

2025 GROWTH AND DIVERSIFICATION PLAN

OCTOBER 2025



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About the Authors

Michael Evans

Director of Business Intelligence
Hampton Roads Alliance

Michael Evans leads the Hampton Roads Alliance's Business Intelligence Division, delivering strategic research, economic analysis, and advisory services that drive regional growth, competitiveness, and investment attraction. His expertise spans workforce analytics, real estate strategy, industry competitiveness, and economic impact analysis. Michael has advised on projects representing over \$1 billion in capital investment and thousands of new jobs, helping position Hampton Roads as a premier location for business and talent.

Michael holds a Master of Public Administration from the University of North Carolina at Chapel Hill and a Bachelor's degree in Public Policy and Economics from William & Mary.

Nikki Johnson

Regional Economist
Hampton Roads Planning District Commission

Nikki Johnson serves as a regional economist, producing in-depth reports and presentations on the Hampton Roads economy, conducting forecasts and economic impact analyses for a variety of stakeholders, and maintaining a comprehensive data repository of socioeconomic indicators for the region. Her analysis supports public policy decisions, regional planning initiatives, and strategic investments across a range of socioeconomic topics.

Nikki holds a Master of Arts in Economics and a Bachelor of Science in Business Administration with a concentration in Economics from Old Dominion University. Her work has been featured in The Virginian-Pilot, Virginia Business, and WAVY-TV.

ODU Dragas Center for Economic Analysis and Policy

The Dragas Center for Economic Analysis and Policy at Old Dominion University conducts impactful, data-driven research on economic trends, industry performance, and regional competitiveness. Their analysis informs public policy, business strategy, and community development throughout Hampton Roads and Virginia.

The Dragas Center provided the data and foundational commentary for the **Economic Overview** section of this report. While the section has been adapted for this plan, the underlying data are drawn directly from their work.

Acknowledgements

We are excited to submit the required biennial update (2023–2025) of the GO Virginia Region 5 Growth and Diversification Plan. This year's update was prepared through collaboration among our key regional partners — the Hampton Roads Alliance, the Hampton Roads Planning District Commission (HRPDC), and the Dragas Center for Economic Analysis and Policy at Old Dominion University. The material in the report was reviewed, edited, and recommended by members of the Region 5 Council and staff of the Hampton Roads Executive Roundtable.

We especially want to acknowledge the creation of a truly collaborative region in recent years and thank the many individuals and organizations whose efforts made this possible. Leading the region's strategic direction and serving as the support organization for the GO Virginia Region 5 Council is the Hampton Roads Executive Roundtable, which combined the previous organizations Reinvent Hampton Roads and the Hampton Roads Business Roundtable. In addition, the Regional Organizations Presidents Council (ROPC) — formed to align 10 major economic development organizations for coordination — is also leading and coordinating key regional initiatives in alignment with this 2025 Growth and Diversification Plan.

For this report, many organizations played leadership roles in its development and review. Roundtable and GO Virginia Region 5 Council members provided input, review, and support. The ROPC contributed updates, review, and strategic comments, while the region's RED (Regional Economic Development) Team — comprised of local economic development directors and coordinated through the Hampton Roads Alliance — also provided insights and commentary. This broad, region-wide participation deepens understanding of the plan's strategic recommendations and strengthens ownership among stakeholders and leaders.

We would like to thank Michael Evans, Director of Business Intelligence at the Hampton Roads Alliance, and Nikki Johnson, Regional Economist at HRPDC, for their authorship of the Plan. We also thank Dr. Bob McNab and Dr. Vinod Agarwal for their data analysis and insights. We extend our appreciation as well to the members of the GO Virginia Region 5 Council for their dedication to this important work supporting long-term economic growth and sustainability for our region. Finally, we continue to honor GO Virginia co-founder and visionary John O. “Dubby” Wynne, who dedicated his life to advancing economic prosperity in Region 5 and across the Commonwealth of Virginia. We remain committed to ensuring that his legacy continues.

Sincerely,



Thomas R. Frantz

Chair

GO VA Region 5



Lynn Taylor, Vice-Chair

Vice Chair

GO VA Region 5



Nancy Grden

President and CEO

Hampton Roads

Executive Roundtable

Executive Summary

Hampton Roads enters this next phase of growth from a position of strength. The region has materially improved its collaboration and connectivity, aligning business, government, and education partners to accelerate innovation and productivity. This progress reflects unprecedented collaboration among regional organizations such as the Hampton Roads Executive Roundtable, Hampton Roads Alliance, Hampton Roads Planning District Commission, and Hampton Roads Workforce Council, among others.

With record levels of private investment, expanded workforce programs, and transformative infrastructure projects, Hampton Roads is prepared to capture emerging opportunities in defense modernization, energy security, global logistics, and artificial intelligence.

Good things are happening:

- Over **\$3 billion in private investment** and **nearly 8,000 jobs** since 2021
- **Largest infrastructure project** in Virginia's history: HRBT Expansion
- Jefferson Lab's **\$300M - \$500M High Performance Data Facility** to power U.S. research
- Norfolk International Airport's **\$400M modernization**, top 13% U.S. ranking
- **Regional collaboration** driving key initiatives and strategic plans

These projects and initiatives are nationally significant. The Hampton Roads Bridge-Tunnel (HRBT) Expansion is the largest infrastructure project in Virginia's history and among the largest infrastructure projects in the United States, increasing mobility and connectivity across the region. Norfolk International Airport is undertaking its most substantial modernization since 1974, a multi-phase effort to enhance the passenger experience, improve airline operations, and strengthen the Airport Authority. Serving nearly 5 million passengers and more than 75,000 flight operations in 2024, Norfolk Airport ranks in the top 13% of U.S. airports. Alongside new subsea cables in Virginia Beach and Jefferson Lab's forthcoming High Performance Data Facility, these investments are building a digital and physical backbone that strengthens Hampton Roads' global competitiveness.

These achievements underscore the region's momentum, but sustaining it will require tackling persistent challenges. GO Virginia Region 5 remains a strategic economic driver for Virginia and anchored by its unmatched concentration of military assets, deepwater port infrastructure, and world-class shipbuilding capabilities. While these strengths continue to define the region, slow population and wage growth, as well as structural workforce constraints highlight the need for targeted action.

Historically, high reliance on federal spending has been viewed as a vulnerability, exposing the economy to shifts in procurement and budget cycles. Today, however, shifting national priorities toward defense modernization, energy security, and resilient supply chains position this federal presence as a powerful platform for innovation, private sector expansion, and economic diversification. The 2025 update to the Region 5 Growth and Diversification Plan builds on this evolving landscape, presenting a data-driven, innovation-focused roadmap to address structural challenges, leverage emerging opportunities, and unlock the region's full growth potential.

“Hampton Roads has made measurable strides in collaboration, connectivity, innovation, and productivity over the past five years, creating a stronger and more competitive regional economy. By aligning partners, strengthening networks, and leveraging new ideas, the region is now operating at a higher level and seeing tangible results.”

Tom Frantz, Chair, GO Virginia Region 5

PLAN PURPOSE AND FRAMEWORK

This Growth and Diversification Plan serves as a strategic roadmap to guide Region 5’s economic transformation over the next two years. Aligned with GO Virginia’s core mission to grow and diversify Virginia’s economy by supporting high-wage, traded-sector jobs, the plan identifies the region’s most promising growth opportunities and lays out actionable strategies across four state-defined investment priorities that will grow the region’s target industry clusters:

1. **Workforce/Talent Development**
2. **Site Development and Infrastructure**
3. **Cluster Scale-Up**
4. **Entrepreneurship and Innovation**

Grounded in robust analysis of economic and labor market trends, informed by employer demand, stakeholder engagement, and federal alignment opportunities, the plan sharpens Region 5’s focus on high-impact clusters, prioritizes shovel-ready site investments, and recommends targeted programs to strengthen competitiveness, equity, and innovation.

REGIONAL ECONOMY AND TARGET INDUSTRY OVERVIEW

Region 5’s economy continues to expand, supported by record levels of employment, wages, and private investment. Between 2021 and 2024, the region added nearly 8,000 jobs and attracted \$3 billion in private investment, driven by growth in advanced manufacturing, logistics, and defense-related technologies.

The region’s gross domestic product (GDP) reached a record \$103.7 billion in 2023, marking the strongest post-recession expansion in nearly two decades.

- **Employment:** Total employment reached 851,480 in 2024, exceeding pre-pandemic levels.
- **Wage Growth:** Real wages increased 2.2% annually since 2019, outpacing the previous decade’s growth of 0.5%.
- **Business Formation:** The number of establishments rose from 37,899 in 2019 to 38,956 in 2022, signaling renewed entrepreneurial momentum.

- **Investment Activity:** More than 7,967 jobs and \$3.02 billion in investment were announced since 2021 across priority clusters.

This data reflects measurable economic resilience and diversification. The following sections detail performance across Region 5's eight priority clusters, which together represent the foundation of high-wage traded-sector employment in Hampton Roads.

INDUSTRY CLUSTER PRIORITIZATION AND SWOT ANALYSIS

The plan continues to prioritize the same eight industry clusters identified in the 2023 Growth and Diversification Plan, reflecting their sustained importance to the region's economic competitiveness and alignment with both state and federal priorities.

- **Advanced Manufacturing**
- **Cybersecurity, Data Analytics, and Modeling & Simulation**
- **Energy Security**
- **Life Sciences**
- **Port Operations, Logistics, and Warehousing**
- **Ship Repair and Shipbuilding**
- **Uncrewed Systems**
- **Water Technologies**

Each cluster is assessed using a detailed SWOT framework, identifying competitive strengths, such as a shipbuilding employment location quotient of 44.7 and life sciences wages exceeding \$115,000, as well as growth barriers, including low employment concentration in emerging sectors and targeted infrastructure needs.

RECOMMENDED STRATEGIC INITIATIVES AHEAD

Economic development organizations within Region 5 have collaborated to identify and align two strategic initiatives that will serve as cornerstones of the region's action plan moving forward:

- The ***Hampton Roads Regional Investment Playbook***, led by the Hampton Roads Alliance, which advances transformational projects to grow key industry sectors.
- The ***Federal Funding/Policy Risks and Opportunities Initiative***, led by the Hampton Roads Executive Roundtable, which focuses on leveraging federal investment in defense, secure energy, uncrewed systems/counter-UAS, logistics, and related sectors.

Both initiatives are designed to capitalize on the region's unique assets and position it to respond to global forces driving remilitarization, reshoring of national capabilities, and energy security. Launched in mid-2025, they will continue to evolve in the years ahead.

Hampton Roads is also serving as the pilot region for ***Start in Hampton Roads***, a first-of-its-kind talent attraction and retention initiative led by the Hampton Roads Chamber, Hampton Roads Executive Roundtable, Hampton Roads Workforce Council, and the Virginia Economic Development Partnership (VEDP). This collaborative effort is evolving into a powerful regional branding and talent

attraction platform, showcasing the region’s distinctive industries, coastal geography, rich history, and vibrant communities.

Other selected major activities are summarized in the strategies that follow:

STRATEGY 1: WORKFORCE/TALENT DEVELOPMENT

Addressing workforce gaps is a central priority. Significant shortages still exist across skilled trades, technology, and middle-skill occupations in all priority clusters. Recommended strategies include:

- Scale proven regional training programs, including the Regional Maritime Training System (RMTS), Maritime Entry to Employment Training (MEET), and Coastal Virginia Manufacturing Apprenticeship Program (COVA MAP).
- Expand apprenticeships, internships, and other work-based learning opportunities.
- Align workforce initiatives with federal priorities in energy security, defense supply chains, and our industry clusters.
- Leverage the *Start in Hampton Roads* initiative to attract and retain talent, showcasing regional career, lifestyle, and entrepreneurial opportunities.
- Build talent pathways based upon the recently completed GO Virginia Region-funded Talent Pathway Initiatives (TPI) for cybersecurity/data analytics and uncrewed systems/aerospace.

STRATEGY 2: SITE DEVELOPMENT AND INFRASTRUCTURE

Most of Region 5’s large-acreage sites remain below Tier 4 readiness, limiting competitiveness for high-value projects. Recommendations include:

- Advance priority sites to Tier 4 and 5 status via the Virginia Business Ready Sites Program (VBRSP).
- Coordinate infrastructure improvements along strategic corridors such as Suffolk, Chesapeake, and the I-64 Innovation Crescent.
- Leverage the Eastern Virginia Regional Industrial Facility Authority (EVRIFA) and federal programs for shared-use infrastructure.

STRATEGY 3: CLUSTER SCALE-UP

Region 5’s capacity to scale key industry clusters is constrained by infrastructure gaps and limited alignment with federal investment priorities. Recommendations include:

- Advance *Hampton Roads Regional Investment Playbook* initiatives to expand core and emerging clusters in line with federal spending priorities.
- Support infrastructure required for national AUKUS Pillar 1 and Pillar 2 initiatives.
- Increase capacity at major regional assets, such as Jefferson Lab, and pursue designation of federal innovation districts.

STRATEGY 4: ENTREPRENEURSHIP AND INNOVATION

Region 5's entrepreneurial ecosystem shows stronger stakeholder coordination than many peer regions, but challenges remain in cohesive storytelling, funding pipelines, and advancing region-wide initiatives to support scale-up. Recommendations include:

- Leverage Innovate Hampton Roads' statewide and national marketing reach to boost the visibility and alignment of regional Entrepreneurial Support Organizations such as 757 Collab, Black BRAND, Neptune Shield, the Hampton Roads Small Business Development Center (SBDC).
- Launch a regional Scale-Up Concierge to connect second-stage firms with capital, space, and workforce resources.
- Develop dual-use commercialization pathways aligned with DoD needs, including the newly launched "757 Defend" initiative by 757 Collab and the Navy Mid-Atlantic Tech Bridge.

PLANNING PROCESS AND STAKEHOLDER ENGAGEMENT

This plan reflects broad engagement with public, private, educational, and nonprofit stakeholders across Hampton Roads. It is the product of a collaborative effort between the Hampton Roads Executive Roundtable, Hampton Roads Alliance, Hampton Roads Planning District Commission, and Old Dominion University's Dragas Center for Economic Analysis and Policy. Together, these organizations combined research, strategy, and implementation expertise to ensure the plan reflects both regional priorities and national opportunities.

The process builds upon initiatives funded by GO Virginia, labor market data, and the Hampton Roads Regional Investment Playbook, aligning local strategies with the National Defense Industrial Strategy and other federal objectives. The Hampton Roads Regional Organizations Presidents Council (ROPC) continues to play a unique and invaluable role in coordinating leadership, shaping policy priorities, and advancing initiatives that position the region for long-term success.

"Hampton Roads is on a powerful upward trajectory, leveraging world-class assets, its innovation-driven economy, and a collaborative spirit that position our region for sustained national and global leadership."

**Nancy Grden, President & CEO
Hampton Roads Executive Roundtable**

LOOKING AHEAD

Region 5's 2025 Growth and Diversification Plan builds on recent progress to advance a proactive, innovation-led economic model. By aligning investments with the region's competitive strengths in defense, energy, aerospace, and logistics, Region 5 can reinforce its position as one of the nation's

foremost military metro areas while accelerating growth in high-value industries that strengthen supply chain resilience, enhance energy security, and foster technology-driven innovation.

The strategies outlined here provide a foundation for targeted action that is supported by measurable outcomes, aligned with state and federal opportunities, and designed to position Hampton Roads as a national leader in connectivity, collaboration, and competitiveness. The following Economic Overview examines the region's demographic, economic, and workforce trends in detail, offering the context necessary to understand both the opportunities and challenges shaping Region 5's economic trajectory. This analysis informs the strategies that follow and ensures future investments are built on a shared understanding of the region's current position and potential.

Economic Overview

KEY TAKEAWAYS

The following key insights summarize Region 5's current economic position. They highlight both the progress achieved in recent years and the structural challenges that remain, providing the context for the detailed analysis that follows in the Economic Overview.

1. **Economic Growth at Record Highs:** Region 5's GDP, employment, and wages are all at historic levels, reflecting steady post-pandemic recovery and resilience.
2. **Defense as a Platform for Diversification:** Tens of billions in Department of Defense spending anchor the economy, creating unmatched stability while also fueling opportunities to expand into adjacent sectors leveraging dual-use technologies, such as advanced manufacturing, cybersecurity, logistics, and energy security.
3. **Population Growth Lagging:** Hampton Roads' population growth trails state and national averages, reinforcing the importance of strengthening talent attraction and retention strategies that can build a larger, more competitive workforce.
4. **Wage Growth Below National Benchmarks:** Wages are rising, though regional growth has been slower than U.S. averages, highlighting the opportunity to expand high-value, higher-wage industries.
5. **Workforce Demand Outpacing Supply:** Priority clusters employ approximately 123,000 workers today and will need 27,000 to 45,000 additional workers over the next decade when both growth and replacement needs are considered.
6. **Persistent Talent Gaps:** Skilled trades, technicians, and STEM professionals remain in highest demand, underscoring the opportunity to scale internships, apprenticeships, and career pathways that can close gaps and strengthen the pipeline.
7. **Small and Young Firms Driving Job Growth:** For the first time in years, Region 5 is outperforming national averages in net job creation by small and young firms, signaling a more dynamic entrepreneurial ecosystem.
8. **Innovation Capacity Still Limited:** Valuable research assets like Jefferson Lab, William & Mary, and Old Dominion University (ODU) provide a strong foundation for innovation. The next opportunity lies in defining a cohesive innovation strategy and strengthening commercialization pathways, particularly for dual-use technologies.
9. **Site Readiness as a Competitive Imperative:** To capture large-scale investment, Hampton Roads must accelerate site readiness efforts, aligning with Virginia Business Ready Sites Program (VBRSP) standards and ensuring infrastructure and utility capacity keep pace.
10. **Emerging Opportunities in Diversification:** Life sciences, water technologies, energy security, and digital infrastructure (subsea cables, data centers, AI) present pathways to strengthen resilience, attract talent, and grow higher-wage jobs.

Building on these key takeaways, the following Economic Overview provides a deeper look at the region's performance, highlighting both areas of strength and vulnerabilities that will shape Region 5's growth trajectory.

REGIONAL ECONOMIC CONTEXT

A primary objective of the 2025 biennial update to Region 5's Growth and Diversification Plan is to evaluate current economic performance, and identify strengths and vulnerabilities to support future growth. Region 5 experienced its fourth consecutive year of expansion in 2024, with GDP, nonfarm payrolls, and total employment at record highs. Inflation-adjusted household income and wages also increased (though these gains were tempered by continued outmigration to other parts of Virginia) and U.S. federal investment, particularly Department of Defense (DoD) spending, remains a key economic anchor, generating billions in wages and supporting thousands of military and civilian personnel.

Historically, the regional economy has depended on three core drivers: DoD spending, the Port of Virginia, and travel and tourism. Between the Great Recession (2007 to 2009) and the COVID-19 recession (2020), Region 5 consistently trailed state and national benchmarks of economic growth. While the initial Growth and Diversification Plan called for reducing reliance on a narrow set of drivers, the current national focus on strengthening the defense industrial base underscores the need to leverage existing defense assets while advancing complementary clusters to promote resilience and diversification.

Recent performance indicators suggest progress. Employment reached an all-time high in 2024, employer-reported job creation has rebounded since the pandemic, and inflation-adjusted wages have surpassed 2019 levels. Still, demographic headwinds, such as slow population growth and outmigration, persist, and uncertainty around future federal budgets reinforces the need to continue investing in clusters aligned with both federal missions and regional strengths.

Key findings from this assessment indicate that while Region 5 continues to trail the Commonwealth and nation in overall economic growth, progress is emerging in several areas. Economic activity remains concentrated among a relatively small number of large firms, workforce development in high-growth sectors has not kept pace with demand, and the region continues to operate without a fully defined innovation or marketing strategy. One notable shift has occurred in recent years. Small and young firms are now driving net job creation at a rate that outpaces national trends, marking a significant departure from past patterns.

Region 5 has begun to make measurable progress in scaling targeted clusters and advancing diversification, though sustained momentum will be essential to achieving long-term resilience. The following sections provide an objective analysis of the region's economic landscape in support of that goal.

