



# The State of the Region

HAMPTON ROADS 2023

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



I will discuss the ongoing economic recovery and the prospects for growth in 2023 and beyond.

Vinod Agarwal will examine the performance of the Port of Virginia, the hotel industry, and residential real estate markets.

Barbara Blake will report on hospice care in Hampton Roads.

I will close with a discussion of the contributions of veterans to the economy of the region.

All our presentation materials can be found at our website: [www.ceapodu.com](http://www.ceapodu.com)

The Strome College of Business and Old Dominion University continue to provide important support for the State of the Region report. However, the report would not appear without the vital backing of these donors, who believe in the power of rational discourse to improve our circumstances.

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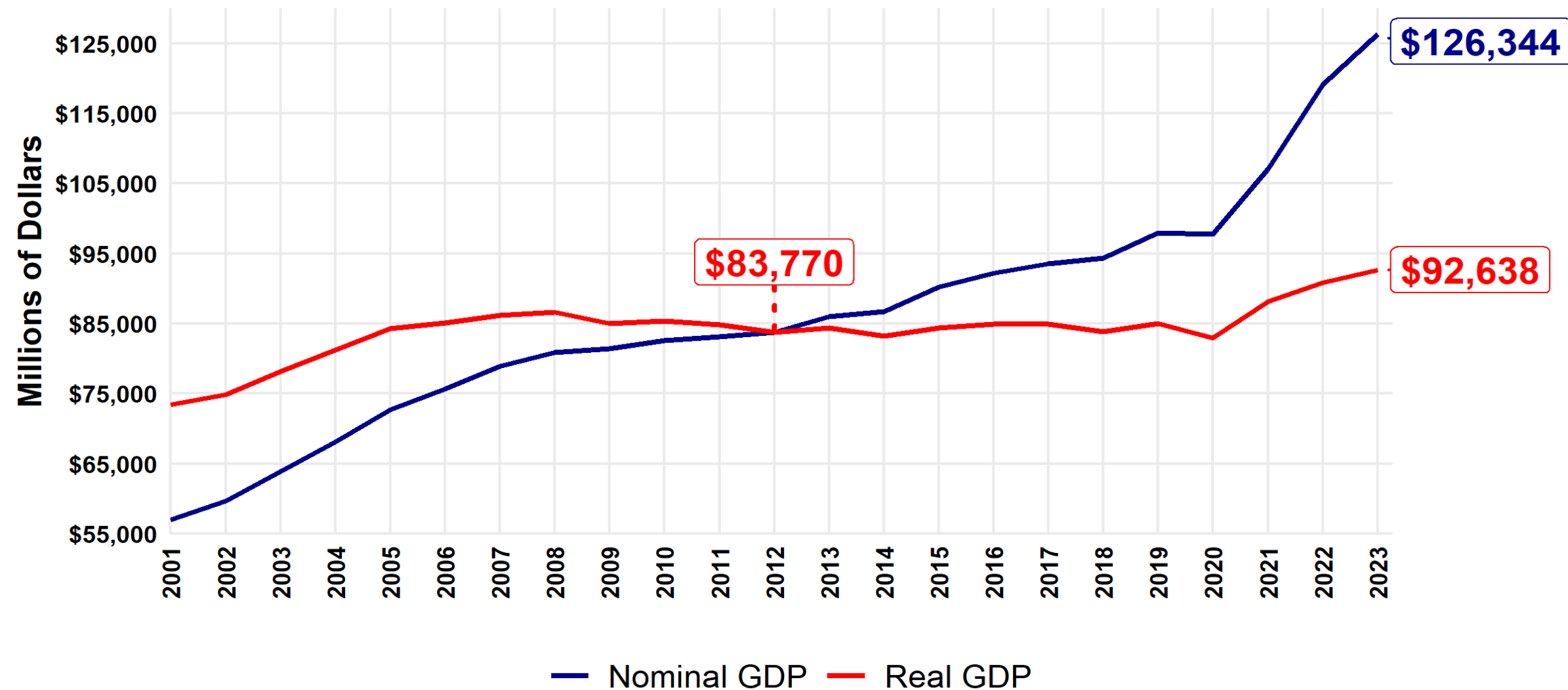
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# The Recovery: Almost Complete



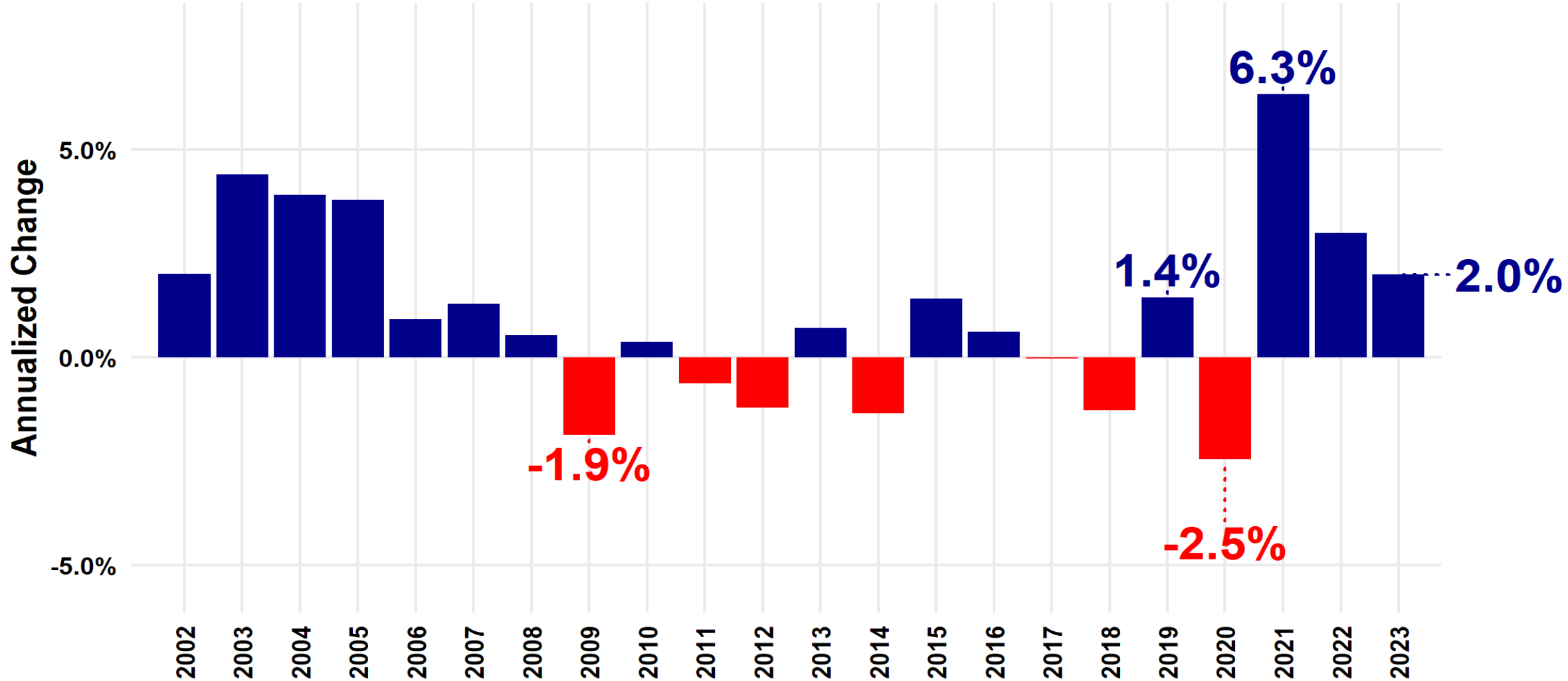
# Nominal and Real Gross Domestic Product Hampton Roads, 2001 - 2023



Sources: U.S. Bureau of Economic Analysis and Dragas Center for Economic Analysis and Policy.  
Data for 2021 is the advance estimate, 2022 represents our estimate, and 2023 is our forecast. 2012 dollars for real GDP.



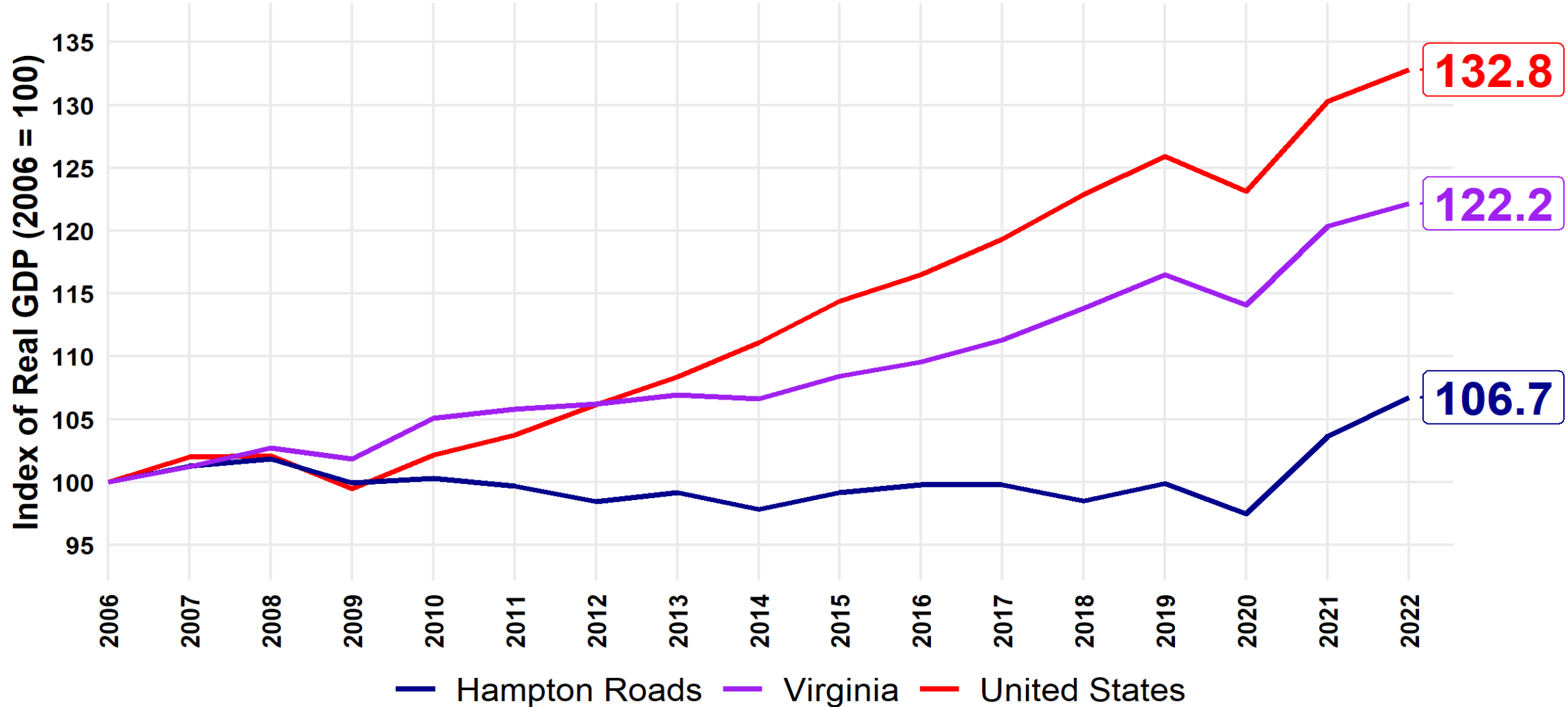
## Growth in Real Gross Domestic Product Hampton Roads, 2002 - 2023



Sources: U.S. Bureau of Economic Analysis and Dragas Center for Economic Analysis and Policy.  
Data for 2021 is the advance estimate, 2022 represents our estimate, and 2023 is our forecast. 2012 dollars for real GDP.

# Index of Real GDP

## Hampton Roads, Virginia, and the United States, 2006 - 2022

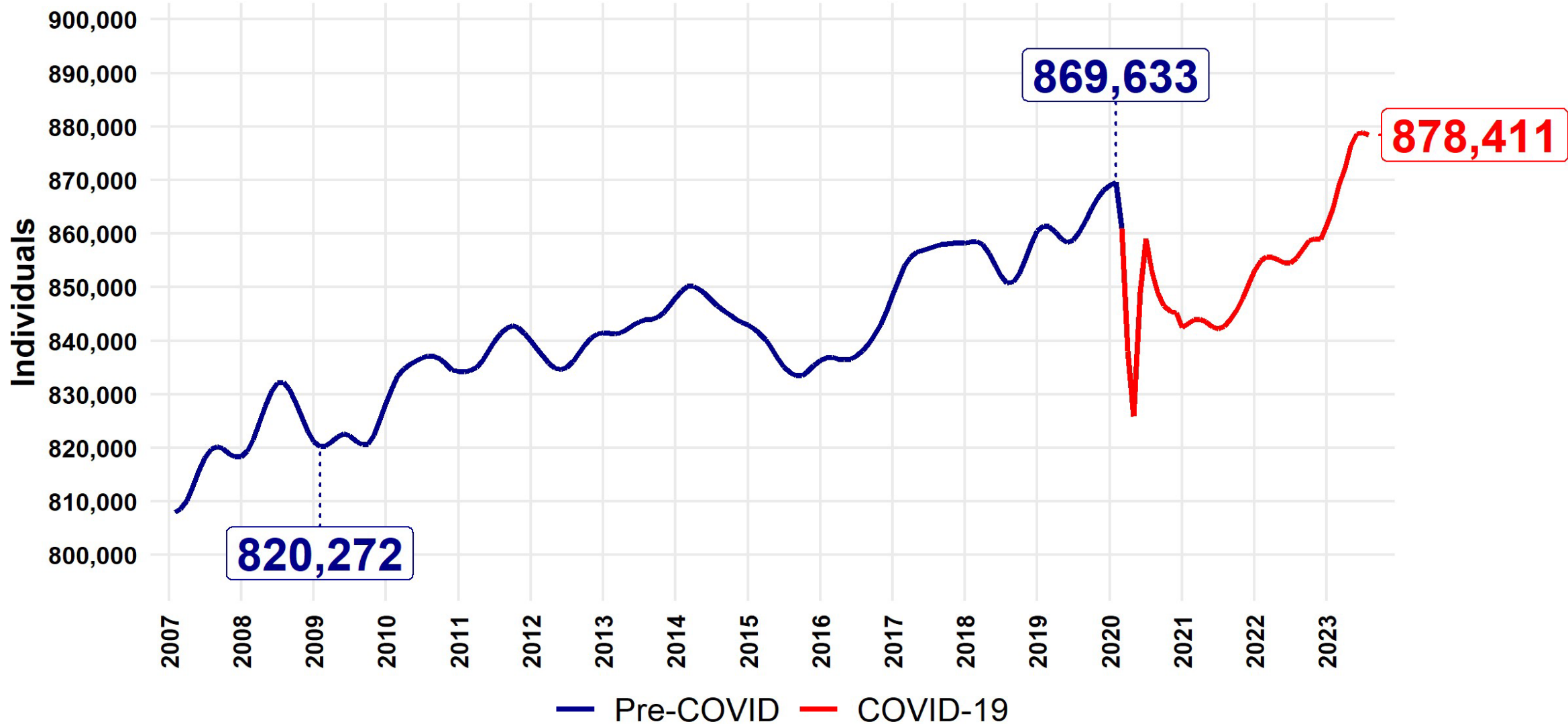


Sources: U.S. Bureau of Economic Analysis and Dragas Center for Economic Analysis and Policy.  
Data for Hampton Roads for 2021 is the advance estimate and 2022 is our estimate.



# Civilian Labor Force

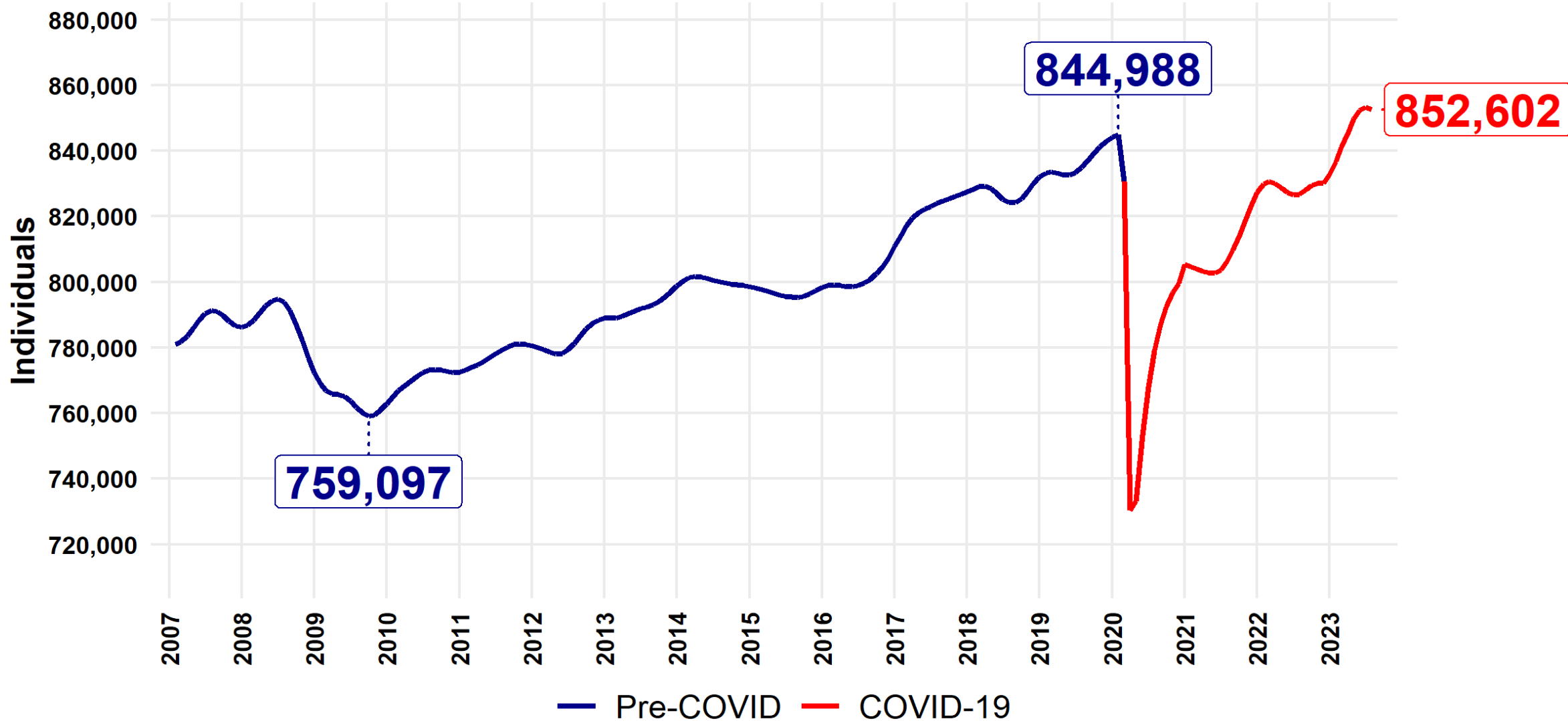
## Hampton Roads, January 2007 - August 2023



Source: Bureau of Labor Statistics, seasonally adjusted data.

