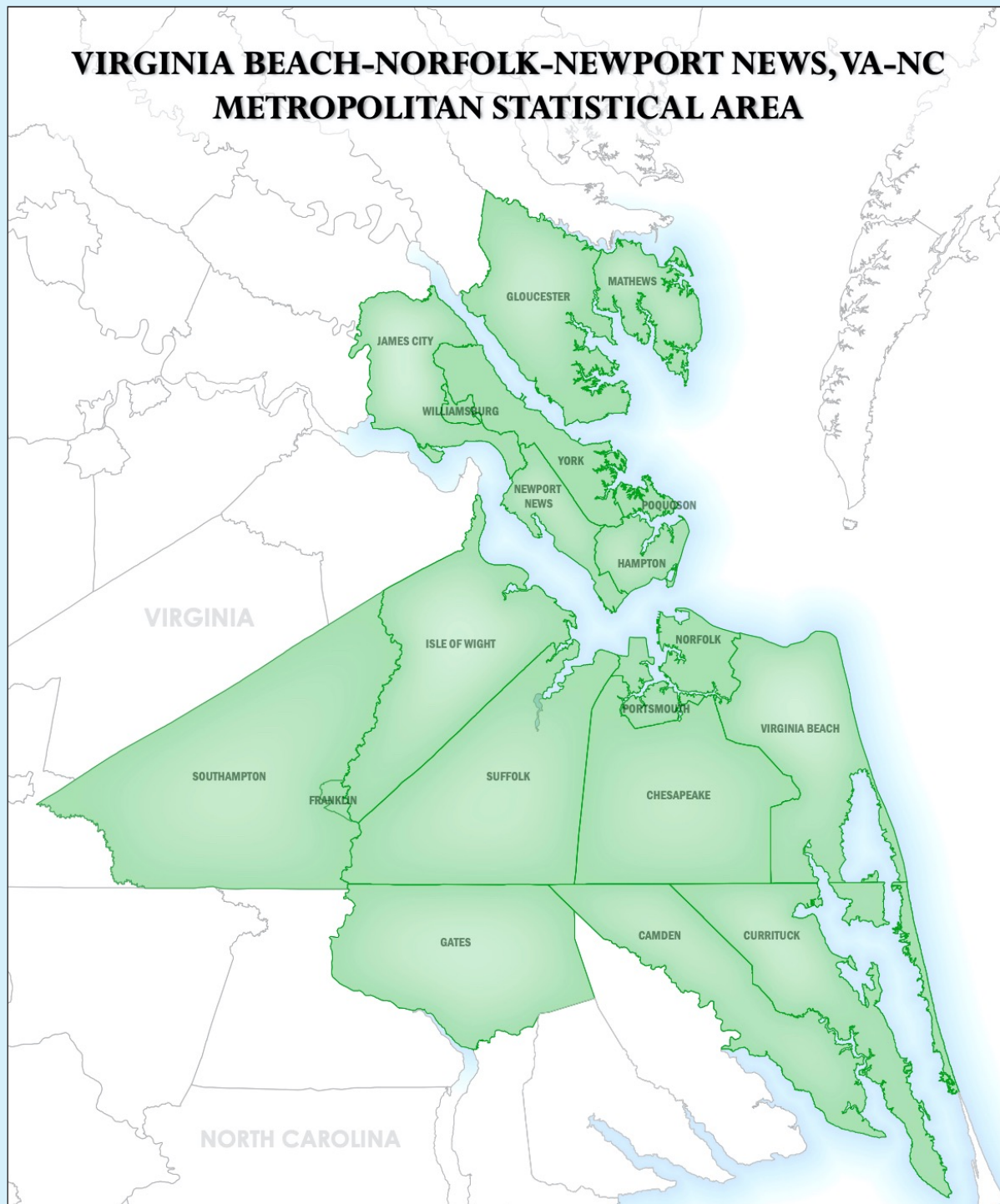




The State of the Region

HAMPTON ROADS 2023

VIRGINIA BEACH-NORFOLK-NEWPORT NEWS, VA-NC METROPOLITAN STATISTICAL AREA



Dear Reader:

This is Old Dominion University's 24th annual State of the Region Report. While it represents the work of many people connected in various ways to the university, the report does not constitute an official viewpoint of Old Dominion, its president, Brian Hemphill, Ph.D., the Board of Visitors, the Strome College of Business or the generous donors who support the activities of the Dragas Center for Economic Analysis and Policy.

Over the past year, we have experienced rising interest rates, persistent inflation, and the continued impact of geopolitical shocks on our daily lives. We live, for better or worse, in interesting times and our ability to grow as a region will certainly be tested in the coming years. There is good news to report. The region has largely recovered from the pandemic-related shocks of 2020 and, in some sectors, a new expansion is underway. While the pillars of the regional economy are strong, the region remains overly reliant on federal spending. Whether federal spending will continue to increase over the coming decade is an open question.

With this in mind, we dive into the question of whether Hampton Roads can improve its economic performance relative to its peer and aspirant metropolitan regions. We applaud efforts by local and regional organizations to promote economic development, but we also must gauge these efforts against the data. Can we move the needle to diversify our economy, provide improved opportunities to residents, and attract new residents to the area we call home?

The 2023 State of the Region Report is divided into seven chapters:

Growth Returns, Now Make It Last

There is some good news to report. Hampton Roads gained population but population growth continues to slow. A record number of residents were at work or looking for work in 2023. A record number of residents of the region reported they were employed in 2023. The number of jobs continued to recovery from the depths of the 2020 economic shock, however, a full recovery may not occur until 2024. Economic growth sharply rebounded from the declines of 2020, and we expect growth to continue in 2023. The region's economic performance, however, continues to lag many of its peers.

The Pillars of the Hampton Roads Economy Remain Strong

Hampton Roads is a region rich with assets – a talented and diverse labor force, a distinctive role in the national security of the nation, a deep-water port that continues to set records, and beaches and amenities that attract visitors from near and far. The region's economic performance is closely aligned with these assets. Defense spending, the Port of Virginia, and the hospitality and tourism industry are often referred to as the "Three Pillars" of the Hampton Roads economy.

The Fourth Pillar: Veterans in Hampton Roads

In 2021, more than 1 in 10 residents of Hampton Roads identified themselves as a veteran of military service. Among these veterans, almost 1 in 3 were military retirees. With thousands of active-duty service members separating from service

in Hampton Roads every year, we ask what is the impact of these veterans on the regional economy. We find that working-age veterans in Hampton Roads are more likely to participate in the labor force than their non-veteran counterparts and that the presence of veterans brings billions of dollars into the region.

Get on the Bus: Public Transportation in Hampton Roads

In many countries, public transportation is a cornerstone of urban life. In Hampton Roads, public transportation is in a moment of transition, sparked by technological change, pandemic disruptions, a growing emphasis on social equity, and a longer-term loss of riders. In this chapter, we discuss who provides public transportation in Hampton Roads. We explore the economics of public transportation and ask what the future holds for public transportation in the region.

Death and Dying in Hampton Roads

Death and taxes may be inevitable, but where we die is usually not a topic of public policy or discussion. Hospice care is the specialized treatment that provides support and comfort to patients who are terminally ill with a general life expectancy of six months or less. In this chapter, we take a close look at serious disease and hospice care in the United States and Virginia. We examine the demand for hospice care by Medicare beneficiaries as well as the changing nature of hospice care suppliers as now more than two-thirds of hospices nationwide operate as for-profit entities.

**Should Taxpayers Subsidize Private Facilities in Hampton Roads?
Glitz vs Reality**

Hampton Roads can learn from the experience of other cities and states. If there is a strong business case for a sports stadium, sports park, or entertainment venue, then investors should be able to tap into financial markets. In this chapter, we examine the arguments surrounding public investments in highly visible facilities. We pose questions that should be asked when considering such investments and explore the potential opportunity costs of these projects. We offer a cautionary tale that such projects are sold as transformative but often fail to generate the promised benefits, not only for taxpayers but also for the cities and regions in question.

The Strome College of Business and Old Dominion University continue to provide support for the State of the Region Report. However, it would not appear without the vital backing of the private donors whose names appear below. They believe in Hampton Roads and the power of rational discussion to improve our circumstances but are not responsible for the views expressed in the report.

Richard F. Barry III
The Aimee and Frank Batten Jr. Foundation
Jane Batten
R. Bruce Bradley
Lucy and Ramon Breeden Foundation

Chartway Credit Union
Dragas Family Foundation
Helen Dragas
David and Susan Goode

Hampton Roads Chamber of Commerce
Patricia and J. Douglas Perry
Dr. Jitendra Swarup
Virginia Peninsula Chamber of Commerce

We also wish to honor the memory of Mr. Tommy Lyons. Mr. Lyons was a founding contributor to the State of the Region Report and sought to elevate the discourse surrounding the economy of the region.

The following individuals were instrumental in the writing, editing, design and dissemination of the report:

Vinod Agarwal
Aliou Ousmane Ba
Barbara Blake

Elizabeth Janik
Nikki Johnson
James V. Koch

Feng Lian
Terry Parker
Matt Voegel

All 24 State of the Region Reports are available at www.ceapodu.com. A limited number of printed copies of the 2023 State of the Region Report are available for purchase for \$50 each. If you have comments or suggestions, please email us at rmcnab@odu.edu.

Sincerely,



Robert M. McNab, Ph.D.
Director of the Dragas Center for Economic Analysis and Policy

**The Virginia Museum of Contemporary Art: Challenges,
Opportunities, and Economic Impact**

Museums are a part of the cultural life of a region and a component of the regional economy. The Virginia Museum of Contemporary Art in Virginia Beach is one such museum. The Virginia Museum of Contemporary Art (Virginia MOCA for short) is a cultural jewel that continues to provide the region with remarkable artistic resources and programming. In this chapter, we explore how museums can contribute to economic activity and explore the economic impact of the Virginia Museum of Contemporary Art.

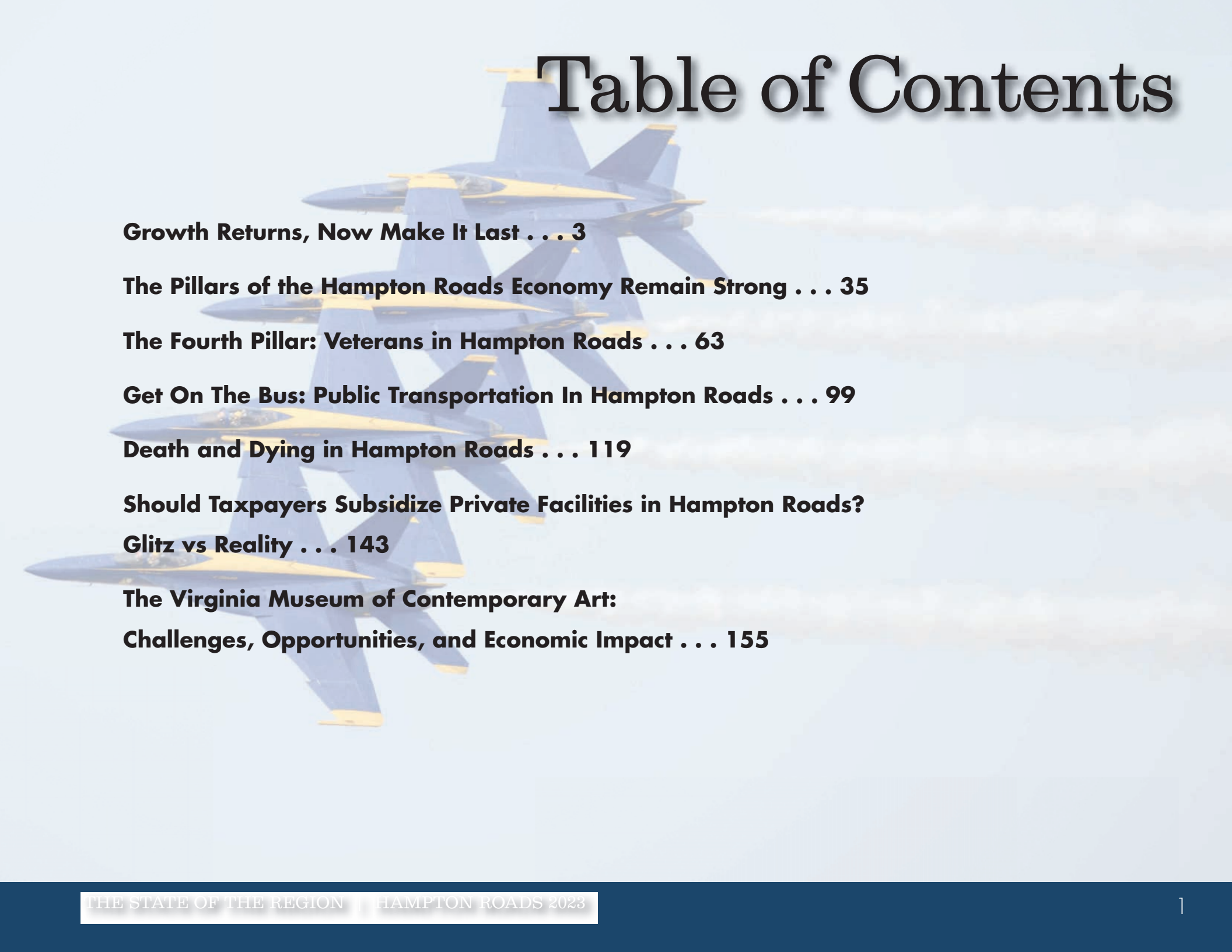


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Growth Returns, Now Make It Last



GROWTH RETURNS, NOW MAKE IT LAST

"You cannot run away from weakness; you must some time fight it out or perish; and if that be so, why not now, and where you stand?"

Robert Louis Stevenson

The fortunes of the Virginia Beach – Norfolk – Newport News Metropolitan Statistical Area ("Hampton Roads") are seemingly written in other places. Presidents and Congresses come and go yet their budgetary decisions shape the economic fortunes of the region. A pivot in national security strategy, plans to retire ships and aircraft to invest in new systems, and the fortunes of war in other places influence how many soldiers, sailors, airmen, and Marines are stationed in Hampton Roads and, consequently, how many dollars flow into the region. While defense spending is considered one of the three pillars of the regional economy, it is first among equals.

For years, the word "diversification" appeared anathema to many in Hampton Roads. Why endanger the proverbial goose that lays the golden egg by suggesting that the region was less interested in its role in the security of the nation? However, as Hampton Roads' fortunes ebbed and flowed due to decisions in Washington, DC, there was a growing realization that the region could "have its cake and eat it too." Diversification of Hampton Roads' economic base was no longer a luxury for consideration; it was essential to lift the pace of economic growth for the remainder of the decade and beyond.

There is some good news to report. The region continues to gain population, albeit slowly compared to its peer and aspirant metro areas. A record number of residents were at work or looking for work in 2023. A record number of the region's residents reported they were employed in 2023. Unemployment in the region hovered near pre-pandemic lows. The number of jobs continued to recover from the depths of the 2020 economic shock, and we expect a complete recovery in jobs in the latter half of 2023. Economic growth sharply rebounded from the declines of 2020, and we forecast growth to continue in 2023.

We would be remiss, of course, if we did not note that challenges remain. Even with improving economic fortunes, Hampton Roads' economic performance lags many of its peer and aspirant metropolitan areas. Finding the right talent at the right time continues to limit employers' ability to expand. Housing remains relatively expensive in the region when compared to incomes. Building regional collaboration and eliminating administrative duplication across jurisdictions continues to be a slow process (but progress is being made). The potential is there for a stronger, more resilient region, growing alongside its peers and, if we dare, leading its competitors into the next decade.

In this chapter, we examine Hampton Roads' economic fortunes in 2022. We dive into the question of whether Hampton Roads' population has grown over the last decade. We look at measures of economic growth and ask how the region may fare for the remainder of 2023. We then examine the region's recovery with respect to its civilian labor force, individual employment, and jobs. We find a recovery that is, for all intents and purposes, complete. The challenge now is to accelerate economic growth in the region and, when that is accomplished, sustain the accelerated pace to match that of our peer and aspirant regions.

The Office of Management and Budget (OMB) defines a Core-Based Statistical Area (CBSA) as a geographical region anchored by an urban center of at least 10,000 residents plus adjacent counties that have socioeconomically integrated with the urban center through commuting ties.¹ The OMB has two categories of CBSAs: Metropolitan Statistical Areas and Micropolitan Statistical Areas. Metropolitan Statistical Areas (MSAs) have at least one urbanized area with a population of 50,000 or more residents. The Virginia Beach – Norfolk – Newport News Metropolitan Statistical Area (MSA) (Hampton Roads) is one of 384 MSAs in the continental United States.

The Virginia Beach – Norfolk – Newport News MSA consists of the independent cities of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg. The counties included in the MSA are Camden County (North Carolina), Currituck County (North Carolina), Gates County (North Carolina), Gloucester County, Isle of Wight County, James City County, Mathews County, Southampton County, and York County. Where possible, we will present data using the new definition of the Hampton Roads MSA; however, some agencies and departments, including the Bureau of Labor Statistics (BLS) and Bureau of Economic Analysis (BEA).

Population Growth, Slowly but Surely?

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

In 2010, the United States Census Bureau estimated there were approximately 1.72 million residents in Hampton Roads (Table 1).² By 2019, according to the U.S. Census' Population Estimates program, there were approximately 1.77 million residents in the region, 3% more than in 2010. The 2020 decennial Census "reset" the population estimates, and we estimate the 2020 population in Hampton Roads was approximately 1.8 million. The change in the population estimates between 2019 and 2020 was almost certainly due to the decennial Census and not an influx of new residents to the region. For this reason, we compare population growth from 2010 to 2019 and 2020 to 2022 as the data are consistent within these periods but not across these periods.

¹ <https://www.govinfo.gov/content/pkg/FR-2010-06-28/pdf/2010-15605.pdf>

² We use the population estimates program to estimate population as metropolitan level estimates are not available for 2022. We obtain estimates for each city and county in the metro area and aggregate to estimate the population. We note that the intercensal estimates are used for 2010 to 2019 and 2020 to 2022.

TABLE 1

**POPULATION AND AVERAGE ANNUAL POPULATION GROWTH
HAMPTON ROADS, VIRGINIA, AND THE UNITED STATES
2020-2022**

	2010 Population	2019 Population	2020 Population	2022 Population	Average Annual Population Growth 2010-2019	Average Annual Population Growth 2020-2022
Hampton Roads	1,717,306	1,768,901	1,801,090	1,806,840	0.3%	0.2%
Virginia	8,023,699	8,535,519	8,636,471	8,683,619	0.7%	0.3%
United States	309,321,666	328,239,523	331,511,512	333,287,557	0.7%	0.3%

Source: United States Census Bureau, 2022 Population Estimates. Population estimates as of July 1st of the corresponding year. Compound annual growth rate for annual average population growth estimates. Estimates for Hampton Roads aggregated from county level population estimates to ensure consistency with city and county level estimates.

The data in Table 1 show that Hampton Roads' population grew more slowly than Virginia or the nation from 2010 to 2019, and the pace of population growth has slowed in the current decade. If there is a modicum of good news, it is that the decline of the average rate of population growth in Hampton Roads this decade was much less pronounced than across the Commonwealth or the nation. However, we caution that the lower rate of population growth nationally is attributable, in some part, to the lingering impacts of the COVID-19 pandemic, so there is not much to celebrate.

Table 2 provides estimates of the population for localities in Hampton Roads for 2010, 2019, 2020, and 2022. During the previous decade, Williamsburg (1.0%), Chesapeake (1.0%), Suffolk (0.9%), Camden County (0.9%), James City County (1.4%), and Currituck County (1.8%) observed average annual rates of population growth above the national average. In this decade, a number of jurisdictions have seen their populations grow by more than 1% annually, on average, including Gloucester County (1.0%), Williamsburg (1.4%), James City County (1.7%), Isle of Wight County (1.9%), Suffolk (2.0%), Camden County (3.2%), and Currituck County (4.5%).

On the other hand, some jurisdictions in the region have shrunk over time. A number of smaller counties, including Gates County, Matthews County and Southampton County lost residents in both the last and current decades. Yet population declines have not been confined to smaller, rural counties. Portsmouth saw its population fall by an average of 0.1% last decade and 0.5% annually this decade. Newport News likewise saw population decline, on average, by 0.1% last decade and 0.5% this decade. Norfolk, whose population was essentially unchanged in the previous decade, has seen its population decline by an average of 1% annually this decade.

Virginia Beach, the largest city in the region, grew at an annual average rate of only 0.3% last decade, but the latest estimates suggest that the city has lost about 4,000 residents this decade. Chesapeake, now the second largest city in the region, continues to grow, adding roughly 3,000 residents between 2020 and 2022. Suffolk, whose population now eclipses that of Portsmouth, saw population growth accelerate from 0.9% annually during last decade to 2.0%, on average, each year from 2020 to 2022.

TABLE 2
POPULATION AND AVERAGE ANNUAL POPULATION GROWTH
CITIES AND COUNTIES IN HAMPTON ROADS
2020-2022

Location	2010 Population	2019 Population	2020 Population	2022 Population	Average Annual Population Growth 2010-2019	Average Annual Population Growth 2020-2022
Camden County	10,009	10,867	10,407	11,088	0.9%	3.2%
Currituck County	23,674	27,763	28,401	31,015	1.8%	4.5%
Gates County	12,165	11,562	10,448	10,383	-0.6%	-0.3%
Gloucester County	36,940	37,348	38,718	39,493	0.1%	1.0%
Isle of Wight County	35,316	37,109	38,702	40,151	0.6%	1.9%
James City County	67,661	76,523	78,478	81,199	1.4%	1.7%
Mathews County	8,974	8,834	8,520	8,490	-0.2%	-0.2%
Southampton County	18,640	17,631	17,952	17,932	-0.6%	-0.1%
York County	65,222	68,280	70,228	71,341	0.5%	0.8%
Chesapeake city	223,556	244,835	249,803	252,488	1.0%	0.5%
Franklin city	8,579	7,967	8,149	8,247	-0.8%	0.6%
Hampton city	137,415	134,510	137,276	138,037	-0.2%	0.3%
Newport News city	180,888	179,225	186,033	184,306	-0.1%	-0.5%
Norfolk city	242,999	242,742	237,738	232,995	0.0%	-1.0%
Poquoson city	12,148	12,271	12,472	12,582	0.1%	0.4%
Portsmouth city	95,451	94,398	97,954	97,029	-0.1%	-0.5%
Suffolk city	84,813	92,108	94,697	98,537	0.9%	2.0%
Virginia Beach city	438,859	449,974	459,646	455,618	0.3%	-0.4%
Williamsburg city	13,727	14,954	15,468	15,909	1.0%	1.4%
Hampton Roads	1,717,036	1,768,901	1,801,090	1,806,840	0.3%	0.2%

Source: United States Census Bureau, 2019 and 2022 Population Estimates. Population estimates as of July 1st of the corresponding year. Compound annual growth rate for annual average population growth estimates.

Graph 1 illustrates the components of population change in Hampton Roads from April 1, 2020 to June 30, 2022. Population change is driven by the natural change in the population (births minus deaths) and net migration (domestic migration minus international migration) to the region. We note that 2020 represents the change from April 1, 2020 to June 30, 2020. In 2021, approximately 526 more residents left Hampton Roads for locations in the United States than moved to Hampton Roads from other domestic locations. In the same year, 1,492 more individuals moved to the region from international locations than departed Hampton Roads for overseas destinations.

In 2022, the components of population change were closer to what they were prior to the COVID-19 pandemic. In 2022, almost 6,200 more residents left the region for domestic locations than moved to the region from other locations in the United States. The net outmigration of residents from Hampton Roads was partially offset by net positive migration from international locations. In 2022, the region saw more than 4,200 more arrivals from international locations than departures overseas. If not for the positive natural increase in the population, Hampton Roads would have lost population in 2022. If we focus solely on the Virginia counties in the region in 2022, this portion of Hampton Roads experienced a small decline in population from 2021 to 2022.

People come and go. The question is where do people come from and where do current residents go? The 2016 – 2020 American Community Survey from the U.S. Census provides some insight into this question with data on the geographic mobility of people between metropolitan statistical areas. Hampton Roads gained the most residents from the New York – Newark – Jersey City metropolitan area, with a net gain of 1,892 residents, followed by 1,399 residents from the Washington, DC, metro area. The Chicago metro area (1,358 residents) were followed by the Charleston (1,235) and Visalia, CA, (1,125) metro areas.

These inflows were offset by more residents leaving Hampton Roads for other metro areas. The largest losses were to the Jacksonville, FL, metro area, with 1,428 more residents moving out of Hampton Roads to Jacksonville than flowing in the opposite direction. The Richmond (-1,330) and Harrisonburg (-1,113) metros were followed by the Miami-Fort Lauderdale-Pompano Beach (-935) and Blacksburg-Christiansburg, VA, (-778) regions.

While it may be surprising that more “military towns” do not make the list in Table 3, the data suggest that the flow of residents to and from Hampton Roads to other metros with relatively large military populations in the U.S. is roughly balanced. According to the 2016 – 2020 American Community Survey data, 3,151 residents moved to the San Diego metro area from Hampton Roads, and 3,142 moved in the opposite direction. While 1,235 more individuals moved from Charleston, SC, to Hampton Roads, 1,428 more people flowed from Hampton Roads to Jacksonville, FL. It would appear that, in the larger picture, these flows “even out.”

When we compare the population growth of Hampton Roads with a number of selected metropolitan statistical areas in the southeastern United States, the story becomes decidedly more somber (Graph 2). Hampton Roads’ annual average population growth rate was significantly slower than almost every peer or aspirant metro area, only exceeding that of the Washington DC – Arlington – Alexandria region. It should be no surprise that the metro areas that experienced relatively faster rates of economic growth observed commensurate increases in population.

The challenge moving forward is not only to generate jobs to attract and retain residents but also to build upon the fact that many residents work in one locale and live in another. Regional efforts to improve transportation infrastructure and public transportation will facilitate the flow of workers, goods, and services across Hampton Roads. Continuing the regional conversations about workforce housing, the state of public education, and whether localities impose too many burdens on businesses are a step in the right direction.

TABLE 3

HIGHEST METRO-TO-METRO MIGRATION FLOWS HAMPTON ROADS, 2016-2020

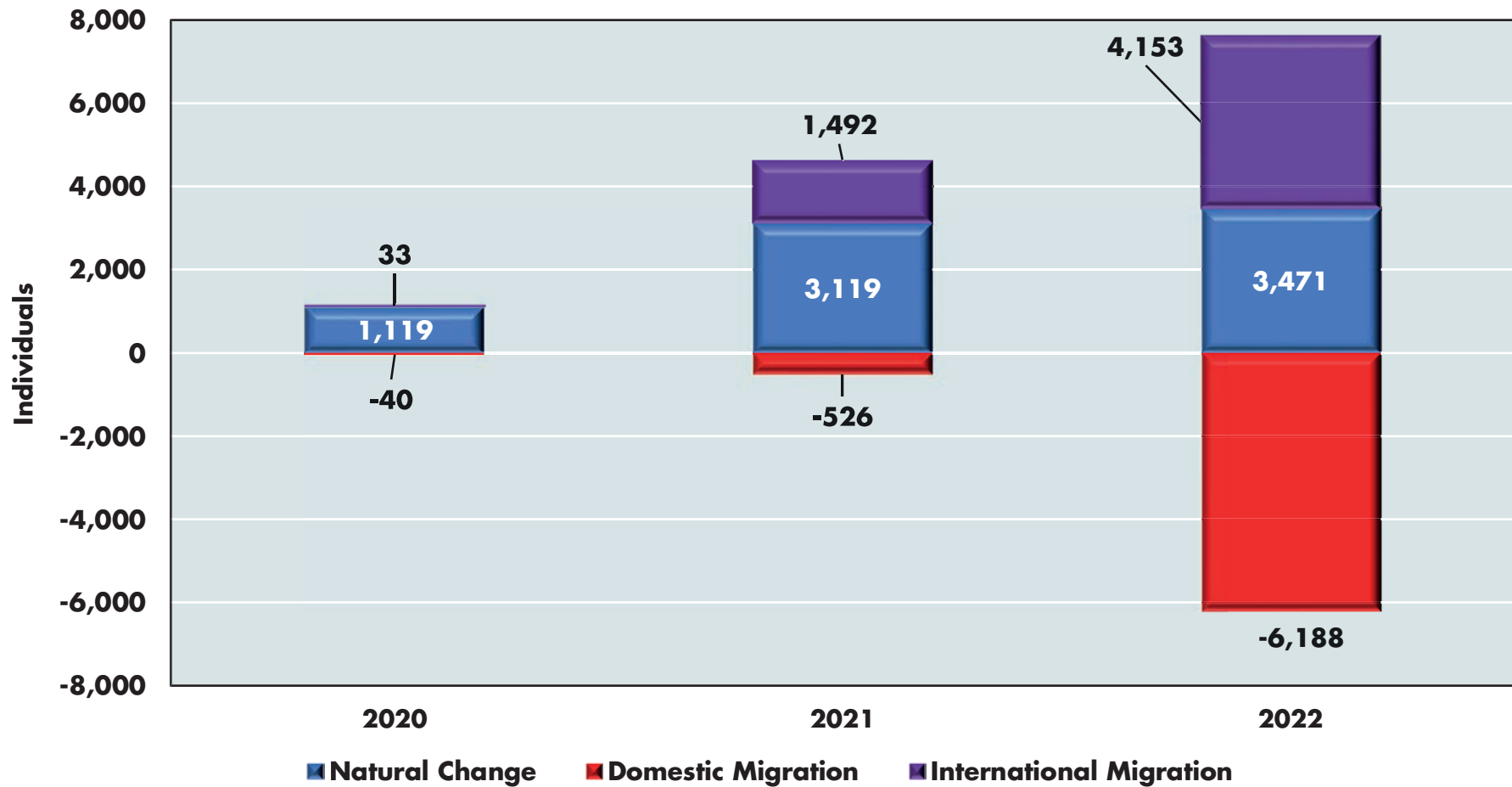
Metropolitan Statistical Area	Moved Into Hampton Roads	Moved from Hampton Roads	Net Migration
New York-Newark-Jersey City, NY-NJ-PA	3,517	1,625	1,892
Washington-Arlington-Alexandria, DC-VA-MD-WV	10,142	8,743	1,399
Chicago-Naperville-Elgin, IL-IN-WI	2,558	1,200	1,358
Charleston-North Charleston, SC	1,814	579	1,235
Visalia, CA	1,165	40	1,125
Blacksburg-Christiansburg, VA	597	1,375	-778
Miami-Fort Lauderdale-Pompano Beach, FL	486	1,421	-935
Harrisonburg, VA	320	1,433	-1,113
Richmond, VA	6,080	7,410	-1,330
Jacksonville, FL	1,490	2,918	-1,428

Source: United States Census Bureau, 2016 – 2020 Metro-to-Metro Migration Flows.



GRAPH 1

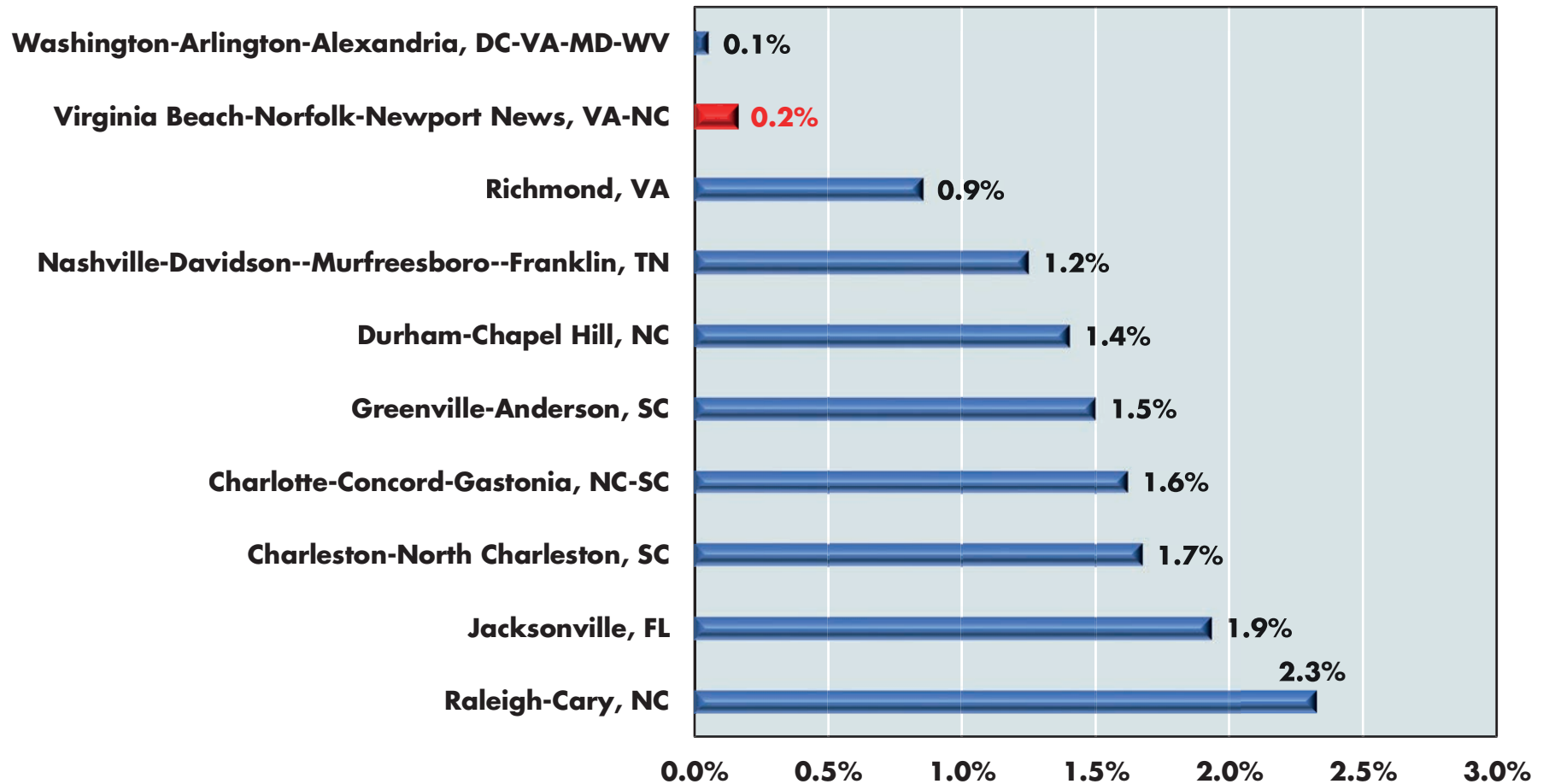
**ESTIMATED COMPONENTS OF POPULATION CHANGE
HAMPTON ROADS, APRIL 1, 2020 – JUNE 30, 2022***



Source: United States Census Bureau, 2022 Population Estimates. Population estimates as of July 1st of the corresponding year, with the exception of 2020. *2020 estimates represent the change from April 1, 2020 to June 30, 2020. Estimates for Hampton Roads aggregated from county-level population estimates.

GRAPH 2

**ANNUAL AVERAGE POPULATION GROWTH RATE
SELECTED METROPOLITAN STATISTICAL AREAS, 2020-2022**



Source: United States Census Bureau, 2022 Population Estimates. Population estimates as of July 1st of the corresponding year. Metropolitan statistical area population estimates. Compound annual growth rate for annual average population growth estimates.

Economic Growth: The Rebound and Recovery

Table 4 presents real (inflation-adjusted) rates of growth for gross domestic product (GDP), a measure of economic activity. The Bureau of Economic Analysis (BEA) produces the national, state, metropolitan area, and county estimates of GDP, which provide a benchmark for economic activity over time. The latest metropolitan area estimates for 2021 should (as we always note) be viewed with an abundance of caution. The BEA released the “advance” 2021 estimates for metropolitan-area GDP in December 2022. The advance estimates for 2021 are likely to be significantly revised in December 2022 and in subsequent years. With such a lag, we advise the reader to examine the underlying trends and focus less on the estimates for a specific year, which are likely to change in the next release.

