2024 Midyear Economic Forecast

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Old Dominion University

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Our forecasts and commentary do not constitute official viewpoints of the Commonwealth of Virginia, Old Dominion University, its President, Brian O. Hemphill, Ph.D., the Board of Visitors, the Strome College of Business, or the generous donors who support the activities of the Dragas Center for Economic Analysis and Policy.
Sentiment and Inflation
The Most Important Financial Problem Facing U.S. Families
April 1-22, 2024 Gallup Survey

- High cost of living/Inflation: 41%
- Cost of owning/renting a home: 14%
- Too much debt/Cannot pay debts: 8%
- Lack of money/Low wages: 7%
- Healthcare costs: 7%
- Energy costs/Oil and gas prices: 6%
- Taxes: 4%
- Unemployment/Loss of job: 3%
- Interest rates: 3%
- Insurance/Life insurance: 3%
- College expenses/Student loans: 3%

Gallup (April 2024). Respondents to open-ended survey question.
University of Michigan: Consumer Sentiment
United States, January 1978 - April 2024

Source: University of Michigan, Surveys of Consumers, not seasonally adjusted data.
Adults Rating the Economy as Good or Excellent
United States, 2017 - 2023

Responses stating economic conditions were good or excellent.
Monthly Inflation
United States, January 2007 - April 2024

Source: Bureau of Labor Statistics, seasonally adjusted data. Core inflation does not include the food and energy sectors.
Monthly Inflation and Cumulative Inflation
United States, January 2019 - April 2024

Source: Bureau of Labor Statistics, seasonally adjusted data. Monthly inflation is the year-over-year change in the Consumer Price Index. Cumulative inflation is equal to the percentage change in the Consumer Price Index from January 2019 to present.
Misery Index
United States, January 1971 - April 2024

Source: Bureau of Labor Statistics, seasonally adjusted data. Misery index is equal to the inflation rate plus unemployment rate.
Weekly Discount Window Primary Rate
United States, January 15, 2003 - June 5, 2024

Sources: Federal Reserve System. Not seasonally adjusted.
Monthly Inflation
United States, January 1973 - December 1979 and July 2020 - April 2024

Source: Bureau of Labor Statistics, seasonally adjusted data.
Perceptions of Personal Well-Being, Local, and National Economies
United States, 2017 - 2023

Responses stating own finances are at least ok and-or economic conditions were good or excellent.
Economic Growth Continues
Nominal and Real Gross Domestic Product
United States, Q1 2000 - Q1 2024

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.
Nonfarm Payrolls (Jobs)
United States, January 2010 - May 2024

Source: Bureau of Labor Statistics, seasonally adjusted data.
Job Openings and Quits
United States, January 2010 - April 2024

Thousands of Jobs

Source: Bureau of Labor Statistics, seasonally adjusted data.
Economic Conditions in Virginia
Nominal and Real Gross Domestic Product
Virginia, 2000 - 2023

Sources: U.S. Bureau of Economic Analysis and Dragas Center for Economic Analysis and Policy.
Billions of chained 2017 dollars for real GDP.
Civilian Labor Force and Individual Employment
Virginia, January 2010 - April 2024

Thousands of Individuals


Civilian Labor Force
Employment

Source: Bureau of Labor Statistics, seasonally adjusted data.
Nonfarm Payrolls (Jobs)
Virginia, January 2010 - April 2024

Source: Bureau of Labor Statistics, seasonally adjusted data.
Job Openings and Quits
Virginia, January 2019 - March 2024

Source: Bureau of Labor Statistics, seasonally adjusted data.
Federal Spending and Debt
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

Billions of Dollars

Source: U.S. Office of Management and Budget. Fiscal Year.
Federal Debt
United States, Q1 2000 - Q1 2024

Billions of Dollars

Source: U.S. Department of the Treasury.
Department of Defense Total Budget
Fiscal Year 2010 - 2029*

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 2024 are estimates while data for 2025 to 2029 are projections based on national DoD spending estimates. Projections do not contain possible supplemental appropriations.
Federal Government: Net Interest Outlays
Fiscal Year 2010 - 2029*

Billions of Dollars


Sources: Office of Management and Budget, Congressional Budget Office, and Draga Center for Economic Analysis and Policy.
*OMB projections for FY 2024 to FY 2029.
Good News and Warning Signs

- Virginia and the United States are in the midst of a new economic expansion.