# Individual Employment Level

## Hampton Roads, January 2007 - August 2023

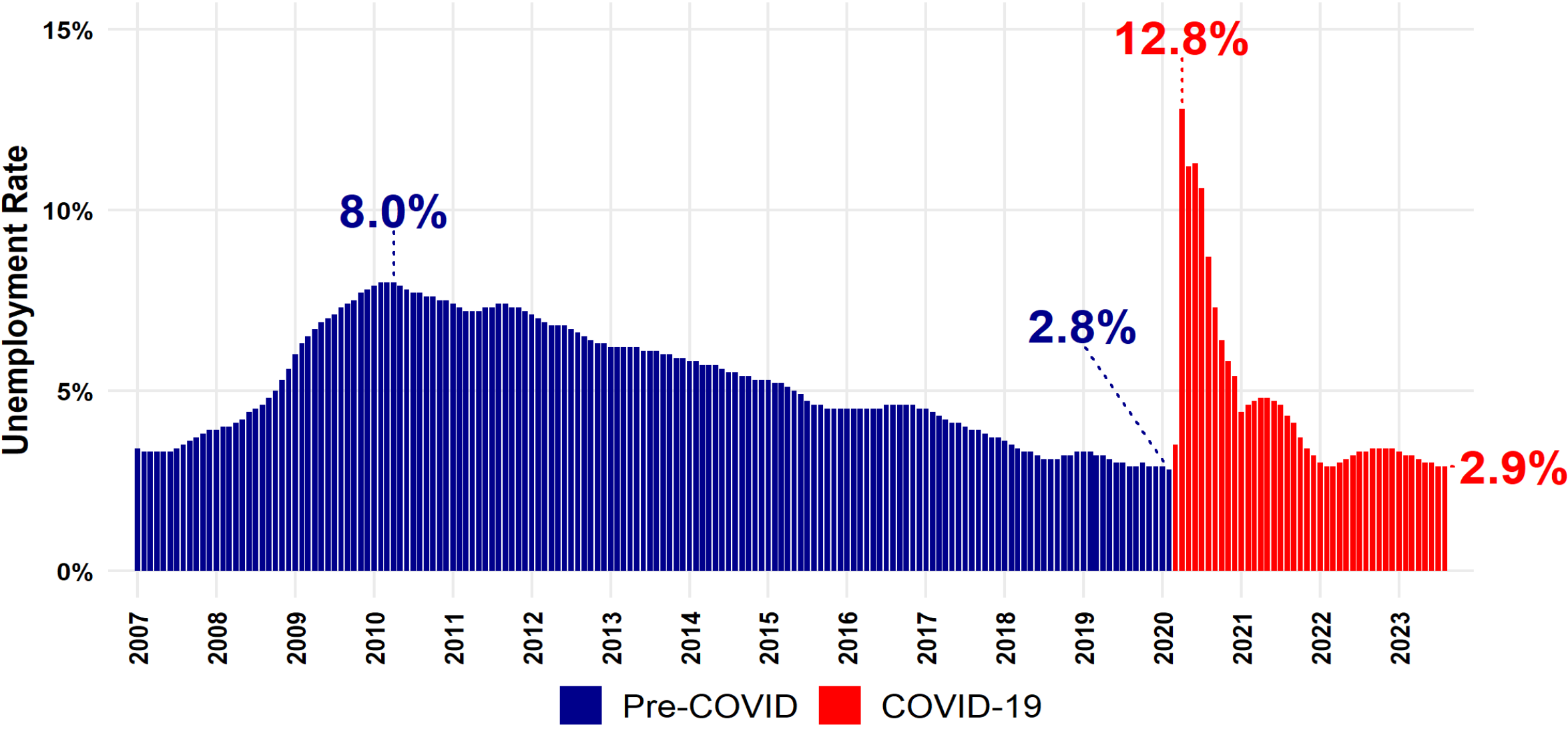


Source: Bureau of Labor Statistics, seasonally adjusted data.



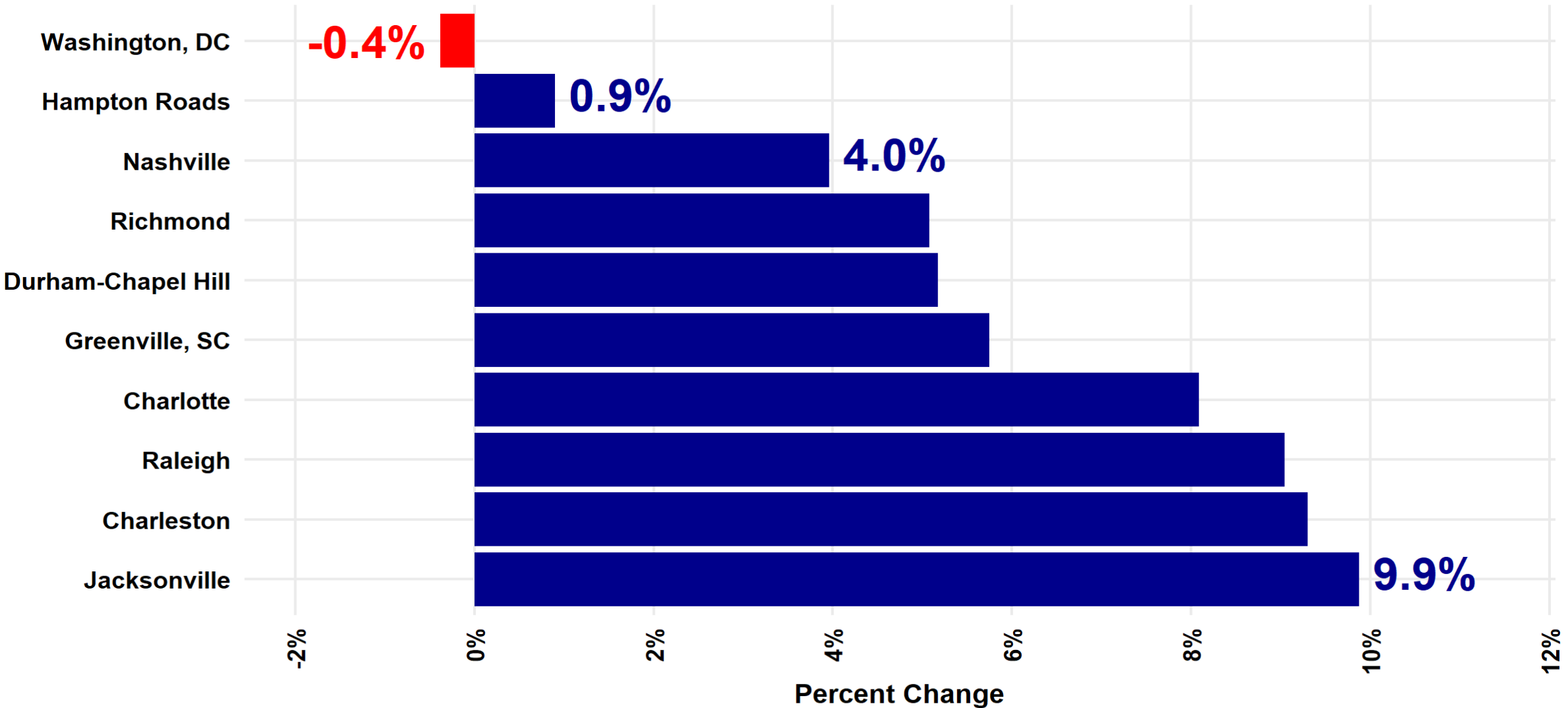
# Headline Unemployment Rate (U3)

## Hampton Roads, January 2007 - August 2023



Source: Bureau of Labor Statistics, seasonally adjusted data.

## Change in Individual Employment Selected Metro Areas, February 2020 - August 2023

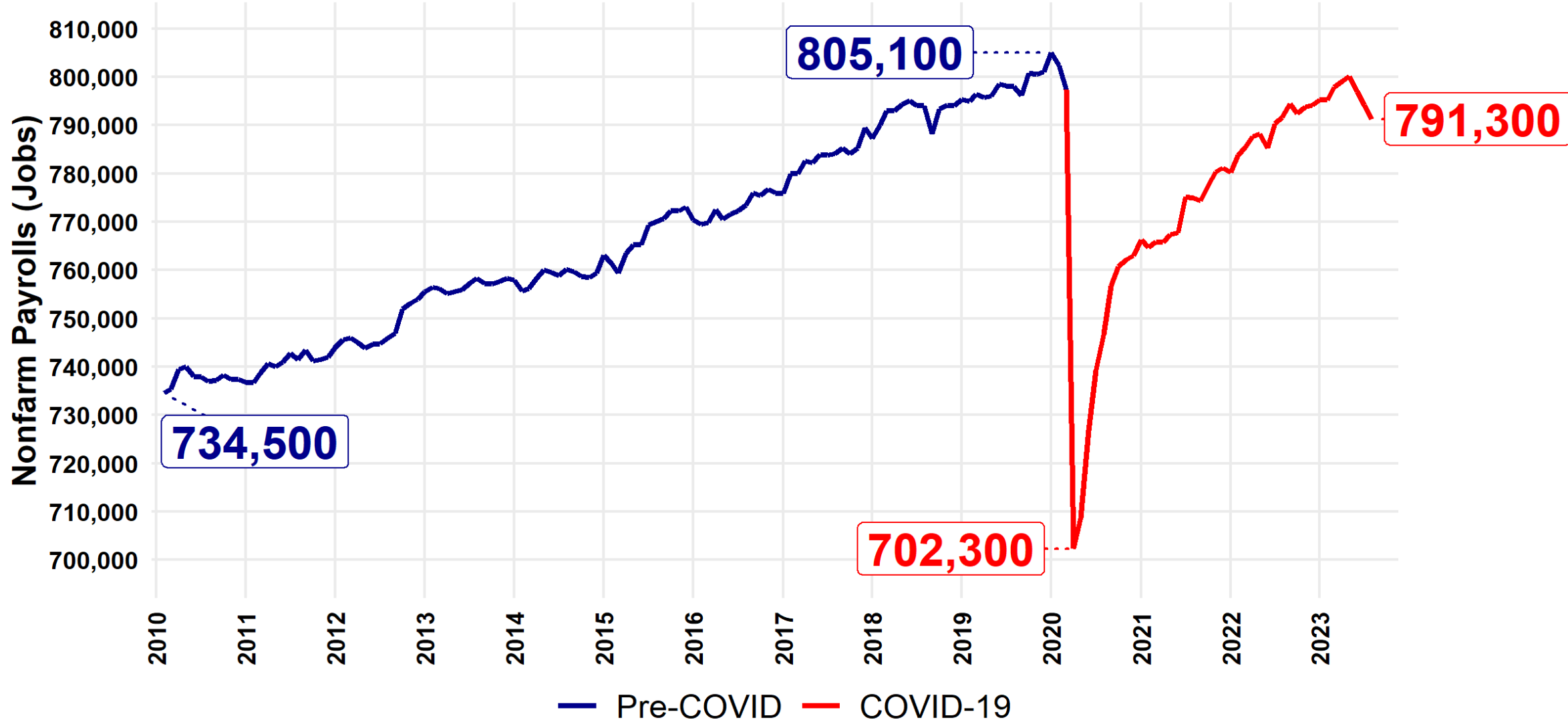


Source: Bureau of Labor Statistics, seasonally adjusted data.



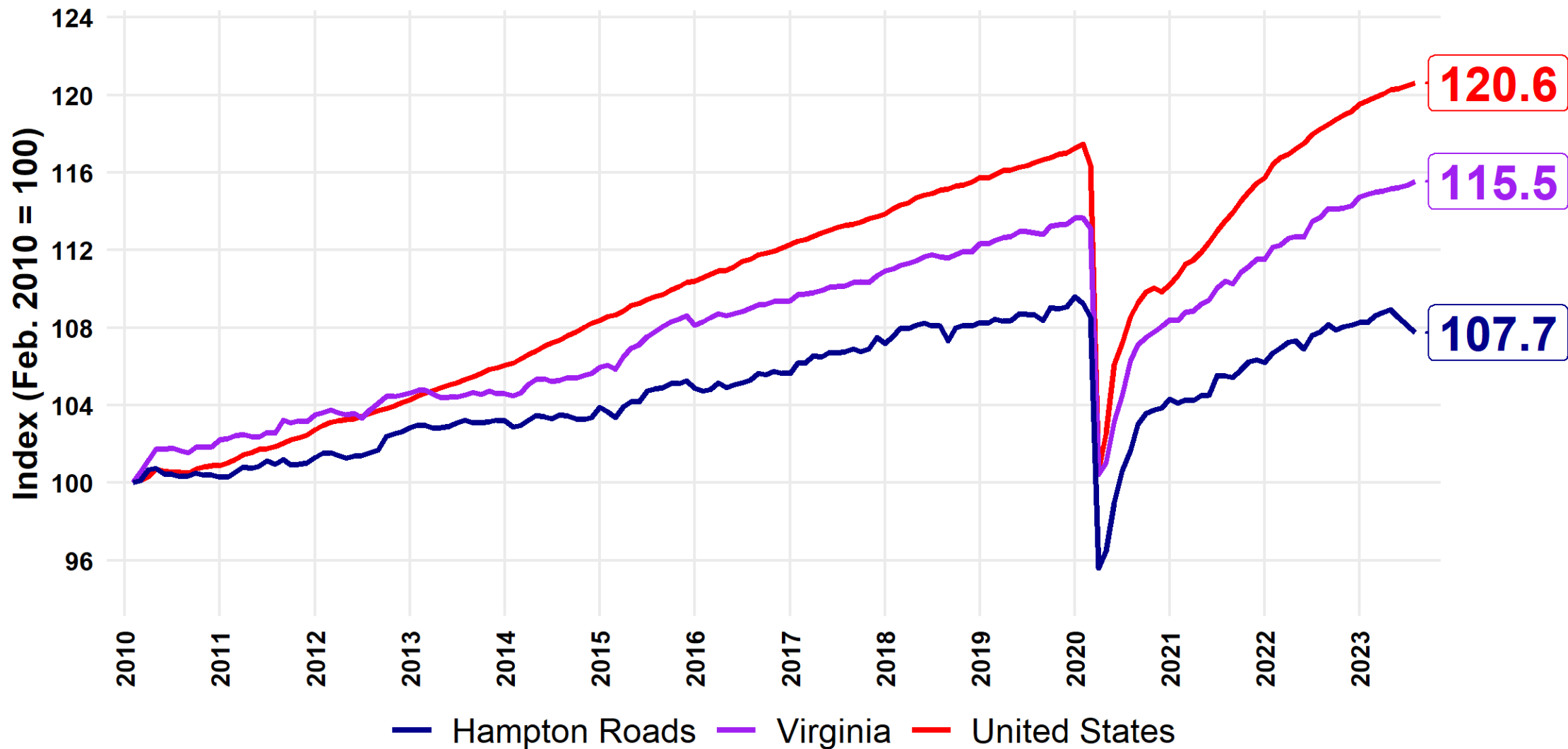
# Nonfarm Payrolls

Hampton Roads, February 2010 - August 2023



# Index of Nonfarm Payrolls

Hampton Roads, Virginia, and the United States, February 2010 - August 2023

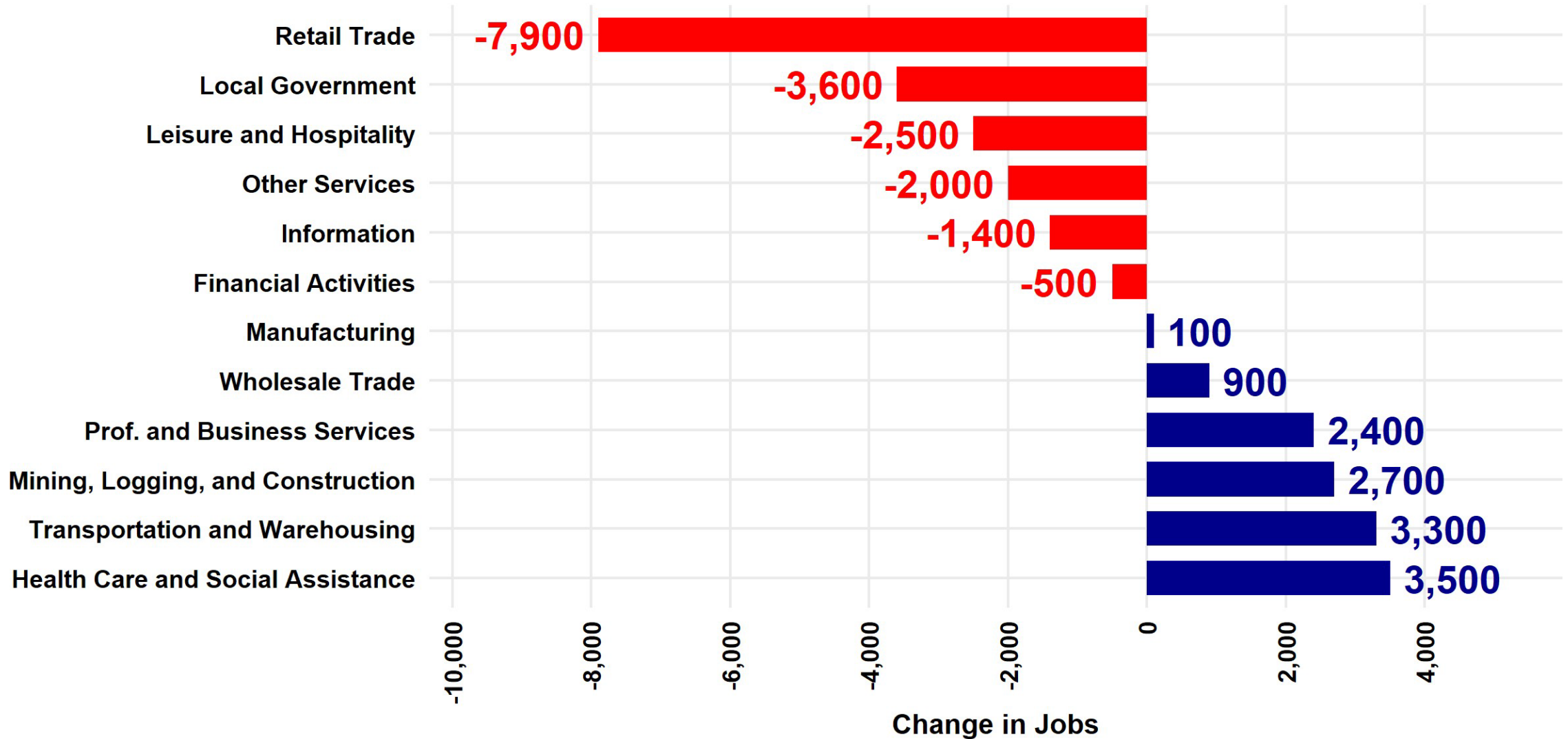


Source: Bureau of Labor Statistics, seasonally adjusted data.

February 2010 was the trough of nonfarm payrolls for the United States, Virginia, and Hampton Roads.

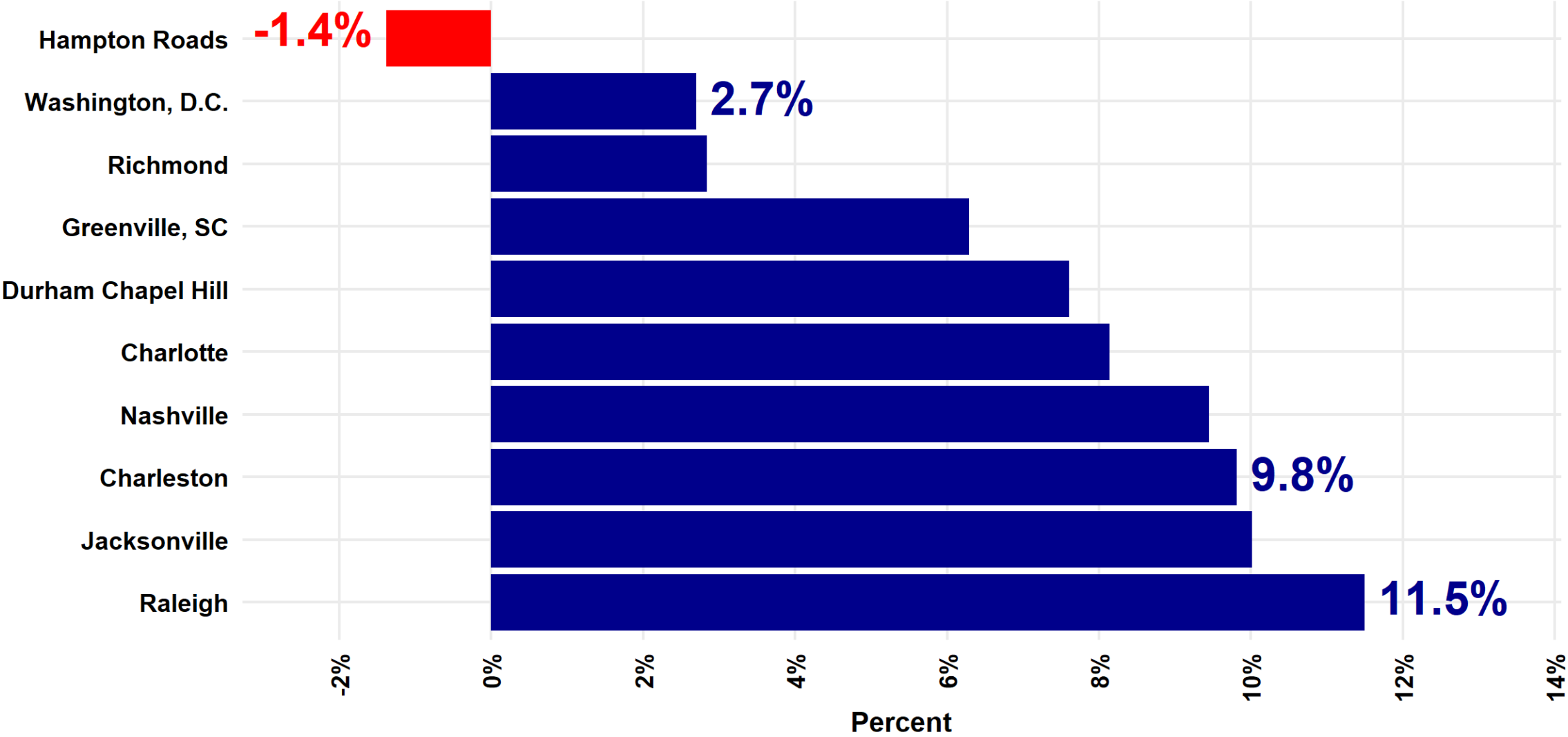
## Civilian Jobs Gained/Lost

Selected Sectors in Hampton Roads, August 2019 - August 2023



Source: Bureau of Labor Statistics, non-seasonally adjusted data.

