	\$62,645	0.6%	1.3%	0.5%	0.8%
Region 6: Eastern	\$61,190	0.5%	1.6%	0.6%	0.8%
Region 7: Northern	\$102,180	2.5%	1.0%	0.1%	0.5%
Region 8: Valley	\$55,532	0.5%	0.5%	0.5%	0.9%
Region 9: Central	\$65,955	0.8%	1.2%	0.4%	1.2%
Virginia	\$77,671	1.5%	1.1%	0.4%	1.0%
Sources: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages and Dragas Center for Economic Analysis and Policy. Consumer Price Index for All Urban Consumer with a base year of 2017 used to estimate real average annual wages. Annual growth rate is the Compound Annual Growth Rate.					

## Per Capita Income in GO Virginia Regions

Per capita income is a measure of the average income earned by residents of a region. Faster growth in per capita income is a signal that a region is not only growing but growing through the creation of higher paying jobs. Regions that lag in per capita income growth may have slower employment growth, or the composition of employment is tilted towards lower-paying jobs. If individuals vote with their feet about economic opportunities, they will tend to seek out regions that offer increasing economic opportunities, an opportunity that is measured, in part, by per capita income growth over time. Table 10 illustrates nominal per capita income in 2023 and the growth rate of real per capita income by decade from 1990 to 2023.

We note that we estimate real per capita income growth from 2019 to 2023 for the current decade to mitigate the impact of the pandemic on personal incomes. Between 1990 to 1999, only two regions were exceeding the pace of real income growth in the Commonwealth (1.6 % per annum) and the nation (1.5% per annum): Region 7 and Region 9's real income grew annually at 2.0% and 1.8%, respectively. However, in the first decade of this century, annual growth in real income mostly slowed down, except for Region 1 (1.4% per annum), Region 5 (1.5% per annum), and Region 6 (1.8% per annum) which grew faster annually than the previous decade. From 2010 to 2019, on the other hand, per capita personal income growth lagged in the regions that faced accelerated growth in the previous decade, while those which faced decelerated growth in the previous decade had a reverse of fortunes: Region 4 (1.6% per annum), Region 9 (1.9% per annum), as well as the state (1.0% per annum) and the nation (1.8% per annum). From 2019 to 2023, however, in six out of the nine GO Virginia regions, annual real personal per capita income grew faster or at pace of that of Virginia (1.5%) and the United States (1.2%).

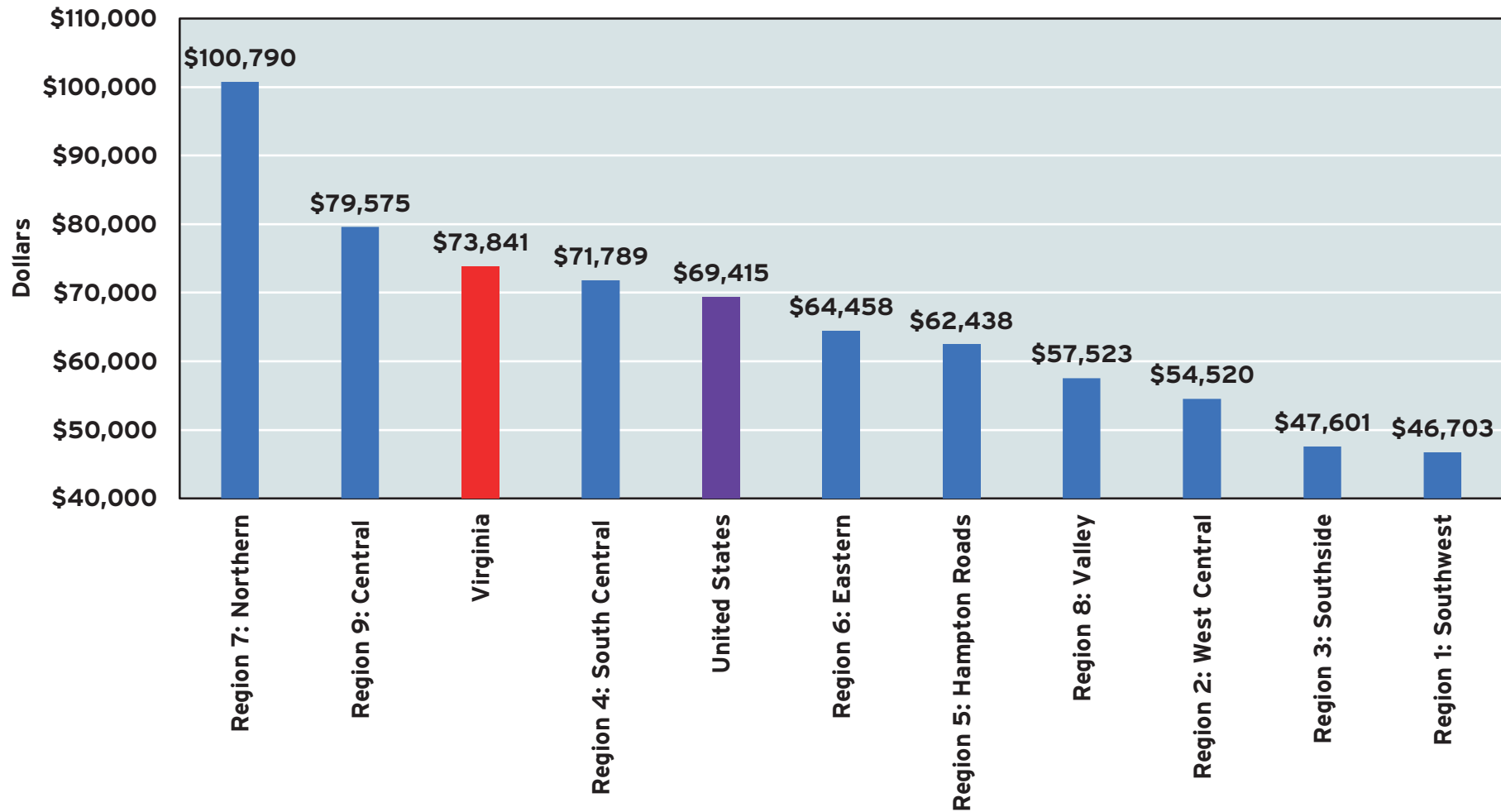
Graph 14 displays nominal per capita income for the GO Virginia regions, Virginia, and the United States in 2023. Not surprisingly, Region 7 had the highest level of personal income per capita (\$100,790), followed by Region 9 (\$79,575) and Region 4 (\$71,789).





TABLE 10					
PER CAPITA INCOME AND GROWTH IN REAL PER CAPITA INCOME GO VIRGINIA REGIONS, VIRGINIA, AND THE UNITED STATES, 1990 - 2023					
Region	Nominal Per Capita Income in 2023	Real Income Average Annual Growth			
		1990-1999	2000-2009	2010-2019	2019-2023
Region 1: Southwest	\$46,703	1.2%	1.4%	0.5%	2.0%
Region 2: West Central	\$54,520	1.2%	0.6%	0.9%	1.8%
Region 3: Southside	\$47,601	0.7%	0.6%	1.1%	2.3%
Region 4: South Central	\$71,789	1.0%	0.4%	1.6%	1.1%
Region 5: Hampton Roads	\$62,438	1.1%	1.5%	0.4%	1.6%
Region 6: Eastern	\$64,458	1.2%	1.8%	0.7%	0.9%
Region 7: Northern	\$100,790	2.0%	0.3%	0.7%	1.5%
Region 8: Valley	\$57,523	1.2%	0.9%	1.2%	1.3%
Region 9: Central	\$79,575	1.8%	0.9%	1.9%	1.8%
Virginia	\$73,841	1.6%	0.9%	1.0%	1.5%
United States	\$69,415	1.5%	0.4%	1.8%	1.2%
Sources: U.S. Bureau of Economic Analysis, Personal Income by County, Table CAINC1 and National Income and Product Accounts, and Dragas Center for Economic Analysis and Policy. Annual growth rate is the Compound Annual Growth Rate. Base year for real per capita income is 2017.					

**GRAPH 14**  
**NOMINAL PER CAPITA INCOME,**  
**GO VIRGINIA REGIONS, VIRGINIA, AND THE UNITED STATES, 2023**



Sources: U.S. Bureau of Economic Analysis, Personal Income by County, Table CAINC1, National Income and Product Accounts, and Dragas Center for Economic Analysis and Policy.

## Final Thoughts

Each year, we ask what the future holds. While the backward-looking data indicates a positive trend across many of the GO Virginia Regions, uncertainty remains. Federal immigration policies have tempered migration inflows and, likely, expedited outflows. The effects of this are estimated to negatively impact national GDP growth by up to 1% in 2025.<sup>8</sup> The Commonwealth is particularly susceptible to these changes, as regional population growth (especially in Region 7) relies on international migration. Furthermore, federal civilian layoffs and resignations will increase in the second half of 2025. In Region 7, each federal civilian job lost will effectively require 1.3 private jobs to compensate for the lost wages. In Region 6, this estimate jumps to 2.4 private sector jobs for every federal civilian job. The DoD's most recent Future Years Defense Program projects nominal increases in spending through 2030. Recent additional spending outlays above the base budget presented in this report are a clear indication that there is an appetite for additional defense spending. How these increases will be spent remains uncertain. The impacts of the One Big Beautiful Bill are becoming clearer and will likely increase the number of uninsured across Virginia and may lead to the shuttering of a number of rural hospitals. Food insecurity is likely to increase as well as nutritional benefits are curtailed for some Virginians.

Virginia can act to improve regional outcomes. We continue to offer the following suggestions. Targeted investments in infrastructure in general are necessary to promote economic development and attract new businesses. Improving the quality of education, including investments in physical infrastructure, is recommended to produce a workforce that can compete in an increasingly globalized economy. Virginia's antiquated tax structure must be reformed to compete with neighboring states. Regulatory relief, or at least regulatory clarity, is a necessary component of economic growth. Lastly, regional collaboration should not just be a slogan. Virginia should continue to promote regional collaborations through efforts like GO Virginia. These recommendations may not be new, but until Virginia acts, they bear repeating.

<sup>8</sup> For more information about the potential impacts of immigration policies, see <https://www.dallasfed.org/research/economics/2025/0708>



# VIRGINIA'S WORKFORCE: UNDERSTANDING APPRENTICESHIPS


*"Always two there are, a master and an apprentice."*

*– Frank Oz as Yoda*

*"The skills gap is a reflection of what we value. To close the gap, we need to change the way the country feels about work."*

*– Mike Rowe, Dirty Jobs and How America Works*





Apprenticeships represent one of the oldest types of workforce development in the United States. According to the Registered Apprenticeship Partners Information Database System (RAPIDS), in 2025, there were 696,205 active apprenticeships reported to date in the Continental United States.<sup>1</sup> Apprenticeships blend structured on-the-job training (OJT) with related instruction, allowing workers to ‘earn while they learn.’ These opportunities provide individuals with hands-on training that lead to stable employment, transferable skills, and long-term career advancement. They open doors to occupations that might otherwise be inaccessible to those without specialized skillsets and offer both immediate wages and the opportunity to build a lifelong trade.

Between 2015 and 2025, the number of active apprentices in the United States nearly doubled, growing from roughly 360,000 to almost 700,000. Annual new registrations climbed from about 178,000 to more than 300,000, and completions more than doubled to over 110,000 per year.<sup>2</sup> Over the past two years, the U.S. Department of Labor (DOL) expanded funding to strengthen capacity and accelerate apprenticeship growth across a wider range of industries. In 2024, the Biden-Harris administration invested more

<sup>1</sup> <https://public.tableau.com/app/profile/dol.apprenticeship/viz/ApprenticePopulationbyStateAnalysis2025-09-24/SWApprDemo>

<sup>2</sup> Registered Apprenticeship: Federal Role and Recent Federal Efforts. (2025, September 1). <https://www.congress.gov/crs-product/R45171>



than \$244 million through two grant programs to help modernize, diversify, and expand the Registered Apprenticeship system. Once considered a pathway primarily for skilled trades, apprenticeships have the potential to emerge as a vital strategy to prepare a competitive workforce in fields ranging from clean energy to AI.

This specialized training path has deep historical roots and has shaped the lives of some very famous people in Virginia and around the world. In the mid-18th century, a young George Washington trained as a survey apprentice in Culpeper County, Virginia, gaining technical and leadership skills that would later serve him in military and civic life. In the early 20th century, Henry Ford began as a machinist apprentice at the Detroit Dry Dock Company, where he first encountered the engines and mechanical systems that started his famous career. Elvis Presley worked briefly as an apprentice electrician for Crown Electric in Memphis before launching his musical career. Stella McCartney refined her craft as a tailoring apprentice on London's Saville Row, years before becoming a top fashion designer. Senator L. Louise Lucas, President pro tempore of the Virginia General Assembly, began her federal career in 1967 as an apprentice shipfitter at the Norfolk Naval Shipyard and, in 1971, became the first woman at the Shipyard to hold the position of shipfitter.

This chapter examines the state of apprenticeship programs in the United States and Virginia, assessing their role in the labor market. We begin with an overview of national apprenticeship policy, tracing major laws and initiatives that have influenced the system's evolution and expansion. We then review trends in apprenticeship participation highlighting the states that lead in registrations and program growth. The discussion pivots to Virginia, where we analyze current occupation, wage and demographic data, and regional apprenticeship examples that connect education and industry. Finally, we consider whether apprenticeships represent a sustainable and scalable solution to the Commonwealth's post-COVID workforce challenges in the decades ahead.

## A Brief History of Apprenticeships in the United States

In the earliest forms of American apprenticeships, a teacher or master agreed to instruct a student in a trade, providing food and lodging, and, when needed, teaching basic reading and writing skills. Colonial apprenticeship contracts were unregulated with apprentices often treated like servants. Fast forward to the nineteenth and early twentieth century, industrial employers and trade associations developed their own systems without oversight which resulted in inconsistent standards across industries. This all changed in 1911, when Wisconsin enacted the nation's first apprenticeship law, establishing safeguards for both apprentices and employers. The 1911 legislation required written agreements between master and apprentice, set expectations for wages and instruction, and mandated that apprentices receive related classroom training. Wisconsin's integration of classroom instruction with OJT learning established a foundation for modern apprenticeship practices, shaping future state and federal laws.

Building on the Wisconsin law, Congress enacted the National Apprenticeship Act of 1937, also known as the Fitzgerald Act, which authorized the Department of Labor to set nationwide standards for apprenticeship training through either its own Office of Apprenticeship (OA) or state-approved State Apprenticeship Agencies (SAAs). In states that choose to manage their own systems, the Department of Labor formally recognizes SAAs, which operate under OA oversight but with local authority. The OA registers programs in states without their own apprenticeship agencies and ensures compliance with federal regulations related to quality, safety, and equal opportunity. The act marked the beginning of the formal Registered Apprenticeship Program (RAP) and established a unified national framework that continues to govern apprenticeship in the United States today. By the mid-1940s, 6,200 registered programs were

operating across the country, training almost 4,000 apprentices.<sup>3</sup> The apprenticeship system initially focused on the traditional industries of manufacturing, construction, and utilities, but after World War II, apprenticeships expanded into the training of firefighters and other health and safety professionals. This diversification reflected both postwar labor demand and the growing need for skilled workers in the service sector.

Initially started as the Navy's National Apprenticeship Program in 1977, the United Services Military Apprenticeship Program (USMAP) debuted in 1999 and expanded to provide active-duty and full-time support members of all branches of service (not just the Navy), including the Army, Navy, Marine Corps, and Coast Guard. Through USMAP, service members enhance their technical and professional skills while on active duty, gaining experience that supports both military advancement and post-service employment. The program now represents roughly 15 to 20 percent of all registered apprentices in the United States, underscoring its impact in linking defense training to national workforce readiness.<sup>4</sup> Upon completion, members receive a nationally recognized Certificate of Completion from the U.S. Department of Labor verifying their expertise across both military and civilian sectors.

### **The Strength of the European Apprenticeship Model**

Apprenticeships in the United States model the systems that were brought by European immigrants based upon the feudal guild system. Immigrants came to the United States with the master-apprentice model for training skilled craftsman. Guild members progressed from Apprentice to Journeyman/Journeyworker (skilled worker who completed all necessary training) to Master status over time. Germany, Austria and Switzerland advanced the current model with paid on the job training and classroom instruction. Now a mature and widely accepted model, the European Centre for the Development of Vocational Training reports there are 29 multifaceted apprenticeship programs supported by EU Members with 54 unique financing methods including training funds based on levies, tax incentives for companies and individuals, and grants for companies and individuals to promote apprenticeship participation. In October 2023, approximately 1.4 million German citizens and 212,000 foreign nationals were enrolled in the country's paid apprenticeship system.<sup>5</sup> France, Switzerland, and the United Kingdom also have student apprentices numbering in the six and seven digits every year, comprising a major part of worker education and training in these countries.

<sup>3</sup> Registered Apprenticeship: Federal Role and Recent Federal Efforts. (2025, September 1). <https://www.dol.gov/node/138009?lang=es>

<sup>4</sup> <https://usmap.osd.mil/docs/ProgramGuide.pdf>

<sup>5</sup> <https://www.arbeitsagentur.de/en/press/2024-20-apprentices-from-abroad-an-increasingly-important-mainstay-in-the-market-for-vocational-training-and-apprenticeships>

## Apprenticeship in the 21st Century

Apprenticeships generally fall into two broad categories: industrial and service sector occupations. Industrial apprenticeships are offered in factories and machine shops, where participants gain technical and mechanical expertise vital to production. These programs are common in food processing, metal fabrication, tool and die making, and other manufacturing operations. In contrast, service sector apprenticeships focus on meeting the needs of people and communities. They include training for utility workers such as electric line technicians, personal service roles such as barbers, chefs, and public safety occupations such as correctional officers. Together, these two categories demonstrate how apprenticeships have evolved to serve both the productive and service-based dimensions of a specialized economy.

