

2024 Annual Economic Forecast

Robert M. McNab and Vinod Agarwal

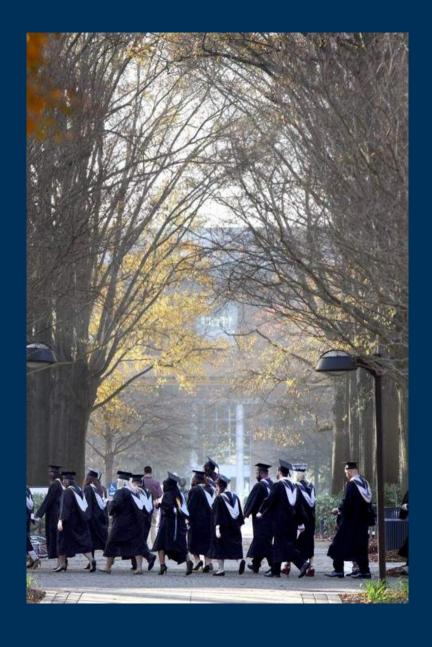
Dragas Center for Economic Analysis and Policy

Strome College of Business

Old Dominion University

January 31, 2024





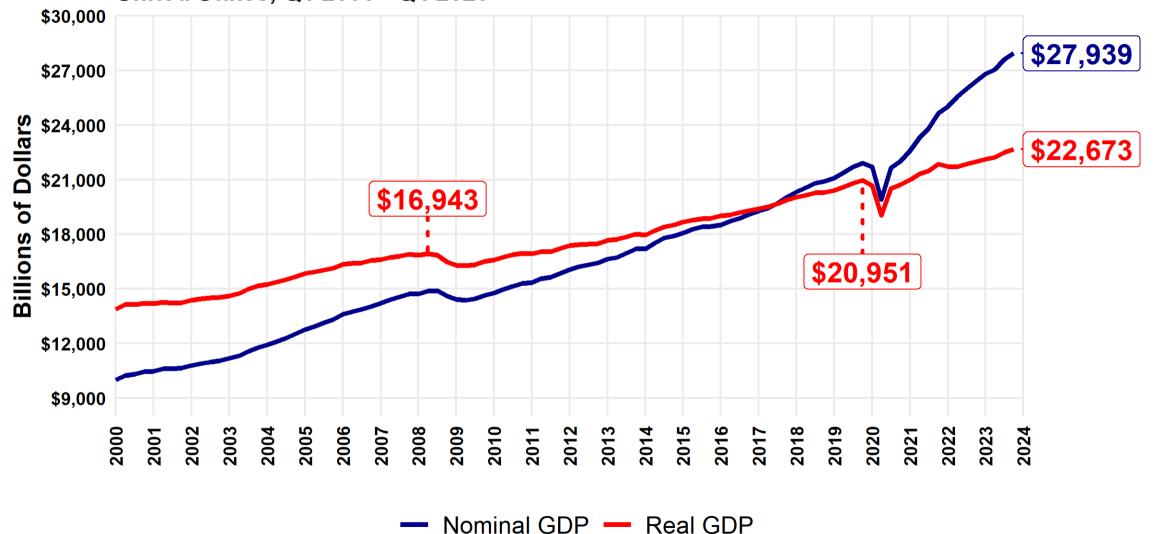
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GDP and Inflation

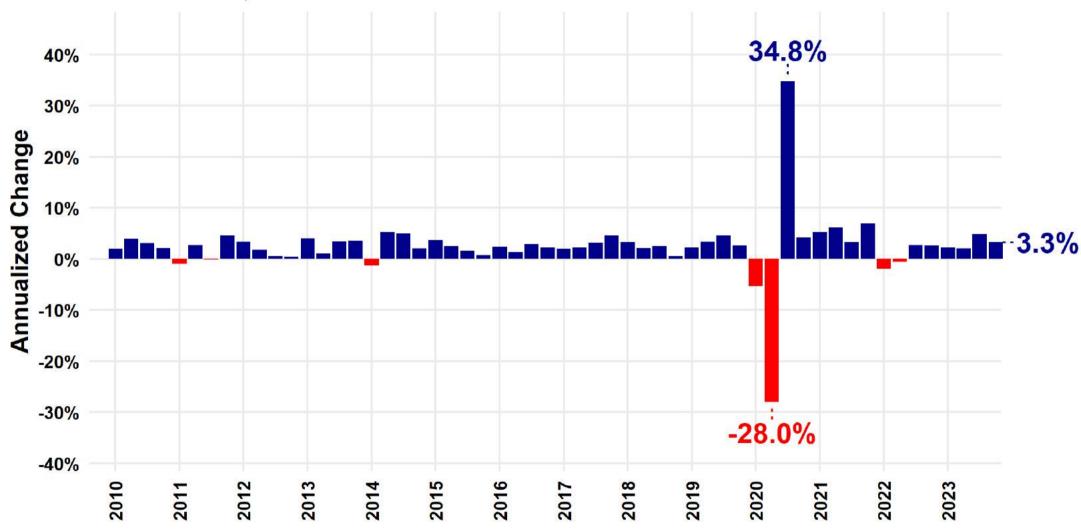


Nominal and Real Gross Domestic Product United States, Q1 2000 - Q4 2023



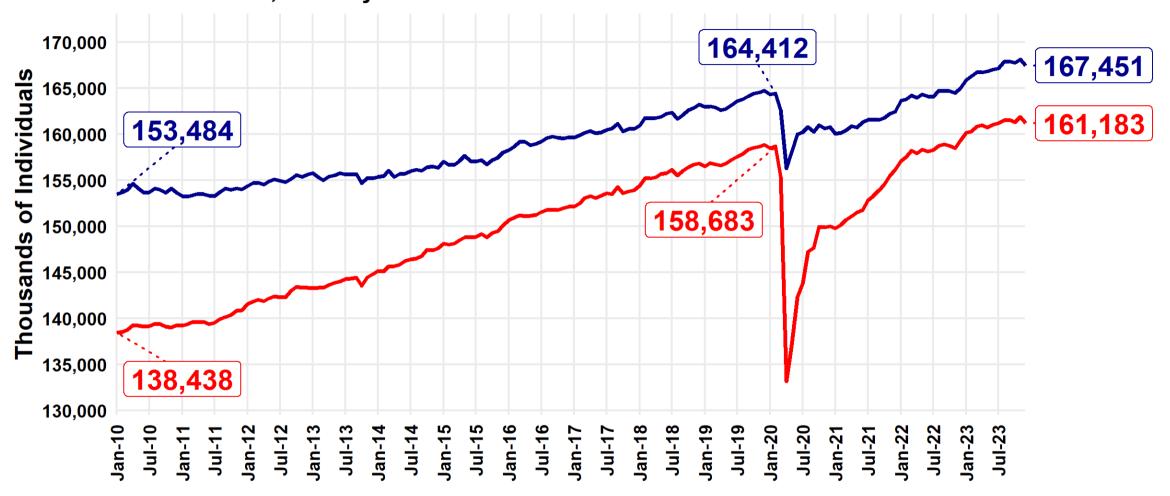
Sources: U.S. Bureau of Economic Analysis and Dragas Center for Economic Analysis and Policy. Seasonally adjusted data. Billions of chained 2017 dollars for real GDP.

Real Gross Domestic Product United States, Q1 2010 - Q4 2023



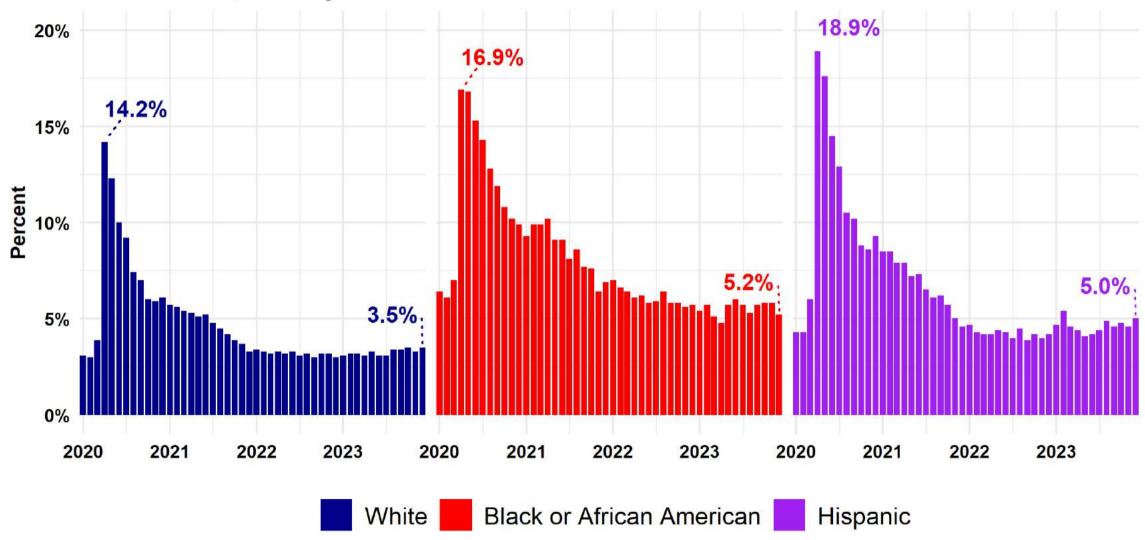
Sources: U.S. Bureau of Economic Analysis and Dragas Center for Economic Analysis and Policy. Compounded annual rate of change, seasonally adjusted annual rate, real GDP in chained 2017 dollars.

Civilian Labor Force and Individual Employment United States, January 2010 - December 2023

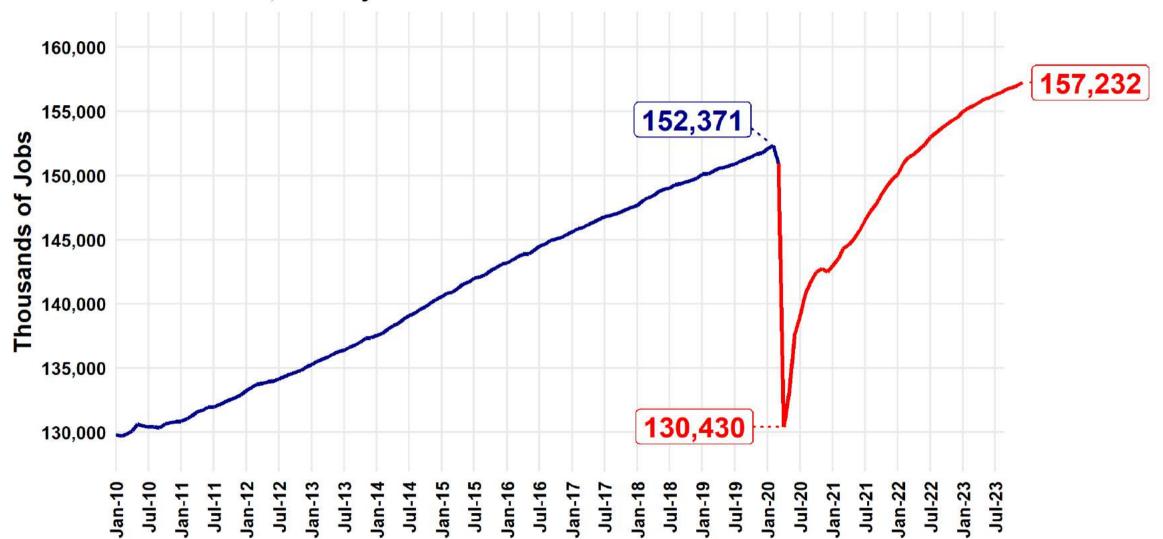


Civilian Labor Force
 Employment

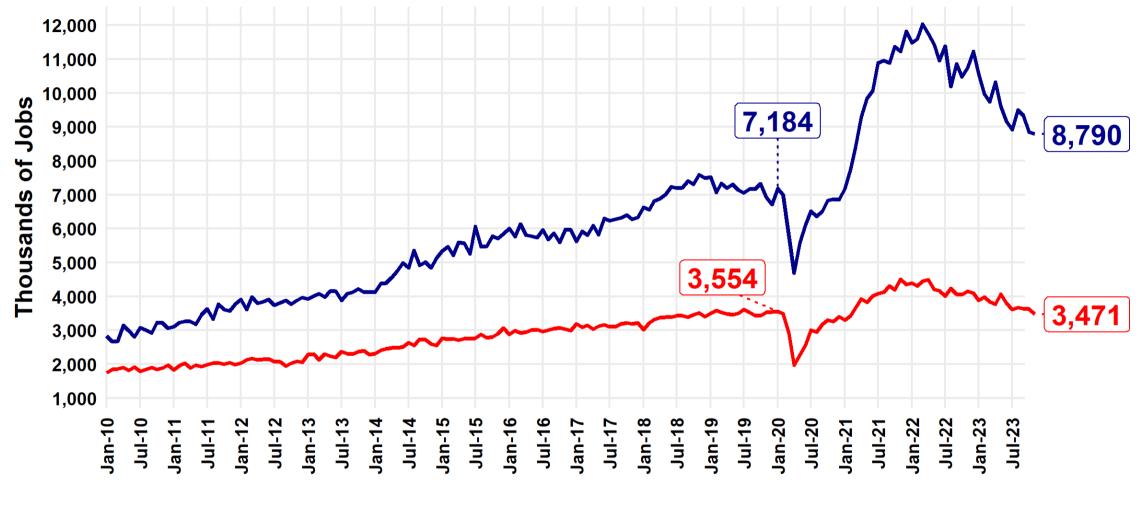
Unemployment Rate by Race and Ethnicity United States, January 2020 - December 2023