The shock from the COVID-19 pandemic is evident in Table 4, with economic activity contracting by 2.5% in Hampton Roads from 2019 to 2020. The region’s robust recovery from the pandemic, however, also stands out, with estimated real GDP growing by 6.3% from 2020 to 2021. We estimate that annual real GDP growth moderated to 2.4% in 2022 and slowed to 2.0% in 2023 in the face of persistent inflation and global uncertainty. If our forecasts contain a kernel of truth, then the region will experience three consecutive years of economic growth, something that has not occurred since the Great Recession of 2007-2009.

When we compare Hampton Roads’ economic performance with that of peer and aspirant metro areas, the recovery of 2021 is more striking. In 2019, Hampton Roads ranked 223 out of 384 metropolitan areas with regard to real GDP growth, a ranking that improved slightly to 210 in 2020. In 2021, Hampton Roads’ rank jumped almost 100 spots to 113, elevating the region from the bottom half of regions to the top third in terms of economic performance.

However, when we compare Hampton Roads to its peer and aspirant metros, we observe that economic activity in 2020 contracted more in the region than the other selected metros except for the Charleston and Greenville-Anderson, SC, metropolitan area (Graph 3). The 2021 estimates (which we again note are likely to be revised) suggest that Hampton Roads recovered more swiftly than its other major metro counterparts in Virginia but slower than its peers outside the Commonwealth (Graph 4). Increases in defense spending, continued record levels of cargo moving through the Port of Virginia, and the resiliency of the travel and tourism industry bolstered growth in 2021 and likely into 2022 and 2023.

The economic recovery in Hampton Roads is good news; however, it must be tempered by comparison with the Commonwealth and nation. Graph 5 illustrates that the region’s economic performance left much to be desired prior to the pandemic, with the regional economy growing by only 15.8% from 2001 to 2019, compared to 35.7% and 43.5% for the state and nation over the same period, respectively. While Hampton Roads performed well at the beginning of the current century, its economic malaise in the decade after the Great Recession was lackluster.

Real GDP in Hampton Roads, the Commonwealth, and the nation all contracted in 2020 as the COVID-19 pandemic, supply chain disruptions, and restrictions on business and social activity disrupted economic activity. Real GDP in Hampton Roads contracted by 2.5% in 2020, 0.4 percentage points more than the Commonwealth but 0.3 percentage points better than the nation. In 2021, Hampton Roads outperformed the Commonwealth and the nation, growing 0.4 percentage points faster than the U.S. and 0.8 percentage points more than Virginia.

Now is the time to engage in concerted action to build upon the recovery to sustain a higher rate of growth over the remainder of the decade. As we discuss in this chapter, investing in key industry clusters, improving infrastructure and public education, and continuing to build a culture of entrepreneurship and innovation are the foundations of long-term growth. Coupled with improvements in regional collaboration and cooperation, these policy actions would set up Hampton Roads for a more vibrant economic future.

TABLE 4

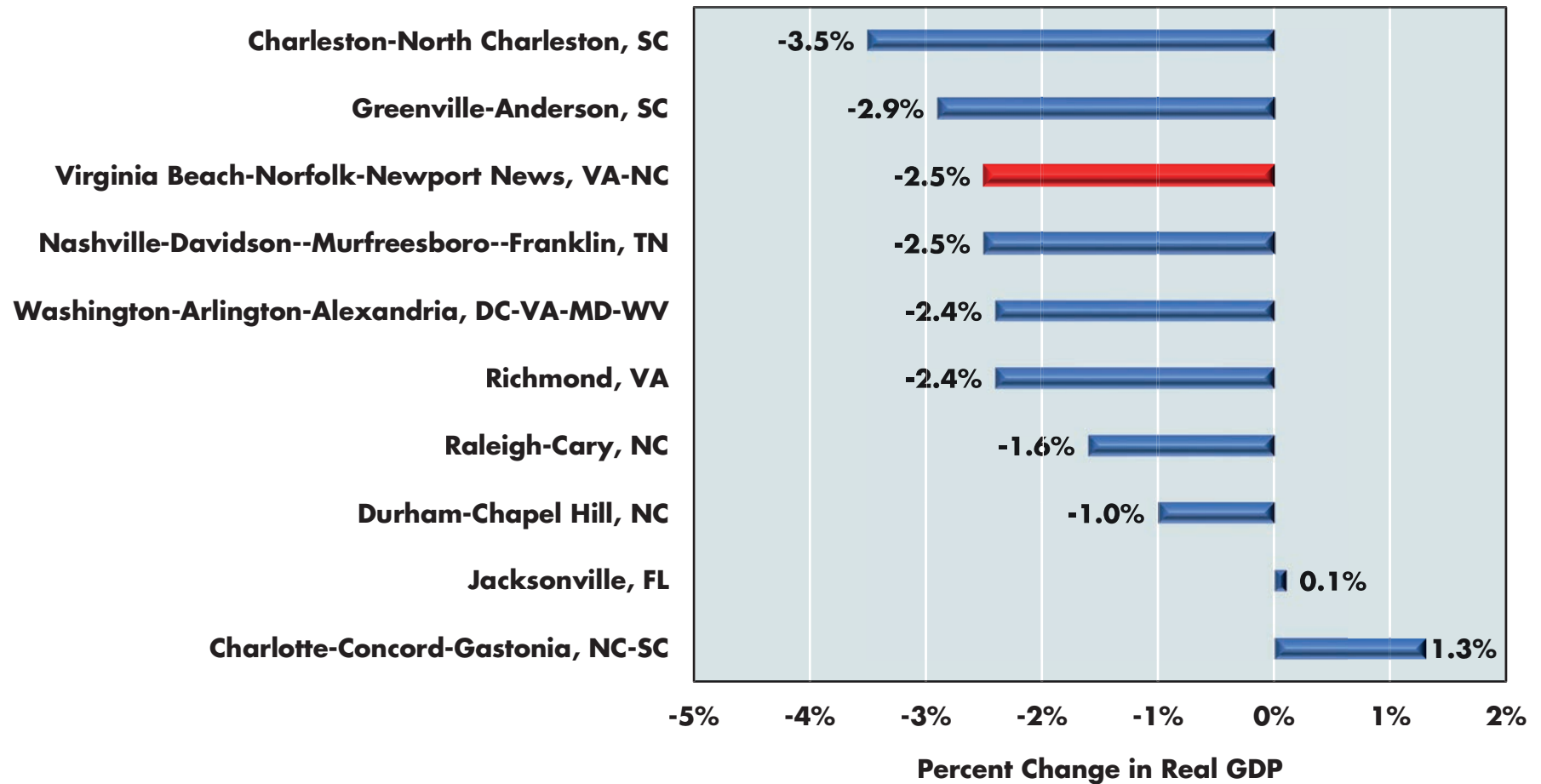
**NOMINAL AND REAL (INFLATION-ADJUSTED) GROSS DOMESTIC PRODUCT IN MILLIONS OF DOLLARS
HAMPTON ROADS, 2001-2023***

	Nominal GDP	Real GDP (Base Year-2012)	Year-over-Year Change in Real GDP
2001	\$56,929	\$73,393	
2002	\$59,704	\$74,864	2.0%
2003	\$63,921	\$78,165	4.4%
2004	\$68,089	\$81,228	3.9%
2005	\$72,734	\$84,303	3.8%
2006	\$75,630	\$85,081	0.9%
2007	\$78,859	\$86,173	1.3%
2008	\$80,833	\$86,640	0.5%
2009	\$81,382	\$85,019	-1.9%
2010	\$82,540	\$85,326	0.4%
2011	\$83,077	\$84,794	-0.6%
2012	\$83,770	\$83,770	-1.2%
2013	\$85,988	\$84,359	0.7%
2014	\$86,702	\$83,221	-1.3%
2015	\$90,208	\$84,393	1.4%
2016	\$92,190	\$84,916	0.6%
2017	\$93,558	\$84,887	0.0%
2018	\$94,310	\$83,807	-1.3%
2019	\$97,950	\$85,010	1.4%
2020	\$97,716	\$82,921	-2.5%
2021	\$107,068	\$88,176	6.3%
2022*	\$116,597	\$90,292	2.4%
2023*	\$124,759	\$92,098	2.0%

Source: U.S. Bureau of Economic Analysis and Dragas Center for Economic Analysis and Policy. *2022 represents our estimate while 2023 represents our forecast. Base year of real GDP is 2012.

GRAPH 3

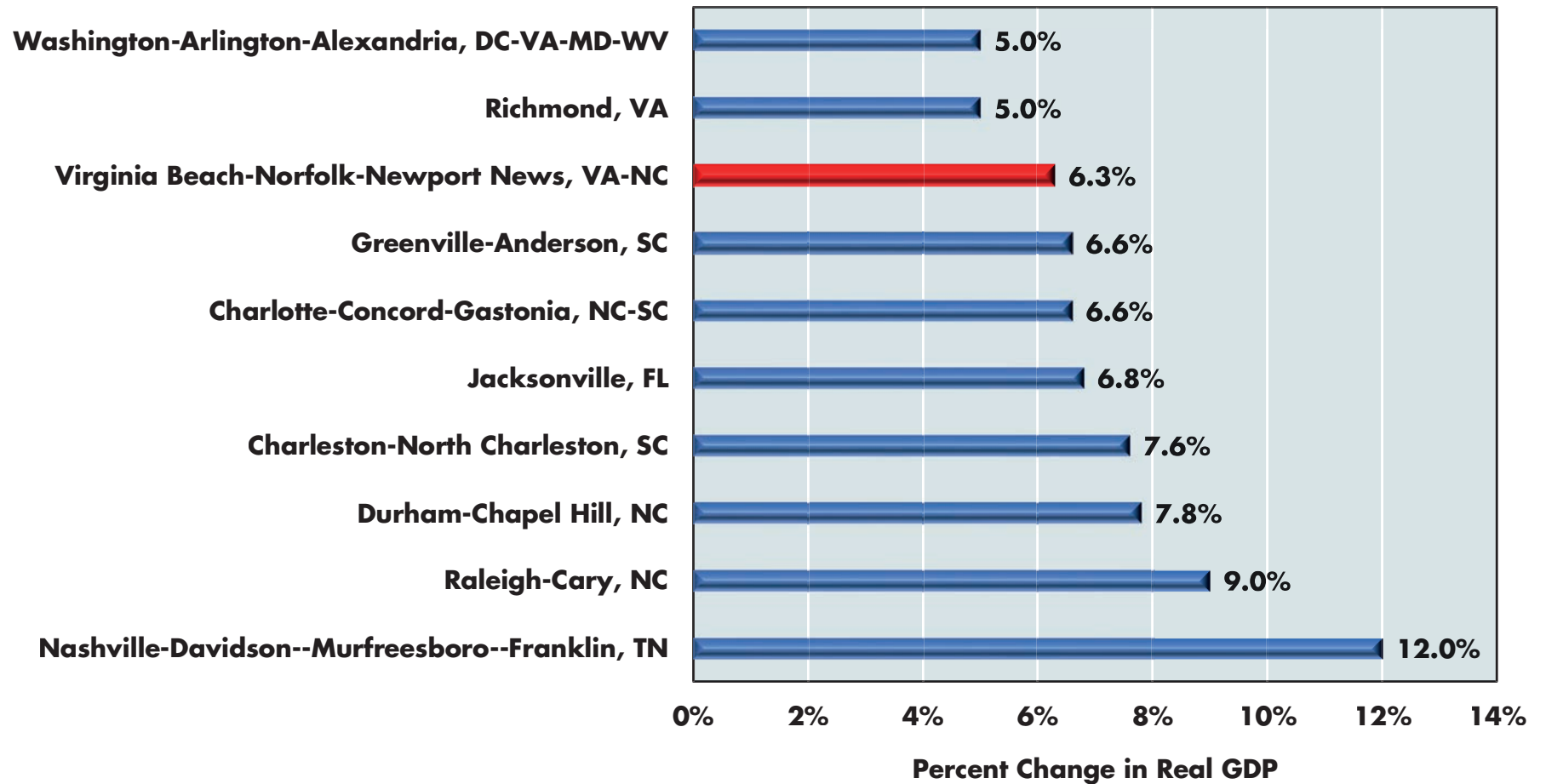
**PERCENT CHANGE IN REAL GDP
SELECTED METROPOLITAN STATISTICAL AREAS, 2020**



Source: Bureau of Economic Analysis (2022).

GRAPH 4

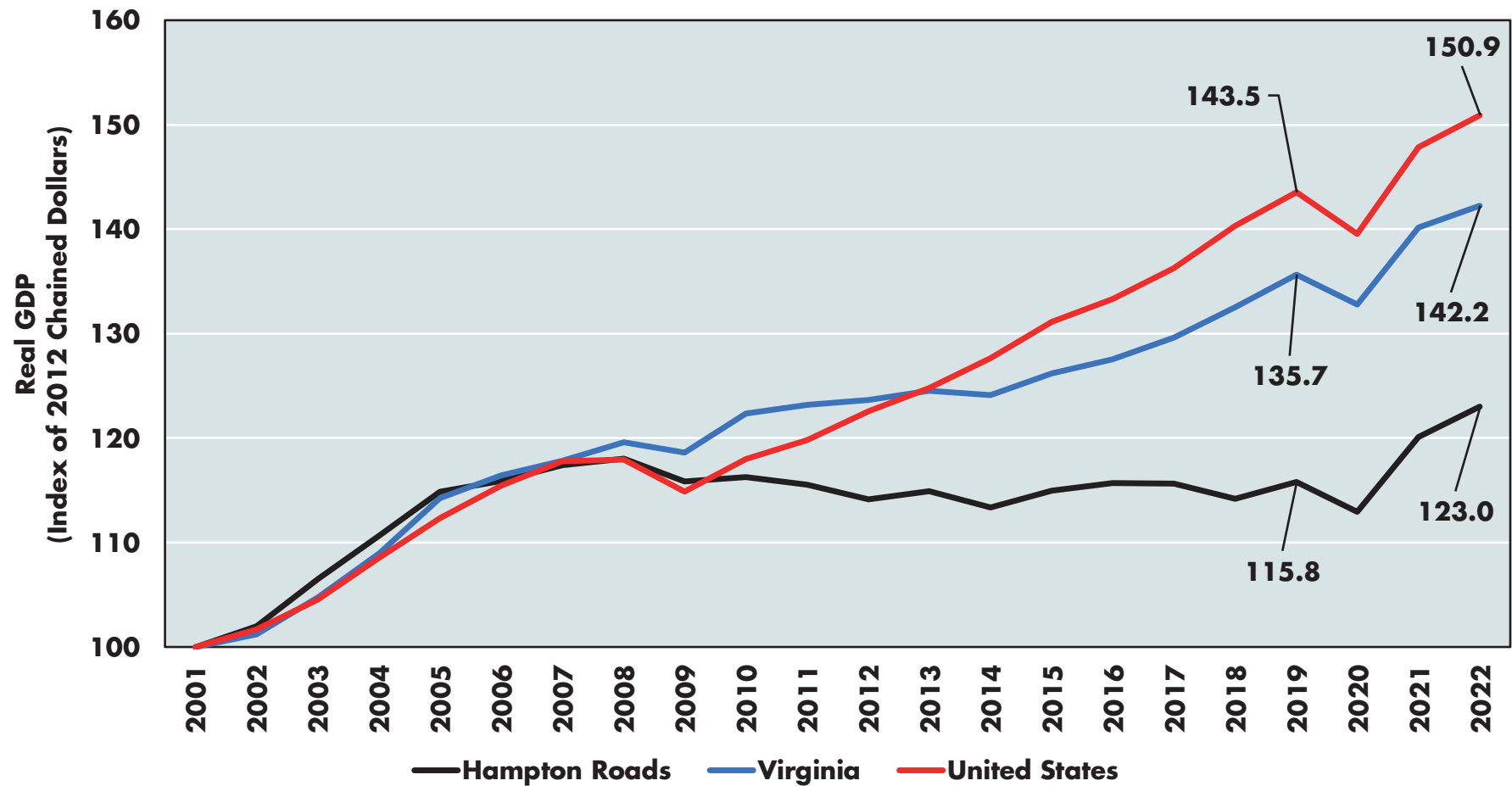
**PERCENT CHANGE IN REAL GDP
SELECTED METROPOLITAN STATISTICAL AREAS, 2021**



Source: Bureau of Economic Analysis (2022).

GRAPH 5

**INDEX OF REAL GROSS DOMESTIC PRODUCT
UNITED STATES, VIRGINIA, HAMPTON ROADS
2001-2022***



Source: U.S. Bureau of Economic Analysis. Real GDP in 2012 chained dollars. *2022 estimate for Hampton Roads. Base year of the index is 2001.

A Recovery in Labor Markets

Sometimes it is better to step back, take a moment, and gain a different perspective. Undoubtedly, the last three years have changed our perceptions of what is normal and how we live, work, and play. Yet, as much as we may live in a “new normal,” looking at how labor markets have fared in Hampton Roads this century can provide us some insight into how labor markets might fare later this decade.

In Graph 6, we examine how the civilian labor force and individual employment have changed in Hampton Roads from 2000 to 2023. We remind the reader that the civilian labor force includes all people aged 16 and older who are employed³ or unemployed⁴ while individual employment only includes those who are considered employed by the Bureau of Labor Statistics (BLS). From 2000 to 2007, the civilian labor force in Hampton Roads grew by an annual average rate of 1.6% while individual employment grew at an annual average rate of 1.5%. The good times, however, did not last.

The Great Recession of 2007-2009 was closely followed by the Budget Control Act of 2011 (which, along with its subsequent amendments, placed caps on federal discretionary spending). From 2008 to 2015, the civilian labor force in Hampton Roads grew at an annual average rate of 0.2% while individual employment only grew by approximately 0.1%, on average, annually. It should be no surprise that many residents in this period looked fondly back at the period around the turn of the century, wondering how to get Hampton Roads labor markets back to where they once had been.

The region's fortunes changed, however, in 2016. Rapid increases in defense spending fueled the regional economy. The civilian labor force grew at an annual average rate of 0.9% from 2016 to 2019, with individual employment growing at an annual average rate of 1.4% over the same period. Entering 2020, the prospects for continued growth were bright as defense budgets continued to rise, the Port of Virginia set new records for traffic, and the travel

and tourism industry continued to reach new highs. However, no one expected the COVID-19 pandemic.

Let's now focus on how regional labor markets responded to the shock of 2020. By now, the refrain is familiar. Prior to the onset of the pandemic, the civilian labor in Hampton Roads reached a record 869,633 people in February 2020. Individual employment also peaked in February 2020, with 844,988 individuals reporting that they were gainfully employed. By April 2020, there were 114,608 fewer individuals reporting they were employed and by May 2020, the civilian labor force had shrunk by 43,804 individuals. The magnitude of the shock still belies description as many individuals in the region were suddenly thrust into unemployment.

The recovery in 2020 and 2021 was, at best, slow, especially relative to other metropolitan areas across the southeastern United States. When compared to the pre-COVID 19 peaks, there were about 24,000 and 45,000 fewer individuals in the civilian labor force and individually employed in Hampton Roads, respectively, at the end of 2020. By the end of 2021, there was a modest recovery, but there were still approximately 19,000 fewer people in the labor force, and individual employment was more than 21,000 below the pre-pandemic peak. There was more progress in 2022. Compared to the pre-pandemic high, there were almost 11,000 fewer individuals at the end of 2022. Individual employment at the end of 2022 was still more than 15,000 individuals below the peak of February 2020.

If the story ended in 2022, one might conclude that Hampton Roads was unlikely to recover anytime soon. However, even amid soaring prices and economic uncertainty, the regional economy powered ahead in 2023. By April 2023, the civilian labor force eclipsed the pre-pandemic peak, with a record 872,378 individuals working or looking for work. Individual employment had also fully recovered from the pandemic shock, with 845,349 individuals reporting they were employed in April 2023 in Hampton Roads.

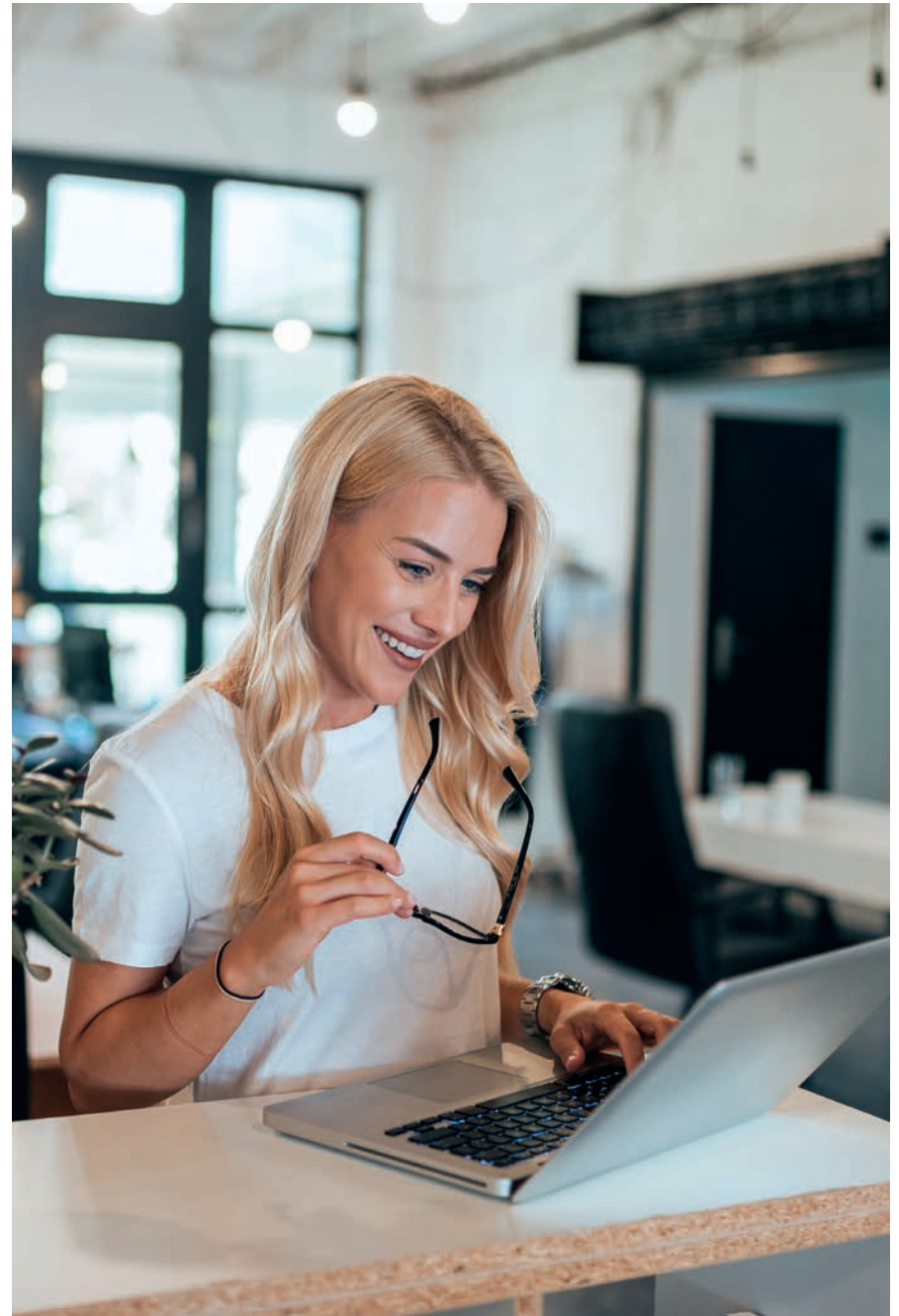
3 According to the Bureau of Labor Statistics, a person is classified as employed if, during the week of the Current Population Survey, they meet any of the following criteria: (1) worked at least one hour as a paid employee, (2) worked at least 1 hour in their own business, (3) were temporarily absent from their job, business, or farm, whether or not they were paid for the time off, or (4) worked without pay for a minimum of 15 hours in a business or farm owned by a member of their family. See <https://www.bls.gov/cps/definitions.htm#laborforce> for an expanded discussion.

4 According to the Bureau of Labor Statistics, a person is considered unemployed if they: (1) were not employed during the survey week, (2) were available for work except for temporary illness, (3) made at least one specific, active effort to find a job during a 4-week period ending with the survey week or were temporarily laid off and expected to return to their job. See <https://www.bls.gov/cps/definitions.htm#unemployed> for additional information.

How does Hampton Roads fare when compared to its peer and aspirant metros? Graph 8 displays the percent change in the civilian labor force from February 2020 to April 2023, and Graph 9 illustrates the percent change in individual employment for the same period. Here, Hampton Roads' performance leaves much to be desired, especially when compared to metro areas to the southeast. The Jacksonville, FL, metropolitan area leads the pack, with a civilian labor force 8.2% larger than February 2020. If there is a modicum of good news, it is the civilian labor force in Hampton Roads has fully recovered from the pandemic, unlike the Washington, DC, metro area.

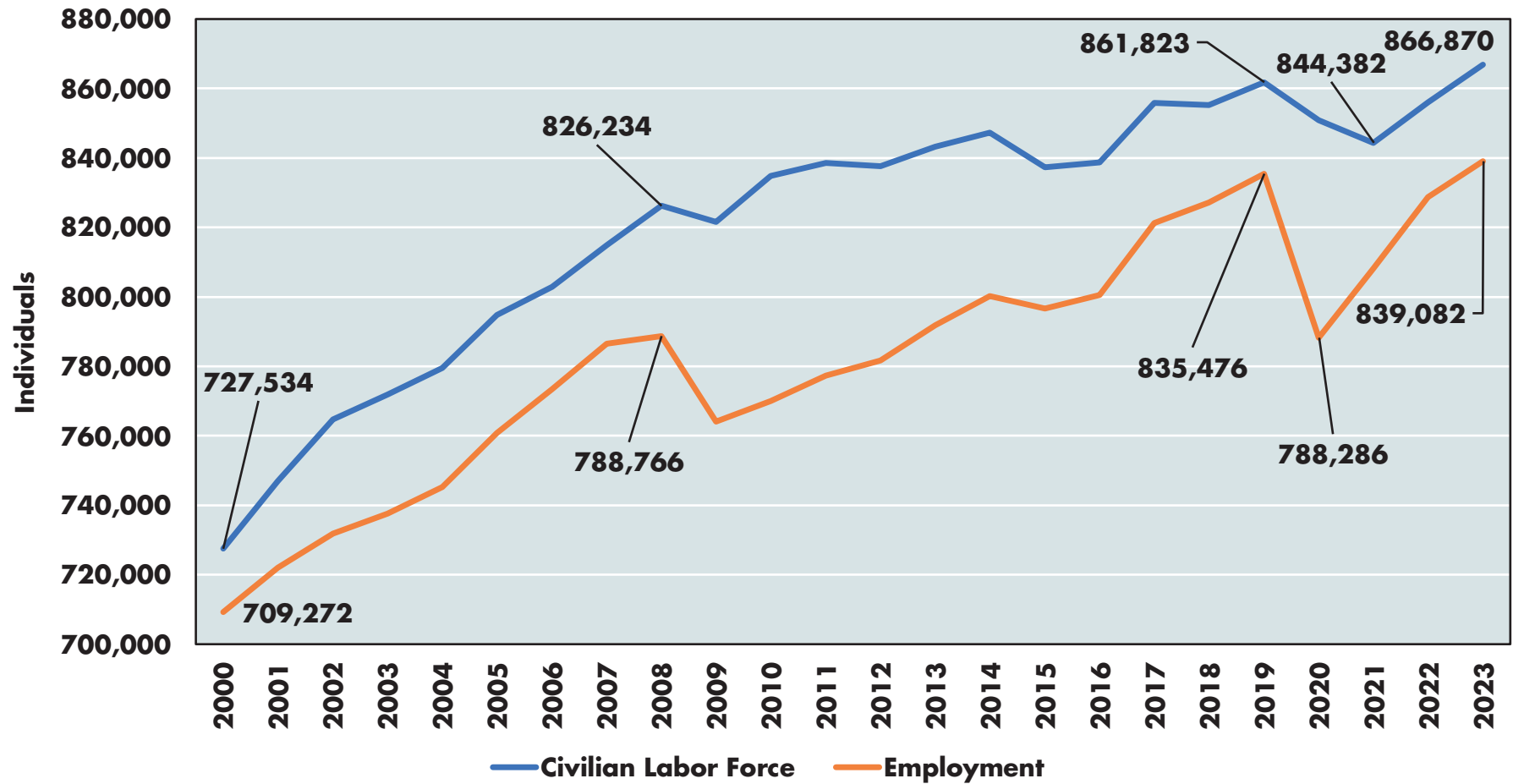
A similar story emerges when we examine individual employment data. Individual employment was about 300 individuals higher in April 2023 in Hampton Roads than in February 2020. While there were more individuals employed in the region, our metro area's performance significantly lags that of almost all peer and aspirant metros. Here again, the Jacksonville metro area has surged ahead, with individual employment 8.4% higher in April 2023 than February 2020.

The open question remains: can the region improve its economic performance relative to its peers over the coming years? Unlike many of its peers, much of Hampton Roads' economy is determined in Washington, DC, so "moving the needle" can be more difficult. We recommend focusing less on the top-line employment numbers and, instead, examining the performance of key industry clusters. Investing in these clusters will not only promote economic diversification, it will also shift control over parts of the regional economy towards Hampton Roads and away from Washington, DC. Yes, the region will continue to occupy a role in the national security of the nation, but it can (and should) also continue to build upon its efforts to bolster economic resiliency and the pace of regional economic growth.



GRAPH 6

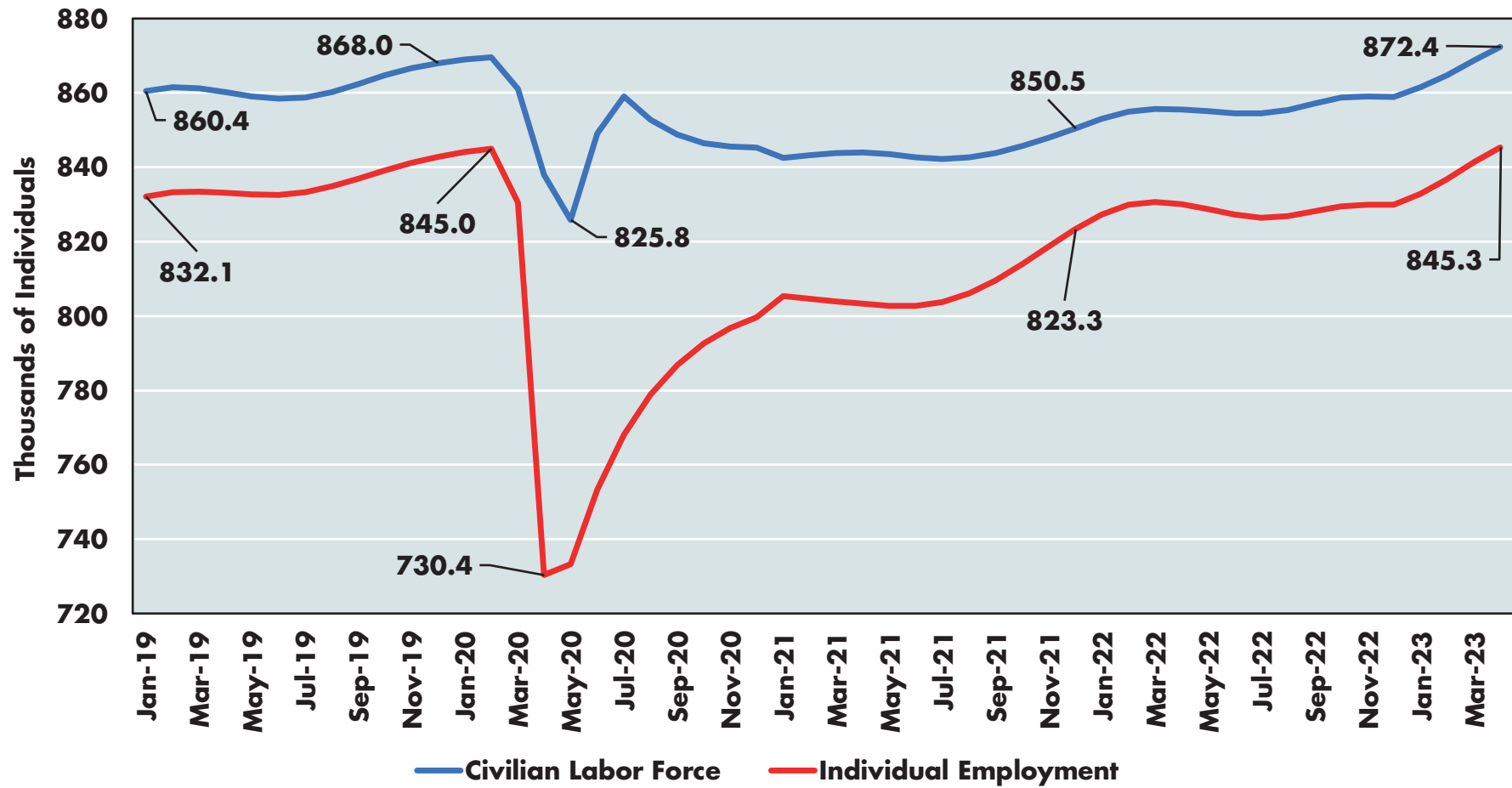
**ANNUAL CIVILIAN LABOR FORCE AND INDIVIDUAL EMPLOYMENT:
HAMPTON ROADS, 2000-2023***



Sources: Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Annual averages of smoothed seasonally adjusted data. 2023 data through April 2023.

GRAPH 7

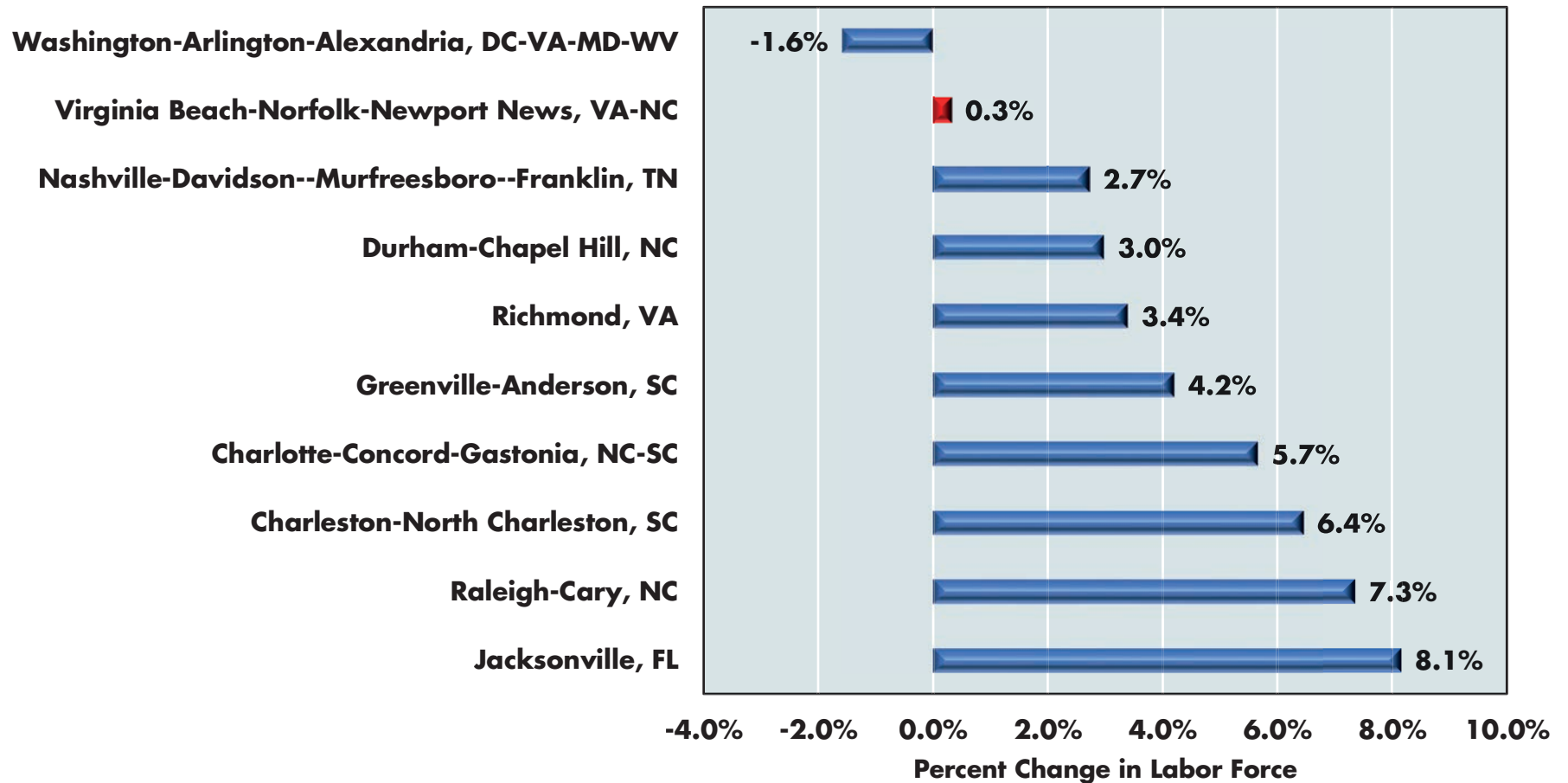
MONTHLY CIVILIAN LABOR FORCE AND INDIVIDUAL EMPLOYMENT:
HAMPTON ROADS, JANUARY 2019-APRIL 2023



Sources: Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Annual averages of smoothed seasonally adjusted data. 2023 data through April 2023.