- Inflation will slowly moderate over the next 12 months. The Federal Reserve will not reduce the discount rate in the short-term unless there is a significant slowdown in job growth and corporate profits.

- For Virginia, unemployment will likely remain below 3% statewide, job growth will continue, and, baring an expected shock, economic growth should average 2% (or more) for 2024 (and possibly 2025).

- Political uncertainty, domestically and globally, remains the greatest threat to continued growth in 2025. Increasing tariffs or sharp reductions to immigration would significantly undermine growth and spark higher inflation in 2025.
## National and Virginia Forecast

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U.S. Real GDP Growth</strong></td>
<td>5.8%</td>
<td>1.9%</td>
<td>2.5%</td>
<td>2.1%</td>
</tr>
<tr>
<td><strong>Civilian Job Growth</strong></td>
<td>2.9%</td>
<td>4.3%</td>
<td>2.3%</td>
<td>1.5%</td>
</tr>
<tr>
<td><strong>Unemployment Rate</strong></td>
<td>5.4%</td>
<td>3.6%</td>
<td>3.6%</td>
<td>3.9%</td>
</tr>
<tr>
<td><strong>Inflation Rate</strong></td>
<td>4.7%</td>
<td>8.0%</td>
<td>4.1%</td>
<td>3.0%</td>
</tr>
<tr>
<td><strong>Core Inflation Rate</strong></td>
<td>3.6%</td>
<td>6.2%</td>
<td>4.8%</td>
<td>2.6%</td>
</tr>
<tr>
<td><strong>Effective Federal Funds Rate</strong></td>
<td>0.1%</td>
<td>1.7%</td>
<td>5.0%</td>
<td>4.8%</td>
</tr>
<tr>
<td><strong>10-year Treasury Bill</strong></td>
<td>1.4%</td>
<td>2.9%</td>
<td>4.0%</td>
<td>4.4%</td>
</tr>
<tr>
<td><strong>30-year Conventional Mortgage</strong></td>
<td>3.0%</td>
<td>5.3%</td>
<td>6.8%</td>
<td>6.7%</td>
</tr>
<tr>
<td><strong>Federal Deficit (Fiscal Year, Billions)</strong></td>
<td>-$2,775</td>
<td>-$1,375</td>
<td>-$1,695</td>
<td>-$1,800</td>
</tr>
<tr>
<td><strong>Virginia Real GDP Growth</strong></td>
<td>5.4%</td>
<td>2.5%</td>
<td>2.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td><strong>Virginia Civilian Job Growth</strong></td>
<td>2.4%</td>
<td>3.1%</td>
<td>1.9%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>
2024 Hampton Roads Economic Forecast
Estimated Department of Defense Direct Spending
Hampton Roads, 2010 - 2029*

Sources: Department of Defense and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Includes federal civilian and military personnel and procurement. * FY 2010 – 2023 are actual expenditures, 2024 is our estimate, and 2025 – 2029 are our forecasts.
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
Headline Unemployment Rate (U3)
Hampton Roads, February 2010 - April 2024

Source: Bureau of Labor Statistics, seasonally adjusted data.
Growth in Nonfarm Payrolls
Selected Metropolitan Areas, February 2020 - April 2024

Washington D.C.: 0.3%
Hampton Roads: 2.3%
Richmond: 4.6%
Durham Chapel Hill: 7.7%
Charlotte: 8.0%
Greenville, SC: 8.1%
Nashville: 9.5%
Jacksonville: 9.5%
Raleigh: 12.4%
Charleston: 12.7%

Sources: Bureau of Labor Statistics and Dragas Center for Economic Analysis and Policy. Seasonally adjusted data.
### Employment and Average Wages for Priority Clusters in Region 5, 2023 Q4