Nonfarm Payrolls (Jobs) United States, January 2010 - December 2023



Job Openings and Quits United States, January 2010 - November 2023



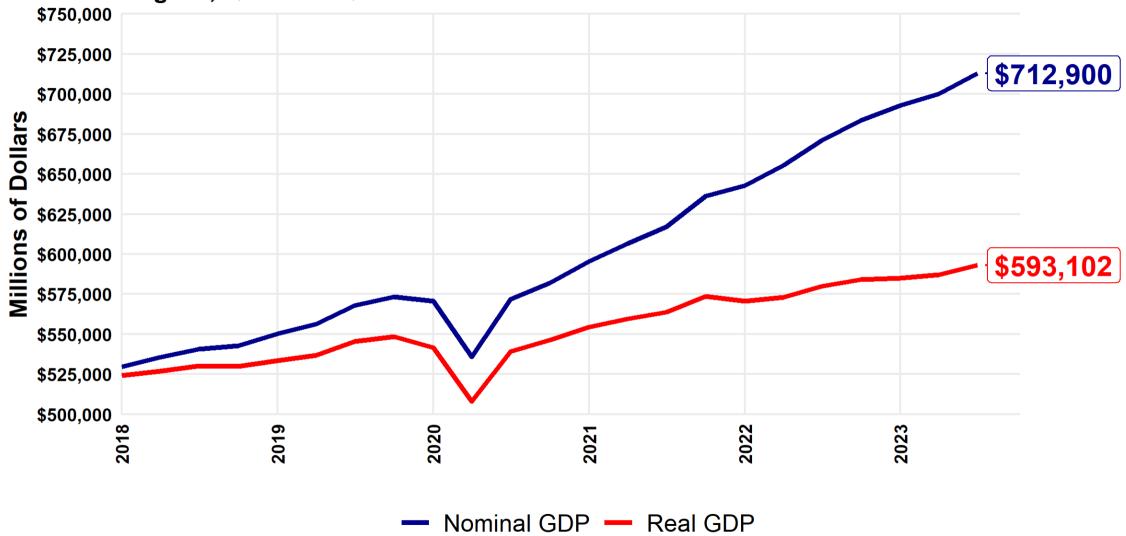
Job OpeningsJob Quits



Economic Conditions in Virginia

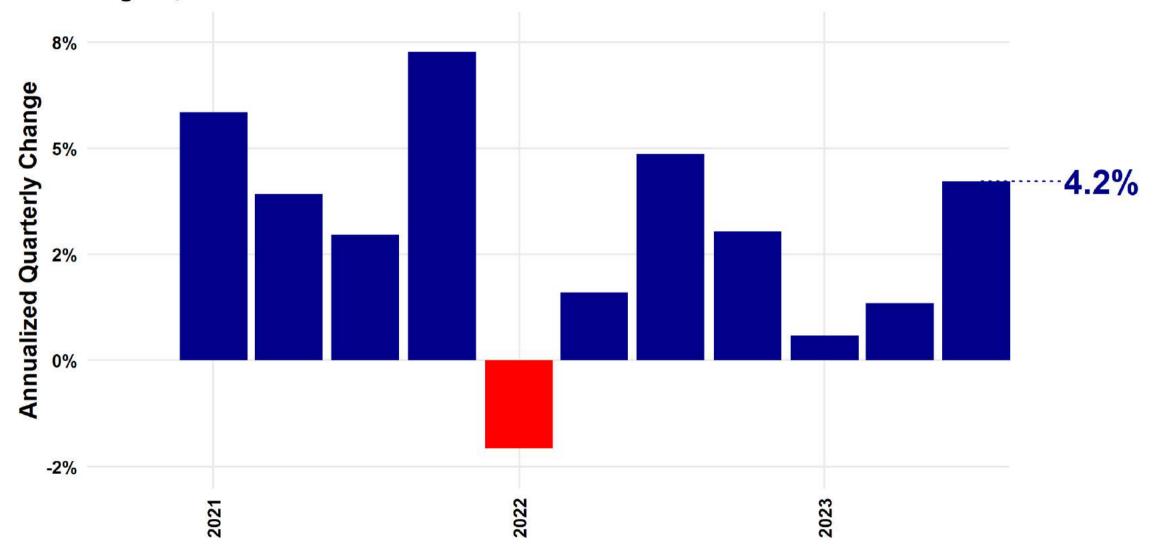


Nominal and Real Gross Domestic Product Virginia, Q1 2018 - Q3 2023

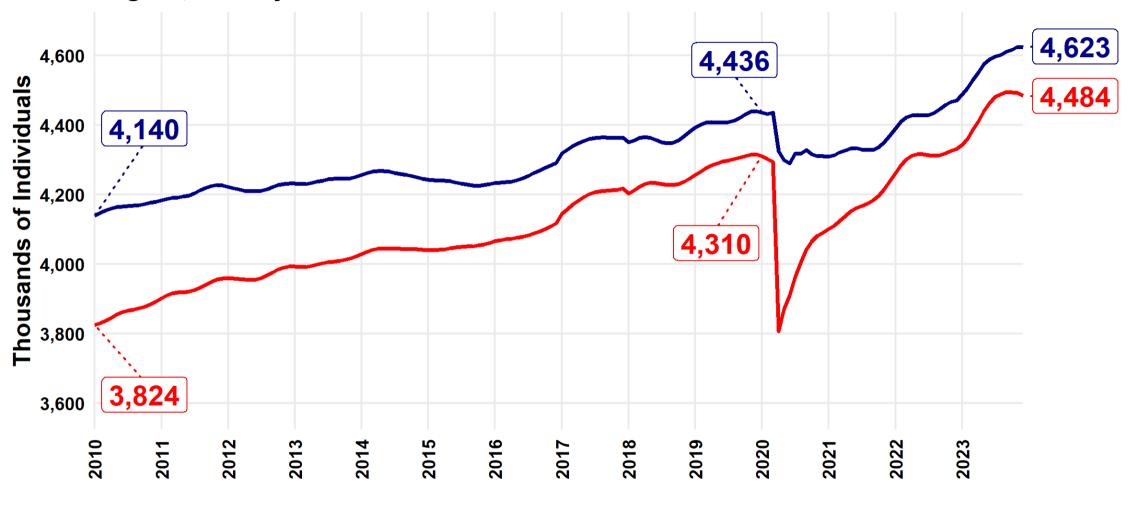


Sources: U.S. Bureau of Economic Analysis and Dragas Center for Economic Analysis and Policy. Seasonally adjusted data. Millions of chained 2017 dollars for real GDP.

Quarterly Change in Real Gross Domestic Product Virginia, Q1 2021 - Q3 2023

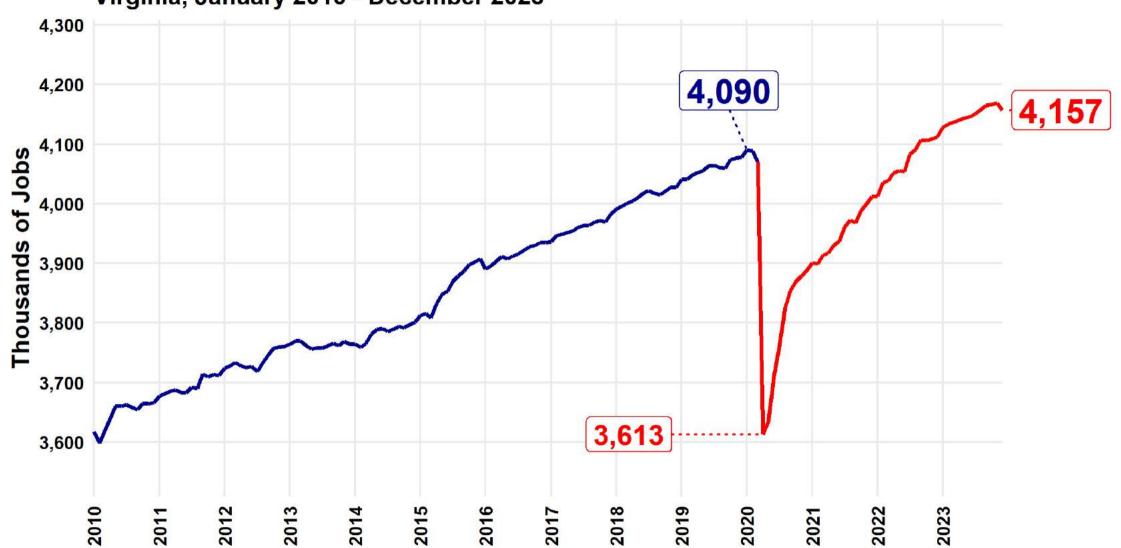


Civilian Labor Force and Individual Employment Virginia, January 2010 - December 2023

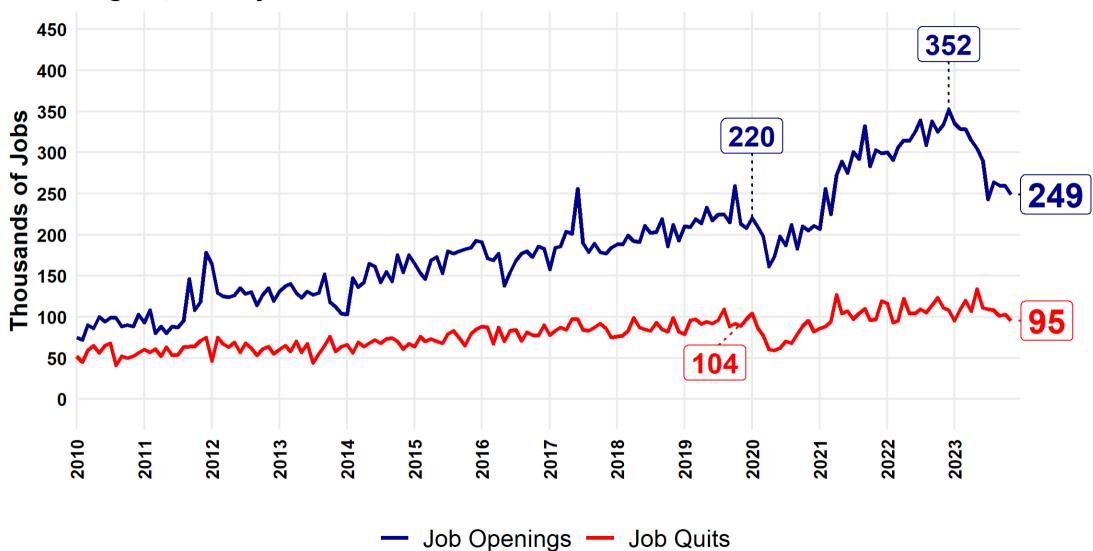


Civilian Labor ForceEmployment

Nonfarm Payrolls (Jobs) Virginia, January 2010 - December 2023



Job Openings and Quits Virginia, January 2010 - November 2023



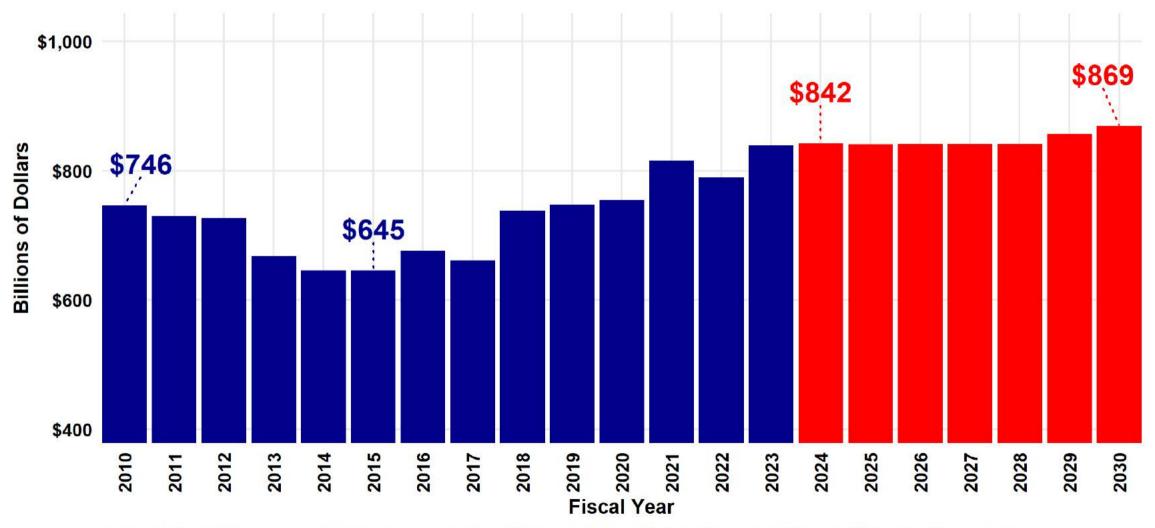
Source: Bureau of Labor Statistics, seasonally adjusted data.



Federal Spending and Debt

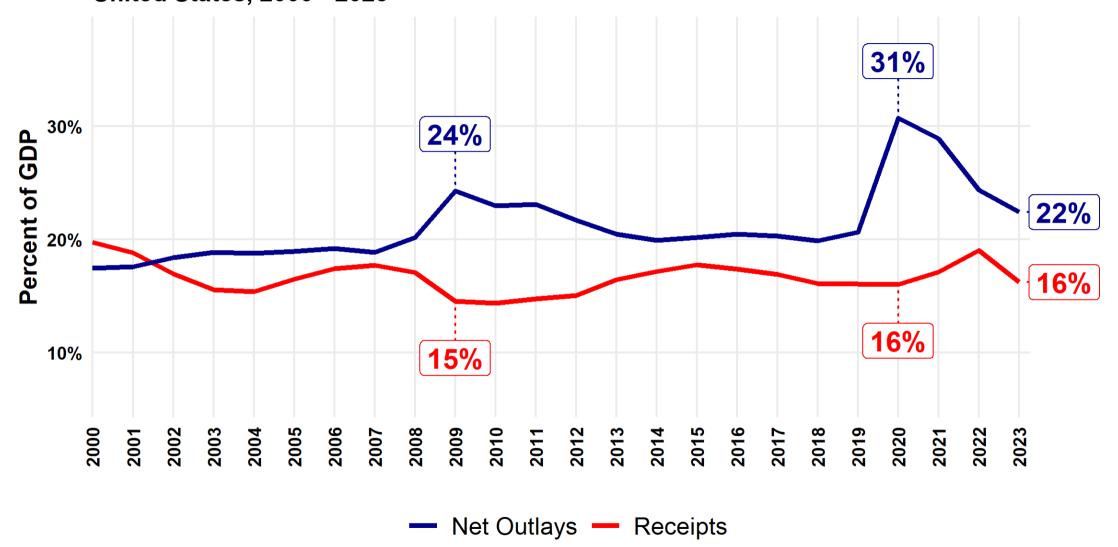


Department of Defense Total Budget Fiscal Year 2010 - 2030*



Sources: Office of Management and Budget, Congressional Budget Office, and Dragas Center for Economic Analysis and Policy. Total budget includes base-budget funding and supplemental funding. Current budget dollars. *Data for 2023 are estimates while data for 2024 through 2030 are projections based on national DoD spending estimates.