Today, the Department of Labor's Office of Apprenticeship and State Apprenticeship Agencies jointly administer the apprenticeship system. Pre-apprenticeship programs focus on preparation for youth and other populations for entry into RAPs but are not federally registered or vetted. Without consistent standards, these K-12 programs can vary greatly and be administered by the DOL, local Workforce Boards, and/or other third parties such as school districts, community colleges, among others. Jobs for the Future (JFF) is a national non-profit that advocates for the recognition of pre-apprenticeship programs to help ensure consistency and better support for underprepared learners as well as federal registration of these programs to better connect K-12 programs with registered apprenticeship programs.<sup>6</sup>

### Why DOL Registration Matters

When pre-apprenticeship programs are not registered or formally linked to a RAP, states, students and employers lose key advantages that strengthen the apprenticeship ecosystem. States lose data because the programs are usually excluded from federal or state reporting systems as well as federal funding. Students lose a guarantee of quality or portability of their training credentials, and employers often end up with a weaker workforce and no connection to federal incentives. Beyond DOL appropriations, several programs support apprenticeships if they are registered with the Department of Labor. The Workforce Innovation and Opportunity Act (WIOA) allows wage reimbursement, training funds, and automatic eligibility for RAPs as training providers. The GI Bill provides living stipends and book allowances to veterans in RAPs. Registration is the key that unlocks alignment with federal policy, funding, and accountability. Without it, even well-intentioned pre-apprenticeship programs are just isolated efforts.

<sup>6</sup> <https://www.jff.org/idea/jffs-framework-high-quality-pre-apprenticeship-program/>

Currently, 29 states and the District of Columbia administer apprenticeship programs through State Apprenticeship Agencies, while the Department of Labor directly oversees the rest. Registration does not automatically provide funding but ensures quality, safety, and equity across industries. Each apprenticeship sponsor, whether an employer, labor organization, or industry group, designs its own training structure, which includes progressive wage increases and a minimum of 144 hours of related technical instruction annually. Programs may be time-based, competency-based, or hybrid. After provisional registration, DOL or an SAA reviews program performance at least once every five years. Programs are periodically reviewed and may be deregistered if found noncompliant.<sup>7</sup>

Registration also grants access to benefits, including Workforce Innovation and Opportunity Act funding and GI Bill educational assistance for veterans. The federal government has significantly expanded its support for apprenticeship programs through a series of coordinated investments and legislation aimed at strengthening the nation's skilled workforce. For example, the Inflation Reduction Act of 2022 required clean-energy tax credit recipients to employ registered apprentices for a percentage of project labor hours to qualify for full tax incentives. Additional funds support State Apprenticeship Expansion Grants to broaden participation and enhance diversity. Apprenticeship Building America (ABA) grants establish regional apprenticeship hubs that connect employers, educators, and workforce boards, and intermediary contracts to expand apprenticeships. In June 2025, the U.S. Department of Labor awarded nearly \$84 million in grants to all 50 states and territories, increasing the capacity of Registered Apprenticeship programs and extending them into high-demand fields such as technology, clean energy, and healthcare, with the goal of reaching one million active apprentices nationwide.<sup>8</sup> Additional strategic investments directed nearly \$100 million to public-private partnerships in cybersecurity, advanced manufacturing, and information technology to align training with critical labor market needs. Complementing these federal efforts, JFF, with support from

Google.org, launched a \$2 million National Apprentice Fund to provide direct financial assistance to apprentices for tools, transportation, and childcare, helping ensure that financial barriers do not prevent program completion.<sup>9</sup> Together, these initiatives represent the most comprehensive federal and private expansion of apprenticeship support in decades, reaffirming the model's role in developing a future-ready workforce in the post-COVID decade and beyond.

There are 1,462 unique occupations approved for registered apprenticeship in the United States. Each category represents an occupation family or job group as defined by the O\*NET SOC<sup>10</sup> system. Table 1 reports the top categories with the highest number of approved apprenticeship roles. The industrial machinery and maintenance sector has the most apprenticeship-qualified occupations, reflecting the continued demand for skilled mechanics, maintenance technicians, and equipment specialists across manufacturing and production industries.

Understanding where apprentices are located offers valuable insight into where they thrive and how participation varies from state to state. This section reviews state-level apprenticeship participation and demographic data to better understand where apprenticeships are growing and who is taking part across the United States. As illustrated in Table 2 and Graph 1, the United States recorded 696,205 active apprentices in 2025 to date with the largest concentrations in California, Texas, and Ohio. The USMAP apprenticeships are located wherever the service member is stationed, including locations around the world. The next highest concentrations of apprentices (over 20,000) are in Michigan, Illinois, Missouri, and Indiana. These states have long-established apprenticeship networks linked to manufacturing, automotive, construction, and industrial trades. Virginia ranks fifteenth nationally. After California and Texas, apprenticeship participation is most prominent in the industrial Midwest and the economically diverse states that have well-developed training infrastructures and state-led workforce initiatives.

7 Registered Apprenticeship: Federal Role and Recent Federal Efforts. (2025, September 1). <https://www.congress.gov/crs-product/R45171>

8 <https://www.dol.gov/newsroom/releases/eta/eta20250630>

9 <https://www.jff.org/jobs-for-the-future-launches-new-2m-fund-to-provide-financial-assistance-to-apprentices-with-support-from-google-org/>

10 O\*NET OnLine has detailed descriptions of the world of work for use by job seekers, workforce development and HR professionals, among others. See: <https://www.onetonline.org/>

TABLE 1	
APPROVED OCCUPATIONS FOR REGISTERED APPRENTICESHIPS BY CATEGORY TYPE, UNITED STATES, 2025	
Category Type	Number of Occupations
Industrial Machinery Mechanics	42
Carpenters	35
Inspectors, Testers, Sorters, Samplers, and Weighers	30
Prepress Technicians and Workers	27
Printing Press Operators	24
Tool and Die Makers	24
Jewelers and Precious Stone and Metal Workers	18
Automotive Service Technicians and Mechanics	18
Plumbers, Pipefitters, and Steamfitters	17
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	17
Sources: Approved Occupations for Registered Apprenticeship, Department of Labor, 2025 <a href="https://www.apprenticeship.gov/apprenticeship-occupations">https://www.apprenticeship.gov/apprenticeship-occupations</a> and Dragas Center for Economic Analysis and Policy.	



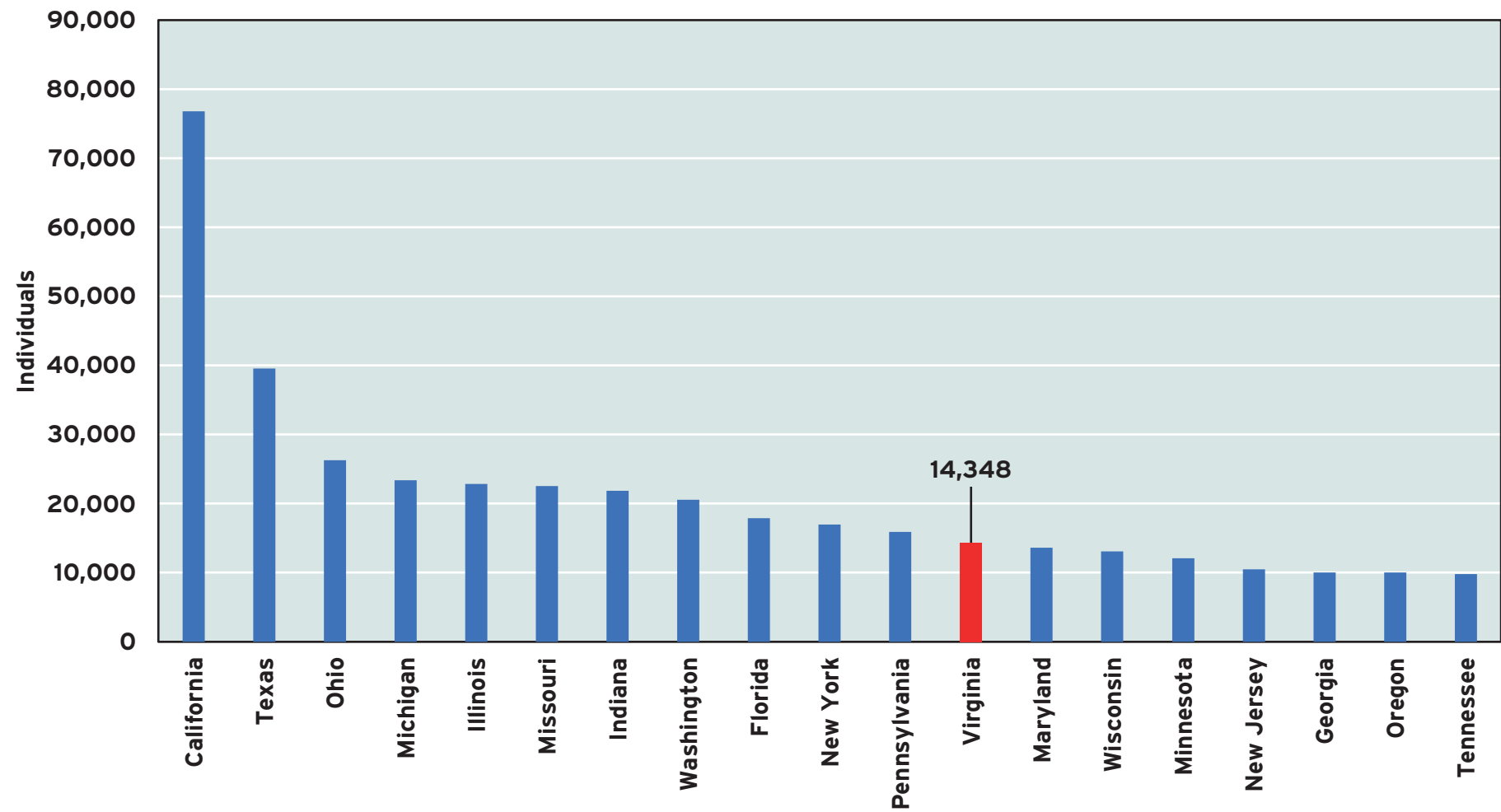
TABLE 2

**REGISTERED APPRENTICESHIP ACTIVE PARTICIPATION  
U.S. SELECTED JURISDICTIONS, FISCAL YEAR 2025 YTD**

Rank	Jurisdiction	Active Apprentices	Description
1	United Services Military Apprenticeship Program (USMAP)	116,269	Serves active-duty military and full-time support members across all branches
2	California	76,802	Largest civilian apprenticeship state, spanning construction, technology, and healthcare
3	Texas	39,574	Expanding energy, logistics, and infrastructure apprenticeships
4	National Programs	28,648	Various Multi-state and industry-led models
5	Ohio	26,284	Advanced manufacturing and industrial leadership
...	...	...	...
15	Virginia	14,348	Strong representation in shipbuilding, education, and healthcare
...	...	...	...
55	Wyoming	598	Smallest state total; over 50 percent of apprentices in construction and 30 percent in utilities
...	...	...	...
	<b>Total Active US Apprenticeships</b>	<b>696,205</b>	

Source: United States Department of Labor, Tableau Public Dashboard, September 2025, <https://public.tableau.com/app/profile/dol.apprenticeship/viz/ApprenticePopulationbyStateAnalysis2025-09-24/SWApprDemo>.

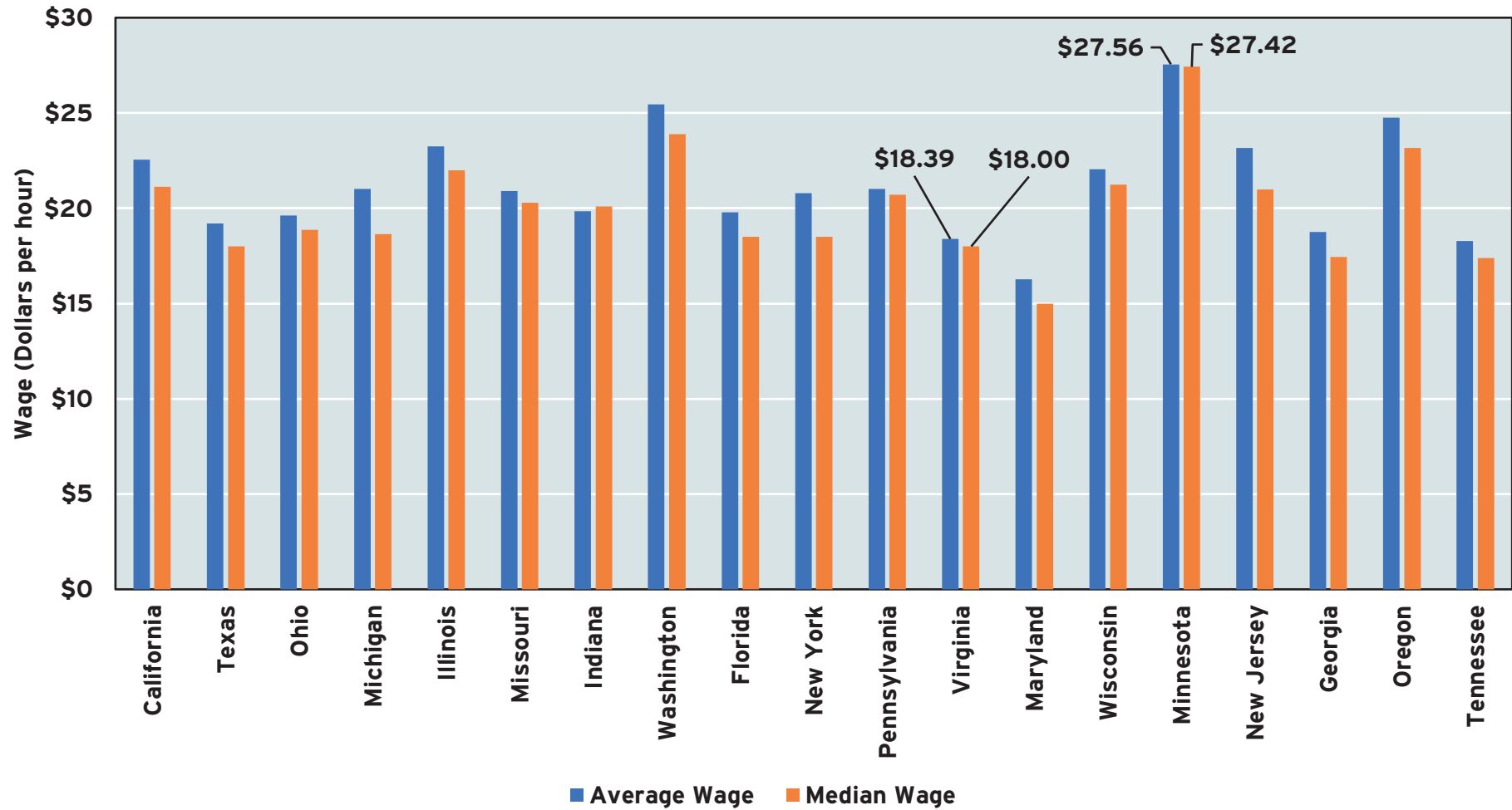
GRAPH 1  
REGISTERED ACTIVE APPRENTICESHIP PARTICIPATION,  
MAJOR U.S. STATES, FISCAL YEAR 2025 YTD



Sources: United States Department of Labor, Tableau Public Dashboard, September 2025, and Dragas Center for Economic Analysis and Policy. <https://public.tableau.com/app/profile/dol.apprenticeship/viz/ApprenticePopulationbyStateAnalysis2025-09-24/SWApprDemo>. Graph reflects aggregated counts minus national programs.

GRAPH 2

AVERAGE AND MEDIAN WAGES OF REGISTERED ACTIVE APPRENTICESHIP,  
MAJOR U.S. STATES, FISCAL YEAR 2025 YTD



Sources: United States Department of Labor, Tableau Public Dashboard, September 2025, and Dragas Center for Economic Analysis and Policy. <https://public.tableau.com/app/profile/dol.apprenticeship/viz/ApprenticePopulationbyStateAnalysis2025-09-24/SWApprDemo>.

In 2025, most active apprentices were between 25 and 54 years old (54.6 percent), followed by those under 25 (43.7 percent). Apprenticeships remain predominantly male, though female participation is gradually increasing; 79.8 percent of apprentices were male (555,554), 13.5 percent were female (94,235), and 6.7 percent (46,416) did not specify gender. Expanding programs in healthcare, information technology, and education have contributed to modest, but steady, progress. By race and ethnicity, the majority of apprentices identify as White (59.9 percent), followed by Black or African American (12.6 percent), with smaller proportions identifying as Asian (2.7 percent), Multiracial (2.1 percent), American Indian or Alaska Native (1.6 percent), or Native Hawaiian or Pacific Islander (1.1 percent). About 20 percent declined to self-identify. Hispanic or Latino apprentices now represent 24.5 percent of participants, underscoring growing outreach to diverse communities.<sup>11</sup>

From the unregulated trade training of the early 1900s to the structured national system of today, apprenticeships have evolved over time. Wisconsin's 1911 apprenticeship law, with its combination of employer safeguards, apprentice protections, and vocational education, provided the template for registered programs. As of 2025, nearly 700,000 active apprentices are enrolled nationwide, reflecting the model's continued adaptability across industries from construction and manufacturing to healthcare, information technology, and public safety. With California and Texas leading participation and Virginia emerging as a top 12 state, the system continues to evolve as an effective strategy for aligning education, employment, and economic growth. In the next section, we will analyze the state of apprenticeships in Virginia.

## Apprenticeships in Virginia

Virginia modernized the state workforce system in 1938 with the passage of the Virginia Apprenticeship Act. The Act created a statewide, registered apprenticeship system with a structured, state-regulated framework for creating skilled workers with paid training and classroom instruction. Virginia's Registered Apprenticeship system was administered by the Virginia Department of Labor and Industry (DOLI), which served as the state's apprenticeship agency since the passage of the Virginia Apprenticeship Act of 1938. In 2024, system oversight transitioned to the newly formed Virginia Department of Workforce Development and Advancement, known as Virginia Works, which now coordinates the state's apprenticeship, training, and workforce development initiatives. Virginia Works oversees thousands of active apprentices across more than 300 occupations, spanning construction, manufacturing, healthcare, information technology, and the maritime trades. Employers can register at no cost, and programs can scale from a single apprentice to a multi-employer consortium.

The state system is funded and administered through General Assembly appropriations, often supplemented by federal cooperative agreements or competitive grants. Virginia Works bears primary responsibility for oversight and technical assistance where the federal government provides guidance, evaluation, and occasional funding opportunities but does not directly finance Virginia Works' operational budget. When the DOL releases national opportunities (such as the Apprenticeship Building America initiative), Virginia Works may apply directly or collaborate with regional intermediaries such as workforce councils.