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



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 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%                                  |

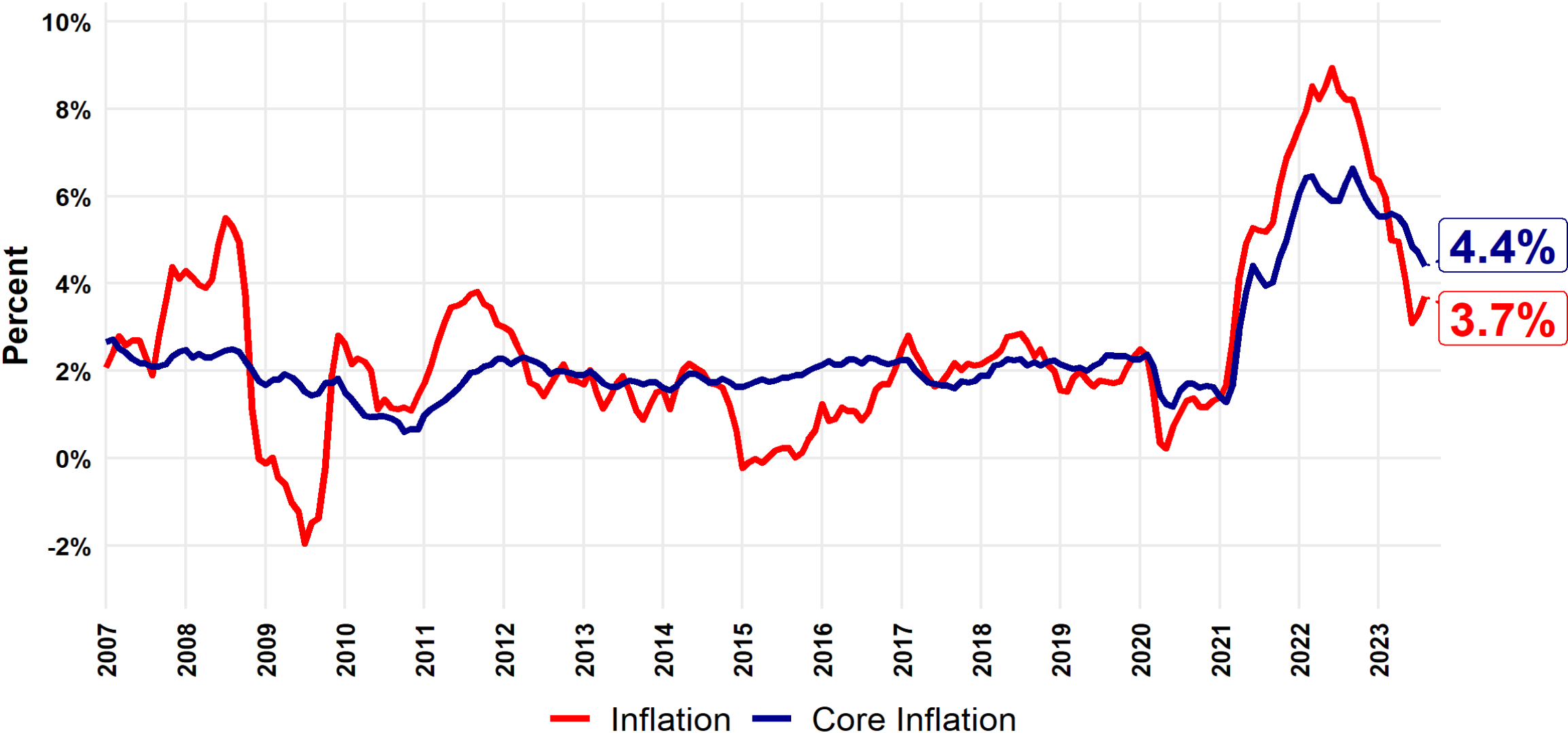
\* Source: JobsEq and Dragas Center for Economic Analysis and Policy. Data as of 2023 Q1 and based on a four-quarter moving average. Annual employment growth is from 2013 Q1 to 2023 Q1.

# Inflation and Defense Spending



# Monthly Inflation

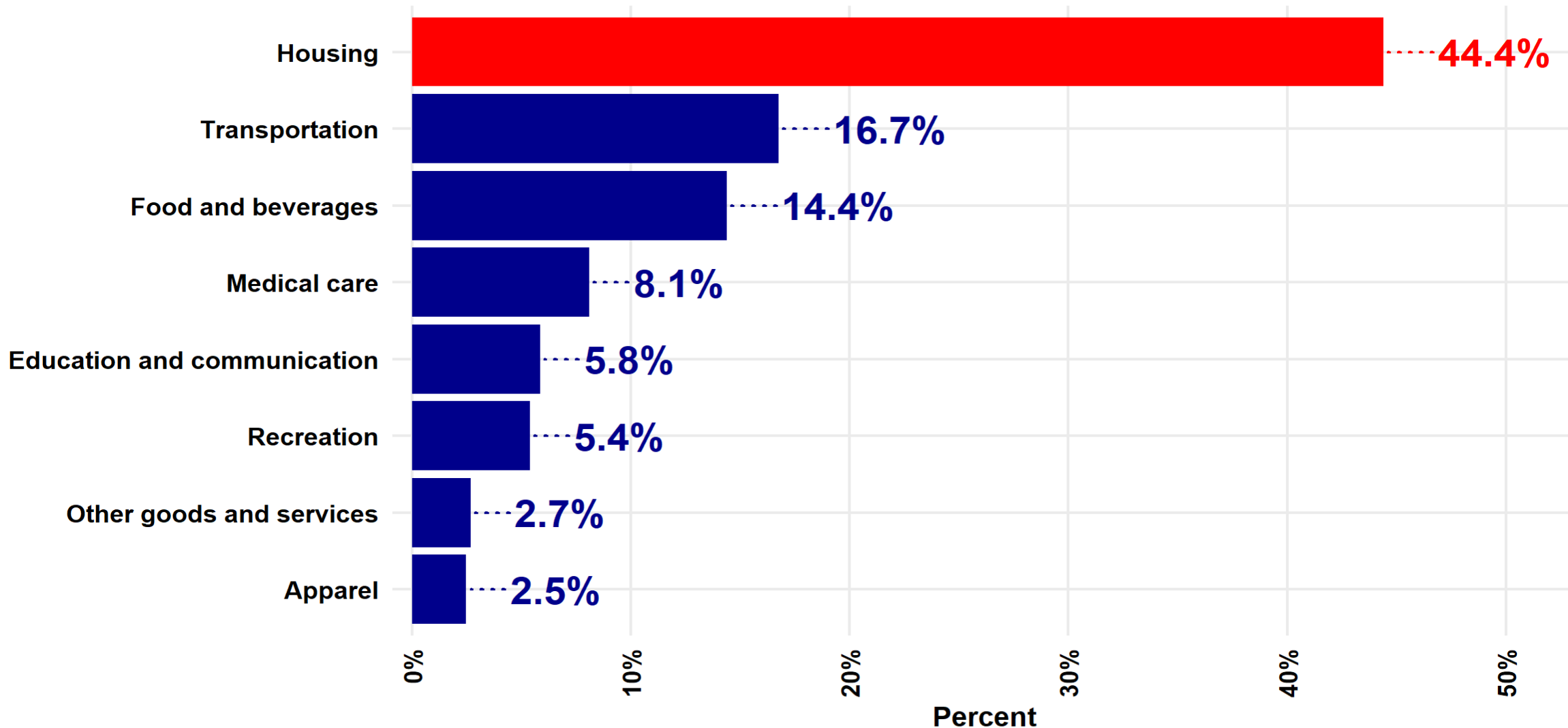
## United States, January 2007 - August 2023



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

# Consumer Price Index Less Food and Energy: Components

## United States, December 2022

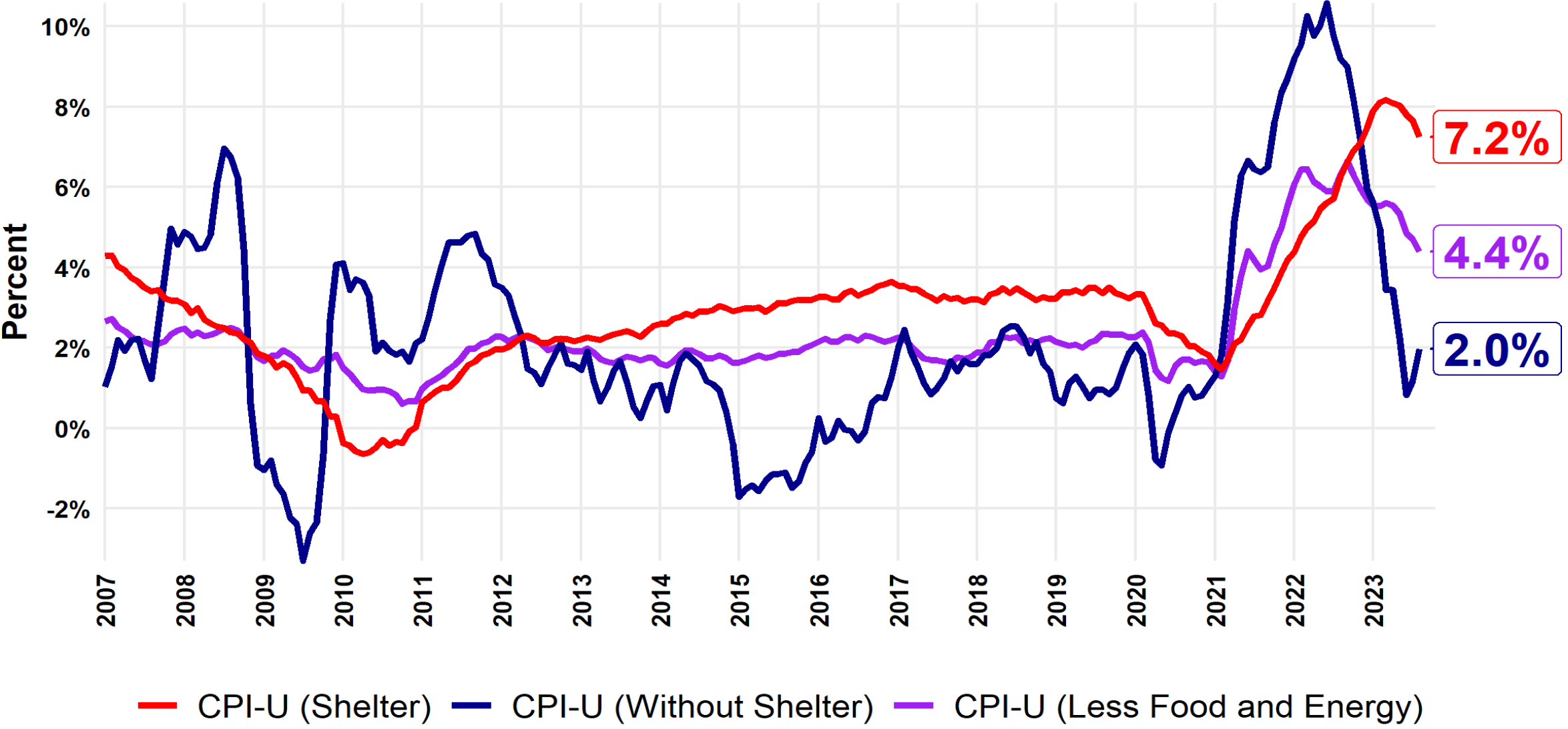


Source: Bureau of Labor Statistics, CPI-U Less Food and Energy, U.S. city average.



# Shelter, Non-Shelter, and Core Monthly Inflation

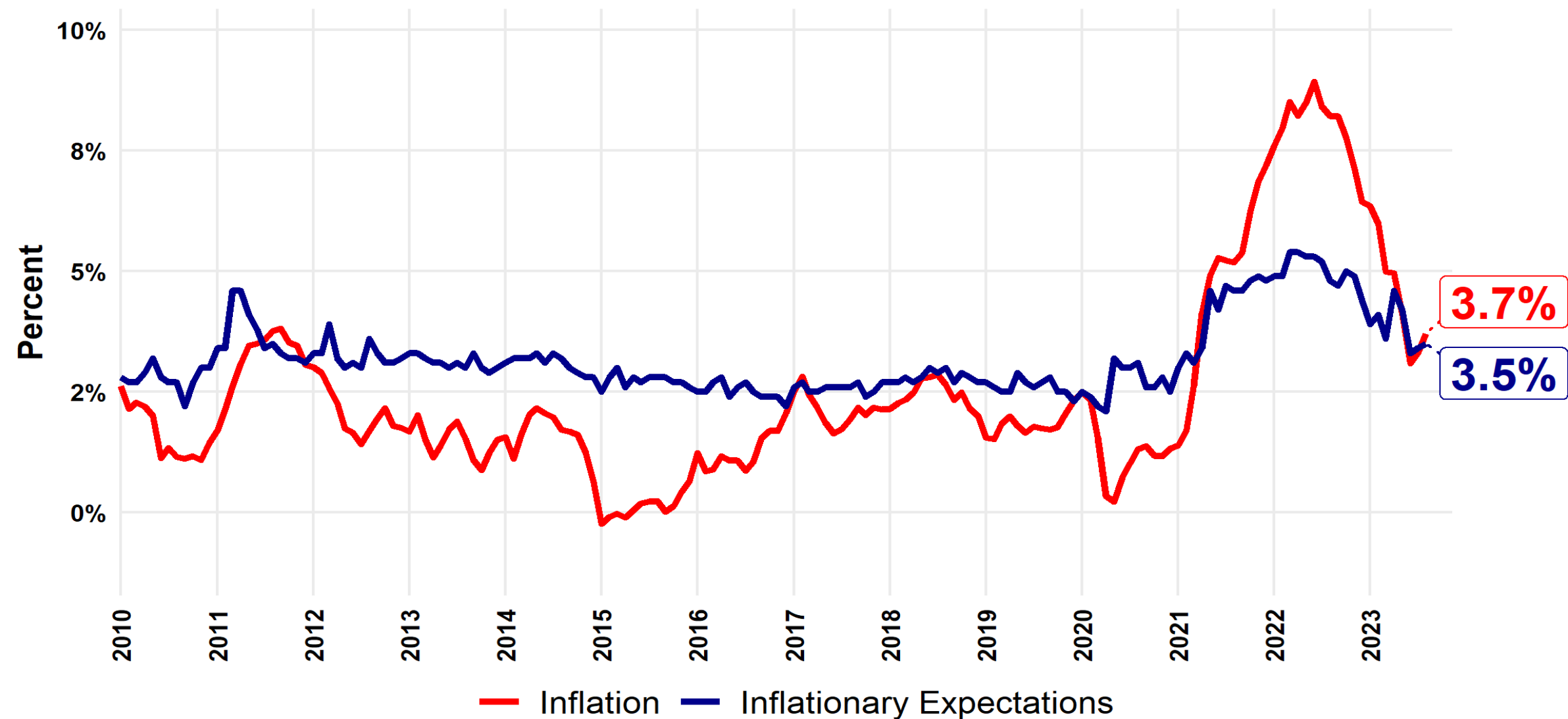
## United States, January 2007 - August 2023



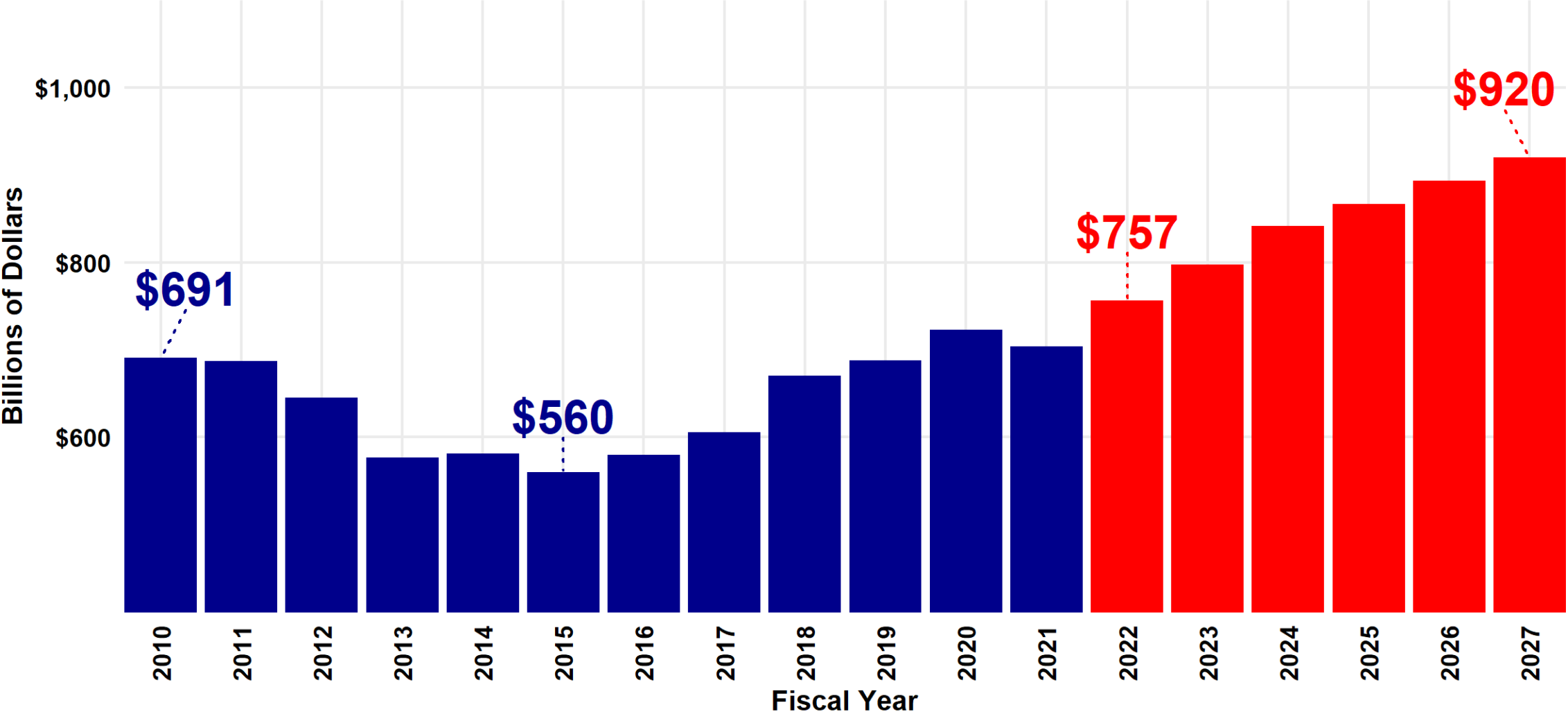
Source: Bureau of Labor Statistics, seasonally adjusted data.