Federal Net Outlays and Receipts as a Percent of GDP United States, 2000 - 2023

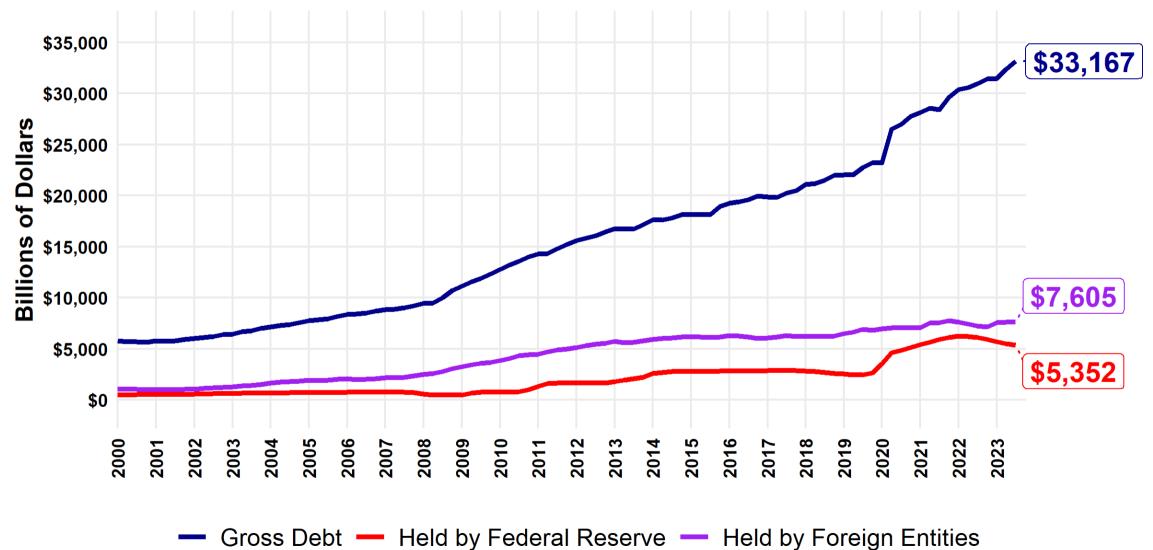


Source: U.S. Office of Management and Budget. Net outlays are outlays net of amounts that are adjustments to obligational authority. Net outlays are considered disbursements net of refunds and reimbursements collected.

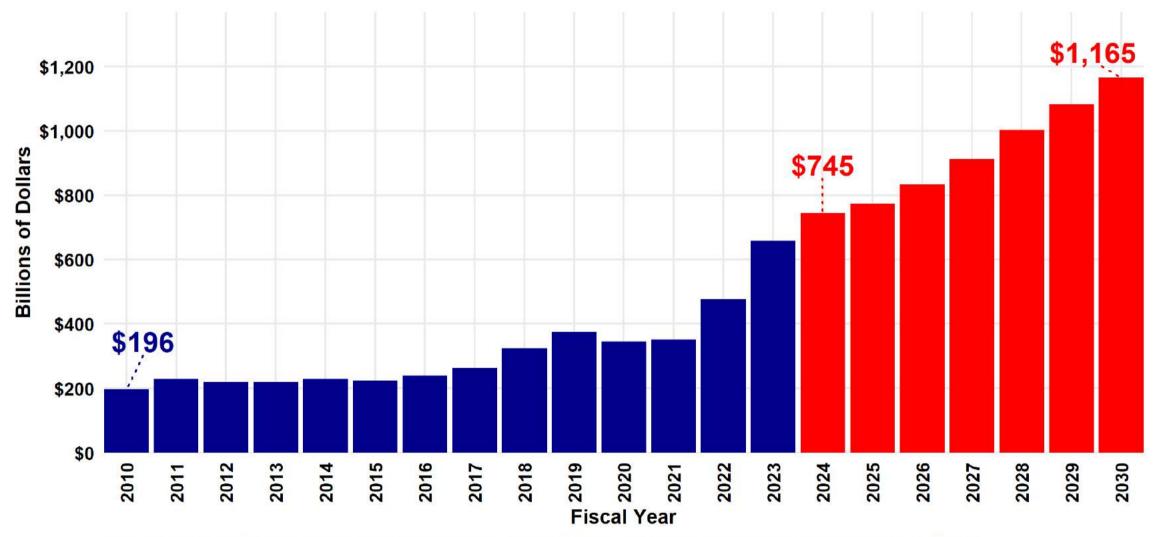
Federal Surplus or Deficit United States, FY 2000 - FY 2023







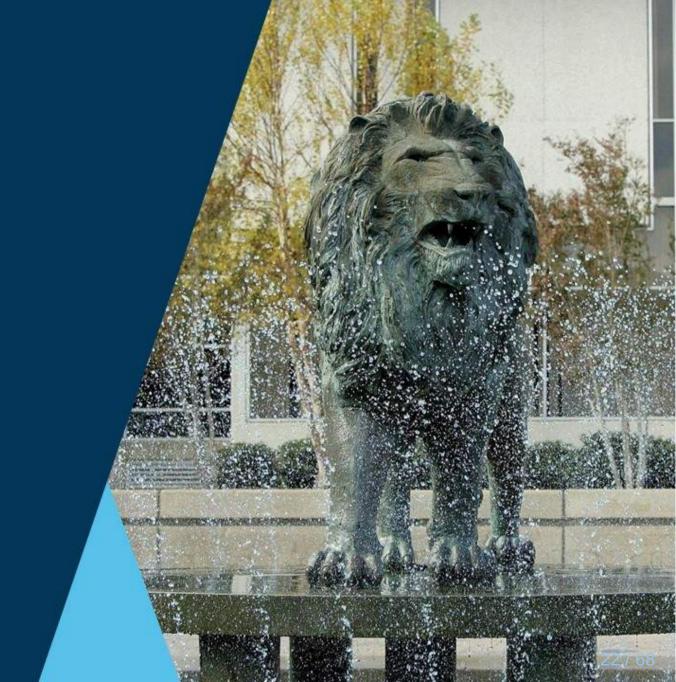
Federal Government: Net Interest Outlays Fiscal Year 2010 - 2030*



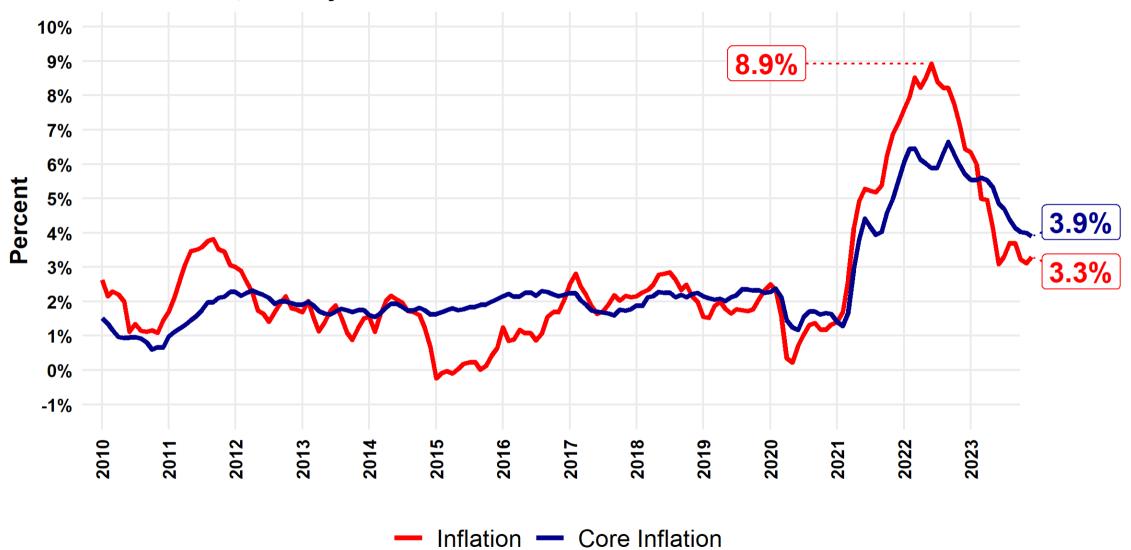
Sources: Office of Management and Budget, Congressional Budget Office, and Dragas Center for Economic Analysis and Policy. *CBO projections for FY 2024 to FY 2030.



Inflation Decelerates

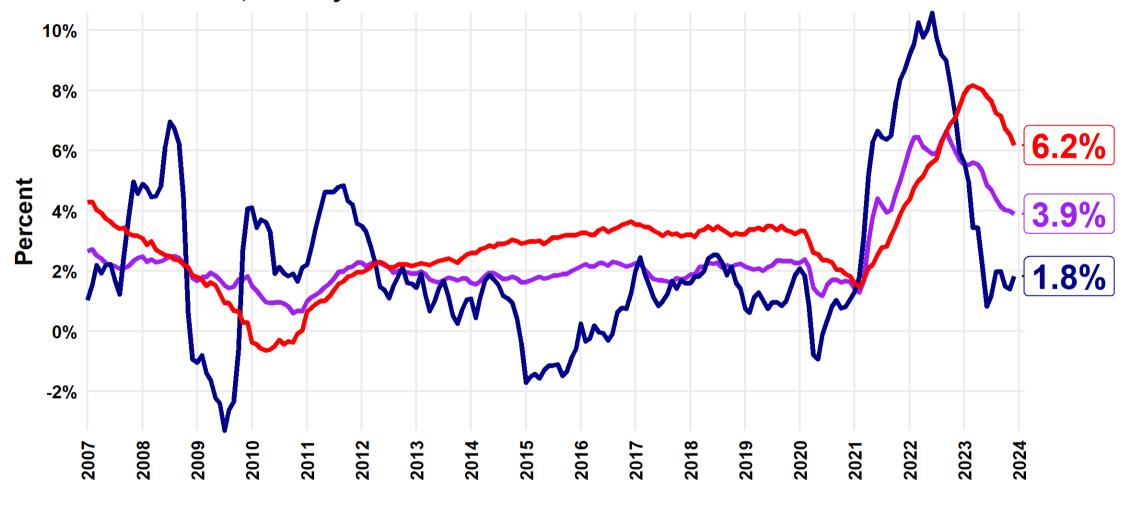


Monthly Inflation United States, January 2010 - December 2023



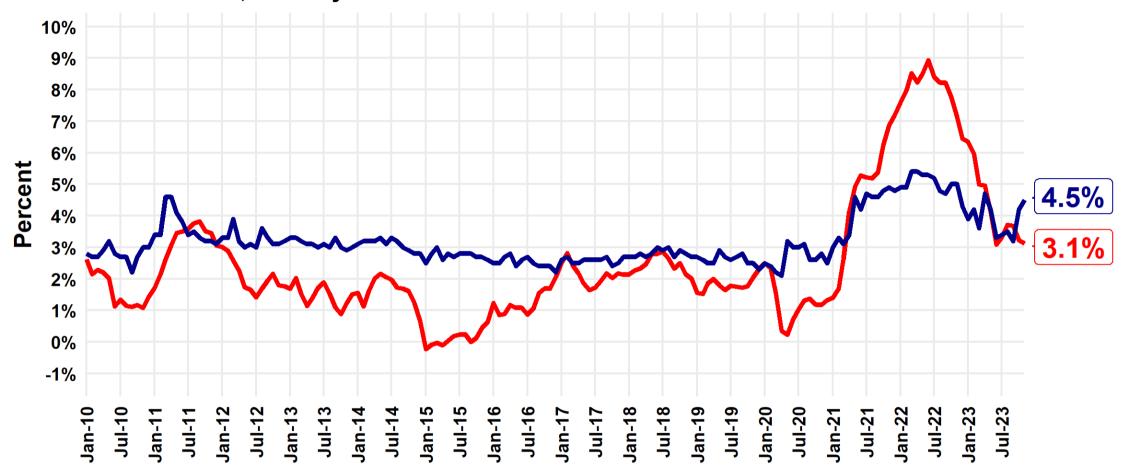
Source: Bureau of Labor Statistics, seasonally adjusted data. Core inflation does not include the food and energy sectors.