GRAPH 8

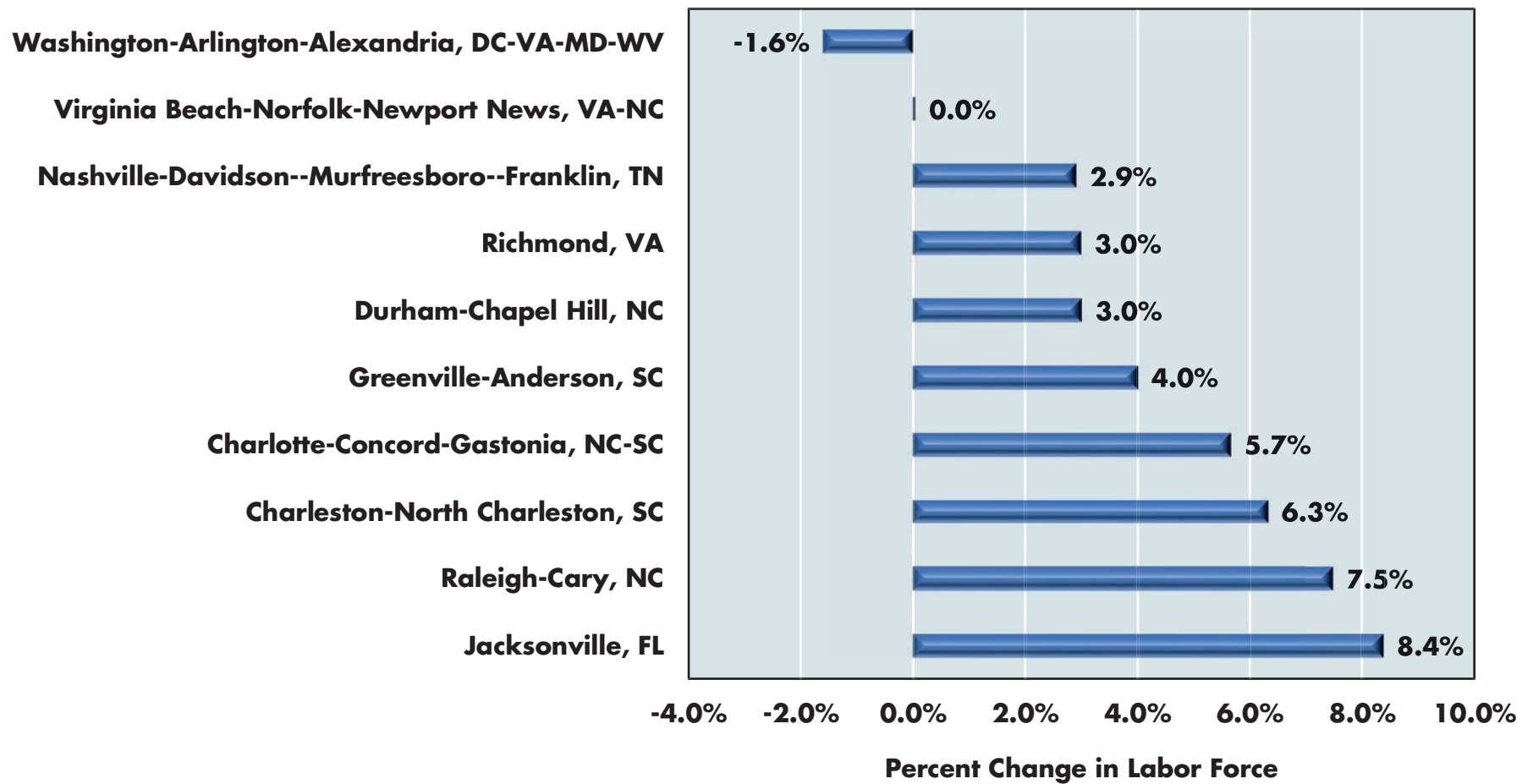
**PERCENT CHANGE IN CIVILIAN LABOR FORCE
SELECTED METRO AREAS, FEBRUARY 2020-APRIL 2023**



Sources: Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Smoothed seasonally adjusted data.

GRAPH 9

**PERCENT CHANGE IN INDIVIDUAL EMPLOYMENT
SELECTED METRO AREAS, FEBRUARY 2020-APRIL 2023**



Sources: Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Smoothed seasonally adjusted data.

Unemployment Falls

The headline unemployment rate is equal to the ratio of the number of unemployed people in the labor force to the overall labor force. Graph 10 displays the average annual unemployment rate in Hampton Roads from 2000 through 2023.⁵ While unemployment spiked during the spring of 2020, the rapid rise in unemployment was not persistent, unlike the Great Recession of 2007-2009. Average annual unemployment after the Great Recession peaked in 2010 and did not fall below the pre-Great Recession peak until 2018. In other words, it took approximately 7 years for the regional economy to lower the unemployment rate to pre-recessionary levels.

While the unemployment rate in Hampton Roads spiked to 12.8% in April 2020, by August 2020, it was already 8.7% and ended the year at 5.4%. By the end of 2021, the unemployment rate in the region had fallen to 3.2%, only 0.4 percentage points higher than the pre-COVID low of 2.8% in February 2020. As more residents of Hampton Roads returned to the labor force in 2022 and 2023, the unemployment rate hovered between 3.0 and 3.4%. In other words, what took the region years after the Great Recession, occurred in less than 24 months after the economic shock of 2020.

In previous reports, we conducted a simple thought experiment to illustrate how departures from the labor force affected the headline unemployment rate in Hampton Roads. In Graph 11, we construct an alternative measure of unemployment by treating exits from the labor force as unemployed individuals. In May 2022, for example, there were 13,950 fewer individuals in the labor force than January 2020. Adding these individuals to the 26,287 unemployed in May 2022 yielded an unemployment rate estimate of 4.6%, 1.5 percentage points higher than the headline unemployment rate. We conducted this thought experiment to inform the reader how departures from the labor force could mask the true extent of unemployment rate in Hampton Roads.

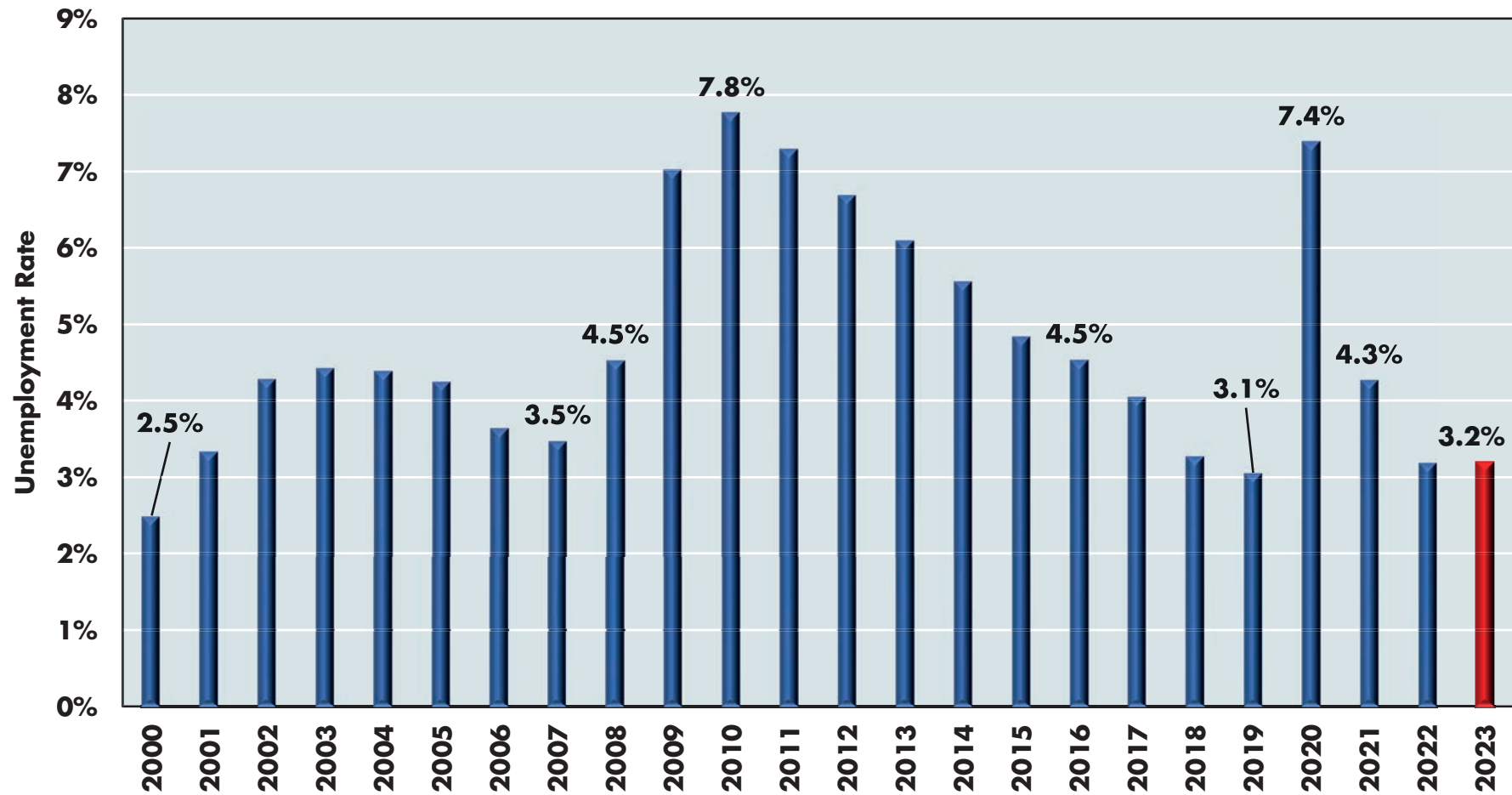
Graph 11 illustrates how the economic environment in Hampton Roads has changed over the past year. As residents of the region have flowed back into the civilian labor force, the gap between the headline and alternative unemployment rates has narrowed. By March 2023, the gap between the two measures was essentially zero, that is, the civilian labor force had recovered from the turbulent times of 2020. Now, we need to work to lift labor force participation rates, so more residents of Hampton Roads productively engage in the regional economy.

The recovery in the civilian labor force, however, needs to be juxtaposed with the longer-term decline in labor force participation regionally, across the state, and across the nation. While the unemployment rate may be low, it belies the fact that a non-trivial percentage of workers are “sitting on the sidelines” and are not actively looking for work or working. The reasons for the long-term decline in labor force participation are complex, but we must temper our good news with this fact.

⁵ The data for 2023 represent the average of the available data at the time of writing.

GRAPH 10

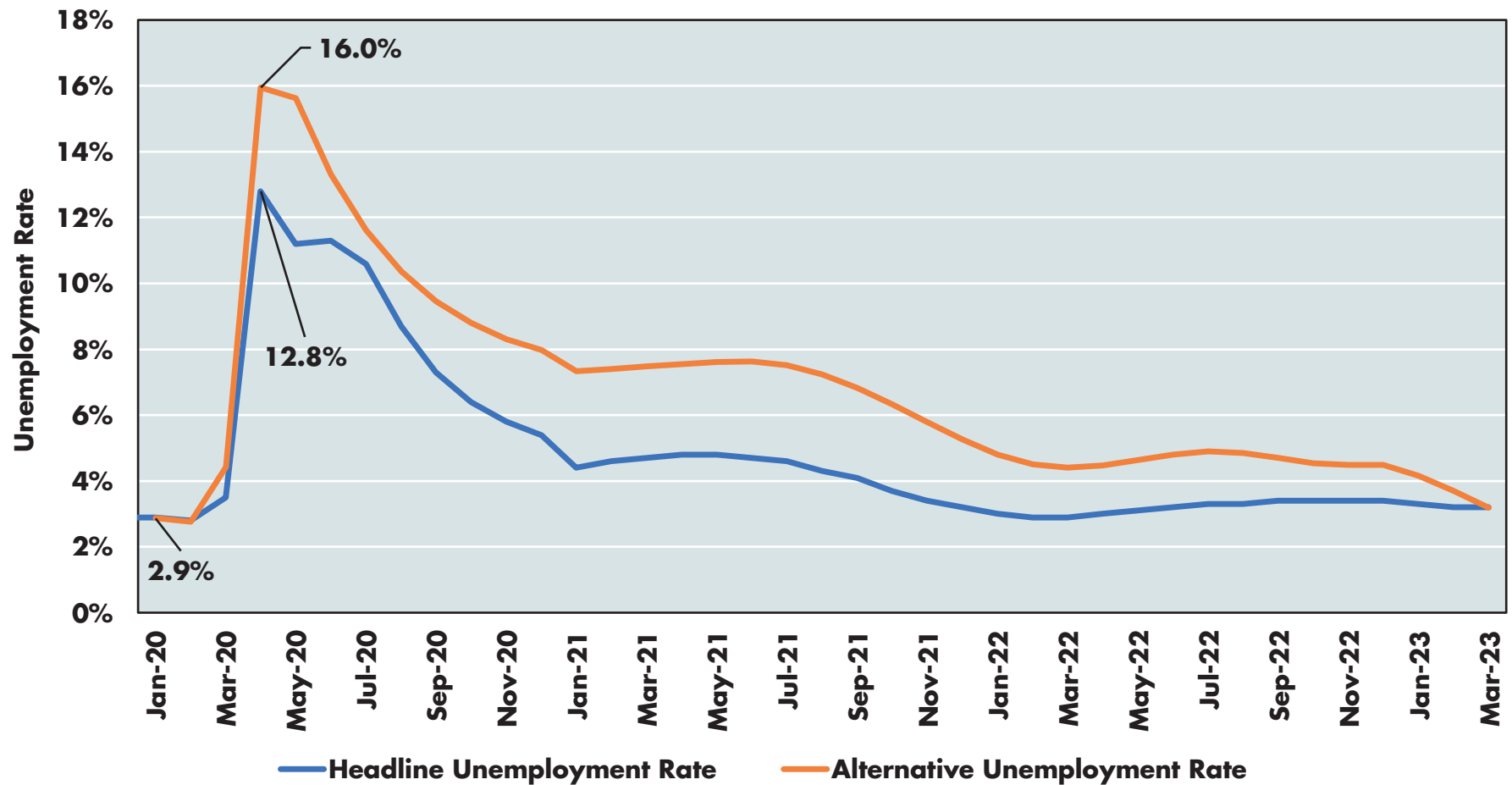
AVERAGE UNEMPLOYMENT RATE
HAMPTON ROADS, 2000-2023*



Sources: Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Smoothed seasonally adjusted data. *2023 represents the average of available data.

GRAPH 11

HEADLINE UNEMPLOYMENT RATE AND ALTERNATIVE UNEMPLOYMENT RATE
HAMPTON ROADS, JANUARY 2020-MARCH 2023



Sources: Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Smoothed seasonally adjusted data.

Jobs in Hampton Roads

To understand how nonfarm payrolls (jobs) have recovered since the onset of the pandemic, we need to first understand how Hampton Roads fared in creating jobs before the COVID-19 economic shock. By now, this is a familiar refrain: Hampton Roads lagged Virginia and the nation in job growth in the decade after the Great Recession of 2007-2009. From the trough in nonfarm payrolls (jobs) in February 2010 to February 2020, the number of jobs in Hampton Roads grew by 9.2% (Graph 12). Across Virginia, the number of jobs over the same period increased by 13.6% while there were 17.5% more jobs nationally. For every job created in Hampton Roads, almost two jobs were created nationally in the decade prior to the pandemic.

Even though job growth lagged in Hampton Roads, there were a record 805,100 jobs in the region in January 2020 (Graph 13). In the span of three months, the gains of the previous decade vanished as employers shed jobs in the face of the pandemic and restrictions curtailed social and business activity. By April 2020, there were 102,800 fewer jobs in the region, a shocking collapse in economic activity. In about 12 weeks, employers shed roughly 1 out of every 8 jobs in Hampton Roads.

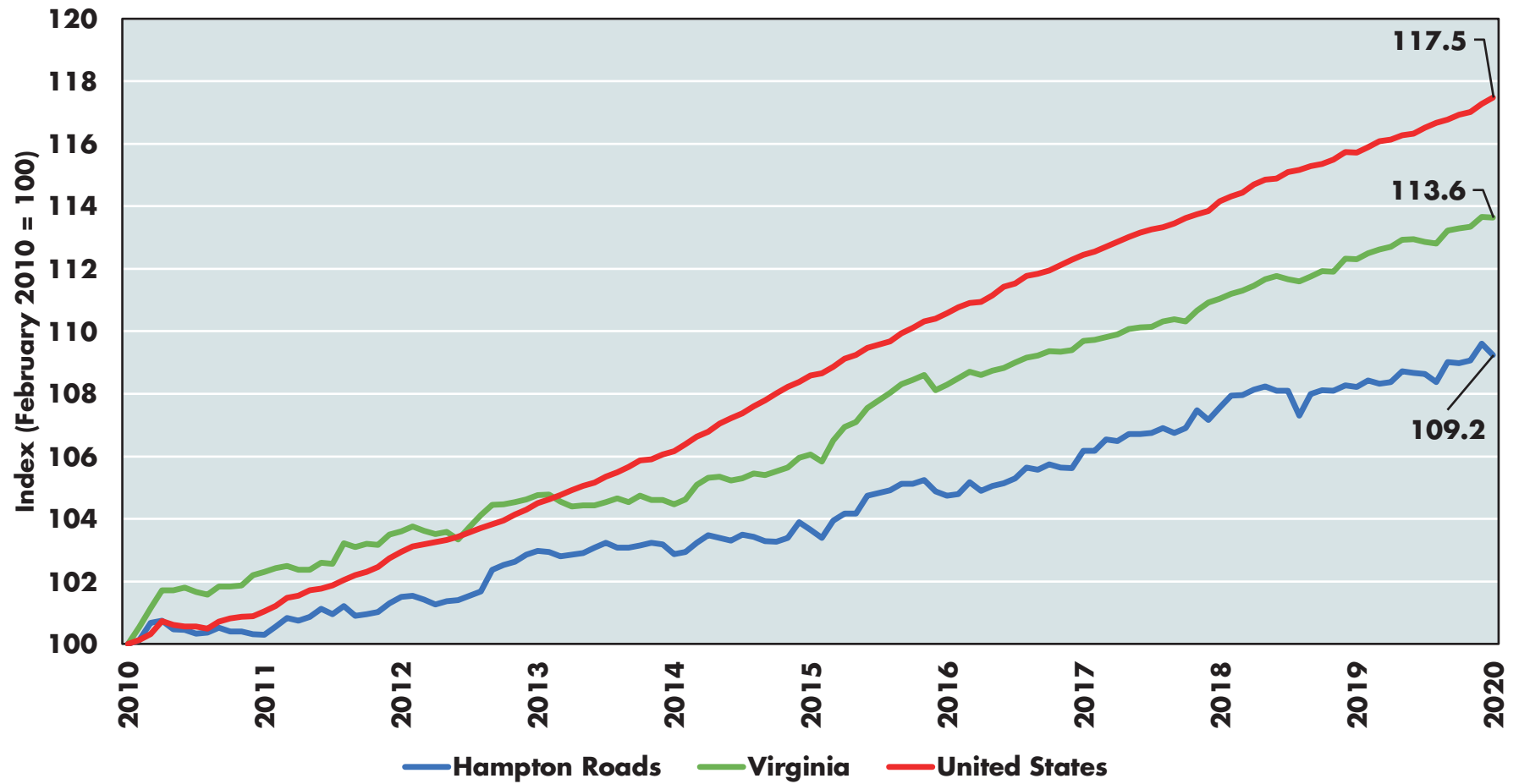
Fortunately, many of these job losses were short-lived, with over 60,000 jobs returning by the end of 2020. There was modest job growth in 2021, so that by the end of the year, employers in Hampton Roads had brought back almost 79,000 of the jobs lost at the depth of the pandemic shock. Job growth continued in 2022, with employers continuing to add jobs, so that at the end of the year, the number of jobs was about 10,900 below the pre-pandemic peak. In 2023, the recovery continued but remained incomplete and it may be 2024 before jobs in Hampton Roads fully recover from the 2020 shock.

Graph 14 highlights the recovery in jobs from the depths of the economic shock from April 2020 to April 2023. The nation and the Commonwealth have fully recovered all the jobs lost from the shock of 2020, and Hampton Roads is not far behind from a full recovery. Compared to the trough of the pandemic, the nation had 19.4% more jobs, while Virginia had 14.5% more jobs, and Hampton Roads had 13.7% more jobs. The jobs recovery profiles appear to be remarkably similar for Virginia and Hampton Roads, which lends further credence to our projection that the region will regain the remaining “lost jobs” in 2023.

When we compare Hampton Roads to its peer and aspirant metropolitan regions, the visuals are not appealing. From February 2020 to April 2023, Hampton Roads ranked second to last among its peer and aspirant metro areas in terms of job growth. With the exception of the Washington, DC, metropolitan area and Hampton Roads, all the other metros have fully recovered the jobs lost in the spring of 2020. Charleston (9.0%), Raleigh (8.9%), Jacksonville (8.9%), Nashville (8.6%), Charlotte (6.3%) and Durham-Chapel Hill (4.9%) have experienced what one can only conclude is a robust recovery. Richmond has about 2.8% more jobs while the Greenville metro area job recovery was complete. The relatively lackluster performance of the three largest metro areas in the Commonwealth explains why Virginia’s job performance lags that of the nation.

GRAPH 12

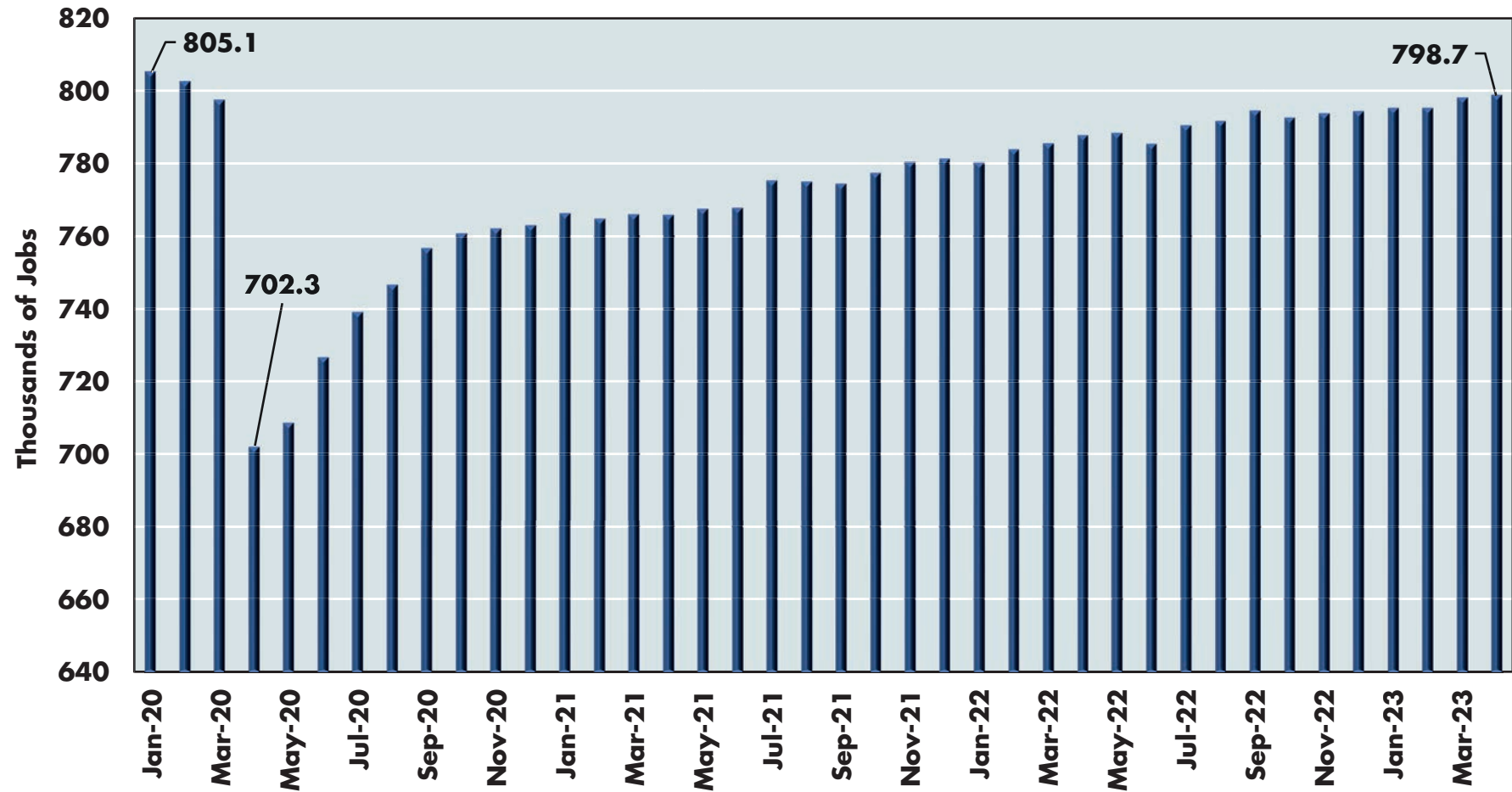
**INDEX OF NONFARM PAYROLLS
UNITED STATES, VIRGINIA, HAMPTON ROADS,
FEBRUARY 2010-FEBRUARY 2020**



Source: Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy. Seasonally adjusted data.

GRAPH 13

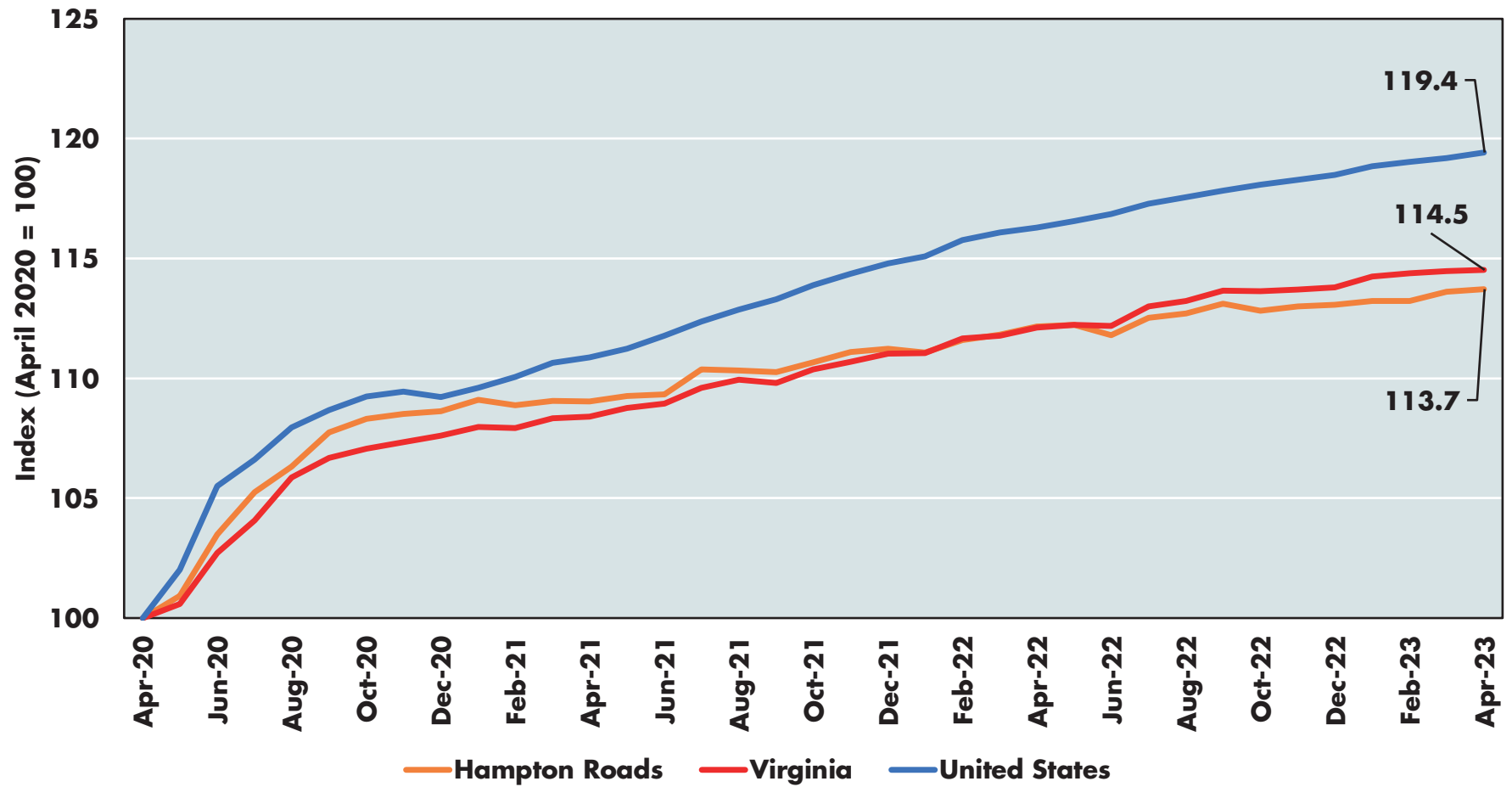
NONFARM PAYROLLS IN HAMPTON ROADS,
JANUARY 2020-APRIL 2023



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

GRAPH 14

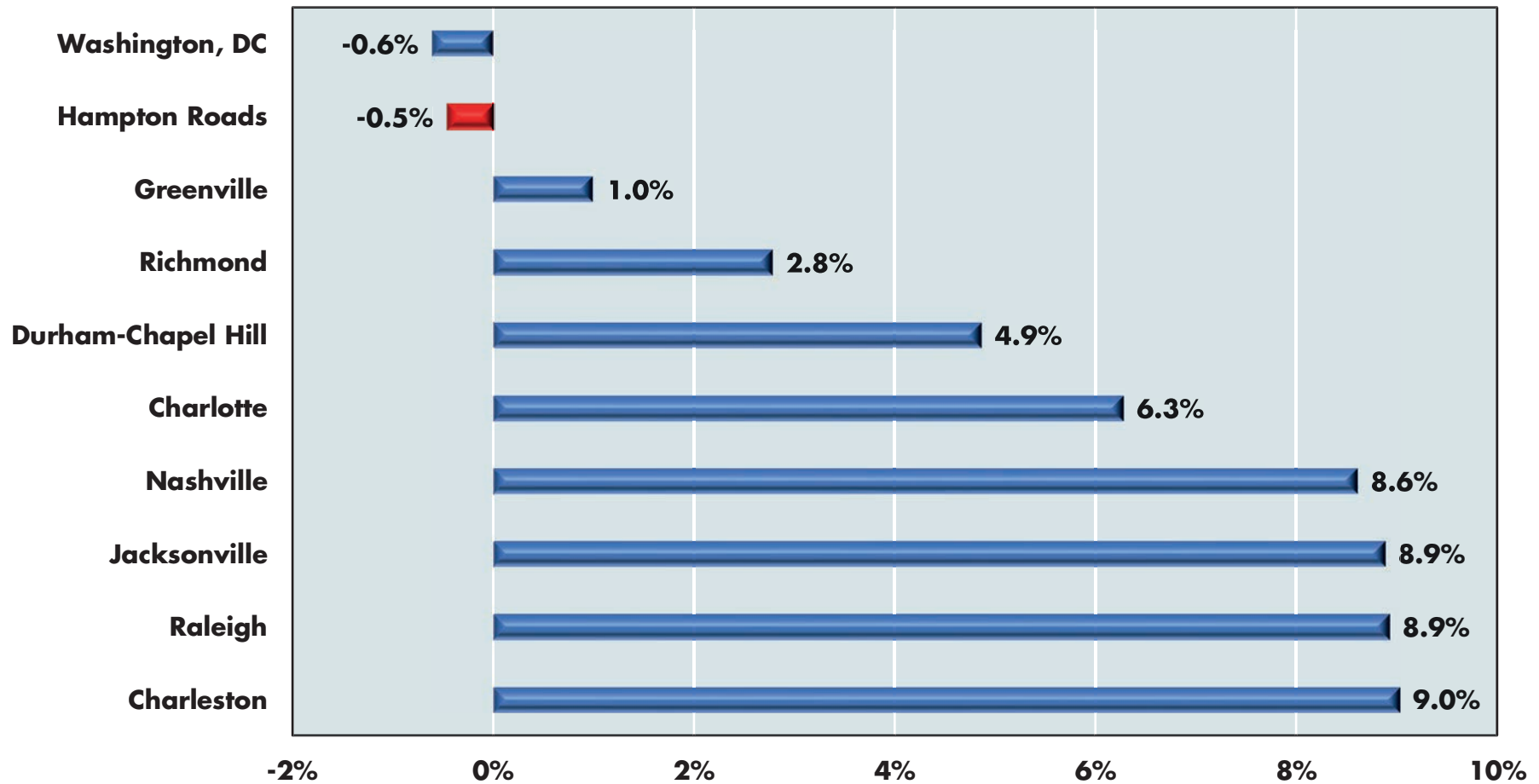
**CUMULATIVE GROWTH IN NONFARM PAYROLLS (JOBS):
UNITED STATES, VIRGINIA, AND HAMPTON ROADS
APRIL 2020-APRIL 2023**



Sources: U.S. Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data are seasonally adjusted.

GRAPH 15

**CUMULATIVE GROWTH IN NONFARM PAYROLLS (JOBS):
SELECTED METROPOLITAN STATISTICAL AREAS, FEBRUARY 2020-APRIL 2023**



Sources: U.S. Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data are seasonally adjusted.

Where are the Job Gains and Losses in Hampton Roads?

Job losses and gains have not been spread evenly across sectors in Hampton Roads. We can compare the change in jobs from April 2019 to April 2023 to see which industries have gained or lost jobs. The Transportation and Warehousing industry stands out, gaining 4,000 jobs, an increase of 16.5%. The gains in this industry are not surprising given the rise of online delivery services as well as continued growth at the Port of Virginia. Health Care and Social Services used to be a lagging industry but is now leading the recovery in 2023 with a gain of 3,000 jobs (3.1%) from April 2019 to April 2023. There are also more jobs in Mining, Logging, and Construction (6.0%) as well as in Financial Activities (4.6%).