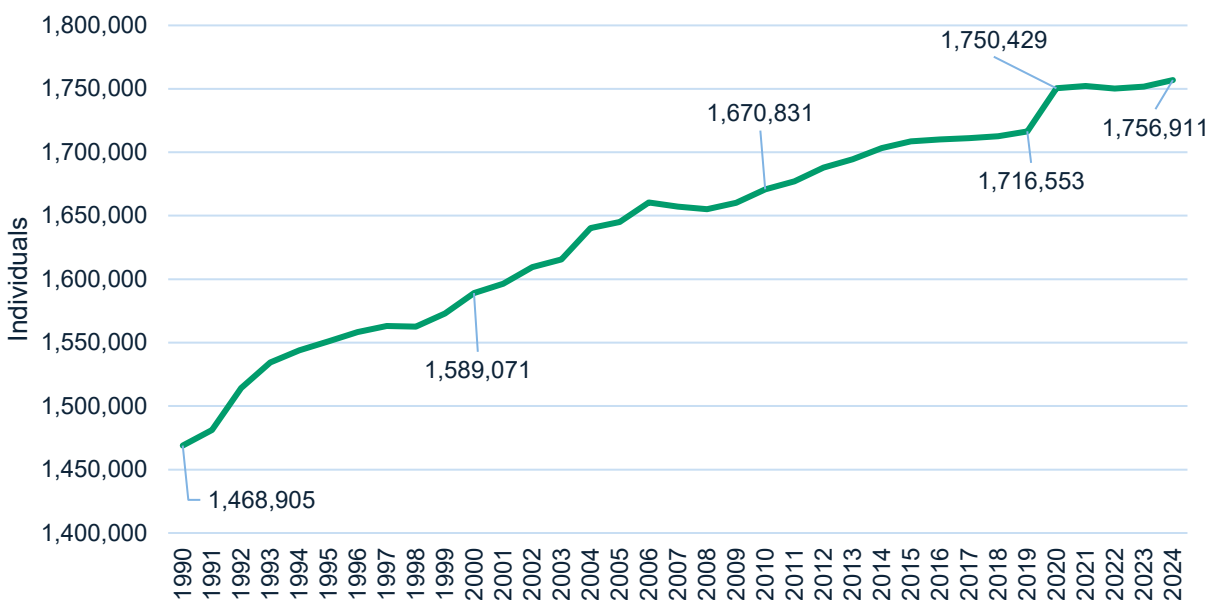
POPULATION GROWTH

Key Points:

- *Region 5's population has grown more slowly than Virginia and the U.S. for three decades, adding fewer than 7,000 residents since 2020.*
- *Domestic outmigration remains the biggest drag, though international migration reached its highest level since 2015.*
- *Population stagnation creates long-term workforce pressures but also underscores the opportunity to improve retention and attraction strategies.*

Population growth is a key indicator of economic vitality, shaping workforce supply, fiscal resources, and overall competitiveness. Region 5 has experienced consistent but slowing growth since 1990, adding fewer than 7,000 residents between 2020 and 2024, an annual rate of just 0.1%, which is among the slowest in Virginia.¹ Over the past three decades, the region's share of Virginia's population has declined steadily, falling from nearly one-quarter in 1990 to less than 20% in 2024.²

Total Population in Region 5: 1990 – 2024

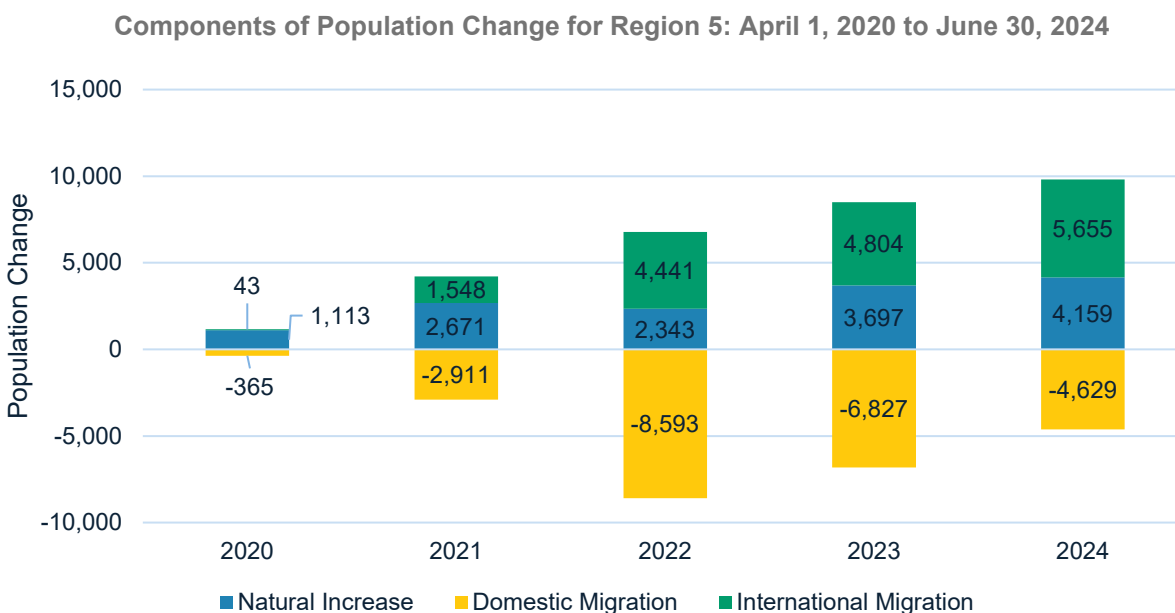


Source: United States Census Bureau

These trends reflect two structural challenges: persistent domestic outmigration and limited natural increase. Although international migration has strengthened in recent years, it has not been enough to offset losses from residents moving to other parts of Virginia and the United States. Stagnant population growth contributes to workforce shortages, slows revenue growth, and raises concerns about long-term competitiveness.

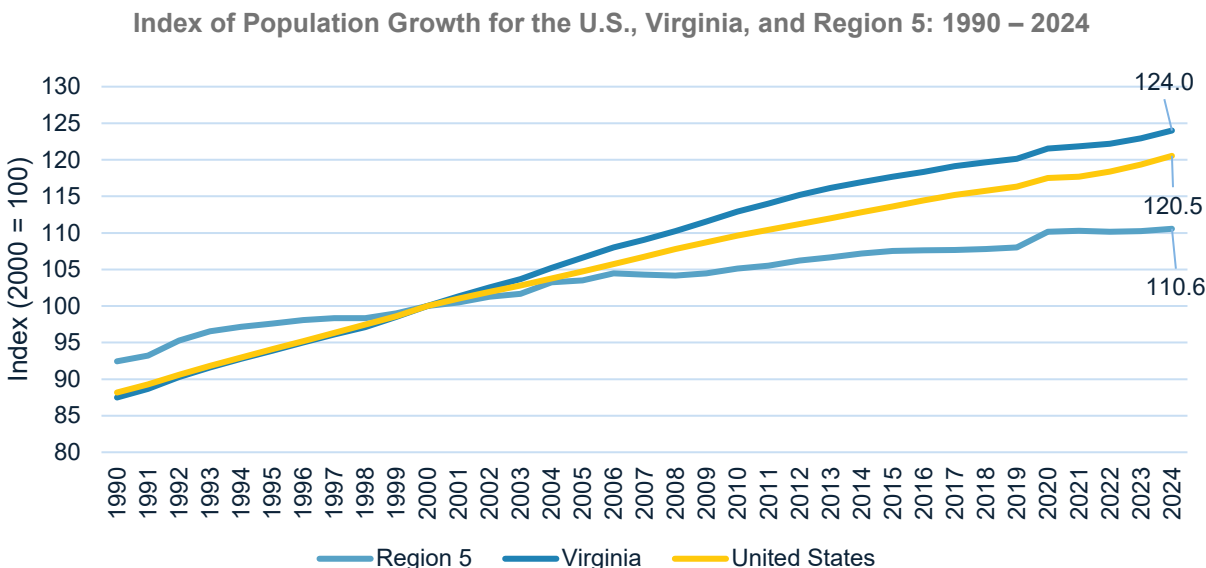
¹ **Annual growth rates:** Region 5 = 0.8% (1990-1999), 0.5% (2000-2009), 0.3% (2010-2019), 0.1% (2020-2024). Virginia = 1.3% (1990-1999), 1.2% (2000-2009), 0.7% (2010-2019), 0.5% (2020-2024). U.S. = 1.2%, 1.0%, 0.7%, 0.5% for the same periods.

² **Share of Virginia's population:** Region 5 = 23.6% (1990), 22.4% (2000), 20.8% (2010), 20.3% (2020), 19.9% (2024).



Source: U.S. Census Bureau

At the same time, positive contributors remain. International migration reached its highest level since 2015 in 2024 and natural increase continues to add residents annually.³ These dynamics highlight both the challenge and opportunity. While domestic outmigration remains a headwind, the region can leverage its assets (defense spending, port infrastructure, and a growing base of international migrants) to strengthen retention and attraction strategies. A detailed breakdown of historical growth rates, migration flows, and comparisons to other GO Virginia regions is provided in Appendix A.



Source: United States Census Bureau

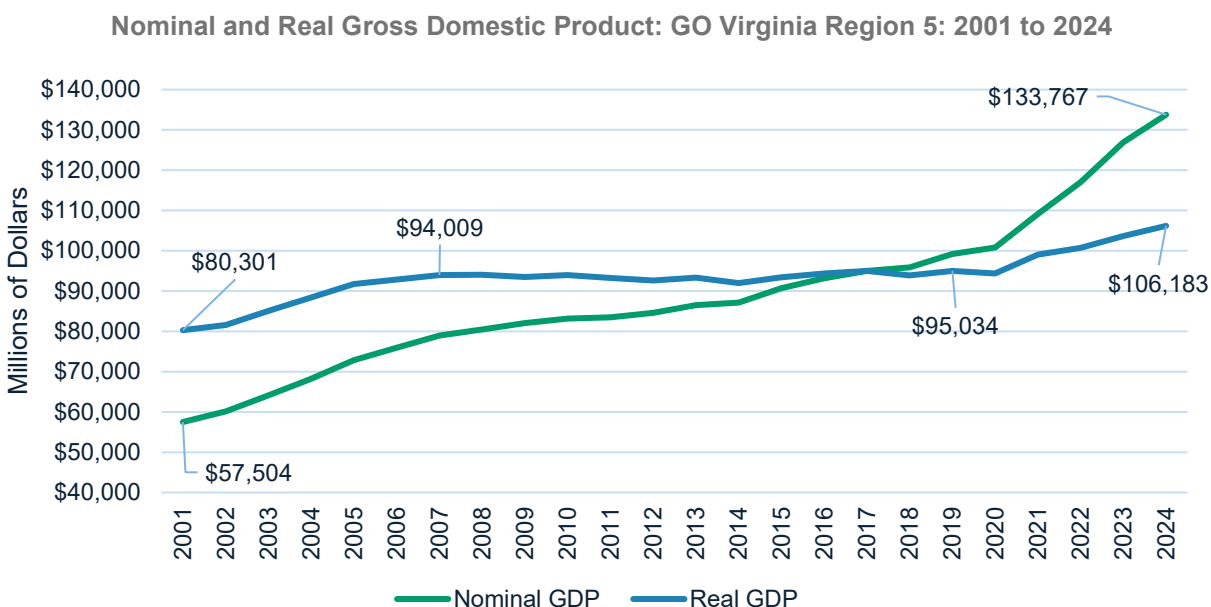
³ **Migration components:** From 2010 to 2019, +78,144 natural increase, +36,675 international migration, and -66,007 domestic migration; From 2020 to 2024, +13,983 natural increase, +16,491 international migration, and -23,325 domestic migration.

GROSS DOMESTIC PRODUCT

Key Points:

- Region 5's GDP reached a **record \$103.7 billion in 2023**, but its share of Virginia's economy declined from 19.8% in 2010 to 17.3% in 2023.
- Post-pandemic growth has been the **strongest since before the Great Recession**, though it still trails Virginia and the U.S.
- Economic activity is increasingly concentrated in the region's largest cities, led by Virginia Beach, Norfolk, and Newport News.

Gross Domestic Product (GDP) measures the total value of goods and services produced in the region and remains a key indicator of economic performance. Region 5's GDP reached an estimated \$103.7 billion in 2023, up from \$94.0 billion in 2010, though its share of statewide output fell from 19.8% to 17.3% over the same period.⁴



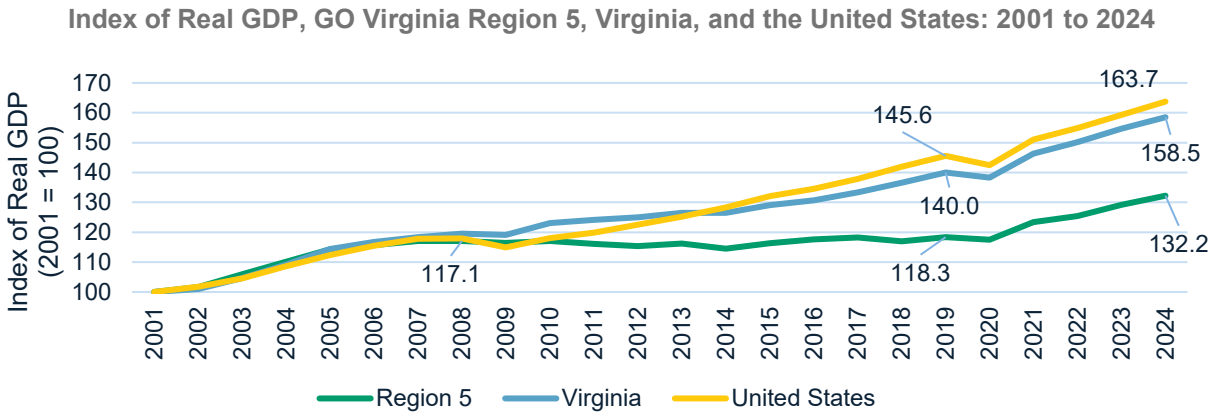
Source: U.S. Bureau of Economic Analysis

The region's economy has shown two distinct patterns over the past two decades. Between 2007 and 2019, real GDP was essentially flat, reflecting the lasting effects of the Great Recession, federal budget sequestration, and discretionary spending caps. In contrast, the post-pandemic period marked a clear acceleration: from 2021 to 2024, real GDP grew by an average of 2.3% annually, the longest sustained expansion since the early 2000s.⁵

⁴ **GDP:** Region 5 GDP was \$94.0B (2010, 19.8% of Virginia) and grew to \$103.7B (2023, 17.3% of Virginia). Virginia GDP was \$475.5B (2010) and grew to \$600.1B (2023). U.S. GDP was \$15.2T (2010) and grew to \$26.3T (2023)

⁵ **Real GDP growth:** Region 5 = 0.1% avg. (2007-2019); 2.3% avg. (2021-2024). Virginia = 1.4% avg. (2007-2019); 2.8% avg. (2021-2024). U.S. = 1.6% avg. (2007-2019); 3.0% avg. (2021-2024).

Despite these gains, Region 5 continues to trail Virginia and the United States. Since 2019, regional real GDP has expanded by 13.9%, compared with 18.5% statewide and 18.1% nationally.⁶ Growth has also been uneven across the Commonwealth. While Hampton Roads outperformed some regions, such as Southside and Southwest, it fell behind Northern Virginia and Central Virginia, where output growth has been more than double Region 5's rate.⁷



Source: U.S. Bureau of Economic Analysis, Dragas Center for Economic Analysis and Policy

Economic activity within Region 5 is increasingly concentrated in its largest cities. By 2023, Virginia Beach, Norfolk, and Newport News together accounted for nearly 59% of the region's total GDP, while the top seven cities comprised almost 87%.⁸ This concentration underscores the role of the region's urban centers as primary drivers of economic output, even as smaller localities face more modest or negative growth trends. Additional detail on GDP performance by GO Virginia region and locality is available in Appendix B.

Location	2010	Share of 2010 GDP	2023	Share of 2023 GDP	Estimated Annual Growth
Accomack County	\$2,874	3.1%	\$1,527	1.5%	-4.7%
Isle Of Wight County	\$1,968	2.1%	\$1,616	1.6%	-1.5%
Northampton County	\$555	0.6%	\$488	0.5%	-1.0%
Chesapeake City	\$9,949	10.6%	\$11,626	11.2%	1.2%
Hampton City	\$7,070	7.5%	\$6,965	6.7%	-0.1%
Newport News City	\$11,333	12.1%	\$15,778	15.2%	2.6%
Norfolk City	\$22,177	23.6%	\$21,207	20.5%	-0.3%

⁶ Real GDP change 2019 to 2024: Region 5 = +13.9%; Virginia = +18.5%; U.S. = +18.1%.

⁷ Average annual real GDP growth 2010 to 2023: Region 5 = 0.8%; Northern Virginia (Region 7) = 2.7%; South Central Virginia (Region 4) = 2.5%; Virginia statewide = 1.7%; U.S. = 2.1%.

⁸ GDP concentration (2023): Virginia Beach = 23.2%; Norfolk = 20.5%; Newport News = 15.2%; Chesapeake = 11.2%; Hampton = 6.7%; Portsmouth = 5.9%; Suffolk = 4.2%. Combined = 86.9% of Region 5 total.

Portsmouth City	\$5,580	5.9%	\$6,138	5.9%	0.7%
Suffolk City	\$3,945	4.2%	\$4,390	4.2%	0.8%
Virginia Beach City	\$20,351	21.7%	\$24,019	23.2%	1.3%
James City + Williamsburg	\$4,642	4.9%	\$6,084	5.9%	2.1%
Southampton + Franklin	\$741	0.8%	\$820	0.8%	0.8%
York + Poquoson, VA	\$2,784	3.0%	\$3,036	2.9%	0.7%
Region 5	\$93,970	---	\$103,695	---	0.8%

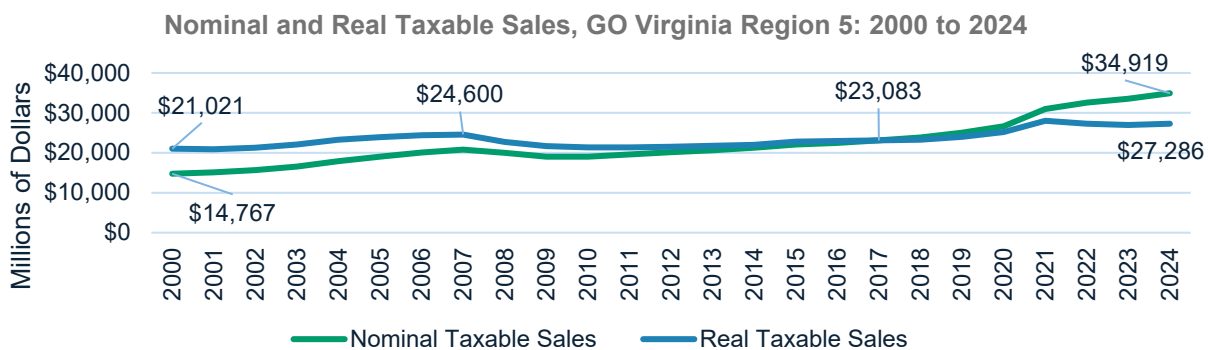
TAXABLE SALES

Key Points:

- Real taxable sales reached a record **\$28.0 billion in 2021** before moderating to **\$27.3 billion in 2024**.
- Growth from 2020 to 2024 averaged **2.0% annually**, stronger than the long-term trend of 0.4% (2000-2009) and 1.3% (2010-2019).
- Region 5's trajectory closely tracks Virginia overall, though statewide declines in 2022 to 2023 were less severe.

Taxable sales provide a higher-frequency indicator of economic activity based on consumer spending. While not a complete measure of output, these data are updated monthly and offer timely insight into regional trends.

In Region 5, real taxable sales rose from \$21.0 billion in 2000 to \$24.6 billion in 2007 before falling to \$21.7 billion during the Great Recession. After a decade of modest growth averaging 0.4% annually from 2000 to 2009, sales increased at a stronger 1.3% pace from 2010 to 2019, reaching \$24.0 billion by the end of the decade.⁹

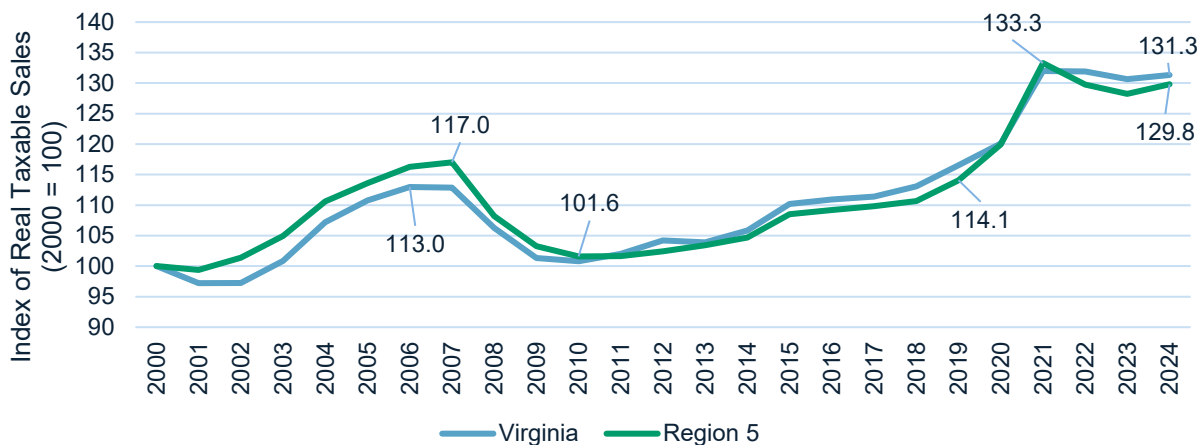


Source: Virginia Tax and the Weldon Cooper Center for Public Service

⁹ Average annual growth: Region 5 = 0.4% (2000-2009), 1.3% (2010-2019), 2.0% (2020-2024). Virginia = 0.3% (2000-2009), 1.2% (2010-2019), 2.3% (2020-2024). U.S. retail sales proxy (Census Advance Retail Sales) = 0.2%, 1.5%, 2.9% for the same periods.

The post-pandemic period has been more dynamic. Real taxable sales peaked at \$28.0 billion in 2021 before declining in 2022 and 2023, ultimately stabilizing at \$27.3 billion in 2024.¹⁰ Even with the downturn, sales expanded by 2.0% annually between 2020 and 2024, outpacing the prior two decades.

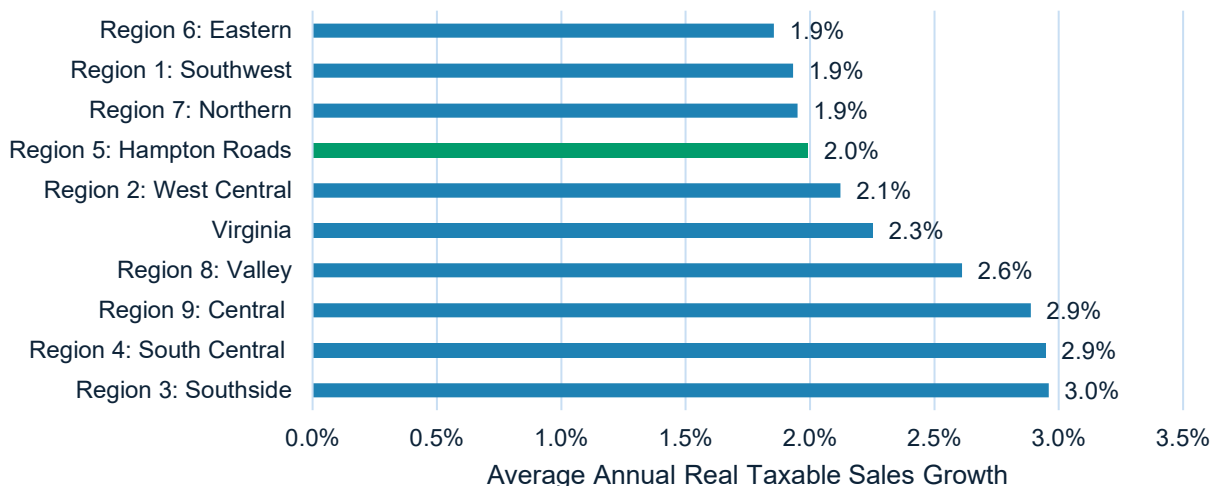
Real Taxable Sales in Go Virginia Region 5 and Virginia: 2000 – 2024



Source: Virginia Tax and the Weldon Cooper Center for Public Service

Regional trends largely mirror those of the Commonwealth. By 2010, Region 5's real taxable sales were 1.6% higher than in 2000, compared with 0.8% statewide. From 2010 to 2019, both Region 5 and Virginia grew steadily before reaching a shared peak in 2021. The subsequent decline was less pronounced statewide, underscoring slightly stronger resilience at the state level.¹¹

Average Annual Rate of Real Taxable Sales Growth, GO Virginia Regions and Virginia: 2020 – 2024



¹⁰ **Real taxable sales:** Region 5 = \$21.0B (2000), \$24.6B (2007), \$21.7B (2009), \$24.0B (2019), \$25.2B (2020), \$28.0B (2021, peak), \$27.3B (2024).

¹¹ **Real taxable sales, change since 2000:** Region 5 = +1.6% (2010), Virginia = +0.8% (2010). Post-pandemic: 2021 peak followed by -2.5% (Region 5) vs. -1.4% (Virginia) through 2023.