Shelter, Non-Shelter, and Core Monthly Inflation United States, January 2007 - December 2023



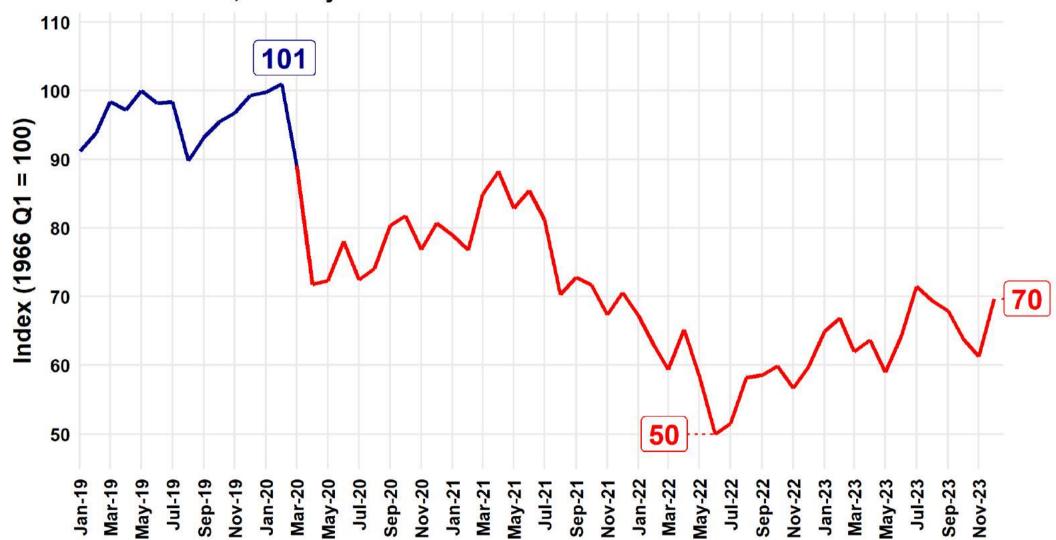
— CPI-U (Shelter) — CPI-U (Without Shelter) — CPI-U (Less Food and Energy)

Monthly Inflation and Inflationary Expectations United States, January 2010 - November 2023

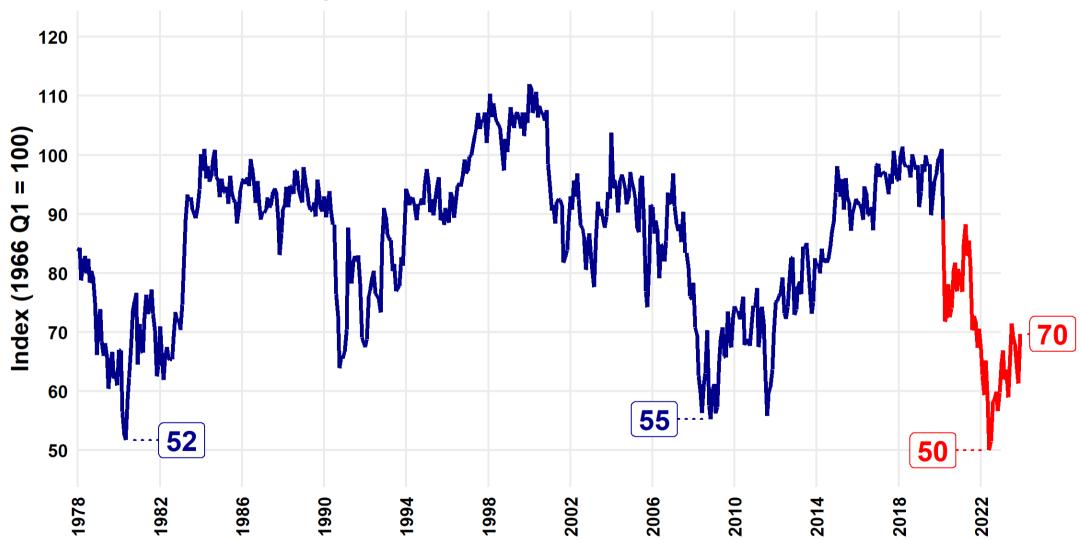


Inflation — Inflationary Expectations

University of Michigan: Consumer Sentiment United States, January 2019 - December 2023



University of Michigan: Consumer Sentiment United States, January 1978 - December 2023



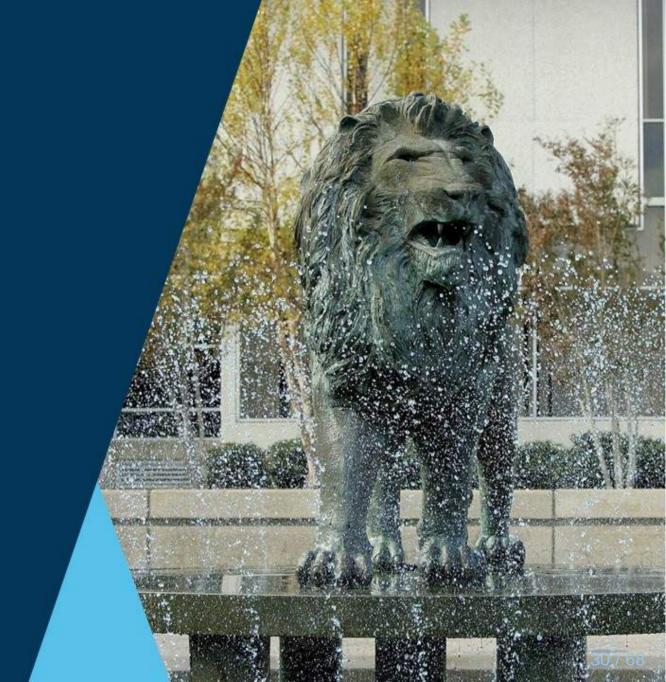
Looking Ahead

- Inflation will continue to moderate in the first half of 2024 and the Federal Reserve will likely reduce the discount rate by 50 basis points in the 2nd half of the year.
- Global uncertainty will continue to increase in 2024; a broader Middle East conflict could spark a resurgence of supply chain difficulties.
- Congress continues to be the major source of downside risk for the Virginia economy in 2024. Even if appropriations are passed for FY 24, FY 25 will begin with a continuing resolution.
- Barring an unexpected shock, the U.S. economy is poised for its third consecutive year of growth in 2024. We project continued (but slower) job growth, resilient consumer spending, and lower interest rates by the end of the year.

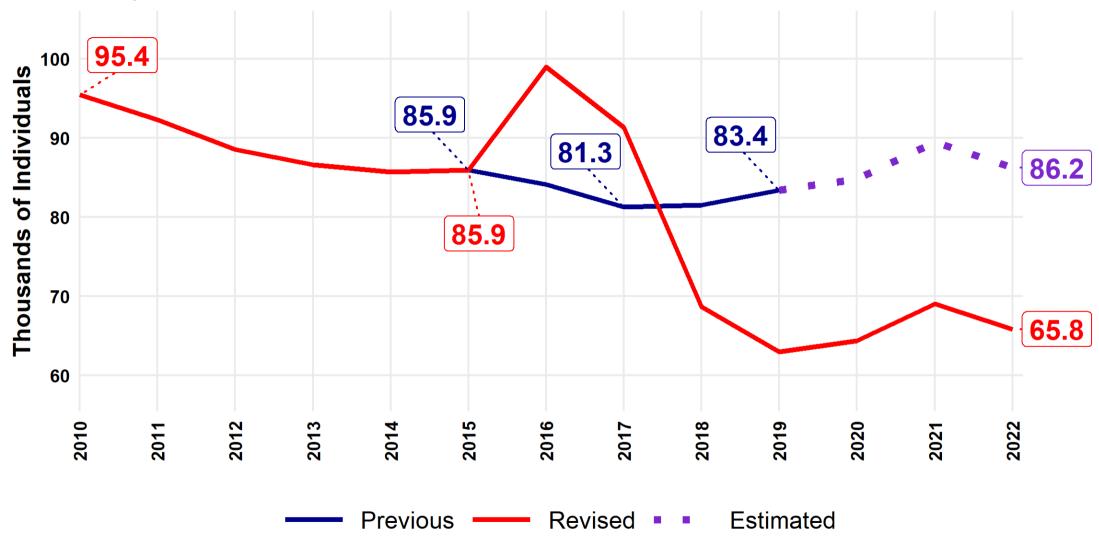
National and Virginia Forecast 2024 2021 2022 2023 U.S. Real GDP Growth 5.8% 1.9% 2.5% 2.3% 2.9% 4.3% 2.3% 1.5% **Civilian Job Growth** 5.4% 3.6% 3.6% 3.7% **Unemployment Rate Inflation Rate** 4.7% 8.0% 4.1% 2.8% **Core Inflation Rate** 3.6% 6.2% 4.8% 2.7% **Effective Federal Funds Rate** 0.1% 1.7% 5.0% 4.5% 1.4% 3.5% 10-year Treasury Bill 2.9% 4.0% **30-year Conventional Mortgage** 3.0% 5.3% 6.8% 5.8% \$1,800 Federal Deficit (Fiscal Year, Billions) -\$2,775 -\$1,375 -\$1,695 **Virginia Real GDP Growth** 5.4% 2.5% 2.2% 2.1% **Virginia Civilian Job Growth** 2.4% 3.1% 1.9% 1.6%



2024 Hampton Roads Economic Forecast

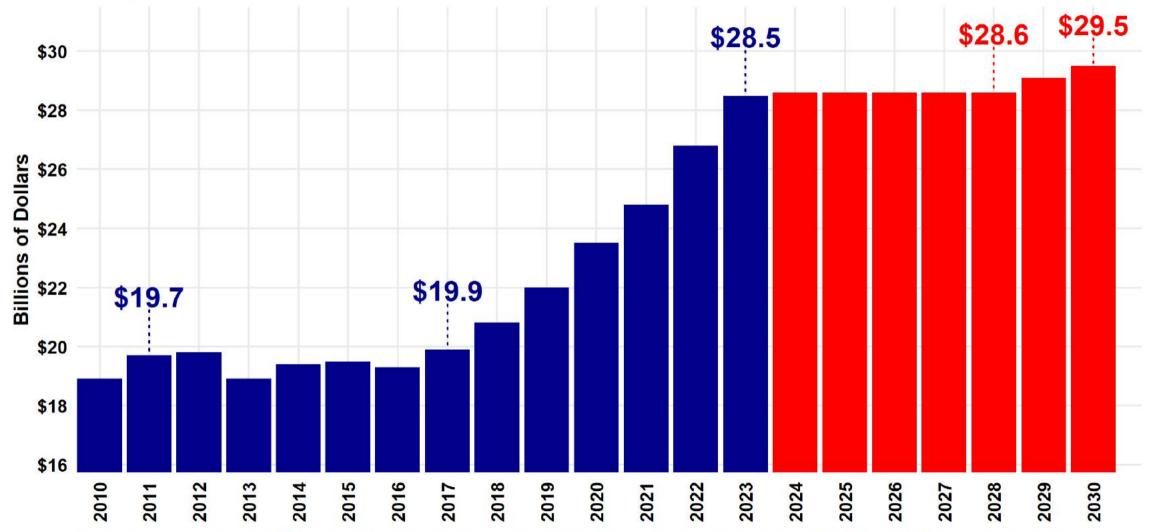


Military Employment Hampton Roads, 2010 - 2022



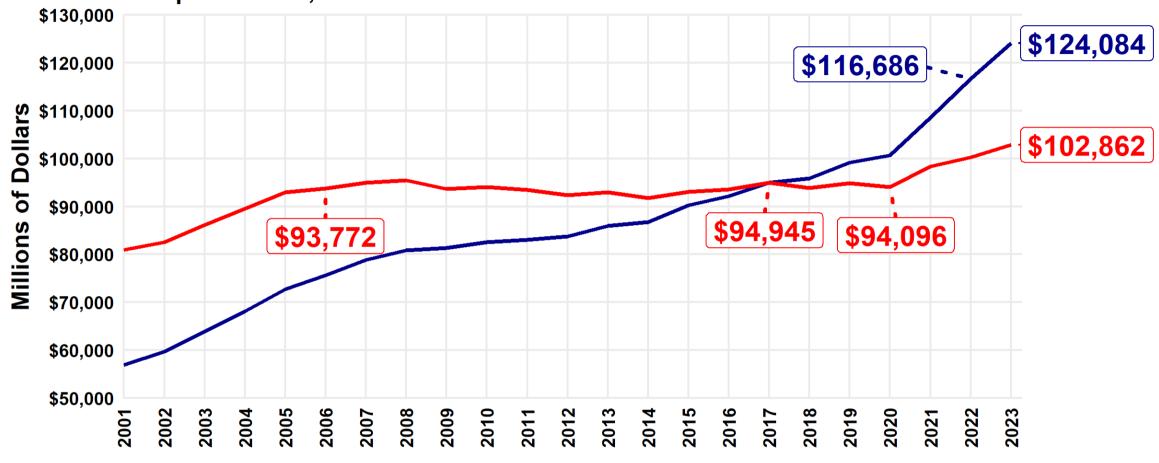
Sources: U.S. Bureau of Economic Analysis and Dragas Center for Economic Analysis and Policy. Previous series updated by BEA on November 17, 2020, and revised series released on November 16, 2023.

Estimated Direct Department of Defense Spending Hampton Roads, 2010 to 2030*



Sources: U.S. Department of Defense and Dragas Center for Economic Analysis and Policy. Includes Federal Civilian and Military Personnel and Procurement spending. *Data for 2023 are estimates while data for 2024 through 2030 are projections based on national DoD spending estimates.

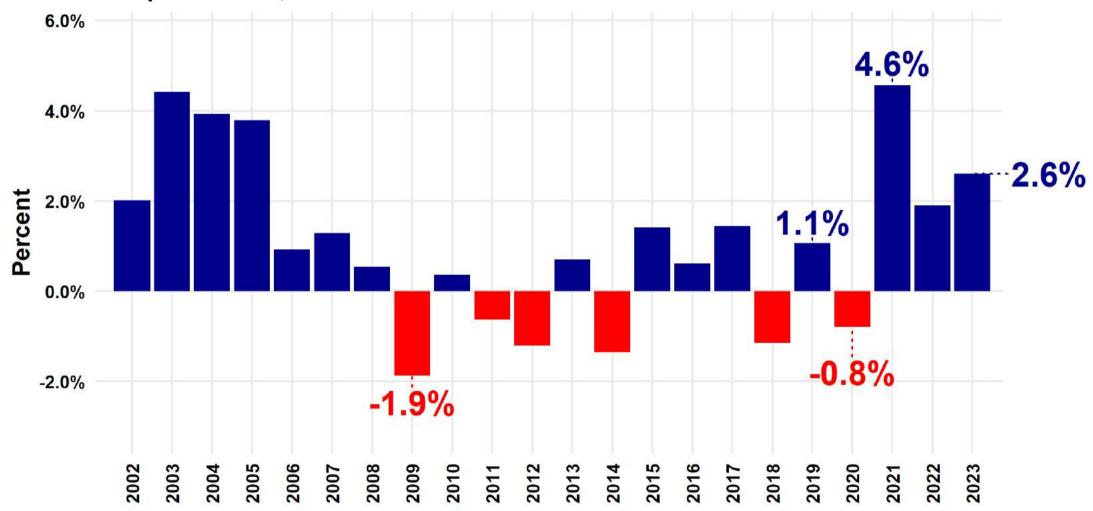
Nominal and Real Gross Domestic Product Hampton Roads, 2001 - 2023



— Nominal GDP — Real GDP

Sources: Bureau of Economic Analysis and Dragas Center for Economic Analysis and Policy. Data on GDP incorporates latest BEA revisions in December 2023. Millions of chained 2017 dollars for real GDP. Data for 2001 to 2016 has not yet been revised. 2022 represents advance estimate and 2023 is our estimate.