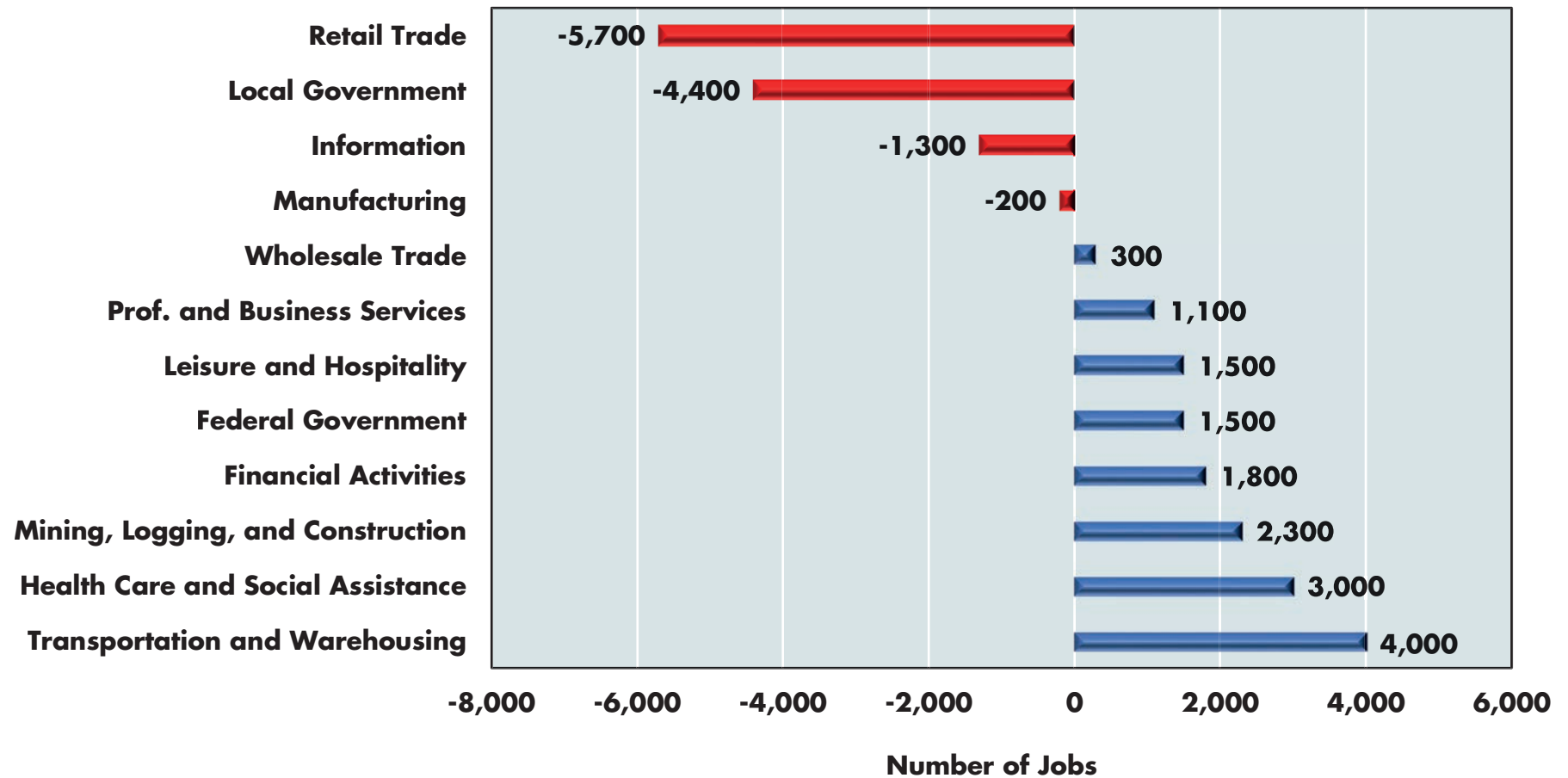
If we examine which industries have not recovered from 2020, local government continues to place downward pressure on overall job growth in the region. While other industries have ebbed and flowed with respect to the level of pre-pandemic jobs, local government payrolls since May 2020 have persistently remained 4,000 to 5,000 jobs below the levels observed in April 2019.

Why are local government jobs not recovering as fast as other industries? In 2020, local governments, facing dire revenue projections and restrictions on business and social activities, shuttered libraries, parks and recreation centers, and moved swaths of employees to remote work. When nongovernment jobs rebounded, and government revenues did not fall as projected (due, in part, to the federal government providing financial grants), local governments found themselves behind job markets. With demand rising in other industries and the unemployment falling below 4% and approaching 3% in some months, local governments are willing to hire but, in many cases, unable to find workers at prevailing wages.



GRAPH 16

**CHANGE IN NONFARM PAYROLLS: HAMPTON ROADS
APRIL 2019-APRIL 2023**



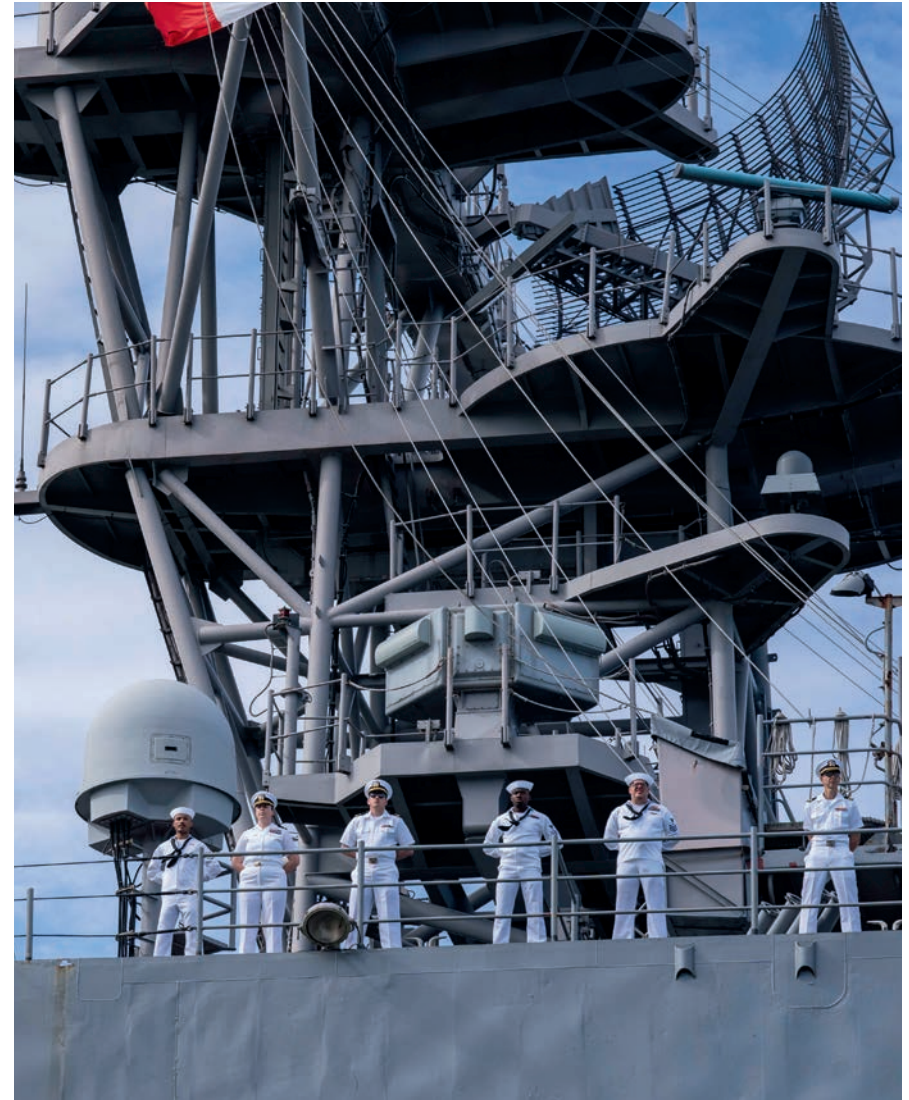
Sources: Bureau of Labor Statistics, Federal Reserve Bank of St. Louis, and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Non-seasonally adjusted data.

Final Thoughts

2022 was a year to remember for Hampton Roads. Most of the economic indicators moved in the right direction, and there are numerous signals that 2023 will improve on the performance of 2022. Projected increases in defense spending, continuing growth in the travel and tourism industry, and increasing revenues at the Port of Virginia have given a “green light” for the regional economy to grow into 2023.

Not all the news is record setting, and we do not lack for challenges. Job creation continues to lag other metro areas, and the pace of the region in establishing new businesses has not recovered to pre-recession levels. The interdependence of Hampton Roads with the Department of Defense (DoD) is a source of economic strength but also vulnerability. We should leverage our unique role in procurement and operations while also seeking out opportunities to foster private sector growth. Investing in key industry clusters is a route to empower job growth and innovation in the region. Each challenge represents an opportunity to work together to make Hampton Roads an even better place to live.

If there are sources of uncertainty, these come from outside the region. Defense policy, for now, favors Hampton Roads. Political uncertainty in Europe and Asia will protect the defense budget, but we should not count on defense spending to continue its growth without bound. The federal deficit is, for the lack of a better phrase, out of control, and federal debt now exceeds \$33 trillion, debt ceiling debates notwithstanding. Yet, the U.S. economy has shown remarkable resiliency in the face of these and other challenges. While growth may slow at the national level in 2023, Hampton Roads is picking up speed and moving forward at a pace not observed since before the Great Recession. Good news indeed.



The Pillars of the Hampton Roads Economy Remain Strong



THE PILLARS OF THE HAMPTON ROADS ECONOMY REMAIN STRONG

"The good news is that every morning we have the choice; not to be controlled by circumstances nor our past but by purposely designing our day, hence our lives better."

Bernard Kelvin Clive, Author and Speaker

The Virginia Beach – Norfolk – Newport News ("Hampton Roads") Metropolitan Statistical Area (MSA) is a region rich with assets – a talented and diverse labor force, a distinctive role in the national security of the nation, a deep-water port that continues to set records, and beaches and amenities that attract visitors from near and far. The region's economic performance is closely aligned with these assets. Defense spending, the Port of Virginia, and the hospitality and tourism industry are often referred to as the "Three Pillars" of the Hampton Roads economy.

The economic health of Hampton Roads is important not only to the residents of the region but also to the citizens of the Commonwealth. The region accounts for about 1 in 5 citizens in Virginia and roughly the same proportion of economic activity in the state. An economically vibrant and innovative Hampton Roads would lift potential Gross Domestic Product (GDP) for Virginia. Likewise, if the region's economic performance is relatively anemic, it can weigh on the state's economic performance.

Improving economic performance in Hampton Roads, we argue, does not mean abandoning the region's economic pillars. The region needs to invest in proven pillars of economic growth and complement these pillars with policies that are friendly to innovation, trade, and talent. As the economy of Hampton Roads evolves over the coming decade, we are likely to see the emergence of new pillars that include Health Care and Health Sciences, Renewable Energy, and Unmanned Systems. This diversification will not only bolster economic growth, it will make the region more resilient in the face of economic and political changes in future.

It may be an understatement to say that it was a good year for the pillars of the Hampton Roads economy. Defense spending continued to flow into the region and set a new record. The Port of Virginia continued to have a significant impact on the economy of Hampton Roads and Virginia and moved record amounts of cargo in 2022. The travel and tourism industry outperformed other regions in Virginia and many regions across the United States. Housing prices were resilient in the face of increasing interest rates and inflation. For these sectors of the Hampton Roads economy, there was an abundance of good news.

In this chapter, we examine the pillars of the Hampton Roads economy. In the next section, we discuss the level of defense spending in the region and how it reverberates through the economy. We then turn to the performance of the Port of Virginia and how it continued to set records for cargo traffic. The succeeding section examines the hotel industry and how it has fared when compared to state and national markets. We then wrap up with an examination of single-family residential housing in Hampton Roads and final thoughts about the prospects for growth in 2023 and beyond.

Good News for Defense Spending: Is the Sky the Limit?

Department of Defense (DoD) spending is one of the pillars of the Hampton Roads economy, but one could argue it is the first among equals. As illustrated in Graph 1, direct DoD spending in Hampton Roads likely exceeded \$25 billion in 2022 and is on track to top \$27 billion in 2023. When we account for the ripple effects of direct DoD spending on the regional economy, we estimate that about 4 out of every 10 dollars of economic activity is the result of DoD spending in the region.

In the short term, we expect that DoD spending will continue to increase. In FY 2022, DoD's base budget was \$756.6 billion, increasing to \$797.7 billion in FY 2023. We note that President Biden proposed a base DoD budget of approximately \$773 billion, and this was viewed as too low by authorizers and appropriators in Congress. With supplemental appropriations to assist Ukraine, the base DoD budget is likely to exceed \$800 billion in FY 2023. The DoD budget request for FY 2024 submitted as part of the President's budget proposal was \$842 billion.¹

Total national defense spending in the President's budget was \$880 billion for FY 2024, rising to \$926 billion by FY 2027. By 2033, national defense spending in this proposal was projected to rise to approximately \$1.06 trillion. We note that the Fiscal Responsibility Act of 2023 does not constrain national defense spending, and given rising geopolitical tensions in Europe and Asia, the possibility exists that the DoD base budget will exceed \$1 trillion in nominal dollars this decade. While increases in defense spending are typically good news for Hampton Roads, we should also recognize that "trees don't grow to the sky." In other words, at some point, the rise in DoD spending will stall, and there will likely be a retrenchment of spending priorities.

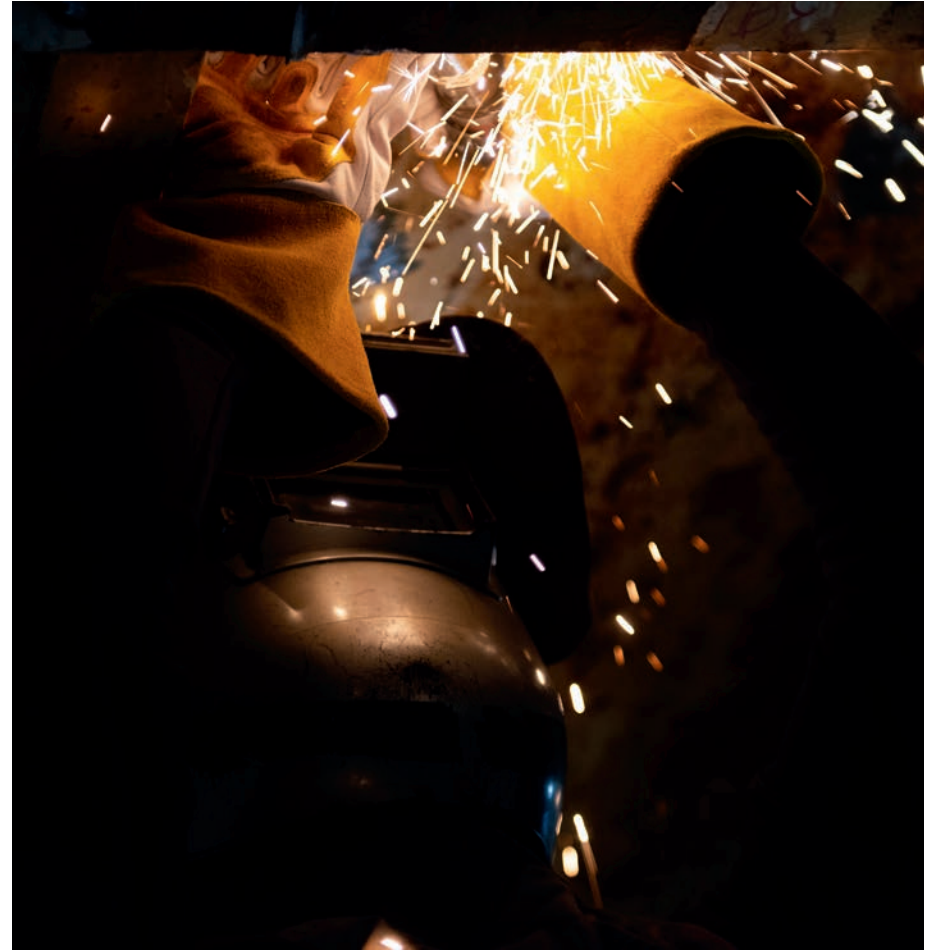
The debate over the debt ceiling in the spring of 2023 centered around the level of the debt already issued by the federal government without significantly addressing the problem that the federal government continues to spend more money than it brings in. The last federal government surplus in FY 2000 is a distant memory (Graph 3). Budget discipline has waned as Congress and successive Presidents have vacillated between increasing expenditures and reducing tax rates. The structural imbalance between revenues and expenditures increased after the passage of the Tax Cuts and Jobs Act of 2017 and the abandonment of discretionary spending caps. The fiscal response to the COVID-19 pandemic pushed the annual deficit to more than \$3 trillion and approximately \$2.8 trillion in FY 2020 and FY 2021, respectively. Proclamations that the deficit has fallen ignore the simple fact that current deficits would be historic compared to deficits observed in previous decades. The President's FY 2024 budget submittal projects that deficits will exceed \$1.7 trillion for the remainder of the decade and exceed \$2 trillion annually at the beginning of the next decade. The passage of the Fiscal Responsibility Act will do little to address the root causes of the deficit: the rise of mandatory and defense spending coupled with the impacts of two decades of tax cuts that failed to pay for themselves as predicted.

In 1946, in the aftermath of World War II, publicly held federal debt peaked at 106.1% of GDP. However, public debt as a percentage of GDP fell rapidly in the post-World War period, reached a low of 22.2% in 1974, and has increased since then. In 1980, the federal debt held by the public increased slightly to 24.5% of GDP. Publicly held federal debt steadily increased to \$16.6 trillion or 77.7% of GDP by 2019. In the aftermath of the fiscal response to the pandemic, publicly held federal debt is projected to reach \$25.9 trillion in 2023 and will likely top \$30.0 trillion by 2026. The publicly held debt to GDP ratio will pass 100% in 2024, and there are no signs of fiscal discipline on the horizon. At some point, the bill for living beyond our means will come due.

¹ https://www.whitehouse.gov/wp-content/uploads/2023/03/budget_fy2024.pdf

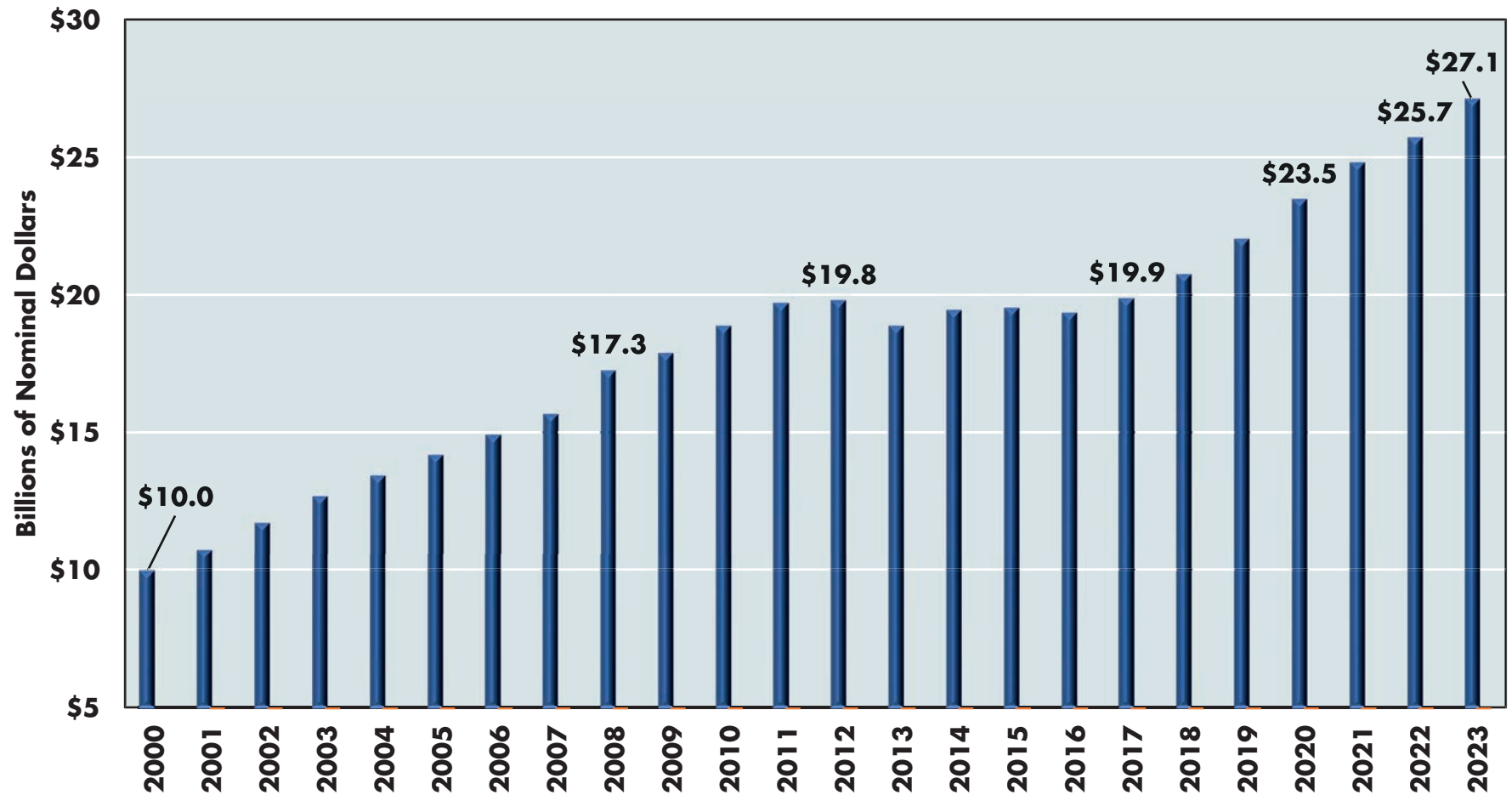
The downgrade of federal government debt by Fitch Ratings in August 2023 is, to some, a warning signal of things to come.² Fitch noted that general government (federal, state, and local government) deficits are projected to rise due to “weaker federal revenues, new spending initiatives, and a higher interest burden.” By 2025, the interest-to-revenue ratio is expected to reach 10%, well above the median interest-to-revenue ratio of 2.8% for AA-rated debt and 1% for AAA-rated debt. At the same time, Fitch noted that governance has continued to deteriorate, with “repeated debt-limit political standards and last-minute resolutions” eroding confidence in fiscal management. Rising deficits and debt, hyperpartisan and performative politics, and the lack of a medium-term fiscal framework to address underlying fiscal issues will continue to plague the public sector in the coming years.

In the short term, the future looks bright for increases in DoD spending. However, the question is when will the lack of fiscal discipline result in markets viewing the United States as a riskier proposition? We don’t know the answer to this question, but it will likely happen during an economic contraction, amplifying the pain on taxpayers. At some point, whether by choice or by financial crisis, Congress will have to raise taxes and restrain expenditures. When it does so, the DoD, as the largest discretionary program in the federal government, will be squarely in the crosshairs.



² Fitch Ratings, August 1, 2023, “Fitch Downgrades the United States’ Long-Term Ratings to ‘AA+’ from ‘AAA’; Outlook Stable.” Available at: <https://www.fitchratings.com/research/sovereigns/fitch-downgrades-united-states-long-term-ratings-to-aa-from-aaa-outlook-stable-01-08-2023>

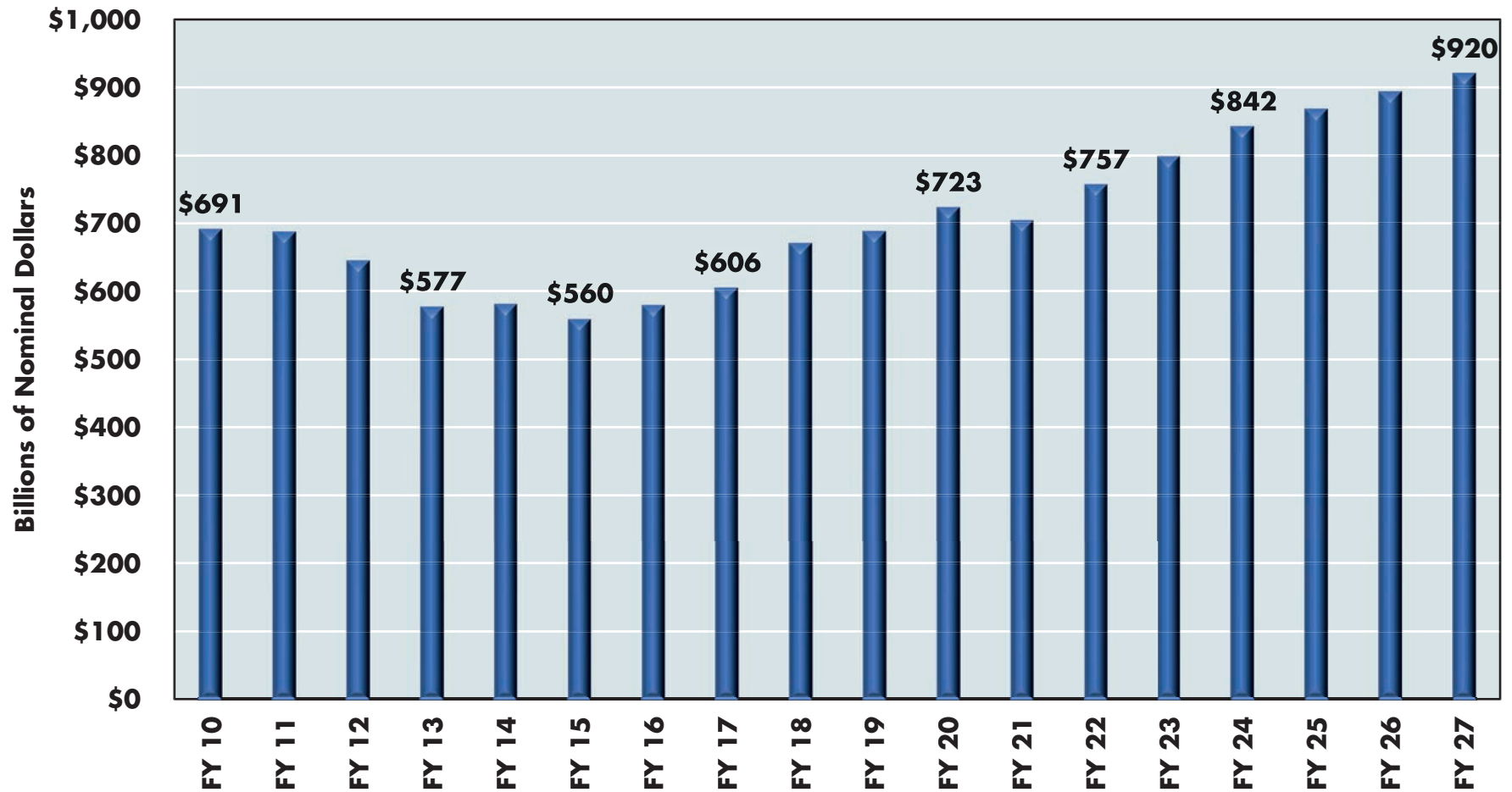
GRAPH 1
ESTIMATED DIRECT DEPARTMENT OF DEFENSE SPENDING IN HAMPTON ROADS,
2000-2023



Sources: Department of Defense and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Includes federal civilian and military personnel and procurement. Last updated in May 2023.

GRAPH 2

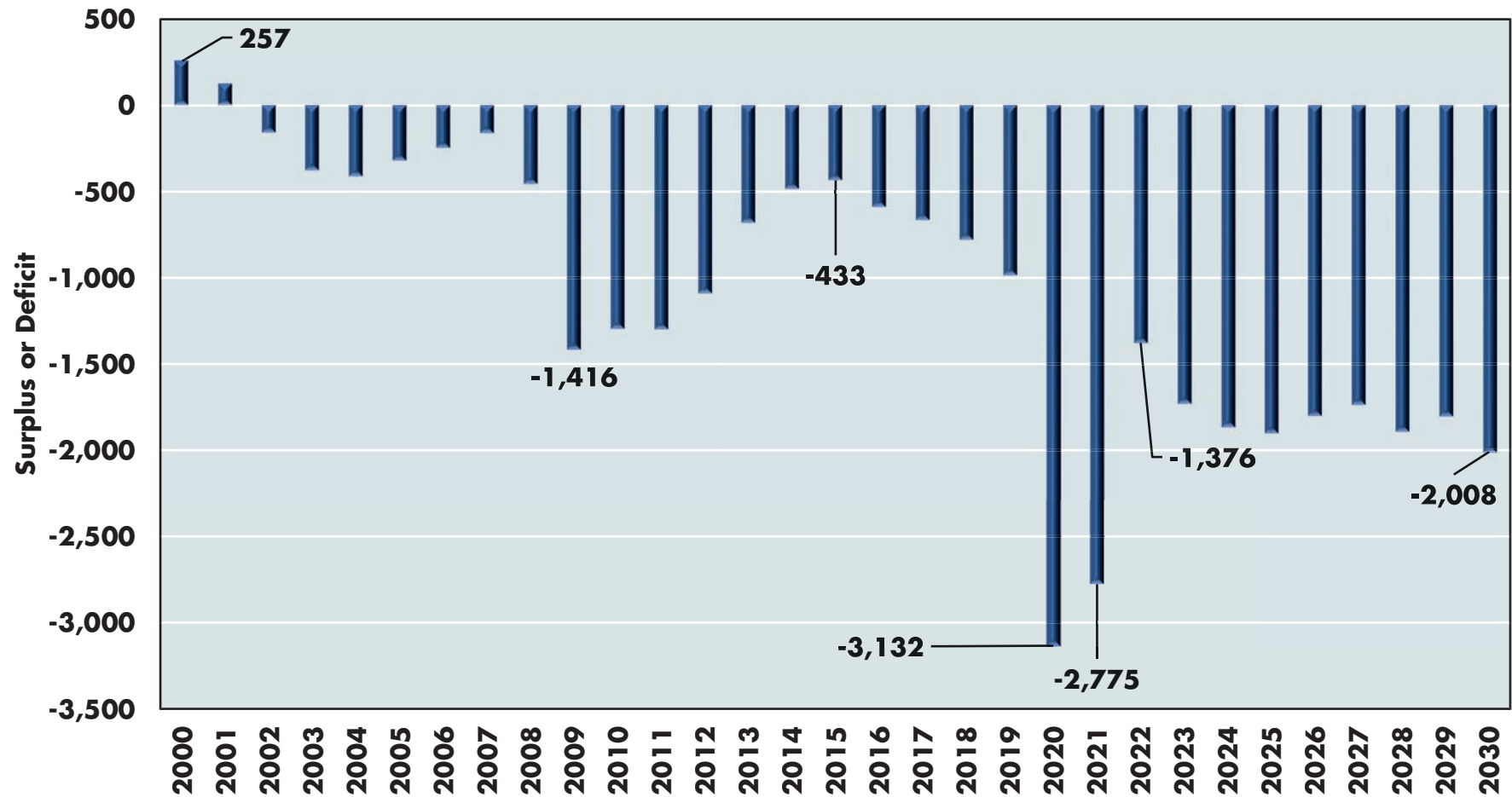
**DEPARTMENT OF DEFENSE DISCRETIONARY BUDGET AUTHORITY,
FISCAL YEAR 2010-FISCAL YEAR 2027**



Sources: Dragas Center for Economic Analysis and Policy, Old Dominion University; Office of the Secretary of Defense (Comptroller) Department of Defense, Defense Budget Materials – FY 2023. The FY 2022 budget presentation includes overseas contingency operations (OCO) in the DoD base budget. For backwards comparison, we present the DoD base as the sum of base funding and OCO funding. Includes emergency budget authority.

GRAPH 3

**FEDERAL BUDGET SURPLUS OR DEFICIT IN BILLIONS OF NOMINAL DOLLARS,
FISCAL YEAR 2000-FISCAL YEAR 2030**



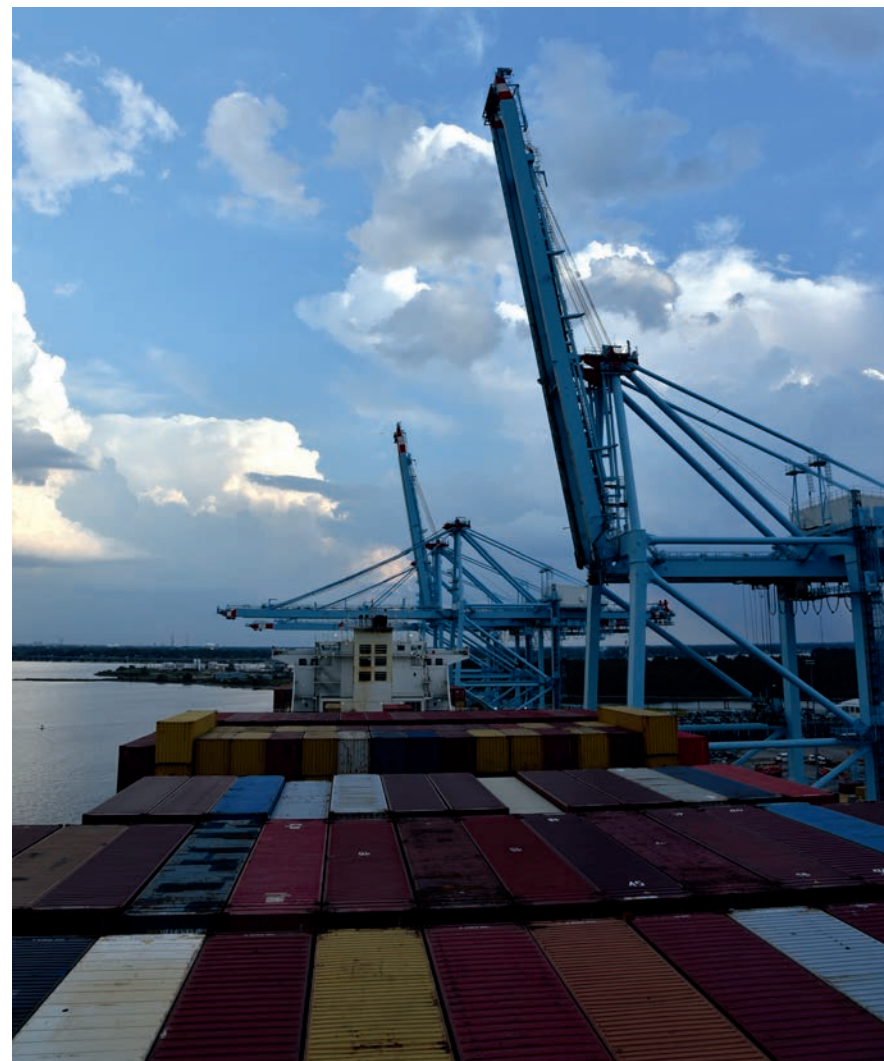
Sources: Dragas Center for Economic Analysis and Policy, Old Dominion University, and Office of Management and Budget FY 2023 Presidential Budget (Table 1.1 – Summary of Receipts, Outlays, and Surpluses or Deficits: 1789 – 2026 and Congressional Budget Office May 2022 Budget and Economic Update, Table 1-1).