<sup>11</sup> United States Department of Labor, Tableau Public Dashboard, September 2025, <https://public.tableau.com/app/profile/dol.apprenticeship/viz/ApprenticePopulationbyStateAnalysis2025-09-24/SWApprDemo>.

In 2024, the Commonwealth received \$17.1 million from the DOL (through federal initiatives such as the Bipartisan Infrastructure Law, Inflation Reduction Act, and CHIPS and Science Act) to expand workforce development and Registered Apprenticeship programs across key industries, including education, clean energy, transportation, advanced manufacturing, and the care economy. Virginia Works received \$7.1 million to grow Registered Apprenticeship programs statewide, the Hampton Roads Workforce Council received \$6 million, and Northern Virginia Community College (NVCC) received nearly \$4 million for similar workforce initiatives. NVCC also received \$1 million from the National Science Foundation (NSF) through its ExLENT initiative.

The following graphs and tables highlight key features of Virginia’s apprenticeship landscape, based on RAPIDS data. Graph 3 illustrates that Virginia’s 2024 apprenticeship portfolio is dominated by traditional building trades but also reports modest diversification through personal services such as beauty and optical services.

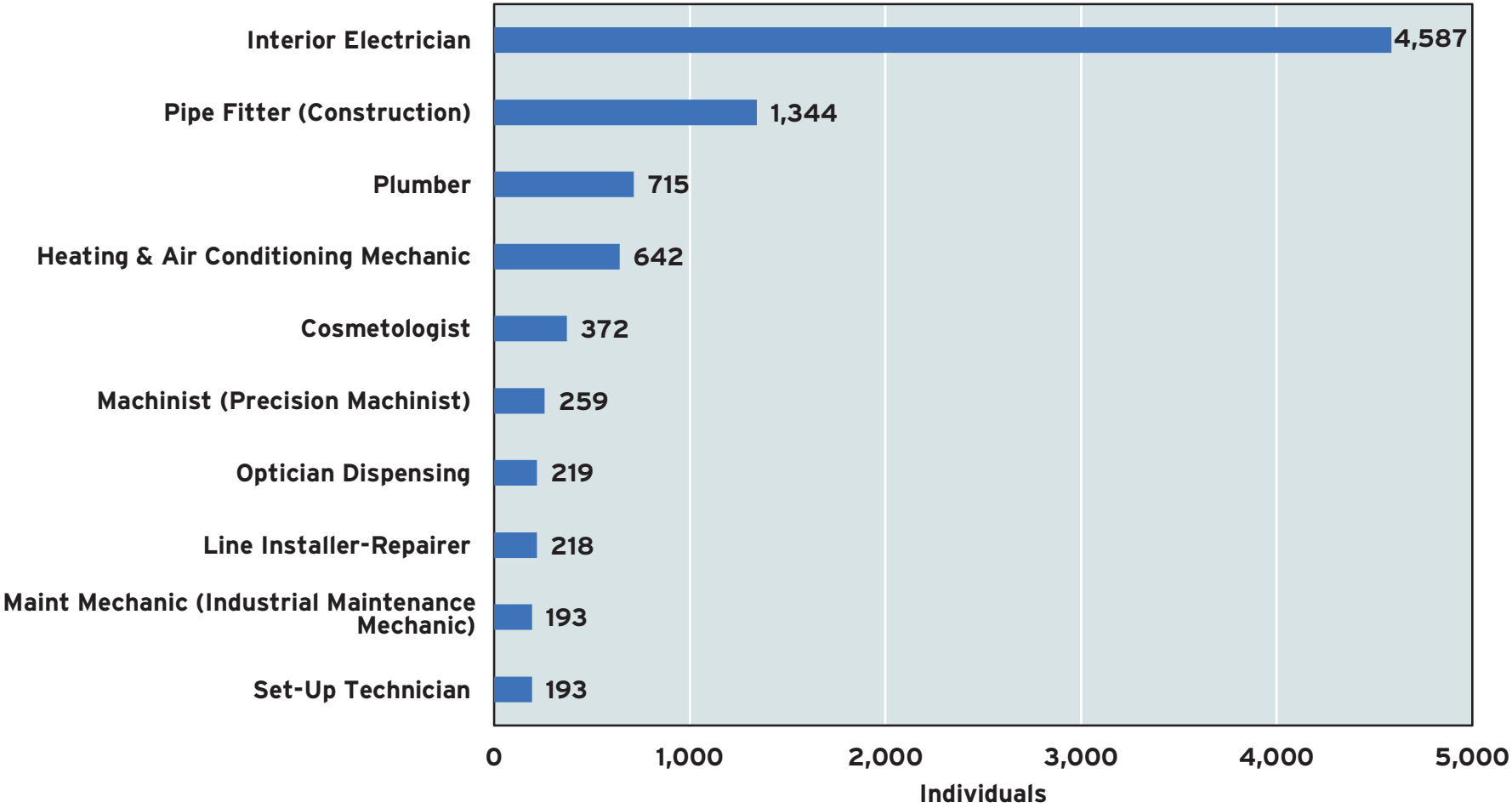
Table 3 reports wage data across selected Apprenticeship Occupations. HVAC mechanics and installers earn the highest median wage at \$30.50 per hour, followed by utility foremen in the telecom industry at \$22.00 per hour. Occupations such as automotive technicians and industrial maintenance repairers represent mid-range earning potential within the state’s growing service and trade sectors. Graph 4 illustrates the racial composition of Virginia’s apprenticeship population in 2024, showing that the majority of participants identify as White, followed by Black or African American, with smaller representation from Hispanic, Asian, and multiracial groups. The distribution reflects both the state’s overall labor force demographics and the concentration of apprenticeships in construction and technical trades, where participation has traditionally been less diverse but is gradually broadening through targeted outreach. Over 83% of apprentices were male.

TABLE 3			
MEDIAN AND STARTING WAGE FOR SELECTED APPRENTICESHIP OCCUPATIONS, VIRGINIA, 2023			
Occupation	Median Wage	Starting Wage	Industry
HVAC Mechanic & Installer	\$30.50	\$30.50	Construction
Electrician	\$29.00	\$18.49	Construction
Automotive Technician	\$23.47	\$18.00	Services
Utility Foreman (Telecom)	\$22.00	\$22.00	Utilities
Industrial Maintenance Repairer	\$16.75	\$16.75	Wholesale/Trade
Telecom Tower Technician	\$15.00	\$15.00	Utilities/Telecom
Source: U.S. Bureau of Labor Statistics, State Occupational Employment and Wage Estimates, <a href="https://www.bls.gov/oes/2023/may/oes_va.htm">https://www.bls.gov/oes/2023/may/oes_va.htm</a> .			



GRAPH 3

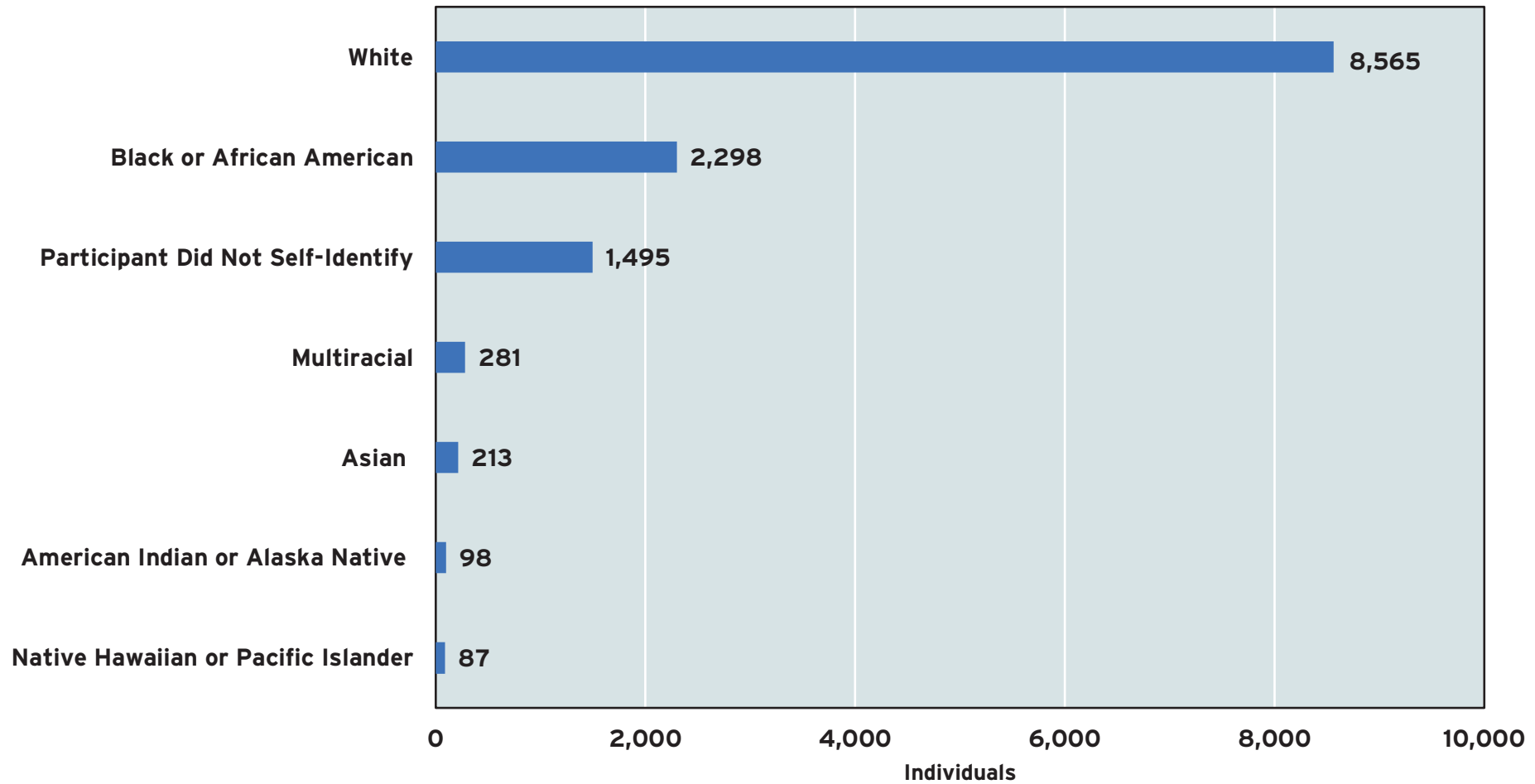
APPRENTICESHIP POPULATION BY OCCUPATION,  
VIRGINIA, FISCAL YEAR 2024



Sources: United States Department of Labor, Tableau Public Dashboard, September 2025, and Dragas Center for Economic Analysis and Policy. <https://public.tableau.com/app/profile/dol.apprenticeship/viz/ApprenticePopulationbyStateAnalysis2025-09-24/SWApprDemo>.

**GRAPH 4**

**APPRENTICESHIP POPULATION BY RACE,  
VIRGINIA, FISCAL YEAR 2024**



Source: Apprentice Population by State Analysis 2025-09-24, <https://public.tableau.com/app/profile/dol.apprenticeship/viz/ApprenticePopulationbyStateAnalysis2025-09-24/SWApprDemo>.

Although Virginia's apprenticeship landscape is modest compared to other states, it is undergoing significant growth through these intentional investments. According to "Active Apprentices and New Apprentices by State and Fiscal Year" DOL data, Virginia grew from 1,290 active apprentices in 2015 to 13,037 in 2024, representing a 910% increase.<sup>12</sup> This growth rate far exceeds that of most other states, including traditional apprenticeship leaders such as California, Texas, and Ohio, which have large, but relatively stable, year-over-year totals. Virginia is among the top-performing states in percentage growth over the past decade, even if not the largest by absolute number of apprentices.

In August 2025, Virginia Works released an economic analysis reporting that the state's Registered Apprenticeship Program (RAP) delivers a strong fiscal and economic return. The study found that the program generated \$6.8 million in additional federal, state, and local tax revenue in FY 2023, representing a three-to-one return on investment for Virginia taxpayers. Apprenticeship participation has increased by 30% since early 2020, with graduates earning consistently higher wages than comparable workers of the same age who did not complete an apprenticeship. The FY 2023 cohort of 2,203 completers produced an estimated \$17.1 million in total labor income and \$34.7 million in value-added economic activity, confirming that apprenticeships strengthen both individual earnings and statewide GDP. Commissioner Nicole Overley told us that "Virginia Works is committed to building a robust apprenticeship ecosystem that connects employers with skilled talent while creating pathways to the future for all Virginians. Through strategic alignment of our programs and partners, we're expanding Registered Apprenticeships into high-demand sectors and seeing measurable results (stronger employer pipelines, more active apprentices, and more diversity of occupations) that demonstrate apprenticeships aren't just workforce development tools, they're economic drivers for the Commonwealth. We're proud to have the most active apprenticeships of any state in the nation right

now with a program that demonstrates a 3:1 return on investment for every state dollar invested. Registered Apprenticeship works!"

Across Virginia, several regional initiatives illustrate how apprenticeships connect students, employers, and educators to meet workforce needs. The following examples from Roanoke, Northern Virginia, and Hampton Roads illustrate how partnerships between schools, colleges, industry, and workforce councils are expanding access to registered apprenticeships and building sustainable talent pipelines in diverse sectors of the state's economy.

### ROANOKE REGIONAL STUDENT APPRENTICESHIP PROGRAM

With a population of over 314,000, the Roanoke Metropolitan Statistical Area (MSA) represents the largest metropolitan area in the western side of Virginia. The MSA is comprised of Botetourt county, Craig county, Franklin county, Roanoke county, Roanoke city, and Salem city. In 2017, the Student Registered Apprenticeship program began in the Roanoke Valley with a pilot program for high school juniors and seniors by Roanoke County Public Schools, the Virginia Department of Labor and Industry (Virginia Works), and the Western Virginia Water Authority. Over time, the program expanded to include Salem City Public Schools and Roanoke City Public Schools. Student apprentices in the program work towards earning credentials associated with each business through employment training and instruction. Earlier this year, the region held the annual apprentice showcase connecting high school students with opportunities at regional employers. To date, over 24 employers have participated in the program.<sup>13</sup> Mike Stevens, former Chief Operating Officer of Lawrence Companies, specializing in a wide array of transportation, logistics, and moving services, told NBC affiliate WSLs 10 in Roanoke that "we are able to take a young person that doesn't want to have to go to college and spend anywhere between \$100,000 to \$200,000 of debt when they can come out and start working immediately, learning more about the trade or the skill that they want to do in that four year period of time."<sup>14</sup>

<sup>12</sup> <https://public.tableau.com/app/profile/dol.apprenticeship/viz/ApprenticePopulationbyStateAnalysis2025-09-24/SWApprDemo>

<sup>13</sup> <https://www.theroanokestar.com/2025/01/14/student-registered-apprenticeship-showcase-to-be-held-january-23>

<sup>14</sup> <https://www.wsls.com/news/local/2024/01/18/regional-student-apprenticeship-program-prepares-students-for-the-real-world>

## TECHNOLOGY APPRENTICESHIPS IN NORTHERN VIRGINIA

Northern Virginia is recognized as one of the nation's leading technology corridors, home to a dense concentration of federal contractors, cybersecurity firms, and major tech employers. The region also hosts the world's largest cluster of data centers earning it the nickname 'Data Center Alley.' In 2024, Northern Virginia Community College (NOVA) in Annandale received nearly \$5 million, including \$3.99 million from the U.S. Department of Labor's Apprenticeship Building America program and \$1 million from the National Science Foundation's ExLENT initiative, to expand apprenticeship opportunities in semiconductor technology and data center operations. The funding supports NOVA's new Engineering Technology Career Scholars Program, a pre-apprenticeship pathway that provides mentoring, wraparound services, and paid OJT training through partnerships with employers Micron Technology and Iron Mountain. Micron is a leading semiconductor company and Iron Mountain is a global firm that helps other businesses store, manage, protect, and analyze their information. Designed to recruit diverse talent from underserved communities, the NOVA initiative enables students to transition directly into registered apprenticeships and higher-wage careers in Northern Virginia's growing technology industries.<sup>15</sup>

## HAMPTON ROADS APPRENTICESHIP HUB

Hampton Roads is one of Virginia's most economically distinct regions with a population of 1.8 million in the Norfolk/Virginia Beach MSA. The Hampton Roads Workforce Council plays a pivotal role in advancing apprenticeship opportunities in the area. Established by the Hampton Roads Workforce Development Board, the Council oversees federally funded workforce development programs across the region's localities, connecting employers with qualified talent and job seekers with training opportunities that enhance career potential. In 2024, the Council was awarded a \$6 million, four-year Apprenticeship Building America (ABA2) grant from the U.S. Department of Labor to enhance Southeastern Virginia's key industries, including maritime, advanced manufacturing, healthcare, education, and cybersecurity.<sup>16</sup>

The Apprenticeship Hub leverages partnerships with Newport News Shipbuilding's Apprentice School and eight other education providers to increase apprenticeships in the region and illustrates how federal innovation funds can enhance state capacity without undermining it. By maintaining Virginia Works as the quality-assurance anchor, the Commonwealth safeguards its standards while benefiting from federal investment in regional innovation. As Shawn Avery, President and CEO of the Hampton Roads Workforce Council told us, "The Apprenticeship Hub grant will allow us to partner even closer to meet the employer needs throughout the region." This initiative exemplifies the Council's broader mission of providing strategic workforce solutions that both strengthen the regional economy and create equitable pathways for individuals to secure meaningful employment.