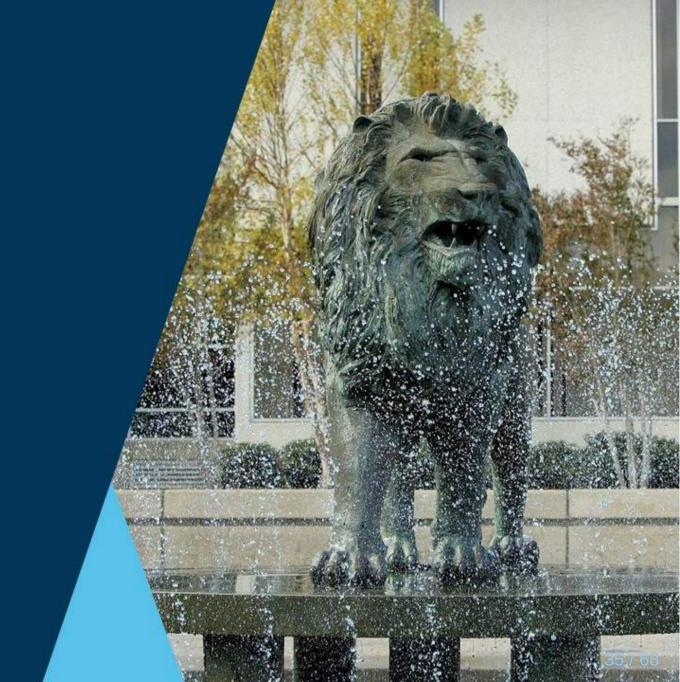
Percent Change in Real Gross Domestic Product Hampton Roads, 2002 - 2023



Sources: Bureau of Economic Analysis and Dragas Center for Economic Analysis and Policy. Data on GDP incorporates latest BEA revisions in December 2023. Millions of chained 2017 dollars for real GDP. Data for 2001 to 2016 has not yet been revised. 2022 represents advance estimate and 2023 is our estimate.

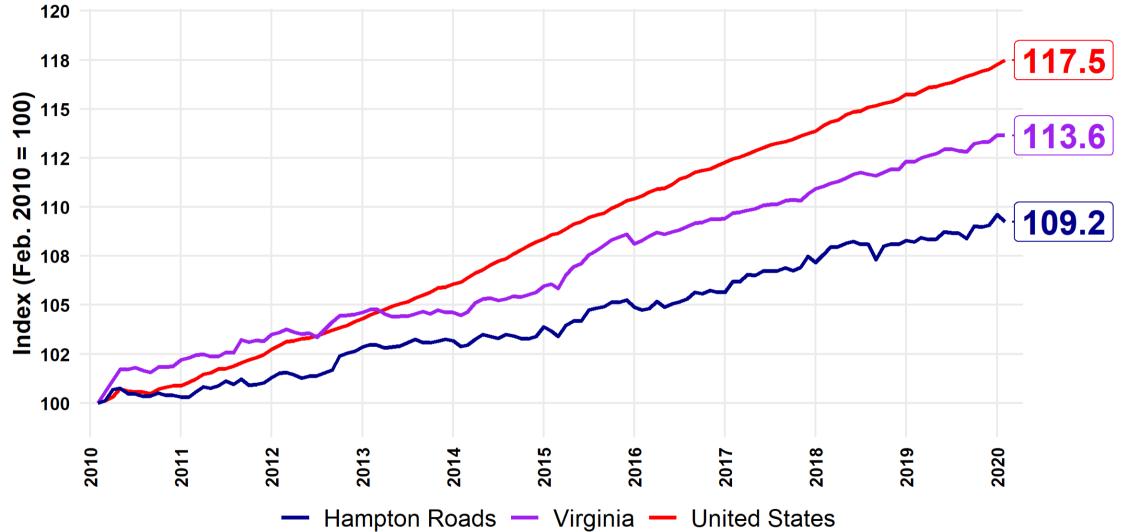


Jobs and Employment



Index of Nonfarm Payrolls

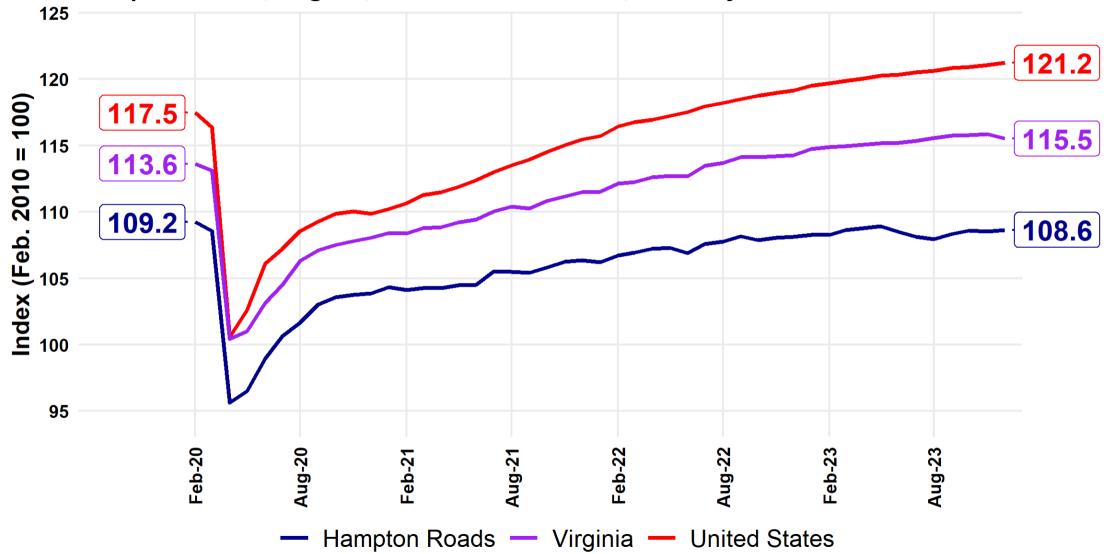




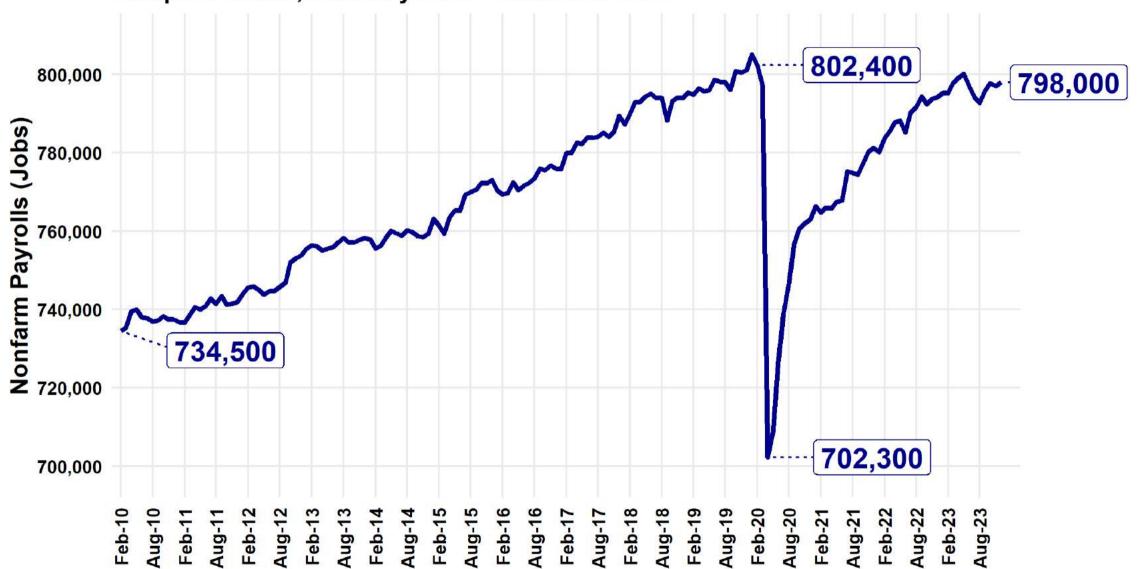
Source: Bureau of Labor Statistics, seasonally adjusted data. February 2010 was the trough of nonfarm payrolls for the United States, Virginia, and Hampton Roads.

Index of Nonfarm Payrolls

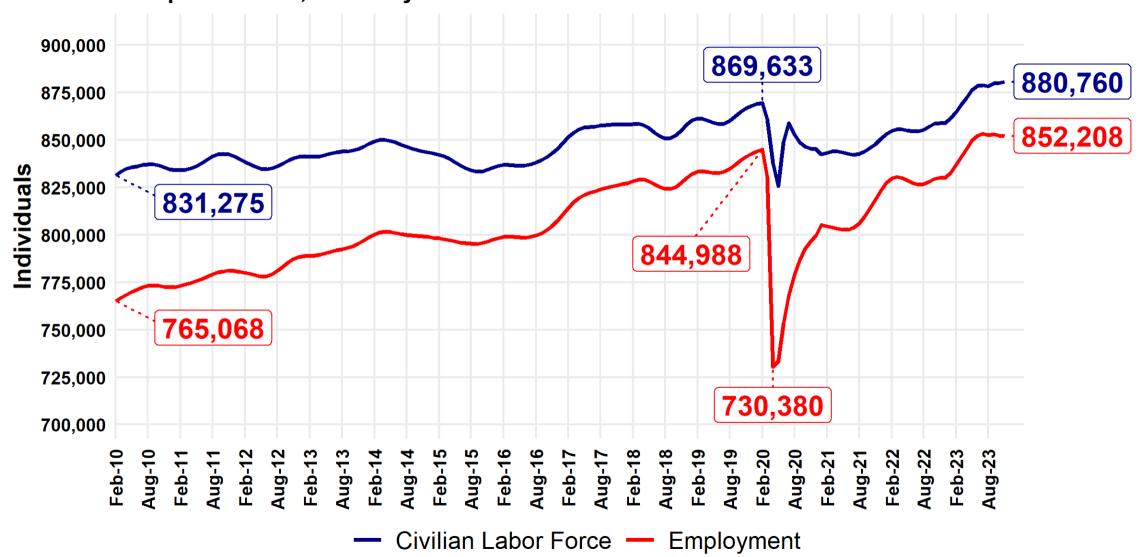




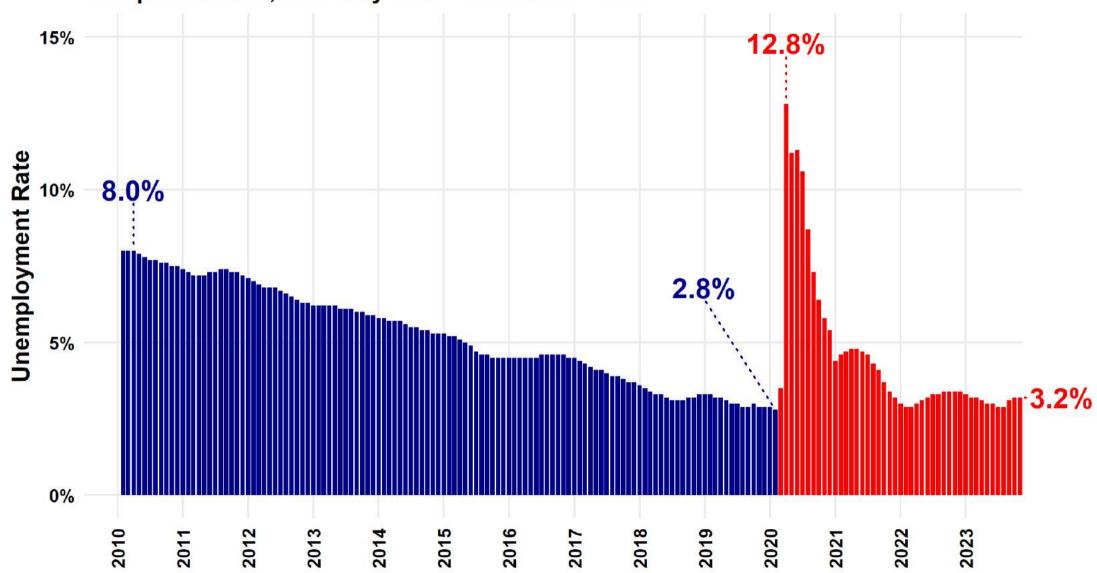
Nonfarm Payrolls Hampton Roads, February 2010 - December 2023



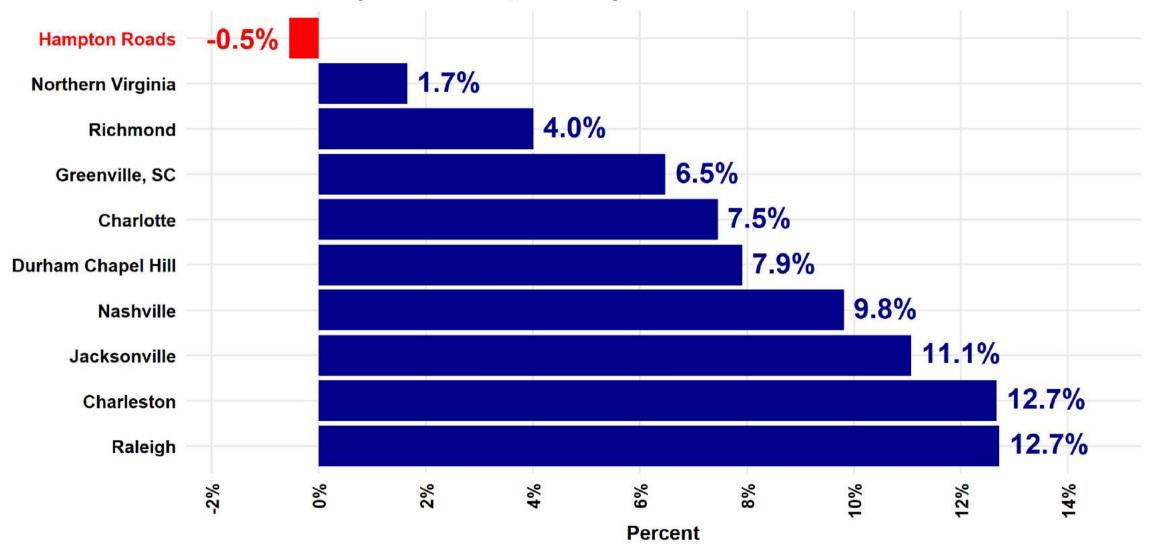
Civilian Labor Force and Individual Employment Hampton Roads, February 2010 - November 2023



Headline Unemployment Rate (U3) Hampton Roads, February 2010 - November 2023



Growth in Nonfarm Payrolls Selected Metropolitan Areas, February 2020 - December 2023