The Port of Virginia: Growth Continues

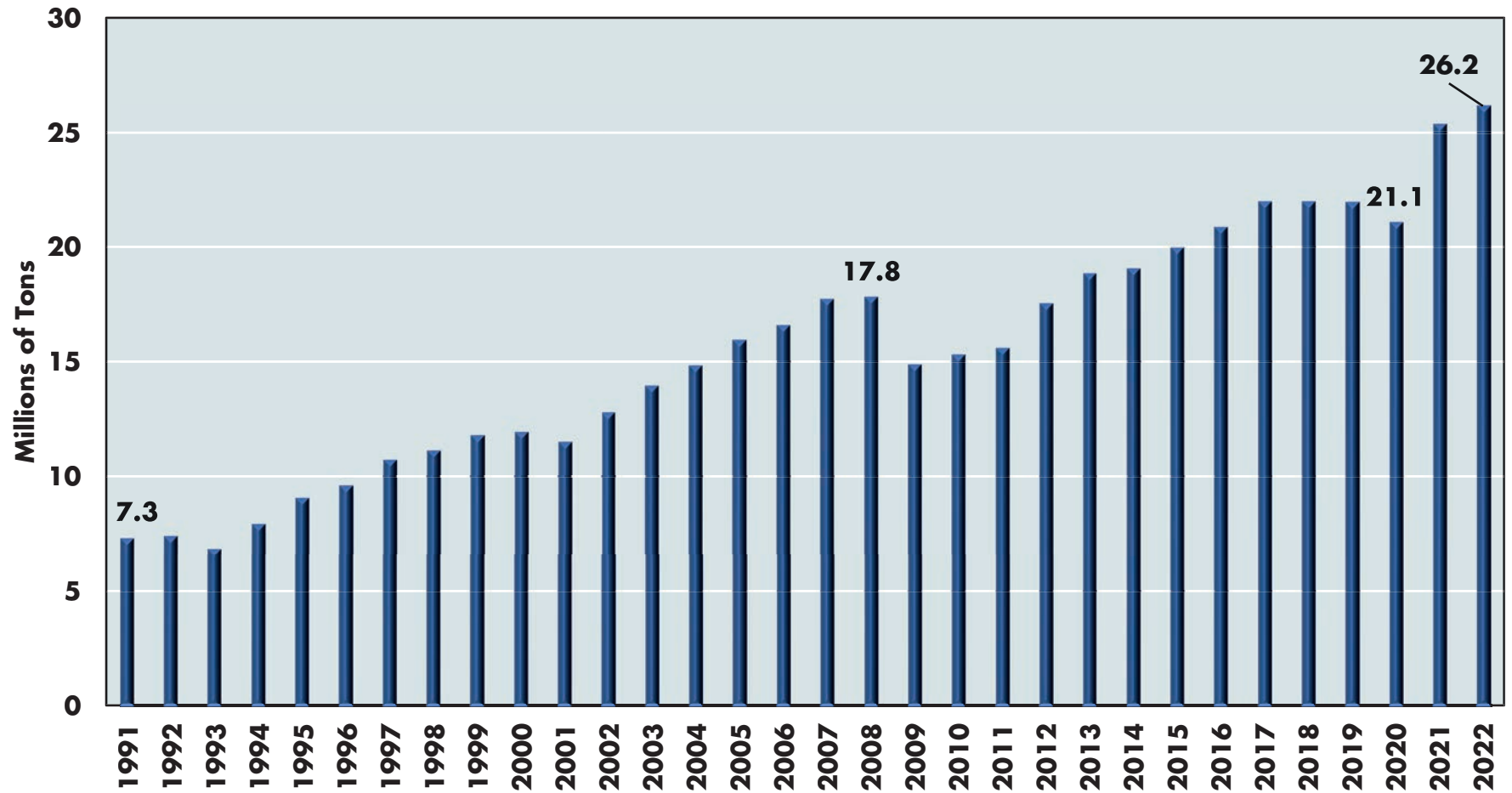
The Port of Virginia continues to provide wind in the sails of the Hampton Roads economy. From 2010 to 2019, general cargo traffic increased from approximately 15.3 million tons to 21.9 million tons, an increase of 43.2% (Graph 4). While traffic dipped by 3.9% in 2020, it surged back in 2021, reaching 25.4 million tons. Cargo traffic continued to climb in 2022, setting another record of 26.2 million tons, an increase of 19.2 from pre-pandemic levels observed in 2019.

Graph 5 displays the total number of Twenty-Foot Equivalent Container Units (TEUs) moved through the Port of Virginia from 1991 to 2022. In 1991, the Port moved almost 1 million TEUs. By 2008, TEU movement through the Port reached 2.1 million. TEU traffic dipped in the aftermath of the Great Recession of 2007-2009 and finally recovered fully in 2013. By 2019, TEU traffic had steadily increased to 2.9 million, an increase of 55.0% over the decade. As with general cargo tonnage, TEU movement dipped slightly in 2020 and then surged in 2021 to 3.5 million TEUs. In 2022, TEU traffic set another record, reaching 3.7 million.

Another sign that the investments in the Port of Virginia are paying off is the average number of TEUs per container vessel call. In Graph 6, we highlight how the average number of TEUs per container ship has increased from 2011 to 2022. As container ships have gotten larger due to shipping companies seeking economies of scale, ports worldwide have had a stark choice: invest in capacity to service these larger ships or fall by the wayside in the global cargo traffic supply chain. In 2011, the average number of TEUs per container vessel call was 1,158. By 2019, the average number of TEUs had grown to 2,214, an increase of 83.5% when compared to 2011. The average number of TEUs per call has continued to increase, reading 2,570 in 2022, an increase of 21.0% from 2019 and 122.0% from 2011. One only needs to look at the size of container ships transiting the deep-water channel to understand how the industry continues to move to larger container ships.



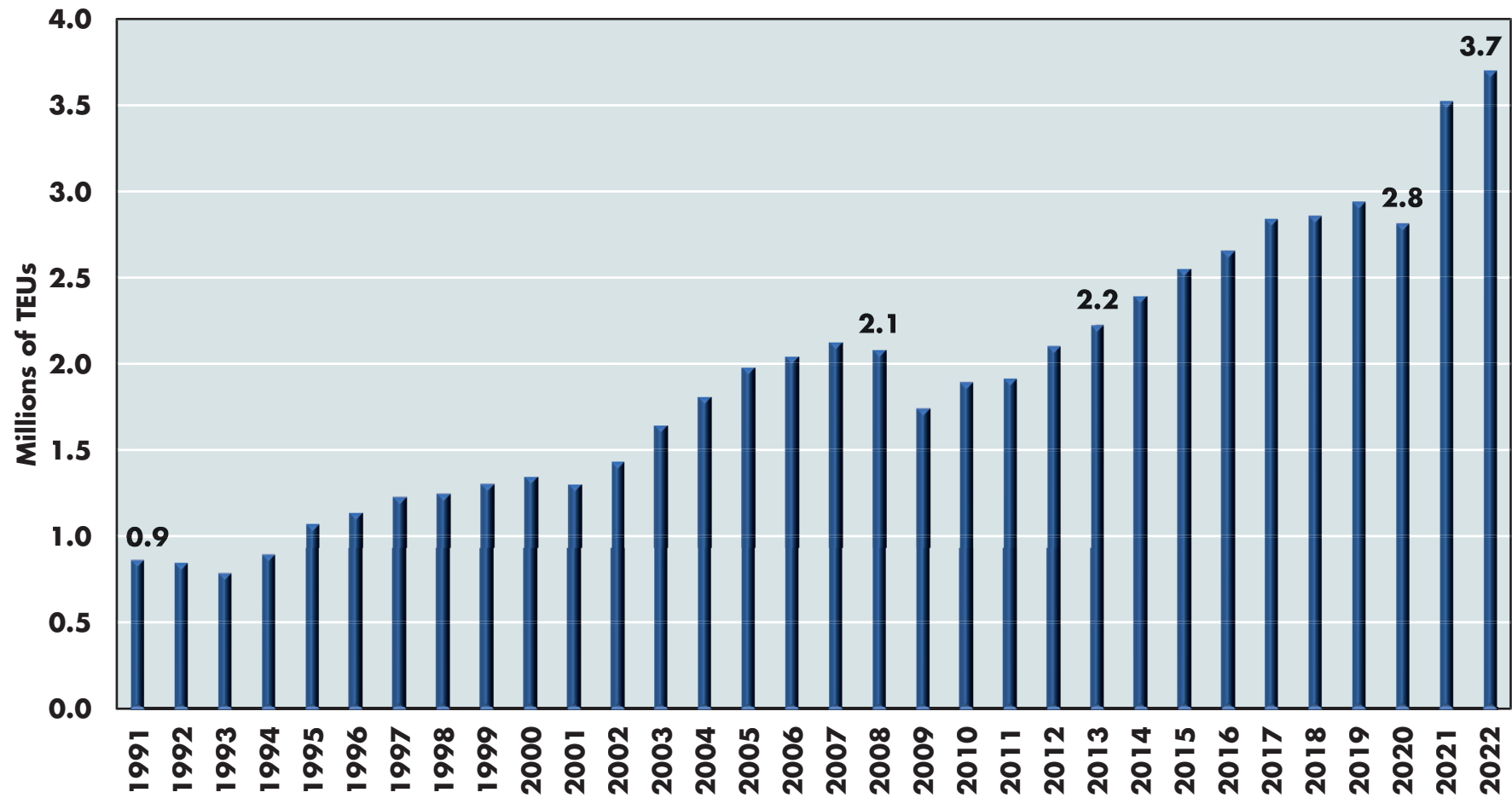
GRAPH 4
GENERAL CARGO TONNAGE
PORT OF VIRGINIA, 1991-2022



Sources: Virginia Port Authority and the Dragas Center for Economic Analysis and Policy, Old Dominion University.

GRAPH 5

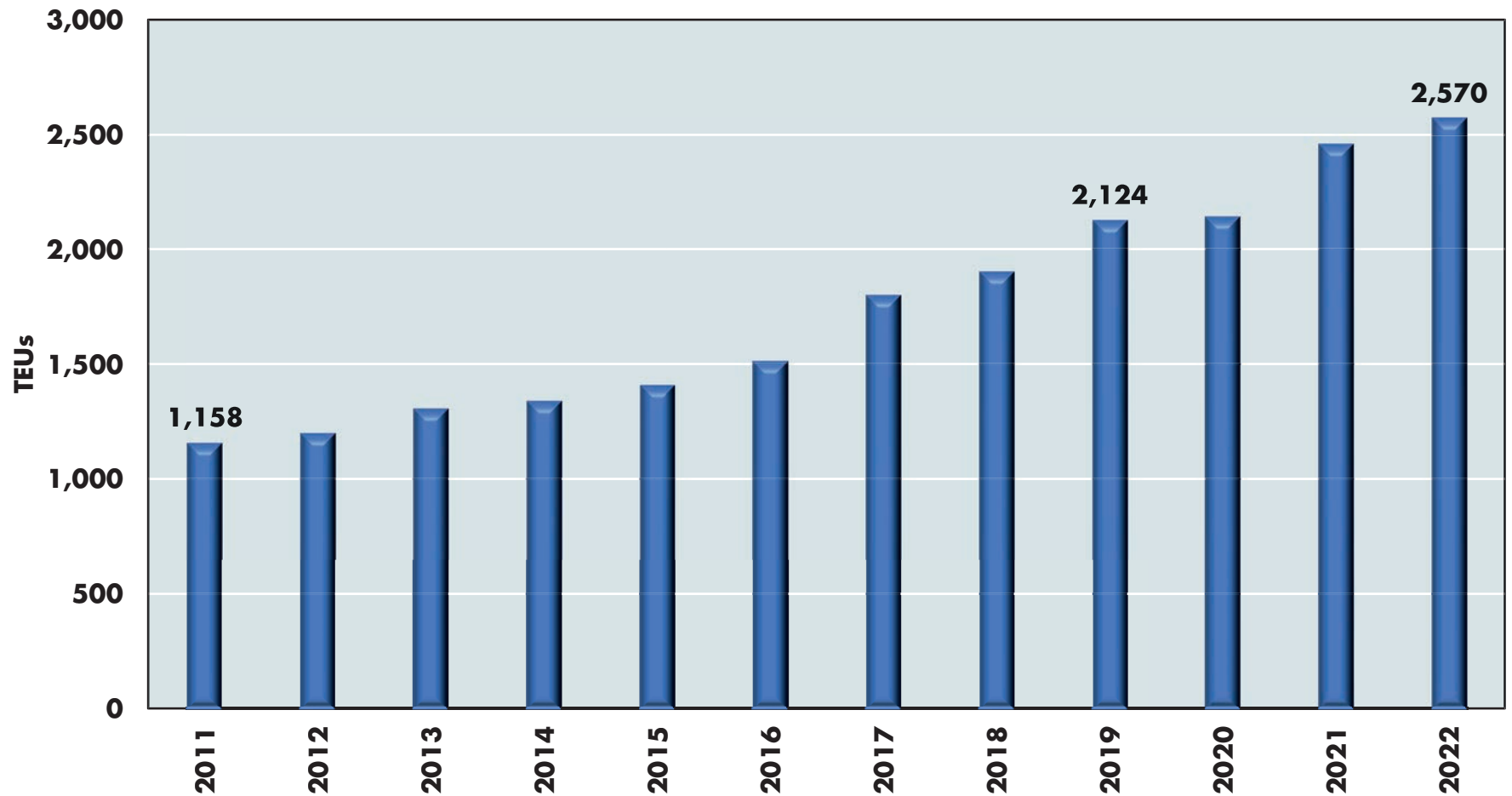
**TWENTY-FOOT EQUIVALENT CONTAINER UNITS (TEUS):
PORT OF VIRGINIA, 1991-2022**



Sources: Virginia Port Authority and the Dragas Center for Economic Analysis and Policy, Old Dominion University.

GRAPH 6

**AVERAGE TWENTY-FOOT EQUIVALENT CONTAINER UNITS (TEUS) PER CONTAINER VESSEL CALL
PORT OF VIRGINIA, 2011-2022**



Sources: Virginia Port Authority and the Dragas Center for Economic Analysis and Policy, Old Dominion University.

Graph 7 displays the share of total loaded TEUs for four major East Coast ports from 2006 through 2022. Two phenomena are readily observable: the rise of the Port of Savannah and the relative decline of the Port of New York/New Jersey through 2020. The fortunes of the two ports appeared to change in 2021 and 2022, with the Port of New York/New Jersey gaining market share while the share of the Port of Savannah declined.

As for the Port of Virginia, its market share in 2022 is about the same as it has been for the past decade. At times, the port's market share has increased or decreased, but these gains and losses have not persisted over time. Yes, the total amount of cargo moving through the Port of Virginia has increased, especially in the last two years, but it has also increased through other ports as well. The continuing challenge for the Port of Virginia is to gain market share and, to its credit, it has continued to make improvements and argue the case for infrastructure investments. It should continue to do so in the coming years.

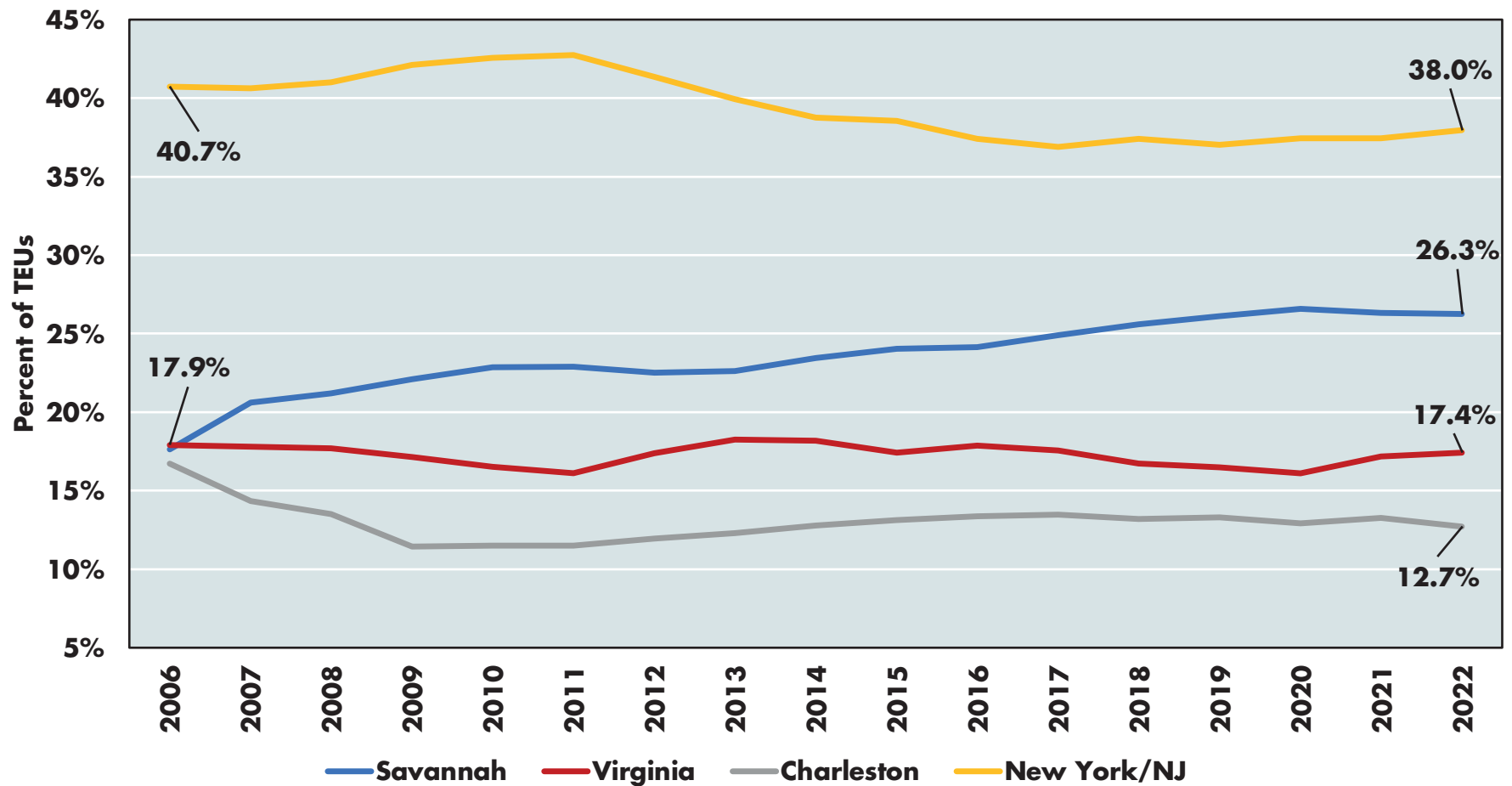
Let's dive into the data on the composition of TEUs. Graph 8 displays the shares of inbound TEUs for a selection of ports on the eastern seaboard. In 2006, 16.6% of inbound loaded TEUs arrived at the Port of Virginia. This share declined, however, to 14.9% in 2015 before recovering in succeeding years. Graph 8 again illustrates the rise of the Savannah port and the relative decline of Charleston and New York with respect to inbound TEUs. In other words, over the last decade, the Port of Virginia has maintained its share of loaded inbound TEUs while Savannah has taken market share from other ports of call.

Graph 9 illustrates the share of outbound loaded TEUs for the same selection of ports. Not only has the Port of Virginia maintained its market share of inbound loaded TEUs over the last decade, it has also gained market share with respect to outbound loaded TEUs. In 2010, the Port of Virginia accounted for approximately 19.2% of outbound loaded TEUs. This share increased to a high of 21.8% in 2014 and then was 19.2% again in 2019. In 2022, the Port of Virginia increased its market share to record levels of 23.1%. We can only interpret this as a positive signal of the Port of Virginia's competitiveness.

Future expansion of activity in and around the Port of Virginia will require a concerted effort by local, regional, and state policy makers and private partners. The Port has successfully navigated economic and public health shocks and should be commended for its nimbleness in the face of adverse events. Economic development in Hampton Roads, especially ready-made, value-added manufacturing sites, is in the port's interest. Import and re-export is a tried-and-true strategy, but the port needs action beyond its domain for this to come to fruition. Transportation networks are also of interest to the Port. Accelerating the construction of I-87, which would connect Hampton Roads and the Raleigh-Durham metro area, would likely accelerate demand for cargo through the Port of Virginia. The potential positive spillovers from the construction of I-87 are numerous and would positively influence the port's trajectory and the Hampton Roads economy.

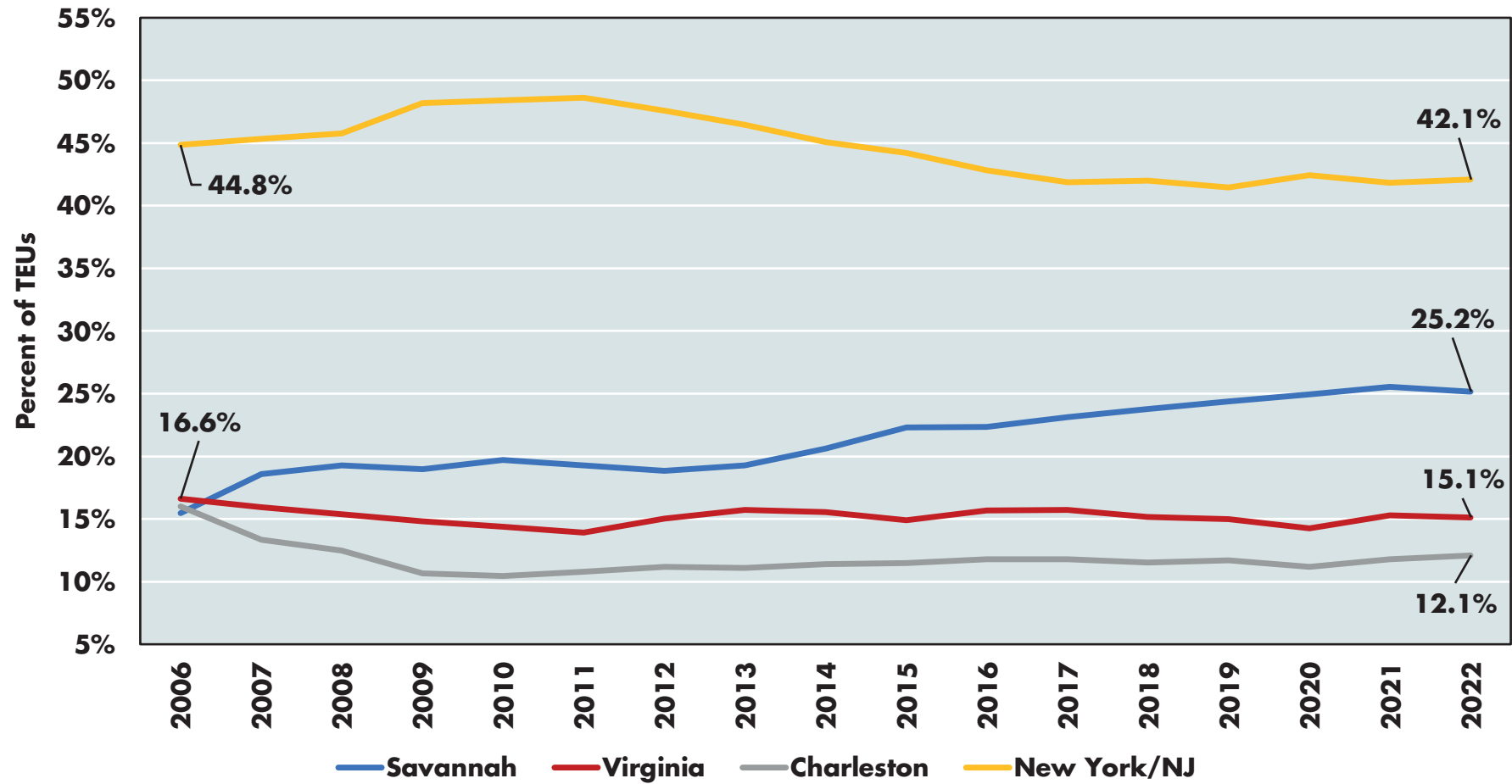
GRAPH 7

**SHARE OF TOTAL LOADED TEUS FOR SELECTED EAST COAST PORTS,
2006-2022**



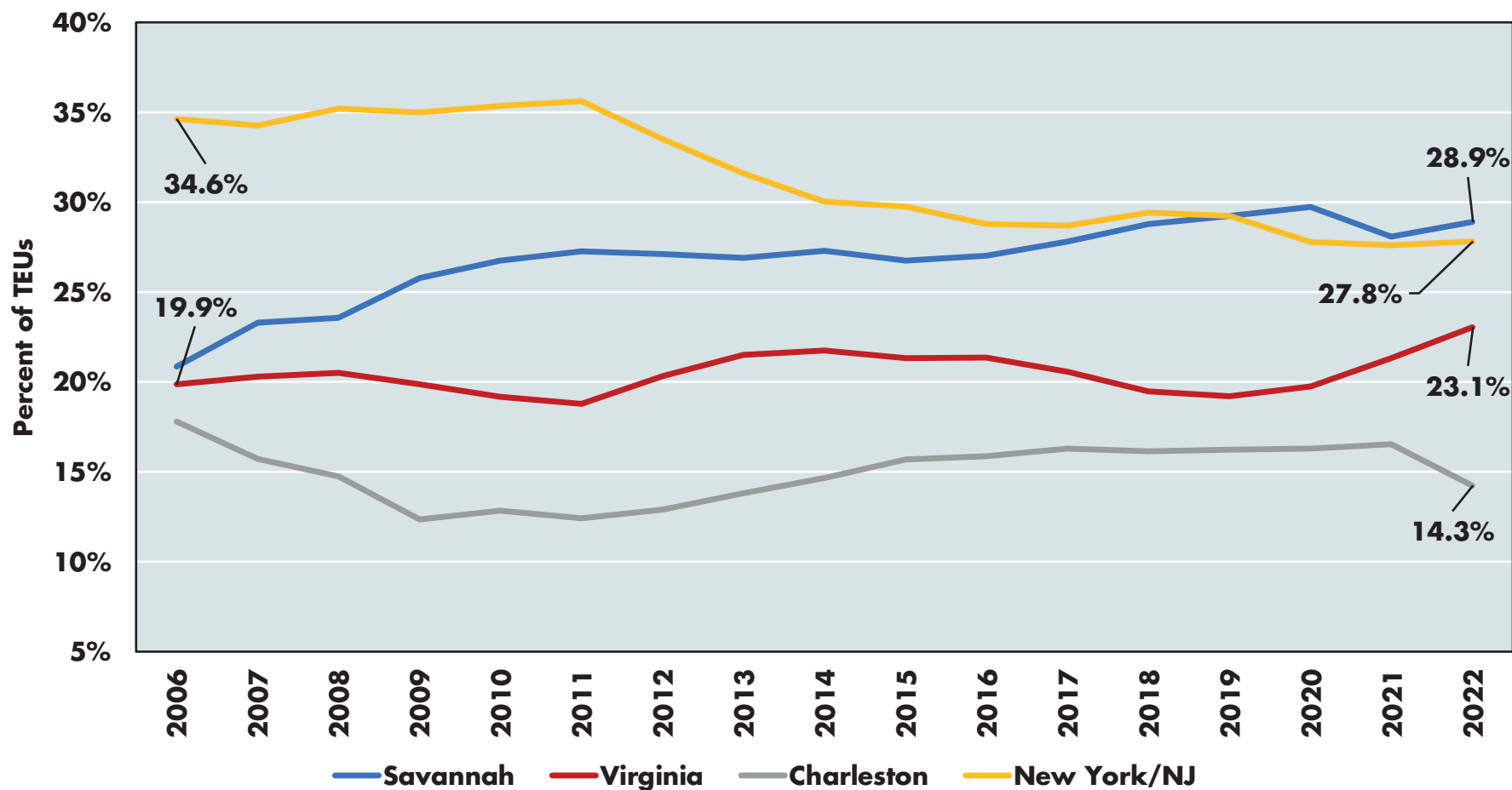
Sources: American Association of Port Authorities, port websites and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Market shares are based on TEUs for Baltimore, Boston, Charleston, Virginia, New York/New Jersey and Savannah.

GRAPH 8
SHARE OF INBOUND LOADED TEUS FOR SELECTED EAST COAST PORTS,
2006-2022



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

GRAPH 9
SHARE OF OUTBOUND LOADED TEUS FOR SELECTED EAST COAST PORTS,
2006-2022



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

The Hotel Industry Continues to Shine

The hospitality and tourism industry in Hampton Roads had a good year in 2022. Graph 10 displays the supply of hotel rooms in the region as well as the average occupancy rate for these rooms from 2000 to 2022. In the latter half the last decade, the average occupancy rate was 61.1%, falling precipitously to 49.1% in 2020 as a result of the COVID-19 pandemic and restrictions on business and social activity. The rebound in occupancy in 2021 was, to put it mildly, dramatic, with average occupancy reaching 61.6%. In 2022, 62.9% of hotel rooms were occupied “on average” in Hampton Roads, approaching the pre-pandemic record of 63.6% in 2019.

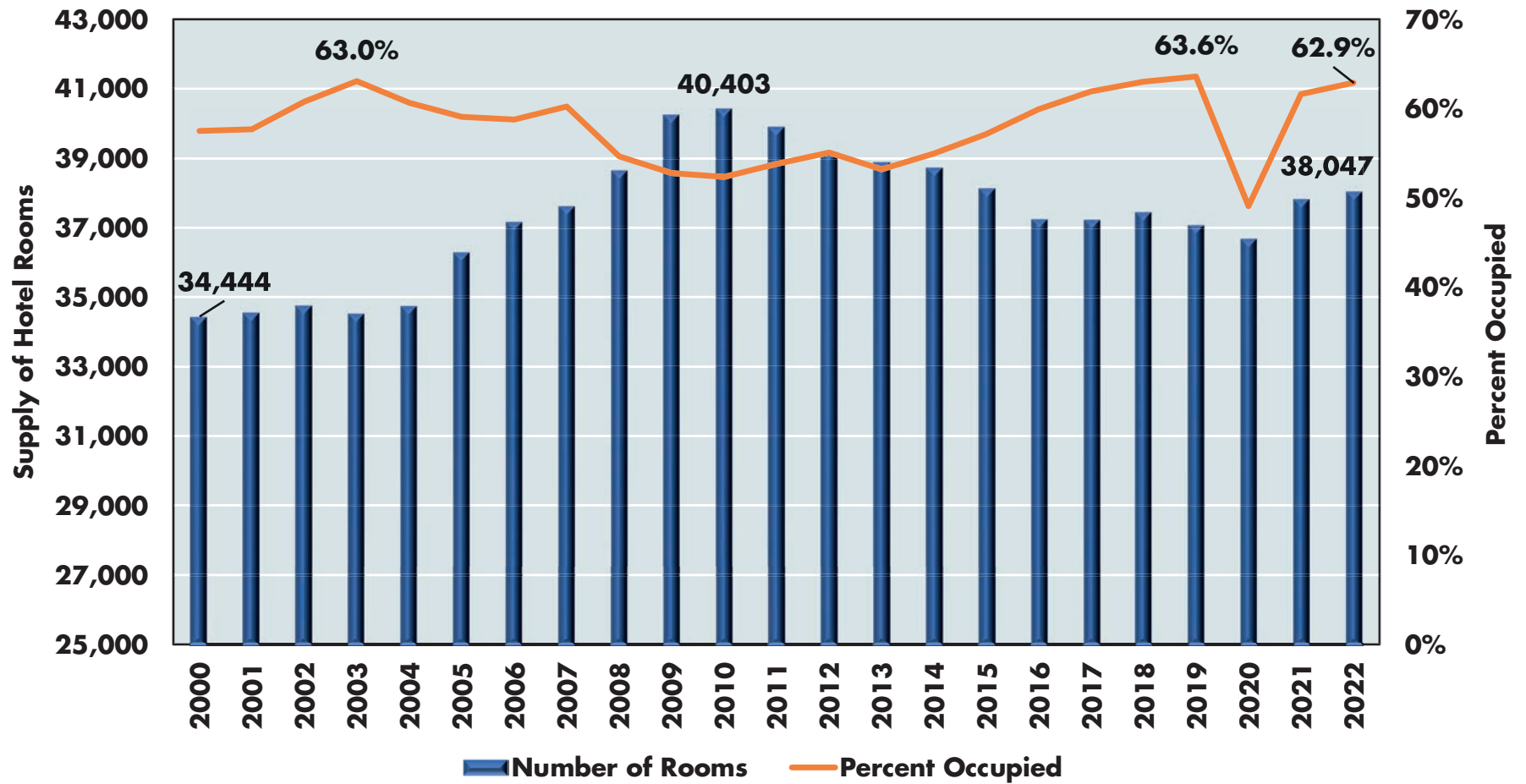
As also reported in Graph 10, the number of hotel rooms in the region increased by 229 rooms from 2021 to 2022 yet remained about 2,400 rooms below the peak of 2010. The contraction of supply in the previous decade appears to be over as hoteliers not only added rooms in the region in 2021 and 2022, but efforts to upscale the available inventory continued as well. It should be no surprise that hotel revenues increased in the face of strong demand for hotel rooms across the region.

Graph 11 displays nominal and real (inflation-adjusted) hotel revenues for Hampton Roads from 2000 to 2022. We focus on real hotel revenues to remove the influence of higher prices in general. Here we can see that real hotel revenues increased over the last decade, rising from \$521.9 million dollars in 2010 to \$616.3 million dollars in 2019. Real hotel revenues then fell by 56.7% in 2020 before recovering completely in 2021. While nominal hotel revenues climbed past \$1.1 billion in 2022 or increased by 10% from their levels in 2021, we caution that higher inflation was responsible for some (if not most) of this increase as real hotel revenues only rose by 1.9% in 2022 from 2021.



GRAPH 10

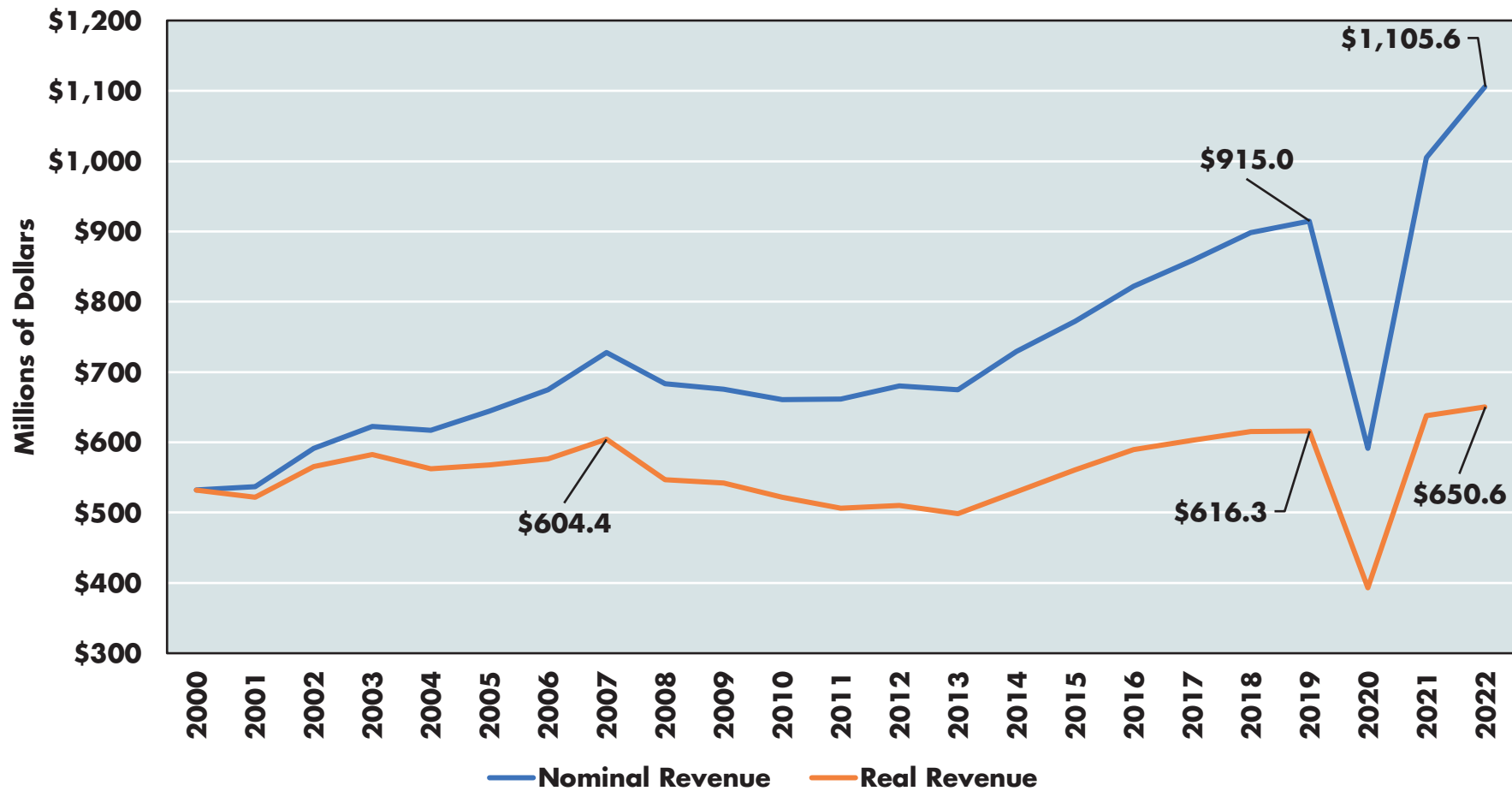
SUPPLY OF HOTEL ROOMS AND OCCUPANCY OF HOTEL ROOMS
HAMPTON ROADS, 2000-2022



Source: STR Trend Report, January 2023.

GRAPH 11

NOMINAL AND REAL HOTEL REVENUE IN MILLIONS OF DOLLARS
HAMPTON ROADS, 2000-2022



Source: STR Trend Report, Various Years, U.S. Bureau of Economic Analysis, Consumer Price Index for all Urban Consumers (Base Year = 2000), and Dragas Center for Economic Analysis and Policy.