Source: Virginia Tax and the Weldon Cooper Center for Public Service

DEFENSE SPENDING, MILITARY EMPLOYMENT, AND FEDERAL EMPLOYMENT

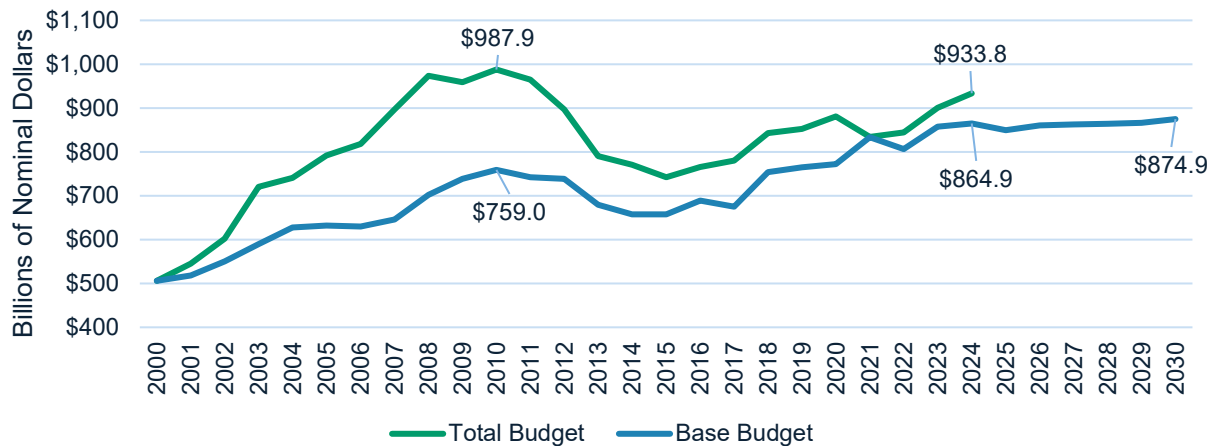
Key Points:

- DoD spending in Hampton Roads nearly **doubled between 2000 and 2012**, rebounded after sequestration, and reached **\$28.6 billion in 2024**.
- Military employment data remain inconsistent, but ACS estimates suggest an upward trend since 2011, aligning with Navy figures.
- Federal civilian wages remain **significantly higher than private-sector wages**, with a **1.6-to-1 replacement rate** highlighting their outsized impact.

Defense spending and federal employment have long served as foundational drivers of economic activity in Region 5, shaping its workforce, industry base, and stability.

DoD appropriations increased significantly in the early 2000s, with direct spending in Hampton Roads nearly doubling from \$10.0 billion in 2000 to \$19.8 billion in 2012. Spending plateaued during sequestration but rebounded strongly after 2019, reaching \$28.6 billion in 2024.¹² While the Department of Defense's 2025 to 2029 Future Years Defense Program (FYDP) anticipates higher baseline funding, the local impact will depend on shifting national priorities, including shipbuilding, maintenance, and research.

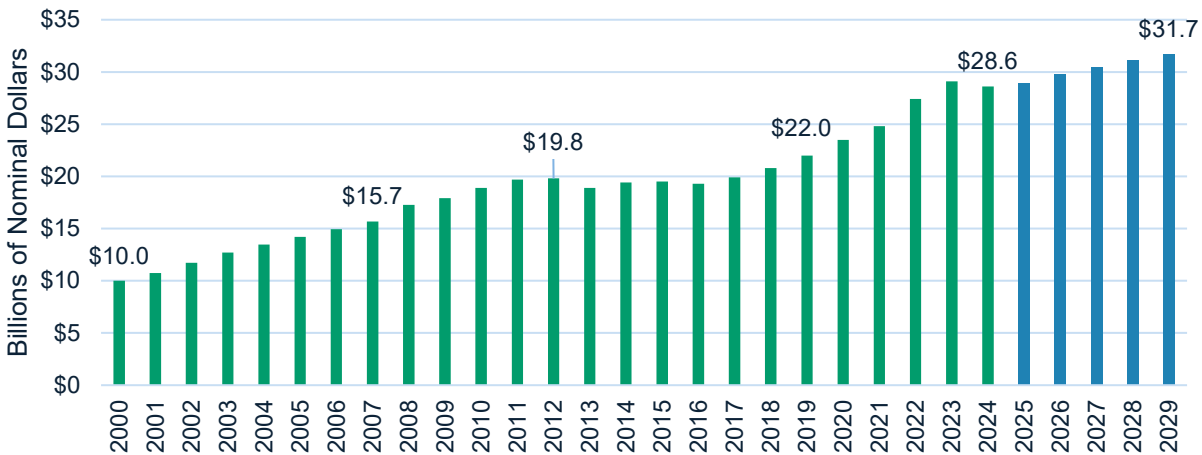
Nominal Department of Defense Base-Budget Funding, Billions of Nominal Dollars: 2000 to 2030



Sources: Congressional Budget Office (2024), Long-Term Implications of the 2025 Future Years Defense Program and Dragas Center for Economic Analysis and Policy

¹² DoD spending in Hampton Roads: \$10.0B (2000), \$19.8B (2012), \$22.0B (2019), \$28.6B (2024). Source: CBO (2024) Long-Term Implications of the 2025 FYDP; Dragas Center.

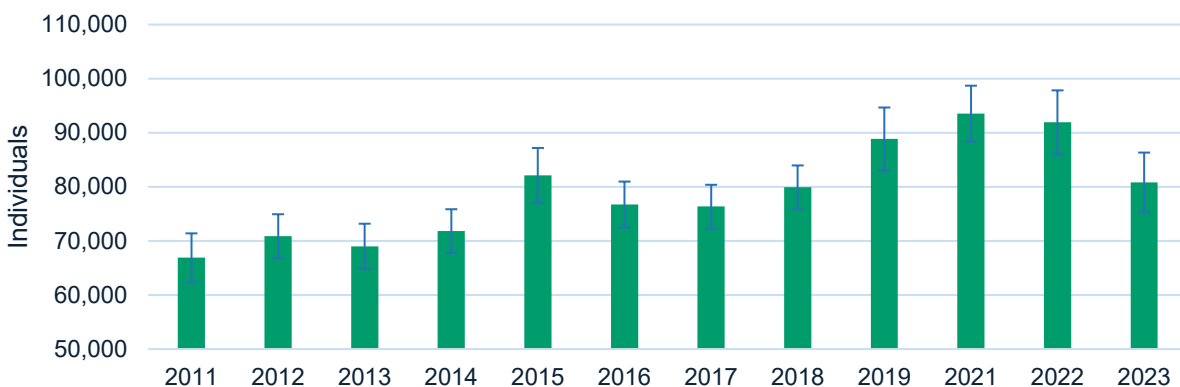
Nominal Direct Department of Defense Spending in Hampton Roads, Billions of Nominal Dollars: 2000 to 2029



Sources: Congressional Budget Office (2024), Long-Term Implications of the 2025 Future Years Defense Program and Dragas Center for Economic Analysis and Policy

Military employment estimates present ongoing challenges. Revisions by the Bureau of Economic Analysis and Defense Manpower Data Center produced apparent declines after 2016, largely due to data assignment challenges with naval vessels. More reliable American Community Survey estimates suggest employment rose from 66,889 in 2011 to 80,835 in 2023, an increase of roughly 21%, consistent with internal Navy reports.¹³

Employment in the Armed Services, Hampton Roads: 2011 to 2023



Source: United States Census Bureau, American Community Survey 1-Year estimates

Compensation data highlight the scale of the military's contribution. Using conservative base pay estimates, military wages in Hampton Roads totaled \$4.2 billion in 2023. Federal civilian employment added another \$5.4 billion, bringing the combined total to \$9.6 billion.¹⁴ Although base pay excludes

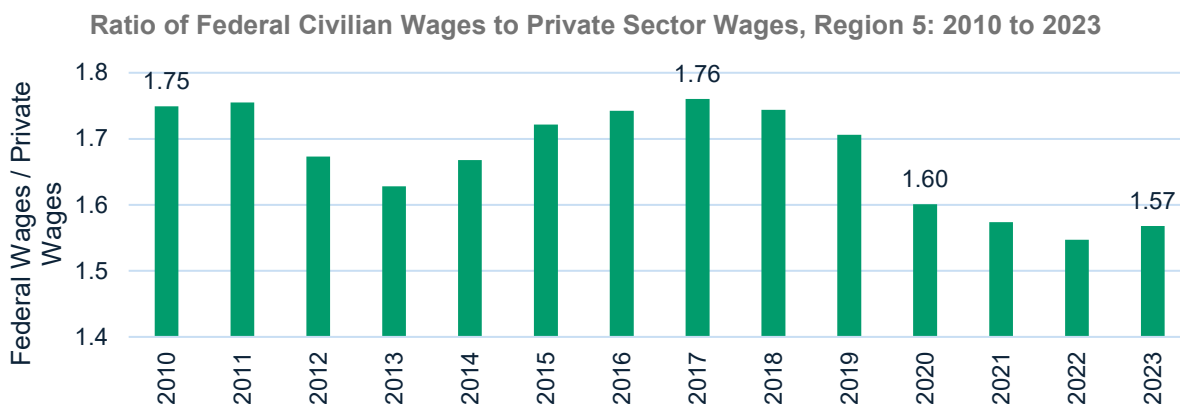
¹³ **Military employment, Hampton Roads:** ACS estimates = 66,889 (2011, MOE $\pm 4,503$) to 80,835 (2023, MOE $\pm 5,497$). Increase $\approx +20.8\%$. Navy internal data confirm growth between FY2011 and FY2021. Source: U.S. Census Bureau, ACS 1-Year Estimates; U.S. Navy.

¹⁴ **Military wages:** \$4.2B in Hampton Roads (2023, base pay only). Federal civilian wages: \$5.4B (2023). Combined = \$9.6B. Federal civilian employment = 59,370 (2023). Federal wages grew 60.7% since 2010, military base pay rose 62.9% since 2011. Source: BLS QCEW; DoD Pay Tables; ACS.

allowances and benefits, these figures illustrate the central role of defense-related employment in the regional economy.

Federal civilian employment also plays a uniquely important role in Hampton Roads, both for its scale and for the wage premium it provides relative to the private sector. In 2010, the average federal civilian wage in Region 5 was approximately 1.8 times higher than that of private-sector employees, at \$71,200 and \$39,700 respectively. By 2023, this ratio declined to 1.6, reflecting faster wage growth in the private sector over time.¹⁵

This ratio reinforces the outsized impact of federal civilian employment on the region's economy. For every federal job lost in Hampton Roads, the private sector would need to generate roughly 1.6 jobs to offset the equivalent wage loss. Because federal jobs are concentrated in higher-paying occupations, this replacement rate highlights both the vulnerability and the importance of sustaining a strong federal employment base in the region.



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Additional detail on defense appropriations, military employment estimates, federal civilian wages, and replacement rates is provided in Appendix C.

INDIVIDUAL EMPLOYMENT GROWTH

Key Points

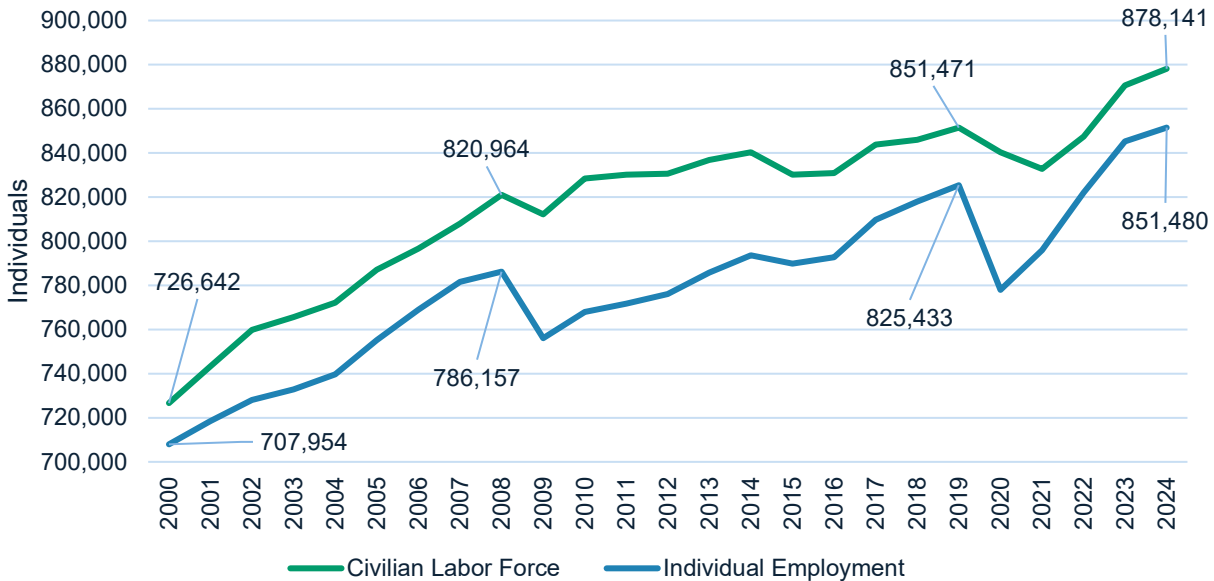
- *Region 5's labor force and employment reached record highs in 2024, surpassing pre-pandemic peaks.*
- *Unemployment fell to 3.0% in 2024, among the lowest rates this century.*
- *Employment growth has consistently trailed Virginia statewide, though recent gains slightly outpaced the U.S. average.*

The civilian labor force includes individuals aged 16 and older who are employed or actively seeking work. Region 5's labor force and employment expanded steadily through the 2000s before both were

¹⁵ Average annual wages, Region 5 (2023): Federal civilian = \$91,000; private sector = \$56,800. Ratio = 1.6. In 2010: Federal civilian = \$71,200; private sector = \$39,700. Ratio = 1.8. Replacement rate: each lost federal civilian job equates to ≈1.6 private-sector jobs needed to offset wage loss. Source: BLS QCEW.

disrupted by the Great Recession. While the labor force rebounded by 2010, employment did not return to pre-recession levels until 2014.

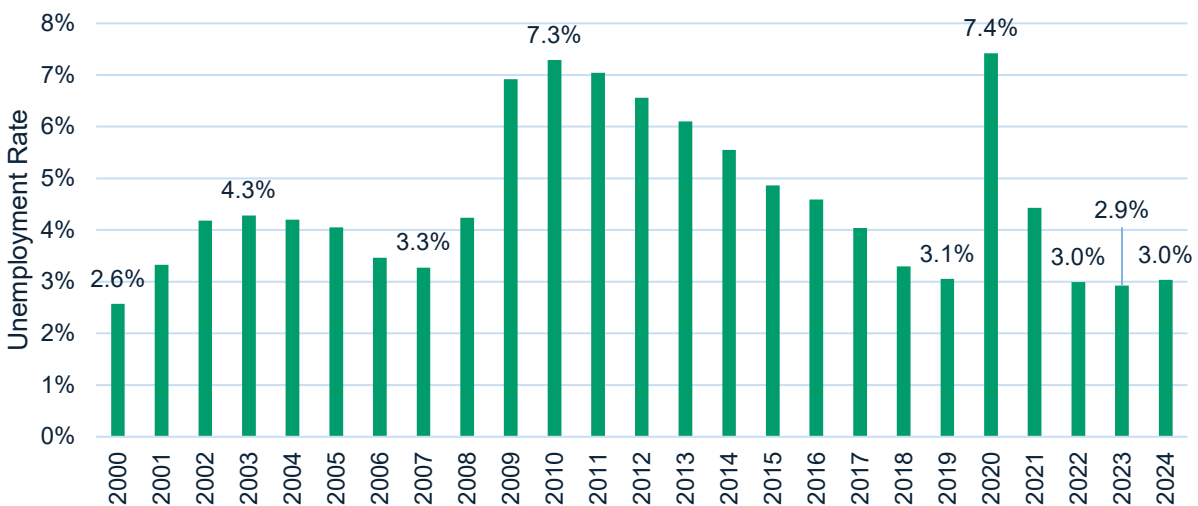
Civilian Labor Force and Individual Employment in Region 5: 2000 to 2024



Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics

Both measures reached new highs in 2019, with the labor force at 851,471 and employment at 825,433. Pandemic disruptions drove steep declines in 2020 and 2021, but recovery was rapid. By 2023, employment surpassed its pre-pandemic peak and grew to a record 851,480 in 2024. The civilian labor force similarly expanded to 878,141 in 2024, also the highest level on record.¹⁶

Average Annual Unemployment Rate in Region 5: 2000 to 2024

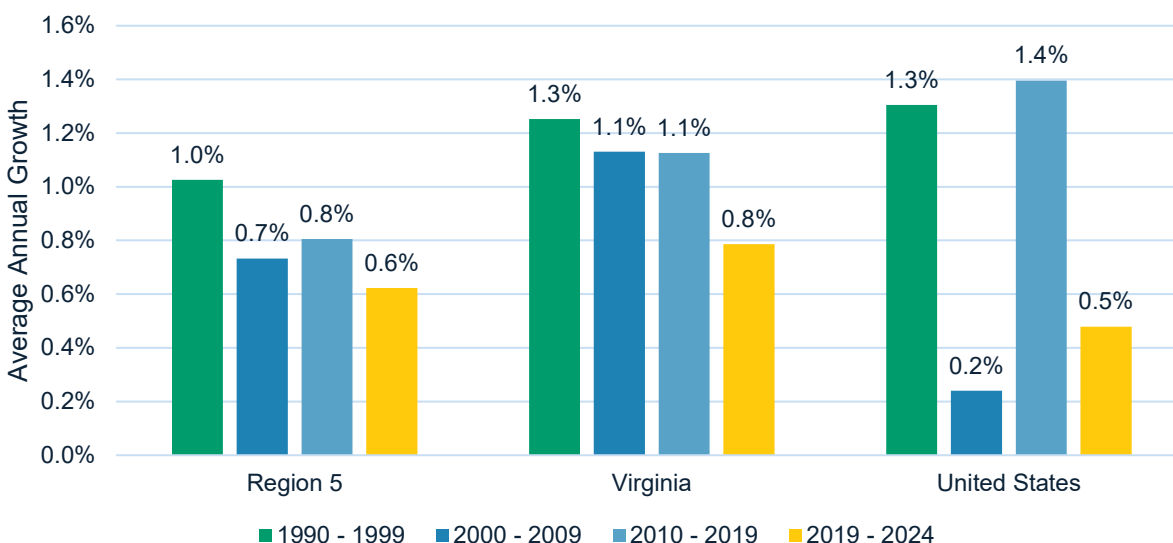


¹⁶ Civilian labor force and employment: Region 5 = 851,471 LF / 825,433 emp. (2019); 870,665 LF / 845,192 emp. (2023); 878,141 LF / 851,480 emp. (2024). Source: BLS LAUS.

Source: U.S. Bureau of Labor Statistics, *Local Area Unemployment Statistics*

Unemployment has generally mirrored these cycles. The regional rate peaked at 7.3% in 2010, fell to 3.1% in 2019, spiked to 7.4% in 2020, and declined steadily thereafter. By 2024, unemployment averaged 3.0%, among the lowest levels observed since 2000.¹⁷ These historically low rates reflect the tightness of the regional labor market, with hiring challenges and labor shortages constraining job growth.

Annual Growth in Individual Employment, Region 5, Virginia, and the United States: 1990 to 2024



Source: U.S. Bureau of Labor Statistics, *Local Area Unemployment Statistics*; Dragas Center for Economic Analysis and Policy

Employment growth benchmarks underscore Region 5's long-standing challenges. Across multiple decades, growth has trailed statewide averages and, with the exception of the 2000s, often lagged national performance. From 2019 to 2024, however, Region 5 slightly outperformed the national average, though it continued to fall short of Virginia overall.¹⁸ At the regional level, Region 5's growth ranked ahead of only two GO Virginia regions (Southwest and Southside) in the most recent period.¹⁹ At the locality level, only Suffolk, Williamsburg, and Northampton County exceeded the statewide average between 2019 and 2024.²⁰

Additional detail on labor force participation, unemployment, and locality-level employment growth is provided in Appendix D.

¹⁷ Unemployment rates: Region 5 = 4.3% (2003), 7.3% (2010), 3.1% (2019), 7.4% (2020), 2.9% (2023), 3.0% (2024). Virginia = 6.9% (2010), 2.6% (2019), 5.4% (2020), 2.8% (2024). U.S. = 9.6% (2010), 3.7% (2019), 8.1% (2020), 3.9% (2024). Source: BLS LAUS, CPS.

¹⁸ Average annual employment growth: Region 5 = 1.0% (1990s), 0.7% (2000s), 0.8% (2010s), 0.6% (2019–2024). Virginia = 1.3%, 1.1%, 1.1%, 0.8% for same periods. U.S. = 1.3%, 0.2%, 1.4%, 0.5%. Source: BLS LAUS; Dragas Center.

¹⁹ GO Virginia regions (2019–2024 avg. annual growth): Region 5 = 0.6%; higher only than Region 1 (0.1%) and Region 3 (0.4%). Top performers: Region 7 = 0.8%, Region 9 = 0.9%. Source: BLS LAUS.

²⁰ Localities exceeding statewide avg. growth (2019–2024): Northampton County = 1.1%; Suffolk = 0.9%; Williamsburg = 0.9%. Statewide avg. = 0.8%. Source: BLS LAUS.