<sup>15</sup> <https://www.nvcc.edu/about/news/press-releases/2024/NOVA-5million-engineering-technology-apprenticeships.html>

<sup>16</sup> <https://www.dol.gov/newsroom/releases/eta/eta20240711-0>

## Conclusion

Now that 2025 is almost at an end and we officially move past the first half of the Post-COVID decade, it is a good time to pause and reflect on the future of workforce development. The COVID-19 pandemic exposed how deeply our economy depends on workers in critical sectors such as healthcare, logistics, manufacturing, and information technology. When global supply chains were disrupted and labor shortages intensified, Americans saw firsthand the importance of skilled workers to the daily functioning of society. According to a 2021 Hechinger Report article, increased demand, improved pay, and new respect have helped make trade careers “slowly come into fashion.”<sup>17</sup> Apprenticeships are an important component of the American workforce system. From their European origins to their formal establishment under the National Apprenticeship Act of 1937, these programs have continually increased over time and adapted to meet the nation’s needs for skilled workers. Paid on-the-job training is a huge assistance to those wanting to train for a new career. Registered apprenticeship program offers reduced student debt and opens career doors for those who cannot afford to leave the labor market to engage in full-time studies. Registered apprenticeships also demonstrate high employer retention rates, with 94% of completers remaining with their training employer for at least one year after program completion.<sup>18</sup>

The Department of Labor’s evaluation of the American Apprenticeship Initiative provides compelling evidence of the model’s value to employers. Employers reported a median return on investment of 44.3 percent; every hundred dollars invested produced \$144.30 in benefits. When indirect gains such as reduced turnover, improved productivity, and employee loyalty were considered, median net benefits reached \$17,862 per apprentice compared with a \$4,951 loss when only direct benefits were included. These findings reinforce the economic rationale for apprenticeship as a workforce strategy. Apprentices contribute to productivity while training, lowering recruitment costs and improving

retention. Employers gain a reliable pipeline of skilled workers closely aligned with their operational needs.<sup>19</sup>

While new apprenticeships programs are promising with increased growth over time and successful student retention, we would be remiss if we didn’t address the problematic gaps in the American model. The fact remains that apprenticeships represent a very small percentage of the total population. Despite gains, apprenticeship availability in the United States remains uneven. In Virginia, while Roanoke, Northern Virginia, Hampton Roads and other areas have successful initiatives, rural areas often lack employer capacity to sustain programs, pointing to the need for continued expansion. The United States also continues to underinvest in apprenticeship infrastructure, relying heavily on employer initiative and short-term grants rather than sustained funding as seen in many European nations (most notably Germany, Switzerland, and Austria).

The result is an uneven system where opportunities cluster in metropolitan areas and certain industries, leaving rural regions and small employers with limited access to registered programs or qualified intermediaries. If apprenticeships are to serve as a scalable solution to our workforce challenges, they must be treated as a core component of education and economic strategy, not a peripheral alternative. Building a stronger, more equitable apprenticeship ecosystem will require long-term investment, regional coordination, and public commitment ensuring that every community, from urban centers to rural towns, can benefit from the promise of learning through work, especially for new high school graduates.

<sup>17</sup> <https://hechingerreport.org/long-disparaged-education-for-the-skilled-trades-is-slowly-coming-into-fashion>

<sup>18</sup> <https://nationalapprenticeship.org/business-benefits>

<sup>19</sup> [www.apprenticeship.gov/sites/default/files/aaai-infographic-employers-11-11-22.pdf](http://www.apprenticeship.gov/sites/default/files/aaai-infographic-employers-11-11-22.pdf)



Despite growing recognition of their value, apprenticeships in Virginia and across the United States remain far too limited to meet the scale of workforce demand. With a population of more than 8.5 million, Virginia's total number of registered apprentices represents only a fraction of the potential talent pipeline. Achieving meaningful impact will require a public commitment comparable to what European nations have made, such as sustained funding, alignment between K-12 and higher education, and coordinated systems that make apprenticeships a familiar and trusted option. In the United States, apprenticeships have struggled to take root culturally because they are still seen as exceptions rather than expectations. Without consistent exposure for students and families, and without widespread availability of programs, it is difficult for them to become part of the American educational mindset.

Building an apprenticeship culture in our country will take both top-down investment and bottom-up belief. Policymakers often hesitate to invest heavily until public demand is visible, while families and students hesitate to participate until programs are abundant, well-funded, and respected. It's a classic dilemma. Without scale, apprenticeships can't gain legitimacy; without legitimacy, they can't achieve scale. Breaking that cycle will require a coordinated push of strong state and federal leadership, sustained employer participation, and early exposure in K-12 schools so that parents, educators, and young people see apprenticeships as a mainstream route to success, not a secondary alternative. Until that alignment occurs, the United States risks remaining stuck with a system that recognizes the value of apprenticeships in theory but struggles to realize their full potential in practice. Only time will tell whether the lessons of the COVID-19 pandemic will lead to a lasting shift in how Americans value skilled work. Signs of renewed interest in the trades suggest that perceptions may be changing, but the deeper question remains: whether apprenticeships can truly flourish until they are woven into our national identity as a legitimate and celebrated pathway to career success.





# IS IT BETTER TO GIVE THAN RECEIVE? EXPLORING THE DISTRIBUTIONAL DIMENSION OF VIRGINIA'S BUDGET

*"The object of government is the welfare of the people."*

*– Theodore Roosevelt, August 31, 1910*





Ensuring that government spending takes place in an efficient manner is a subject of academic discourse, political debate, and the occasional political thriller. Ideally, for citizen-taxpayers to get the highest value-for-money out of the public sector, governments should direct their resources to programs where the benefits from public spending exceed the cost to taxpayers of providing these programs. This basic efficiency relationship is true at the federal, state, and local government levels.

Focusing on government efficiency alone, however, leaves out an important reality about government finance: the public sector also has an important redistributive function.<sup>1</sup> As so aptly observed by Richard Musgrave in his 1959 seminal work on public finance, this means that government taxes are not always directed back in the form of public services to the citizens who pay for them. The government may tax some individuals and, in the pursuit of a distributional objective, transfer some portion of these taxes to other individuals.

<sup>1</sup> Musgrave (1959), in his seminal work on public finance, argued that the policy objectives of the public sector can, in general, be classified into three functions: the allocation function, distribution function, and stabilization function. The allocation function pertains to the role of the public sector in the production of private and public goods. The distribution function of the public sector deals with how income and wealth are distributed in society according to what a society considers 'fair' or 'just.' The stabilization function pertains to the use of tax and expenditure policy to maintain high employment, price level stability, and an appropriate rate of economic growth.



A tax that falls more heavily on lower-income individuals as a percent of their income alters the distribution of income, as well as a tax that is levied more significantly on wealthier individuals. Needless to say, the distribution function of government often sparks the greatest debate because, in the end, it is a value-based or normative question.

Who pays and who receives is a question of fiscal incidence. Fiscal incidence measures the economic impact of public sector taxation and spending. We can examine policies through the lens of fiscal incidence to ask who ‘wins’ and, more importantly, who ‘loses,’ as most changes to taxes and expenditures do not leave everyone better off. For instance, when considering federal revenues and expenditures from the state perspective, some states are ‘net contributors,’ that is, their residents send more in taxes to the federal government than the state and its residents receive in return in the form of federal spending. Other states are ‘net recipients,’ as they receive more in federal spending and transfers than their residents and businesses send to the federal government in taxes.

The Rockefeller Institute of Government analysis of federal revenues and spending suggests that, in 2023, the federal government expended \$134.9 billion in New Jersey for goods, services, and transfer payments.<sup>2</sup> In the same year, New Jersey taxpayers sent the federal government \$153.8 billion in taxes. For every \$1 in taxes sent by New Jersey businesses and individuals to the federal government, the state received only \$0.88 in return. Other donor states included Massachusetts (\$0.91 in expenditures for every \$1 in taxes), Washington (\$0.95 in expenditures for every \$1 in taxes), California and New Hampshire (\$0.97 for every \$1 in taxes), and New York (\$0.98 for every \$1 in taxes). From a fiscal incidence perspective, these states are ‘donor states,’ that is, states that send more to the federal government in taxes than they receive in return in the form of spending.

If there are states that give more to the federal government than they receive, then there must be states that receive more from the federal government than they send in taxes. In 2023, the states that benefited most were New Mexico (\$2.83 in expenditures for every \$1 in taxes), West Virginia (\$2.49 in expenditures for every \$1 in taxes), and Mississippi (\$2.48 in expenditures for every \$1 in taxes). Many of these ‘net recipient’ states were poorer, with median household incomes below the national median in 2023.

**Virginia, however, stands apart from many of the net recipient states. In 2023, the federal government spent approximately \$260.0 billion in the Commonwealth. In the same year, Virginia residents and businesses sent the federal government about \$119.4 billion in taxes. In other words, Virginia received \$2.18 in expenditures for every \$1 in taxes, ranking it 5th in the nation in net receipts. On a per capita basis, Virginians received \$29,681 in federal spending and sent to the federal government \$13,666 in taxes. The Commonwealth ranked first among the states on a per capita basis.**

For Virginia residents, the fact that the state receives billions more in federal funds than it sends to the federal government in the form of taxes should not be a surprise. Northern Virginia is home to a number of federal departments and agencies and federal contracts. In August 2025, for example, there were 185,200 federal civilian employees across the Commonwealth (down from 196,700 in January 2025), concentrated primarily in Northern Virginia and Hampton Roads. According to the Defense Manpower Data Center<sup>3</sup> (DMDC), there were 122,254 active-duty service members stationed in Virginia in June 2025, plus an additional 25,569 serving in the National Guard and Reserves. One only needs to transit the Hampton Roads Bridge Tunnel and observe multiple aircraft carriers in port or visit Northern Virginia to grasp the presence of the federal government in the Commonwealth.

<sup>2</sup> For more information, see the Rockefeller Institute of Government at <https://rockinst.org/issue-areas/fiscal-analysis/balance-of-payments-portal/>

<sup>3</sup> U.S. Department of Defense, 2024. DOD Releases Report on Defense Spending by State in Fiscal Year 2023. Release: Oct. 15, 2024. See more at: <https://dwp.dmdc.osd.mil/dwp/app/dod-data-reports/workforce-reports>

State governments also redistribute resources. As with the federal government, state governments alter the distribution of resources through taxation and spending. The extent of redistribution varies across states and occurs through two mechanisms. First, state governments directly provide their residents with public services through the efforts of state-level departments and agencies. Since the extent to which state residents benefit from state government services does not necessarily depend on the state taxes they paid, there may be a distributional aspect to direct state government spending.

Second, state governments often distribute a significant share of the revenue they raise as “intergovernmental expenditures.” Intergovernmental expenditures are expenditures by the state government that are received by local governments, where they are classified as intergovernmental revenues. The General Assembly and Governor Youngkin, for example, created the School Construction Assistance Program (SCAP) and appropriated \$80.0 million for SCAP in Fiscal Year (FY) 2025 and 2026. SCAP grants will be awarded to local school boards and regional Career and Technical Education (CTE) programs to fund the construction, expansion, or modernization of public school buildings. From the state level, a SCAP grant is an intergovernmental expenditure. From the local school district perspective, a SCAP grant is intergovernmental revenue to facilitate school construction or maintenance.

Unless the state government returns funding in exact proportion to where state revenues are collected, residents in some parts of each state will contribute more to these intergovernmental transfers than they receive from them. In other parts of each state, residents may be net recipients of intergovernmental transfers, with the state intergovernmental transfers to their local government(s) exceeding the revenues that local taxpayers contributed to the state treasury.

**This chapter focuses on the distribution of intergovernmental finances in Virginia. Specifically, it analyzes the distribution of state-level public resources in the Commonwealth of Virginia that takes place as a result of state-to-local intergovernmental transfers. The analysis suggests that, as a result of the manner in which state revenues are collected and allocated back to localities, some Virginians contribute significantly more to the Commonwealth budget in taxes than they receive back in local benefits, while other state residents receive a major net benefit—often without even knowing it.**

## State and Local Government Finance in the United States

The U.S. Census Bureau prepares a Census of Governments once every five years that brings together detailed state and local government finance data. State and local government finance statistics for 2022 suggest that state and local expenditures varied considerably across the United States, both in the magnitude of spending and the distribution of spending between state and local governments. These variations reflect, in part, the differences in preferences among voters about the scope and functions of state governments.

Table 1 highlights that, in a typical state, state and local governments spent about \$12,500 per resident per year, and this spending was roughly evenly divided between the state government and the local government. Per capita state and local government expenditures varied from \$8,920 (Idaho) to \$20,972 (Alaska). In the most centralized states (Hawaii and Delaware), state spending accounted for about two-thirds of state and local government spending. In the most decentralized states (Nebraska and New York), local governments accounted for roughly two-thirds of overall spending.

In order to avoid double-counting, state government expenditures only reflect direct state government expenditures (i.e., final outlays). As such, it does not reflect each state government's intergovernmental expenditures, or the intergovernmental fiscal transfers provided from the state government to the local government level. Table 1 shows not only the total amount of state and local direct spending but also reveals the level of each state's intergovernmental expenditures. These amounts can simultaneously be considered as a state-level expenditure or as the level of local expenditures funded by intergovernmental revenues provided by the state government. For completeness, given the three-tiered nature of the American federal system, the table also highlights the portion of local government spending that is funded from intergovernmental revenues received by local governments from the federal government.

**In 2022, state direct expenditure in the Commonwealth was \$6,316 per Virginian, while local direct expenditure was \$5,801 per resident. Of total state and local direct expenditure of \$12,117 per resident, the state government accounted for 52.1% while local governments were responsible for 47.9% of state and local government spending. State intergovernmental expenditure was \$1,871 per Virginian. Local governments also received \$247 per capita in federal intergovernmental revenues.**

TABLE 1

**STATE AND LOCAL DIRECT AND INTERGOVERNMENTAL EXPENDITURES PER CAPITA BY STATE  
UNITED STATES, 2022**

State	State Direct Expenditure	State Intergovernmental Expenditure	Local Direct Expenditure	Local Intergovernmental Revenue From Federal Government	State & Local Expenditure
Alaska	\$12,753	\$3,181	\$8,219	\$594	\$20,972
New York	\$7,207	\$3,769	\$11,707	\$878	\$18,914
California	\$7,478	\$4,000	\$10,191	\$749	\$17,669
Wyoming	\$7,362	\$2,943	\$10,082	\$694	\$17,444
Oregon	\$8,757	\$1,968	\$7,015	\$507	\$15,772
Vermont	\$9,963	\$3,422	\$5,339	\$154	\$15,302
Massachusetts	\$8,965	\$1,899	\$6,278	\$619	\$15,242
New Mexico	\$10,006	\$3,318	\$5,090	\$401	\$15,096
North Dakota	\$8,012	\$3,310	\$6,781	\$437	\$14,793
Hawaii	\$10,747	\$56	\$3,606	\$352	\$14,353
Washington	\$5,858	\$2,800	\$8,406	\$543	\$14,264
Nebraska	\$5,165	\$1,667	\$8,806	\$331	\$13,971
Delaware	\$9,541	\$2,217	\$4,213	\$78	\$13,754
New Jersey	\$7,850	\$2,105	\$5,829	\$240	\$13,679
Maryland	\$7,378	\$1,999	\$6,292	\$392	\$13,670
Rhode Island	\$8,556	\$1,600	\$5,026	\$228	\$13,582
Minnesota	\$6,340	\$2,995	\$6,951	\$337	\$13,291
Illinois	\$6,135	\$2,559	\$7,122	\$493	\$13,257
Colorado	\$5,340	\$1,660	\$7,740	\$409	\$13,080
Utah	\$6,742	\$1,640	\$6,078	\$424	\$12,821
Pennsylvania	\$6,673	\$2,149	\$6,119	\$407	\$12,792
Iowa	\$6,018	\$2,110	\$6,686	\$291	\$12,704
Connecticut	\$6,517	\$2,193	\$6,079	\$192	\$12,596
Louisiana	\$7,119	\$2,067	\$5,248	\$318	\$12,367
Virginia	\$6,316	\$1,871	\$5,801	\$247	\$12,117
Maine	\$7,555	\$1,602	\$4,326	\$187	\$11,880



TABLE 1

**STATE AND LOCAL DIRECT AND INTERGOVERNMENTAL EXPENDITURES PER CAPITA BY STATE  
UNITED STATES, 2022**

State	State Direct Expenditure	State Intergovernmental Expenditure	Local Direct Expenditure	Local Intergovernmental Revenue From Federal Government	State & Local Expenditure
Kansas	\$5,751	\$2,218	\$6,066	\$220	\$11,817
West Virginia	\$7,939	\$2,047	\$3,866	\$254	\$11,805
Kentucky	\$7,414	\$1,558	\$4,264	\$353	\$11,678
Wisconsin	\$5,675	\$2,282	\$5,751	\$213	\$11,426
Ohio	\$5,695	\$2,052	\$5,612	\$312	\$11,306
South Carolina	\$5,895	\$1,550	\$5,373	\$207	\$11,268
Michigan	\$5,475	\$2,880	\$5,640	\$334	\$11,116
North Carolina	\$5,175	\$2,091	\$5,866	\$369	\$11,041
Texas	\$4,665	\$1,382	\$6,209	\$331	\$10,874
Alabama	\$5,203	\$2,149	\$5,587	\$295	\$10,791
Montana	\$6,091	\$1,200	\$4,484	\$305	\$10,575
New Hampshire	\$5,658	\$1,511	\$4,911	\$114	\$10,569
Indiana	\$5,339	\$1,878	\$5,185	\$135	\$10,523
Mississippi	\$5,428	\$2,274	\$5,084	\$293	\$10,512
Arizona	\$5,587	\$1,633	\$4,850	\$252	\$10,437
South Dakota	\$5,460	\$1,292	\$4,768	\$365	\$10,228
Arkansas	\$6,234	\$2,519	\$3,971	\$379	\$10,205
Missouri	\$4,806	\$1,306	\$5,124	\$216	\$9,930
Tennessee	\$4,206	\$1,637	\$5,674	\$232	\$9,880
Oklahoma	\$5,465	\$1,532	\$4,392	\$196	\$9,857
Florida	\$3,931	\$1,036	\$5,734	\$400	\$9,665
Nevada	\$3,829	\$1,989	\$5,737	\$477	\$9,566
Georgia	\$3,938	\$1,429	\$5,479	\$253	\$9,417
Idaho	\$4,711	\$1,814	\$4,209	\$163	\$8,920
<b>Averages</b>	<b>\$6,598</b>	<b>\$2,087</b>	<b>\$5,977</b>	<b>\$343</b>	<b>\$12,576</b>

Sources: United States Census Bureau (2024) and the Dragas Center for Economic Analysis and Policy. Estimates may not equal totals due to rounding.