How well has the hotel industry in Hampton Roads fared when compared to other markets in the United States? In Graph 12, we compare the monthly performance of hotel revenue in the region with the top-25 markets in the nation as well as all other markets in the United States. Hampton Roads generally outperformed other hotel markets across the nation almost every month in 2022. Simply put, hotel revenues grew at a faster pace in 2022 relative to 2019 in Hampton Roads compared to the averages across the top-25 markets and markets outside the top 25 in the United States.

Let's turn to how the local markets are faring in Hampton Roads relative to Virginia and the nation (Table 1). To examine whether the hotel sector has been improving or declining, we need a measure that captures revenue, demand, and the supply of rooms. The industry standard in this regard is Revenue per Available Room (RevPAR). If revenue increases, either due to higher demand for rooms or due to higher room rates, but the supply of rooms remains the same, then RevPAR increases as each available room is generating more revenue. On the other hand, if revenue increases but the supply of rooms increases at a greater rate, then RevPAR falls, as each available room "on average" is bringing less money. RevPAR is a valuable metric because it incorporates both demand and supply influences.

Our first observation is that Hotel Revenue in 2022, compared to 2019, has risen more quickly in Hampton Roads than across Virginia or the nation. Every sub-market in the region saw its revenue grow at a higher rate than the state or the nation. Within Hampton Roads, Virginia Beach observed the highest increase in revenue; its revenue increased by 24.7% followed closely by the Chesapeake/Suffolk market where revenue grew by 23.8%. The Williamsburg market observed the smallest regional growth (15.5%), in contrast to a 11% growth for the nation.

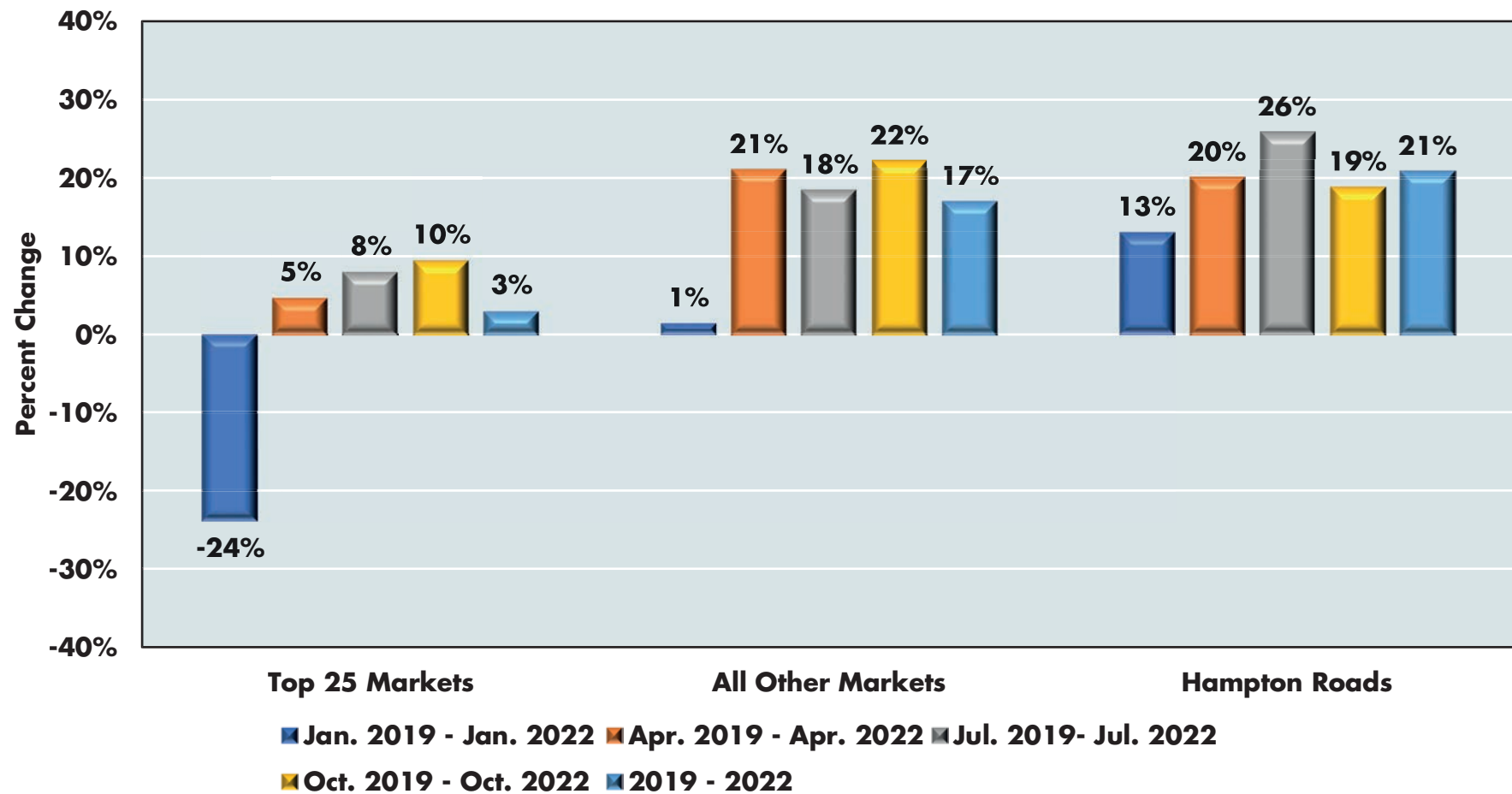
Our second observation is that RevPAR also grew faster in Hampton Roads compared to Virginia or the nation. Incidentally, this was true also for every sub-market in the region. Even though Virginia Beach, for example, observed a 7.7% increase in the supply of rooms, RevPAR grew 15.8% in 2022 when compared with 2019. In other words, Virginia Beach had more rooms, and these were generating higher revenue. The Norfolk-Portsmouth market experienced the greatest increase in rooms sold (6.3%), outpacing the increase in supply (6.1%) and saw its RevPAR increase by 12.9%.

Increases in RevPAR in Hampton Roads, its sub-markets, Virginia, and the nation were primarily due to hotels' ability to charge higher room rates, due to pent-up demand for leisure travel, rather than substantial increases in demand as indicated by rooms sold. Table 1 shows that, in almost every market except for Northern Virginia and the state, Average Daily Rate increased by at least 12.7% while rooms sold increased at most by 6.3% and, in many cases, rooms sold actually declined.

The story of the hotel industry in Hampton Roads is another piece of good news for the regional economy. Tourism brings in "new" money to the region and, by all accounts, hoteliers are outperforming state and national averages. The success of the hotel industry in the aftermath of the COVID-19 pandemic illustrates why it is one of the pillars of the Hampton Roads economy.

GRAPH 12

PERCENT CHANGE IN MONTHLY HOTEL REVENUE FROM 2019-2022
HAMPTON ROADS AND SELECTED MARKETS IN THE UNITED STATES



Source: STR Monthly Trend Reports and Dragas Center for Economic Analysis and Policy, Old Dominion University.

TABLE 1
PERCENT CHANGE IN SELECTED HOTEL PERFORMANCE INDICATORS
HAMPTON ROADS, VIRGINIA, AND THE UNITED STATES
2019-2022

	Hotel Revenue	Revenue per Available Room	Average Daily Rate	Supply of Rooms	Hotel Rooms Sold	Occupancy
USA	11.0%	8.1%	13.6%	2.7%	-2.3%	-4.9%
Virginia	4.2%	3.4%	7.6%	0.8%	-3.2%	-4.0%
Northern Virginia	-17.0%	-10.7%	-1.6%	-7.0%	-15.6%	-9.3%
Hampton Roads	20.8%	17.7%	19.1%	2.6%	1.4%	-1.1%
Chesapeake/Suffolk	23.8%	23.8%	17.9%	0.0%	5.0%	5.0%
Newport News/ Hampton	15.7%	17.0%	18.0%	-1.1%	-1.9%	0.8%
Norfolk/Portsmouth	19.8%	12.9%	12.7%	6.1%	6.3%	0.2%
Virginia Beach	24.7%	15.8%	23.6%	7.7%	0.9%	-6.3%
Williamsburg*	15.5%	17.8%	17.6%	-1.9%	-1.8%	0.2%

Sources: STR Trend Report for December 2022 and Dragas Center for Economic Analysis and Policy, Old Dominion University. *Williamsburg market includes City of Williamsburg and James City County.

A Brief Look at Housing in Hampton Roads

The last two decades have seen changing fortunes for the residential real estate market in Hampton Roads. From the boom of the early 2000s to the bust of the Great Recession, the region has seen real estate fortunes ebb and flow. The long “hangover” of foreclosures from the Great Recession finally evaporated in the latter half of the last decade, and real estate values surged during the pandemic. Now, with higher interest rates, the question is what does 2023 and beyond hold for the residential real estate market in Hampton Roads?

First, let’s provide some context about the interest rate environment. In Graph 13, we present the annual average interest rates for a conforming 30-year fixed rate mortgage from 1972-2022. We present this longer range of data to avoid recency bias, that is, anchoring our perspective on the most recent nadir in interest rates. Graph 13 illustrates two points: (1) home mortgage rates have declined, on average, over the last three decades, and (2) we are moving off the observed low of recent home mortgage rates. The rapid rise in interest rates is a result of the Federal Reserve trying to cool demand and reduce inflation. There is another impact to consider: many homeowners refinanced to get lower mortgage rates in the years prior to the pandemic and in 2020 and 2021. These homeowners may be “locked in” to these low interest rates and, when faced with the choice of selling or staying in a low-rate mortgage, may choose to remain in place. Until interest rates cool, the supply of existing homes entering the market may not be as robust as those buying would hope, maintaining pressure on existing home values.

Graph 14 provides some insight into the composition of sale for single-family residential housing in Hampton Roads. We must caution the reader that having a longer-term perspective is important. If we examined the change in existing single-family homes in Hampton Roads from 2021 to 2022, it would appear that sales are in a proverbial free-fall, declining by approximately 18.0% year-over-year. However, if we draw back, the number of sales in the region in 2022 (28,469), would have been a record in any year except for 2020 and 2021. In fact, the number of existing home sales in 2022 was about 3,700 homes higher than the peak observed prior to the Great Recession.

Yes, sales have slowed, but the pace has remained high relative to the pre-pandemic average.

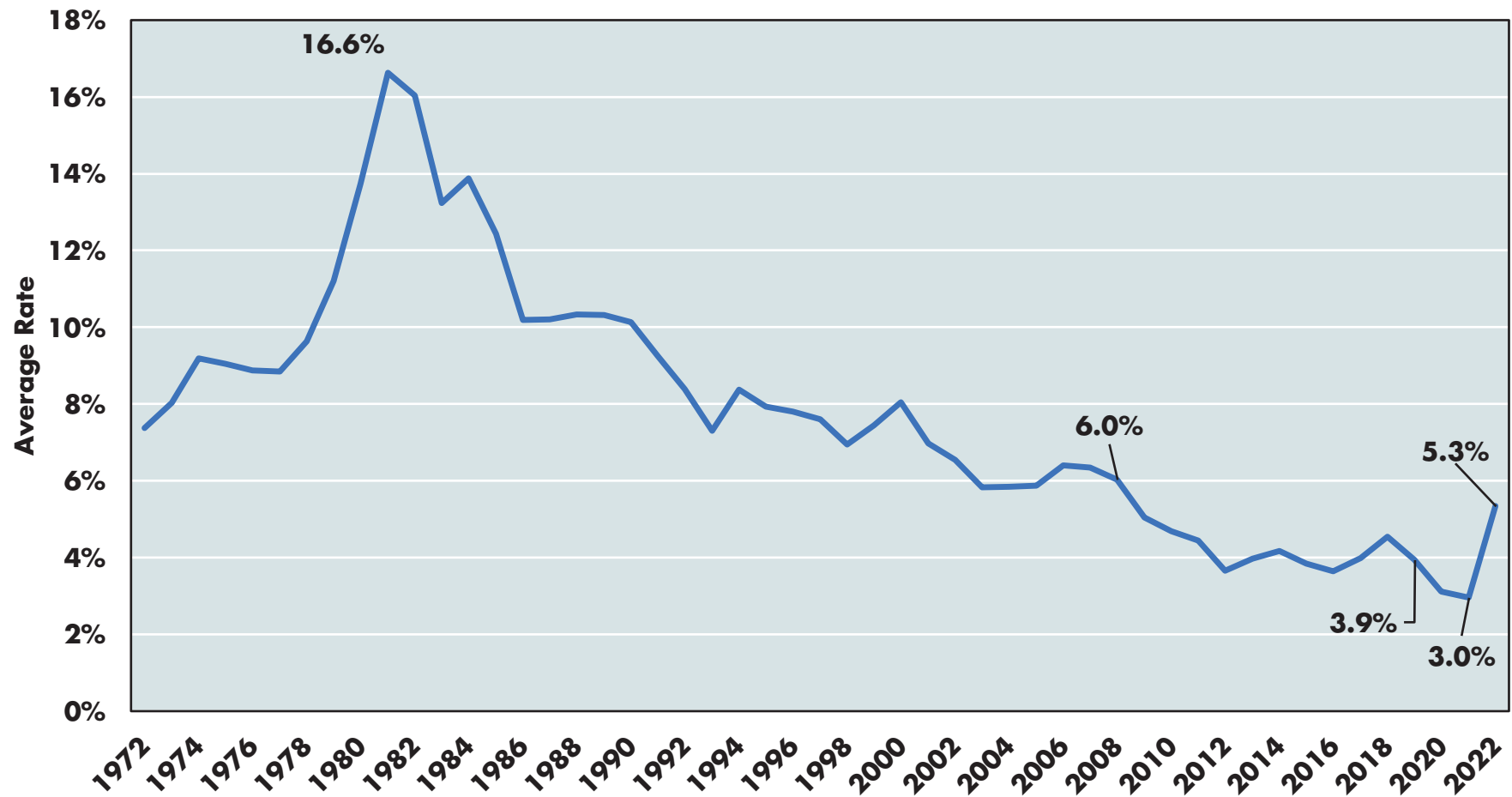
One measure of demand is the number of days that an existing single-family home remains on the market for sale (Graph 15). Prior to the Great Recession, the average number of days on market for an existing home fell to a low of 27 in 2004 before rising to a peak of 102 days in 2011. Over the remainder of the decade, the average number of days on the market steadily fell, reaching 53 days in 2019. With mortgage rates falling to lows at the beginning of the current decade not observed since the early 1970s, home sales increased, and the number of average days on the market fell to 41 in 2020 and then again to 24 in 2021. In 2022, the average days on market for existing homes declined to a record 22 days. However, with the recent rise in mortgage interest rates, demand has cooled (somewhat), and the average number of days on market has increased in 2023. We do not believe that we will return to the previous post-recession peak unless there is a significant change in financial and economic conditions.

With constrained supply and sustained demand, the median sales price of existing homes in Hampton Roads continued to rise in 2022. In 2019, the median sales price was \$234,000, rising to \$255,000 in 2020 and again to \$279,000 in 2021. In 2022, the median sales price of existing homes in the region reached \$300,000, a rise of 7.5% from 2021. Even though mortgage rates are higher in 2023 than in the recent past, the evidence points to a continued rise in median sales prices of existing homes in 2023.

Why are prices increasing when interest rates have risen? The answer is simple: limited supply. There has not been an influx of homes into the single-family market. If we examine the ratio of selling prices to listing prices over the last three years, we observe that the average ratio has hovered around 100. In other words, homes entering the market continue to sell near or above the asking price. This would not occur if demand had slowed significantly, or supply had increased as well. Simply put, even with higher interest rates, there are not a lot of homes around for sale, and buyers continue to compete for the available (but scarce) listings.

GRAPH 13

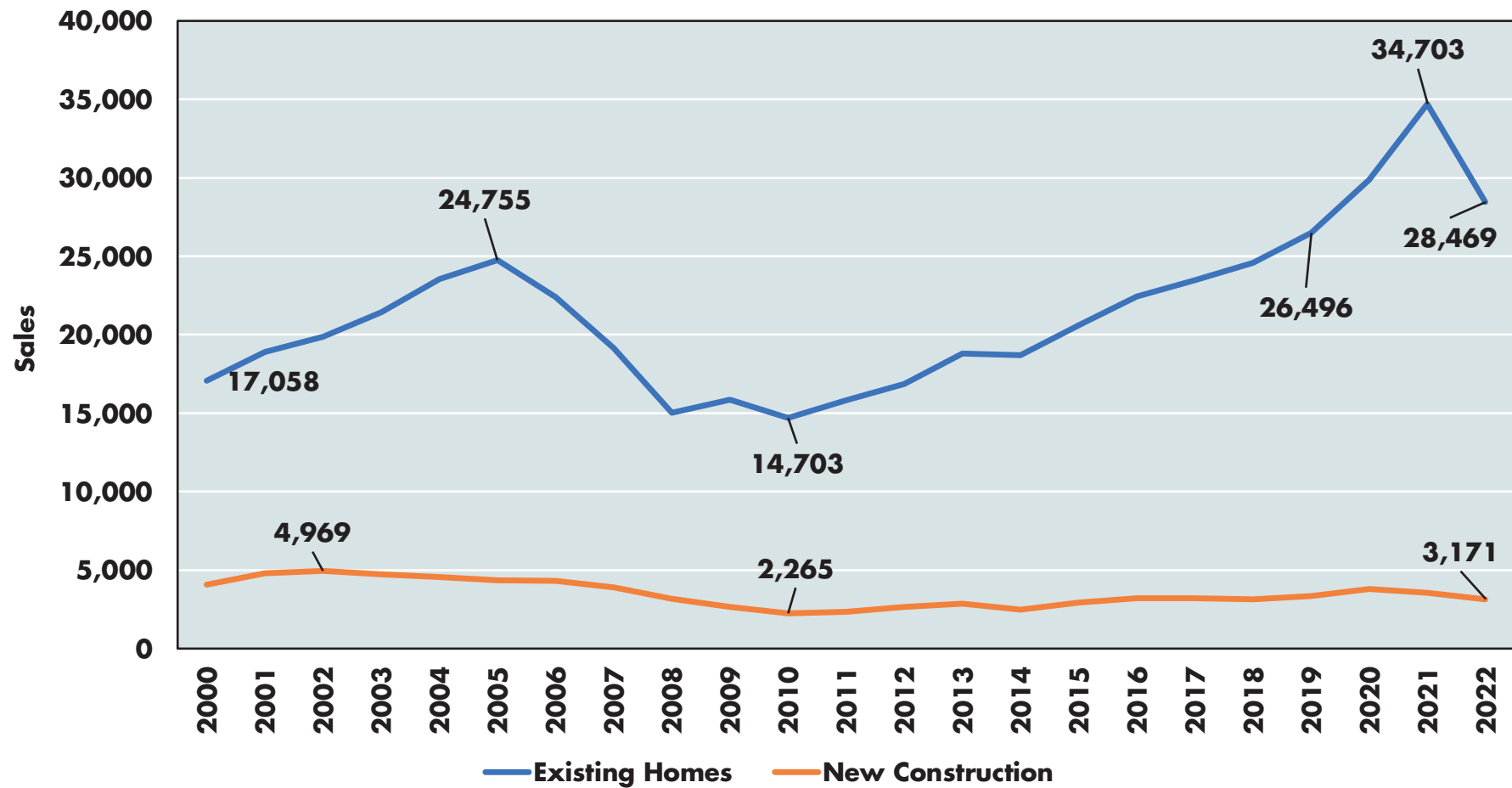
**AVERAGE ANNUAL INTEREST RATE FOR 30-YEAR FIXED HOME MORTGAGE
1972-2022**



Source: Federal Reserve Bank of St. Louis. Average annual rate. Conforming 30-year mortgage.

GRAPH 14

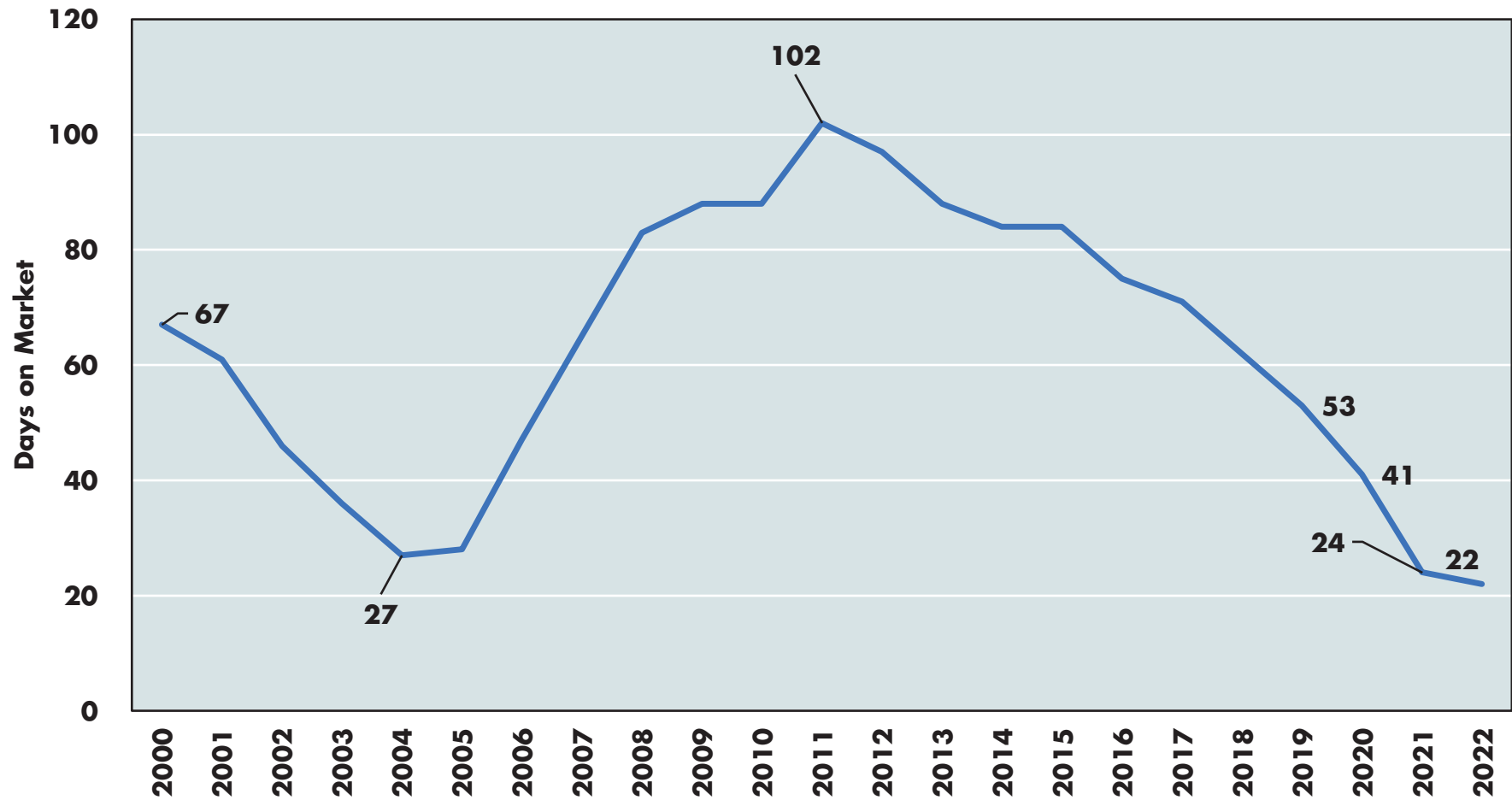
**EXISTING AND NEW CONSTRUCTION HOME SALES
HAMPTON ROADS, 2000-2022**



Source: 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.

GRAPH 15

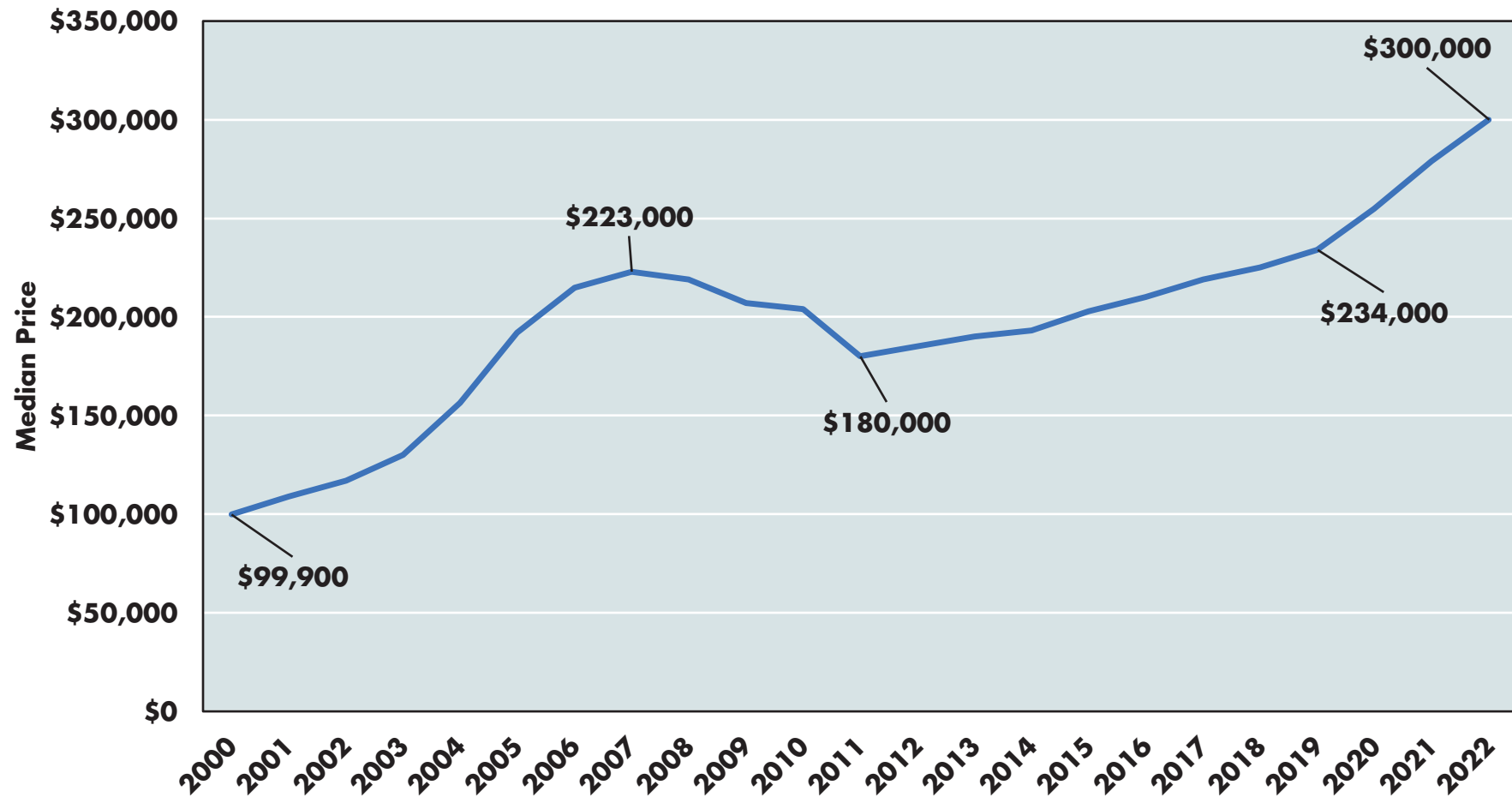
**AVERAGE DAYS ON MARKET FOR EXISTING HOMES FOR SALE
HAMPTON ROADS, 2000-2022**



Source: 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 sales in our region.

GRAPH 16

**MEDIAN SALES PRICE OF EXISTING SINGLE-FAMILY HOMES
HAMPTON ROADS, 2000-2022**



Source: Real Estate Information Network and Old Dominion University Economic Forecasting Project. Information Deemed Reliable But not Guaranteed. Figures reported here represent only those properties that are listed through REIN by its members and may not represent all sales activity in our region.

Final Thoughts

The pillars of the Hampton Roads economy had a good year. Defense spending flowing into the region continued to increase in 2022 and will increase in 2023. Given the discussions in Washington, DC, defense spending is likely to rise again in 2024. More federal dollars flowing into the region is good news for regional economic growth in the short term. Ongoing federal deficits and the national debt level are worrisome, and continued efforts to diversify the regional economy are important to build resilience.

The Port of Virginia continued to build upon the success of 2021 with another record level of cargo and TEU traffic in 2022. The Port successfully navigated the shocks associated with the COVID-19 pandemic and provides fuel for the regional (and state) economic engine. Increasing investments in the Port infrastructure as well as the regional transportation infrastructure is a smart bet that is likely to pay significant dividends for the Port and the economy as a whole.

The hotel industry shone in 2022, with another record year in terms of revenue. Occupancy continued to recover from the pandemic, and hoteliers earned more revenue per available room across the region. The hotel industry continued to outperform the state and nation with regards to the pandemic recovery and looks to have another banner year in 2023.

Now, as we look forward to 2024, the prospect for these pillars remains bright. The challenge for the region is to leverage these pillars to increase growth in the other sectors of the economy. The pillars have shown it is possible, and regional efforts to boost collaboration and investment are underway. Now is the time to lean into these activities to boost growth in and outside the pillars to lift residents' economic fortunes across the region.



The Fourth Pillar: Veterans in Hampton Roads



THE FOURTH PILLAR: VETERANS IN HAMPTON ROADS

"...To care for him who shall have borne the battle and for his widow and his orphan..."

President Abraham Lincoln, 1865

The economy of Hampton Roads is typically regarded as resting on three pillars: national defense, the Port of Virginia, and the hospitality and tourism industry. With an estimated \$25 billion in national defense spending flowing into the region in 2022, national defense policy and spending undoubtedly dominates regional conversations about how to spur economic growth. Yet national defense spending has another impact on Hampton Roads, one that is so woven into our lives, it has become part and parcel of the fabric of the region: the presence of military veterans and retirees.

In 2021, according to the United States Census Bureau, 12.5% of the resident population in Hampton Roads identified themselves as a veteran of military service. Almost 1 in 3 military veterans in the region were military retirees. These military retirees received monthly payments of almost \$200 million or about \$3,000 per retiree per month. Not only does Hampton Roads benefit financially from the presence of military veterans and retirees, but these residents also bring a wealth of skills, experience, and talent to the regional economy.

More than 10,000 service members separate annually from the armed services in Hampton Roads. Retaining these separating veterans is a recruiting and retention effort: some will leave because they want to return home, some will stay with minimal effort because they have already decided to stay in the region, and then there are the uncommitted. Russell Czack, a retired Navy commander who currently heads the Commonwealth's digital shipbuilding effort, noted in 2022 that veterans bring experience and discipline to the workforce, skills that are in high demand by local employers. "You can train somebody to do the actual work that you want them to do," Czack says. "It's a little harder to instill within them the importance of being on time, to work as a team, to be a leader, to take care of other people. These are traits that the military is very good at instilling and training their people."¹

Over 7% of businesses in the region are veteran owned, almost three times the national average. Military veterans between the ages of 18 and 54 are more likely to be actively engaged in the labor force nationally and regionally. In particular, military veterans in Hampton Roads, on average, participate in the labor force at higher rates than their national counterparts. The presence of military veterans and retirees generates billions of dollars of transfer payments and direct expenditures by the federal government in the region. Military veterans and retirees are the fourth pillar of the Hampton Roads economy.

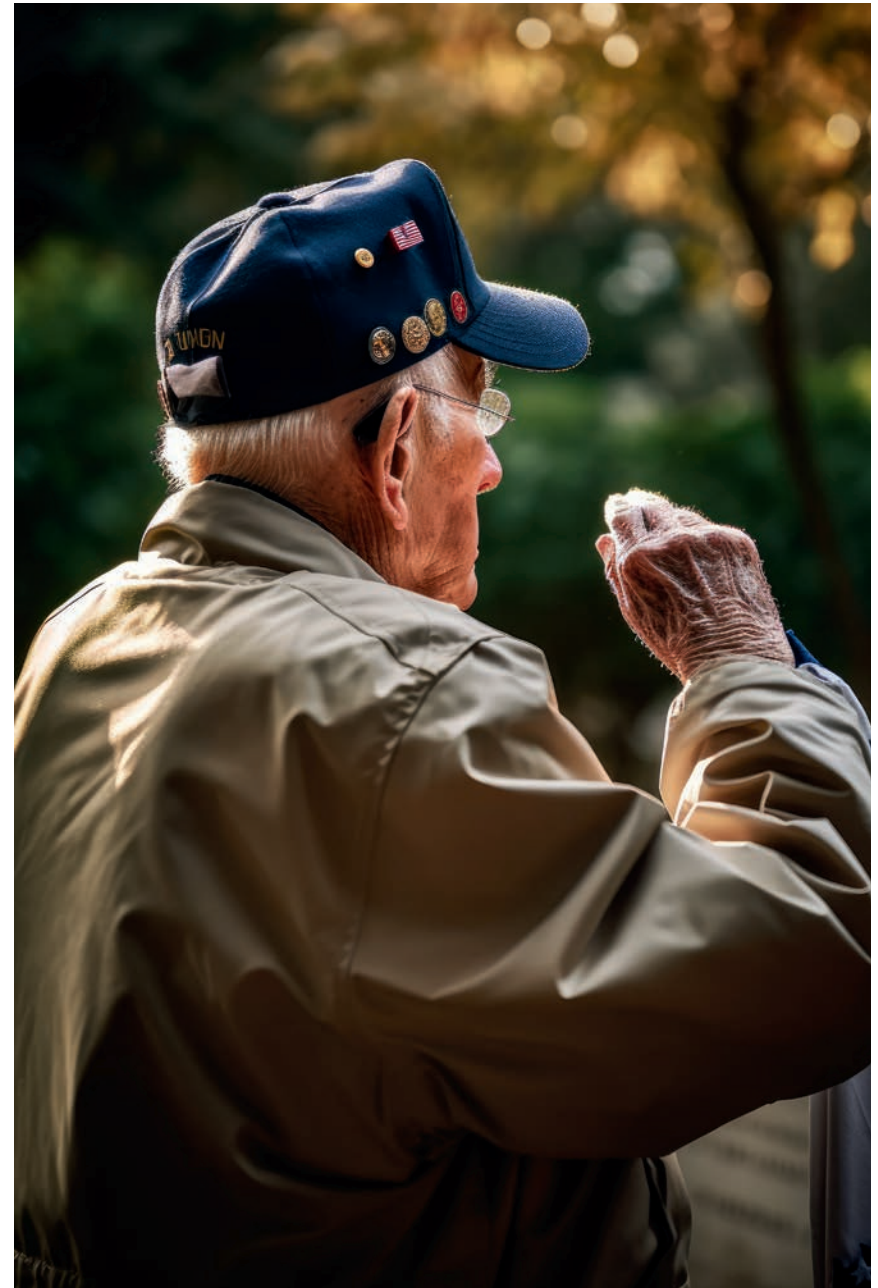
In this chapter, we explore the role of military veterans and retirees in the Hampton Roads economy. We first ask what is a military veteran and what are the differences between veterans and retirees. We then ask who are the military veterans and retirees nationally and in Hampton Roads and explore how Hampton Roads fares when compared to other metropolitan regions across the United States. We delve into retiree and disability compensation payments and highlight how much money flows into Hampton Roads due to the presence of these individuals. The last section of the chapter offers final thoughts on the role of military veterans and retirees in Hampton Roads

¹ Courtney Mabeus-Brown, "Next stop – civilian life." *Virginia Business* (April 28, 2022).