NONFARM PAYROLLS

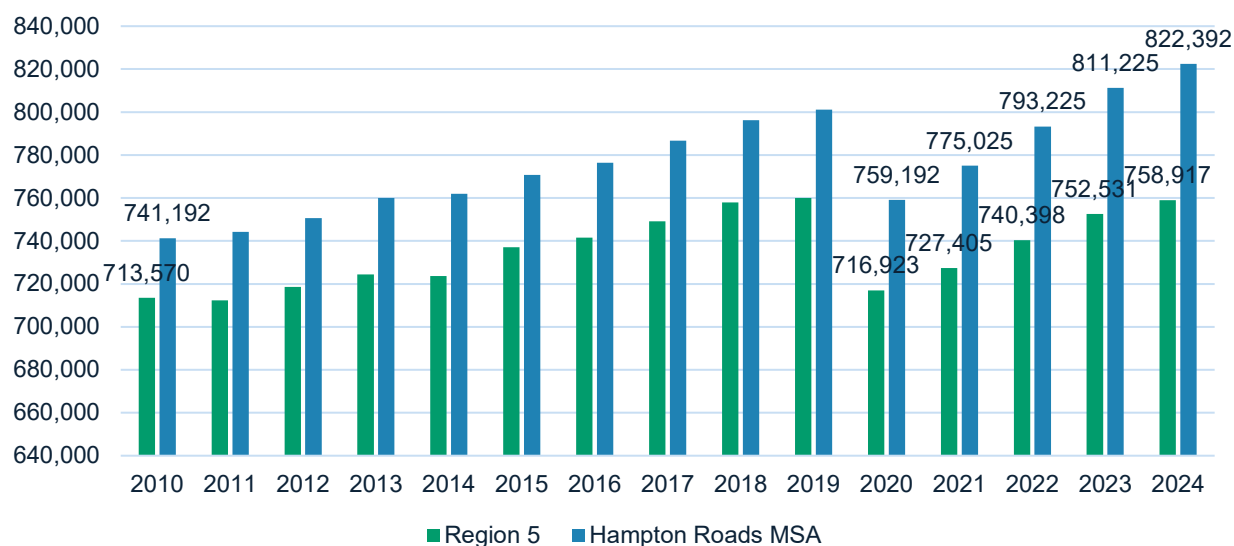
Key Points

- *Region 5 regained all jobs lost during the pandemic by 2024, though recovery lagged the Hampton Roads MSA.*
- *Geographic differences between Region 5 and the Hampton Roads MSA account for the discrepancy in job recovery.*
- *Real wages in Region 5 grew at an average annual rate of **2.2% from 2019 to 2024**, outpacing the 0.5% growth of the prior decade.*

Individual employment reflects residents working in Region 5, while nonfarm payrolls measure jobs located within the region. Payroll estimates are derived from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW), which aggregates city and county-level data.

As of the third quarter of 2024, Region 5 had fully regained the jobs lost during the pandemic. By comparison, the Hampton Roads MSA recovered by 2023, a difference driven by geography: the MSA includes faster-growing counties in North Carolina, while Region 5 encompasses slower-growing Virginia counties.²¹

**Average Annual Nonfarm Payrolls, Region 5 vs Hampton Roads MSA:
2010 to 2024**

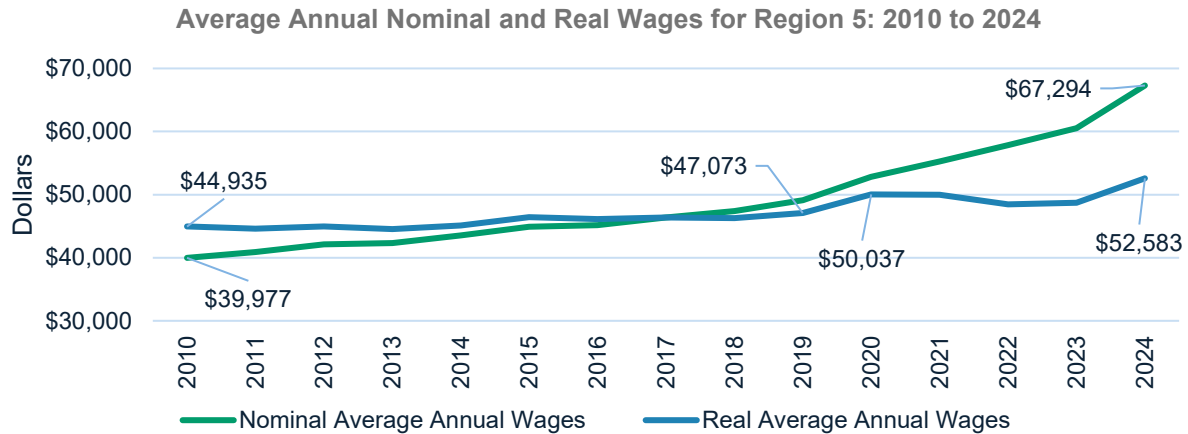


Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; Dragas Center for Economic Analysis and Policy

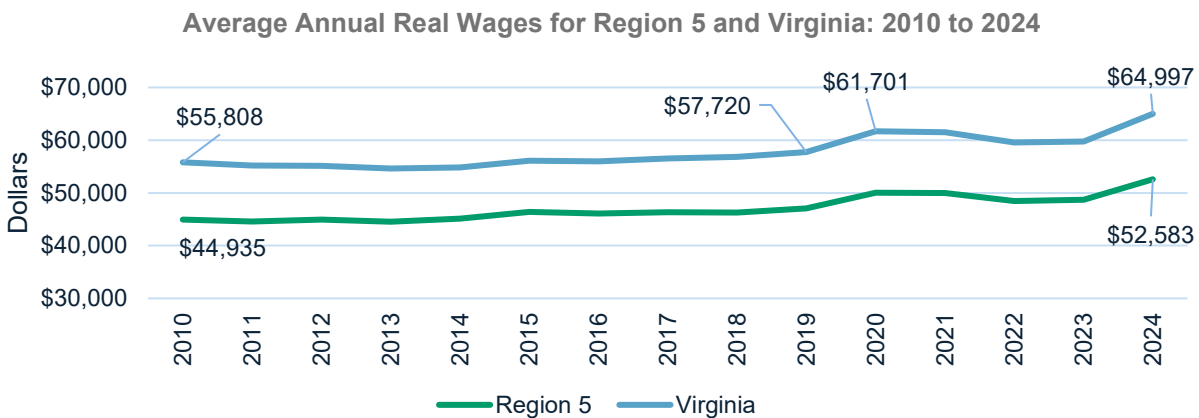
Wage growth also reflects two distinct periods. From 2010 to 2019, real wages in Region 5 grew modestly from \$44,935 to \$47,073, averaging just 0.5% annually. Between 2019 and 2024, however, real wages rose more sharply at 2.2% per year, outpacing inflation as nominal wages grew faster

²¹ Nonfarm payroll employment: Region 5 recovered all jobs by Q3 2024; Hampton Roads MSA recovered by 2023. Geographic differences: Region 5 includes slower-growing Virginia counties (e.g., Northampton, Isle of Wight), while MSA includes faster-growing NC counties (e.g., Currituck, Gates). Source: BLS QCEW.

than consumer prices.²² Virginia followed a similar trend, with average real wage growth accelerating from 0.4% annually in 2010 to 2019 to 2.4% annually in 2019 to 2024.²³



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; Dragas Center for Economic Analysis and Policy



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; Dragas Center for Economic Analysis and Policy

PER CAPITA INCOME

Key Points

- Region 5's per capita income reached **\$62,438 in 2023**, ranking fifth among GO Virginia regions.
- Growth accelerated to **1.6% annually between 2019 and 2023**, outpacing both Virginia (1.5%) and the U.S. (1.2%).

²² Region 5 real wages: \$44,935 (2010) to \$47,073 (2019), avg. annual growth = 0.5%. \$47,073 (2019) to \$52,583 (2024), avg. annual growth = 2.2%. Source: BLS QCEW; Dragas Center.

²³ Virginia real wages: \$55,808 (2010) to \$57,720 (2019), avg. annual growth = 0.4%. \$57,720 (2019) to \$64,800 (2024), avg. annual growth = 2.4%. U.S. real wages: \$54,600 (2010) to \$58,400 (2019), 0.6%; \$58,400 (2019) to \$64,200 (2024), 1.9%. Source: BLS QCEW.

- *Income levels vary widely by locality, with James City County and Williamsburg leading the region at \$81,761, while Accomack reported declines.*

Per capita income measures the average income earned by residents in a region and reflects both job creation and the quality of employment opportunities. Region 5's per capita income reached \$62,438 in 2023, ranking fifth among the nine GO Virginia regions.²⁴

	2023 Nominal Per Capita Income	Real Income Growth 1990-1999	Real Income Growth 2000-2009	Real Income Growth 2010-2019	Real Income Growth 2019 – 2023
Region 5	\$62,438	1.1%	1.5%	0.4%	1.6%
Virginia	\$73,841	1.6%	0.9%	1.0%	1.5%
United States	\$69,415	1.5%	0.4%	1.8%	1.2%

Source: U.S. Bureau of Economic Analysis

Growth has varied over time. From 2000 to 2009, Region 5 outpaced Virginia and the U.S. with a 1.5% annual growth rate in real per capita income. From 2010 to 2019, however, growth slowed to just 0.4% annually, trailing both Virginia at 1.0% and the U.S. at 1.8%. More recently, the region outperformed: between 2019 and 2023, Region 5 recorded 1.6% annual growth, exceeding Virginia's 1.5% and the national rate of 1.2%.²⁵

Income disparities across localities remain significant. In 2023, James City County and Williamsburg reported the highest per capita income in Region 5 at \$81,761, followed by York County and Poquoson at \$73,221, and Virginia Beach at \$72,091. By contrast, Accomack County was the only locality to experience a decline in real per capita income between 2019 and 2023.²⁶

Additional detail on regional and locality-level per capita income trends is provided in Appendix E.

INDUSTRY CONCENTRATION

Key Points

- ***Defense-related spending remains the region's anchor, with federal activity accounting for an estimated 40% of total regional output.***
- ***Region 5 averaged 809,113 jobs in Q3 2024, with annual wages of \$60,599 and five-year job growth of just 0.1%, lagging state and national benchmarks.***
- ***Health Care, Retail Trade, and Accommodation & Food Services are the largest sectors by employment, while Professional Services, Manufacturing, and Public Administration lead in wages and competitiveness.***

²⁴ Per capita income (nominal, 2023): Region 5 = \$62,438, ranking 5th of 9 GO Virginia regions. Virginia = \$73,841; U.S. = \$69,415. Highest GO Virginia regions: Region 7 (Northern VA) = \$100,790; Region 9 (Piedmont) = \$79,575; Region 4 (South Central) = \$71,789. Source: BEA.

²⁵ Real per capita income growth (annual average): Region 5 = 1.5% (2000 - 2009), 0.4% (2010 - 2019), 1.6% (2019 - 2023). Virginia = 0.9%, 1.0%, 1.5%. U.S. = 0.4%, 1.8%, 1.2%. Source: BEA.

²⁶ Locality per capita income (nominal, 2023): James City + Williamsburg = \$81,761; York + Poquoson = \$73,221; Virginia Beach = \$72,091. Lowest = Portsmouth = \$48,985. Accomack = \$52,443 with -2.0% real growth, 2019–2023. Source: BEA.

Industry concentration reflects the balance of employment across sectors, wage levels, and competitiveness as measured by location quotients (LQs). An LQ is a measure of industry concentration that compares a region's share of employment in a specific industry to the national share. An LQ greater than 1.0 indicates the region is more specialized in that industry than the U.S. overall, suggesting a competitive advantage.

In Hampton Roads, federal activity continues to dominate. Active-duty military personnel and DoD civilian employees earned more than \$11 billion in wages in 2023, while direct DoD spending likely exceeded \$28 billion in 2024. Including indirect and induced impacts, federal activity accounted for an estimated 40% of total regional output.²⁷

Region 5 averaged 809,113 jobs with average annual wages of \$60,599 in Q3 2024. Over the past five years, total employment grew by just 3,479 jobs annually (0.1%), which is below state and national averages.²⁸ This sluggish growth underscores structural workforce challenges even as the regional economy expands in output.

Sectoral performance varies widely. Health Care and Social Assistance remains the largest sector with 117,600 jobs and an average wage of \$64,546, though its LQ of 1.0 indicates employment shares aligned with national averages. Retail Trade (85,834 jobs) and Accommodation & Food Services (78,233 jobs) both declined in recent years and pay below-average wages. By contrast, Professional, Scientific, and Technical Services, Manufacturing, and Public Administration all report higher-than-average wages, with Public Administration posting the region's highest LQ at 1.5.²⁹ Detailed sectoral data, including employment, wages, growth rates, and LQs, are provided in Appendix F.

KEY INDUSTRY CLUSTERS

Key Points

- *Region 5 recognizes **eight priority clusters**, with Energy Security redefining Clean Energy to reflect evolving industrial realities.*
- *Average wages across all clusters continue to rise, led by Life Sciences, Uncrewed Systems, and Water Technologies, underscoring sustained demand for high-skill technical and research roles.*
- ***Shipbuilding & Ship Repair** remains the dominant cluster, employing **41,764 workers with an unparalleled LQ of 44.7**.*
- *Life Sciences and Energy Security show momentum, posting strong growth in recent years.*

²⁷ Federal contribution: Active-duty + DoD civilian wages = \$11.0B (2023). Direct DoD spending = \$28.6B (2024). Federal share of total output ≈ 40%. Source: JobsEQ; CBO (2024); Dragas Center.

²⁸ Total employment: Region 5 = 809,113 (Q3 2024); annual growth = +3,479 jobs (0.1% per year, 2019 - 2024). Virginia = 0.9% avg. annual growth (2019 - 2024); U.S. = 1.4%. Average annual wages: Region 5 = \$60,599 (2024), Virginia = \$70,321, U.S. = \$72,129. Source: JobsEQ, 2024 Q3.

²⁹ Sector highlights: Health Care = 117,600 jobs, \$64,546 avg. wage, LQ = 1.0; Retail Trade = 85,834 jobs, \$34,690 avg. wage, LQ = 1.1; Accommodation & Food Services = 78,233 jobs, \$25,418 avg. wage, LQ = 1.1; Professional Services = 60,211 jobs, \$90,148 avg. wage, LQ = 1.0; Manufacturing = 73,134 jobs, \$77,265 avg. wage, LQ = 1.1; Public Administration = 56,168 jobs, \$87,492 avg. wage, LQ = 1.5. Source: JobsEQ, 2024 Q3.

- *Advanced Manufacturing declined by 0.5% annually, raising competitiveness concerns despite its high wages and LQ.*

Since 2017, Region 5 has identified consistent key industry clusters to guide growth and diversification. In 2025, the framework was refined to include eight priority clusters:

- Advanced Manufacturing
- Cybersecurity, Data Analytics, and Modeling & Simulation
- Energy Security
- Life Sciences
- Port Operations, Logistics, and Warehousing
- Shipbuilding and Ship Repair
- Uncrewed Systems
- Water Technologies

The shift from “Clean Energy” to “Energy Security” reflects the growing importance of reliable and diversified power supplies for industries such as advanced manufacturing, shipbuilding, and data centers. This redefined cluster emphasizes modernizing the grid, expanding storage, and strengthening resilience while continuing to advance renewable generation.

Cluster performance reveals both opportunities and risks. Shipbuilding and Ship Repair remains the region’s anchor, with 41,764 workers earning \$83,894 on average in 2024. Its LQ of 44.7 reflects unmatched national specialization. Rising defense budgets, ongoing maintenance backlogs, and long-term commitments, such as AUKUS and the U.S. National Defense Industrial Strategy, reinforce the cluster’s sustained strength.³⁰

By contrast, Advanced Manufacturing employed 10,097 workers in 2024 with wages nearly \$20,000 above the regional average, yet posted a five-year decline of 0.5% annually. This trend signals potential erosion of competitive advantage despite high wages and an LQ of 2.5.³¹

Growth opportunities are most evident in Life Sciences and Energy Security. Life Sciences expanded employment by 1.3% annually since 2019, reaching 7,137 workers with average wages of \$115,289, which is among the highest in the region. Energy Security-related industries, including offshore wind and grid modernization, have expanded rapidly, supported by federal and state priorities that align with Hampton Roads’ infrastructure advantages.³²

³⁰ Shipbuilding & Ship Repair: 41,764 workers (2024 Q3), avg. wage = \$83,894, LQ = 44.7, 0.3% avg. annual employment growth (2019 - 2024). Source: JobsEQ, 2024 Q3.

³¹ Advanced Manufacturing: 10,097 workers (2024 Q3), avg. wage = \$81,322, LQ = 2.5, -0.5% avg. annual growth (2019 - 2024). Regional avg. wage = \$60,599. Source: JobsEQ, 2024 Q3.

³² Life Sciences: 7,137 workers (2024 Q3), avg. wage = \$115,289, LQ = 0.7, 1.3% avg. annual growth (2019–2024). Energy Security-related industries (including offshore wind and grid modernization) recorded 1.6% avg. annual growth, 2019 - 2024. Source: JobsEQ, 2024 Q3; BEA.

Location Quotients and Employment for Priority Clusters in Region 5: 2023 vs. 2025 Plan Update

Clusters	2023 Employment	2024 Employment	Percentage Change 2023-2024	2023 Average Annual Wages	2024 Average Annual Wages	Percentage Change 2023-2024	2023 Employment Location Quotient	2024 Employment Location Quotient	5-Year Average Annual Employment Growth
Advanced Manufacturing	10,637	10,097	-5.1%	\$74,530	\$81,322	9.1%	2.5	2.5	-0.50%
Energy Security	24,363	25,400	4.3%	\$85,329	\$90,853	6.5%	1.2	1.2	0.80%
Cyber Security, Data Analytics, and Modeling and Simulation	5,230	5,046	-3.5%	\$76,512	\$88,011	15.0%	0.6	0.6	0.50%
Life Sciences	7,054	7,137	1.2%	\$107,437	\$115,289	7.3%	0.7	0.7	1.30%
Port Operations, Logistics, and Warehousing	18,861	17,774	-5.8%	\$72,333	\$74,894	3.5%	1.1	1	0.40%
Shipbuilding and Ship Repair	40,158	41,764	4.0%	\$81,386	\$83,894	3.1%	43.1	44.7	0.30%
Uncrewed Systems and Aerospace	14,822	15,622	5.4%	\$93,681	\$98,601	5.3%	1.8	1.8	0.60%
Water Technologies	38,278	39,681	3.7%	\$89,897	\$94,158	4.7%	1.2	1.3	0.90%

Note: Green indicates areas in which there was an increase in employment, wages, or location quotient from the last Growth and Diversification Plan.

Yellow indicates areas in which there was a decrease in these measures.

Source: JobsEq, 2025. Data as of 2024 Q3

ESTABLISHMENT CREATION

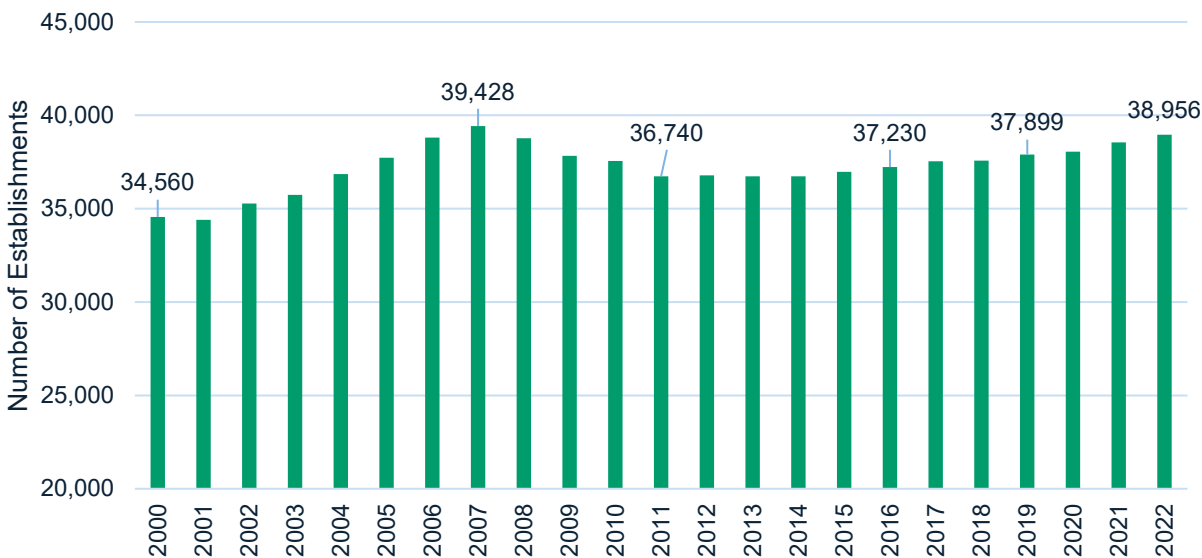
Key Points

- *Region 5 had **38,956 establishments in 2022**, a 1.2% annual growth rate since 2020.*
- *Long-term establishment growth has lagged: 0.1% annually from 2010 to 2019 vs. 0.6% in Virginia and 0.8% nationally.*
- *Growth is concentrated in localities such as **Isle of Wight, Suffolk, and Williamsburg**, while others like **Portsmouth and Southampton County** declined.*

Establishment trends provide insight into the region's business formation and entrepreneurial activity. In 2000, Region 5 had 34,560 establishments, rising to 39,428 by 2007 before falling to 36,740 during the Great Recession, representing a 6.8% decline. By 2019, the region had 37,899 establishments, still below the 2007 peak. More recently, however, momentum has improved: Region 5 added nearly 900 establishments between 2020 and 2022, reaching 38,956.³³

Average annual growth rates highlight these shifts. From 1990 to 1999 and again from 2000 to 2009, Region 5 averaged 1.0% growth per year, in line with the nation but behind Virginia overall. Between 2010 and 2019, growth slowed sharply to 0.1% annually, trailing the Commonwealth (0.6%) and U.S. (0.8%). Since 2020, growth has accelerated to 1.2% per year, matching Virginia but still falling short of the national average of 1.8%.³⁴

Number of Establishments in Region 5: 2000 to 2022



Source: U.S. Census Bureau, County Business Patterns; Dragas Center for Economic Analysis and Policy

³³ Total establishments: Region 5 = 34,560 (2000), 39,428 (2007, +14.1%), 36,740 (2011, -6.8%), 37,899 (2019), 38,956 (2022). Source: U.S. Census Bureau, County Business Patterns; Dragas Center for Economic Analysis and Policy.

³⁴ Average annual establishment growth: Region 5 = 1.0% (1990 - 1999), 1.0% (2000 - 2009), 0.1% (2010 - 2019), 1.2% (2020 - 2022). Virginia = 1.7%, 1.1%, 0.6%, 1.2%. U.S. = 1.4%, 0.6%, 0.8%, 1.8%. Source: U.S. Census Bureau, County Business Patterns; Dragas Center.

At the local level, performance varies widely. Chesapeake, Suffolk, and Virginia Beach have added establishments consistently since 1990. In contrast, Portsmouth, Hampton, and Southampton County have experienced long-term declines. Between 2020 and 2022, Isle of Wight County led the region with 3.2% annual growth, Suffolk grew by 3.0%, and Williamsburg by 4.2%. Several localities, however, saw declines, including Accomack, Franklin, Hampton, Portsmouth, Southampton, and York.³⁵ Additional detail on establishment trends by locality and industry is provided in Appendix G.

EDUCATIONAL ATTAINMENT

Key Points

- *Region 5 outperforms the U.S. on key attainment metrics, but lags Virginia in bachelor's and graduate degrees.*
- *The region stands out in **associate degree attainment** (9.8%), higher than both Virginia (7.8%) and the U.S. (8.8%).*
- *A large share of adults report "**some college, no degree**" (22.6%), well above the state and national averages.*
- *Region 5 ranks **4th among GO Virginia regions** for share of residents with a college degree (45.0%).*

Workforce development depends on the region's ability to produce skilled workers in sufficient numbers and attract additional talent from outside the area. Without these efforts, businesses face hiring constraints that limit expansion and competitiveness.