# Monthly Inflation and Inflationary Expectations

## United States, January 2010 - August 2023

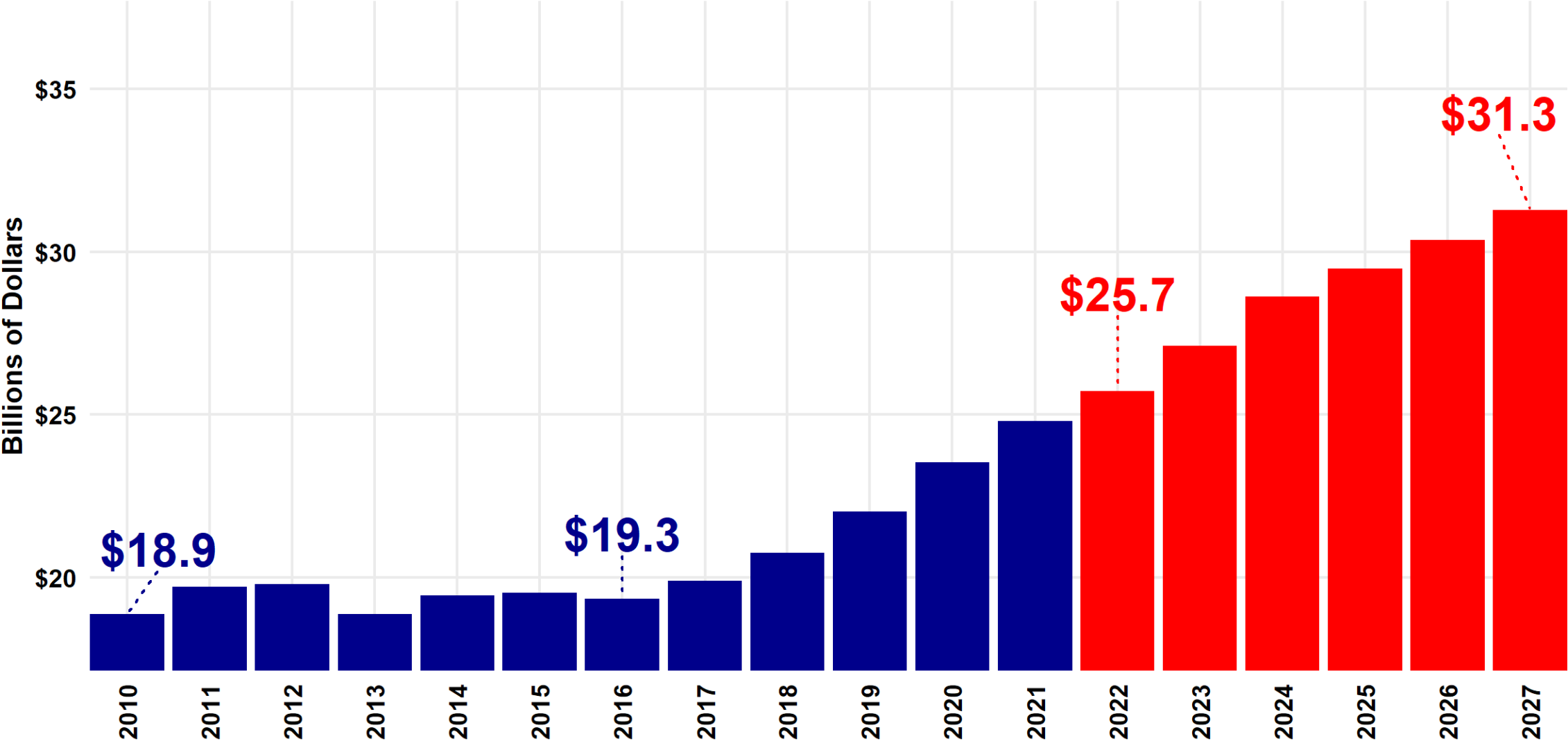


Department of Defense Base Budget  
Fiscal Year 2010 - 2027



Sources: Dragas Center for Economic Analysis and Policy; Office of Management and Budget FY 2024 Budget Request.  
FY 2023 is an estimate. FY 2024 - FY 2027 are forecasts.

# Department of Defense Direct Spending Hampton Roads, 2010 - 2027



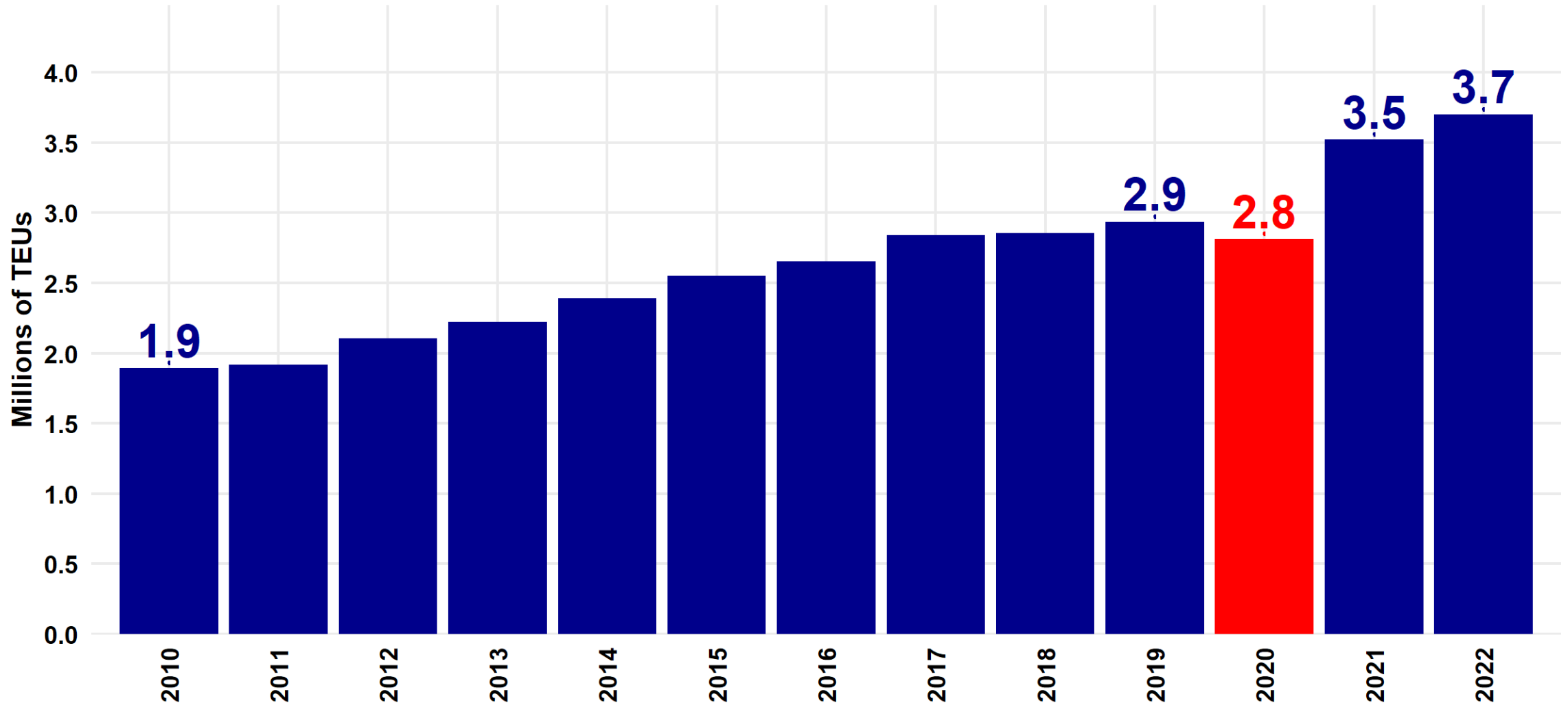
Sources: Dragas Center for Economic Analysis and Policy; 2022 is an estimate. 2023 - 2027 are forecasts. Calendar years.



# The Port Sets New Records

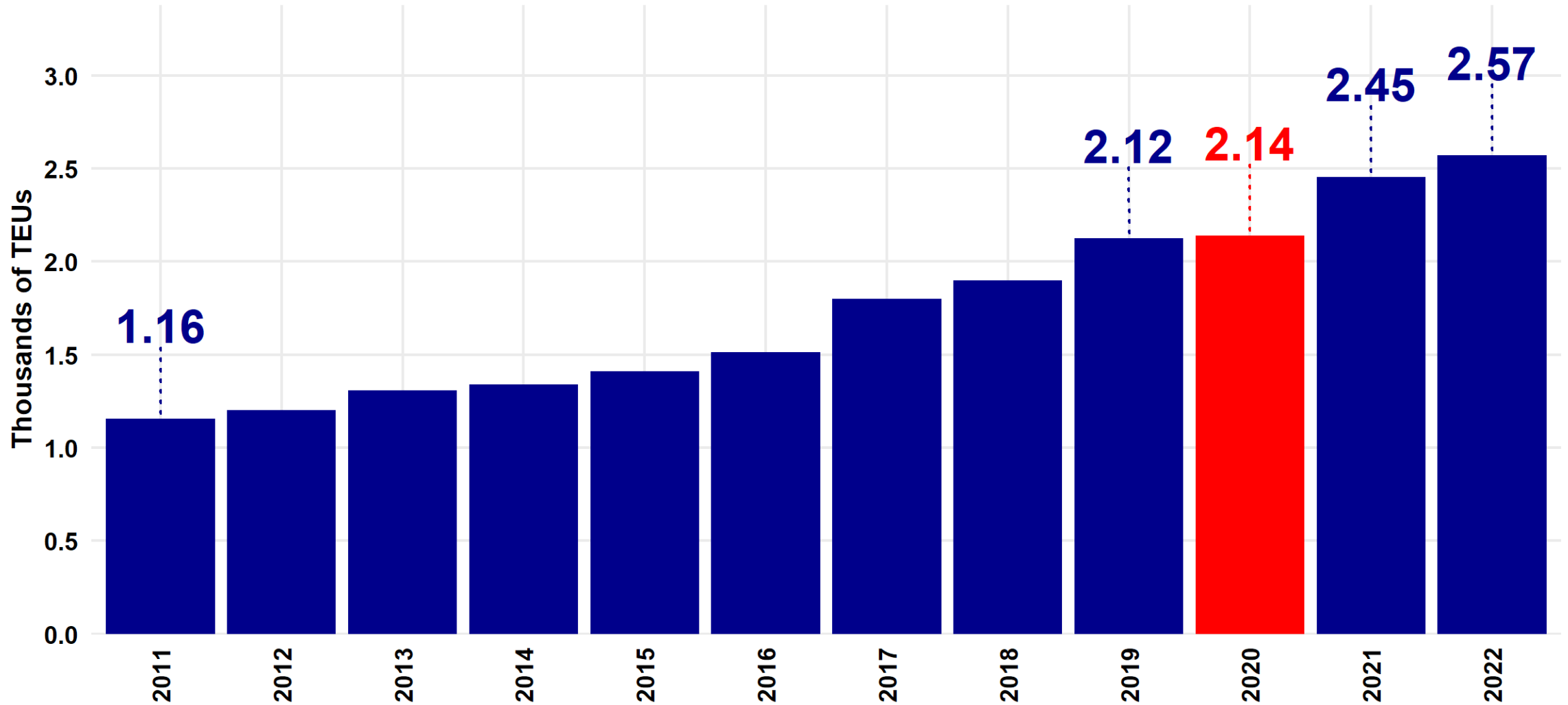


## Twenty-Foot Equivalent Container Units (TEUs) Port of Virginia, 2010 - 2022



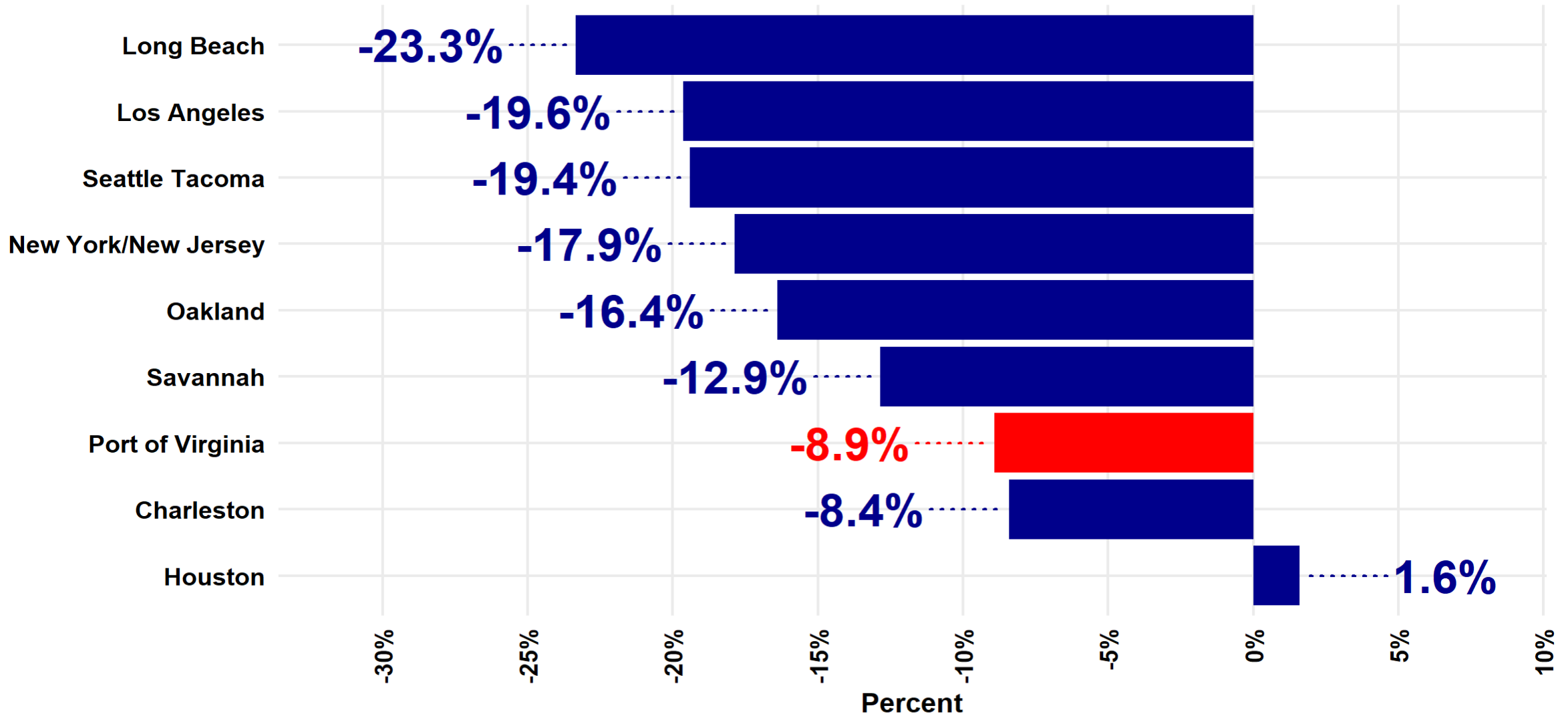
Sources: Virginia Port Authority and Dragas Center for Economic Analysis and Policy.

## Average TEUs per Container Vessel Call Port of Virginia, 2011 - 2022



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

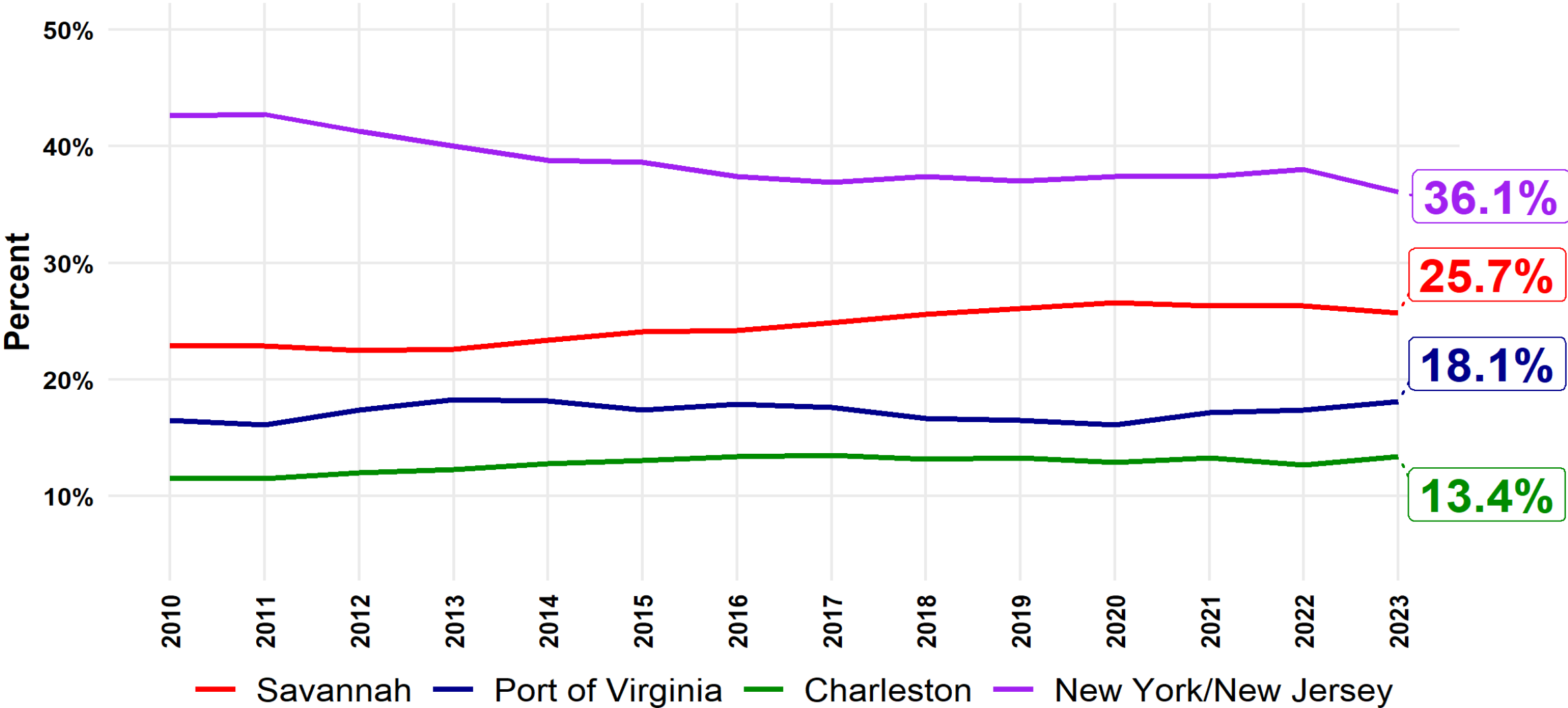
## Percent Change in Total Loaded TEUs Selected U.S. Ports, YTD July 2022 - YTD July 2023



Sources: Websites of Ports and Dragas Center for Economic Analysis and Policy.



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

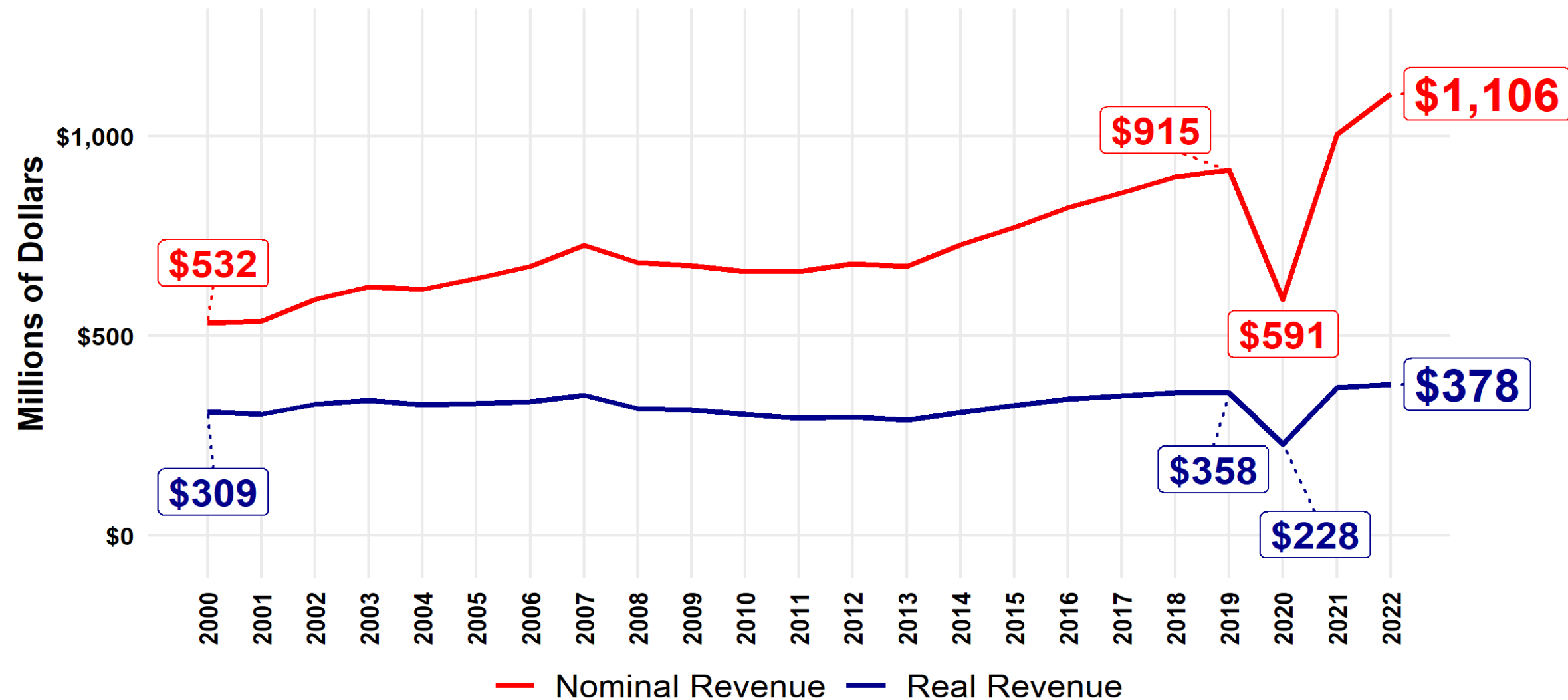


Sources: American Association of Port Authorities, websites of ports, and Dragas Center for Economic Analysis and Policy.  
2023 data are through June.