What is a veteran? The answer can be simple or complex, depending on whether the individual in question was on active duty, activated from the Reserve or National Guard, or injured while on active duty for training. The term “veteran” is defined by Title 38 U.S.C. § 101 (2) which states: “The term ‘veteran’ means a person who served in the active military, naval, or air service, and who was discharged or released therefrom under conditions other than dishonorable.”² Title 38 U.S.C. § 101 (21) notes that active-duty service includes: (1) full-time duty in the Armed Forces, other than active duty for training; (2) full-time duty (other than for training purposes) as a commissioned officer of the Regular or Reserve Corps of the Public Health Service; (3) full-time duty as a commissioned officer of the National Oceanic and Atmospheric Administration or its predecessor organization the Coast and Geodetic Survey service as a cadet at the United States Military, Air Force, or Coast Guard Academy, or as a midshipman at the United States Naval Academy; and (4) authorized travel to or from such duty or service. Title 38 U.S.C. § 101(24) defines “active military, naval, or air service” to include: (1) active duty, (2) any period of active duty for training during which the individual concerned was disabled or died from a disease or injury incurred or aggravated in line of duty; and (3) any period of inactive-duty training during which the individual concerned was disabled or died. The United States Census Bureau asks whether an individual has ever served on active duty in the U.S. Armed Forces to identify veterans in the population.³

² For more information and the complete U.S. code, see <https://www.law.cornell.edu/uscode/text/38/101>.

³ <https://www.census.gov/topics/population/veterans/about/faq.html>



The Shrinking U.S. Veteran Population

The size of the veteran population in the United States is directly tied to the size of the armed forces. In 2000, there were approximately 24.7 million veterans in the United States, a number that declined to 18.4 million in 2022. The decline in the veteran population is not surprising given the increasing age of veterans from World War II as well as the wars in Korea and Vietnam. With the transition to the all-volunteer force in the aftermath of the Vietnam War and the drawdown in forces following the end of the Cold War, the overall size of the active-duty force is significantly smaller than the past.

More recent conflicts, including the first Gulf War (1990-1991), the war in Iraq (2003-2011), and the war in Afghanistan (2001-2021), did not result in an appreciable increase in the size of the active-duty force like World War II, Korea, or Vietnam. From 2000 to 2022, the number of active-duty military service members has hovered between 1.3 and 1.4 million, down from the post-Vietnam peak of 2.2 million in 1987.⁴ While reservists and members of the National Guard were activated during these conflicts, these activations did not increase the number of veterans on the scale, for example, of the Vietnam war. The smaller size of the active-duty force also means that the veteran population in the United States will decline over the coming decades. By 2050, the number of veterans is projected to decline to approximately 11.9 million.

Graph 2 illustrates the distribution of the veteran population by period of armed conflict for 2000 and 2021. In 2000, more than 1 in 5 veterans (21.7%) had served in World War II. By 2021, World War II veterans only comprised 2.2% of the entire veteran population. Likewise, the proportion of Korean War veterans dropped from 15.3% of the veteran population in 2000 to 6.6% of the population in 2021. As of 2021, Vietnam era veterans comprised the largest slice of the veteran population (34.9%), but this share will dwindle over the coming years. In 2021, more than 1 in 5 veterans had served in the first Gulf War, up from 1 in 10 in 2000. Veterans of the Iraq and Afghanistan eras accounted for 22.4% of the veteran population in 2021.

Nationally, the veteran population is aging (Graph 3). In 2000, about 1 in 4 veterans were between the ages of 17 and 44, about 4 in 10 veterans were between the ages of 45 and 64, and 3.6 in 10 veterans were 65 years and older. By 2021, 1 in 5 veterans were between the ages of 17 and 44, 1 in 3 veterans were between the ages of 45 and 64, and almost 1 in 2 veterans were 65 years and older. When compared to the civilian population, the aging of the veteran population becomes more apparent. In 2021, roughly 1 in 5 adults (21.6%) of the population in the nation was 65 years old and older, about less than half the proportion of veterans of the same age.

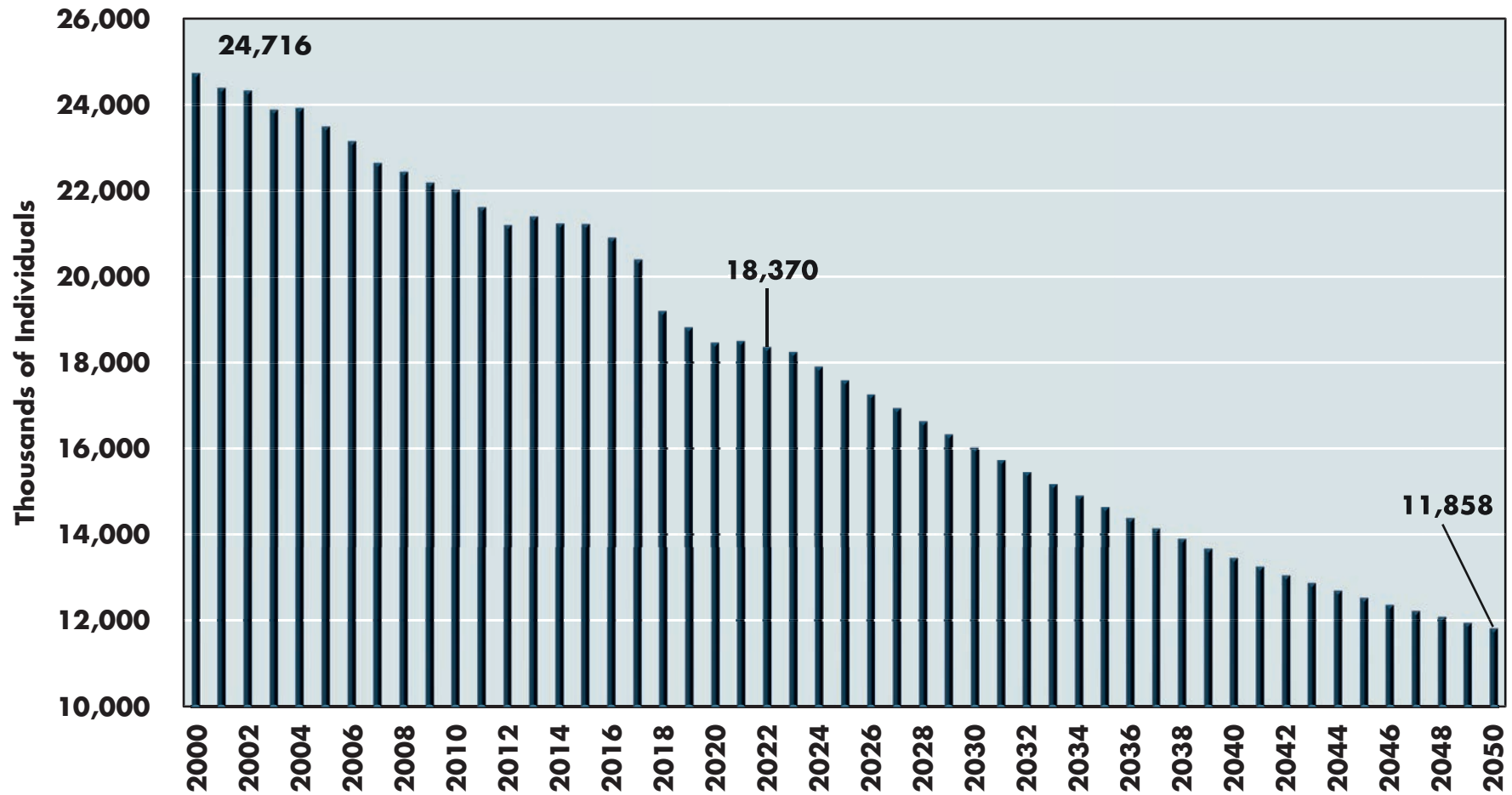
The gender composition of the veteran population is changing as well. As illustrated in Graph 4, the proportion of women in the veteran population has increased over the last two decades and is projected to increase over the coming years. Almost 1 in 10 veterans were women in 2021, a percentage that is projected to increase to almost 1 in 5 by 2050. The changing composition of the veteran population requires a shift in how services are provided to these individuals. A “one-size-fits-all” model will no longer work as the proportion of veterans who are women (and who are older) grows over time. The challenge for the nation is to adapt its veteran services to meet the needs of this changing population.

As the veteran population shrinks relative to the total population of the nation, the connections between those who serve and who are served have grown more tenuous. In 1980, according to the U.S. Census Bureau, 37% of the male population and less than 1% of the female population ages 18 and older nationally were veterans. By 2021, the proportion of male veterans had fallen to 13.4% while the proportion of female veterans remained relatively the same at 1.2%. In Congress, the number of individuals who served in the armed forces has declined as well, raising questions about whether decision makers have enough perspective on the lives of armed services members when making decisions about compensation, benefits, and other concerns.

⁴ Defense Manpower Data Center (DMDC), retrieved from: <https://usafacts.org/state-of-the-union/defense/> Estimate of total active-duty military excludes Coast Guard.

GRAPH 1

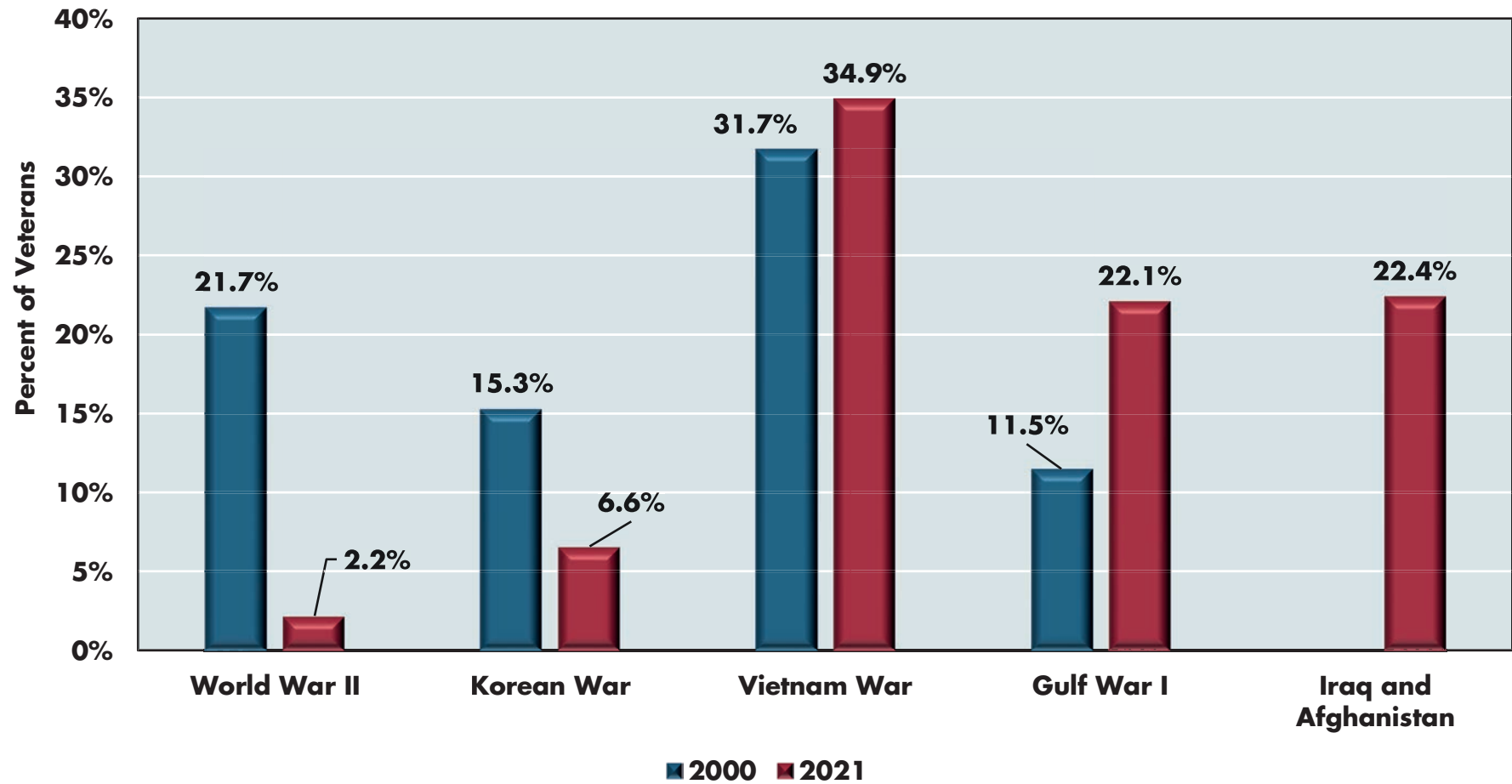
**HISTORICAL AND PROJECTED VETERAN POPULATION (IN THOUSANDS)
UNITED STATES, 2000-2050**



Source: FRED Population Level - Total Veterans, 18 Years and over, Thousands of Persons, Annual, Not Seasonally Adjusted (LNU00049526), Veterans Affairs VetPop 2020 Model.

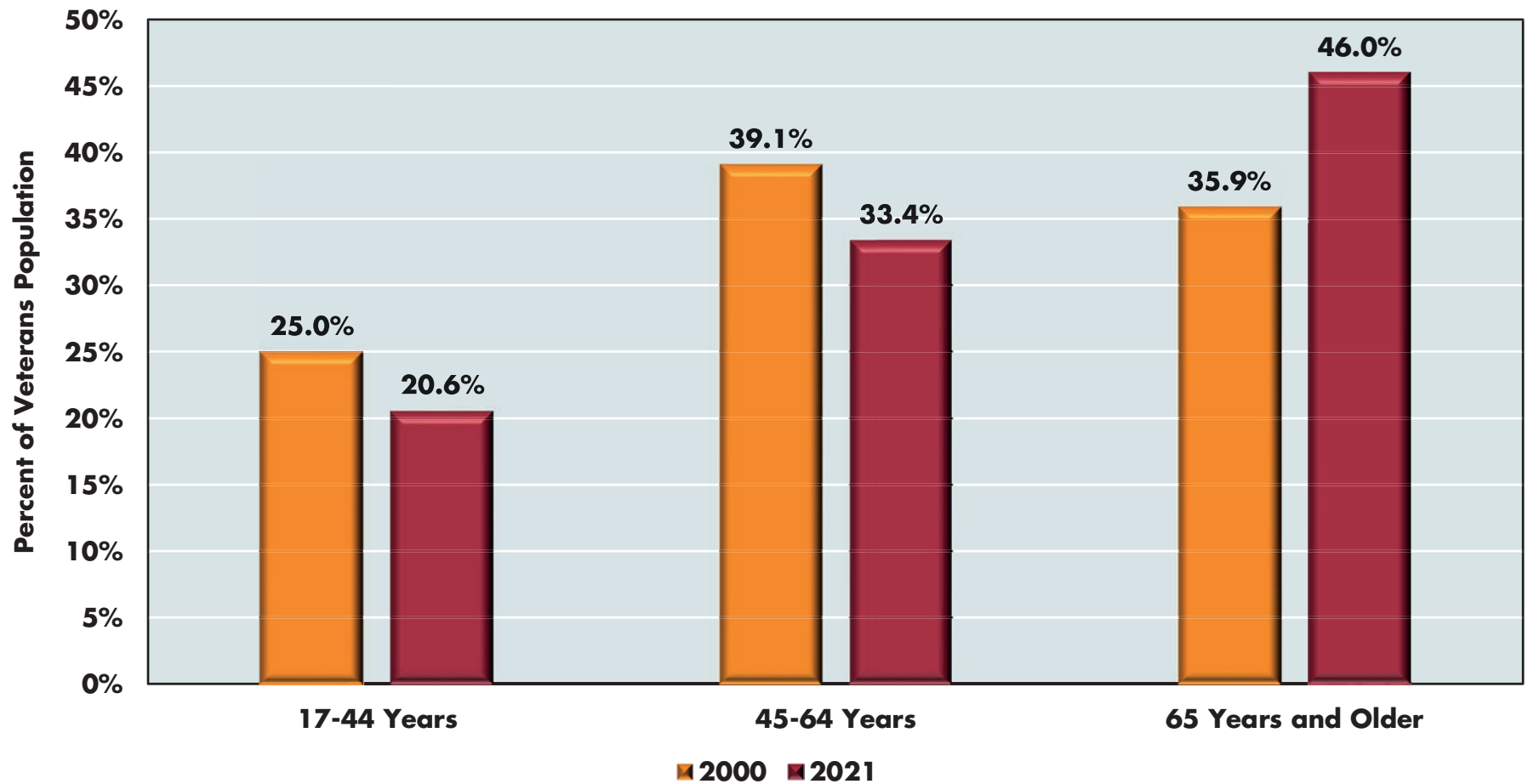
GRAPH 2

**VETERAN POPULATION BY PERIOD OF SERVICE
UNITED STATES, 2000 AND 2021**



Source: U.S. Census Bureau. 2000 reflects 2000 Decennial Census and estimates for 2021 reflect the American Community Survey 5-year estimates, 2017-2021. The total percent of veterans exceeds 100% as service members can serve in more than one armed conflict period.

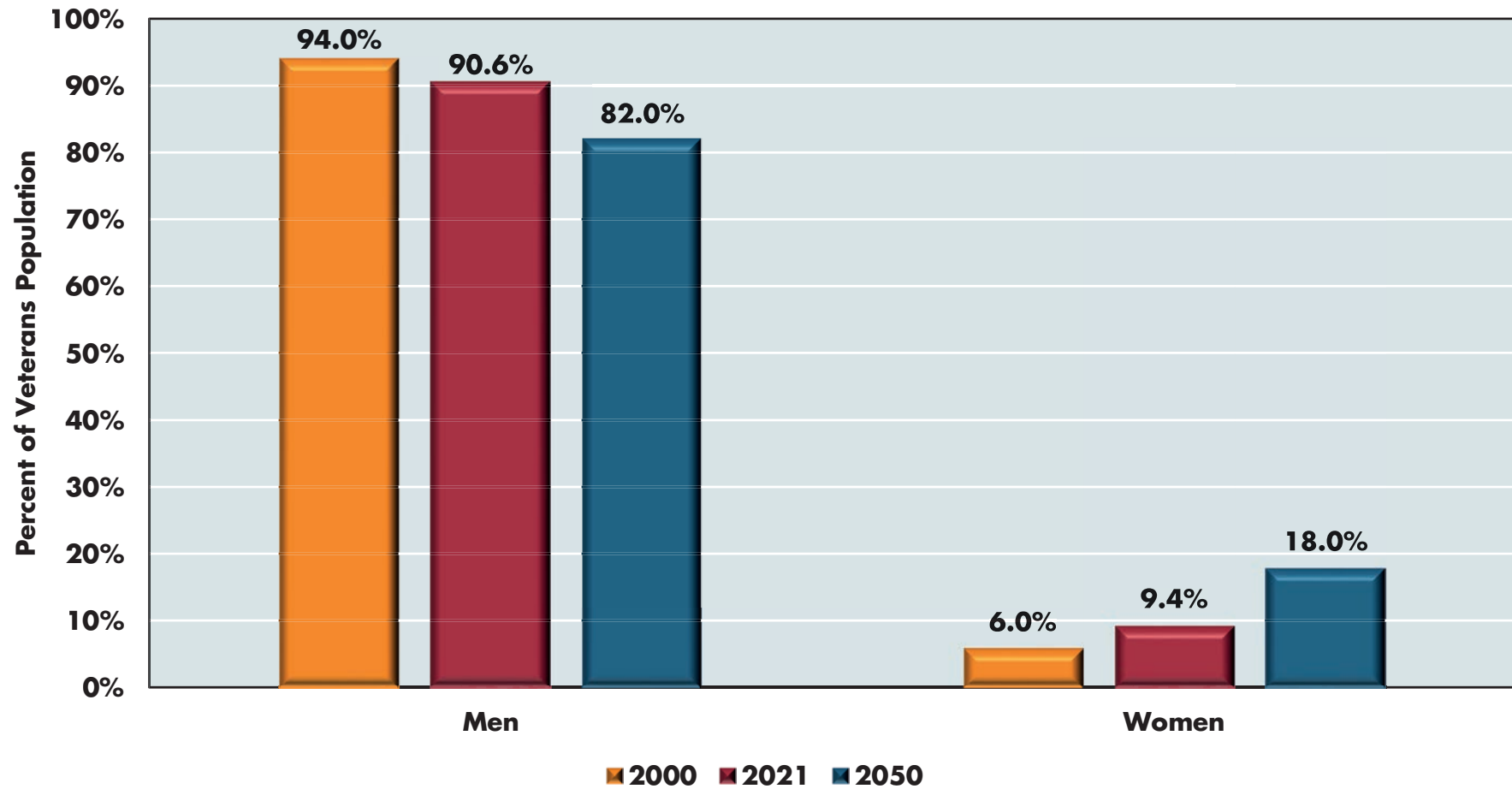
GRAPH 3
AGE DISTRIBUTION OF THE VETERAN POPULATION
UNITED STATES, 2000 AND 2021



Source: U.S. Census Bureau and Veteran Affairs VetPop Model 2020. 2000 reflects 2000 Decennial Census and estimates for 2021 reflect the American Community Survey 5-year estimates, 2017-2021.

GRAPH 4

**GENDER DISTRIBUTION OF THE VETERAN POPULATION
UNITED STATES, 2000 AND 2021**



Source: U.S. Census Bureau and Veteran Affairs VetPop Model 2020. 2000 reflects 2000 Decennial Census and estimates for 2021 reflect the American Community Survey 5-year estimates, 2017-2021.

Post-Service Employment: Veterans in the Workforce

Post-separation veterans often find their skills and experience in demand in the civilian workplace. While some military skill sets may not directly translate to civilian life, the rigors of military life often produce individuals who are adaptable, disciplined, and willing to work. A 2019 Pew Research Center survey found the majority of post-9/11 veterans said the skills and training gained from their prior military experience were useful in transitioning to civilian employment.⁵ There were, however, significant differences between commissioned officers and those who were non-commissioned officers or enlisted. While 78% of commissioned officers responded that military service was useful in finding a civilian job, 59% of non-commissioned officers and 54% of enlisted veterans responded in a similar fashion. Only about 1 in 10 respondents to the survey stated that serving in the armed forces hindered their ability to find gainful employment.

When we examine the unemployment rates of the veteran and the non-veteran populations, evidence supports the argument that military service provides a competitive advantage in the workforce. Graph 5 illustrates the simple fact that the annual unemployment rate for veterans is below that of the non-veteran population from 2000 to 2022. Even during periods of economic distress, such as the Great Recession of 2007-2009 or the COVID-19 economic shock of 2020, veterans' unemployment rate remained below that of the non-veteran population.

We must first recall that the unemployment rate is equal to the ratio of the number of unemployed to the number of individuals in the labor force. If there are fewer people participating in the labor force because those who are unemployed exit the labor force, then the unemployment rate will fall. Likewise, if there are fewer unemployed and the labor force is the same or growing, the unemployment rate will fall. Understanding whether the unemployment rate is driven by fewer unemployed in the labor force or a smaller labor force is crucial for our discussion.

There are two distinct possibilities for why the veteran unemployment rate is lower than the non-veteran population. First, veterans participate in the labor force at similar rates as the non-veteran population and veterans have distinct advantages that render them more employable. Second, veterans participate in the labor force at lower rates than the non-veteran population; but, for those who participate, unemployment rates are lower.

At first glance, it might seem that veterans' participation in the labor force is lower than non-veterans'; that is, a smaller percentage of the veteran population is gainfully employed or looking for employment than the non-veteran population. In 2000, 69.3% of the non-veteran population ages 18 and older and 59.0% of the veteran population participated in the labor force. By 2022, non-veteran participation had fallen to 64.7% while labor force participation by the veteran population had declined to 48.0%. One might conclude that the veteran population's unemployment rate was lower because fewer veterans were working or actively engaged in looking for work.

In Graph 7, we explore labor force participation among veterans by gender. Women veterans have a much higher labor force participation rate than their male counterparts. In 2000, women veterans' labor force participation was 8.1 percentage points higher than male veterans. By 2022, the difference between women and men veteran labor force participation rates had climbed to 12.1%. Why? There are more male veterans than female veterans, and the male veterans are relatively older than the female veterans. As the male veterans have aged relative to the female veterans, their labor force participation rates have declined at a faster rate than those for women veterans.

When we compare the age distribution of the veteran and non-veteran population, we can observe how the age composition of the veteran population drives down overall labor force participation rates. In 2021, approximately 49.2% of veterans were 65 years and older, compared to just 18.7% of the non-veteran adult population in the United States. Approximately half of the veteran population (50.8%) was between the ages of 18 and 64, far below the 81.3% of the non-veteran adult population of working age group.

⁵ Ruth Igielnik, "Key Findings about America's military veterans," Pew Research Center (November 7, 2019). Available at: <https://www.pewresearch.org/short-reads/2019/11/07/key-findings-about-americas-military-veterans/>

Proportionally speaking, there are fewer veterans of working age, so labor force participation rates are lower for the veteran population.

When we examine the labor force participation rates for the working age population (18 to 64), a different story emerges from the data. In 2022, the estimated labor force participation rates for veterans and non-veterans ages 18 to 64 were roughly the same, with 76.2% of non-veterans in the labor force compared to 76.3% of veterans. When we draw back to examine the entire data series from 2009 to 2022, veterans' labor force participation was 0.2 percentage points higher than non-veterans' labor force participation.

To further illustrate our point that an aging veteran population drives aggregate labor force participation lower, we examine labor force participation for the veteran and non-veteran population ages 65 and older (Graph 10). While non-veteran labor force participation rates have climbed from 2009 to 2022, veteran labor force participation rates for this group have fallen over the same period. In 2022, for those 65 and older, non-veteran labor force participation was 19.9%, 4.6 percentage points higher than the veteran labor force participation rate of 15.3%. Further, labor force participation rates for those who are 65 years or older, veterans or non-veterans, are much lower (less than 21%) compared to those who are between the ages of 18 and 64. Their participation rates are higher than 73.9%. Given that about one-half of veterans are 65 and older, it becomes readily apparent that this group is driving the overall labor force participation rate lower for the overall veteran population and that younger veterans participate in the labor force at the same (or higher) rate when compared to the non-veteran population.

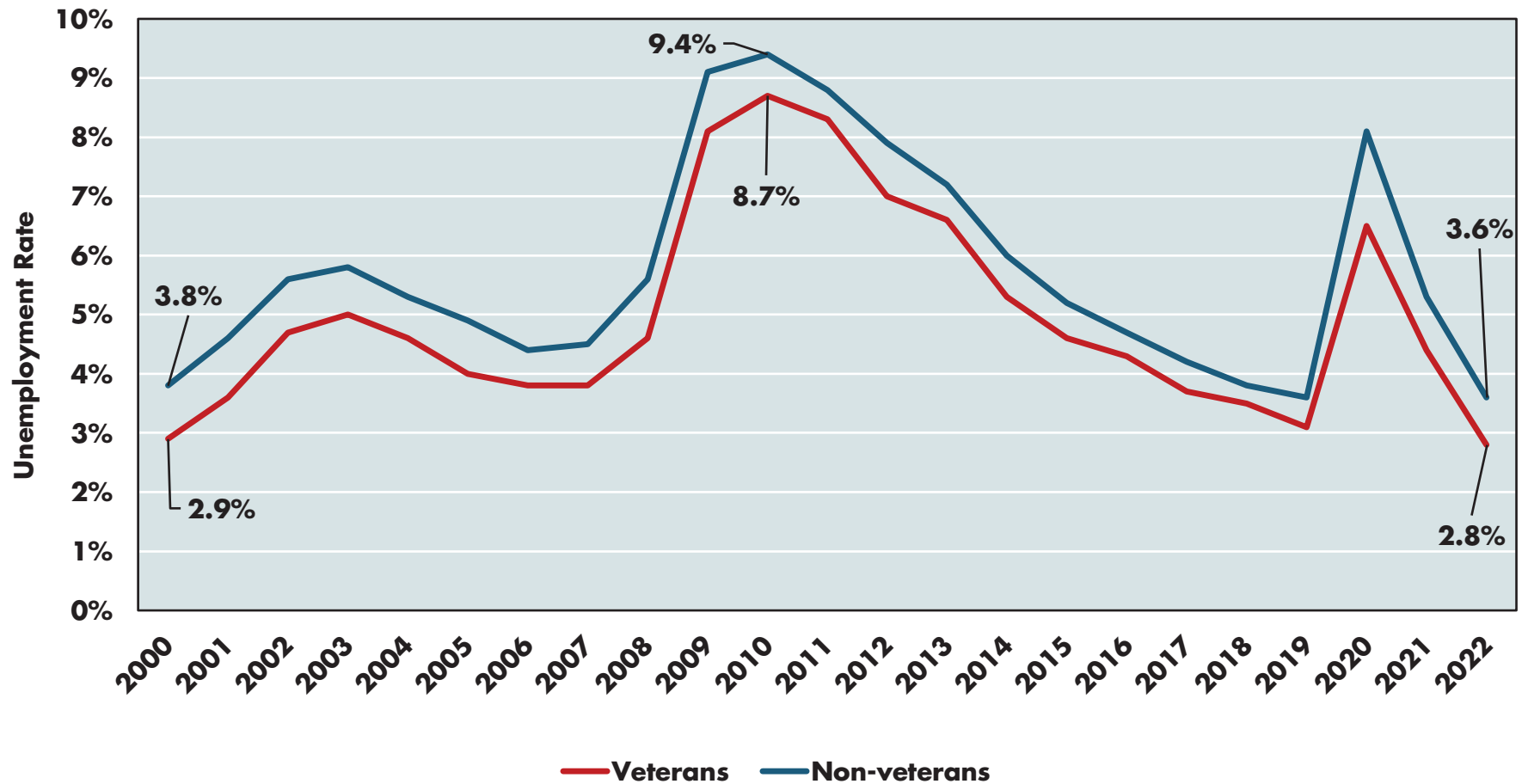
Another factor contributing to the disparities in labor force participation rates is that veterans are more likely to have a disability compared to non-veterans. Data from the U.S. Census Bureau American Community Survey (ACS) 5-year estimates for 2017 to 2021 shows that approximately 29.5% of veterans reported having a disability, compared to 14.1% of non-veterans. The higher share of disabled veterans compared to non-veterans means fewer veterans are physically able to participate in the labor force.

Finally, veterans are more likely to be enrolled in school during their prime working age years compared to the non-veteran population.⁶ Veterans are more likely to be in school during their prime working age years because they were often still in military service when the average non-veteran had already graduated. The education benefits available to veterans are also likely to be a factor. Education benefits for veterans, such as the GI Bill, are more generous than most education benefit programs available to the non-veteran population.



⁶ <https://www.brookings.edu/blog/up-front/2019/10/31/veterans-are-engaged-in-the-labor-force-and-in-the-classroom/>

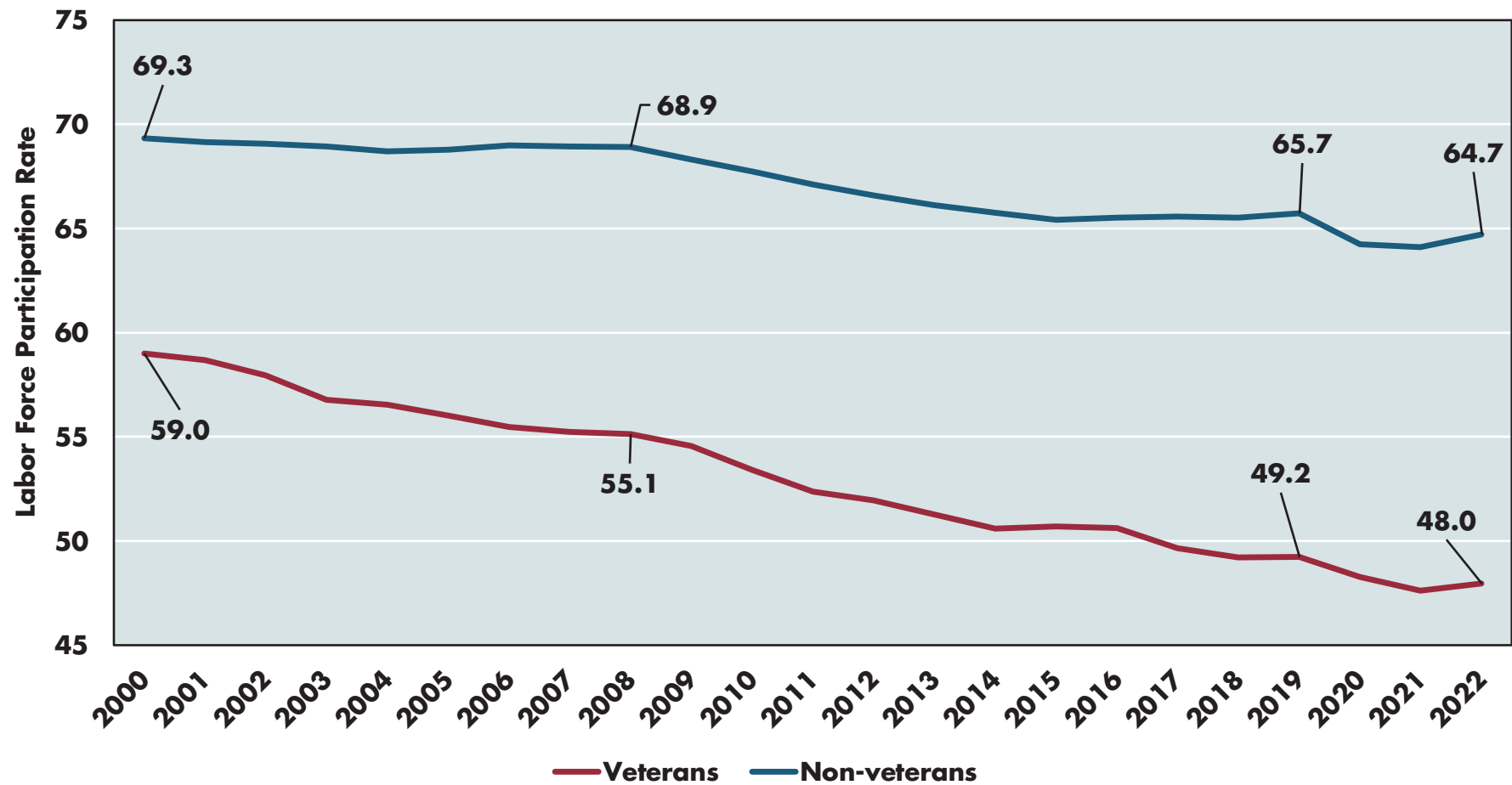
GRAPH 5
ANNUAL UNEMPLOYMENT RATE BY VETERAN STATUS
UNITED STATES, 2000-2022



Source: Bureau of Labor Statistics, Employment Situation of Veterans Summary, various years.

GRAPH 6

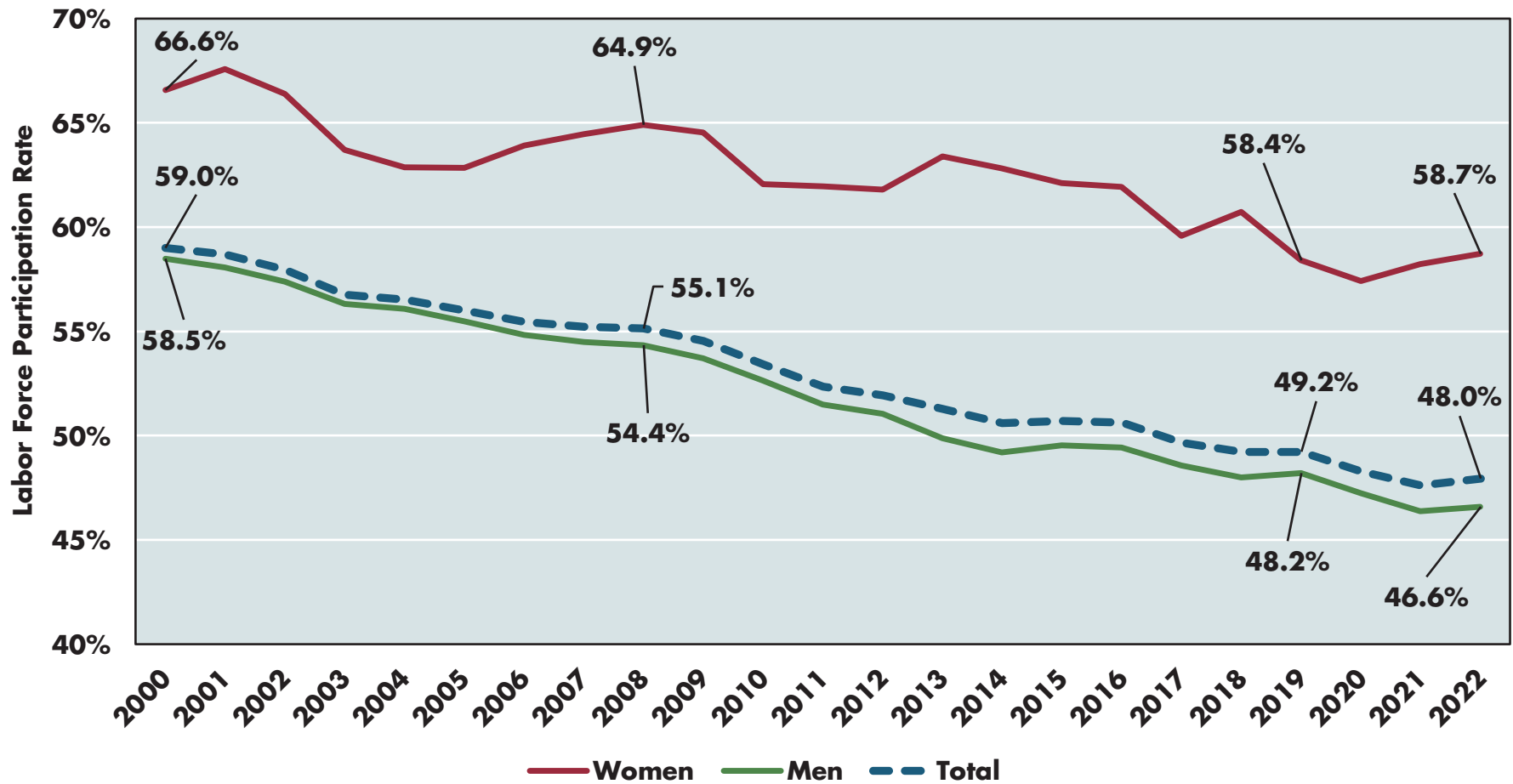
**LABOR FORCE PARTICIPATION RATE BY VETERAN STATUS
UNITED STATES, 2000-2022**



Sources: Labor Force Participation Rate – Total Veterans, 18 Years and Older. Bureau of Labor Statistics, Current Population Survey (CPS). Retrieved from FRED (LNU01349526).