Educational attainment data from the 2019 to 2023 American Community Survey highlight both strengths and challenges. In 2023, just 7.5% of Region 5 adults aged 25 and older lacked a high school diploma, outperforming Virginia (8.7%) and the United States (10.6%). Another 25% held a high school diploma, roughly in line with national and state averages.³⁶

Region 5 excels in associate degree attainment: 9.8% of adults hold this credential compared with 7.8% in Virginia and 8.8% nationally.³⁷ The region trails, however, in bachelor's and graduate degree attainment. Only 35.2% of adults hold at least a four-year degree, slightly above the U.S. average (35.0%) but 6.3 percentage points below Virginia's 41.5%.³⁸

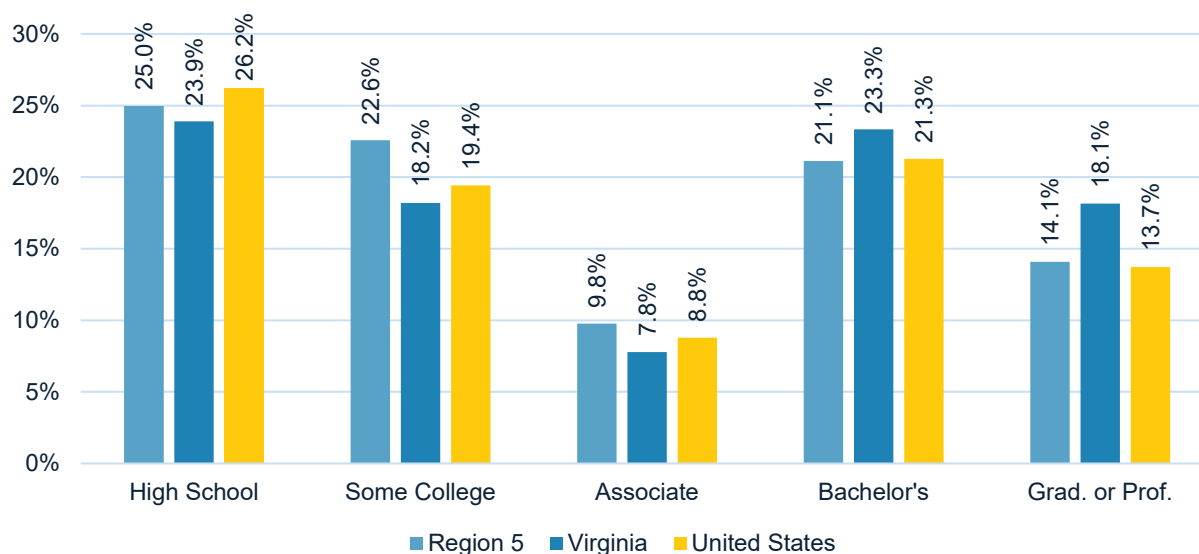
³⁵ Local establishment growth (2020 - 2022): Isle of Wight = 3.2% avg. annual; Suffolk = 3.0%; Williamsburg = 4.2%. Declines: Accomack (-0.6%), Franklin (-2.1%), Hampton (-0.3%), Portsmouth (-0.9%), Southampton (-2.5%), York (-0.1%). Source: U.S. Census Bureau, County Business Patterns; Dragas Center.

³⁶ Share of adults (25+), less than high school: Region 5 = 7.5%, Virginia = 8.7%, U.S. = 10.6%. High school diploma: Region 5 = 25.0%, Virginia = 23.9%, U.S. = 26.2%. Source: U.S. Census Bureau, ACS 2019 - 2023; Dragas Center.

³⁷ Associate degree attainment: Region 5 = 9.8%; Virginia = 7.8%; U.S. = 8.8%. Source: U.S. Census Bureau, ACS 2019 - 2023.

³⁸ Bachelor's + graduate/professional degrees: Region 5 = 35.2%, Virginia = 41.5%, U.S. = 35.0%. "Some college, no degree": Region 5 = 22.6%, Virginia = 18.2%, U.S. = 19.4%. Source: U.S. Census Bureau, ACS 2019 - 2023.

Educational Attainment of Population Aged 25 Plus, United States, Virginia, and Region 5: 2023



Source: U.S. Census Bureau; Dragas Center for Economic Analysis and Policy

One concern is that 22.6% of Region 5 adults report “some college, no degree,” compared with 18.2% statewide and 19.4% nationally.³⁸ This suggests both active enrollment and a significant portion of residents leaving programs before completion. Closing this gap would directly strengthen workforce readiness, particularly in fields tied to the region’s industry clusters.

Region 5 ranks fourth among GO Virginia regions for residents with any higher education credential (45.0%), trailing South Central (48.2%), Central (48.7%), and Northern Virginia (67.0%). While the region is competitive within the Commonwealth, it faces a gap compared to leading regions, particularly Northern Virginia.³⁹

Additional information on educational attainment by level and GO Virginia region is provided in Appendix H.

WORKFORCE GAPS

Key Points

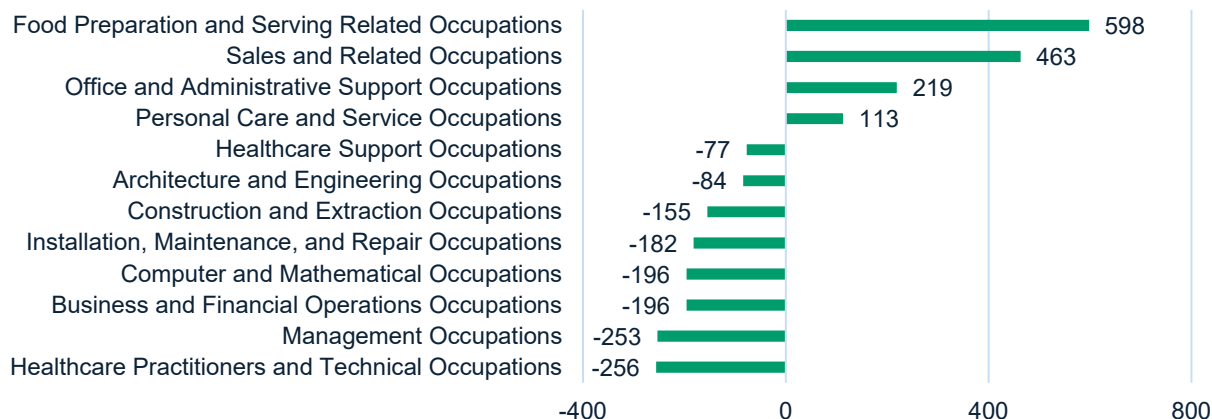
- The most acute shortages are projected in **Business Operations Specialists, Computer Occupations, and Healthcare Practitioners**, each with deficits of ~160 workers annually.
- Priority clusters will require **7,900 to 10,500 new workers** over the next decade, with **replacement needs adding 19,700 to 34,400**, for a total demand of **27,600 to 45,000 openings**.
- Shortfalls are concentrated in higher-wage occupations (avg. \$86,000+), while surpluses appear in lower-wage fields (avg. \$42,000).

³⁹ Share of adults with a higher education credential (any degree), 2023: Region 5 = 45.0%. Highest regions: Region 4 (48.2%), Region 9 (48.7%), Region 7 (67.0%). Virginia statewide = 49.3%; U.S. = 43.8%. Source: U.S. Census Bureau, ACS 2019 - 2023.

A workforce gap occurs when the available labor pool is insufficient to meet employer demand. In a growing economy, expansions and new investments can generate demand faster than the region can supply talent. In other cases, mismatches between worker skills and employer needs create persistent shortages that constrain growth, delay projects, or deter new investment. While short-term imbalances can often be addressed through training, recruitment, or technological adoption, longer-term gaps require coordinated strategies involving education, workforce development, and industry partnerships.

Projections for 2025 to 2034 highlight several occupations where demand is expected to outpace supply. The largest annual shortfalls are for Business Operations Specialists (-163), Computer Occupations (-160), and Healthcare Diagnosing or Treating Practitioners (-159). Other management and technical roles, including Engineers, Top Executives, and Operations Managers, also show persistent gaps. These occupations are core to the region's industry clusters and offer well above-average wages, underscoring their strategic importance.⁴⁰

Potential Annual Workforce Gaps in Region 5 by Major Occupation: 2025 to 2034



Source: JobsEQ; Dragas Center for Economic Analysis and Policy

Looking at priority clusters, Region 5 will need between 7,900 and 10,500 additional workers over the next decade to meet growth-related demand. When retirements and occupational transfers are included, replacement needs raise the total requirement to between 27,600 and 45,000 workers. The largest demand will occur in Shipbuilding and Ship Repair (8,400 to 14,200 openings) and Energy Security (6,100 to 9,600 openings), but all clusters will face pressures that could limit expansion without targeted interventions.⁴¹

Importantly, the wage differential between shortage and surplus occupations highlights the economic stakes. In 2024, roles with projected shortfalls averaged over \$86,000 annually, while those with expected oversupply averaged less than \$42,000. This divergence illustrates how market

⁴⁰ Projected shortfalls (annual average, 2025 to 2034): Business Operations Specialists = -163; Computer Occupations = -160; Healthcare Practitioners = -159; Other Management Occupations = -86; Top Executives = -80; Engineers = -66; Operations Managers = -58; Financial Specialists = -36; Math Occupations = -27; Health Technologists = -24. Wages ranged from \$67,900 to \$156,800. Source: JobsEQ, 2025.

⁴¹ Projected workforce demand in priority clusters, 2025 to 2034: Growth = 7,900 - 10,500; Replacement = 19,700 - 34,400; Total = 27,600 - 45,000. Largest needs: Ship Repair & Shipbuilding = 8,400 - 14,200; Energy Security = 6,100 - 9,600. Source: JobsEQ; BLS; VEC; Lightcast; Dragas Center, 2025.

imbalances shape compensation, career opportunities, and the competitiveness of the regional workforce.⁴²

Additional detail on projected workforce demand, occupational gaps, and replacement needs is provided in Appendix I.

CLOSING SUMMARY: ECONOMIC OVERVIEW

Region 5's economic profile reflects both enduring strengths and evolving challenges. Longstanding advantages in defense, maritime industries, and logistics continue to anchor the regional economy, while emerging opportunities in fields such as life sciences, water technologies, and energy security offer potential for diversification and growth. The past decade has seen steady gains in establishment counts, rising wages in key industries, and competitive advantages in sectors with high location quotients. At the same time, lagging growth in some traditional clusters, persistent workforce gaps in high-demand occupations, and lower-than-average attainment of four-year degrees when compared to the statewide figures highlight the importance of targeted workforce and business development strategies.

Moving forward, the region's competitiveness will depend on its ability to strengthen priority industry clusters, accelerate site readiness, and align workforce pipelines with employer needs. This will require a focused approach that builds on existing strengths, addresses structural challenges, and positions the region to capture opportunities in emerging markets.

The next section provides a situational analysis of Region 5's priority clusters, assessing current performance, competitive advantages, and barriers to growth. This analysis serves as the foundation for the plan's goals, actionable strategies, and strategic outlook, ensuring that investments and initiatives are aligned with the region's long-term vision for economic resilience and prosperity.

⁴² Wage differential: 2024 avg. annual wages for shortage occupations = \$86,000+; oversupply occupations = <\$42,000. Source: JobsEQ, 2025.

Target Clusters

Since 2017, Region 5 has identified key industry clusters to guide regional growth and diversification. In 2025, this framework was refined to focus on eight priority clusters that represent both the region's established strengths and emerging opportunities: Advanced Manufacturing; Cybersecurity, Data Analytics, and Modeling & Simulation; Energy Security; Life Sciences; Port Operations, Logistics, and Warehousing; Shipbuilding and Ship Repair; Uncrewed Systems and Aerospace; and Water Technologies. These clusters capture the industries that drive export activity, high wage employment, and innovation capacity across the region. The table below provides a summary of each cluster's employment, wage levels, concentration, and recent growth trends.

Location Quotients and Employment for Priority Clusters in Region 5

Clusters	Employment	Average Annual Wages	Employment Location Quotient	5-Year Average Annual Employment Growth
Advanced Manufacturing	10,097	\$81,322	2.5	-0.50%
Energy Security	25,400	\$90,853	1.2	0.80%
Cyber Security, Data Analytics, and Modeling and Simulation	5,046	\$88,011	0.6	0.50%
Life Sciences	7,137	\$115,289	0.7	1.30%
Port Operations, Logistics, and Warehousing	17,774	\$74,894	1	0.40%
Shipbuilding and Ship Repair	41,764	\$83,894	44.7	0.30%
Uncrewed Systems and Aerospace	15,622	\$98,601	1.8	0.60%
Water Technologies	39,681	\$94,158	1.3	0.90%

Source: JobsEQ, DHCD

ADVANCED MANUFACTURING

Advanced Manufacturing remains one of Region 5's most established competitive strengths, anchored by defense and ship systems production, component manufacturing, and precision engineering. With 10,097 jobs and a location quotient of 2.5, the cluster shows a high degree of specialization. Employment has declined slightly at -0.5 percent per year, yet replacement demand remains strong as production and skilled trade positions turn over. The need to replace experienced tradespeople and production supervisors continues to define the region's short term workforce priorities.

**Advanced Manufacturing Workforce Gaps in Region 5:
Top 5 Occupations, 2-Year Demand**

Occupation	Exits	Transfers	Employment Growth	Total Demand
Team Assemblers	70	129	-18	181
Aerospace Engineers	24	34	-1	56
Welders, Cutters, Solderers, and Brazers	21	56	-5	72
First-Line Supervisors of Production and Operating Workers	20	38	-5	53
Machinists	24	37	-5	56
Total	637	1,133	-169	1,598

Source: JobsEQ, DHCD

WATER TECHNOLOGIES

Water Technologies is a defining cluster for Region 5, reflecting the region's unique position at the intersection of maritime activity, coastal resilience, and environmental innovation. The cluster employs 39,681 workers with an average annual wage of \$94,158 and a location quotient of 1.3. Employment has grown 0.9 percent annually over the past five years. Employers span utilities, engineering firms, and technology companies focused on clean water infrastructure and coastal systems. Rising investment in resilience and flood mitigation has amplified demand for engineers, project managers, and environmental specialists.

Water Technologies Workforce Gaps in Region 5: Top 5 Occupations, 2-Year Demand

Occupation	Exits	Transfers	Employment Growth	Total Demand
Software Developers	126	260	96	482
Civil Engineers	85	179	-3	262
Management Analysts	105	163	22	290
Project Management Specialists	70	163	9	242
General and Operations Managers	60	158	14	232
Total	2,201	3,879	338	6,420

Source: JobsEQ, DHCD

CYBER SECURITY, DATA ANALYTICS, AND MODELING AND SIMULATION

This cluster supports the region's extensive federal and defense technology ecosystem, employing 5,046 workers with an average wage of \$88,011. Driven by Department of Defense operations, research institutions, and private sector analytics firms, it integrates high wage, high skill work in data systems and virtual training environments. Growth has remained steady over the past five years, supported by defense and research activity in data systems and simulation technologies. Workforce demand is concentrated in analytical, software, and engineering roles, reflecting the cluster's focus on defense modeling, training, and information security.

**Cyber, Data Analytics, Modeling & Sim. Workforce Gaps in Region 5:
Top 5 Occupations, 2-Year Demand**

Occupation	Exits	Transfers	Employment Growth	Total Demand
Software Developers	127	261	120	508
Management Analysts	58	90	17	165
Computer Systems Analysts	38	48	20	106
Computer User Support Specialists	36	58	19	112
General and Operations Managers	27	72	13	112
Total	956	1,821	454	3,233

Source: JobsEQ, DHCD

LIFE SCIENCES

The Life Sciences cluster includes 7,137 jobs with an average annual wage of \$115,289 and a location quotient of 0.7. Employment has expanded by 1.3 percent per year, reflecting growth in biotechnology, health care, and advanced materials. Activity spans research, diagnostics, and manufacturing, contributing to a mix of scientific, managerial, and technical occupations. The cluster continues to benefit from institutional partnerships and applied research that support steady workforce needs in laboratory and production roles.

Life Sciences Workforce Gaps in Region 5: Top 5 Occupations, 2-Year Demand

Occupation	Exits	Transfers	Employment Growth	Total Demand
Software Developers	14	30	22	66
Medical Scientists, Except Epidemiologists	5	24	8	37
General and Operations Managers	9	24	3	36

Managers, All Other	9	15	2	26
Project Management Specialists	7	16	3	25
Total	354	696	122	1,173

Source: JobsEQ, DHCD

PORT OPERATIONS, LOGISTICS, AND WAREHOUSING

Port Operations, Logistics, and Warehousing remain a key regional strength, employing 17,774 workers with an average annual wage of \$74,894 and a location quotient of 1.0. Employment has expanded modestly, averaging 0.4 percent growth per year over the past five years. As one of the largest ports on the east coast, the cluster supports critical activities that move goods through the Port of Virginia and its extensive distribution and supply chain network. High turnover and retirements continue to drive replacement demand, particularly in transportation, material handling, and maritime support roles.

Port Operations, Logistics, & Warehousing Workforce Gaps in Region 5: Top 5 Occupations, 2-Year Demand

Occupation	Exits	Transfers	Employment Growth	Total Demand
Heavy and Tractor-Trailer Truck Drivers	165	246	9	419
Laborers & Freight, Stock, Material Movers	180	329	21	530
Stockers and Order Fillers	200	339	8	547
Industrial Truck and Tractor Operators	76	169	5	251
Sailors and Marine Oilers	89	145	-6	229
Total	1,422	2,424	107	3,956

Source: JobsEQ, DHCD

SHIPBUILDING AND SHIP REPAIR

Shipbuilding and Ship Repair is Region 5's largest cluster, employing 41,764 workers with an average annual wage of \$83,894 and an exceptionally high location quotient of 44.7. Employment has grown modestly at 0.3 percent per year, reflecting stable demand tied to naval ship construction and maintenance. The cluster supports a broad mix of production, trade, and technical occupations and forms the foundation of the regional manufacturing base. Federal investments in shipyard modernization, fleet sustainment, and submarine production are expected to strengthen long term stability and generate additional demand for skilled workers and suppliers across the regional supply chain.

**Shipbuilding and Ship Repair Workforce Gaps in Region 5:
Top 5 Occupations, 2-Year Demand**

Occupation	Exits	Transfers	Employment Growth	Total Demand
Welders, Cutters, Solderers, and Brazers	222	584	-49	758
Team Assemblers	223	414	-9	627
First-Line Supervisors of Production & Operating Workers	151	283	-3	431
Machinists	144	222	-3	363
Electricians	87	168	-2	254
Total	2,741	4,988	-211	7,518

Source: JobsEQ, DHCD

UNCREWED SYSTEMS AND AEROSPACE

Uncrewed Systems and Aerospace is a growing innovation sector in Region 5, employing 15,622 workers with an average annual wage of \$98,601 and a location quotient of 1.8. Employment has expanded by 0.6 percent annually over the past five years, supported by the region's advanced manufacturing base, defense presence, and expanding research capacity in automation and autonomous systems. The cluster integrates engineering, software, and production roles tied to defense, aviation, and autonomous systems. Continued expansion in research and applied technology supports moderate but consistent job growth and a concentration of high wage technical occupations.

**Uncrewed Systems and Aerospace Workforce Gaps in Region 5:
Top 5 Occupations, 2-Year Demand**

Occupation	Exits	Transfers	Employment Growth	Total Demand
Software Developers	67	137	57	260
Aerospace Engineers	25	35	-1	58
Computer User Support Specialists	20	32	11	63
Computer Systems Analysts	20	26	11	57
Management Analysts	24	37	8	69
Total	479	867	151	1,495

Source: JobsEQ, DHCD

ENERGY SECURITY

Energy Security employs 25,400 workers with an average annual wage of \$90,853 and a location quotient of 1.2. Employment has grown 0.8 percent per year, supported by the region's role in energy generation, grid management, and emerging offshore wind activity. The cluster reflects a shift from a clean energy focus to a broader approach emphasizing reliability, resilience, and defense related energy systems. Planned investment in offshore wind and modernized infrastructure is expected to sustain growth and create steady demand across technical and engineering occupations. Most demand reflects transfers and growth tied to energy infrastructure and operations roles. Workforce needs align with programs in power systems, construction trades, and maritime energy technology across regional training providers.

Energy Security Workforce Gaps in Region 5: Top 5 Occupations, 2-Year Demand

Occupation	Exits	Transfers	Employment Growth	Total Demand
Construction Laborers	32	54	0	86
Electrical Power-Line Installers and Repairers	16	34	4	54
Operating Engineers and Other Construction Equipment Operators	17	29	0	46
First-Line Supervisors of Construction Trades and Extraction Workers	15	22	0	37
Industrial Machinery Mechanics	16	21	8	45
Total	346	587	34	966

Source: JobsEQ, DHCD

WORKFORCE AND EDUCATION COLLABORATION

Addressing skill gaps requires close collaboration among workforce and education partners. Region 5's training capacity is anchored by the Hampton Roads Workforce Council, as well as the region's strong community college, college, and university network. Each institution has the potential to contribute to cluster-specific pipelines.

- The Regional Maritime Training System (RMTS) and Maritime Entry to Employment Training (MEET) programs directly address shortages in shipbuilding and advanced manufacturing.
- COVA MAP and Talent Pathway Initiatives (TPIs) target high-demand fields in cybersecurity, data analytics, and aerospace.
- Ongoing collaboration with K–12 career and technical education programs supports early awareness and credentialing for skilled trades.

These partnerships ensure that the region's workforce strategy remains aligned with employer demand in every priority cluster.

Situational Analysis of Priority Clusters

Cluster	Strengths	Weaknesses	Opportunities	Threats
Advanced Manufacturing	<ul style="list-style-type: none"> • Employment location quotient of 2.5 and average wages more than \$20,000 above the regional average. • R&D spending in the 80th percentile. • Aligns with GO Virginia investment in manufacturing technology. 	<ul style="list-style-type: none"> • Average employment growth from 2019 Q3 to 2024 Q3 averaged - 0.5%. • Documented talent shortages persist across technician, engineering, and drafting occupations. 	<ul style="list-style-type: none"> • Federal reshoring initiatives and defense supply chain incentives may direct new investment to domestic manufacturers. • Opportunity to expand apprenticeships and short-term credentials under the region's workforce alignment initiative. 	<ul style="list-style-type: none"> • Continued employment decline may weaken cluster density and reduce attractiveness to suppliers and investors.
Energy Security	<ul style="list-style-type: none"> • Average wages of \$90,853 among the highest across all clusters. • The region benefits from existing and planned offshore wind infrastructure and solar development capacity. • Supports offshore wind and grid modernization projects prioritized in the region's Infrastructure and Site Readiness strategy. 	<ul style="list-style-type: none"> • Employment growth has been modest, averaging only 0.8% annually over the past five years. • Federal policy uncertainty has introduced short-term risk and stalled investment in some sub-sectors. 	<ul style="list-style-type: none"> • Offshore wind development may create demand for regional suppliers and advanced manufacturing tie-ins. • Long-term growth in renewable energy supports sustained demand for this cluster. 	<ul style="list-style-type: none"> • Shifts in federal priorities could reduce or delay funding for clean energy projects. • Other states are aggressively competing to anchor energy manufacturing and assembly hubs.