# Local Government Structure, Functions, and Finances in Virginia

Article VII of the Constitution of Virginia provides the constitutional framework for the organization, powers, officers, governing bodies, procedures, and finances of local governments in the Commonwealth. Title 15.2 of the Code of Virginia (“Counties, Cities and Towns”) provides the legal framework for the governance, powers, and finances of counties, cities, and towns in the Commonwealth. The Commonwealth of Virginia is currently divided into 95 counties, along with 38 independent cities that are considered county-equivalents for census purposes.

The county governing body is the board of supervisors.<sup>4</sup> Most counties elect their supervisors on a first-past-the-post basis from single-member electoral districts, but there is some variation in electoral structures (e.g., at-large elections). In addition, five constitutional officers are elected at large at the county level: the sheriff, the treasurer, the commissioner of revenue, the clerk of the circuit court, and the commonwealth’s attorney.<sup>5</sup>

The Virginia Constitution establishes local governments as agents of the state. Local governments do not have powers beyond those granted to them by the state government.<sup>6</sup> In the absence of an explicit provision in Virginia’s constitution granting local governments “home rule” powers, Virginia is considered a “Dillon’s Rule” state. This means that, as a matter of case law, the Commonwealth operates under the legal doctrine that localities can only wield the powers explicitly authorized to them by the state.<sup>7</sup> The functional authorities of Virginia local government include powers in the areas of finance, education,

public safety and judicial administration, public works (including water and sanitation and solid waste management), social services (e.g., social protection and public health), planning and zoning, transportation, elections, and parks and recreation. Local governments are limited in their power to impose local taxes and revenues only as permitted by the Commonwealth.

In practice, the powers and responsibilities for public sector functions—such as education, health, public safety, and so on—are typically shared between the state and government levels, although the exact assignment of powers and functions may differ between—and even within—different states. In some cases, these functional assignments can be confusing. For instance, rather than being part of county governments, county health departments in Virginia are actually part of the Virginia Department of Health through 33 regional health districts. In Arlington and Fairfax Counties, however, the county health departments are operated and managed by their respective county governments.

**Table 2 illustrates the level of state and local government employment by function in Virginia in 2022. The relative distribution of employment provides an indication of service delivery, that is, ‘who does what.’ While state and local governments have public safety functions, local governments had 40,389 public safety employees in 2022 (Full-Time Equivalent, or FTEs), compared to 14,762 employees (FTE) at the state level. It would appear that local governments, relative to the state government, occupied a more significant role in public safety on an employment basis. On the other hand, in 2022, state government FTEs in Virginia in the Health and Hospitals function (18,570) outnumbered local government FTEs (8,289). We observe similar disparities in Table 3 which provides the level of direct expenditures by function for the state government and local governments across Virginia in 2022.<sup>8</sup>**

4 Freeman, Joseph F. 2007. Local Government in Virginia. Virginia Local Government Management Association Education Project in cooperation with the Weldon Cooper Center for Public Service.

5 Below the county level, there are 189 incorporated town governments in Virginia. The analysis of town government finances is beyond the scope of the current report. Unlike in many other states, Virginia’s school districts are not independent local government institutions in their own right. Instead, Virginia’s school divisions (which operate and supervise public schools in their local jurisdiction) are considered dependent school districts, relying on funding from their respective county or city government.

6 In accordance with Article VII of the Constitution of Virginia, the general and specific powers assigned to local governments are provided in Title 15.2 of the Code of Virginia.

7 See more at: <https://www.law.virginia.edu/news/202003/it-time-home-rule-virginia>, <https://www.vpm.org/news/2025-03-05/curious-commonwealth-john-dillon-rule-virginia-locality-law-why>

8 Local governments play a limited role in road infrastructure in the Commonwealth, especially in the rural areas of the state. County governments in Virginia own less than 1 percent of the urban and rural roads in the Commonwealth (FHA 2024). Instead, the vast majority of the Commonwealth’s road network is owned and managed by the Virginia Department of Transportation and largely funded through the Commonwealth Transportation Fund (VDOT 2024).

TABLE 2				
STATE AND LOCAL GOVERNMENT EMPLOYMENT				
VIRGINIA, 2022				
Full-Time Equivalent (FTE) Employment	State	Local	State & Local	Local Share
Governmental Administration	5,324	14,020	19,344	72.5%
Judicial and Legal	3,792	5,713	9,505	60.1%
Public Safety	14,762	40,839	55,601	73.5%
Highways, Transportation & Transit	7,697	8,112	15,809	51.3%
Health & Hospitals	18,570	8,289	26,859	30.9%
Public Welfare & Soc. Sec. Admin	4,675	9,995	14,670	68.1%
Environment & Housing	4,162	23,081	27,243	84.7%
Education	62,303	205,090	267,393	76.7%
Other Functions	6,294	13,991	20,285	69.0%
Total	127,579	329,130	456,709	72.1%
Sources: United States Census Bureau (2024) and the Dragas Center for Economic Analysis and Policy. Estimates may not equal totals due to rounding.				

TABLE 3

**STATE AND LOCAL GOVERNMENT DIRECT EXPENDITURES  
VIRGINIA, 2022**

<b>Full-Time Equivalent (FTE) Employment</b>	<b>State (Millions)</b>	<b>Local (Millions)</b>	<b>State &amp; Local (Millions)</b>	<b>Local Share</b>
<b>Governmental Administration</b>	\$2,988.5	\$3,151.1	\$6,139.6	51.3%
<b>Judicial and Legal</b>	\$601.0	\$516.6	\$1,117.6	46.2%
<b>Public Safety</b>	\$2,581.0	\$6,253.7	\$8,834.8	70.8%
<b>Highways, Transportation &amp; Transit</b>	\$5,524.4	\$3,228.9	\$8,753.3	36.9%
<b>Health &amp; Hospitals</b>	\$7,296.4	\$2,642.2	\$9,938.6	26.6%
<b>Public Welfare &amp; Soc. Sec. Admin</b>	\$21,641.1	\$2,062.5	\$23,703.6	8.7%
<b>Environment &amp; Housing</b>	\$732.6	\$5,182.3	\$5,914.9	87.6%
<b>Education</b>	\$11,398.8	\$20,836.8	\$32,235.6	64.6%
<b>Other Functions</b>	\$2,097.4	\$6,450.9	\$8,548.3	75.5%
<b>Total</b>	<b>\$54,861.2</b>	<b>\$50,325.1</b>	<b>\$105,186.3</b>	<b>47.8%</b>

Sources: United States Census Bureau (2024) and the Dragas Center for Economic Analysis and Policy. Estimates may not equal totals due to rounding.

## Local Government Finances in the Commonwealth

The U.S. Census Bureau produces Census of Governments estimates for local government revenues and expenditures in the United States once every five years. The Virginia Auditor of Public Accounts (VAPA), however, prepares an annual comparative report on local government finances. There are some differences between the revenues and expenditures reported by the VAPA and the Census Bureau. The VAPA report, for example, does not include data for a number of localities that failed to submit the required fiscal year financial reporting information on time.<sup>9</sup>

Table 4 illustrates the distribution of local government own-source revenues, intergovernmental revenues, and the shares of own-source and total revenues by source for FY 2023. Local government raised approximately \$26.8 billion in revenues through local taxes and fees in FY 2023 and received about \$17.8 billion in intergovernmental revenues from the state (\$13.3 billion) and federal (\$4.5 billion) governments. Real estate taxes (\$13.3 billion) accounted for almost half (49.8%) of local own-source revenues. Other local general property taxes, which include taxes on personal property (e.g., vehicles and business property), as well as taxes on the property of public service corporations (including electric, gas, telecommunications, and water companies) accounted for about \$4.5 billion (17.0%) of own-source revenue. Other local taxes, which include taxes such as local sales and use taxes, consumer utility taxes, hotel and motel room taxes, and restaurant food taxes, raised about \$4.8 billion (17.8% of own-source revenues) in FY 2023. Non-tax revenues, such as regulatory fees, fines, user charges, interest, and revenue from the rental or sale of property, raised \$4.1 billion in FY 2023, about 15.4% of local own-source revenues.

Intergovernmental revenues provided to local governments by the Commonwealth are divided into general revenue sharing (non-categorical state aid) and categorical state aid.<sup>10</sup> The largest set of categorical aid funding is provided as direct aid to public education. Local governments received approximately \$17.8 billion in intergovernmental revenues in FY 2023, with state intergovernmental revenues equaling 29.8% of all local government revenues, only slightly behind real estate taxes, which were 29.9% of all local government revenues.

Table 5 presents total expenditures of county governments and independent cities in the Commonwealth for FY 2023 by function. Public education dominates the budget of local governments, accounting for \$20.6 billion (54.4%) of local spending. Public Safety expenditures were \$6.1 billion (16.1% of local expenditures), followed by Health and Human Services (approximately \$4.0 billion or 10.5% of local expenditures). We note that, unlike revenues, where we can ascertain whether it was an own-source or intergovernmental dollar, there is no such differentiation for expenditures.

<sup>9</sup> Tables 4 and 5 report total local government revenues and expenditures for county governments and independent cities in Virginia for FY 2023, based on the Comparative Report of Local Government Revenues and Expenditures prepared by the Virginia Auditor of Public Accounts (2024). For Table 4 and the subsequent fiscal-incidence analysis, the authors supplemented the VAPA data to fill in missing values for intergovernmental revenues from the Commonwealth and the federal government for localities that did not submit timely financial reports. Where available, values from the previous financial years' Virginia Auditor of Public Accounts reports were used (for FY 2022 or FY 2021) to substitute missing values. Where otherwise unavailable, intergovernmental revenue figures data were included from the budget documents (e.g., approved budgets) of the localities themselves.

<sup>10</sup> Funding provided for shared (categorical) expenses is recorded separately. A fourth category of intergovernmental revenue is formed by Payments in Lieu of Taxes.



TABLE 4

**LOCAL GOVERNMENT REVENUES BY SOURCE**  
**VIRGINIA, FY 2023**  
**MILLIONS OF DOLLARS**

Source	Own-Source Revenues	Share of Own-Source Revenues	Intergovernmental Revenues	Share of Total Revenues
Real Estate Taxes	\$13,333.6	49.8%	--	29.9%
Other General Property Taxes	\$4,545.7	17.0%	--	10.2%
Other Local Taxes	\$4,775.0	17.8%	--	10.7%
Other Local Revenues	\$4,119.3	15.4%	--	9.2%
From the Commonwealth		--	\$13,291.0	29.8%
From the Federal Government		--	\$4,544.2	10.2%
<b>Total</b>	<b>\$26,773.6</b>	<b>--</b>	<b>\$17,835.2</b>	<b>--</b>

Sources: Virginia Auditor of Public Accounts (2024), and the Dragas Center for Economic Analysis and Policy.

TABLE 5

**LOCAL GOVERNMENT EXPENDITURES BY FUNCTION**  
**VIRGINIA LOCALITIES, FY 2023**  
**MILLIONS OF DOLLARS**

Function	Expenditure	Share
General Government Administration	\$1,526.0	4.0%
Judicial Administration	\$654.4	1.7%
Public Safety	\$6,100.9	16.1%
Public Works	\$2,171.8	5.7%
Health and Human Services	\$3,981.2	10.5%
Education	\$20,611.8	54.4%
Parks, Recreation, and Culture	\$1,189.6	3.1%
Community Development	\$1,627.2	4.3%
<b>Total</b>	<b>\$37,865.1</b>	<b>-</b>

Sources: Virginia Auditor of Public Accounts (2024) and the Dragas Center for Economic Analysis and Policy. Total and percentage do not sum to 100 percent as data presented does not include \$2.3 billion in non-departmental expenditure.

## The Role of Intergovernmental Expenditures in the State Budget

As reported by the Joint Legislative Audit and Review Commission (JLARC), Virginia's total operating budget, including general and non-general funds, was \$81.9 billion in FY 2023.<sup>11</sup> According to the Virginia Department of Planning and Budget (VDPB), close to two-thirds of the Commonwealth's finances are accounted through a series of special-purpose funds collectively referred to as non-general funds according to Virginia's Department of Planning and Budget (DPB). In FY 2023, non-general funds amounted to about \$51 billion, or 63% of state expenditures. Non-general funds are funded by federal grants or other earmarked revenue sources, such as tuition payments that fund public universities or motor fuels tax revenues set aside for the Commonwealth Transportation Fund. As these non-general fund resources are earmarked to fund specific state-level expenditures, we do not consider them for the discussion on the fiscal incidence of intergovernmental transfers in Virginia.

What is traditionally understood by 'the commonwealth budget' is formally referred to as the Commonwealth General Fund. This is the part of the Commonwealth's government budget that is funded from taxes—including income and sales taxes—paid by citizens and businesses, which can be used for a variety of government programs, over which the Governor and General Assembly have the most discretion. In FY 2023, the General Fund amounted to \$30.9 billion, or approximately 37.8% of state expenditures. The state income tax raised almost \$19.0 billion in FY 2023, accounting for 61.5% of general fund revenues. Sales and use taxes raised approximately \$5.3 billion (17.2% of general fund revenues) in FY 2023.

**In FY 2023, 48.8% of general fund expenditures were intergovernmental in nature (Table 7). Instead of classifying expenditures by governmental unit (department or agency) or functional classification (education, health, etc.), we can aggregate expenditures by the object (economic classification) of expenditures. This allows us to separate intergovernmental expenditures from other types of expenditures. Intergovernmental expenditures (distributions to localities) were \$13.96 billion or 48.8% of general fund expenditures in FY 2023.<sup>12</sup> Most of these distributions (transfers) are "categorical aid," i.e., subsidies provided by the state government for specific local government functions, such as K-12 education. Public education accounted for approximately 68.0% of intergovernmental fiscal transfers. Figure 1 presents the distribution of these intergovernmental transfers across the Commonwealth in per capita terms.**

<sup>11</sup> Virginia's fiscal year (FY) runs from July 1st to June 30th of the following year. As such, FY 2023 covers the period from July 1, 2022, through June 30, 2023. This is different from the tax year (TY) which runs from January 1st to December 31st of each year.

<sup>12</sup> The total amount of intergovernmental transfers reported as received by counties and independent cities from the Commonwealth over the same period—after adjusting for missing observations—was \$13.29 billion according to Virginia Auditor of Public Accounts (2023). Reporting discrepancies of finances between government levels are not uncommon. Furthermore, the latter amount does not include transfers to sub-county town governments.

**TABLE 6**

**GENERAL FUND REVENUES BY REVENUE CLASS  
AND OTHER SOURCES  
VIRGINIA, FY 2023  
MILLIONS OF DOLLARS**

General Fund Revenues	Revenue	Share
Individual Income Taxes	\$18,984	61.5%
Sales & Use Taxes	\$5,292	17.2%
Corporate Income Taxes	\$2,031	6.6%
Other Taxes	\$1,939	6.3%
Other - Nontax	\$1,437	4.7%
Transfers In	\$1,168	3.8%
<b>Total</b>	<b>\$30,851</b>	<b>-</b>

Sources: Office of the Comptroller (2023) and the Dragas Center for Economic Analysis and Policy.  
Estimates may not equal totals due to rounding.

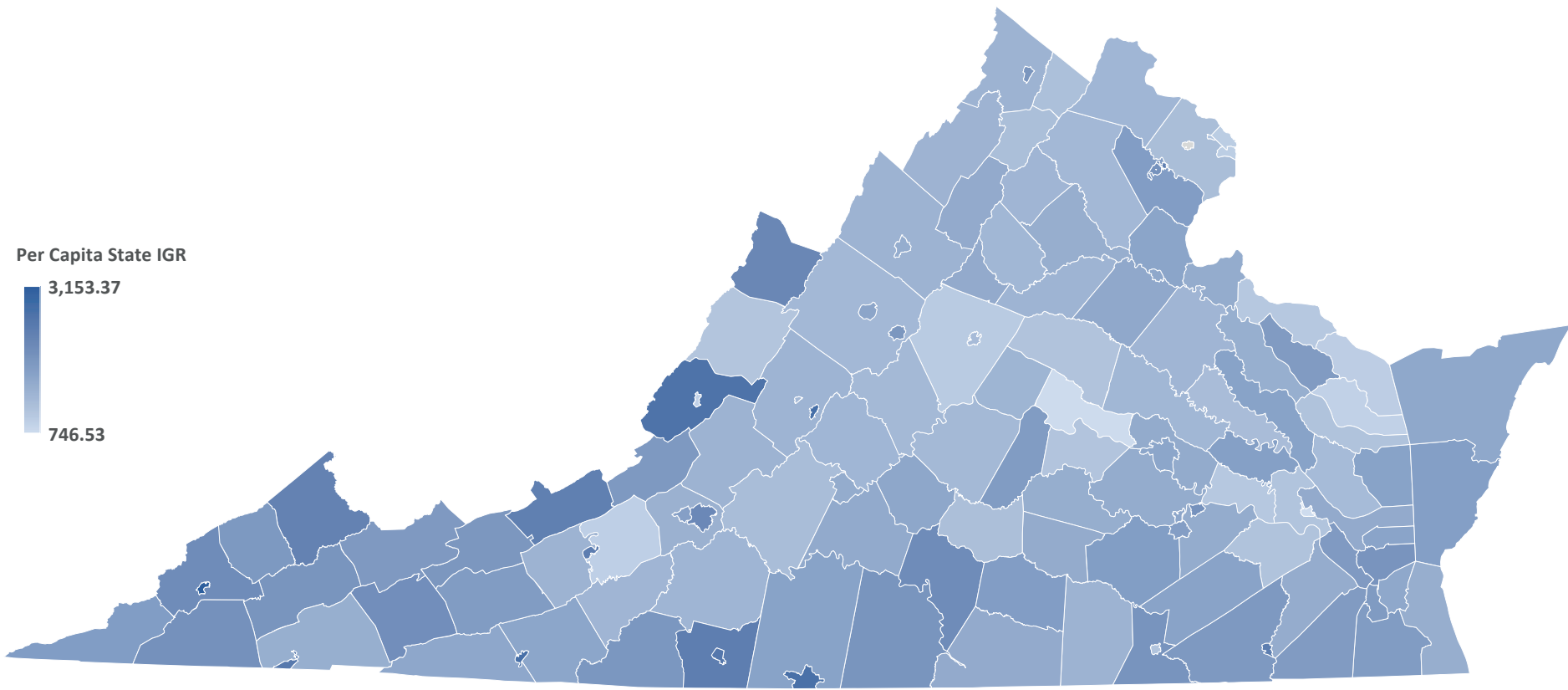
**TABLE 7**

**GENERAL FUND EXPENDITURES BY OBJECT  
VIRGINIA, FY 2023  
MILLIONS OF DOLLARS**

General Fund Expenditures	Expenditure	Share
Distributions to Localities	\$13,964	48.8%
Contractual Services	\$7,622	26.6%
Personal Services	\$3,473	12.1%
Transfers to Component Units	\$2,436	8.5%
Other	\$909	3.2%
Supplies & Materials	\$236	0.8%
<b>Total</b>	<b>\$28,640</b>	<b>-</b>

Sources: Office of the Comptroller (2023) and the Dragas Center for Economic Analysis and Policy.