<table>
<thead>
<tr>
<th>Clusters</th>
<th>Employment</th>
<th>Average Wages</th>
<th>Change in Employment 2013 Q4 - 2023 Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Manufacturing</td>
<td>10,353</td>
<td>$74,634</td>
<td>0.30%</td>
</tr>
<tr>
<td>Clean Energy</td>
<td>24,069</td>
<td>$87,452</td>
<td>1.30%</td>
</tr>
<tr>
<td>Cyber Security, Data Analytics and Mod-Sim</td>
<td>5,053</td>
<td>$78,115</td>
<td>4.20%</td>
</tr>
<tr>
<td>Life Sciences</td>
<td>7,345</td>
<td>$109,812</td>
<td>-0.10%</td>
</tr>
<tr>
<td>Port Operations, Logistics, and Warehousing</td>
<td>17,936</td>
<td>$73,067</td>
<td>2.40%</td>
</tr>
<tr>
<td>Ship Repair and Ship Building</td>
<td>41,056</td>
<td>$83,327</td>
<td>1.10%</td>
</tr>
<tr>
<td>Uncrewed Systems and Aerospace</td>
<td>14,864</td>
<td>$96,488</td>
<td>1.10%</td>
</tr>
<tr>
<td>Water Technologies</td>
<td>38,135</td>
<td>$91,435</td>
<td>0.90%</td>
</tr>
<tr>
<td>All Industries</td>
<td>799,281</td>
<td>$58,593</td>
<td>0.10%</td>
</tr>
</tbody>
</table>

*Source: JobsEq and Dragas Center for Economic Analysis and Policy. Data as of 2023 Q4 and based on a four-quarter moving average. Annual employment growth is from 2013 Q4 to 2023 Q4.*
The Port of Virginia: Steady Increases in Its Market Share
Total Loaded Twenty Foot Equivalent Container Units (TEUs)
Port of Virginia, 2010 - 2023

Millions of TEUs

2010: 1.59
2011: 1.69
2012: 1.79
2013: 1.90
2014: 2.01
2015: 2.12
2016: 2.23
2017: 2.33
2018: 2.44
2019: 2.55
2020: 2.26
2021: 2.81
2022: 2.81
2023: 2.63

Sources: Virginia Port Authority and Draga Center for Economic Analysis and Policy.
Percent Change in Total Loaded TEUs
Selected U.S. Ports, 2022 - 2023

New York/New Jersey: -13.6%
Long Beach: -11.9%
Savannah: -11.5%
Oakland: -10.1%
Seattle/Tacoma: -8.1%
Los Angeles: -7.0%
Port of Virginia: -6.3%
Charleston: -6.1%
Houston: -0.3%

Sources: Websites of ports and the Old Dominion University Economic Forecasting Project.
Shares of Total Loaded TEUs
Selected East Coast Ports, 2010 - 2024

Percent of TEUs

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 2024 is through March 2024.
Hotels Rebound but Challenges Remain
Nominal and Real (Inflation-Adjusted) Hotel Revenue
Hampton Roads, 2000 - 2023

Millions of Dollars

Nominal Revenue - Real Revenue

Sources: STR Trend Report January 2024, Bureau of Labor Statistics (base year is chained; 2000=100), and the Dragas Center for Economic Analysis and Policy.
## Percent Change in Hotel Revenue in United States, Virginia, Northern Virginia, and Hampton Roads, 2019 to 2023

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

*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 2023

Sources: STR Trend Report January 2024, and AirDNA data received in March 2024. AirDNA data exclude shared rooms.
Total and Whole House Rental Revenues of Airbnb and Vrbo Properties
Hampton Roads, 2016 - 2023