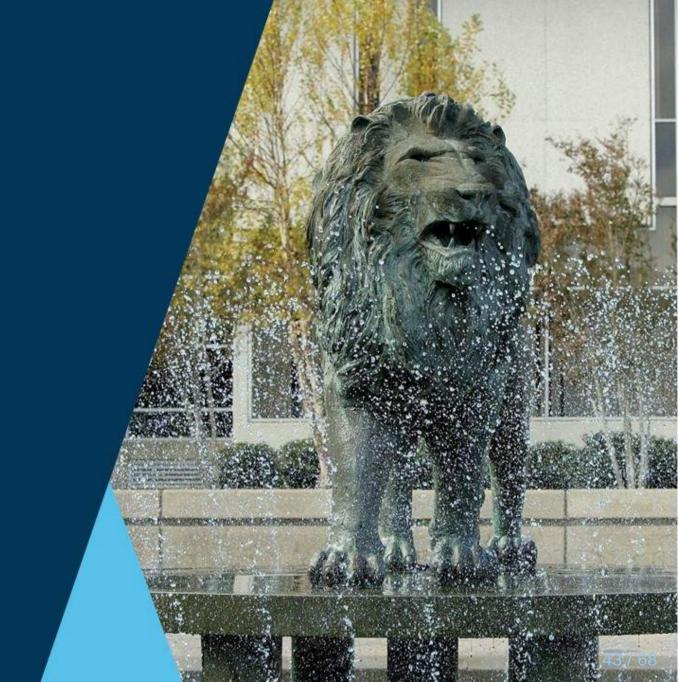
Employment and Average Wages for Priority Clusters in Region 5, 2023 Q1

Clusters	Employment	Average Wages	Change in Employment 2013 Q1 - 2023 Q1		
Advanced Manufacturing	10,637	\$ 74,530	2.30%		
Clean Energy	24,363	\$ 85,329	13.30%		
Cyber Security, Data Analytics and Mod-Sim	5,230	\$ 76,512	63.80%		
Life Sciences	7,054	\$107,437	0.70%		
Port Operations, Logistics, and Warehousing	18,861	\$ 72,333	34.60%		
Ship Repair and Ship Building	40,158	\$ 81,386	10.90%		
Unmanned Systems and Aerospace	14,822	\$ 93,681	9.30%		
Water Technologies	38,278	\$ 89,897	7.10%		
All Industries	787,431	\$ 57,128	4.10%		
* Course, Joha Farand Drawas Contanter For Formania Analysis and Policy Data as of 2002 O1 and based on a form aventar maying avenues. Annual annual annual answer in from					

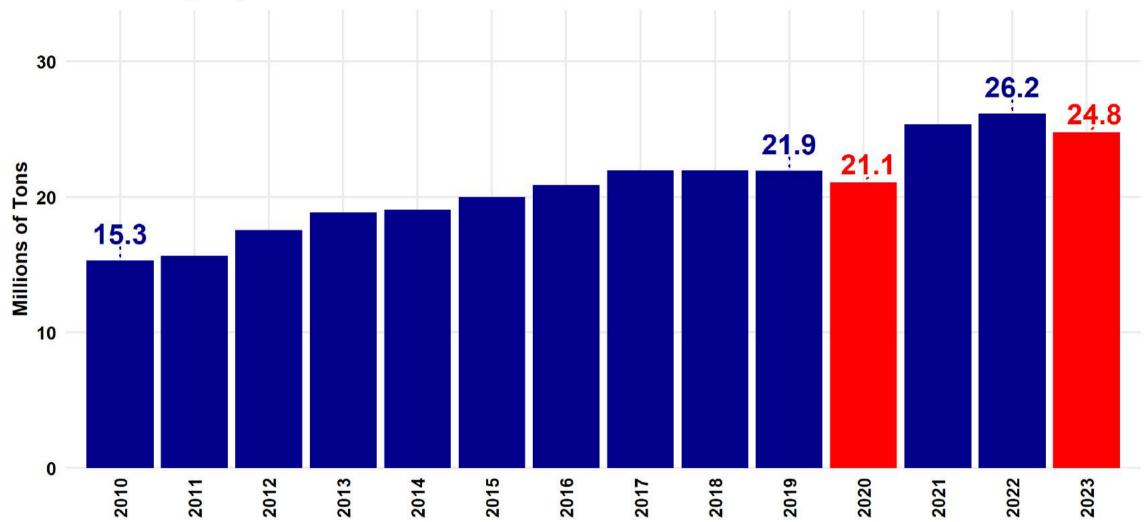
^{*} Source: JobsEq and Dragas Center for Economic Analysis and Policy. Data as of 2023 Q1 and based on a four-quarter moving average. Annual employment growth is from 2013 Q1 to 2023 Q1.



The Port of Virginia: Steady Increases in its Market Share

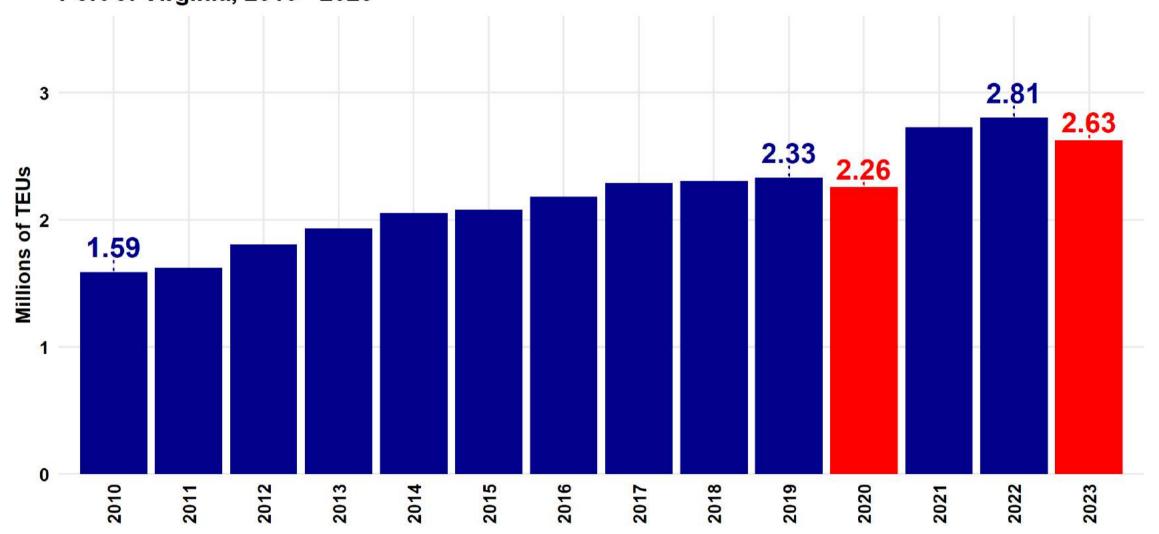


General Cargo Tonnage Port of Virginia, 2010 - 2023

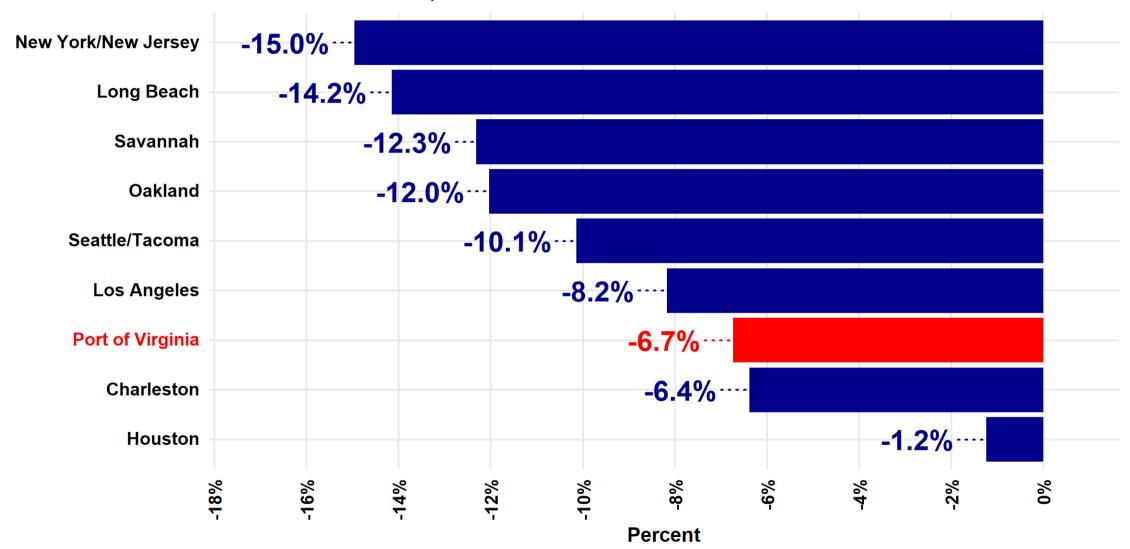


Sources: Virginia Port Authority and Dragas Center for Economic Analysis and Policy.

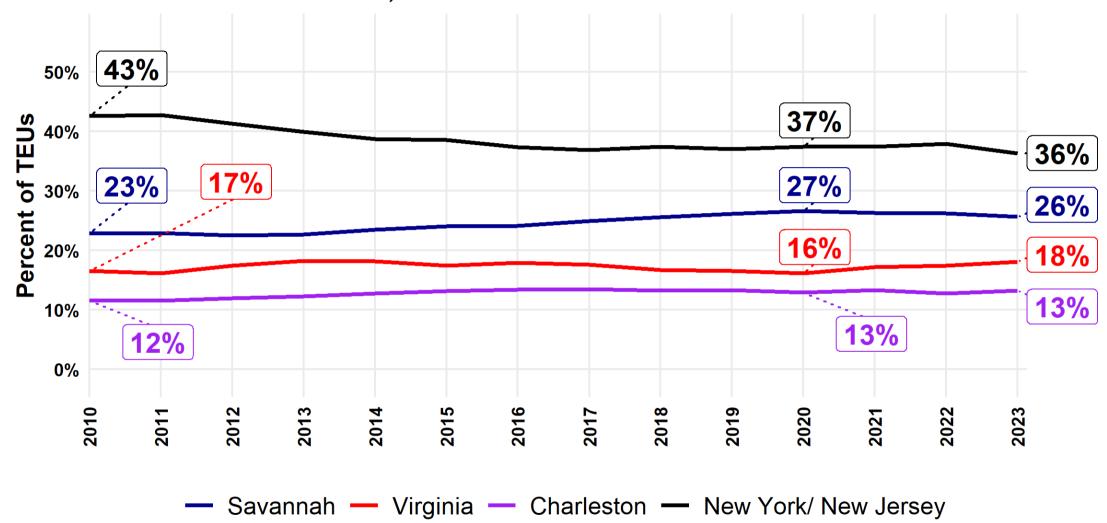
Total Loaded Twenty Foot Equivalent Container Units (TEUs) Port of Virginia, 2010 - 2023



Percent Change in Total Loaded TEUs Selected U.S. Ports, YTD November 2022 - YTD November 2023



Shares of Total Loaded TEUs Selected East Coast Ports, 2010 - 2023

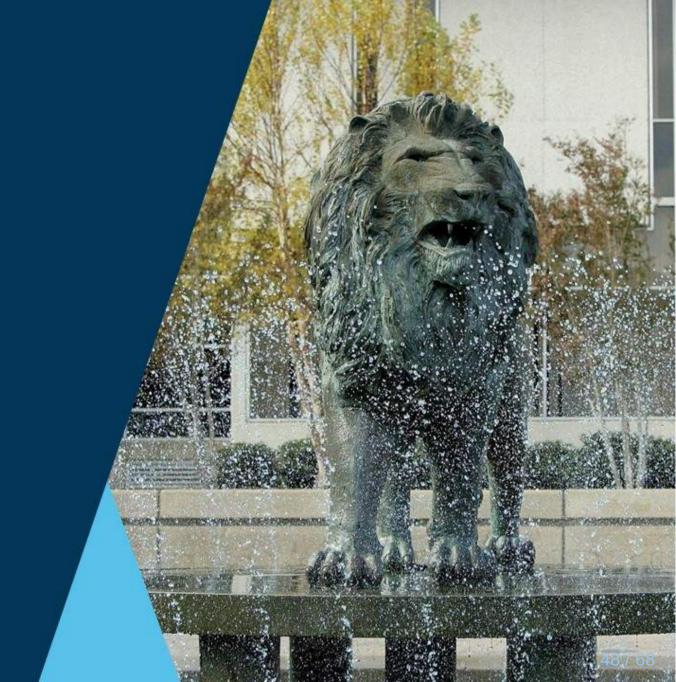


Sources: American Association of Port Authorities, websites of ports and the Old Dominion University Economic Forecasting Project. Market shares are based on TEUs for Baltimore, Boston, Charleston, Virginia, New York/New Jersey, and Savannah.

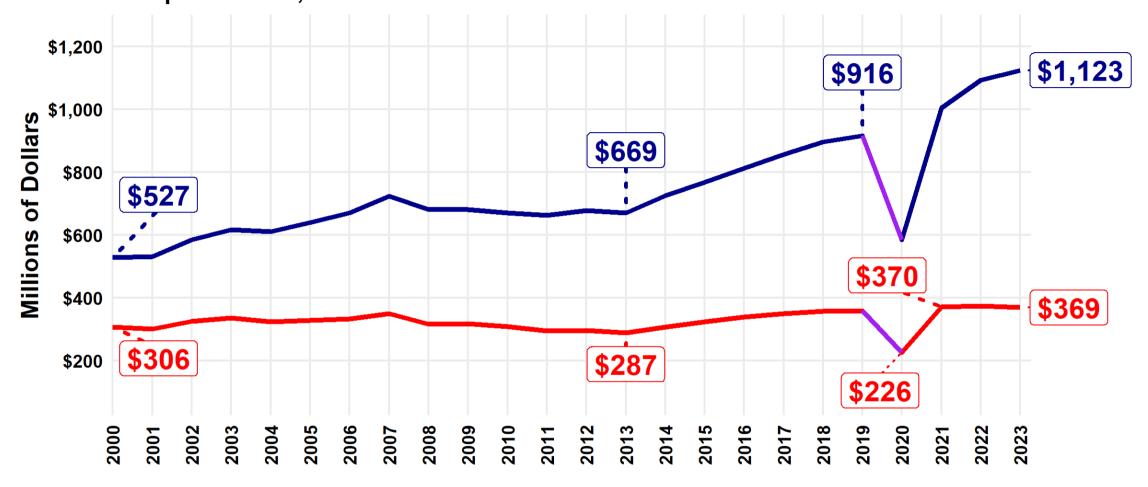
* Data for 2023 are through November 2023.