# Hotels Surge Ahead



## Nominal and Real (Inflation-Adjusted) Hotel Revenue Hampton Roads, 2000 - 2022



Sources: STR Trend Report January 2023, Bureau of Labor Statistics, and Dragas Center for Economic Analysis and Policy.  
Base year is chained; 1982-84=100

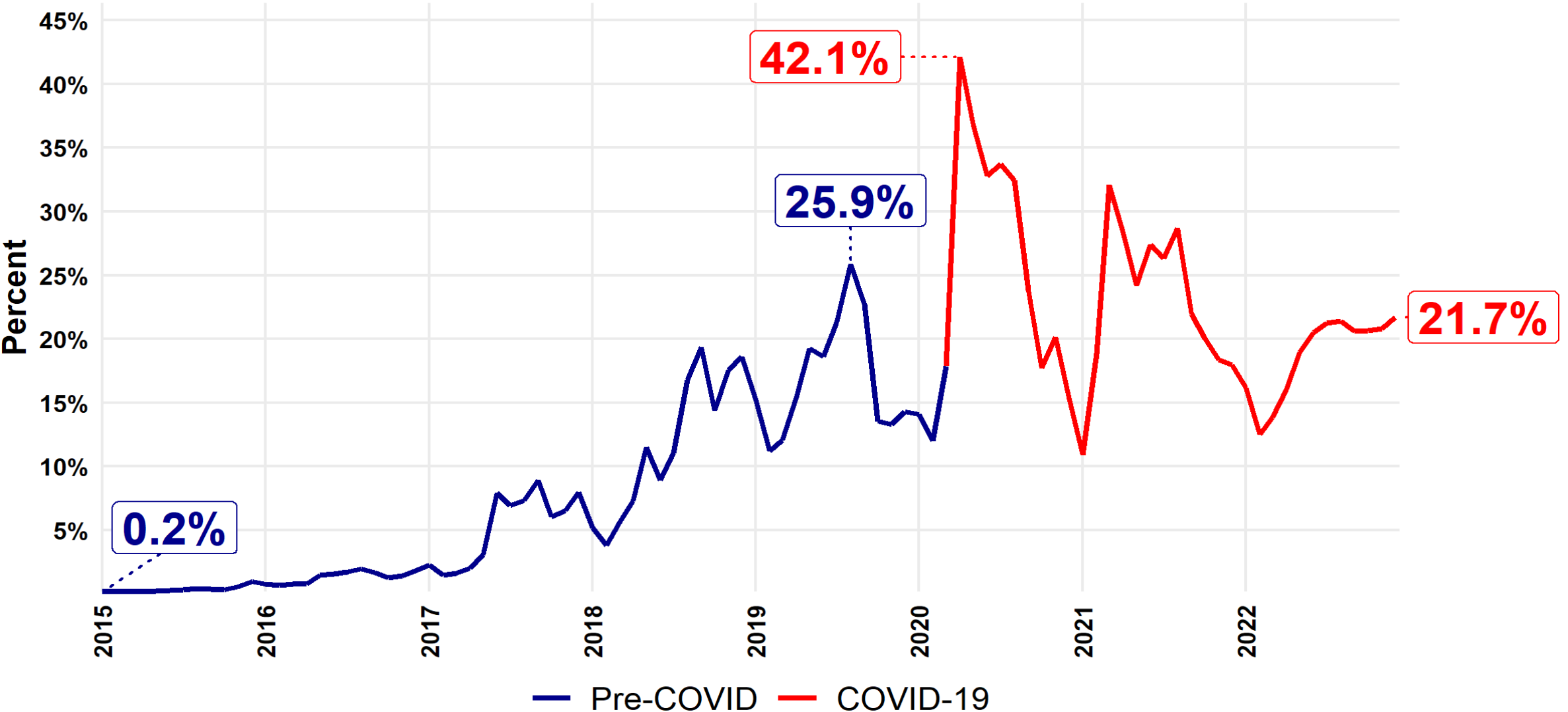
## Percent Change in Selected Key Performance Indicators of Hotels in USA, Virginia, and Hampton Roads: YTD August 2019 to YTD August 2023

| <u>Area</u>          | <u>Hotel Revenue</u> | <u>RevPAR</u> | <u>Hotel Rooms Sold</u> |
|----------------------|----------------------|---------------|-------------------------|
| USA                  | 15.3%                | 11.9%         | -2.0%                   |
| Virginia             | 11.5%                | 10.0%         | -2.1%                   |
| Hampton Roads        | 21.9%                | 17.8%         | 1.3%                    |
| Chesapeake/Suffolk   | 25.8%                | 25.8%         | 2.5%                    |
| Newport News/Hampton | 15.6%                | 17.1%         | -3.2%                   |
| Norfolk/Portsmouth   | 26.3%                | 18.8%         | 6.9%                    |
| Virginia Beach       | 28.0%                | 15.6%         | 3.5%                    |
| Williamsburg*        | 8.4%                 | 10.8%         | -3.6%                   |

\* Williamsburg market includes City of Williamsburg and James City County. Sources: STR Trend Report for August 2023, and Dragas Center for Economic Analysis and Policy.

# Short-term Rental Revenue as a Percent of Hotel Revenue

## Hampton Roads, January 2015 - December 2022



Sources: STR Trend Report, January 2023 and Airdna, January 2023. Airdna data exclude shared rooms.



# Housing in Hampton Roads

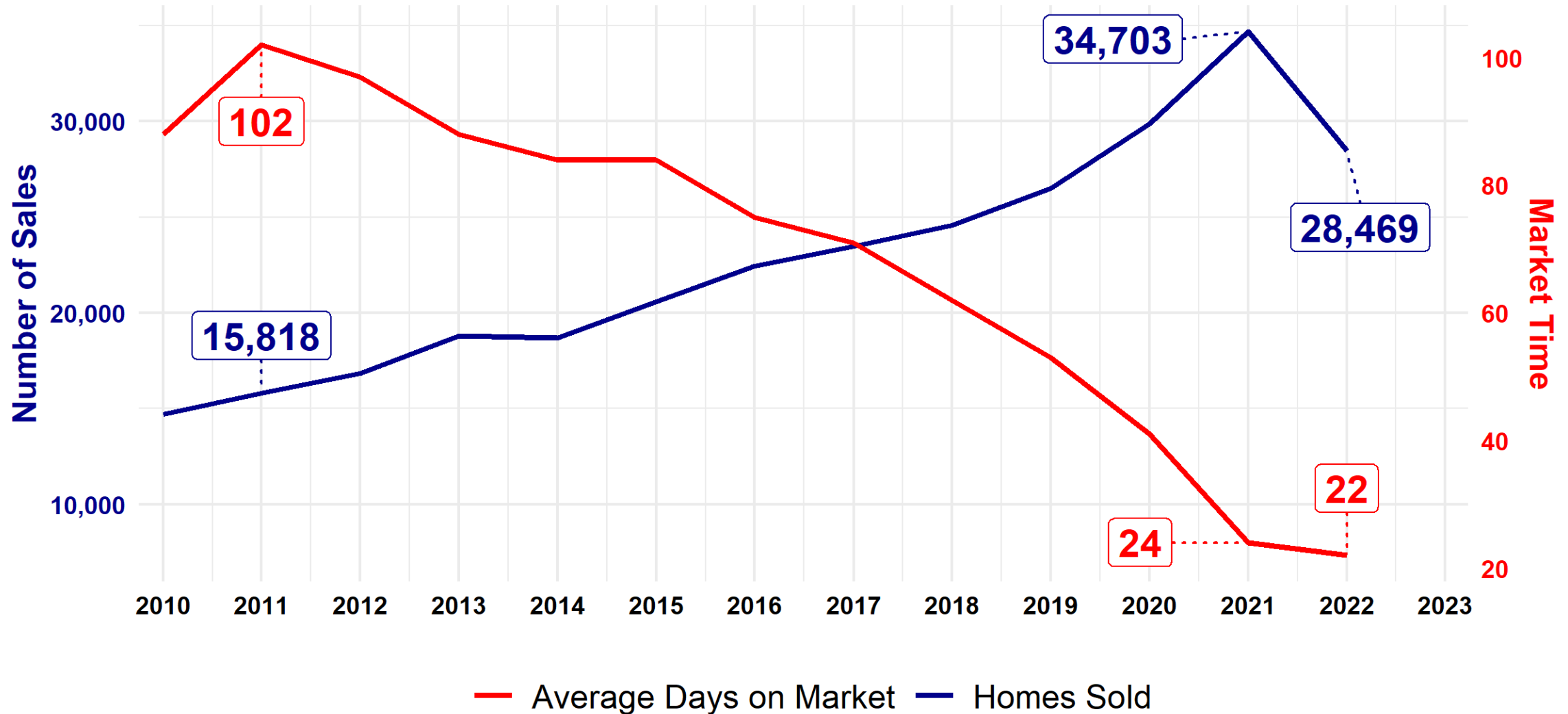


**Percent Change in Median Sale Price of Existing Residential Homes  
Selected Cities in Hampton Roads, 2020, 2021, and 2022**

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

\* 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.

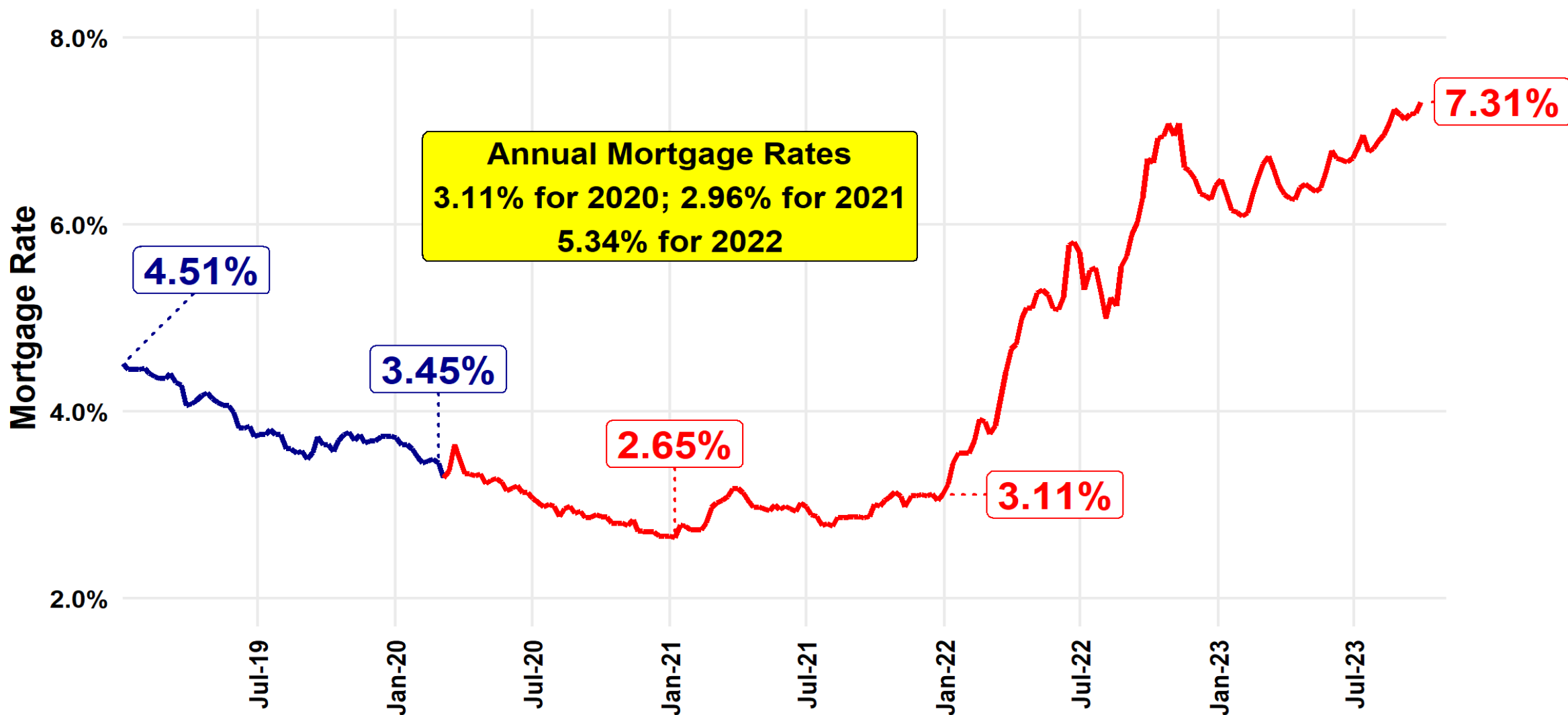
## Existing Residential Homes Sold and Average Days on the Market Hampton Roads, 2010 - 2022



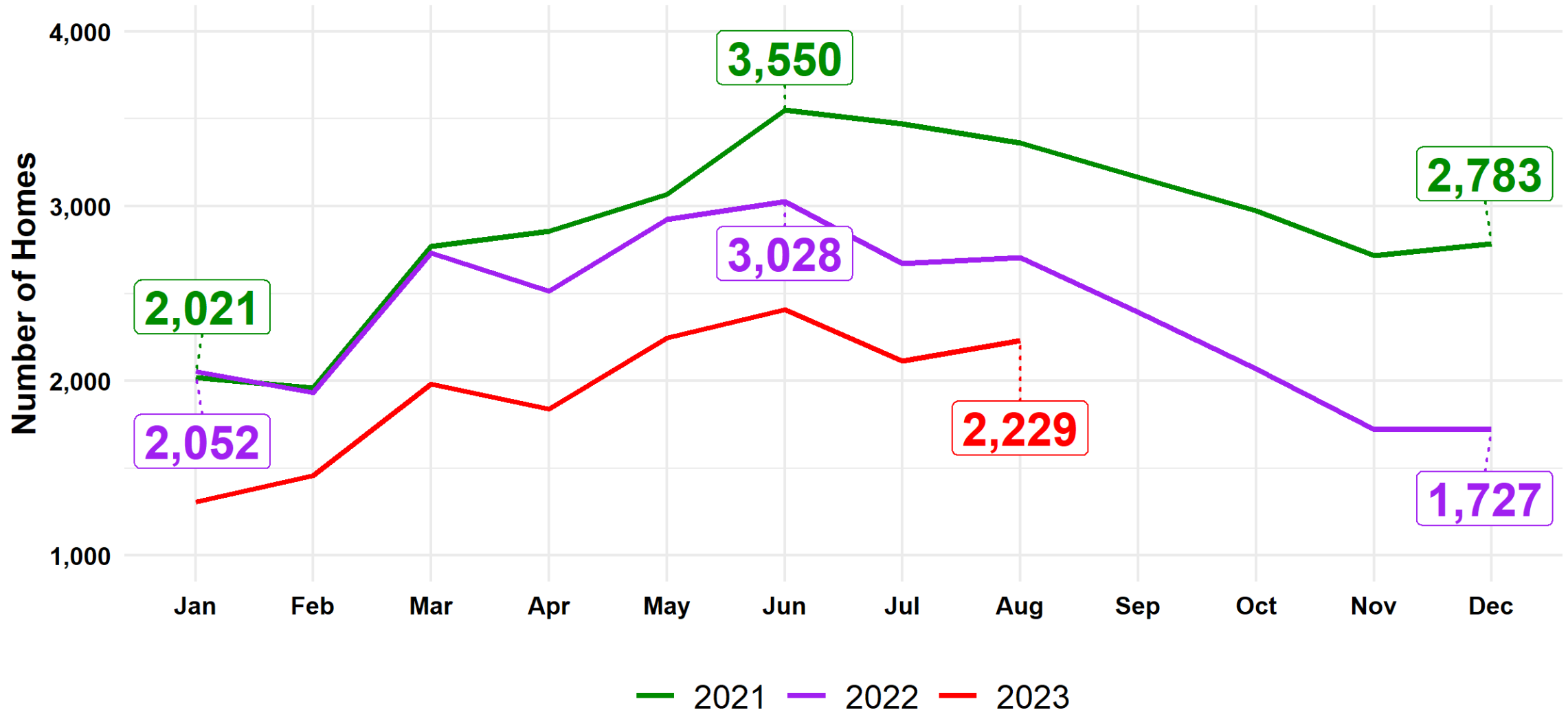
Sources: Real Estate Information Network Inc. and Dragas Center for Economic Analysis and Policy.

# Weekly 30-Year Fixed Mortgage Rate

## United States, January 3, 2019 - September 28, 2023



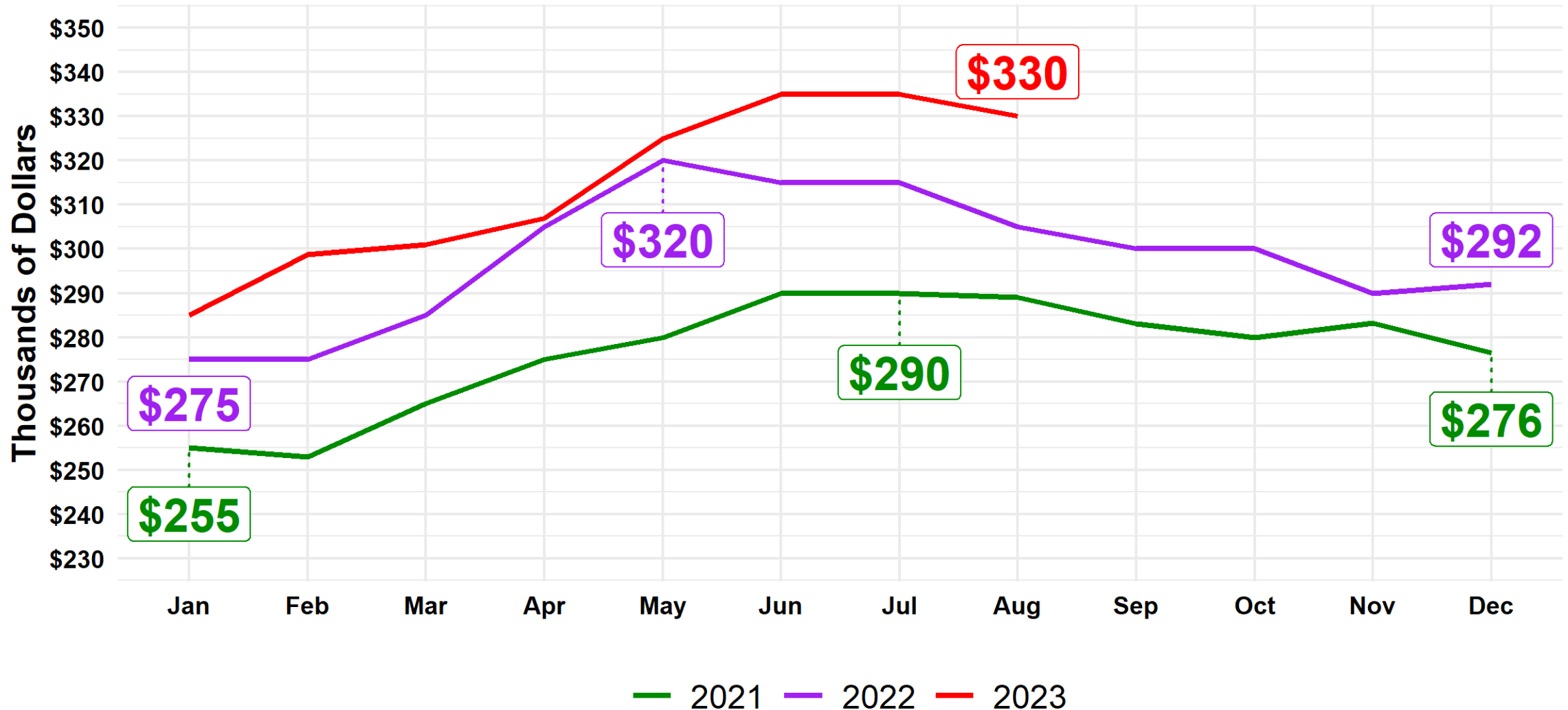
## Number of Existing Residential Homes Sold Hampton Roads, January 2021 - August 2023