**FIGURE 1**  
**PER CAPITA INTERGOVERNMENTAL FISCAL TRANSFERS RECEIVED BY COUNTY**  
**VIRGINIA, 2022**



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© GeoNames, Microsoft, TomTom

Sources: Virginia Auditor of Public Accounts (2024) and the Dragas Center for Economic Analysis and Policy.

# A Fiscal Incidence Analysis of Intergovernmental Fiscal Transfers in Virginia

The “balance of payments” (or the fiscal incidence) of government spending is typically calculated as the amount of distributions by the higher-level government minus the amount paid by residents and businesses in taxes and other revenues in the subnational jurisdictions.<sup>13</sup> When analyzing the balance of payments between the federal government and the states, the Rockefeller Institute looks at the distribution of all federal spending in different states minus the amount paid in federal taxes and other revenues by residents and businesses in each state.

Our analysis of the state-local balance of payments in Virginia is limited to intergovernmental finances, as this is the most direct (and most traceable) aspect of fiscal redistribution within the Commonwealth. By comparison, the fiscal incidence of state-level direct spending programs would be much harder to track across different localities.<sup>14</sup> While local spending funded by own (local) revenues may move public resources from one group of households to another within the same locality, spending from local revenues is generally fully spent on residents within the same locality. We also remind the reader that our analysis does not consider the incidence of the Commonwealth’s non-general fund accounts.

In FY 2022, the state government distributed \$13.96 billion from the General Fund to localities. With some minor discrepancies and adjustments, county governments and independent cities reported receiving \$13.29 billion as intergovernmental revenues from the Commonwealth over the same period. We use the latter amount as the basis for our analysis, as the ‘horizontal’ distribution of this amount is easily traceable between the Commonwealth and the localities.

**According to the Office of the Comptroller, the largest stream of revenues paid into the General Fund is formed by individual income tax collection, amounting to approximately \$20.4 billion in FY 2022. During the 2022 Tax Year, the Virginia Department of Taxation reported about \$17.0 billion in individual income tax liabilities. Given that the Department of Taxation knows where each taxpayer resides, it tracks individual income tax revenue liabilities and collections by locality. This allows an analysis of income tax contributions by county, ranging from Fairfax County—which contributed almost \$4.0 billion (\$3,976.7 million) in individual income tax revenues to the budget of the Commonwealth—to Highland County, which only contributed \$2.1 million to the Commonwealth in income tax revenue.**

Taxpayers’ contributions to the state’s General Fund are not spread evenly across the Commonwealth as income tax liabilities are (for most taxpayers) a fixed percentage of their income (5.75% for income in excess of \$17,000). Median household income varies considerably across the Commonwealth. In 2023, median household income was \$38,497 in Norton city, \$41,438 in Galax city, \$42,216 in Buchanan County, \$42,269 in Lee County, and \$42,434 in Martinsville city. In the same year, median household income was \$133,792 in Stafford County, \$140,160 in Arlington County, \$150,113 in Fairfax County, \$154,734 in Falls Church city, and \$178,707 in Loudoun County. The variation in median household incomes, not surprisingly, results in a similar variation in income tax payments across the Commonwealth.

Using the city of Fairfax as an example, we can estimate the per capita contribution of each locality to the intergovernmental finance pool. In 2022, the 24,003 residents of Fairfax city remitted \$80.35 million in income tax payments. These payments represented approximately 0.47% of the \$17.02 billion in income tax payments for the year. Local governments reported receiving \$13.29 billion in intergovernmental revenue from the Commonwealth during the same year, thus the residents of Fairfax city ‘contributed’ 0.47% to the intergovernmental

<sup>13</sup> Alternatively, the net fiscal incidence may be expressed as the ratio of distributions by the higher-level government divided by the amount contributed in taxes and other revenues by residents and businesses. This metric is applied further below (Graph 3).

<sup>14</sup> For instance, while it would be theoretically possible to attribute expenditures for the Virginia State Police or the Virginia Department of Corrections across different local jurisdictions, this would be a much more data-intensive and arduous task.



finance pool of \$13.29 billion, which equals \$62.76 million or \$2,615 per resident.

Graph 1 illustrates the per capita contributions of the top and bottom 5 Virginia localities in 2022. Falls Church is followed by Goochland County (\$3,133), Arlington County (\$3,109), Alexandria city (\$2,728), and Fairfax city (\$2,615). The lowest per capita contributors to the intergovernmental finance pool were Petersburg (\$419), Lee County (\$425), Emporia city (\$440), Dickenson County (\$475), and Buchanan County (\$507). In other words, the residents of Falls Church contributed approximately \$9.10 to the intergovernmental finance pool for every \$1 contributed by the residents of Petersburg.

According to Virginia's constitution, the state government was based upon the sovereignty of the people united for the common good, or the "common weal." This finds its expression, among others, in the deliberate attempt of the state government to ensure equitable access to public services. For instance, the Virginia constitution mandates that school funding is provided by the Commonwealth based on a prescribed (uniform) standard of quality. As the result of this constitutional mandate, along with other legislation and policy decisions made as part of different state-level programs, counties and independent cities with greater expenditure needs and with a lower ability to raise own-source revenues tend to receive greater intergovernmental fiscal transfers from the Commonwealth.

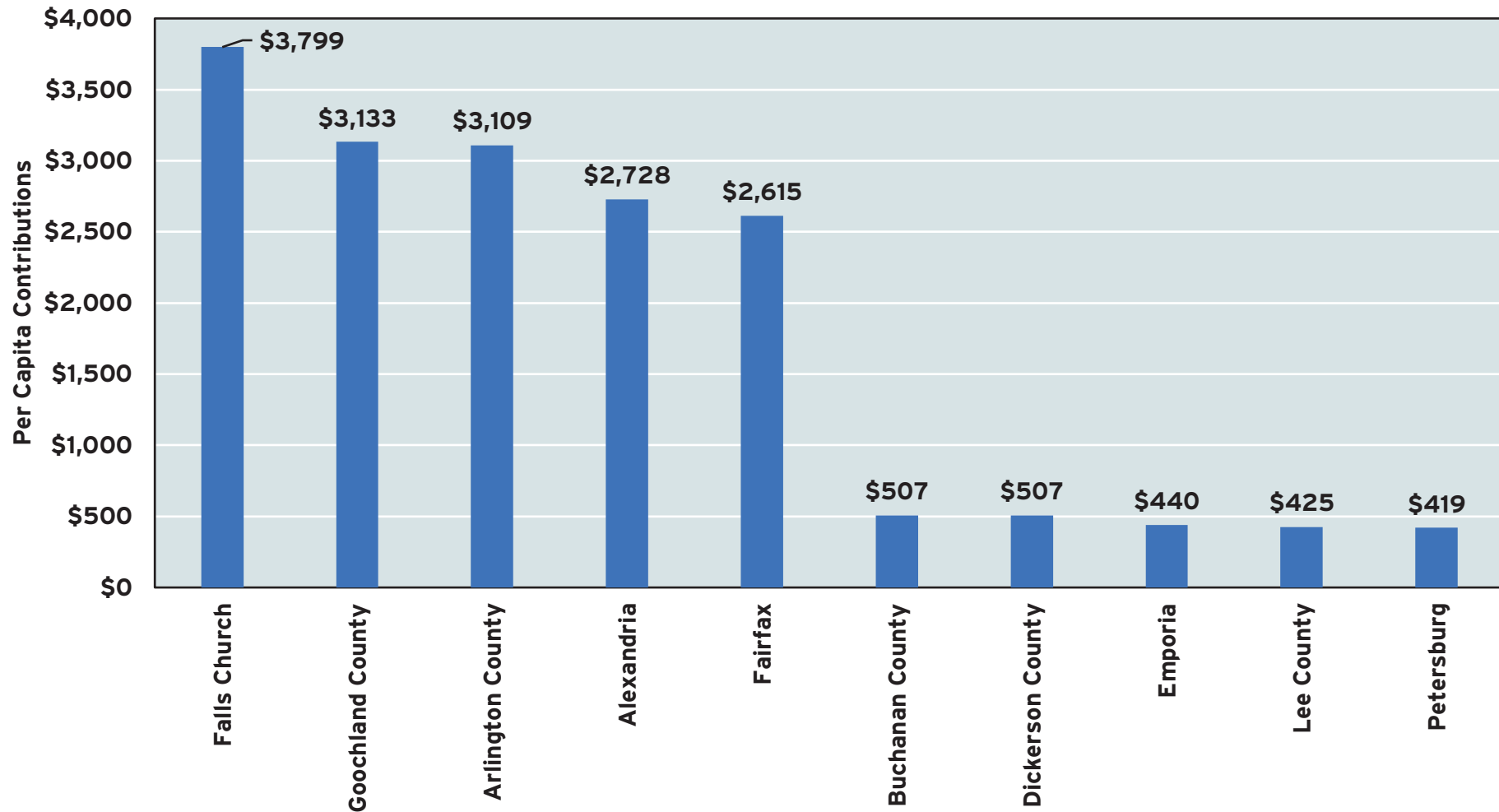
Graph 2 illustrates the other side of the coin in intergovernmental finance: local intergovernmental revenues from the Commonwealth that each locality received in 2022. Graph 2 presents the top and bottom 5 localities in terms of revenues (receipts). At one end of the spectrum is Norton city, which received \$11.47 million, or \$3,153 per resident, in local intergovernmental revenues. At the other end is Williamsburg city, which received \$12.11 million, or \$747 per resident, in intergovernmental revenues in the same year.

We now have the revenues (what each locality received from the pool) and contributions (what each locality paid into the pool) for the Commonwealth in 2022. The difference between what a locality contributed and what a locality received determines whether the locality is a 'net contributor' or 'net recipient.' For example, in 2022, Fairfax city contributed \$2,615 per resident to the pool, while it received \$945 per resident from it. This means that Fairfax 'paid' \$1,670 more per resident into the pool than it received that year, so it was a net contributor to the pool. Norton city, on the other hand, contributed \$628 per resident to the pool, but received \$3,153 per resident. In other words, it was a net recipient of \$2,526 per resident.

Graph 3 presents the top 5 and bottom 5 net contributors to the intergovernmental finance pool in the Commonwealth in 2022. We define, following standard practice, the balance of payments as local intergovernmental revenues from the Commonwealth minus contributions to the local intergovernmental revenue pool. In other words, net contributors had a negative balance of payments while net recipients had a positive balance of payments. In per capita terms, the largest net contributors in the Commonwealth were Falls Church city (-\$2,676), Goochland County (-\$2,366), Arlington city (-\$2,118), Alexandria city (-\$1,750), and Fairfax city (-\$1,670). At the other end of the spectrum, are Norton city (\$2,526), Buena Vista city (\$2,286), Galax city (\$2,109), Danville city (\$2,097), and Alleghany County (\$1,961).

**GRAPH 1**

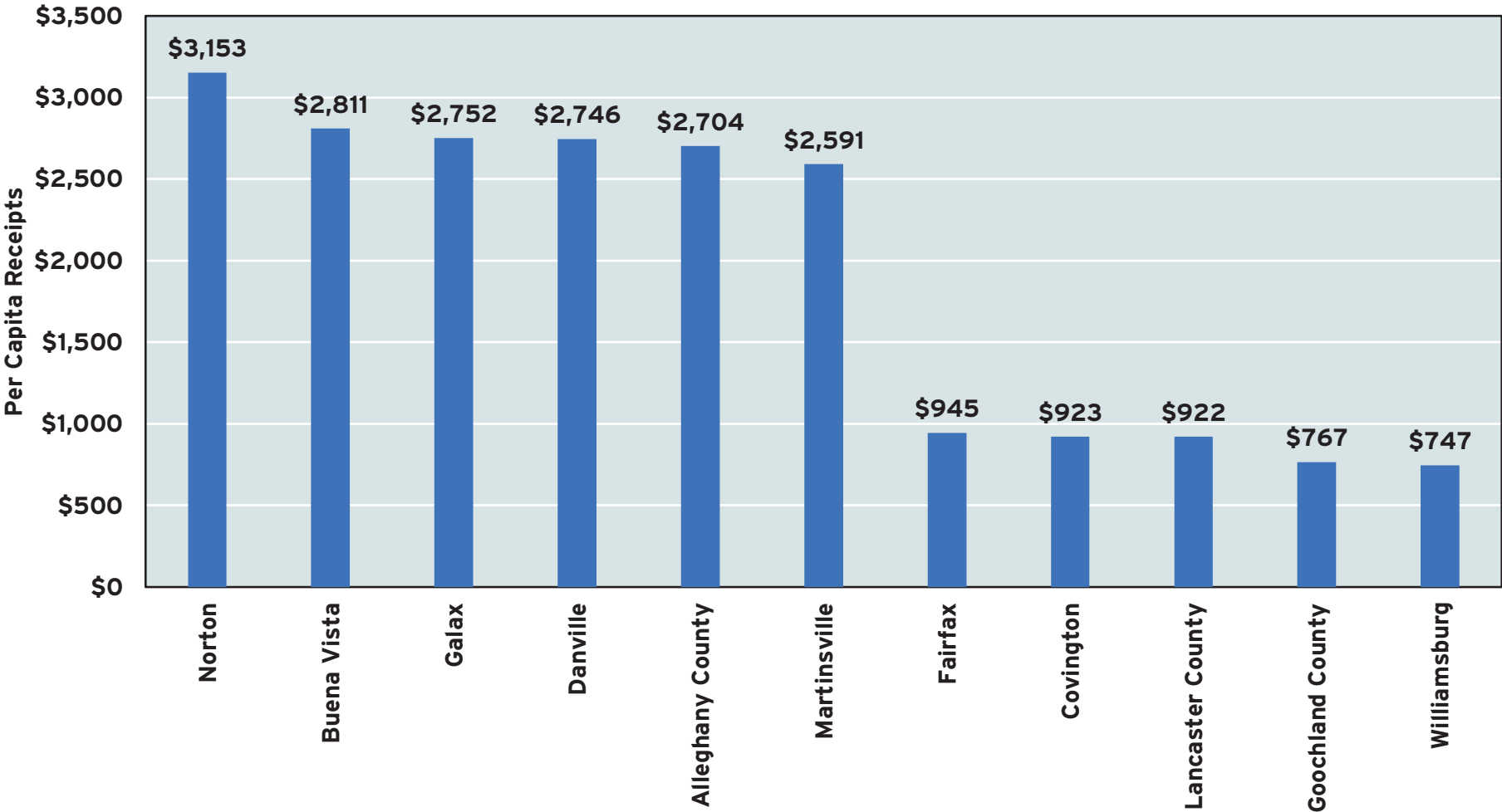
**PER CAPITA CONTRIBUTIONS TO THE INTERGOVERNMENTAL FINANCE POOL IN VIRGINIA  
TOP 5 AND BOTTOM 5 LOCALITIES, 2022**



Sources: Virginia Department of Taxation, 2024 and the Dragas Center for Economic Analysis and Policy. Localities ordered based on net contribution per capita.

GRAPH 2

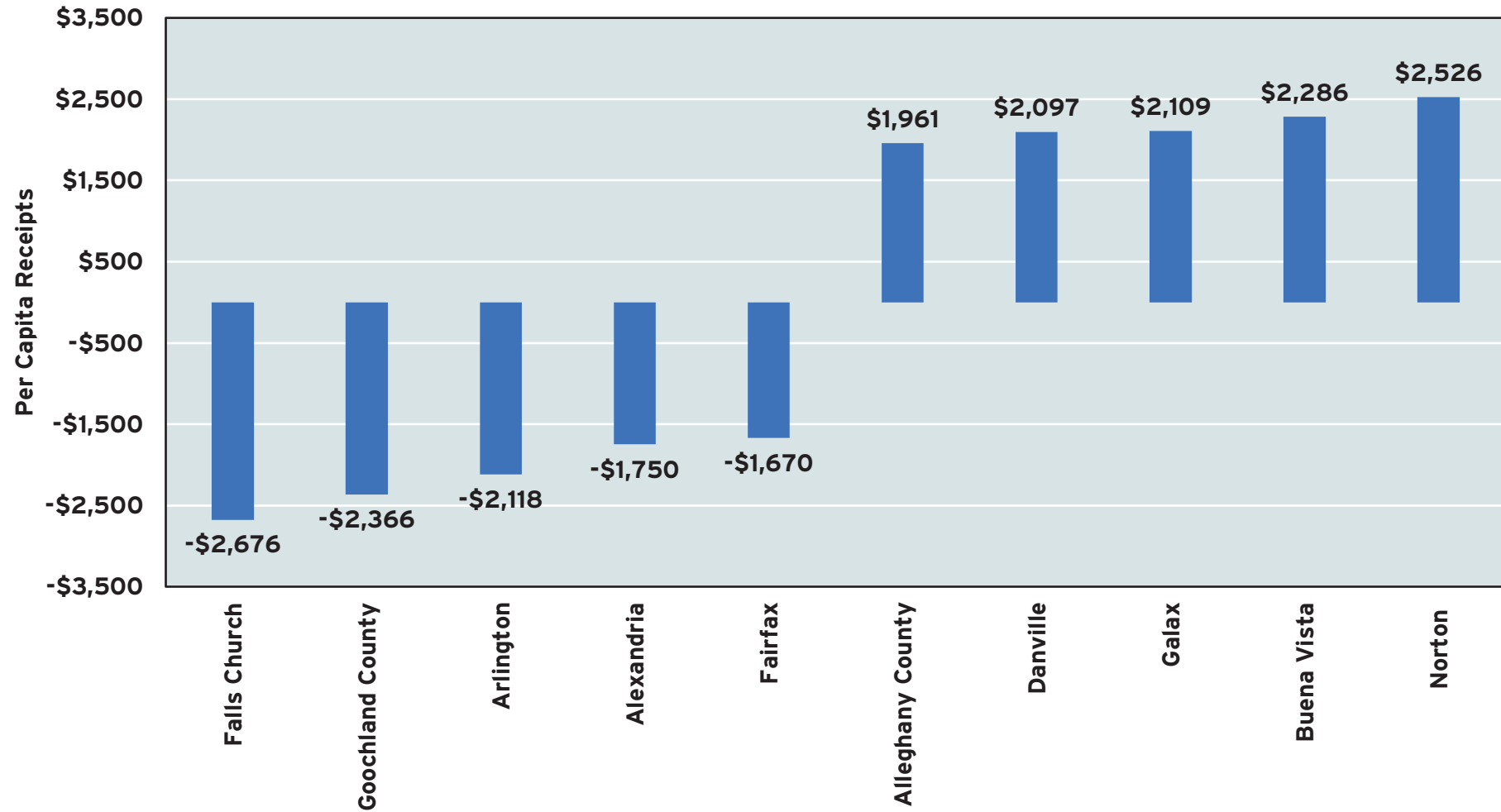
PER CAPITA RECEIPTS FROM THE INTERGOVERNMENTAL FINANCE POOL IN VIRGINIA  
TOP 5 AND BOTTOM 5 LOCALITIES, 2022



Sources: Virginia Auditor of Public Accounts, 2024 and the Dragas Center for Economic Analysis and Policy. Localities ordered based on net receipts per capita.