Hotels Rebound but Challenges Remain



Nominal and Real (Inflation-Adjusted) Hotel Revenue Hampton Roads, 2000 - 2023



Nominal Revenue — Real Revenue

Percent Change in Hotel Revenue in United States, Virginia, Northern Virginia, and Hampton Roads, 2019 to 2023

	2019 to 2020	2020 to 2021	2021 to 2022	2022 to 2023	2019 to 2023
USA	-49.9%	66.0%	32.9%	5.2%	16.4%
Virginia	-48.1%	58.2%	26.2%	9.1%	13.0%
Northern Virginia	-62.3%	40.8%	56.4%	17.7%	-2.3%
Hampton Roads	-36.2%	71.8%	8.9%	2.7%	22.6%
Chesapeake/Suffolk	-22.1%	43.1%	9.5%	3.5%	26.4%
Newport News/Hampton	-29.0%	43.7%	13.6%	2.3%	18.5%
Norfolk/Portsmouth	-32.9%	56.9%	13.9%	4.8%	25.7%
Virginia Beach	-31.0%	72.9%	4.6%	3.6%	29.2%
Williamsburg*	-62.3%	161.2%	11.2%	-0.7%	8.7%

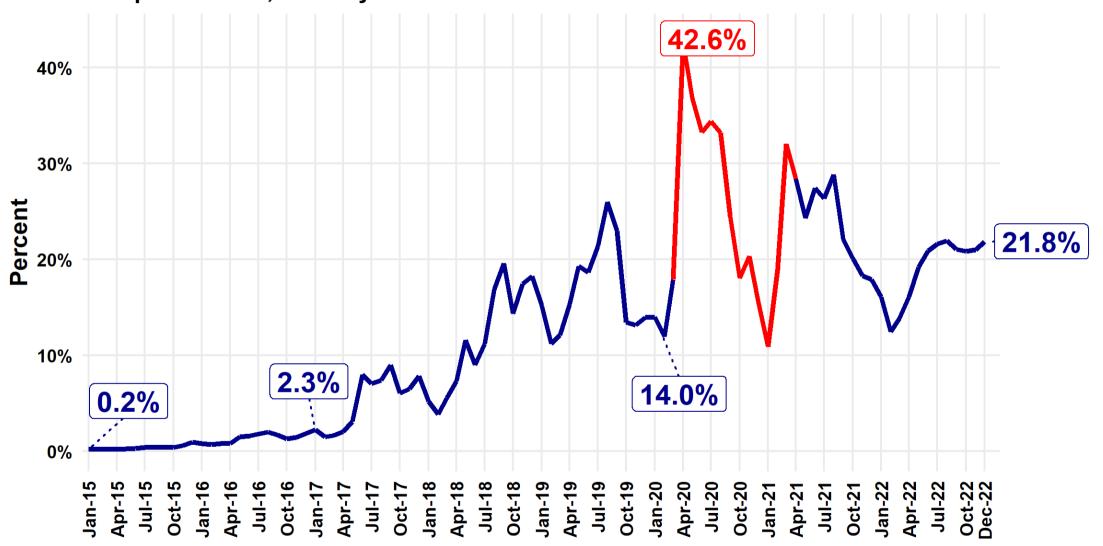
Sources: STR Trend Report January 2024, and Dragas Center for Economic Analysis and Policy.
 *Williamsburg market includes City of Williamsburg and James City County.

Percent Change in Selected Key Performance Indicators of Hotels in United States, Virginia, Northern Virginia, and Hampton Roads, 2019 to 2023

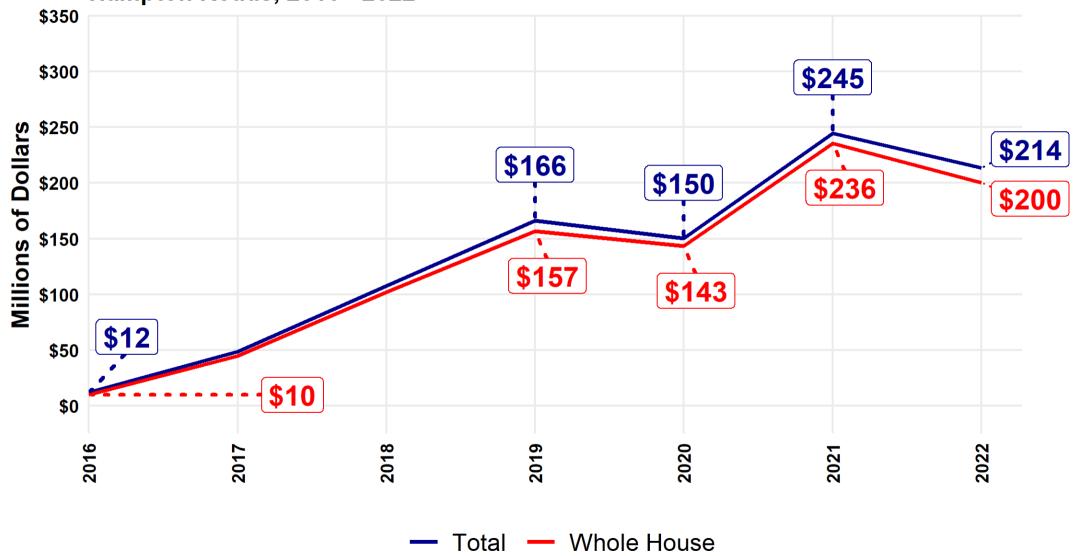
	RevPAR	<u>ADR</u>	Supply of Rooms	Hotel Rooms Sold	
USA	13.2%	18.4%	2.8%	-1.7%	
Virginia	11.3%	14.5%	1.5%	-1.3%	
Northern Virginia	4.0%	9.0%	-6.1%	-10.4%	
Hampton Roads	18.5%	21.0%	3.4%	1.4%	
Chesapeake/Suffolk	25.9%	24.0%	0.4%	2.0%	
Newport News/Hampton	20.7%	21.1%	-1.8%	-2.1%	
Norfolk/Portsmouth	18.5%	19.2%	6.1%	5.4%	
Virginia Beach	16.6%	23.9%	10.8%	4.3%	
Williamsburg*	11.0%	13.1%	-2.1%	-3.9%	
a Sources: STD Trend Deport January 2024 and Dragge Center for Economic Analysis and Policy					

^a Sources: STR Trend Report January 2024 and Dragas Center for Economic Analysis and Policy.
*Williamsburg market includes City of Williamsburg and James City County.

Airbnb and Vrbo Revenue as a Percent of Hotel Revenue Hampton Roads, January 2015 - December 2022



Total and Whole House Rental Revenues of Airbnb and Vrbo Properties Hampton Roads, 2016 - 2022





Housing Sales Decline but Prices Continue to Rise

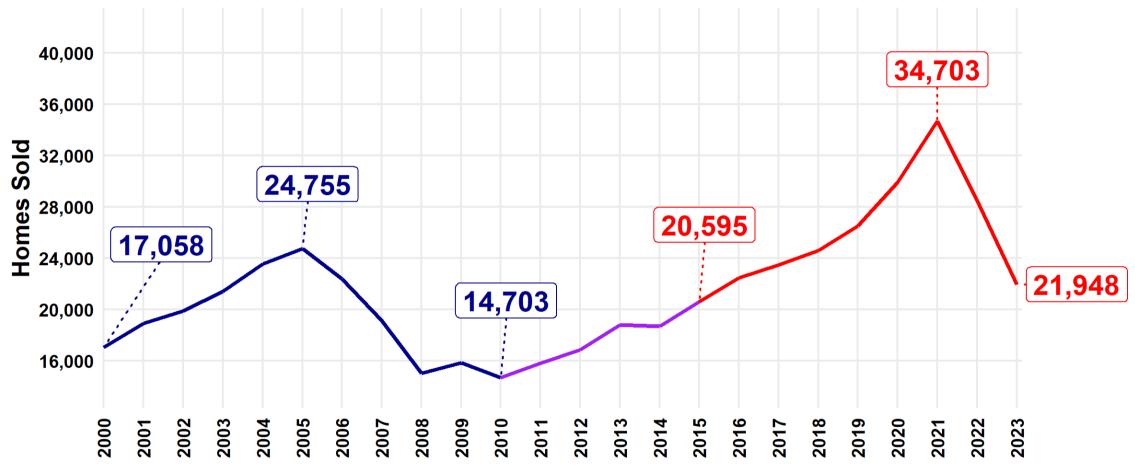


Percent Change in Median Price of Existing Residential Homes Selected Cities in Hampton Roads, 2020, 2021, 2022, and 2023

<u>City</u>	2019 to 2020	2020 to 2021	2021 to 2022	2022 to 2023
Chesapeake	6.4%	11.7%	7.9%	3.6%
Norfolk	11.4%	12.7%	6.6%	6.0%
Portsmouth	13.0%	15.2%	9.5%	6.5%
Suffolk	10.1%	13.6%	9.9%	1.2%
Virginia Beach	9.8%	8.8%	8.1%	7.5%
Hampton	8.8%	16.6%	6.7%	6.3%
Newport News	8.4%	10.0%	8.7%	6.0%
Williamsburg*	9.5%	8.4%	10.3%	4.9%
Hampton Roads	9.0%	9.4%	7.5%	5.8%

^{*} Sources: Real Estate Information Network and Dragas Center for Economic Analysis and Policy. Williamsburg includes City of Williamsburg, James City County, York County, and Gloucester County.

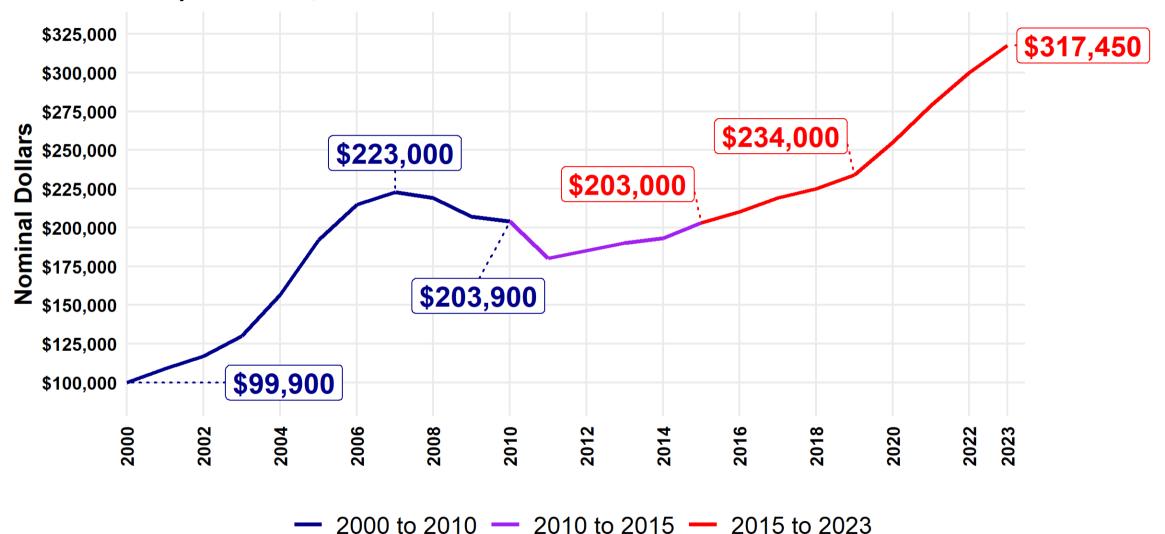




— 2000 to 2010 — 2010 to 2015 — 2015 to 2023

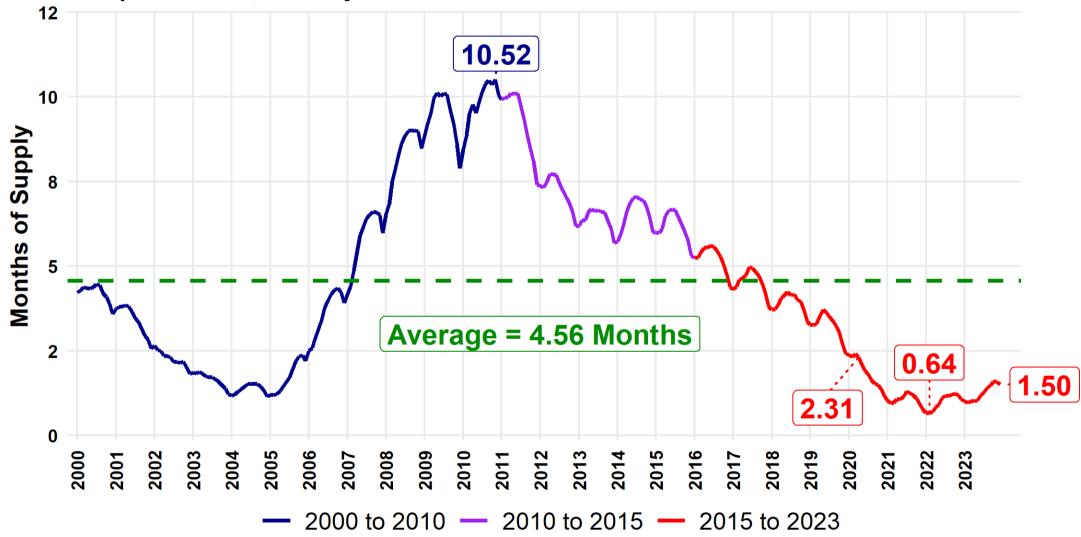
Sources: Real Estate Information Network and Old Dominion University Economic Forecasting Project. Figures reported here represent only those properties that are listed through REIN by its members.