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

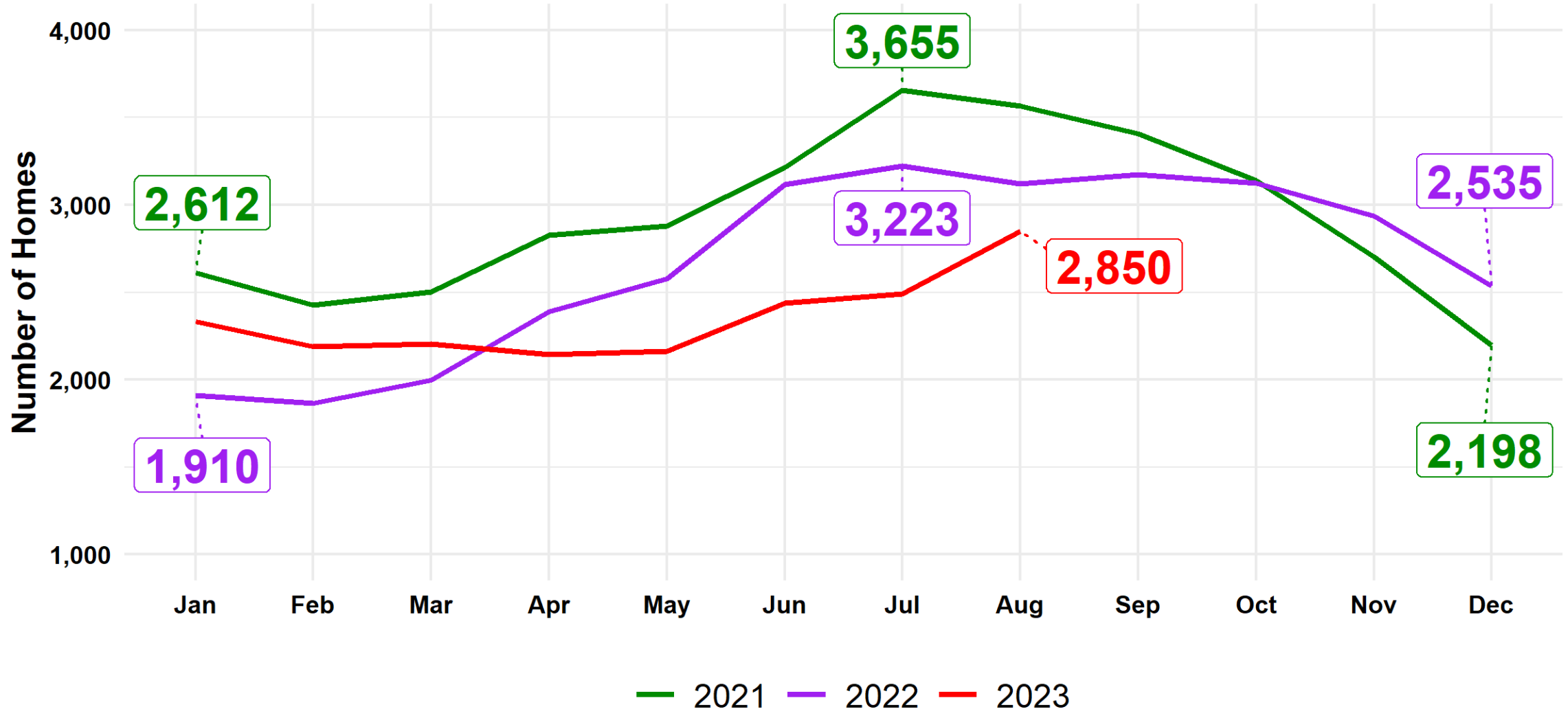


## Median Price of Existing Residential Homes Hampton Roads, January 2021 - August 2023



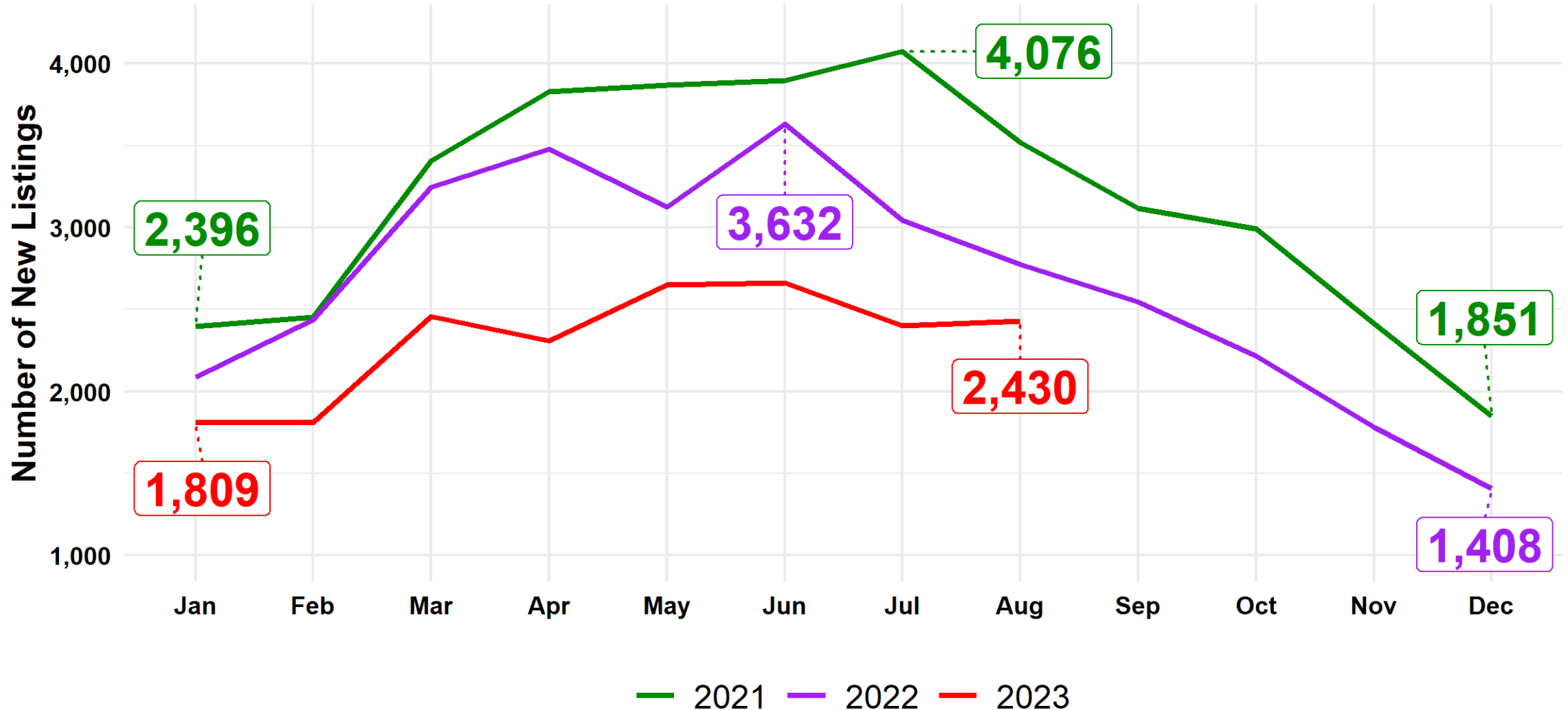
Sources: Real Estate Information Network Inc. and Dragas Center for Economic Analysis and Policy.

## Inventory of Existing Single-Family Homes Hampton Roads, January 2021 - August 2023



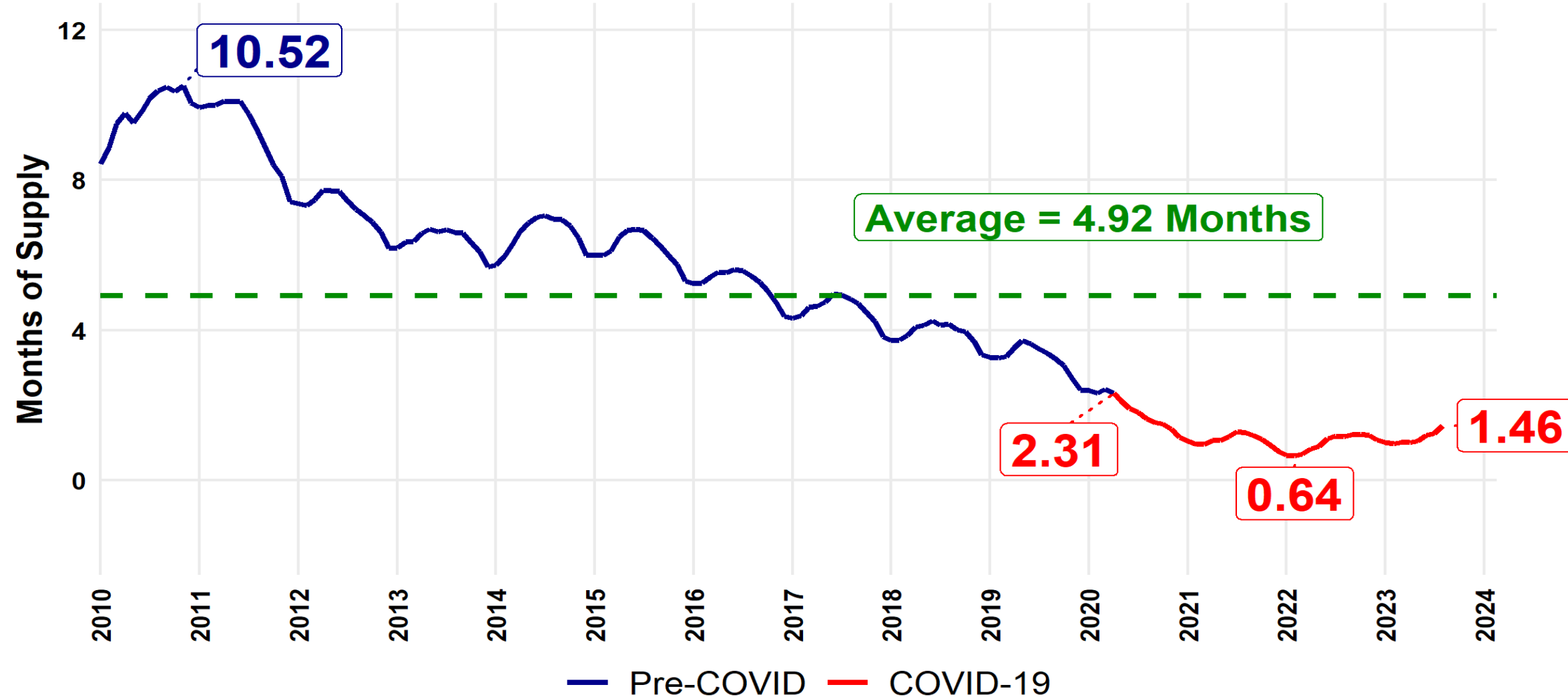
Sources: Real Estate Information Network Inc. and Dragas Center for Economic Analysis and Policy.

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



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

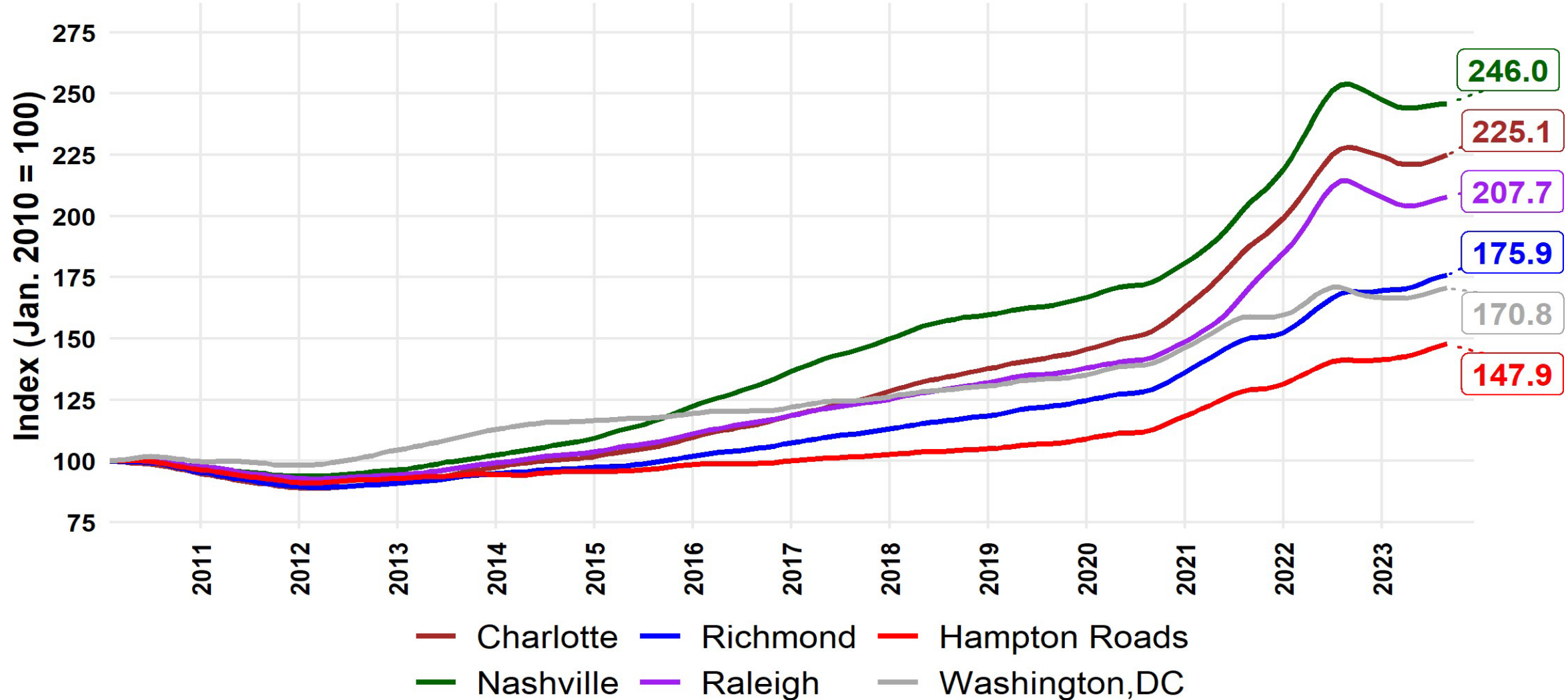
# Estimated Months of Supply for Existing Homes Hampton Roads, January 2010 - August 2023



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.

# Growth in Zillow Home Value Index (ZHVI)

Hampton Roads and Selected Metro Areas, January 2010 - August 2023



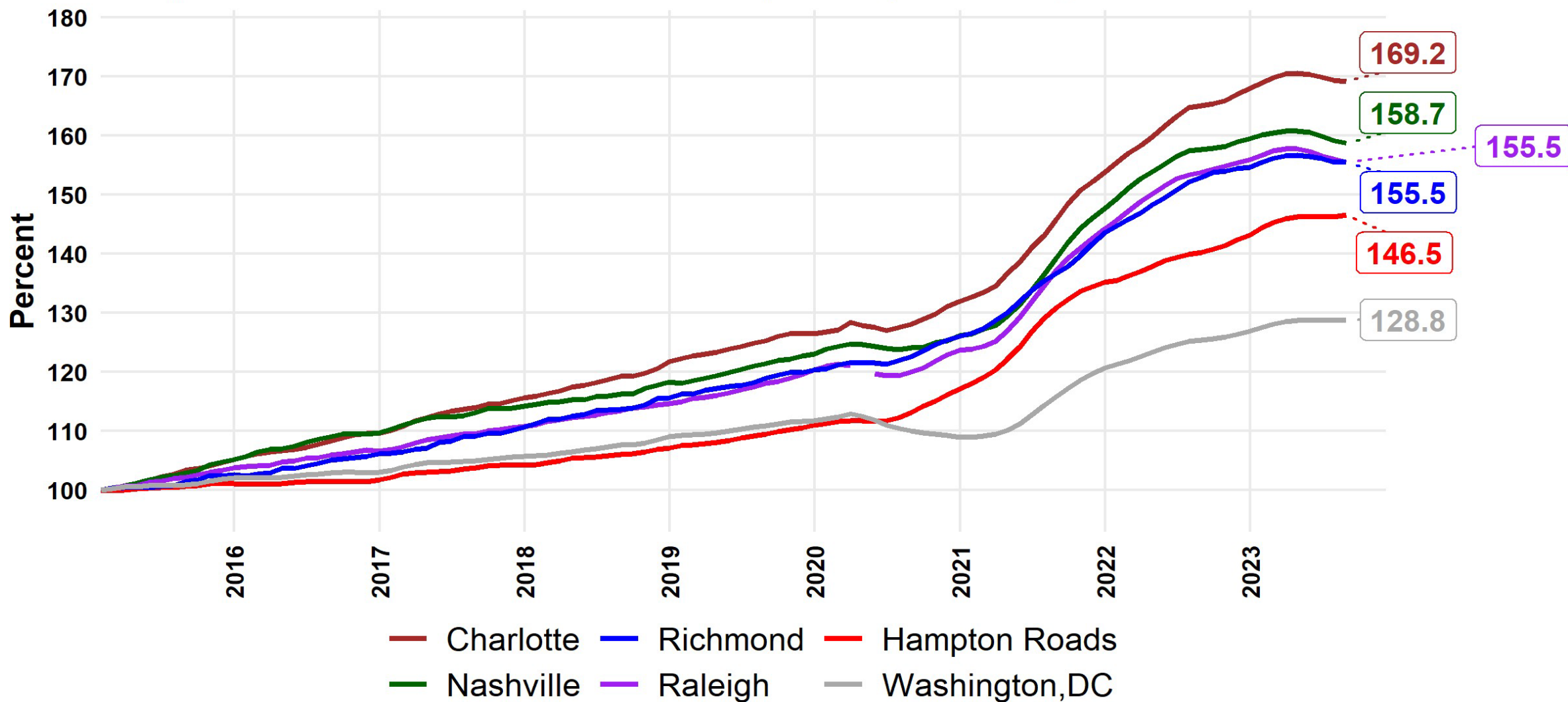
Source: Zillow (2023), All Homes Plus Multifamily Time Series, smoothed seasonally adjusted data.

ZHVI measures typical home values across region and housing type and reflects the value for homes in the 35th to 65th percentile range.



# Growth in Zillow Observed Rent Index (ZORI)

Hampton Roads and Selected Metro Areas, January 2015 - August 2023



Source: Zillow (2023), smoothed seasonally adjusted data. ZORI is a repeat-rent dollar-denominated index that captures the mean of listed rents that fall into the 40th to 60th percentile range for all rentals in a given region.