**GRAPH 3**

**PER CAPITA BALANCE OF PAYMENTS FROM THE INTERGOVERNMENTAL FINANCE POOL  
TOP 5 AND BOTTOM 5 VIRGINIA LOCALITIES, 2022**



Sources: Virginia Auditor of Public Accounts, 2024 and the Dragas Center for Economic Analysis and Policy. Localities ordered based on net contribution per capita.

TABLE 8

**PER CAPITA BALANCE OF PAYMENTS FROM THE INTERGOVERNMENTAL FINANCE POOL  
VIRGINIA LOCALITIES, 2022**

Virginia Locality	Per Capita Receipts	Per Capita Contributions	Per Capita Balance of Payments
Falls Church	\$1,123	\$3,799	-\$2,676
Goochland County	\$767	\$3,133	-\$2,366
Arlington County	\$991	\$3,109	-\$2,118
Alexandria	\$978	\$2,728	-\$1,750
Fairfax	\$945	\$2,615	-\$1,670
Fairfax County	\$1,232	\$2,725	-\$1,493
Albemarle County	\$1,004	\$2,242	-\$1,238
Loudoun County	\$1,369	\$2,584	-\$1,215
Rappahannock County	\$1,368	\$2,313	-\$945
Fauquier County	\$1,327	\$2,127	-\$800
Clarke County	\$1,207	\$1,812	-\$605
James City County	\$1,124	\$1,719	-\$595
Powhatan County	\$1,119	\$1,713	-\$594
Lancaster County	\$922	\$1,504	-\$582
Charles City County	\$1,057	\$1,444	-\$387
Hanover County	\$1,344	\$1,710	-\$366
Northumberland County	\$976	\$1,341	-\$365
Bedford County	\$1,240	\$1,590	-\$350
Williamsburg	\$747	\$981	-\$235
Charlottesville	\$1,284	\$1,462	-\$178
Montgomery County	\$949	\$1,008	-\$59
Fredericksburg	\$1,628	\$1,630	-\$2
Richmond County	\$1,831	\$1,831	\$0
Louisa County	\$1,135	\$1,116	\$19
Middlesex County	\$1,141	\$1,116	\$24
Henrico County	\$1,572	\$1,533	\$39
Westmoreland County	\$1,063	\$981	\$82
Frederick County	\$1,418	\$1,314	\$104



**TABLE 8**

**PER CAPITA BALANCE OF PAYMENTS FROM THE INTERGOVERNMENTAL FINANCE POOL  
VIRGINIA LOCALITIES, 2022**

<b>Virginia Locality</b>	<b>Per Capita Receipts</b>	<b>Per Capita Contributions</b>	<b>Per Capita Balance of Payments</b>
Warren County	\$1,221	\$1,112	\$109
Virginia Beach	\$1,510	\$1,399	\$111
Madison County	\$1,352	\$1,211	\$141
Bath County	\$1,110	\$968	\$142
Poquoson	\$1,690	\$1,545	\$145
Chesterfield County	\$1,554	\$1,374	\$181
King William County	\$1,262	\$1,078	\$184
Richmond	\$1,663	\$1,472	\$191
King George County	\$1,562	\$1,360	\$202
Nelson County	\$1,319	\$1,108	\$211
Botetourt County	\$1,422	\$1,210	\$211
Orange County	\$1,399	\$1,168	\$231
Roanoke County	\$1,456	\$1,218	\$238
York County	\$1,584	\$1,334	\$250
New Kent County	\$1,768	\$1,517	\$251
Gloucester County	\$1,292	\$1,029	\$263
Augusta County	\$1,323	\$1,044	\$279
Surry County	\$1,147	\$842	\$305
Stafford County	\$1,675	\$1,368	\$307
Covington	\$923	\$615	\$308
Isle of Wight County	\$1,545	\$1,234	\$311
Fluvanna County	\$1,388	\$1,051	\$337
Spotsylvania County	\$1,615	\$1,274	\$342
Rockingham County	\$1,425	\$1,080	\$345
Culpeper County	\$1,512	\$1,154	\$358
Prince William County	\$1,816	\$1,452	\$365
Shenandoah County	\$1,412	\$1,020	\$392
Lexington	\$1,326	\$912	\$414

TABLE 8

**PER CAPITA BALANCE OF PAYMENTS FROM THE INTERGOVERNMENTAL FINANCE POOL  
VIRGINIA LOCALITIES, 2022**

Virginia Locality	Per Capita Receipts	Per Capita Contributions	Per Capita Balance of Payments
Floyd County	\$1,374	\$944	\$430
Franklin County	\$1,381	\$950	\$431
Caroline County	\$1,368	\$914	\$454
Rockbridge County	\$1,406	\$932	\$474
Amelia County	\$1,520	\$984	\$537
Essex County	\$1,500	\$957	\$542
Washington County	\$1,501	\$954	\$547
Mathews County	\$1,712	\$1,163	\$550
Prince Edward County	\$1,214	\$643	\$571
Salem	\$1,772	\$1,168	\$604
Amherst County	\$1,364	\$742	\$622
Greene County	\$1,583	\$946	\$637
Emporia	\$1,128	\$440	\$689
Pulaski County	\$1,423	\$732	\$691
Northampton County	\$1,784	\$1,072	\$712
Lynchburg	\$1,552	\$840	\$712
King & Queen County	\$1,712	\$978	\$734
Suffolk	\$1,831	\$1,088	\$743
Chesapeake	\$1,824	\$1,080	\$744
Buckingham County	\$1,313	\$558	\$755
Mecklenburg County	\$1,581	\$821	\$760
Accomack County	\$1,638	\$873	\$765
Staunton	\$1,666	\$886	\$779
Campbell County	\$1,593	\$777	\$815
Page County	\$1,582	\$752	\$831
Brunswick County	\$1,426	\$589	\$837
Norfolk	\$1,624	\$769	\$855
Colonial Heights	\$1,654	\$786	\$867

**TABLE 8**

**PER CAPITA BALANCE OF PAYMENTS FROM THE INTERGOVERNMENTAL FINANCE POOL  
VIRGINIA LOCALITIES, 2022**

<b>Virginia Locality</b>	<b>Per Capita Receipts</b>	<b>Per Capita Contributions</b>	<b>Per Capita Balance of Payments</b>
Prince George County	\$1,560	\$679	\$881
Winchester	\$1,960	\$1,063	\$897
Appomattox County	\$1,645	\$746	\$899
Manassas	\$2,029	\$1,119	\$910
Pittsylvania County	\$1,718	\$758	\$960
Dinwiddie County	\$1,808	\$844	\$964
Harrisonburg	\$1,537	\$547	\$990
Nottoway County	\$1,564	\$548	\$1,016
Carroll County	\$1,661	\$588	\$1,074
Southampton County	\$1,897	\$814	\$1,083
Wythe County	\$1,818	\$731	\$1,087
Grayson County	\$1,644	\$552	\$1,092
Waynesboro	\$1,945	\$840	\$1,105
Craig County	\$1,889	\$766	\$1,122
Sussex County	\$1,700	\$564	\$1,136
Newport News	\$1,866	\$719	\$1,147
Cumberland County	\$1,819	\$670	\$1,149
Tazewell County	\$1,878	\$660	\$1,219
Portsmouth	\$1,851	\$606	\$1,245
Halifax County	\$1,985	\$724	\$1,261
Bland County	\$1,939	\$674	\$1,265
Lunenburg County	\$1,809	\$543	\$1,266
Hampton	\$1,986	\$689	\$1,297
Roanoke	\$2,221	\$912	\$1,308
Patrick County	\$1,947	\$632	\$1,315
Petersburg	\$1,792	\$419	\$1,373
Manassas Park	\$2,434	\$1,058	\$1,377
Greensville County	\$1,991	\$604	\$1,387

TABLE 8

**PER CAPITA BALANCE OF PAYMENTS FROM THE INTERGOVERNMENTAL FINANCE POOL  
VIRGINIA LOCALITIES, 2022**

Virginia Locality	Per Capita Receipts	Per Capita Contributions	Per Capita Balance of Payments
Lee County	\$1,822	\$425	\$1,397
Russell County	\$1,985	\$584	\$1,400
Dickenson County	\$1,907	\$475	\$1,431
Scott County	\$2,041	\$584	\$1,457
Smyth County	\$2,096	\$624	\$1,472
Charlotte County	\$2,153	\$647	\$1,506
Highland County	\$2,252	\$741	\$1,511
Hopewell	\$2,034	\$507	\$1,526
Wise County	\$2,155	\$550	\$1,605
Giles County	\$2,417	\$767	\$1,650
Bristol	\$2,558	\$790	\$1,768
Henry County	\$2,444	\$624	\$1,820
Radford	\$2,476	\$645	\$1,831
Franklin	\$2,454	\$618	\$1,836
Buchanan County	\$2,358	\$507	\$1,852
Martinsville	\$2,591	\$654	\$1,938
Alleghany County	\$2,704	\$743	\$1,961
Danville	\$2,746	\$649	\$2,097
Galax	\$2,752	\$642	\$2,109
Buena Vista	\$2,811	\$525	\$2,286
Norton	\$3,153	\$628	\$2,526

Sources: Virginia Department of Taxation (2024), Virginia Auditor of Public Accounts (2024), and the Dragas Center for Economic Analysis and Policy. Localities ordered based on net contribution per capita.

**Table 8 provides similar estimates for each of Virginia’s 95 counties and 38 independent cities, ranked from the biggest net contributor per person to the biggest net recipient per person. Out of the \$13.29 billion in transfers that the Commonwealth collects from taxpayers and then redistributes to counties and independent cities, \$3.54 billion is redistributed from the net contributor localities to net recipient localities and counties. Almost 90% of net contributions were provided by five localities: Fairfax County, Loudoun, Arlington, Alexandria, and Albemarle. By contrast, over three-quarters of counties in Virginia are net recipients of intergovernmental funding, meaning that their local government spending is subsidized—on net—by the residents of other counties. Although the Hampton Roads region (Chesapeake, Norfolk and Newport News) as well as Prince William County stand out as large recipients in nominal (total) terms, due to their higher populations, counties in the Southwest and Southside regions of the state are among the highest per capita net recipients.**

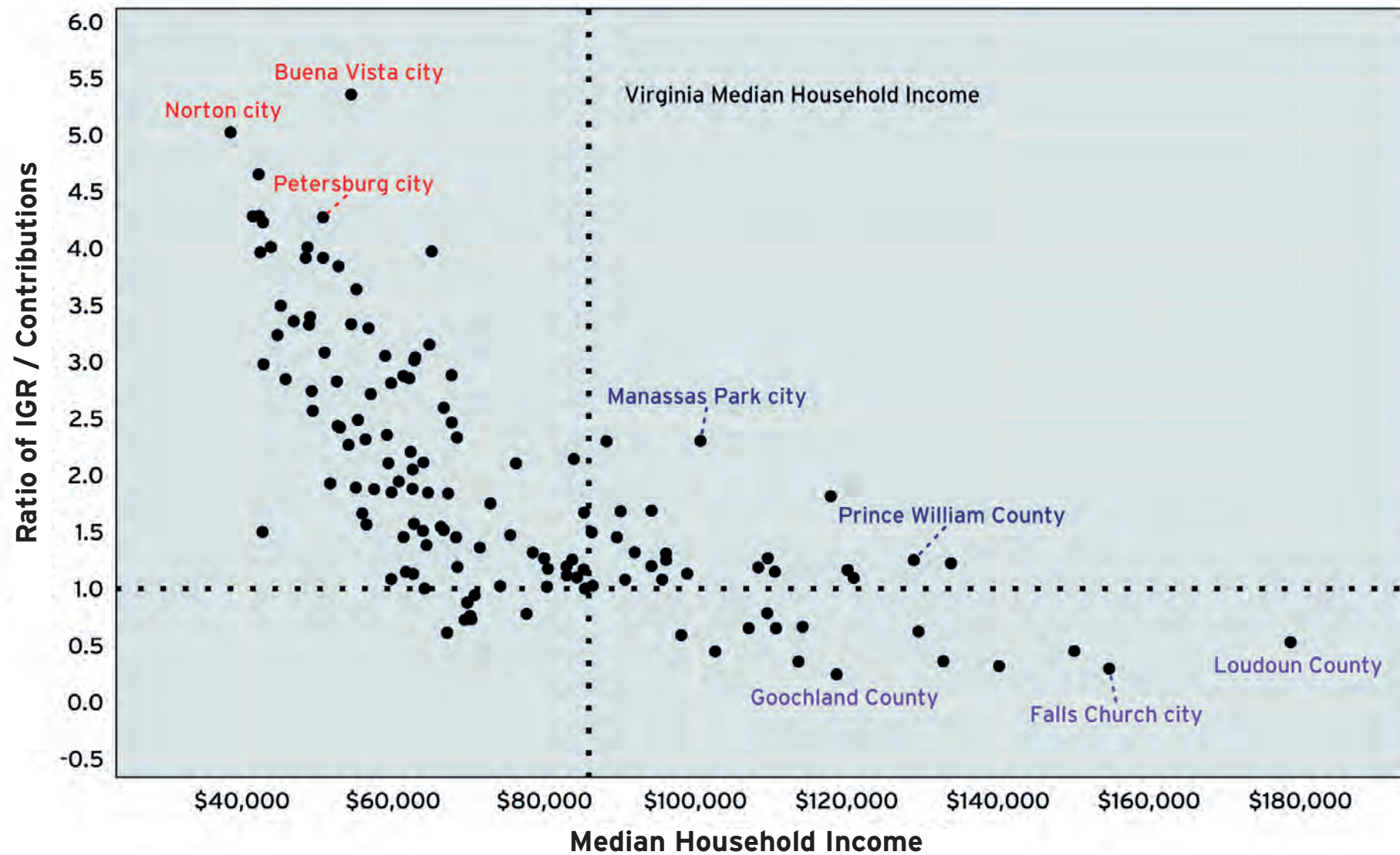
Graph 4 presents the ratio of intergovernmental revenues to intergovernmental contributions for Virginia’s localities in 2022 relative to 2019 – 2023 median household income from the U.S. Census. If the ratio of intergovernmental revenues to intergovernmental contributions is greater than 1, then the locality is a net recipient from the local intergovernmental finance pool. Conversely, localities with a ratio less than 1 are net contributors. Buena Vista city, for example, had a ratio of 5.36 in 2022, that is, for every \$1 contributed to the finance pool, the locality received \$5.36 in return. Goochland County, on the other hand, had a ratio of 0.24 in 2022. For this county, for every \$1 contributed to the finance pool in income taxes, the county received \$0.24 in return in local intergovernmental revenues.





GRAPH 4

**BALANCE OF PAYMENTS OF STATE-LOCAL INTERGOVERNMENTAL TRANSFERS  
VIRGINIA, 2022**



Sources: United States Census Bureau, American Community Survey 5-Year Estimate (2019-2023), Virginia Department of Taxation, 2024, Virginia Auditor of Public Accounts, 2024, and the Dragas Center for Economic Analysis and Policy.



## An Unseen Dependence on Transfers?

The nature of state-local finances in Virginia is complex and understudied. In fact, it is tempting to look at state and local public expenditures for the state as a whole—or one local government at a time—without necessarily looking at how these expenditures are paid for (and who pays for them). Yet, it would be imprudent not to consider the fiscal incidence of how the Commonwealth redistributes resources, and the impact that this has on governance and local public services in the Commonwealth.

**Irrespective of whether a local government is a net contributor or a recipient, local governments tend to advocate for greater intergovernmental transfers without considering who pays for them.**

Table 9 highlights the total expenditure of each locality in the Commonwealth in 2022. Table 9 also illustrates how much each locality's expenditures were funded by intergovernmental transfers from the state and federal government. Fairfax city, for example, received local intergovernmental revenues from the state that were equal to 13.1% of total expenditures in 2022. Federal intergovernmental revenues received by Fairfax city were equivalent to 0.3% of total expenditures. In total, approximately 13.4% of Fairfax city's total expenditures in 2022 were funded by intergovernmental transfers from the state and federal government. On the other hand, Henry County received intergovernmental revenues from the state that were equal to 65.4% of local total expenditures in 2022. Henry County also received federal intergovernmental revenues equal to 20.0% of total expenditures, meaning that 85.4% of local expenditures were funded through intergovernmental transfers.