Median Price of Existing Homes Hampton Roads, 2000 - 2023



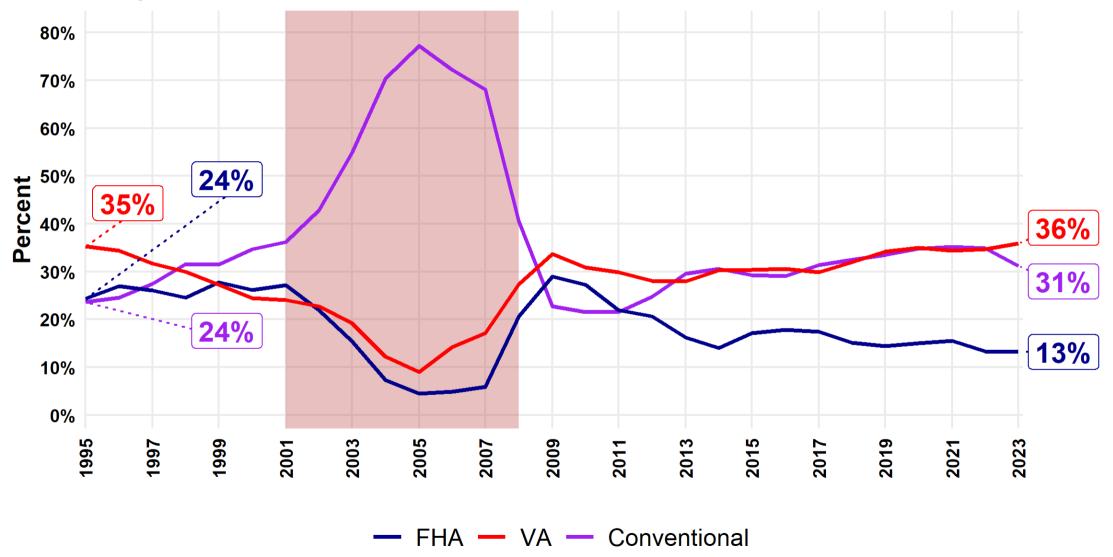
Sources: Real Estate Information Network and Old Dominion University Economic Forecasting Project. Figures reported here represent only those properties that are listed through REIN by its members and may not represent all new construction activity in our region.

Estimated Months of Supply for Existing Homes Hampton Roads, January 2000 - December 2023

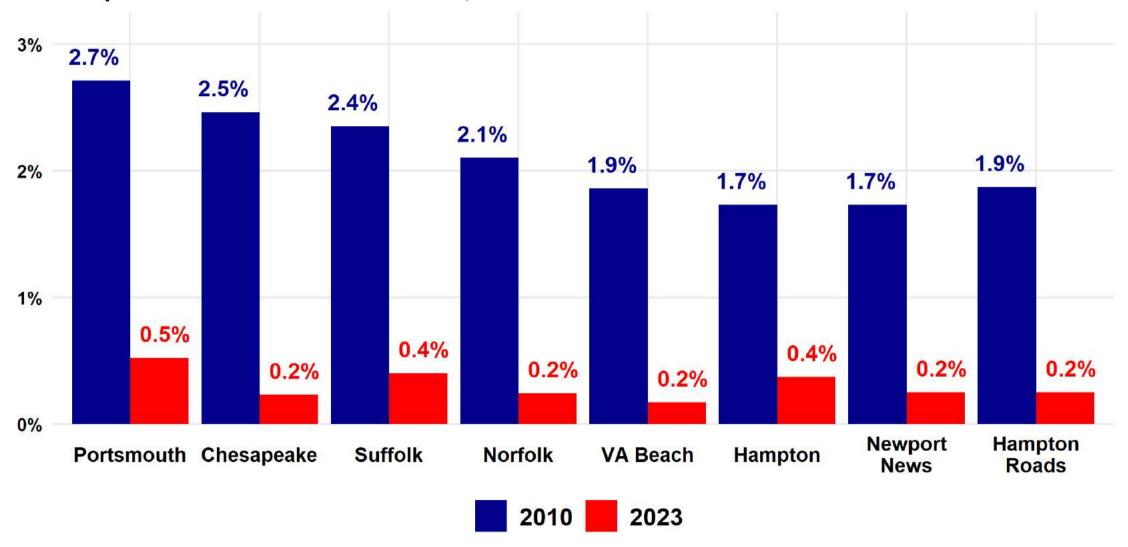


Sources: Real Estate Information Network Inc. and Dragas Center for Economic Analysis and Policy. Months of supply is based on average sales in the last 12 months.

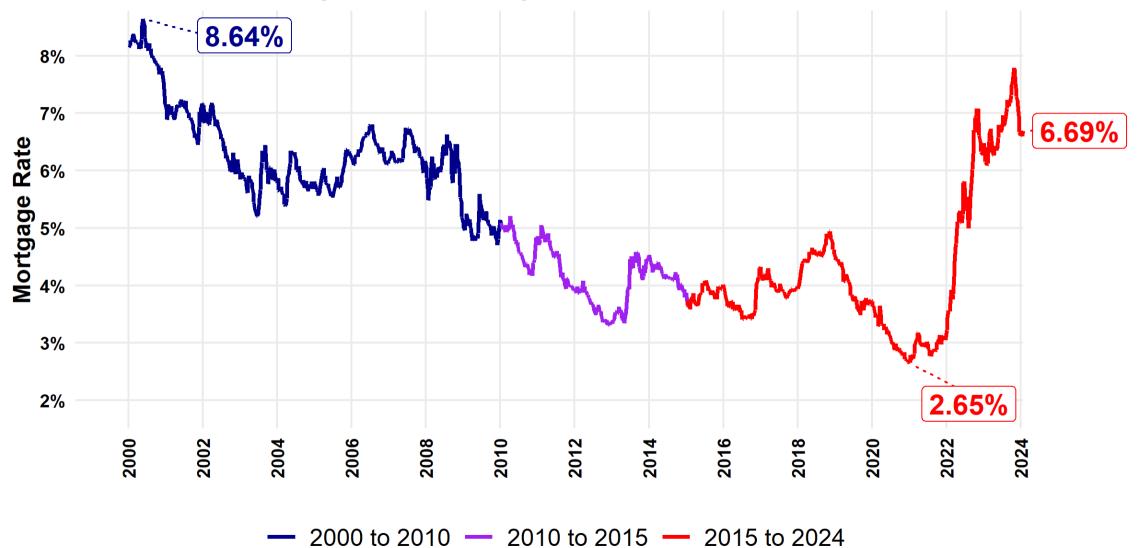
Distribution of Existing Home Sales by Types of Financing Hampton Roads, 1995 - 2023



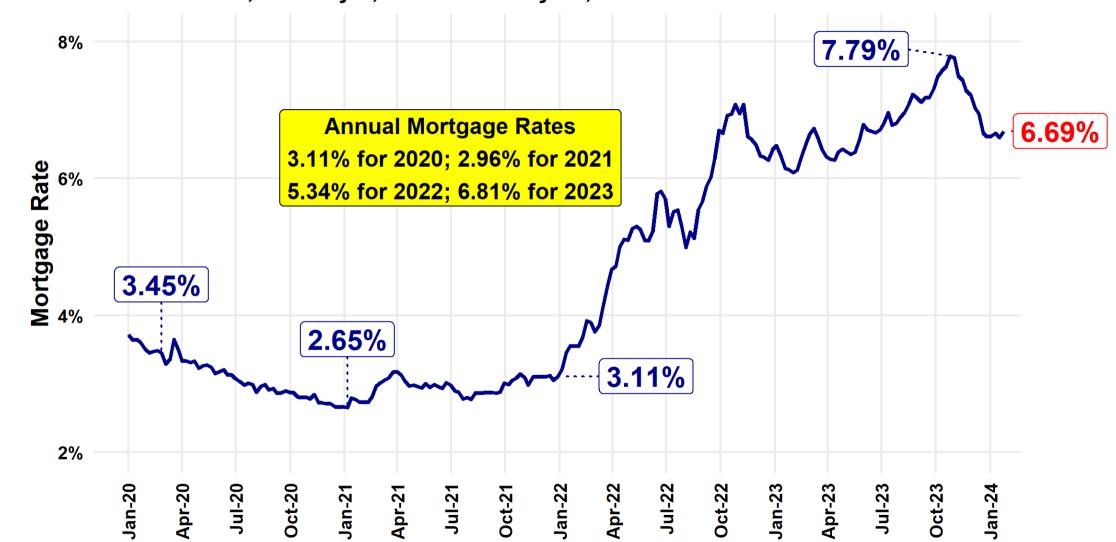
Percent of Housing Units with Foreclosure Filings Hampton Roads and Selected Cities, 2010 and 2023



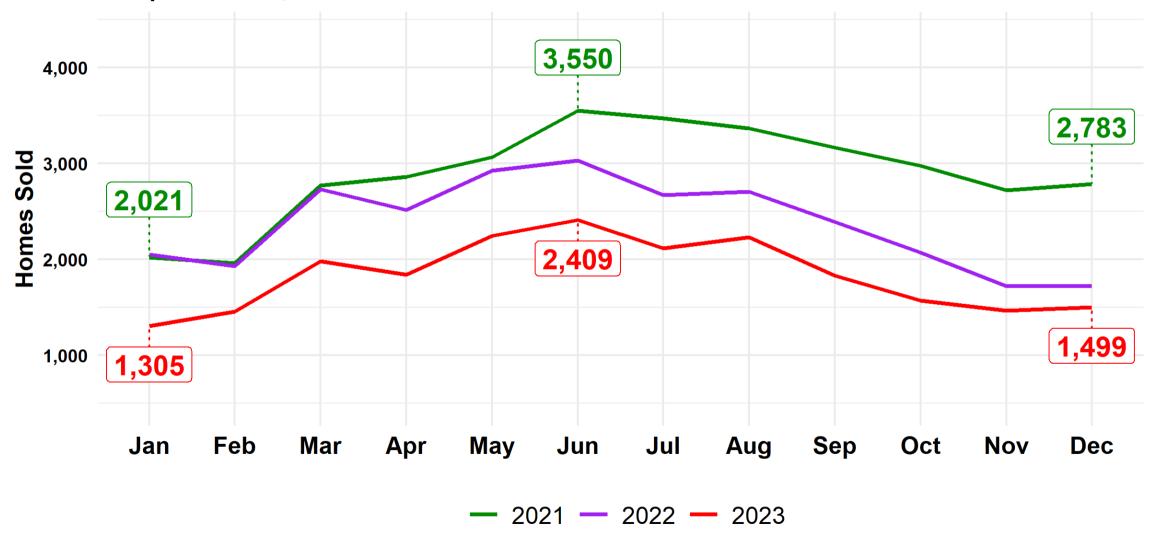
Weekly 30-Year Fixed Mortgage Rate United States, January 7, 2000 - January 25, 2024



Weekly 30-Year Fixed Mortgage Rate United States, January 2, 2020 - January 25, 2024

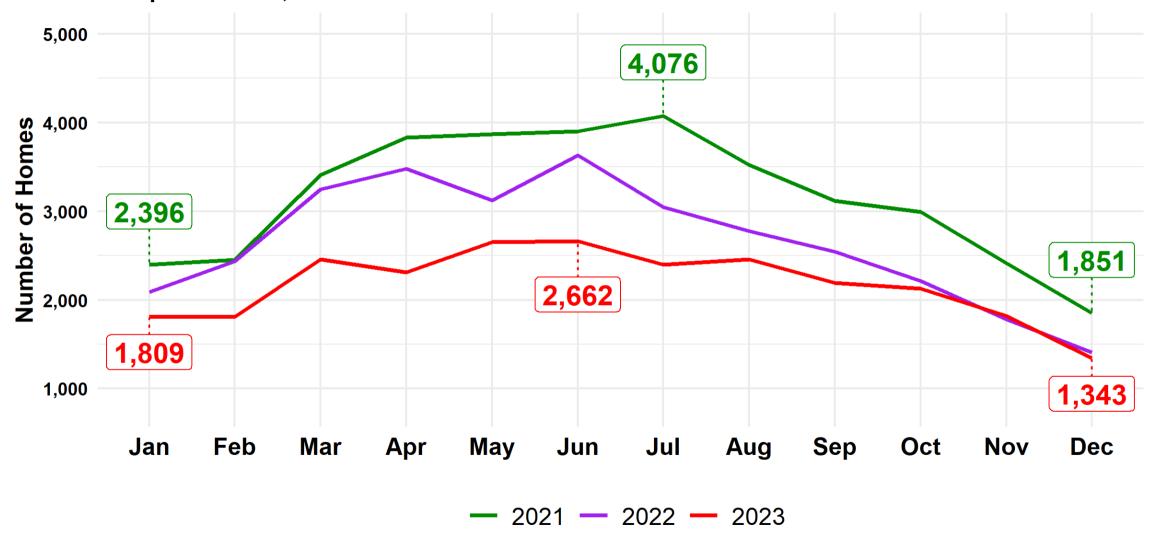


Number of Existing Residential Homes Sold Hampton Roads, 2021 - 2023



Sources: Real Estate Information Network Inc. and Dragas Center for Economic Analysis and Policy.

New Listings of Existing Residential Homes Hampton Roads, 2021 - 2023



Source: Real Estate Information Network Inc. and the Old Dominion University Economic Forecasting Project.

Ratio of Selling Price to Listed Price of Existing Homes Hampton Roads, January 2019 - December 2023



Regional Forecast

	2021 Actual	2022 Actual	2023 Estimated/ Actual	2024 Forecast
Hampton Roads Real GDP	4.6%	1.9%	2.6%	2.1%
Civilian Job Growth	2.1%	2.1%	1.1%	1.2%
Unemployment Rate	4.5%	3.2%	3.2%	3.2%
Taxable Sales	16.2%	5.3%	3.6%	3.8%
Hotel Revenue	71.8%	8.9%	2.7%	3.4%
General Cargo Tonnage	20.3%	3.1%	-4.5%	4.8%
General Cargo TEUs	25.2%	5.1%	-11.0%	3.7%
One-Unit Housing Permit Value	5.2%	-13.6%	2.5%	3.6%

2024 Outlook for Hampton Roads

- Defense Spending will continue to provide a boost for the Hampton Roads Economy.
- Regional Economy is expected to grow at the same pace as the national economy.
- Port of Virginia should see a moderate growth in tonnage and loaded TEUs.
- With anticipated lower annual mortgage rates in 2024, existing home sales are likely to stabilize but median prices are expected to continue to increase.
- Going forward, uncertainty in Washington will continue to be a major concern for the health of the regional economy.

Upcoming Publications and Events

- -- Mid-Year Economic Forecast (May June 2024)
- -- State of the Region Report (October 2024)
- -- State of the Commonwealth Report (December 2024)
- You may also text CEAPODU to 66866 to join our email list.
- Follow DragasCenterODU on Facebook and LinkedIn for up-to-date information to help you understand new economic developments.