Cybersecurity, Data Analytics, & M&S

- Regional institutions support niche strengths in modeling and simulation and advanced analytics.
- Significant potential for cross-sector impact through digitalization of shipbuilding, port logistics, and defense.
- Advances the digital infrastructure and defense innovation strategy outlined in the plan.
- Employment location quotient of 0.6, indicating a lower concentration of employment relative to the national average.
- Employment has remained largely flat, growing by just 0.5% annually over the past five years.
- Demand for cybersecurity and data science is projected to grow nationally and within defense and maritime sectors.
- Modeling and simulation capabilities can be leveraged in health, defense, and infrastructure applications.
- Connects to defense innovation and digital infrastructure investments supported by GO Virginia's Talent Development and Innovation Ecosystem initiatives.
- Flat employment and weak LQ metrics may hinder long-term funding and investment interest.
- Without rapid adaptation, educational programs may fall out of sync with evolving employer demands.

Life Sciences

- Average wages exceed \$115,000, the highest among all industry clusters.
- Steady job growth, averaging 1.3% annually over the past five years.
- Employment location quotient of 0.7, indicating a lower concentration of employment relative to the national average.
- Fragmentation in the cluster limits visibility and collaboration across firms and researchers.
- Health system partnerships and translational research could be expanded through regional collaboration.
- Crossovers with modeling and simulation and data science offer potential for bioinformatics and health analytics.
- Advances research commercialization and wet lab development under the region's Innovation Ecosystem investment priorities.
- Larger metros with more mature life science hubs may outcompete the region for firms, talent, and clinical trials.
- Gaps in specialized lab space and wet lab infrastructure could slow firm growth and relocation interest.

Port Ops, Logistics, & Warehousing	<ul style="list-style-type: none"> • Deep natural harbors and a strategic location for domestic and international cargo movement. • Average annual wages of \$74,894 are competitive for the sector. • Reinforces infrastructure investment priorities for intermodal access and last-mile connectivity. 	<ul style="list-style-type: none"> • The cluster's employment LQ declined to 1.0, down from 1.1 in the prior G&D update, suggesting loss of relative specialization. • Lack of direct interstate access to southern metros continues to constrain freight efficiency and growth. 	<ul style="list-style-type: none"> • Integrating logistics with manufacturing and energy supply chains may increase local value capture. • Federal infrastructure funding may be leveraged to improve last-mile and interstate connectivity. 	<ul style="list-style-type: none"> • Competing coastal and inland ports are investing heavily in automation and infrastructure, increasing competition. • Workforce shortages in CDL drivers, technicians, and warehouse staff continue to challenge expansion.
Ship Repair & Shipbuilding	<ul style="list-style-type: none"> • Employment LQ of 44.7 in this cluster, the highest among all sectors. • Long- standing private-public partnerships support workforce and infrastructure development. • Core to the defense industrial base strategy and tied to ongoing shipyard modernization projects. 	<ul style="list-style-type: none"> • An aging workforce and inconsistent apprenticeship throughput raise long-term skill replacement concerns. • Employment growth averaged just 0.3% annually over five years, reflecting limited net expansion. 	<ul style="list-style-type: none"> • Supports apprenticeship expansion and shipyard modernization projects funded through the Talent Development and Cluster Scale-Up investment areas. • Supply chain overlaps with advanced manufacturing and cybersecurity enable cross-cluster innovation. • Shift in federal priorities is driving increased investment to expand U.S. shipbuilding capacity. 	<ul style="list-style-type: none"> • Regional competition and cost pressures. • Skilled labor shortages in trades like welding and marine electrical work could constrain growth and limit the cluster's ability to scale.
Uncrewed Systems & Aerospace	<ul style="list-style-type: none"> • Average annual wages exceed \$98,000. 	<ul style="list-style-type: none"> • Access to specialized test facilities and aerospace-grade 	<ul style="list-style-type: none"> • Rapid adoption of autonomous systems in defense, logistics, 	<ul style="list-style-type: none"> • Aggressive investments by peer states.

	<ul style="list-style-type: none"> Existing defense presence, academic assets, and existing aerospace firms provide a foundation for growth. Directly aligned with aerospace innovation and test corridor initiatives. 	infrastructure remains limited.	<ul style="list-style-type: none"> and agriculture creates new markets. Crossovers with modeling, simulation, and AI tools present high-value innovation pathways. Aligns with autonomous systems R&D and test site expansion within the region's Innovation Ecosystem framework. 	<ul style="list-style-type: none"> Regulatory uncertainty and lagging FAA policy on uncrewed systems may slow deployment. Talent pipeline may not scale quickly enough to match national or private-sector demand.
Water Technologies	<ul style="list-style-type: none"> Employment LQ grew from 1.2 (2023) to 1.3 (2024), signaling increasing specialization. Average annual wages over \$94,000. 	<ul style="list-style-type: none"> Cluster remains relatively fragmented across firms in A&E, planning, and research. Limited dedicated commercialization and pilot facilities slow technology validation. 	<ul style="list-style-type: none"> Advances coastal resilience and stormwater infrastructure projects under the Infrastructure and Site Readiness initiative. Growing global and national demand for coastal resilience, stormwater, and climate adaptation solutions. Synergies with shipbuilding, energy, and port operations for dual-use innovation. 	<ul style="list-style-type: none"> Policy shifts at the federal level could delay or constrain short-term investment. Competition from other resilience hubs (Boston, Miami, Houston) for firms and talent.

Cross-Cutting Challenges to Cluster Success

Region 5's priority clusters have strong growth potential, but their trajectory is directly shaped by region-wide constraints that impact our ability to attract, retain, and fully leverage talent. These are not side issues; rather, they are fundamental competitiveness factors that influence the scalability, resilience, and long-term success of every cluster.

HOUSING AVAILABILITY AND AFFORDABILITY

The 2024 Life in Hampton Roads survey, conducted annually by Old Dominion University's Social Science Research Center, continues to rank housing costs and availability among the most pressing concerns for residents. Across much of the region, home prices and rents have grown faster than wages, creating affordability gaps that disproportionately affect early- and mid-career professionals, a demographic that is critical to sustaining a competitive, innovation-driven economy.

For major employment sectors such as shipbuilding, advanced manufacturing, and logistics, these housing pressures have direct operational impacts. When affordable housing is scarce near major job centers, workers face longer commute times, which can erode job satisfaction, increase absenteeism, and drive higher turnover. This, in turn, reduces workforce stability and increases recruitment and training costs for employers.

The problem is compounded by the mismatch between available housing stock and the needs of the workforce. In some submarkets, the bulk of new housing construction has been oriented toward higher-income buyers, leaving limited options for middle-income households that form the backbone of many target industry clusters. Rental markets are experiencing similar constraints, with rising rents outpacing inflation and vacancy rates remaining low in proximity to industrial hubs, ports, and shipyards.

These dynamics are not just a social or community development issue, they are a core economic competitiveness factor. Without targeted solutions that expand the supply of workforce-appropriate housing near employment corridors, Region 5 risks losing talent to more affordable markets and limiting the scalability of its priority clusters.

CHILDCARE ACCESS AND WORKFORCE PARTICIPATION

Access to high-quality, affordable childcare is a critical workforce infrastructure issue, especially for Hampton Roads' large military population. For dual-military households or single-parent service members, limited childcare availability can directly influence retention decisions. Joint Base Langley-Eustis, for example, maintains the largest waitlist for on-base childcare in the Air Force, with nearly 600 families awaiting placement, while Navy Region Mid-Atlantic installations in Hampton Roads report over 2,200 children on waitlists.

The Military Child Care in Your Neighborhood (MCCYN) and MCCYN+ programs are designed to provide fee assistance for families who cannot access on-base childcare. The programs,

however, face constraints: administrative costs are high, provider margins are thin, and teacher pay remains low compared to other professions. These factors discourage private providers from enrolling, further limiting the supply of quality care.

Beyond the military community, limited childcare access constrains regional labor force participation, particularly among women with young children. Nationally, mothers with children under age five participate in the labor force at lower rates than other parents, reflecting the challenges of balancing caregiving and employment. Local estimates for Hampton Roads are broadly consistent with state and U.S. trends, suggesting that childcare barriers represent untapped workforce potential. Addressing these shortages is not only a family support issue but also one of the most direct pathways to expanding the available talent pool.

PERCEPTIONS OF OPPORTUNITY AND MOBILITY

The *Fahrenheit Outmigration Study*, which was commissioned by the Hampton Roads Executive Roundtable and the Hampton Roads Workforce Council, underscores a competitive reality: Hampton Roads is losing younger and mid-career professionals to markets perceived as offering stronger career trajectories, lower living costs, and a richer menu of amenities. This segment of the workforce is often the most mobile, and the impact of this mobility is magnified in high-demand, high-skill sectors such as cybersecurity, engineering, and life sciences.

The study revealed that Hampton Roads' most mobile demographic (young, college-educated professionals) perceive stronger upward mobility in markets such as Raleigh, Charlotte, and Washington, D.C. Respondents cited career advancement pathways, competitive compensation, and cultural amenities as key factors driving relocation decisions. While Hampton Roads offers comparable affordability and quality of life, raising awareness of these assets and amplifying local success stories will be central to reshaping perceptions.

At the same time, the region is investing in distinctive amenities that strengthen its identity and appeal to younger professionals. Projects such as Atlantic Park's wave park in Virginia Beach, the Trail757 and VB Trail projects, and the upcoming Virginia 250 commemorations showcase Hampton Roads as both a historic and forward-looking community. These initiatives enhance livability and position the region as a dynamic place to start a career, family, or business.

"Hampton Roads hooked me when I first came here with the Navy, and it's only getting better — with teamwork, innovation, and investment fueling our future."

**Bob McKenna, President & CEO
Virginia Peninsula Chamber**

A promising new effort is the *Start in Hampton Roads* initiative, a collaborative marketing campaign led by the Hampton Roads Chamber and Hampton Roads Executive Roundtable. The campaign emphasizes Hampton Roads as the place to start a career, start a family, and start a business. Expanding the visibility and reach of such initiatives will be critical to retaining talent and positioning the region as a competitive alternative to peer markets.

SKILLED LABOR SHORTAGE

Despite strong progress in expanding training pipelines through apprenticeships, credentialing, and partnerships with community colleges, demand for skilled labor continues to exceed supply. Factors such as housing affordability, domestic outmigration, and limited awareness of local career pathways all contribute to the gap. Addressing these barriers requires not only scaling training but also strengthening retention strategies, including affordable housing near job centers, targeted outmigration reduction efforts, and enhanced marketing of local opportunities.

IMPLICATIONS FOR PRIORITY CLUSTERS

Across all priority clusters, workforce scalability is directly tied to housing affordability, childcare access, and quality-of-life factors. In ship repair and shipbuilding, scarcity of housing near naval facilities makes it harder to retain skilled trades, while advanced manufacturing, food and beverage processing, and port-related operations face similar constraints in maintaining reliable, round-the-clock staffing near production corridors and terminals. Energy security projects and water technologies also depend on specialized trades and technical expertise, with housing shortages near infrastructure hubs threatening to delay timelines and raise costs.

For knowledge-intensive sectors such as uncrewed systems, cybersecurity, data analytics, modeling and simulation, and life sciences, national competition for talent places added weight on Hampton Roads' ability to offer competitive wages, strong career pathways, and appealing community amenities. Together, these challenges underscore that workforce infrastructure, such as housing, childcare, and livability, has become as essential to cluster growth as traditional business incentives or site readiness.

STRATEGIC RELEVANCE

These constraints cut across all four GO Virginia investment strategies:

- **Talent & Workforce:** Expanding training without addressing housing and childcare risks underutilizing newly skilled workers.
- **Sites:** Fully competitive sites require proximity to housing, transportation, and community amenities that support workforce attraction.
- **Industry Scale-Up:** Major infrastructure and capacity expansions will only succeed with parallel investments in livability.
- **Entrepreneurship:** Founders and growth-stage companies weigh quality-of-life factors heavily when deciding where to launch and scale.

“The mission of the Hampton Roads Chamber is to set the conditions for regional economic prosperity. Through strong regional collaboration, including with GO Virginia Region 5, Hampton Roads is a thriving region, cultivating opportunities for everyone.”

**Bryan Stephens, President & CEO
Hampton Roads Chamber**

POSITIONING FOR ACTION

While the scope of this plan focuses on industry-specific strategies, parallel initiatives will be critical in shaping complementary efforts to address housing, childcare, and affordability. These are foundational economic development challenges, and resolving them will strengthen every cluster and enhance the region’s competitiveness for future investment.

Plan Goals and Actionable Strategies

Region 5's updated economic strategy builds on recent progress, further advancing a proactive, innovation-driven approach to regional growth. Grounded in updated economic data, informed by broad stakeholder engagement, and strengthened by a deeper alignment with federal priorities, this plan refines and prioritizes the region's goals through GO Virginia's four investment strategies:

1. **Workforce/Talent Development**
2. **Site Development and Infrastructure**
3. **Cluster Scale-Up**
4. **Entrepreneurship and Innovation**

Each strategy is tied to active or proposed projects that directly support Region 5's priority industry clusters. These initiatives include defined performance measures and evaluation frameworks to ensure measurable outcomes and accountability.

By aligning strategic investments with both foundational and future-focused sectors, Region 5 will strengthen its role as a globally competitive economy that delivers sustained, high-value growth.

- **Ship Repair and Shipbuilding:** Submarine industrial base, naval systems, ship repair, and defense logistics.
- **Advanced Manufacturing:** Dual-use technologies, precision systems, food & beverage processing, and mission-critical components.
- **Port Operations, Logistics, and Warehousing:** Port of Virginia's deep-water channels, advanced intermodal connections, warehousing hubs, and foreign trade zone advantages.
- **Energy Security:** Offshore wind, Dominion Energy's energy infrastructure, small modular nuclear reactors (SMRs), microgrids, and other energy solutions.
- **Uncrewed Systems:** Leveraging NASA Langley, military aviation commands, and uncrewed systems.
- **Cybersecurity, Data Analytics, and Modeling & Simulation:** Advanced computing, cyber defense, robotics, and data-driven decision systems.
- **Life Sciences:** Driven by ODU's Virginia Health Sciences programs, Eastern Virginia Medical School, Sentara Health, and regional biotech firms engaged in medical research, diagnostics, and pharmaceutical manufacturing, with the Hampton Roads Biomedical Research Consortium (HRBRC) serving as a convening hub.

STRATEGY 1: WORKFORCE/TALENT DEVELOPMENT

Updated Regional Goal: *Close workforce gaps in key industry clusters through aligned training programs, strategic talent importation, expanded re-skilling efforts, and increased retention of local graduates and transitioning military personnel.*

“Hampton Roads is building an agile workforce—through GO Virginia-funded Talent Pathways Initiatives in Maritime, Data Analytics & Cybersecurity, and Aerospace & Unmanned Systems—aligning training with industry demand, fueling innovation, and ensuring growth creates opportunity for all our residents.”

**Shawn Avery, President & CEO
Hampton Roads Workforce Council**

Key Initiatives and Projects:

- Develop the pathways studied through the Talent Pathway Initiatives (TPI) to include Uncrewed Systems, Cyber/Data/Modeling & Simulation, and Artificial Intelligence.
- Promote and expand the Regional Maritime Training System (RMTS), a regional talent portal that connects jobseekers, training providers, and maritime employers in shipbuilding, logistics, and port operations.
- Scale up and replicate successful models such as MEET (Maritime Entry to Employment Training) and COVA MAP (Maritime Advancement Pathways) to serve other core sectors.
- Expand dual enrollment, internships, apprenticeships, and work-based learning across K-12, community colleges, and four-year institutions.
- Support credentialing and re-skilling programs in response to new federal investment priorities and emerging green supply chains.
- Engage industry-led training initiatives in defense, shipbuilding, data science, and energy (e.g., wind, nuclear, microgrid).
- Leverage the *Hampton Roads Regional Investment Playbook* to identify and prioritize workforce development needs in targeted sectors such as defense, advanced manufacturing, secure energy, logistics, and uncrewed systems.
- Align training and credentialing programs with emerging opportunities identified through the Federal Funding/Policy Risks and Opportunities Initiative, preparing workers for federally driven growth in sectors like counter-UAS, secure energy, and maritime logistics.
- Integrate *Start in Hampton Roads* into workforce pipelines to attract and retain talent by promoting the region’s distinctive industries, coastal geography, and quality of life.

Performance Measures:

- Number of workers trained, credentialed, or upskilled in high-demand clusters.
- Retention rates of graduates and veterans in the Hampton Roads workforce.
- Job placement rates and wage gains post-training.
- Participation in regionally aligned programs (e.g., military-to-civilian pathways, energy sector certifications).
- Reduction in projected annual workforce gaps by industry and occupation.
- Number of jobs created in sectors prioritized by the *Hampton Roads Playbook*.

- Share of training completions directly aligned to federally funded or strategic investment projects.

STRATEGY 2: SITE DEVELOPMENT AND INFRASTRUCTURE

Updated Regional Goal: *Ensure Region 5 has a competitive portfolio of Tier 4 and 5 business-ready sites to attract and accommodate high-value projects in target clusters.*

Key Initiatives and Projects:

- Advance sites through the Virginia Business Ready Sites Program (VBRSP) to Tier 4 and Tier 5 status.
- Leverage the Eastern Virginia Regional Industrial Facility Authority (EVRIFA) to fund regional site upgrades and shared assets.
- Identify and prioritize new candidate sites in strategic corridors, including Suffolk, Chesapeake, and the I-64 Innovation Crescent.
- Coordinate site investments with expected demand from the shipbuilding and ship repair industrial base, offshore wind, and advanced manufacturing.

Performance Measures:

- Number of sites certified at Tier 4 or higher.
- Percentage of RFIs with matching site availability.
- Prospect feedback on site readiness and suitability.
- Reduction in project losses due to site constraints.
- Time-to-market improvements for priority sites.
- Alignment of certified sites with priority industry clusters identified in the Hampton Roads Regional Investment Playbook.

STRATEGY 3: CLUSTER SCALE-UP

Updated Regional Goal: *Invest in physical and digital infrastructure that enables growth in federal-aligned, tech-enabled, and energy-intensive sectors.*

“This is our moment, our chance to build the projects, attract the investment and create the jobs that will shape Hampton Roads for generations to come.”

Douglas L. Smith, President & CEO
Hampton Roads Alliance

Key Initiatives and Projects:

- Advance *Hampton Roads Regional Investment Playbook* initiatives to expand both core and emerging industry clusters in alignment with federal spending priorities.

- Support infrastructure requirements for national AUKUS Pillar 1 and Pillar 2 initiatives, including submarine supply chain expansion and advanced technology sectors such as AI, quantum, and cybersecurity.
- Expand capacity at major regional assets including Jefferson Lab, NASA Langley, and other research hubs; pursue the designation of federal innovation districts to anchor tech and defense-related growth.
- Develop enabling infrastructure for energy-intensive industries, such as port electrification, energy logistics at Fairwinds Landing, and expanded water/sewer capacity at key industrial sites.
- Strengthen regional innovation ecosystems by aligning public and private investment with national defense industrial strategy priorities and emerging technology fields.

Performance Measures:

- Infrastructure funding leveraged (state/federal/private).
- Number of federal-aligned projects supported.
- Measurable gains in capacity and throughput (e.g., megawatt capacity, reduced development timelines).
- New firm attraction and retention in innovation hubs, defense corridors, and energy-intensive growth zones.

STRATEGY 4: ENTREPRENEURSHIP AND INNOVATION

Updated Regional Goal: *Foster a scalable innovation ecosystem that accelerates commercialization, supports scale-ups, and diversifies the economy, while aligning with regional branding, talent attraction, and high-priority projects identified in the Hampton Roads Regional Investment Playbook and the Start in Hampton Roads initiative.*

“757 Collab shows the power of leverage in action. The catalytic investment made in 757 Collab by GOVA didn’t just launch one program — it created a platform that has evolved into a vertically-aligned venture hub, with its newest line of business - 757 Defend - bringing in federal partners, defense industry resources, and new funding opportunities for regional dual-use startups.”

Paul Nolde, President & CEO, 757 Collab

Key Initiatives and Projects:

- Expand and align key entrepreneurship platforms, including 757 Collab, Black BRAND, Innovate Hampton Roads, REaKTOR, and Build-to-Scale, to create an integrated, region-wide support network for startups and growth-stage companies.
- Launch a regional Scale-Up Concierge service to connect second-stage firms with capital, space, workforce, and technical expertise.
- Develop dual-use commercialization pathways that align with Department of Defense needs, including innovation districts and co-location with federal and private R&D facilities.
- Support and expand access in underserved areas by improving broadband availability, enhancing technical assistance programs, and increasing business formation in rural and historically underrepresented communities.
- Leverage the “757 Defend” initiative, launched by 757 Collab in partnership with the Navy Mid-Atlantic Tech Bridge, to accelerate commercialization of defense-related technologies and strengthen the region’s role in national security innovation.
- Integrate with *Start in Hampton Roads* to highlight the region’s entrepreneurial opportunities as part of a broader branding and engagement platform, showcasing distinctive industries, coastal geography, and community assets to attract founders and innovators.

Performance Measures:

- Number of startups launched, supported, or successfully scaled.
- Capital raised by early-stage and second-stage companies.
- Participation in federal innovation and commercialization funding programs.
- Engagement and growth among underserved entrepreneurs and geographies.
- Increase in commercialization of dual-use technologies linked to regional defense and federal priorities.

MONITORING PROGRESS

Region 5 will implement a performance dashboard to provide clear, consistent tracking of progress across all four strategies, priority clusters, and localities. The dashboard will serve as both a management tool and a public resource, ensuring transparency, accountability, and the ability to make timely adjustments based on results.

The dashboard will:

- Track program outcomes on a quarterly and annual basis to measure short-term progress and long-term impact for each of the four strategic areas: Workforce/Talent Development, Site Development and Infrastructure, Cluster Scale-Up, and Entrepreneurship and Innovation.
- Be reviewed by the Regional Council and published annually to keep stakeholders informed and engaged.
- Track progress on cross-cutting initiatives such as the *Hampton Roads Regional Investment Playbook*, the *Federal Funding/Policy Risks and Opportunities Initiative*, and

the *Start in Hampton Roads* talent attraction and retention initiative, ensuring transformational projects, federal investment wins, and workforce attraction outcomes are aligned with the four strategies.