**The estimates in Table 9 suggest that intergovernmental finance plays a significant and, for the most part, unseen role in the lives of citizens throughout the Commonwealth. In 2022, 85 cities and counties in Virginia received intergovernmental revenues equivalent to at least half of their total expenditures, while 126 cities and**

**counties received intergovernmental revenues equal to at least 30% of their total expenditures. Simply put, most local governments are significantly dependent, and in some cases, almost completely dependent, on transfers from the state and federal government.**

**Intergovernmental fiscal transfers have also allowed for lower local property taxes, but only in specific parts of the Commonwealth.**

Because the system of intergovernmental fiscal transfers funnels tax resources away from relatively high-income counties without returning it to them in the same proportion, county governments in these parts of the state face pressure to impose higher local property tax rates to fund the quality public services that county residents demand. Furthermore, since these counties are expected to contribute a greater share of local education requirements from own sources, they systematically need to raise more local revenues than they receive in grants.

The top 5 net contributing counties in Virginia impose an average property tax rate of almost exactly \$10 per \$1,000 of assessed value. By contrast, a typical county in the rest of Virginia imposes a property tax of only \$8 per \$1,000 of assessed value, with 23 counties (or independent cities) in the Commonwealth imposing property taxes at less than \$6 dollars per \$1,000 of assessed value. As such, not only do taxpayers in the highest-contributing counties subsidize the local public services of other localities in the state, they also pay considerably higher local property taxes in their own localities (both due to higher rates, as well as due to higher property values in their counties).

Although the differences between the local property tax rates may not sound like a lot, setting minimum standards for local fiscal self-reliance in terms of local service delivery and taxation could have a major impact on the need for fiscal redistribution. If every net recipient county government in Virginia would collect property taxes at the rate of \$10 per \$1,000 of assessed value, they could collectively generate more than \$900 million in additional local property tax revenue.

TABLE 9

**PER CAPITA BALANCE OF PAYMENTS FROM THE INTERGOVERNMENTAL FINANCE POOL  
VIRGINIA LOCALITIES, 2022**

Virginia Locality	Total Expenditure	Ratio of Local IGFR from Virginia to Expenditure	Ratio of Local IGFR from Federal Government to Expenditure	Ratio of Local IGFR to Expenditure
Accomack	\$123,992,796	43.5%	19.2%	62.7%
Albemarle	\$467,312,044	24.8%	8.9%	33.7%
Alleghany	\$75,434,691	53.4%	15.3%	68.7%
Amelia	\$46,425,491	43.4%	10.4%	53.8%
Amherst	\$89,804,425	47.3%	15.5%	62.8%
Appomattox	\$52,189,916	52.1%	13.2%	65.3%
Arlington	\$1,569,072,392	15.2%	7.3%	22.6%
Augusta	\$242,633,147	42.4%	13.6%	56.0%
Bath	\$25,901,919	18.1%	14.2%	32.4%
Bedford	\$214,820,226	46.1%	12.3%	58.4%
Bland	\$26,238,543	46.5%	15.7%	62.2%
Botetourt	\$111,684,570	42.7%	8.2%	50.9%
Brunswick	\$55,445,623	39.8%	13.1%	52.8%
Buchanan	\$100,417,833	45.6%	19.8%	65.4%
Buckingham	\$47,006,206	47.0%	17.6%	64.5%
Campbell	\$181,932,320	49.0%	13.0%	62.0%
Caroline	\$108,426,936	40.8%	12.1%	52.9%
Carroll	\$99,759,459	48.0%	18.5%	66.5%
Charles City	\$27,334,019	25.5%	15.3%	40.7%
Charlotte	\$49,628,621	49.6%	17.2%	66.8%
Chesterfield	\$1,437,674,425	41.3%	8.6%	49.9%
Clarke	\$52,751,040	35.1%	13.2%	48.3%
Craig	\$15,815,285	58.6%	21.3%	79.9%
Culpeper	\$192,445,265	42.5%	12.9%	55.4%
Cumberland	\$37,320,589	48.1%	16.4%	64.6%
Dickenson	\$53,593,834	48.8%	17.4%	66.2%

TABLE 9

**PER CAPITA BALANCE OF PAYMENTS FROM THE INTERGOVERNMENTAL FINANCE POOL  
VIRGINIA LOCALITIES, 2022**

Virginia Locality	Total Expenditure	Ratio of Local IGFR from Virginia to Expenditure	Ratio of Local IGFR from Federal Government to Expenditure	Ratio of Local IGFR to Expenditure
Dinwiddie	\$108,694,727	47.5%	13.3%	60.8%
Essex	\$40,458,301	39.2%	14.6%	53.8%
Fairfax	\$6,441,193,451	21.8%	9.6%	31.4%
Fauquier	\$329,301,310	29.6%	8.1%	37.7%
Floyd	\$49,186,870	42.3%	15.2%	57.6%
Fluvanna	\$85,920,764	45.0%	8.3%	53.3%
Franklin	\$175,170,990	42.7%	17.6%	60.3%
Frederick	\$363,943,159	37.0%	8.5%	45.4%
Giles	\$71,764,914	56.1%	12.6%	68.7%
Gloucester	\$136,430,514	36.7%	11.0%	47.7%
Goochland	\$92,313,324	21.8%	7.1%	28.8%
Grayson	\$53,934,845	46.8%	19.1%	65.8%
Greene	\$77,087,474	43.5%	10.4%	53.9%
Greensville	\$40,656,136	54.3%	16.3%	70.6%
Halifax	\$118,210,104	55.8%	13.8%	69.6%
Hanover	\$428,109,885	35.3%	8.5%	43.8%
Henrico	\$1,329,903,517	39.7%	8.1%	47.9%
Henry	\$182,434,485	65.4%	20.0%	85.4%
Highland	\$10,331,754	48.7%	19.4%	68.1%
Isle of Wight	\$147,483,159	41.9%	6.6%	48.5%
James City	\$291,183,356	30.7%	7.8%	38.5%
King & Queen	\$36,472,334	31.3%	12.4%	43.7%
King George	\$108,715,761	39.7%	8.1%	47.8%
King William	\$55,518,649	41.1%	8.5%	49.6%
Lancaster	\$36,261,007	27.3%	16.0%	43.3%
Lee	\$73,210,926	54.0%	28.5%	82.5%

TABLE 9

**PER CAPITA BALANCE OF PAYMENTS FROM THE INTERGOVERNMENTAL FINANCE POOL  
VIRGINIA LOCALITIES, 2022**

Virginia Locality	Total Expenditure	Ratio of Local IGFR from Virginia to Expenditure	Ratio of Local IGFR from Federal Government to Expenditure	Ratio of Local IGFR to Expenditure
Loudoun	\$2,544,570,810	23.2%	3.9%	27.1%
Louisa	\$149,333,666	30.2%	10.7%	40.9%
Lunenburg	\$42,152,922	51.3%	16.3%	67.6%
Madison	\$49,865,933	38.0%	14.0%	52.0%
Mathews	\$38,106,633	37.9%	12.4%	50.3%
Mecklenburg	\$170,958,473	27.9%	10.1%	38.0%
Middlesex	\$43,889,023	28.0%	14.6%	42.7%
Montgomery	\$239,119,842	40.5%	12.7%	53.3%
Nelson	\$58,172,773	33.6%	11.7%	45.3%
New Kent	\$81,961,909	53.5%	5.7%	59.2%
Northampton	\$53,668,139	40.0%	13.9%	53.9%
Northumberland	\$43,869,754	26.2%	16.8%	43.0%
Nottoway	\$48,375,708	50.5%	19.5%	70.0%
Orange	\$131,089,703	39.6%	12.9%	52.5%
Page	\$78,526,289	47.1%	12.7%	59.8%
Patrick	\$63,216,904	52.6%	13.0%	65.6%
Pittsylvania	\$194,340,070	52.5%	15.1%	67.6%
Powhatan	\$93,741,779	37.4%	7.4%	44.9%
Prince Edward	\$57,610,156	46.3%	16.1%	62.4%
Prince George	\$136,359,426	49.5%	14.6%	64.2%
Prince William	\$2,356,711,000	37.8%	11.4%	49.2%
Pulaski	\$112,368,018	42.5%	16.4%	58.9%
Rappahannock	\$33,424,702	30.3%	13.2%	43.4%
Richmond	\$37,473,167	44.8%	16.3%	61.0%
Roanoke	\$353,238,334	39.8%	9.3%	49.1%
Rockbridge	\$88,767,485	35.6%	9.9%	45.5%

TABLE 9

**PER CAPITA BALANCE OF PAYMENTS FROM THE INTERGOVERNMENTAL FINANCE POOL  
VIRGINIA LOCALITIES, 2022**

Virginia Locality	Total Expenditure	Ratio of Local IGFR from Virginia to Expenditure	Ratio of Local IGFR from Federal Government to Expenditure	Ratio of Local IGFR to Expenditure
Rockingham	\$285,878,872	42.0%	14.0%	55.9%
Russell	\$93,922,892	53.5%	16.9%	70.5%
Scott	\$89,731,560	48.5%	21.1%	69.6%
Shenandoah	\$152,473,627	41.2%	9.8%	51.0%
Smyth	\$125,043,384	48.7%	16.8%	65.4%
Southampton	\$70,516,761	48.2%	12.2%	60.4%
Spotsylvania	\$542,557,378	43.2%	8.8%	51.9%
Stafford	\$645,073,615	42.4%	10.0%	52.4%
Surry	\$37,212,675	20.0%	8.1%	28.1%
Sussex	\$46,286,069	38.2%	15.4%	53.5%
Tazewell	\$147,149,484	50.4%	17.0%	67.4%
Warren	\$129,325,127	39.0%	10.6%	49.6%
Washington	\$171,189,803	47.1%	19.0%	66.1%
Westmoreland	\$52,603,662	37.9%	15.6%	53.5%
Wise	\$148,766,767	51.5%	23.2%	74.6%
Wythe	\$99,938,262	50.8%	17.3%	68.1%
York	\$291,424,864	38.9%	10.7%	49.6%
Alexandria	\$852,341,839	18.1%	8.8%	27.0%
Bristol	\$114,790,849	37.4%	23.1%	60.5%
Buena Vista	\$34,324,487	54.4%	16.9%	71.3%
Charlottesville	\$268,040,793	24.6%	11.4%	35.9%
Chesapeake	\$1,131,797,876	40.6%	11.9%	52.5%
Colonial Heights	\$84,913,953	35.1%	9.3%	44.5%
Covington	\$26,338,524	19.8%	19.4%	39.2%
Danville	\$241,955,644	48.1%	15.4%	63.5%
Emporia	\$30,112,983	21.2%	12.2%	33.4%

TABLE 9

**PER CAPITA BALANCE OF PAYMENTS FROM THE INTERGOVERNMENTAL FINANCE POOL  
VIRGINIA LOCALITIES, 2022**

Virginia Locality	Total Expenditure	Ratio of Local IGFR from Virginia to Expenditure	Ratio of Local IGFR from Federal Government to Expenditure	Ratio of Local IGFR to Expenditure
Fairfax	\$173,427,510	13.1%	0.3%	13.4%
Falls Church	\$109,025,617	15.0%	3.6%	18.6%
Franklin	\$48,765,152	40.2%	21.8%	62.0%
Fredericksburg	\$167,174,631	26.9%	11.3%	38.3%
Galax	\$42,319,298	44.1%	24.8%	68.9%
Hampton	\$696,543,792	38.9%	14.0%	52.9%
Harrisonburg	\$209,329,758	40.9%	11.6%	52.5%
Hopewell	\$112,317,225	41.0%	12.0%	53.1%
Lexington	\$28,058,227	34.3%	21.7%	56.0%
Lynchburg	\$340,877,147	36.5%	23.6%	60.0%
Manassas	\$234,809,200	36.8%	8.0%	44.8%
Manassas Park	\$97,921,632	43.0%	15.1%	58.1%
Martinsville	\$76,731,557	44.7%	21.3%	66.0%
Newport News	\$900,912,642	38.0%	17.5%	55.5%
Norfolk	\$1,016,768,669	38.0%	24.8%	62.8%
Norton	\$23,051,942	49.8%	26.0%	75.7%
Petersburg	\$183,511,469	32.7%	2.6%	35.3%
Poquoson	\$52,505,897	40.6%	11.1%	51.8%
Portsmouth	\$388,169,294	46.1%	11.9%	58.0%
Radford	\$78,573,941	53.1%	13.7%	66.8%
Richmond	\$1,370,834,918	27.5%	17.1%	44.6%
Roanoke	\$556,009,801	39.8%	18.4%	58.2%
Salem	\$120,760,446	36.6%	27.6%	64.1%
Staunton	\$106,118,598	40.5%	10.6%	51.1%
Suffolk	\$469,832,722	38.7%	9.9%	48.6%
Virginia Beach	\$1,962,644,100	35.0%	11.5%	46.5%



TABLE 9

**PER CAPITA BALANCE OF PAYMENTS FROM THE INTERGOVERNMENTAL FINANCE POOL  
VIRGINIA LOCALITIES, 2022**

Virginia Locality	Total Expenditure	Ratio of Local IGFR from Virginia to Expenditure	Ratio of Local IGFR from Federal Government to Expenditure	Ratio of Local IGFR to Expenditure
Waynesboro	\$106,974,849	41.0%	14.4%	55.4%
Williamsburg	\$53,614,885	22.6%	16.1%	38.7%
Winchester	\$168,322,437	33.1%	15.2%	48.2%

Sources: Virginia Department of Taxation (2024), Virginia Auditor of Public Accounts (2024), and the Dragas Center for Economic Analysis and Policy. Localities ordered based on net contribution per capita.

Distributing the fiscal burden of local public services more fairly across the Commonwealth could improve public service standards, could reduce state taxes, or a mix of both. The overall quality of K-12 education in Virginia would likely improve as a result of the infusion of additional educational funding from locally raised revenues. Alternatively, an increase in property tax collections in net recipient localities would proportionally lower the requirement for intergovernmental transfers and could therefore be offset by an equal reduction in state income taxes. In this scenario, if net recipient counties were required to apply a reasonable property tax rate, households across Virginia could benefit from a reduction in the individual income tax rate.

**Greater local autonomy (including greater revenue decentralization) may have benefits for the Commonwealth.**

Despite the relatively typical intergovernmental fiscal picture in Virginia, the Commonwealth should be considered a relatively centralized state. As already discussed earlier, Virginia is a Dillon Rule state, which means that local governments only have the powers—including the taxing powers—that the state government explicitly grants them. The state has historically retained power over many functions at the state level: for instance, whereas in most states, local governments construct, own, and operate their own streets and roads, in Virginia, the vast majority of local roads are owned and maintained by the state. Similarly, as per the 1971 state constitution, while allowing local governments to serve as front-line providers of K-12 education, the state government plays an important role in setting standards and funding public education in the Commonwealth.

**However, Virginia’s status as a Dillon Rule state does not preclude the Commonwealth from empowering local governments with either greater functional responsibilities, with greater taxing powers, or both.**

Especially given the diversity of economic conditions within the Commonwealth, it is important that the governance structures within the state are able to respond to the different demands placed on the public sector within different regions or localities. If, for instance, local

communities in some part of the state prefer to have better public services—and are willing to pay for this themselves by raising local revenues—it would be appropriate to allow them to do so, as opposed to forcing the entire state to be subject to higher taxes. Greater decentralization of powers and functions from the state to the local level would likely enhance the economic efficiency and competitiveness of the state overall.

The current intergovernmental fiscal structure of the state does not appear to give local governments many options to do so, as the state constrains the set of local government revenue-raising powers to a relatively small set of revenue instruments beyond the real estate property tax. While the revenue options available to Virginia local governments have increased somewhat in the past few years (e.g., counties are permitted to collect a restaurant meals-tax without a local referendum), these revenue sources are not the types of broad-based taxes that would allow localities to raise substantial revenues without the risk of inefficiencies and distortions.

Given the considerable imbalance in the state’s net fiscal incidence, it would be prudent to consider whether Virginia local governments might benefit from greater revenue autonomy, for instance, through the introduction of a ‘piggyback’ local income tax (similar to the current income tax system in Maryland). Doing so could involve simultaneously lowering the state individual income tax by 1, 2, or 3 percentage points, while permitting county governments and independent cities to set a local income tax rate up to, say, 3%. Unlike the meals-tax or other minor local taxes, such a piggyback tax would not impose any administrative burden on county governments or additional compliance burden for Virginia residents, since it is simply collected by the Virginia Department of Taxation together with the state’s individual income tax. Such a potential reform would provide a state tax cut to all Virginians, while allowing local jurisdictions to determine their own preferred income tax rates, thus permitting them to increase the quality of their public services and/or reduce their reliance on property taxes or other—less efficient—local revenue options as they prefer.

## Concluding Remarks

Ensuring that governments provide value-for-money to their constituents requires a fiscal system where the overall benefits from public spending exceed the cost to taxpayers for funding these programs. While waste, fraud and abuse are often blamed for the perceived inefficiency of the public sector, fiscal redistribution is a much more significant cause of a mismatch between the benefits and costs provided by the public sector across taxpayers and localities.

The inherent aim of intergovernmental fiscal transfers is to achieve equitable access to local public services, including public education, by mitigating economic disparities across different regions and localities within the state. Yet, this has resulted in a situation where—in some counties and cities—the contributions made by taxpayers to the Commonwealth far exceed the funds that are returned to these communities. In other parts of the Commonwealth, the benefits from the intergovernmental fiscal transfer far exceed the contributions made by local taxpayers.

In the years ahead, a major political question will be whether the extent of intergovernmental redistribution is supported by the strength of the social contract in the Commonwealth. This is especially true to the extent that voters and politicians in some of the regions of the Commonwealth that are shown as major net recipients are advocating for lower taxation and a smaller role for the public sector while receiving generous support from taxpayers in other parts of the commonwealth.

As Virginia moves forward, it is imperative to continue exploring and implementing strategies that promote government efficiency, fiscal fairness, and the state's overall economic vitality. The imbalance in Virginia's net fiscal incidence revealed in this analysis calls for a thoughtful reassessment of the state's fiscal policies. Indeed, explicitly recognizing the redistributive aspects of different fields of public policy is an essential step towards achieving a more equitable and efficient allocation of public resources in Virginia. State officials should resist the temptation to solve all problems at the state level in a one-size-fits-all manner, which will inevitably result in further redistribution. Instead, consideration should be given to reforms that empower county and city governments—both with additional functional responsibilities, as well as with a commensurate increase in funding responsibilities and taxing powers—to allow for a more balanced and responsive fiscal landscape.