Source: AirDNA data received in March 2024; excludes shared rooms.
Housing Sales Decline but Prices Rise
<table>
<thead>
<tr>
<th>City</th>
<th>2019 to 2020</th>
<th>2020 to 2021</th>
<th>2021 to 2022</th>
<th>2022 to 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chesapeake</td>
<td>6.4%</td>
<td>11.7%</td>
<td>7.9%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Norfolk</td>
<td>11.4%</td>
<td>12.7%</td>
<td>6.6%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Portsmouth</td>
<td>13.0%</td>
<td>15.2%</td>
<td>9.5%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Suffolk</td>
<td>10.1%</td>
<td>13.6%</td>
<td>9.9%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Virginia Beach</td>
<td>9.8%</td>
<td>8.8%</td>
<td>8.1%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Hampton</td>
<td>8.8%</td>
<td>16.6%</td>
<td>6.7%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Newport News</td>
<td>8.4%</td>
<td>10.0%</td>
<td>8.7%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Williamsburg*</td>
<td>9.5%</td>
<td>8.4%</td>
<td>10.3%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Hampton Roads</td>
<td>9.0%</td>
<td>9.4%</td>
<td>7.5%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

* 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.
Existing Home Sales
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.
Median Sales 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 - May 2024

Average = 4.51 Months

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

Sources: Real Estate Information Network and the Old Dominion University Economic Forecasting Project.
Weekly 30-Year Fixed Mortgage Rate
United States, January 3, 2019 - June 6, 2024

Annual Mortgage Rates
3.11% for 2020; 2.96% for 2021
5.34% for 2022; 6.81% for 2023

4.51%
3.45%
2.65%
3.11%

7.79%
6.99%

Sources: Freddie Mac and Federal Reserve Bank of St. Louis. Weekly rate ending Thursday of each week.
Weekly 30-Year Fixed Mortgage Rate
United States, April 2, 1971 - June 6, 2024

Sources: Freddie Mac and Federal Reserve Bank of St. Louis. Weekly rate ending Thursday of each week.
Number of Existing Residential Homes Sold, 12-month Moving Average
Hampton Roads, January 2019 - May 2024

Sources: Real Estate Information Network Inc. and Dragas Center for Economic Analysis and Policy.
Index of Median Sale Price of Existing Residential Homes
Hampton Roads, January 2019 - May 2024

Sources: Real Estate Information Network Inc. and Dragas Center for Economic Analysis and Policy.
New Listings of Existing Residential Homes, 12-month Moving Average
Hampton Roads, January 2019 - May 2024

Source: Real Estate Information Network Inc. and the Old Dominion University Economic Forecasting Project.
Inventory of Existing Residential Homes, 12-month Moving Average
Hampton Roads, January 2019 - May 2024

Sources: Real Estate Information Network Inc. and Dragas Center for Economic Analysis and Policy.
Ratio of Selling Price to Listed Price of Existing Homes
Hampton Roads, January 2019 - May 2024

Selling Price to Listed Price

Source: Real Estate Information Network and Old Dominion University Economic Forecasting Project.
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.
<table>
<thead>
<tr>
<th></th>
<th>2021 Actual</th>
<th>2022 Actual</th>
<th>2023 Estimated/Actual</th>
<th>2024 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hampton Roads Real GDP</td>
<td>4.6%</td>
<td>1.9%</td>
<td>2.6%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Civilian Job Growth</td>
<td>2.1%</td>
<td>2.3%</td>
<td>2.2%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>4.5%</td>
<td>3.2%</td>
<td>3.1%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Taxable Sales</td>
<td>16.3%</td>
<td>5.3%</td>
<td>2.9%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Hotel Revenue</td>
<td>71.8%</td>
<td>8.9%</td>
<td>2.8%</td>
<td>3.4%</td>
</tr>
<tr>
<td>General Cargo Tonnage</td>
<td>20.3%</td>
<td>3.1%</td>
<td>-5.3%</td>
<td>4.8%</td>
</tr>
<tr>
<td>General Cargo TEUs</td>
<td>25.2%</td>
<td>5.1%</td>
<td>-11.2%</td>
<td>3.7%</td>
</tr>
<tr>
<td>One-Unit Housing Permit Value</td>
<td>5.2%</td>
<td>-13.6%</td>
<td>-2.1%</td>
<td>3.6%</td>
</tr>
</tbody>
</table>
Upcoming Publications and Events

-- State of the Region Report (October 2024)

-- State of the Commonwealth Report (December 2024)

-- Annual Economic Forecast (January 2025)

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-- Follow DragasCenterODU on Facebook and LinkedIn.

-- All our presentation materials can be found at our website: www.ceapodu.com