# (Mostly) Good News to Build Upon

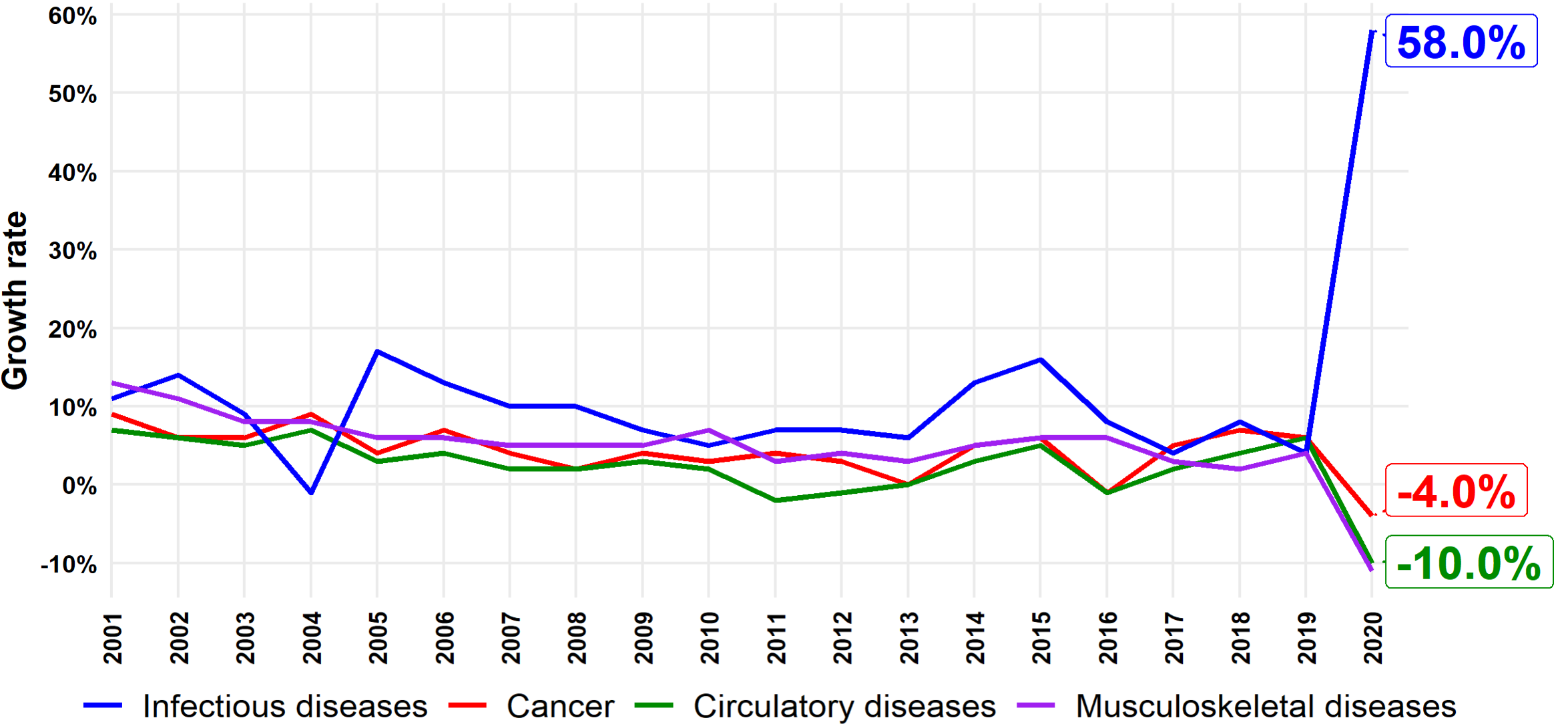
- DoD spending will continue to rise in the short-term, fueling economic activity in the region. Are these increases sustainable?
- Traffic through the Port of Virginia will remain above pre-COVID levels, however, inflation and rising interest rates will reduce demand for imports in the short-term.
- The leisure and hospitality sector continues to outperform the state and nation. Recruiting and retaining talent may limit future growth.
- Inflation will continue to moderate, however, it will remain above the Federal Reserve's target well into 2024, if not beyond.
- Focus on key industry clusters: (1) Maritime, (2) Renewable energy, (3) Health care and Health Research, and (4) Unmanned Systems to leverage Hampton Roads' comparative advantages to spur future growth.

A photograph showing a woman with curly hair, wearing a blue shirt, leaning over an elderly patient lying in a hospital bed. The patient has a nasal cannula and is holding a white cloth. The scene is dimly lit, with a soft light source from the right. The text "Hospice Care in Hampton Roads" is overlaid at the bottom.

# Hospice Care in Hampton Roads

# Annual Expenditure Growth by Disease

## United States, 2001 - 2020



Source: US Bureau of Economic Analysis (2023).

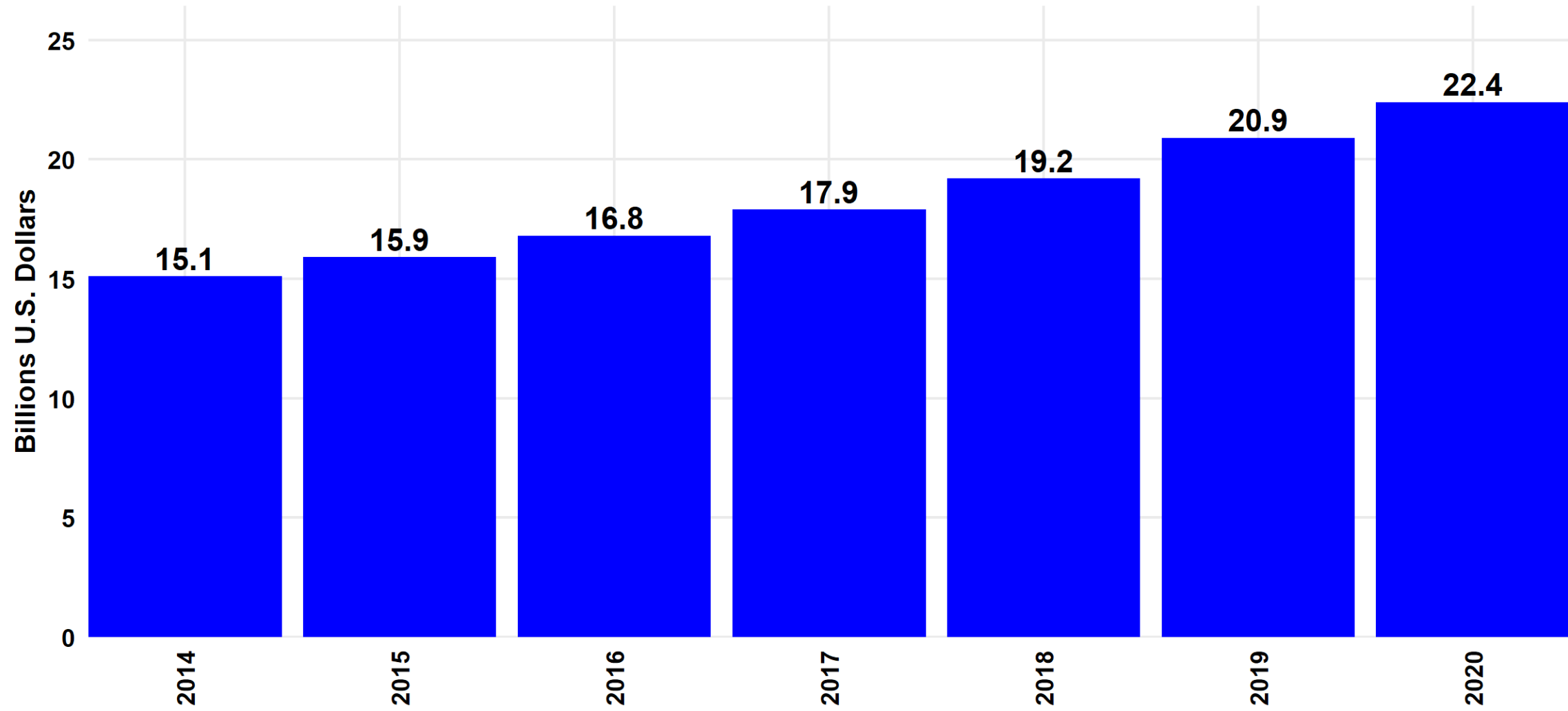
## Ten Leading Causes of Death, United States and Virginia, 2021

| Rank | United States                      | Virginia                           |
|------|------------------------------------|------------------------------------|
| 1    | Heart Disease                      | Heart Disease                      |
| 2    | Cancer                             | Cancer                             |
| 3    | COVID-19                           | COVID-19                           |
| 4    | Accidents                          | Accidents                          |
| 5    | Stroke                             | Stroke                             |
| 6    | Chronic Lower Respiratory Diseases | Chronic Lower Respiratory Diseases |
| 7    | Alzheimer's Disease                | Diabetes                           |
| 8    | Diabetes                           | Alzheimer's Disease                |
| 9    | Chronic Liver Disease/Cirrhosis    | Kidney Disease                     |
| 10   | Kidney Disease                     | Suicide                            |

\* Source: National Center for Health Statistics (2023). A total of 3,464,231 resident deaths were registered in the United States in 2021. The 10 leading causes of death accounted for 74.5% of all U.S. deaths in 2021. Causes of death are ranked according to number of deaths. Virginia: National Center for Health Statistics (2023). Death data, including leading causes of death, come from the NVSS and CDC WONDER, and rankings are based on 2021 age-adjusted death rates.



U.S. Medicare Spending, Hospice,  
2014 to 2020



Source: Medicare Payment Advisory Commission report (2023).

## Part A Medicare and Hospice Services Enrollees United States and Selected States, 2020

| State          | Part A Enrollees | Hospice Utilizers | Percent of Part A Enrollees |
|----------------|------------------|-------------------|-----------------------------|
| Kentucky       | 931,126          | 22,575            | 2.4%                        |
| Maryland       | 1,056,328        | 26,479            | 2.5%                        |
| North Carolina | 2,028,204        | 56,136            | 2.8%                        |
| Tennessee      | 1,382,574        | 39,413            | 2.9%                        |
| Virginia       | 1,540,473        | 39,930            | 2.6%                        |
| West Virginia  | 442,495          | 11,440            | 2.6%                        |
| United States  | 61,211,371       | 1,717,193         | 2.8%                        |

\* Sources: <https://www.kff.org/medicare>, The Henry J. Kaiser Family Foundation, Centers for Medicare & Medicaid Services, Office of Enterprise Data and Analytics, CMS Chronic Conditions Data Warehouse.  
Note: The total Medicare Part A enrollee counts and calculated 'per Part A enrollee' rates are based on enrollees in Traditional Medicare and Medicare Advantage/Other Health Plans combined because once a beneficiary enrolled in Medicare Advantage/Other Health Plans elects the hospice benefit, his or her Medicare benefits revert to fee-for-service.

# What's Missing in Hospice Care in Hampton Roads?

- Many US communities have freestanding inpatient hospice facilities.
- These facilities assist individuals who do not have caregivers available at home or need around-the-clock physical care.
- Virginia has only eight hospice houses in the entire state, far fewer per capita than neighboring states.
- West Virginia has a hospice house for every 30,000 citizens.
- More than 1.8 million citizens in Hampton Roads currently have no freestanding hospice house to meet their end-of-life needs.



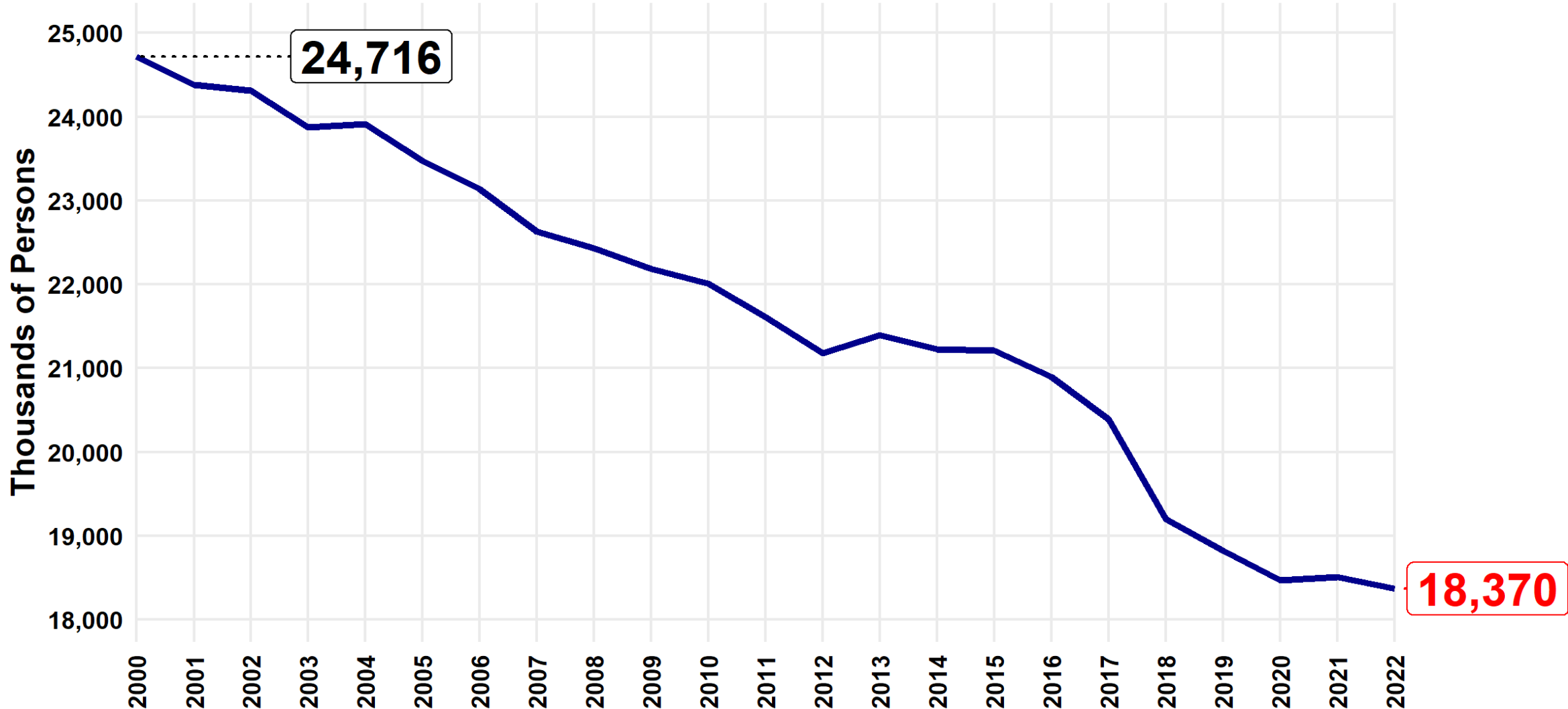




# Veterans in Hampton Roads

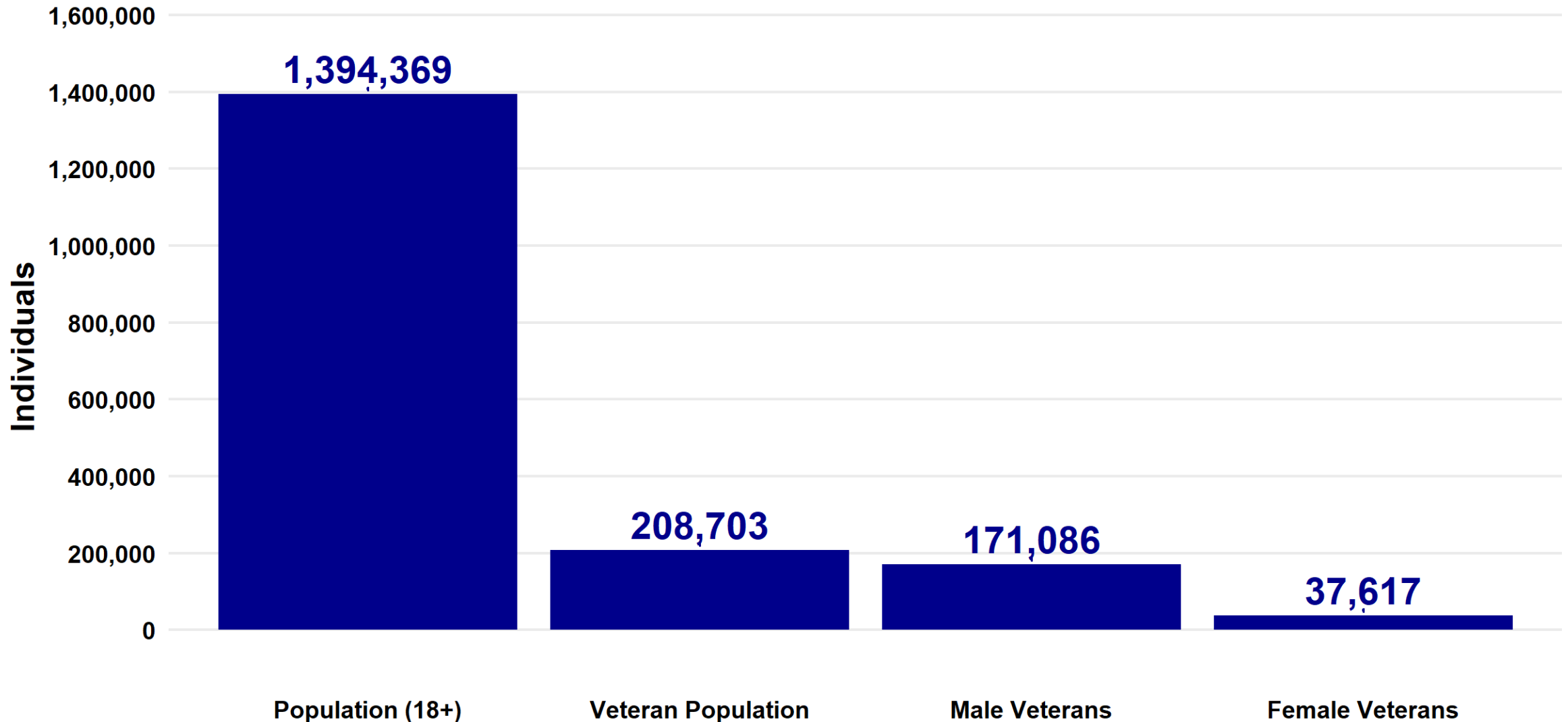


## Total Veterans, 18 Years and Over United States, 2000 - 2022

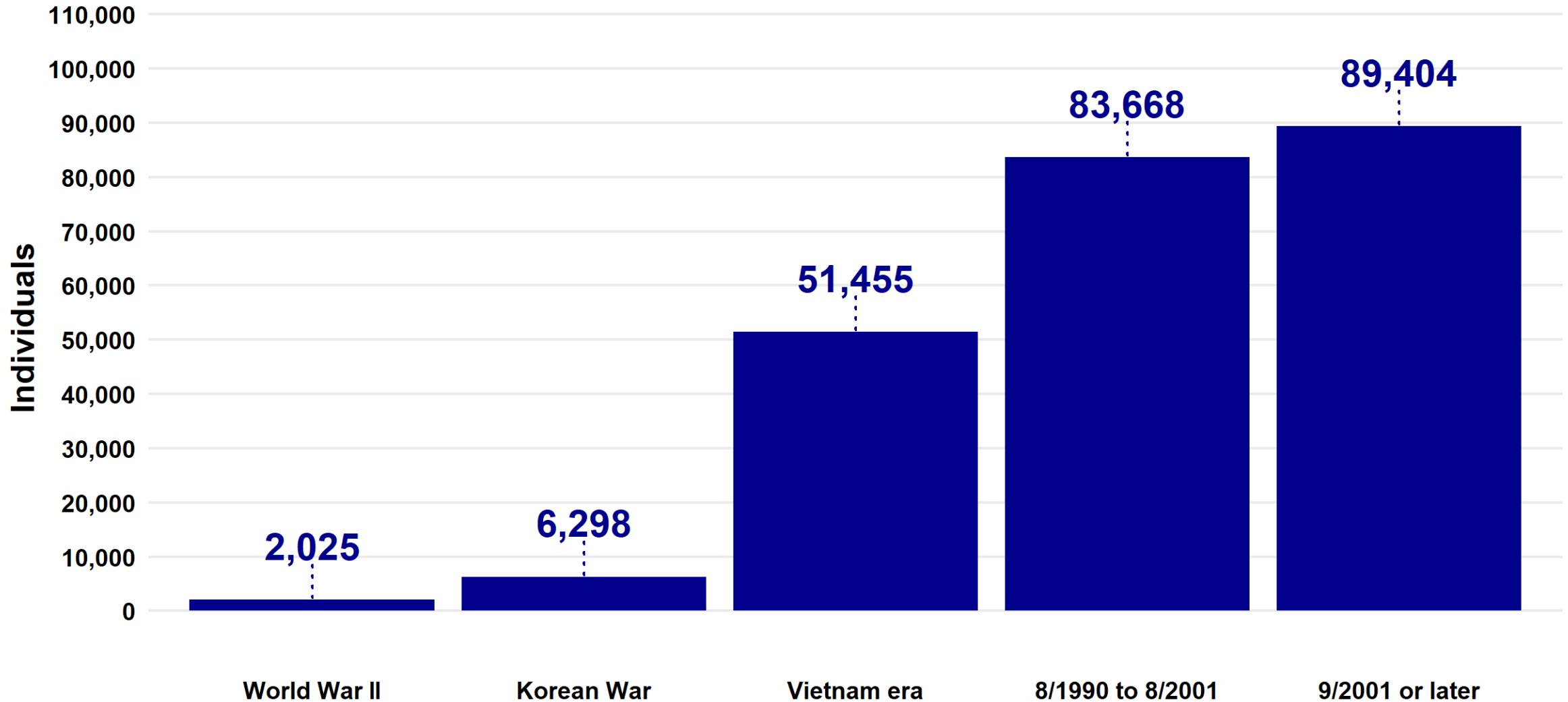


Source: U.S. Bureau of Labor Statistics, Current Population Survey, annual averages.