- Monitor progress toward regional and federal alignment goals, ensuring the strategy remains responsive to evolving opportunities and challenges.
- Use findings from quarterly and annual reviews to guide adjustments in resource allocation, initiative design, and funding priorities.

By maintaining an ongoing feedback loop between performance data and strategic action, Region 5 can remain agile, reinforce its competitive advantages, and demonstrate measurable results that strengthen its position for future investment and growth.

Recent Announcements

Since 2021, GO Virginia Region 5 has experienced significant business attraction and expansion activity, reinforcing the region's strengths in manufacturing, logistics, defense, and emerging technologies. From January 2021 through June 2025, the region has seen:

- **80 business announcements**
- **7,967 new jobs committed**
- **\$3.02 billion in total capital investment**

These announcements span a wide range of sectors and localities, with notable growth in advanced manufacturing, warehousing and distribution, and defense-related industries. Both new business locations and existing facility expansions contributed to this economic momentum, underscoring Region 5's strategic assets, including port access, skilled workforce, and robust transportation infrastructure.

The scale and diversity of these projects highlight Region 5's role as a statewide leader in economic development. However, this growth also reinforces the need to continue investing in workforce development, site readiness, and infrastructure to maintain the region's competitiveness. A detailed list of projects is provided in the accompanying table, with information on company names, localities, industries, job creation, and investment levels.

Company Name	Locality	Month Announced	New Jobs	Investment (\$M)
Acoustical Sheetmetal Company (ASC)	Virginia Beach	June 2025	350	46
Sumitomo Machinery Corporation of America	Chesapeake	May 2025	0	9
TST Fab & Machine	Norfolk	March 2025	56	3
VIDARR Inc.	Virginia Beach	March 2025	38	3
DeLong Co.	Portsmouth	December 2024	14	26
Born Primitive	Virginia Beach	October 2024	0	14
Currie Medical Inc	Norfolk	October 2024	60	1
Norfolk Portsmouth Beltline Railroad	Portsmouth	October 2024	40	57
Sirius Analysis	Virginia Beach	September 2024	105	0
Anheuser-Busch InBev	James City	September 2024	0	7
Kongsberg Defence & Aerospace Inc.	James City	September 2024	187	71
Canon Virginia, Inc.	Newport News	September 2024	0	37

LS Greenlink USA, Inc.	Chesapeake	July 2024	338	681
Paden Cold Storage	Norfolk	June 2024	3	2
Liebherr Mining Equipment Company	Newport News	June 2024	175	73
Total Quality Logistics (TQL)	Norfolk	June 2024	100	0
FreezPak	Suffolk	March 2024	80	78
Prince Ink	Norfolk	February 2024	2	0
Solenis	Suffolk	January 2024	34	193
Eska Graphic Board	Suffolk	November 2023	9	5
Katoen Natie Norfolk Inc.	Norfolk	November 2023	76	60
DOMA Technologies, LLC	Virginia Beach	November 2023	307	4
Newport News Shipbuilding	Norfolk	November 2023	150	100
Dorman Products	Virginia Beach	October 2023	76	4
Amazon	Virginia Beach	September 2023	1100	350
Lyon Shipyard	Norfolk	September 2023	134	9
Automatic Coating, Limited	Suffolk	September 2023	50	23
Hermes Abrasives USA	Virginia Beach	September 2023	30	6
DEME Group	Norfolk	August 2023	40	0
Armed Forces Brewing Company	Norfolk	July 2023	47	5
Fugro Geotechnics and Survey	Norfolk	June 2023	15	0
Top Tier Solar Solutions	Norfolk	June 2023	70	0
ZIM	Virginia Beach	June 2023	307	16
Bauer Compressors	Norfolk	May 2023	47	7
AIT Marine	Norfolk	March 2023	76	1
Magazine Jukebox	Norfolk	February 2023	20	1
PRINCO LLC	Norfolk	February 2023	284	24
Yellow Dog Software	Norfolk	January 2023	20	0

Booz Allen Hamilton	Norfolk	January 2023	200	0
Dilon Technologies	Newport News	December 2022	0	7
MSI	Suffolk	December 2022	80	62
O-I Glass, Inc.	James City	November 2022	0	6
ARDX	Norfolk	November 2022	15	2
Stihl Inc.	Virginia Beach	November 2022	15	49
Nakano Warehouse & Transportation Corp.	Chesapeake	November 2022	25	14
Lowe's Companies, Inc.	Suffolk	October 2022	100	119
DroneUp	Virginia Beach	August 2022	510	7
Oldcastle APG	Suffolk	August 2022	28	6
Fairbanks Morse Norfolk Service Center	Chesapeake	July 2022	50	13
Massimo Zanetti Beverage USA	Suffolk	June 2022	79	29
High Liner Foods USA	Newport News	June 2022	0	31
Atlantic Constructors Inc. (ACI)	Suffolk	June 2022	75	1
Muhlbauer, Inc.	Newport News	May 2022	34	9
Birdsong Peanuts	Suffolk	May 2022	0	25
TeckArk	Norfolk	April 2022	8	0
WR Systems	Norfolk	April 2022	200	1
Colonna's Shipyard	Norfolk	April 2022	40	28
Embody, Inc.	Norfolk	April 2022	92	5
Certified Origins USA, Inc.	Newport News	March 2022	30	25
Perdue Agribusiness	Chesapeake	March 2022	0	59
Mercana Furniture and Decor	Newport News	January 2022	26	9
Celadon	Chesapeake	January 2022	210	267
Celadon	Suffolk	November 2021	60	7
Aery Aviation, LLC	Newport News	September 2021	211	15

Prism Maritime	Chesapeake	August 2021	166	4
SVT Robotics	Norfolk	August 2021	37	0
MI Technical Solutions, Inc.	Chesapeake	July 2021	10	1
Kristi Corporation USA	Suffolk	June 2021	10	1
Lyon Shipyard	Norfolk	June 2021	119	24
Anchor Sandblasting and Coatings	Norfolk	May 2021	45	0
Breeze Airways	Norfolk	May 2021	116	5
indieDwell	Newport News	May 2021	220	2
Kimley-Horn & Associates, Inc.	Virginia Beach	May 2021	0	102
Dante Valve Company	Norfolk	April 2021	40	2
Sunny Farms, LLC	Virginia Beach	April 2021	155	60
Katoen Natie Norfolk, Inc.	Norfolk	April 2021	35	61
JRF Ship Repairs	Portsmouth	April 2021	0	1
CMA CGM	Norfolk	February 2021	415	36
Tabet Manufacturing Company, Inc.	Norfolk	January 2021	68	7
Atlantic Wind Transfers	Norfolk	January 2021	3	0

Site Inventory and Readiness

A region's ability to attract new businesses and support existing industry expansion hinges on its inventory of development-ready sites. In GO Virginia Region 5, site readiness has emerged as a critical determinant of economic competitiveness.

To help localities and economic development organizations evaluate and prepare sites for development, Virginia administers the Virginia Business Ready Sites Program (VBRSP). The program classifies sites using a Tier 1 to Tier 5 framework, assessing both ownership/control and levels of infrastructure and due diligence completed:

- **Tier 1–2** sites are typically in early stages of preparation, with minimal due diligence or infrastructure in place.
- **Tier 3** indicates completion of foundational studies such as wetlands delineation, geotechnical evaluations, surveys, and environmental assessments.

- **Tier 4** signals that infrastructure is either fully in place or can be delivered within 12–18 months, making the site nearly shovel-ready.
- **Tier 5** sites are fully permitted, and development can begin immediately upon securing land disturbance permits.

While Region 5 has made strides in advancing the readiness of some key sites, much of the regional inventory remains below Tier 4. This presents a barrier to competitive project attraction, especially in high-demand sectors such as defense, advanced manufacturing, logistics, and energy, where speed to market is a top priority.

Moreover, many of the region’s most marketable sites face infrastructure or due diligence gaps that preclude higher tiering. Strategic investments are needed to elevate sites through the VBRSP tiers, especially to Tier 4 and 5 levels, where business prospects require confidence that timelines for construction and occupancy are both short and predictable.

The need for additional business-ready sites is particularly acute given Region 5’s focus industries, which often require large acreage, utility-served parcels with clear environmental status and proximity to multimodal transportation assets.

The following is a current inventory of sites in Region 5, organized by VBRSP tier and key characteristics.

Site Name	Locality	Total Acreage	Business Ready Site Tier
Hampton Roads Center North Campus	Hampton	470.00	4
Kings Creek Commerce Center	York	433.00	4
Shirley T. Holland Intermodal Park - Phase II	Isle of Wight	307.00	4
Innovation Park	Virginia Beach	155.00	4
Tech Center Research Park	Newport News	63.66	4
Shirley T. Holland Intermodal Park Phase III	Isle of Wight	965.00	3
Hampton Roads Executive Airport	Chesapeake	664.00	3
Port 460 Logistics Center	Suffolk	540.00	3
Camp Parkway	Southampton	438.70	3
Corporate Landing Business Park	Virginia Beach	325.00	3
Virginia Commerce Center	Suffolk	56.63	3
Norfolk Southern Site	Isle of Wight	1,723.00	2
Landing West	Chesapeake	887.00	2

Coastal Logistics Center Phase II and III	Suffolk	350.00	2
Air Commerce Park West Phase 1	Newport News	280.00	2
Westport Commerce Park	Suffolk	249.00	2
Hankins Farm Property	James City	203.71	2
Beale Farm Properties	Southampton	202.00	2
Bromay Street	Chesapeake	193.00	2
York River Commerce Park	York	173.00	2
Carleton Advanced Manufacturing Site	Newport News	145.00	2
Three Oaks @ Greenbrier Commerce Park	Chesapeake	143.60	2
Bowers Hill	Chesapeake	131.00	2
Fairwinds Landing	Norfolk	123.00	2
Oakland Industrial Park	Newport News	112.20	2
James River Commerce Center	James City	100.00	2
Southampton Commerce and Logistics Center	Southampton	80.00	2
Air Commerce Park East	Newport News	80.00	2
9131 & 9200 Barhamsville Rd	James City	76.10	2
Summit Pointe	Chesapeake	69.60	2
Norfolk Southern Railway Co Railroad Yard Site	Chesapeake	69.50	2
Franklin Industrial Air Park	Isle of Wight	69.00	2
Southampton Business Park	Southampton	61.00	2
West Road	Chesapeake	51.00	2
160 Blow Flats Road	James City	45.27	2
Oakland Industrial Park (Parcel A)	Newport News	45.00	2
Dominion Triangle	Chesapeake	39.70	2
Oakland Industrial Park (Parcels C, D, E)	Newport News	35.92	2
Copart Site	Chesapeake	30.00	2

14601 Jefferson Avenue	Newport News	29.80	2
700 Weaver Lane	Chesapeake	27.48	2
Pretlow Industrial Park	Franklin City	20.00	2
Oakland Industrial Park (Parcel B)	Newport News	11.75	2
Coastal Virginia Commerce Park (Frank Williams Tract)	Chesapeake	4,022.33	1
Bayville Farms Tract	Chesapeake	726.81	1
Eastern State Hospital Site	James City	540.65	1
Quarterpath at Williamsburg	Williamsburg	383.00	1
Lovett 64 Commerce Center	James City	328.00	1
South Battlefield	Chesapeake	318.50	1
Darden Property	Chesapeake	159.68	1
Dominion Blvd. South	Chesapeake	117.10	1
Cartwright Belle Haven Site	Chesapeake	77.60	1

Conclusion

Region 5's 2025 Growth and Diversification Plan embodies a focused progression toward economic transformation, supported by measurable regional milestones. Since 2023, the region has secured over \$900 million in investments, including the Offshore Wind Supply Chain Hub, the \$681 million LS GreenLink subsea cable manufacturing facility, \$225 million in port terminal improvements, and the \$80 million Fairwinds Landing project. These wins, coupled with enhanced regional coordination, have strengthened the return on public investment and accelerated progress toward a more diverse, innovation-focused economy.

This plan does not propose change for its own sake. It charts a course to diversify within areas of strength, strategically leverage federal investment, and grow sectors that offer high-wage, sustainable job opportunities across the region. Two regionwide strategic initiatives will serve as cornerstones moving forward: the *Hampton Roads Regional Investment Playbook*, led by the Hampton Roads Alliance, which aligns public and private resources to advance transformational projects in defense, advanced manufacturing, energy innovation, and other key industries; and the *Federal Funding/Policy Risks and Opportunities Initiative*, led by the Hampton Roads Executive Roundtable, which focuses on maximizing the region's share of federal investments in defense, aerospace, secure energy, uncrewed systems/counter-UAS, AI and digital infrastructure, logistics, and related sectors. Together, these efforts position Region 5 to respond to global trends in remilitarization, reshoring, and energy security.

In addition, the region is piloting *Start in Hampton Roads*, the region's first-of-its-kind Talent Attraction and Retention Initiative in partnership with VEDP. This program is building a regional branding and engagement platform that highlights the region's distinctive industries, coastal geography, history, and community to attract top talent. Complementing these efforts, the region must also maintain a strong pipeline of shovel-ready and business-ready sites. Competitive site readiness, supported by infrastructure investments, zoning alignment, utility capacity, and permitting efficiency, remains essential to attracting major employers and capturing time-sensitive opportunities in emerging industries.

While the region is well positioned to advance GO Virginia's mission, persistent barriers could limit growth if unaddressed. Eastern Shore connectivity challenges constrain access to larger markets. Housing affordability and availability affect workforce attraction and retention. Limited childcare access impacts labor force participation, especially among working parents. Gaps in healthcare access, particularly in rural and underserved communities, can hinder overall economic vitality. Transportation bottlenecks remain a concern for moving goods and workers efficiently across the region. Addressing these issues in parallel with site readiness and industry growth will ensure that the region can meet the needs of both employers and residents.

The strategies outlined in this plan provide a comprehensive framework for addressing these challenges and leveraging the region's strengths. Region 5 will: (1) expand talent and workforce pipelines aligned with employer demand; (2) accelerate site readiness to ensure competitive, business-ready locations; (3) scale industry clusters by building on federal anchors and advancing

dual-use technologies; and (4) foster entrepreneurship and innovation through stronger commercialization pathways and support for small and young firms. Together, these strategies reinforce one another and position Hampton Roads for long-term resilience and prosperity.

With clearly defined priorities, actionable strategies, investment in site readiness, and strong regional collaboration, Region 5 is prepared to translate its assets into broader economic opportunity, building an economy that benefits businesses, workers, and communities for years to come.

“The Growth and Diversification Plan further unites Hampton Roads around shared goals—aligning our region’s assets, priorities, and strategies to fuel prosperity and strengthen Hampton Roads’ competitiveness.”

**Bob Crum, Executive Director
Hampton Roads Planning District Commission**

Appendix A: Population Trends and Migration Data

Table A1: Population, Region 5 vs. Virginia vs. U.S., 1990 to 2024

Region	1990	2000	2010	2020	2024
Region 1: Southwest	393,511	398,740	401,784	370,639	363,040
Region 2: West Central	643,350	700,085	762,197	779,594	784,517
Region 3: Southside	366,116	387,778	383,733	365,714	364,071
Region 4: South Central	900,854	1,036,200	1,177,724	1,302,605	1,353,601
Region 5: Hampton Roads	1,468,905	1,589,071	1,670,831	1,750,429	1,756,911
Region 6: Eastern	291,414	376,459	470,994	527,256	561,501
Region 7: Northern	1,472,561	1,829,631	2,245,500	2,550,954	2,601,818
Region 8: Valley	386,523	445,222	509,080	547,649	563,584
Region 9: Central	282,699	336,206	401,856	442,775	462,152
Virginia	6,216,884	7,105,817	8,023,699	8,637,615	8,811,195
United States	248,790,925	282,162,411	309,321,666	331,577,720	340,110,988

Table A2: Population Growth Rate, Region 5 vs. Virginia vs. U.S., 1990 to 2024

Region	1990-1999 Annual Growth	2000-2009 Annual Growth	2010-2019 Annual Growth	2020-2024 Annual Growth
Region 1: Southwest	0.2%	0.1%	-0.7%	-0.5%
Region 2: West Central	0.8%	0.8%	0.3%	0.2%
Region 3: Southside	0.6%	-0.1%	-0.6%	-0.1%
Region 4: South Central	1.4%	1.4%	0.9%	1.0%
Region 5: Hampton Roads	0.8%	0.5%	0.3%	0.1%
Region 6: Eastern	2.6%	2.3%	1.0%	1.6%
Region 7: Northern	2.1%	2.0%	1.3%	0.5%
Region 8: Valley	1.4%	1.4%	0.7%	0.7%

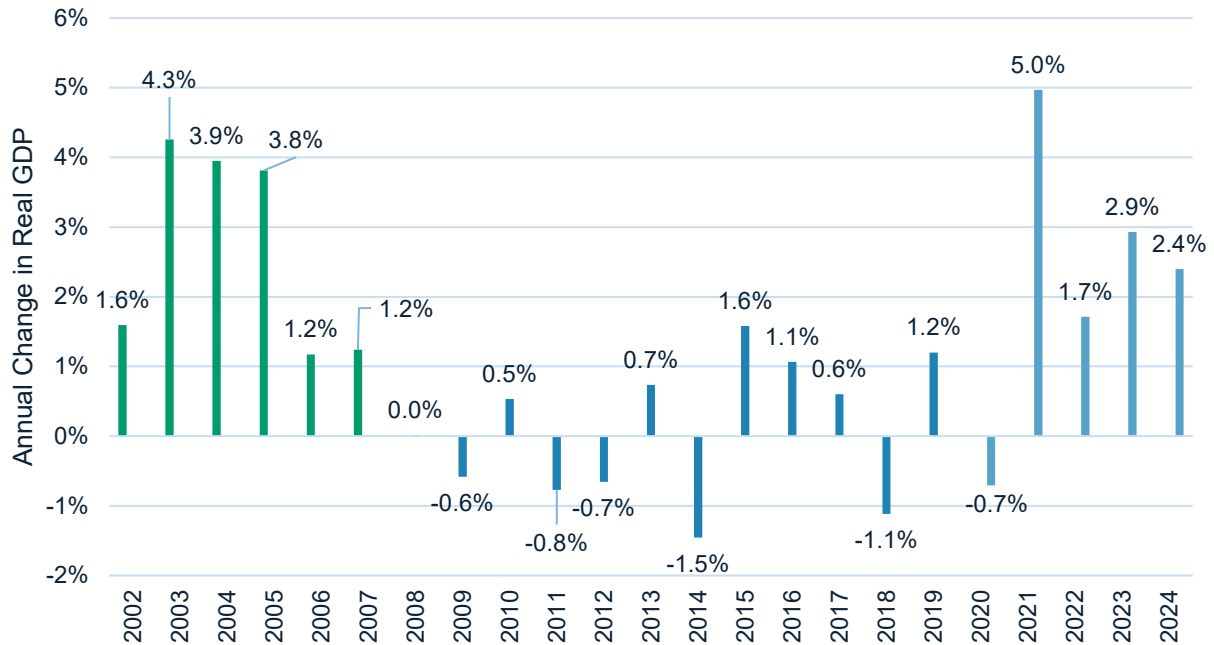
Region	1990-1999 Annual Growth	2000-2009 Annual Growth	2010-2019 Annual Growth	2020-2024 Annual Growth
Region 9: Central	1.7%	1.9%	1.0%	1.1%
Virginia	1.3%	1.2%	0.7%	0.5%
United States	1.2%	0.9%	0.7%	0.4%

Table A3: Components of Population Change, Region 5 vs. Virginia vs. U.S.

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

Appendix B: Gross Domestic Product

Graph B1: Growth in Real Gross Domestic Product: GO Virginia Region 5, 2002 to 2024



Source: U.S. Bureau of Economic Analysis, Dragas Center for Economic Analysis and Policy

Graph B2: GO Virginia Regions, Real GDP Growth: 2010 to 2023

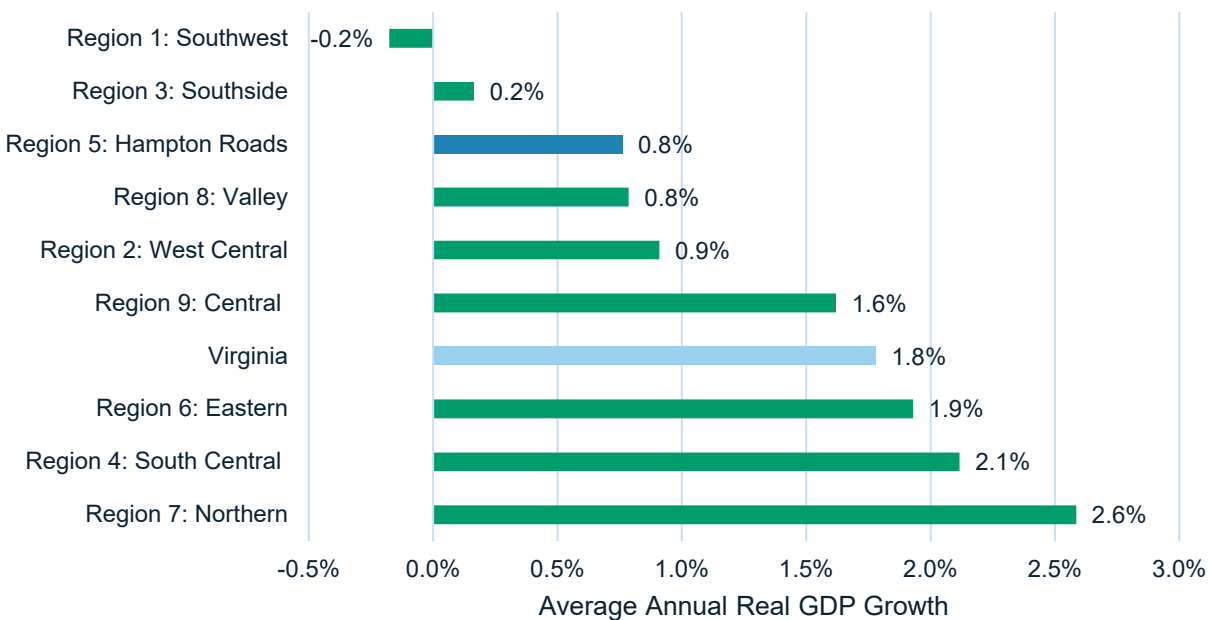
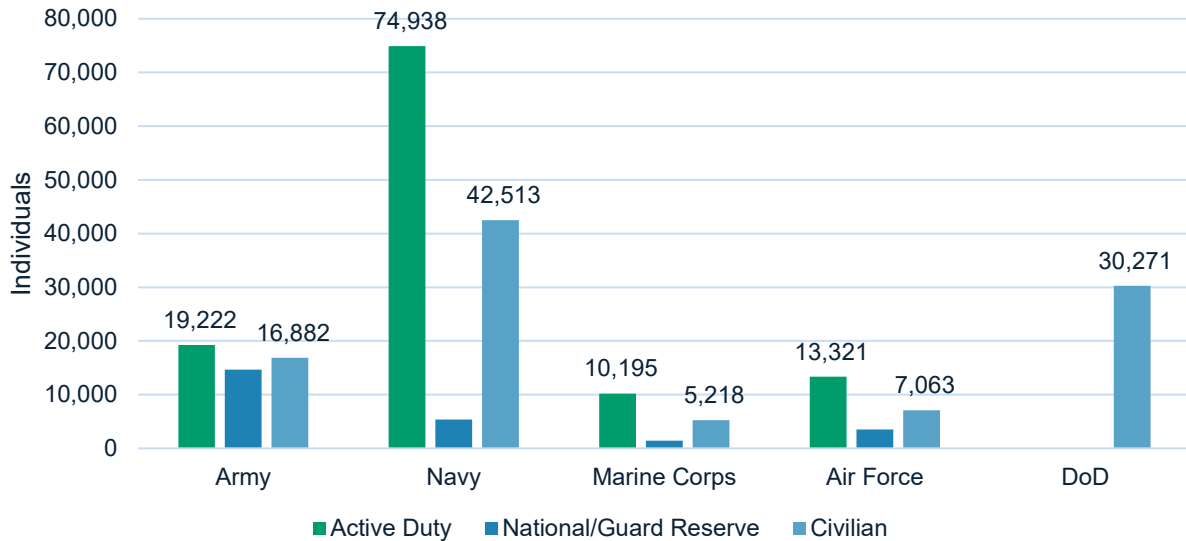


Table B1: Share of Virginia's GDP by GO Virginia Region, 2010 vs 2023

Region	2010	Share of Virginia's 2010 GDP	2023	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	43.6%
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	---

Appendix C: Military and Federal Employment

Graph C1: Active Duty, Reserve, National Guard, and DoD Civilian Personnel, Virginia: June 2024

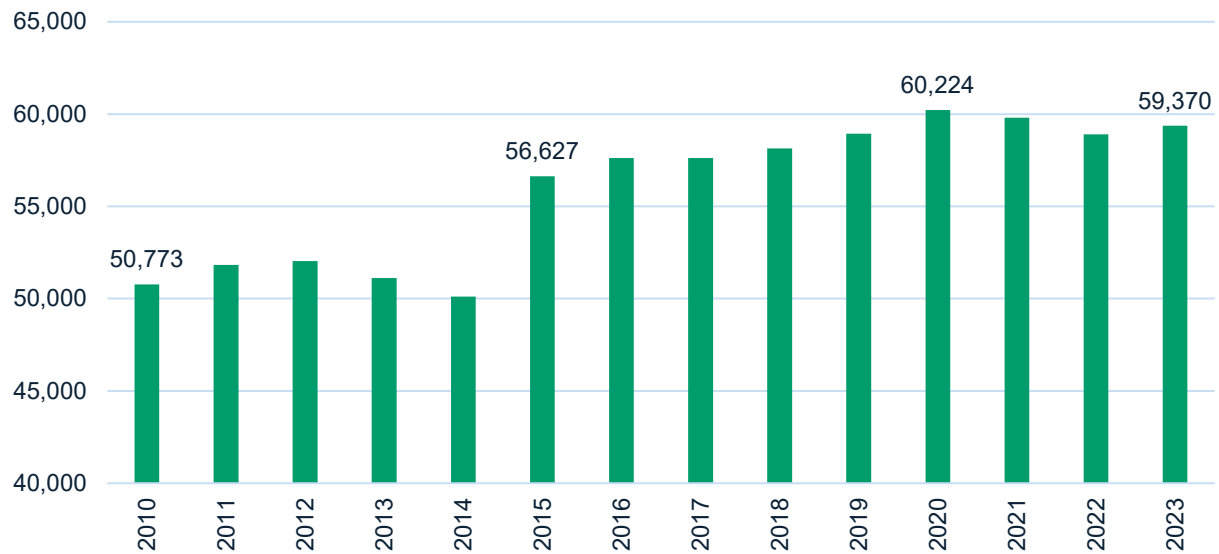


Sources: Defense Manpower Data Center (June 2024)

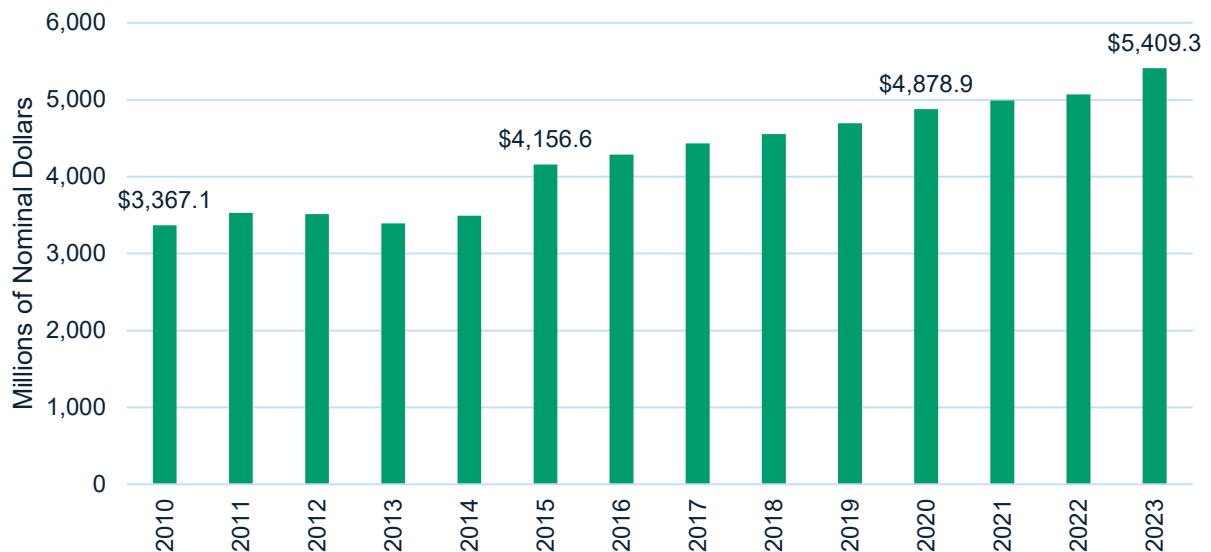
Graph C2: Estimated Total Basic Pay for Military Personnel in Hampton Roads: 2011 to 2023



Source: United States Census Bureau, American Community Survey 1-Year estimates

Graph C3: Federal Civilian Employment in Region 5: 2010 to 2023

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Graph C4: Total Wages for Federal Civilian Employees in Region 5, Millions of Nominal Dollars: 2010 to 2023

Source: Bureau of Labor Statistics

Table C1: Federal Civilian Employment Across GO Virginia Regions

	Federal Civilian Employment	Share of Virginia Total	Average Federal Annual Wage	Average Private Sector Annual Wage
Region 1: Southwest	1,416	0.7%	\$72,140	\$45,683
Region 2: West Central	4,750	2.5%	\$87,030	\$54,384
Region 3: Southside	1,025	0.5%	\$68,983	\$45,712
Region 4: South Central	17,379	9.2%	\$94,822	\$67,851
Region 5: Hampton Roads	59,370	31.4%	\$91,112	\$58,113
Region 6: Eastern	13,007	6.9%	\$125,723	\$53,245
Region 7: Northern	80,723	42.6%	\$130,626	\$97,799
Region 8: Valley	3,739	2.0%	\$94,225	\$52,583
Region 9: Central	2,633	1.4%	\$120,547	\$60,117
Unknown or Unidentified	5,289	2.8%	\$116,463	\$109,212
Virginia	189,331	---	\$111,492	\$74,269

Appendix D: Individual Employment Growth

Table D1: Employment Growth, GO Virginia Regions and Virginia: 1990 to 2024

	Annual Employment Growth 1990-1999	Annual Employment Growth 2000-2009	Annual Employment Growth 2010-2019	Annual Employment Growth 2019 – 2024
Region 1: Southwest	0.2%	0.2%	-0.4%	0.1%
Region 2: West Central	0.8%	0.0%	0.5%	0.7%
Region 3: Southside	0.0%	-0.9%	0.5%	0.4%
Region 4: South Central	1.1%	0.7%	1.6%	1.2%
Region 5: Hampton Roads	1.0%	0.7%	0.8%	0.6%
Region 6: Eastern	2.6%	2.2%	1.4%	1.0%
Region 7: Northern	1.4%	1.6%	1.4%	0.8%
Region 8: Valley	1.5%	0.8%	1.2%	1.0%
Region 9: Central	1.3%	1.7%	1.5%	0.9%
Virginia	1.3%	1.1%	1.1%	0.8%
United States	1.3%	0.2%	1.4%	0.5%

Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics; Dragas Center for Economic Analysis and Policy

Table D2: Employment Growth in Region 5 Localities: 1990 to 2024

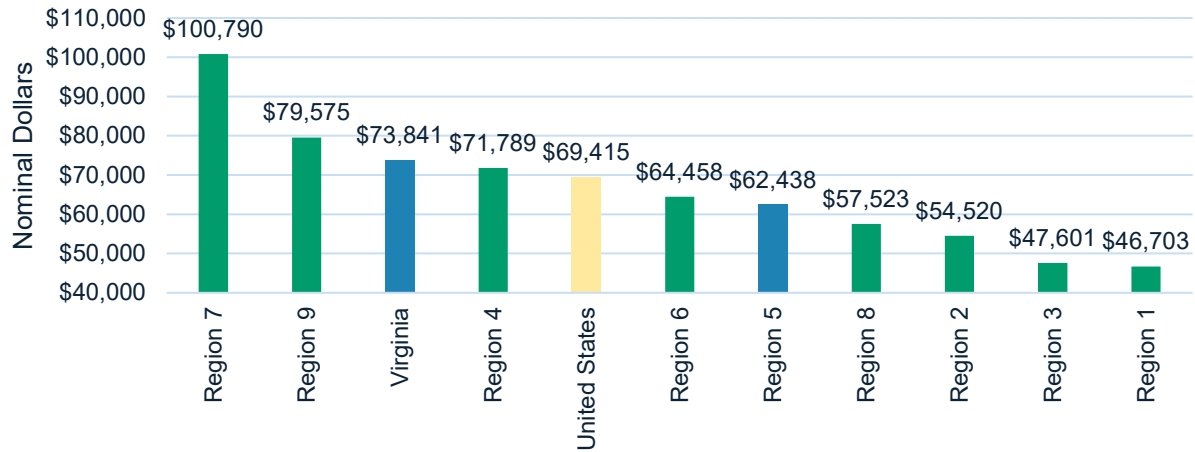
	Employment Growth 1990-1999	Employment Growth 2000-2009	Employment Growth 2010-2019	Employment Growth 2019-2024
Accomack	-0.4%	0.5%	0.3%	-0.4%
Chesapeake City	3.4%	1.3%	1.5%	0.7%
Franklin City	1.5%	0.3%	0.7%	-0.4%
Hampton City	0.4%	-0.1%	0.3%	0.7%
Isle of Wight	2.0%	2.2%	0.9%	0.8%
James City	3.3%	3.3%	1.9%	0.8%
Newport News City	0.6%	0.9%	0.4%	0.5%
Norfolk City	-1.9%	0.0%	0.5%	0.5%
Northampton	-0.7%	0.9%	-1.2%	1.1%
Poquoson City	0.6%	0.3%	0.5%	0.5%
Portsmouth City	-0.5%	0.0%	0.4%	0.7%

	Employment Growth 1990-1999	Employment Growth 2000-2009	Employment Growth 2010-2019	Employment Growth 2019-2024
Southampton	1.2%	0.3%	0.2%	0.2%
Suffolk City	2.6%	3.2%	1.4%	0.9%
Virginia Beach City	1.3%	0.3%	0.8%	0.6%
Williamsburg City	1.0%	0.8%	1.1%	0.9%
York	3.9%	1.0%	1.0%	0.8%
Region 5: Hampton Roads	1.0%	0.7%	0.8%	0.6%
Virginia	1.3%	1.1%	1.1%	0.8%

Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics; Dragas Center for Economic Analysis and Policy

Appendix E: Per Capita Income

Graph E1: Nominal Per Capita Income, U.S., Virginia, and GO Virginia Regions: 2023



Source: U.S. Bureau of Economic Analysis

Table E1: Per Capita Income by Locality

Location	2023 Nominal Per Capita Income	Real Income Growth 1990-1999	Real Income Growth 2000-2009	Real Income Growth 2010-2019	Real Income Growth 2019-2023
Accomack County	\$52,443	0.2%	3.3%	2.1%	-2.0%
Isle Of Wight County	\$69,100	1.7%	2.8%	0.4%	1.2%
Northampton County	\$65,814	1.4%	2.6%	3.1%	0.6%
Chesapeake City	\$62,736	1.1%	1.8%	0.0%	1.6%
Hampton City	\$52,364	1.0%	0.9%	-0.1%	1.4%
Newport News City	\$50,764	0.0%	1.7%	-0.2%	1.7%
Norfolk City	\$51,434	1.2%	0.8%	-0.2%	2.1%
Portsmouth City	\$48,985	0.5%	2.0%	-0.2%	0.8%
Suffolk City	\$66,130	1.6%	2.6%	0.4%	1.8%
Virginia Beach City	\$72,091	1.1%	0.9%	0.8%	1.8%
James City + Williamsburg, VA	\$81,761	2.8%	1.2%	0.6%	1.8%
Southampton + Franklin, VA	\$53,011	1.1%	0.3%	2.1%	1.5%

Location	2023 Nominal Per Capita Income	Real Income Growth 1990-1999	Real Income Growth 2000-2009	Real Income Growth 2010-2019	Real Income Growth 2019-2023
York + Poquoson, VA	\$73,221	0.6%	2.1%	0.3%	1.0%
Region 5	\$62,438	1.1%	1.5%	0.4%	1.6%

Source: U.S. Bureau of Economic Analysis

Appendix F: Industry Concentration

Table F1: Employment, Wages, Growth, and LQs by Industry

Industry	Employment	Average Annual Wages	Average Annual Employment Growth: Last 5 Years	Employment Location Quotient
Accommodation and Food Services	78,233	\$25,418	-0.8%	1.1
Administrative and Support and Waste Management	48,125	\$46,670	-1.3%	1.0
Agriculture, Forestry, Fishing and Hunting	2,508	\$58,205	-1.4%	0.3
Arts, Entertainment, and Recreation	22,292	\$26,883	2.8%	1.3
Construction	46,435	\$69,213	1.3%	1.0
Educational Services	67,221	\$55,965	-0.3%	1.0
Finance and Insurance	21,666	\$90,954	-0.4%	0.7
Health Care and Social Assistance	117,600	\$64,546	0.8%	1.0
Information	9,215	\$67,828	-4.2%	0.6
Management of Companies and Enterprises	12,069	\$117,046	0.7%	1.0
Manufacturing	73,134	\$77,265	-0.1%	1.1
Mining, Quarrying, and Oil and Gas Extraction	146	\$85,132	7.8%	0.1
Other Services (except Public Administration)	34,426	\$36,865	-2.0%	1.0
Professional, Scientific, and Technical Services	60,211	\$90,148	1.7%	1.0
Public Administration	56,168	\$87,492	0.5%	1.5
Real Estate and Rental and Leasing	15,711	\$63,553	0.2%	1.1
Retail Trade	85,834	\$34,690	-1.0%	1.1
Transportation and Warehousing	35,202	\$59,456	2.6%	0.9
Unclassified	1,441	\$49,615	-0.2%	1.1
Utilities	4,032	\$82,924	1.1%	1.0
Wholesale Trade	17,444	\$79,532	0.1%	0.6
Total - All Industries	809,113	\$60,599	0.1%	1.0

Source: JobsEq, data as of 2024 Q3

Appendix G: Establishment Creation

Table G1: Establishment Growth, U.S., Virginia, and GO Virginia Regions: 1990 to 2022

	Annual Establishment Growth 1990 – 1999	Annual Establishment Growth 2000 – 2009	Annual Establishment Growth 2010 – 2019	Annual Establishment Growth 2020 – 2022
Region 1: Southwest	1.2%	-0.9%	-1.3%	0.0%
Region 2: West Central	1.5%	0.4%	-0.1%	1.4%
Region 3: Southside	1.0%	-0.3%	-0.9%	-0.1%
Region 4: South Central	1.3%	1.0%	0.8%	1.5%
Region 5: Hampton Roads	1.0%	1.0%	0.1%	1.2%
Region 6: Eastern	2.5%	1.9%	0.4%	2.8%
Region 7: Northern	2.6%	1.9%	1.4%	0.9%
Region 8: Valley	1.2%	0.9%	0.2%	1.6%
Region 9: Central	2.0%	1.3%	0.6%	2.2%
Virginia	1.7%	1.1%	0.6%	1.2%
United States	1.4%	0.6%	0.8%	1.8%

Source: U.S. Census Bureau, County Business Patterns; Dragas Center for Economic Analysis and Policy

Table G2: Average Establishment Growth, U.S., Virginia, and Region 5 Localities: 1990 to 2022

	Annual Establishment Growth 1990 – 1999	Annual Establishment Growth 2000 – 2009	Annual Establishment Growth 2010 – 2019	Annual Establishment Growth 2020 - 2022
Accomack County	1.2%	0.2%	-1.6%	-0.6%
Chesapeake City	3.4%	2.0%	0.4%	1.8%
Franklin City	-2.4%	2.5%	-1.6%	-2.1%
Hampton City	0.0%	-0.2%	-0.3%	-0.3%
Isle Of Wight County	1.6%	2.2%	1.0%	3.2%
James City County	12.8%	5.4%	0.6%	1.4%
Newport News City	0.4%	0.3%	-0.1%	1.0%
Norfolk City	-1.2%	0.8%	-0.9%	0.4%
Northampton County	0.4%	0.5%	-0.7%	1.6%

	Annual Establishment Growth 1990 – 1999	Annual Establishment Growth 2000 – 2009	Annual Establishment Growth 2010 – 2019	Annual Establishment Growth 2020 - 2022
Poquoson City	0.5%	2.5%	0.0%	0.7%
Portsmouth City	-0.6%	0.9%	-0.7%	-0.9%
Southampton County	2.8%	-1.6%	-1.0%	-2.5%
Suffolk City	0.7%	2.9%	1.3%	3.0%
Virginia Beach City	1.7%	0.7%	0.6%	1.7%
Williamsburg City	-4.7%	-5.5%	1.0%	4.2%
York County	5.5%	2.4%	0.5%	-0.1%
Region 5	1.0%	1.0%	0.1%	1.2%
Virginia	1.7%	1.1%	0.6%	1.2%
United States	1.4%	0.6%	0.8%	1.8%

Source: U.S. Census Bureau, County Business Patterns; Dragas Center for Economic Analysis and Policy.

Appendix H: Educational Attainment

Table H1: Educational Attainment of Population Aged 25+, United States, Virginia, and GO Virginia Regions: 2023

	Less Than High School	High School Graduate	Associate's degree	Bachelor's Degree	Graduate or Prof. Degree	Any College Degree
Region 1: Southwest	14.5%	37.5%	20.3%	10.3%	11.3%	27.7%
Region 2: West Central	8.1%	31.4%	20.3%	8.8%	18.7%	40.1%
Region 3: Southside	15.6%	36.9%	20.7%	9.5%	11.1%	26.7%
Region 4: South Central	8.2%	24.2%	19.4%	7.8%	24.4%	48.2%
Region 5: Hampton Roads	7.5%	25.0%	22.6%	9.8%	21.1%	45.0%
Region 6: Eastern	9.2%	28.0%	20.7%	7.9%	20.6%	42.1%
Region 7: Northern	7.2%	13.2%	12.6%	5.6%	31.6%	67.0%
Region 8: Valley	11.4%	34.5%	18.8%	7.3%	16.4%	35.3%
Region 9: Central	8.3%	25.1%	17.9%	6.9%	23.0%	48.7%
Virginia	8.7%	23.9%	18.2%	7.8%	23.3%	49.3%
United States	10.6%	26.2%	19.4%	8.8%	21.3%	43.8%

Source: U.S. Census Bureau; Dragas Center for Economic Analysis and Policy

Appendix I: Workforce Gaps

Table I1: Occupation Gaps for 3-Digit SOC, Region 5: 2025 to 2034

Occupation	Annual Average Wages 2024 Q3	Employment 2024 Q3	Projected Employment 2034	Annual Supply Gap
Business Operations Specialists	\$89,800	43,479	44,328	-163
Computer Occupations	\$116,100	21,316	23,000	-160
Healthcare Diagnosing or Treating Practitioners	\$127,700	32,793	34,183	-159
Other Management Occupations	\$128,900	15,393	15,927	-86
Top Executives	\$133,900	18,103	18,170	-80
Engineers	\$112,700	13,460	13,619	-66
Operations Specialties Managers	\$156,800	8,253	8,753	-58
Financial Specialists	\$91,100	14,352	14,329	-36
Mathematical Science Occupations	\$112,400	2,044	2,411	-27
Health Technologists and Technicians	\$67,900	4,319	4,424	-24

Source: JobsEQ (2025).

Table I2: Projected Workforce Demand in Priority Clusters, 2025 to 2035

Clusters	Current Employment (2024 Q3)	Growth Need (10 yrs)	Replacement Need (10 yrs)	Total Openings (10 yrs)
Advanced Manufacturing	10,097	600 - 800	1,600 - 2,800	2,200 - 3,600
Energy Security	25,400	2,000 - 2,500	4,100 - 7,100	6,100 - 9,600
Cyber Security, Data Analytics, and Modeling and Simulation	5,046	750 - 1,000	800 - 1,400	1,600 - 2,400
Life Sciences	7,137	850 - 1,100	1,100 - 2,000	2,000 - 3,100
Port Operations, Logistics, and Warehousing	17,774	1,100 - 1,400	2,900 - 5,000	3,900 - 6,400
Shipbuilding and Ship Repair	41,764	1,700 - 2,500	6,700 - 11,700	8,400 - 14,200
Uncrewed Systems and Aerospace	15,622	900 - 1,250	2,500 - 4,400	3,400 - 5,600
Water Technologies	39,335	2,400 - 3,100	6,000 - 10,900	8,400 - 14,000
Total	122,840	7,900 - 10,500	19,700 - 34,400	27,600 - 45,000

Source: JobsEq, 2025. Data as of 2024 Q3; growth projections from BLS/VEC/Lightcast; replacement needs modeled using BLS separations methodology at 1.5 - 2.5% annually, compounded over 10 years.