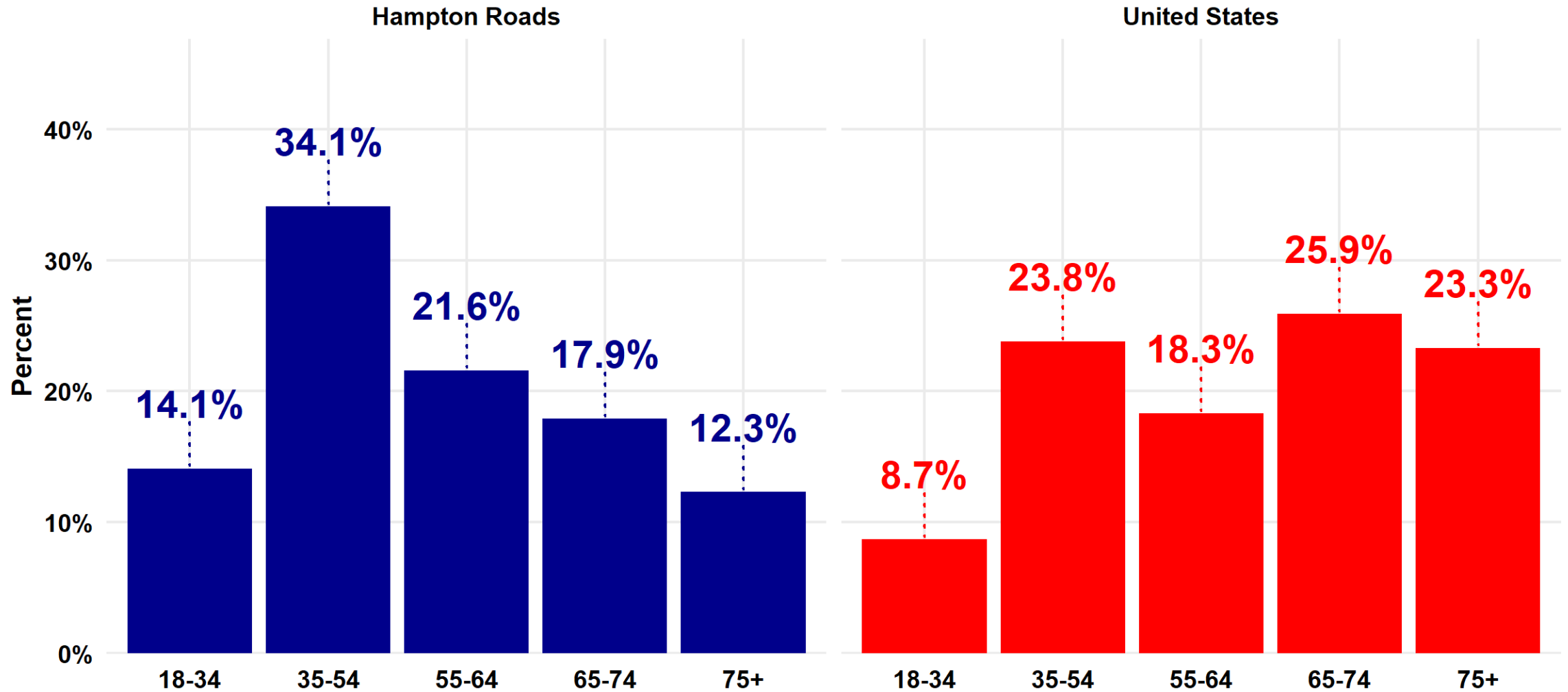
## Total Population (18+) and Veteran Population Hampton Roads, 2021



## Veterans by Period of Service Hampton Roads, 2021

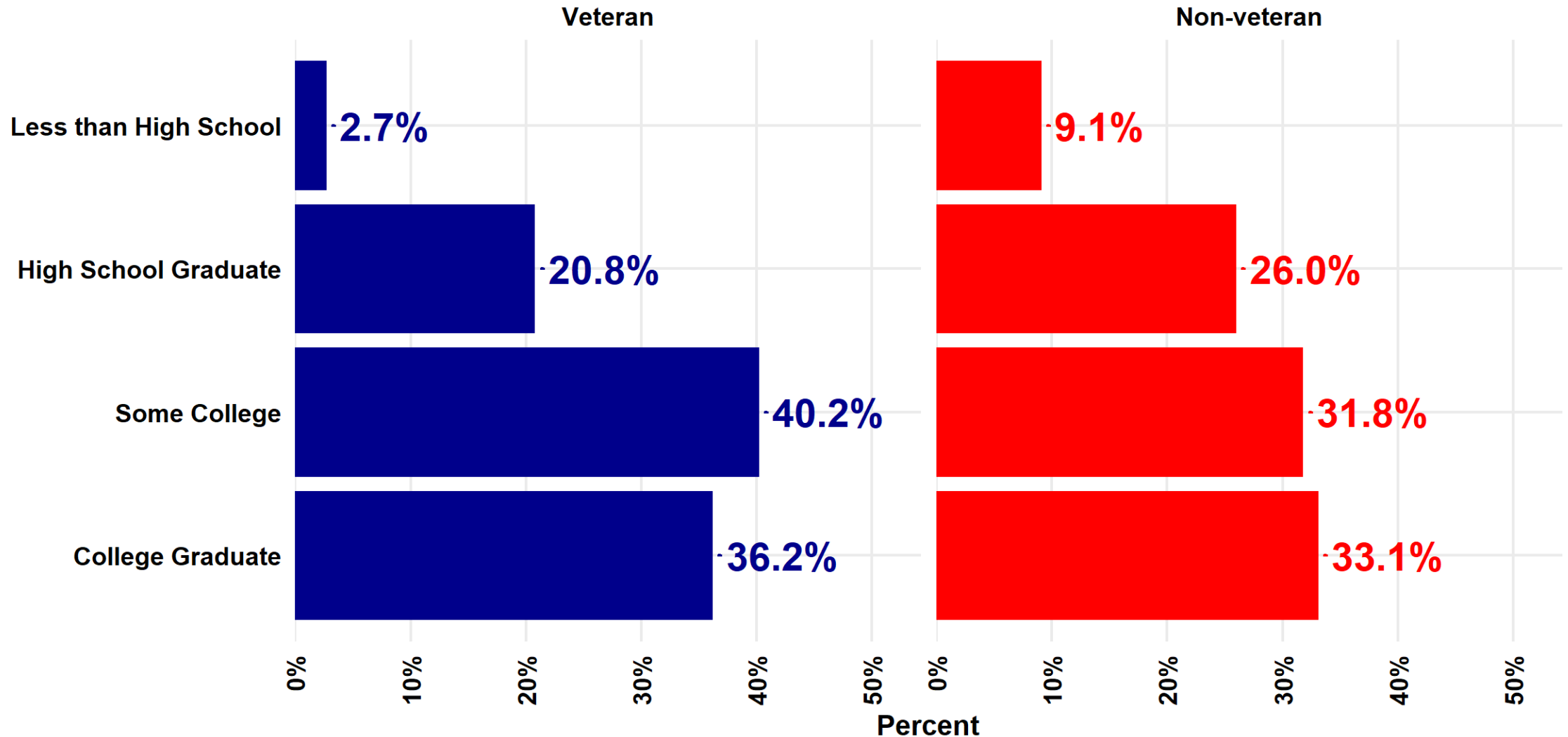


# Age Distribution of Veteran Population Hampton Roads and the United States, 2021



Source: U.S. Census, 2021 American Community Survey, 5-Year Estimates.

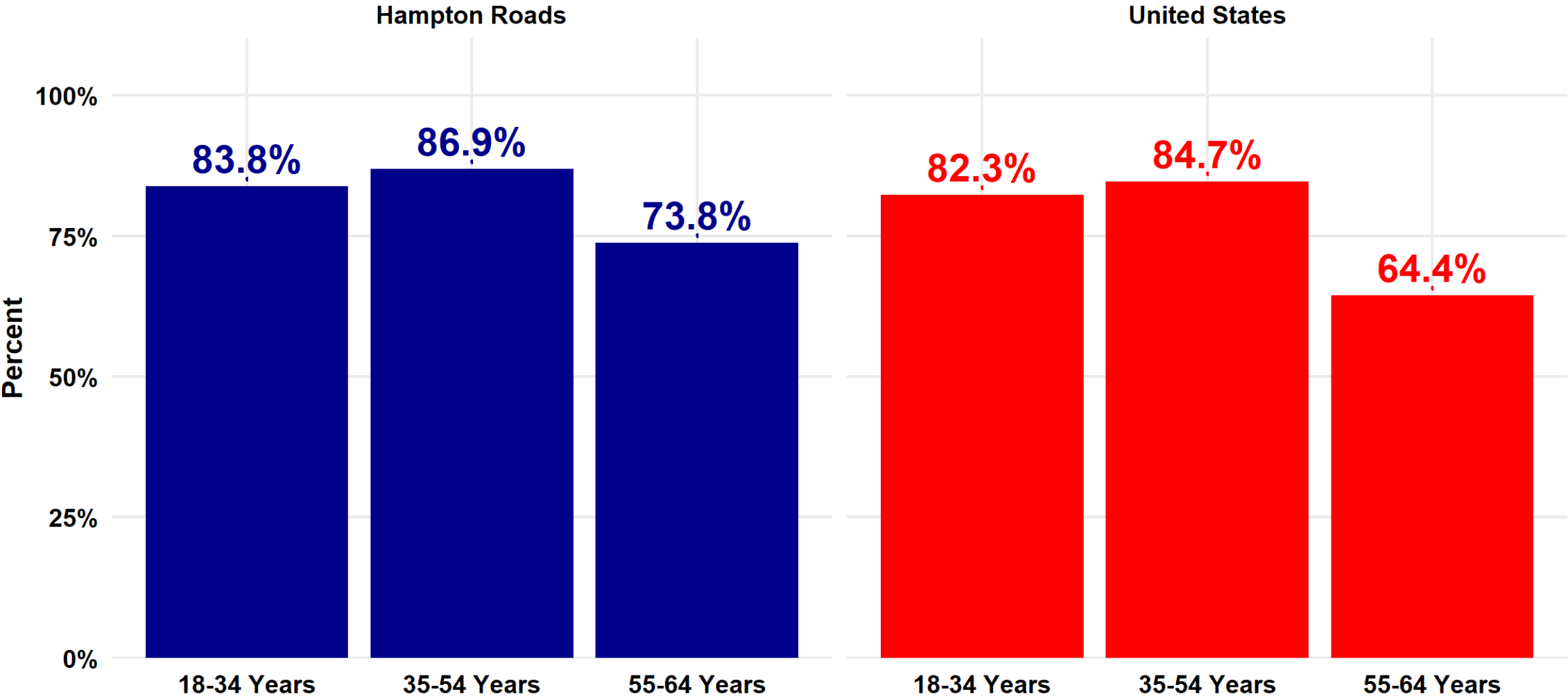
## Distribution of Adult Population by Education Level Veteran and Non-Veteran Population, Hampton Roads, 2021



Source: U.S. Census, 2021 American Community Survey, 5-Year Estimates.

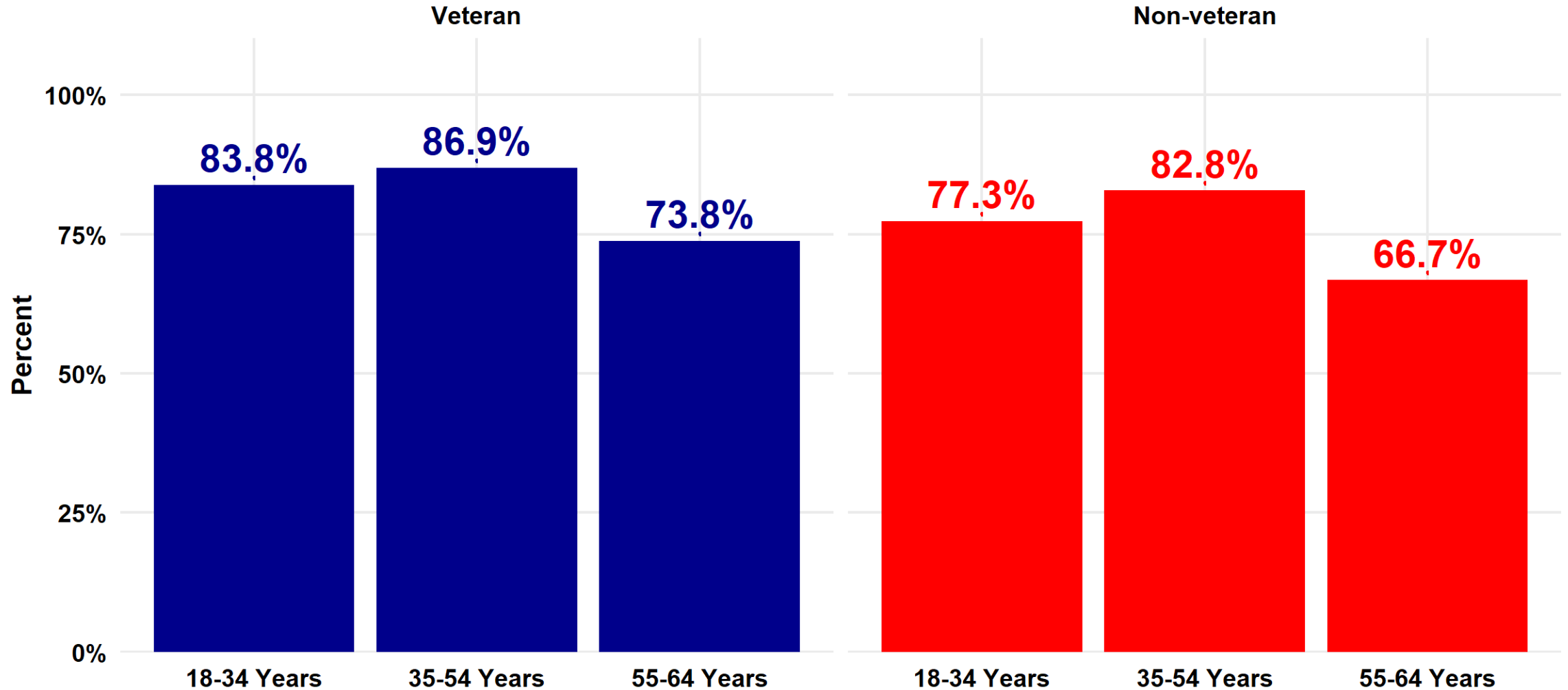


Veterans Labor Force Participation by Age Group  
Hampton Roads and the United States, 2021



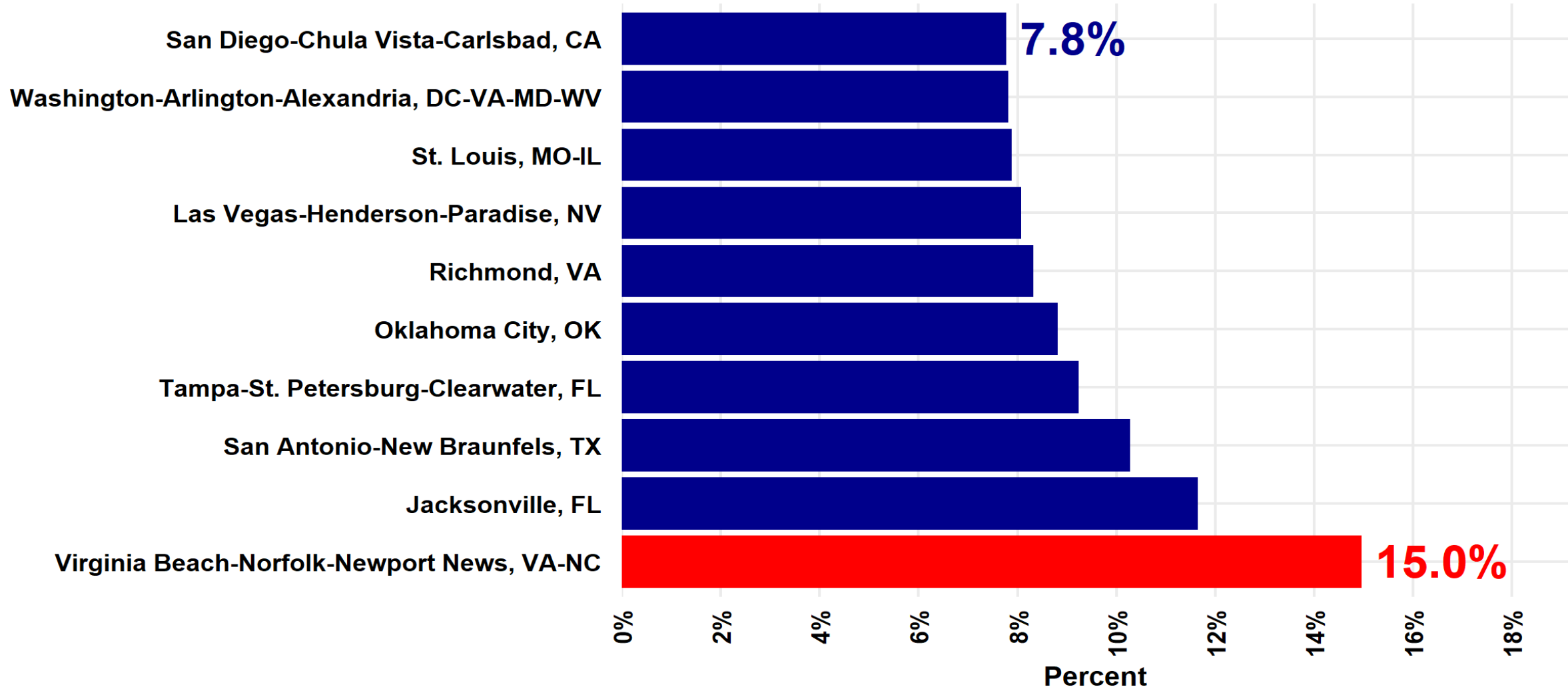
Source: U.S. Census, 2021 American Community Survey, 5-Year Estimates.

# Labor Force Participation by Age Group and Veteran Status Hampton Roads, 2021



Source: U.S. Census, 2021 American Community Survey, 5-Year Estimates.

## Share of Veterans in Adult Population Top-Ten Ranked Large Metro Areas, 2021



Source: U.S. Census, 2021 American Community Survey, 5-Year Estimates.  
Metropolitan areas with adult populations greater than 1 million.

# Veterans in Hampton Roads

- Hampton Roads was ranked first among large metro areas for the share of residents that were veterans. The region also ranked first for the share of military retirees.
- In 2021, approximately 5% of adults in Hampton Roads were military retirees, receiving almost \$200 million a month in retirement payments.
- The presence of veterans and retirees is "fiscal gold" for the region, leading to more than \$3.4 billion in transfers and direct expenditures in 2022.
- Veterans accounted for 8.5% of firms in the region in 2022, employing almost 35,000 residents, and generating more than \$2.2 billion in payroll.
- Veterans are the fourth pillar of the economy in the region, fueling federal spending, generating employment, and participating in the life of the region.



# The State of the Region

HAMPTON ROADS 2023

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



# Public Transportation in Hampton Roads



Public transportation is a cornerstone of urban life in many countries.

In Hampton Roads, however, the automobile is the primary mode of transportation. For those without a car, mobility around the region is more difficult.

In Hampton Roads, public transportation faces significant challenges, including technological change and a long-term loss in ridership.

In this chapter, we explore who rides public transit, who pays for it, and what the future may hold for public transportation in the region.

# Should Taxpayers Subsidize Private Facilities?



Taxpayer funding of sports, entertainment, and other facilities has increased over the last three decades.

Proponents of subsidies argue that the economic benefits outweigh the costs and facilities increase regional "pride."

Economists have found, however, that benefits are overstated while costs are typically understated.

Taxpayers are often 'on the hook' for debt payments, even if the team departs or the business venture fails.

We offer a cautionary tale on using public funds for private facilities.

# Virginia Museum of Contemporary Art

The Virginia Museum of Contemporary Art ("Virginia MOCA") in Virginia Beach is a nationally-recognized museum located in Virginia Beach.

Museums contribute to the economy of a region, and Virginia MOCA is no exception.

We estimate that Virginia MOCA contributed more than \$3.3 million annually to regional GDP from FY 2016 to FY 2022.

We examine how Virginia MOCA can improve its engagement with the community and raise its economic impact in the years to come.



# Upcoming Publications and Events

- State of the Commonwealth Report (December 2023)
- Annual Economic Forecast (January 2024)
- Mid-Year Economic Forecast (May - June 2024)
- State of the Region Report (October 2024)
- State of the Commonwealth Report (December 2024)
- Text CEAPODU to 66866 to join our email list.
- Follow DragasCenterODU on Facebook, LinkedIn, and Twitter.
- All our presentation materials can be found at our website: [www.ceapodu.com](http://www.ceapodu.com)