GRAPH 7

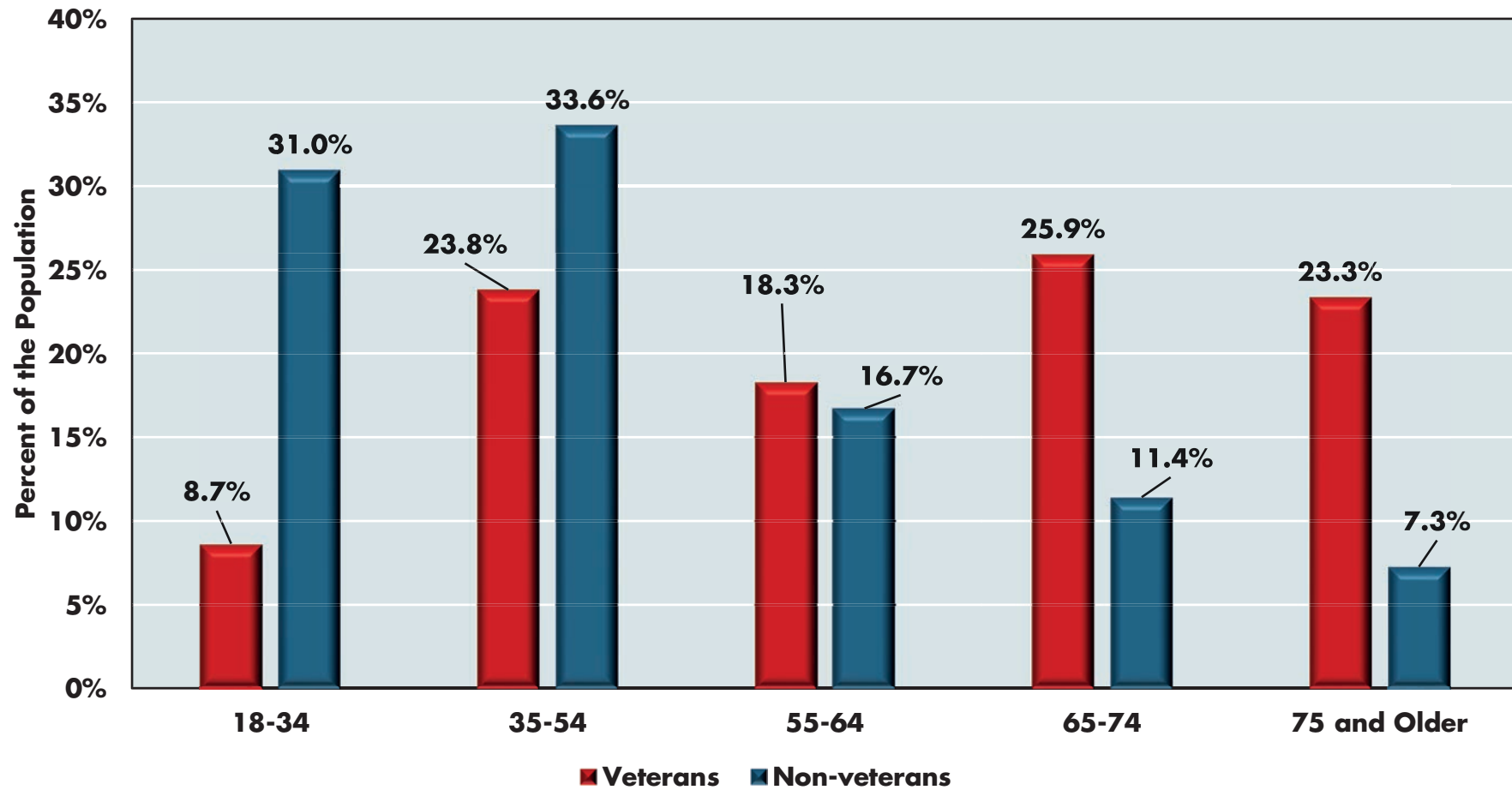
VETERAN LABOR FORCE PARTICIPATION RATES BY GENDER
UNITED STATES, 2000-2022



Source: Labor Force Participation Rates, 18 Years and Older. Bureau of Labor Statistics, Current Population Survey (CPS). Retrieved from FRED (LNU01349526, LNU01349527, LNU01349528).

GRAPH 8

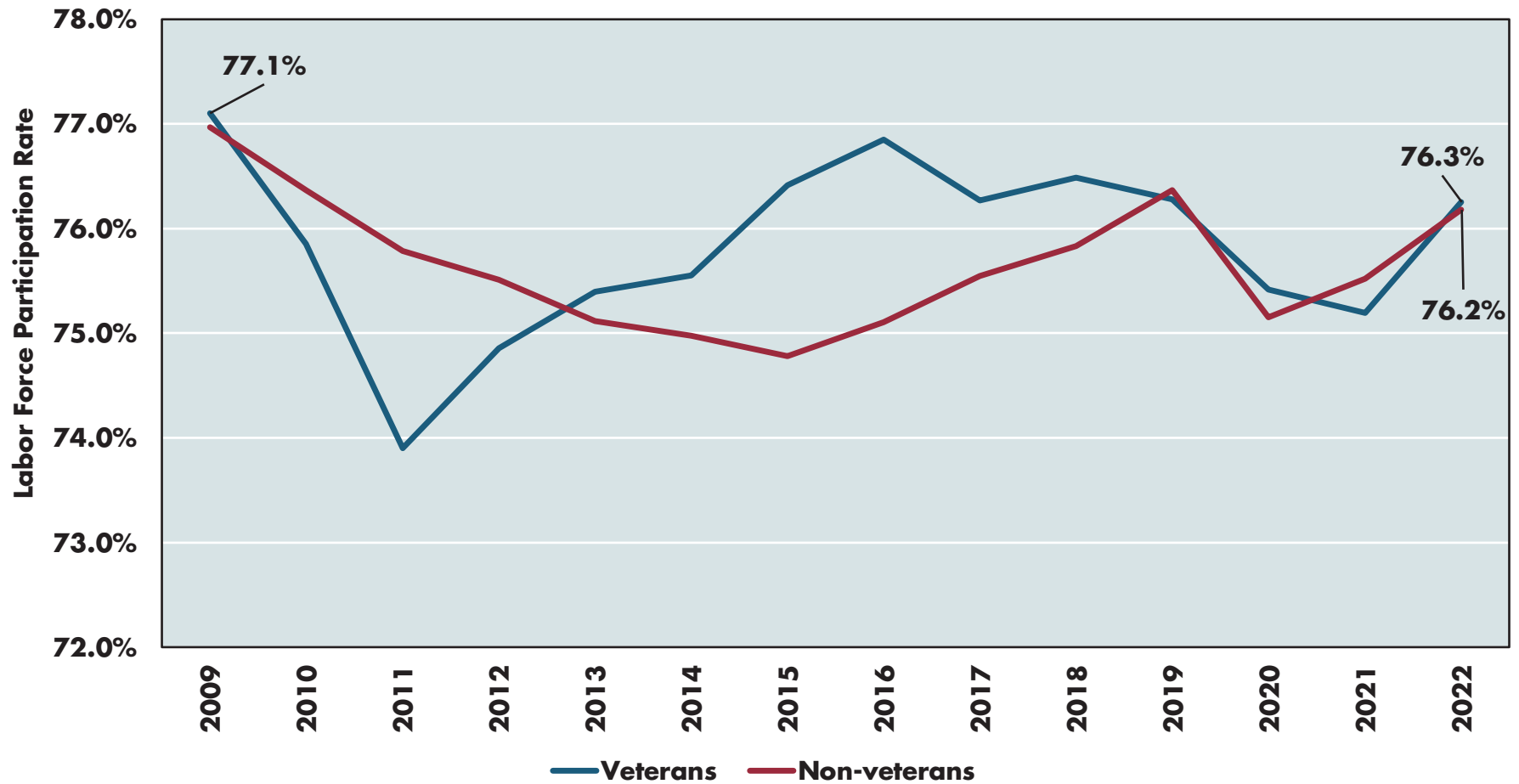
**PERCENT OF POPULATION BY AGE GROUP AND VETERAN STATUS
UNITED STATES, 2021**



Source: U.S. Census Bureau American Community Survey 5-year estimates, 2017-2021.

GRAPH 9

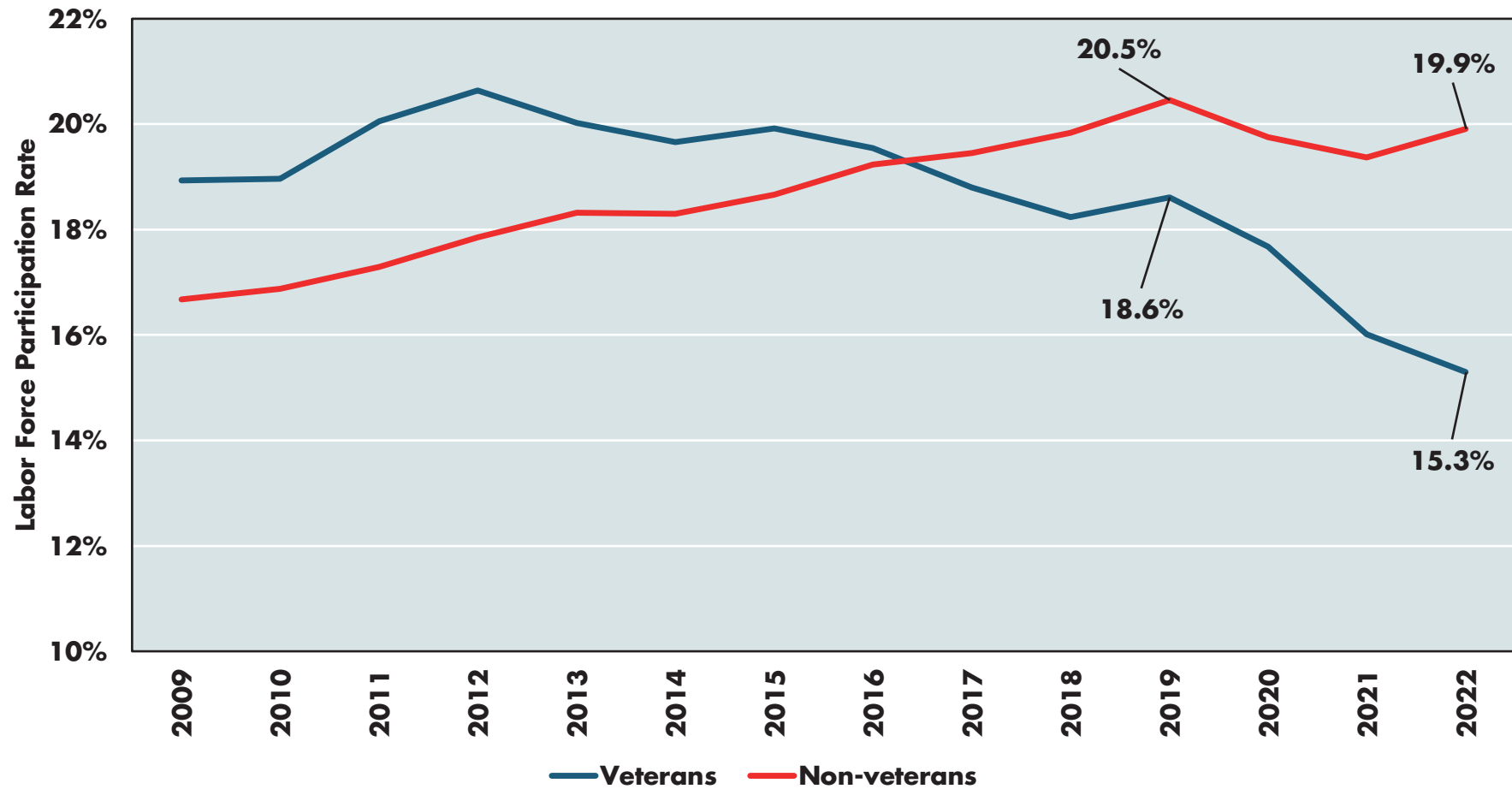
**LABOR FORCE PARTICIPATION RATES BY VETERAN STATUS, AGES 18 TO 64
UNITED STATES, 2009-2022**



Source: Bureau of Labor Statistics, Current Population Survey (CPS).

GRAPH 10

LABOR FORCE PARTICIPATION RATE (AGES 65 AND OVER) BY VETERAN STATUS
UNITED STATES, 2009-2022



Sources: Bureau of Labor Statistics, Current Population Survey (CPS).

Veterans Benefits: Rising Budgets Despite a Shrinking Number of Recipients

Once separated from active-duty service, veterans and their families may be eligible for healthcare services and a variety of benefit programs administered by the U.S. Department of Veterans Affairs. Veterans Affairs includes the Veterans Health Administration, the largest integrated healthcare system in the nation providing healthcare services to service members, veterans, and their dependents, and the Veterans Benefits Administration (VBA), which provides financial and other forms of assistance to veterans and their families. Program eligibility is often determined by type and length of service. Table 1 shows the number of recipients and total expenditures in fiscal year 2022 for each of the benefit programs available to veterans under the Veterans Benefit Administration.

In Fiscal Year 2022, Veterans Benefit Administration (VBA) expenditures totaled \$153.64 billion, with disability compensation accounting for \$135.3 billion (88.1%) of the total expenditures. Disability compensation provides a monthly benefit to eligible veterans with a service-connected disability. The monthly benefit amount is determined by the veteran's service-connected disability rating and the number of dependents. As of December 2022, for example, the monthly benefit for a veteran with no dependents and 30% service-connected disability rating is \$508⁷ (Table 2). A veteran with no dependents and a service-connected disability rating of 100% would receive an estimated monthly benefit of \$3,622.



⁷ <https://www.va.gov/disability/compensation-rates/veteran-rates/>

TABLE 1

**VETERANS BENEFITS ADMINISTRATION BENEFIT PROGRAMS
NOMINAL EXPENDITURES AND TOTAL RECIPIENTS, FY 2022**

Benefit Program	Definition	Total Recipients	Total Expenditures (Millions)
Pension & Fiduciary	Needs-based pension plan available to eligible wartime veterans and their survivors. Fiduciary program provides oversight for those unable to manage benefits on their own.	407,782	\$4,436
Disability Compensation	Monthly tax-free payment for disabilities incurred or aggravated during active service. Payment is determined by the veteran's service-connected disability rating. Program includes payments to surviving spouses and dependents.	5,894,585	\$135,296
Insurance	Life insurance for service members, their families and veterans who are unable to purchase commercial insurance at the standard healthy rate.	5,586,174	\$135
Education	Educational resources for eligible veterans, their dependents, service members, and reservists. Includes monthly payments for tuition, educational costs, and a monthly housing allowance.	834,460	\$10,399
Veterans Readiness & Employment	Assists veterans with a service-connected disability in finding and maintaining stable employment and maximizing independence in their daily lives.	124,437	\$1,471
Home Loan Guaranty	VA home loans to buy, refinance, or adapt a home available to veterans, surviving spouses, reserves, and active-duty personnel.	746,091	\$1,905

Source: Veterans Benefits Administration Annual Benefits Report, Fiscal Year 2022. Home loan recipients reflect the number of loans guaranteed and insurance recipients reflect the total number of lives insured.

TABLE 2	
DISABILITY COMPENSATION RATES VETERANS WITH NO DEPENDENTS, 2023	
Disability Rating	Monthly Base Payment
10%	\$166
20%	\$328
30%	\$508
40%	\$732
50%	\$1,042
60%	\$1,320
70%	\$1,663
80%	\$1,933
90%	\$2,172
100%	\$3,622
Source: U.S. Department of Veterans Affairs. Monthly Payment increases with dependents if the veteran's service-connected disability rating is 30% or above.	

While the veteran population has declined over the past two decades, the same cannot be said for the Department of Veteran Affairs (VA) expenditures. As illustrated in Table 3, from 2010 to 2022, the veteran population decreased by 17.9% while VA inflation-adjusted expenditures rose by approximately 83.0%. Expanded eligibility for the Disability Compensation program, coupled with the wounds and trauma of veterans of the wars in Iraq and Afghanistan, drove program costs higher. In FY 2018, nominal Disability Compensation program expenditures were \$77 billion, more than federal government spending on either the Supplemental Nutrition Assistance Program (SNAP) or the Earned Income Tax Credit (EITC) and more than half as much as spending on Social Security Disability Insurance (SSDI).⁸ Given that the United States has sent these veterans in harm's way, there is an explicit obligation to care for them when they return home.

TABLE 3			
DEPARTMENT OF VETERANS AFFAIRS TOTAL EXPENDITURES UNITED STATES, FY 2010 AND FY 2022 THOUSANDS OF 2021 DOLLARS			
	2010	2022	Percentage Change 2010-2022
Veteran Population	22,568,578	18,522,638	-17.9%
Real Compensation & Pension Expenditures	\$59,374,974	\$124,653,083	109.9%
Real Total Expenditures	\$134,984,471	\$247,024,581	83.0%
Sources: The National Center for Veterans Analysis and Statistics, April 2023 and the Bureau of Labor Statistics Consumer Price Index (CPI-U). Inflation-adjusted 2021 dollars.			

One reason for the rise in expenditures is that service-connected disability ratings have risen over time (Graph 11). In FY 2000, of the 2.3 million veterans with a service-connected disability rating, approximately 1.2 million (53.2%) had a rating of 0 to 20%. In the same year, there were 333,700 veterans with a 70 to 100% disability rating (14.5%). By FY 2020, the number of veterans with a service-connected disability rating had increased to about 5.1 million, an increase of 120% from FY 2000. Veterans with a 0 to 20% rating in FY 2020 increased by only 8% compared to FY 2000.

The growth in veterans with service-connected disability ratings has occurred among the highest disability rating groups. The number of veterans with a 30 to 40% disability rating increased by 51% from FY 2000 (506,019) to FY 2020 (762,378). Veterans with a 50 to 60% disability rating have increased by 206%, from 241,260 in FY 2000 to 737,789 in FY 2020. The number of veterans with the highest rating, between 70 to 100% disability, has jumped from 333,700 in FY 2000 to 2,250,820 in FY 2020, an increase of 575%.

⁸ Coile, C., Duggan, M. and Guo, A. (2021), To Work for Yourself, for Others, or Not at All? How Disability Benefits Affect the Employment Decisions of Older Veterans. J. Pol. Anal. Manage., 40: 686-714.

Why have we observed such a significant increase in veterans with significant service-connected disabilities? Expanded eligibility may be one explanation. The Honoring our PACT Act of 2022, for example, increases disability compensation and health care services for veterans exposed to toxic substances.⁹ It also increases the number of veterans without service-connected disabilities who can receive health care from the VA. Both provisions are likely to increase VA spending by \$300 billion between 2022 and 2031.¹⁰

A second explanation is that many injuries that would have been fatal on the battlefield are no longer so due to advances in evacuation and medical care. The use of Improvised Explosive Devices on the modern battlefield increased the prevalence of Traumatic Brain Injuries (TBIs) among veterans. The VA reported that more than 185,000 veterans have been diagnosed with at least one TBI. For those deployed to Afghanistan or Iraq, the estimated rates of probable TBIs ranged from 11 to 23%.¹¹ Compared to veterans of earlier conflicts, veterans of Afghanistan and Iraq have a higher likelihood of having a service-connected disability.



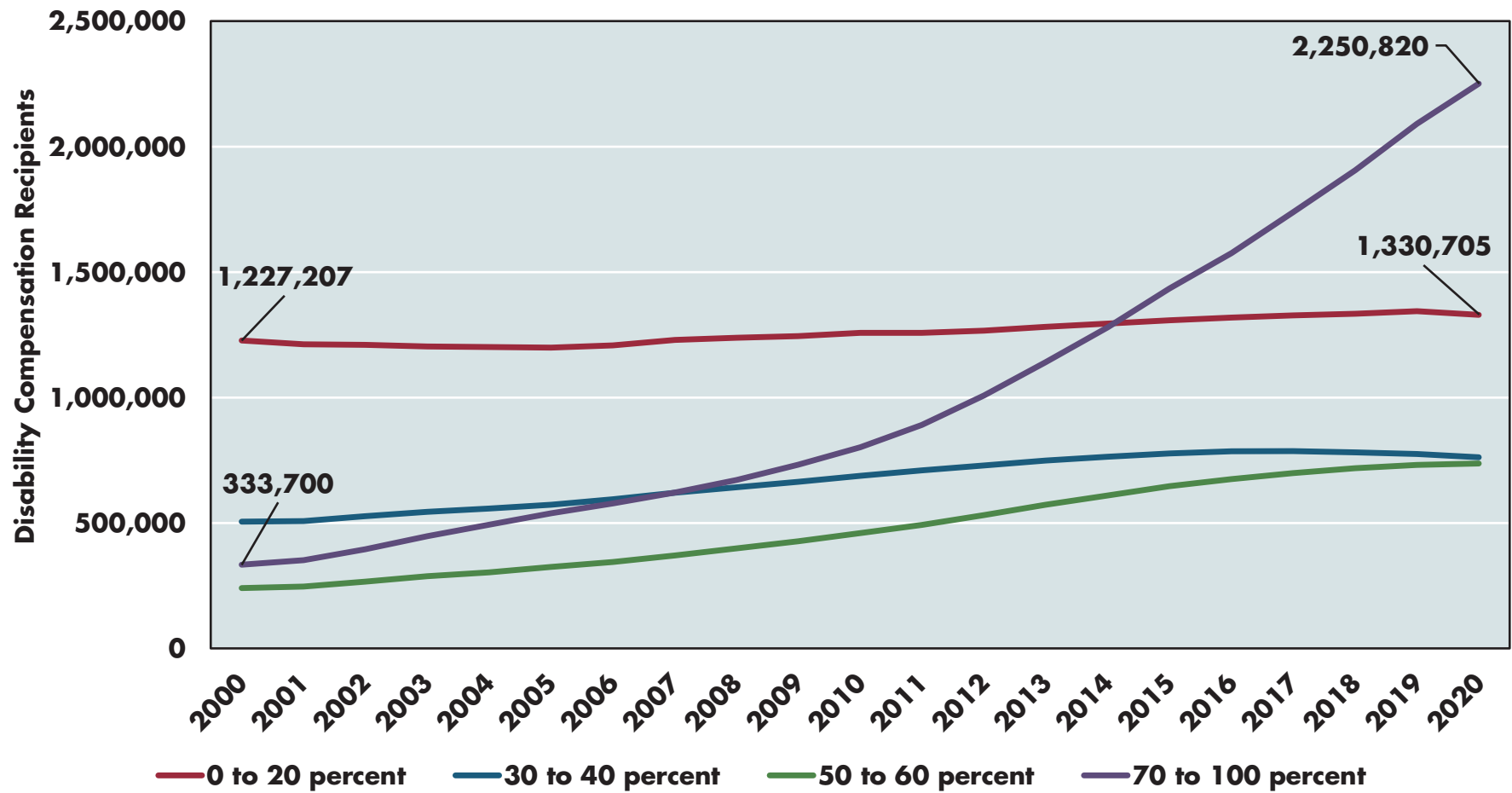
⁹ <https://www.va.gov/resources/the-pact-act-and-your-va-benefits/>

¹⁰ https://www.cbo.gov/system/files/2022-06/hr3967_senate_version.pdf

¹¹ Lisa K. Lindquist, Holly C. Love, and Eric B. Elbogen (2018). Traumatic Brain Injury in Iraq and Afghanistan Veterans: New Results from a National Random Sample Study.

GRAPH 11

DISABILITY COMPENSATION RECIPIENTS BY SERVICE-CONNECTED DISABILITY RATING
UNITED STATES, FY 2000 AND FY 2020



Source: Department of Veterans Affairs, Veterans Benefits Administration; 1985-1998: COIN CP-127 Reports; 1999-2020: Annual Benefits Reports. Prepared by the National Center for Veterans Analysis and Statistics.

Pension Benefits for Military Retirees

Veterans who have either served in active duty for at least 20 years or were found unfit for duty due to an eligible disability are considered military retirees.¹² Military retirees receive a noncontributory defined benefit (pension) plan under the military retirement system administered by the Department of Defense. The military retirement system also includes a survivor annuity program. For retirees who elect coverage under this benefit plan, their beneficiaries will continue to receive up to 55% of the retiree's pension payment upon their death.

In 2018, the armed services introduced the blended retirement system.¹³ This system differs from the traditional military pension benefit. The blended system does retain a defined benefit where retirement pay is based on years of service, so if you serve 20 years, you will receive a defined benefit equal to 40% of your final base pay. The blended system introduced a defined contribution, where the military contributes 1% of base pay to the Thrift Savings Plan. Service members are automatically enrolled with a 3% contribution, and the military will match up to 5% of base pay after 2 years of service. The blended system also introduced a continuation pay incentive. Here, when a service member reaches 12 years of service and commits to 4 more years of service, they will receive a cash incentive between 2.5 to 13 times regular monthly base pay (assuming active-duty service). Service members, upon retirement, can take a lump sum payment of either 25% or 50% of gross estimated retirement pay and receive smaller monthly retirement checks. When the service member reaches the age of 67, their retirement pay goes back to the full amount if they have taken the lump sum option.

Of the 2.2 million military retirees in the United States in 2022, slightly over 2.0 million retirees received a pension under the military retirement system (Table 4). In the same year, the average inflation-adjusted monthly pension for a military retiree was \$2,430, and a total of \$59.6 billion was distributed

to retirees. The decline in the number of veterans has yet to be fully reflected in the number of retirees. From 2010 to 2022, the total number of veterans declined 16.5%, but the number of retirees rose 7.8% over the same period. As military service has become a more selective experience, retirees have become a larger share of the veteran population. In 2010, approximately 9.4% of veterans were military retirees; by 2022, their share has risen to 12.2% of the veteran population.

TABLE 4 MILITARY RETIREES AND REAL (INFLATION-ADJUSTED) PENSION PAYMENTS FROM DOD UNITED STATES, 2010 AND 2022			
	2010	2022	Percentage Change: 2010-2022
Military Retirees	2,075,838	2,238,572	7.8%
Paid Retirees	1,955,289	2,043,658	4.5%
Veterans	22,010,917	18,369,583	-16.5%
Retirees as a Percent of Veterans	9.4%	12.2%	
Real Total Annual Pension Payments (Billions of \$)	\$58.0	\$59.6	2.8%
Real Average Monthly Pension Payment Per Retiree	\$2,470	\$2,430	-1.6%
Sources: Retirees data received from Defense Manpower Data Center (DMDC) and the Bureau of Labor Statistics Consumer Price Index for all urban Consumers (CPI-U). Pension payments reflected in 2021 dollars. Monthly payment per retiree reflects payment from DoD. More than 90% of retirees receive a pension from the DoD, non-paid retirees have elected to waive their pension payment to receive benefit from other sources.			

¹² A veteran is entitled to disability retired pay if the disability is: permanent, not of negligence, and has a disability rating of at least 30%. Reservist generally must be at least 60 years old and have served at least 20 years to receive a pension.

¹³ <https://militarypay.defense.gov/blendedretirement/>

The Veteran Population in Hampton Roads

Among the nation's 392 metropolitan statistical areas, Hampton Roads ranks 11th in the percentage of its adult population that are veterans of military service. However, this ranking is somewhat misleading. Among the metro areas with significant veteran populations, Hampton Roads is the only metro area among these top 20 with a population of more than 1 million residents (Table 5). If we were to examine metropolitan areas with more than 1 million residents, Hampton Roads has the highest proportion of adults that identify as veterans of military service.

Turning to data from the Veterans Administration, we can explore estimates of the veteran population at the city and county level in Hampton Roads (Table 6). In 2022, almost 1 in 5 adults in Hampton (19.6%) were veterans, followed by Virginia Beach (17.5%), Newport News (17.1%), and Norfolk (17.1%). Williamsburg (9.7%) and York County (9.7%) observed the smallest proportion of veterans in the region; however, these percentages were still above the national average of 7.1%. If we examine the distribution of veterans in absolute numbers across the region, more than 1 in 4 veterans in Hampton Roads call Virginia Beach home.

Graph 12 compares the distribution of the veteran population by period of service for Hampton Roads, Virginia, and the United States. Proportionally, Hampton Roads has fewer veterans from the World War II, Korea, and Vietnam eras of service. More than 8 out of 10 veterans in the region served during the first or second Gulf War periods, almost double that of the national average.

The differences in age distributions between Hampton Roads and the nation are highlighted in Graph 13. In 2022, 69.3% of Hampton Roads veterans were below the age of 65 compared to 54.1% for the nation. Nearly one in three (31.4%) of the region's veterans were between the ages of 17 to 44, ten percentage points higher than the United States (21.4%). In other words, veterans, on average, are younger in Hampton Roads than the nation.

Graph 14 shows the projected veteran population in Hampton Roads from 2020 to 2050. Consistent with national trends, the veteran population is projected to decline in the region. The veteran population will decrease from around 225,000 in 2022 to about 166,000 in 2050. While the fall in the veteran population in Hampton Roads is significant, it is less than the national decline. By 2050, the projected veteran population is expected to fall by 26% in Hampton Roads and 35.4% nationally. The reason for the slower decline in Hampton Roads is simple: the continued presence of the armed services and separations of military service members who are stationed in the region as well as younger veterans compared to the national average.

TABLE 5

**VETERAN SHARE OF ADULT POPULATION
TOP 20 METROPOLITAN AREAS, 2021**

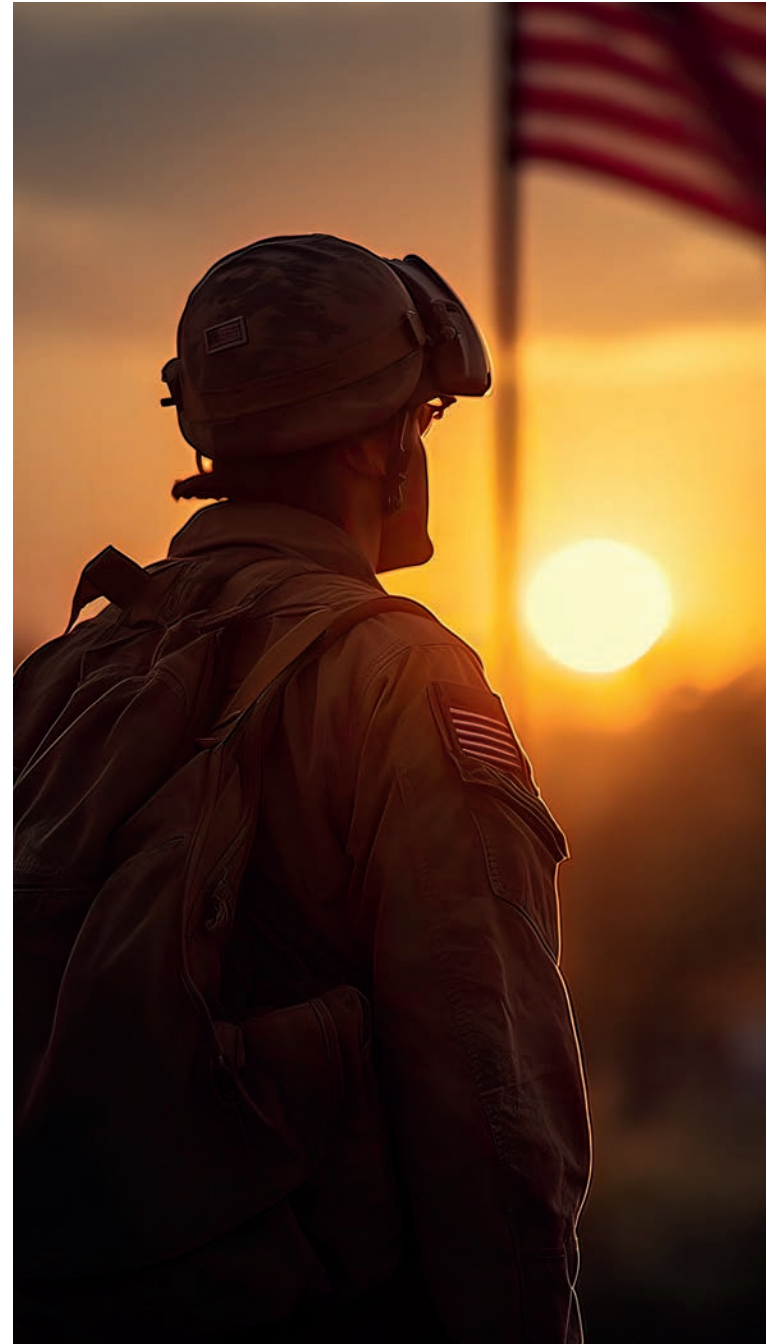
Metropolitan Area	Veteran Population	Total Adult Population	Veterans Share of Adult Population	Ranking
Hinesville, GA	10,797	58,081	18.6%	1
Killeen-Temple, TX	63,641	343,256	18.5%	2
Sierra Vista-Douglas, AZ	18,058	98,244	18.4%	3
Crestview-Fort Walton Beach-Destin, FL	39,913	220,655	18.1%	4
Clarksville, TN-KY	37,406	231,942	16.1%	5
Jacksonville, NC	24,392	152,443	16.0%	6
The Villages, FL	18,659	118,206	15.8%	7
Colorado Springs, CO	89,373	569,783	15.7%	8
Lawton, OK	15,067	96,811	15.6%	9
Fayetteville, NC	58,687	386,454	15.2%	10
Virginia Beach-Norfolk-Newport News, VA-NC	208,703	1,394,369	15.0%	11
Pensacola-Ferry Pass-Brent, FL	57,720	395,069	14.6%	12
Bremerton-Silverdale-Port Orchard, WA	31,723	217,388	14.6%	13
Panama City, FL	20,560	143,083	14.4%	14
Warner Robins, GA	20,219	141,581	14.3%	15
Elizabethtown-Fort Knox, KY	16,660	117,462	14.2%	16
Great Falls, MT	9,179	65,010	14.1%	17
Lake Havasu City-Kingman, AZ	24,676	175,343	14.1%	18
Homosassa Springs, FL	17,976	129,077	13.9%	19
Cheyenne, WY	10,581	76,728	13.8%	20

Source: U.S. Census Bureau American Community Survey 5-year estimates, 2017-2021.

TABLE 6**VETERAN POPULATION
HAMPTON ROADS AND HAMPTON ROADS LOCALITIES, 2022**

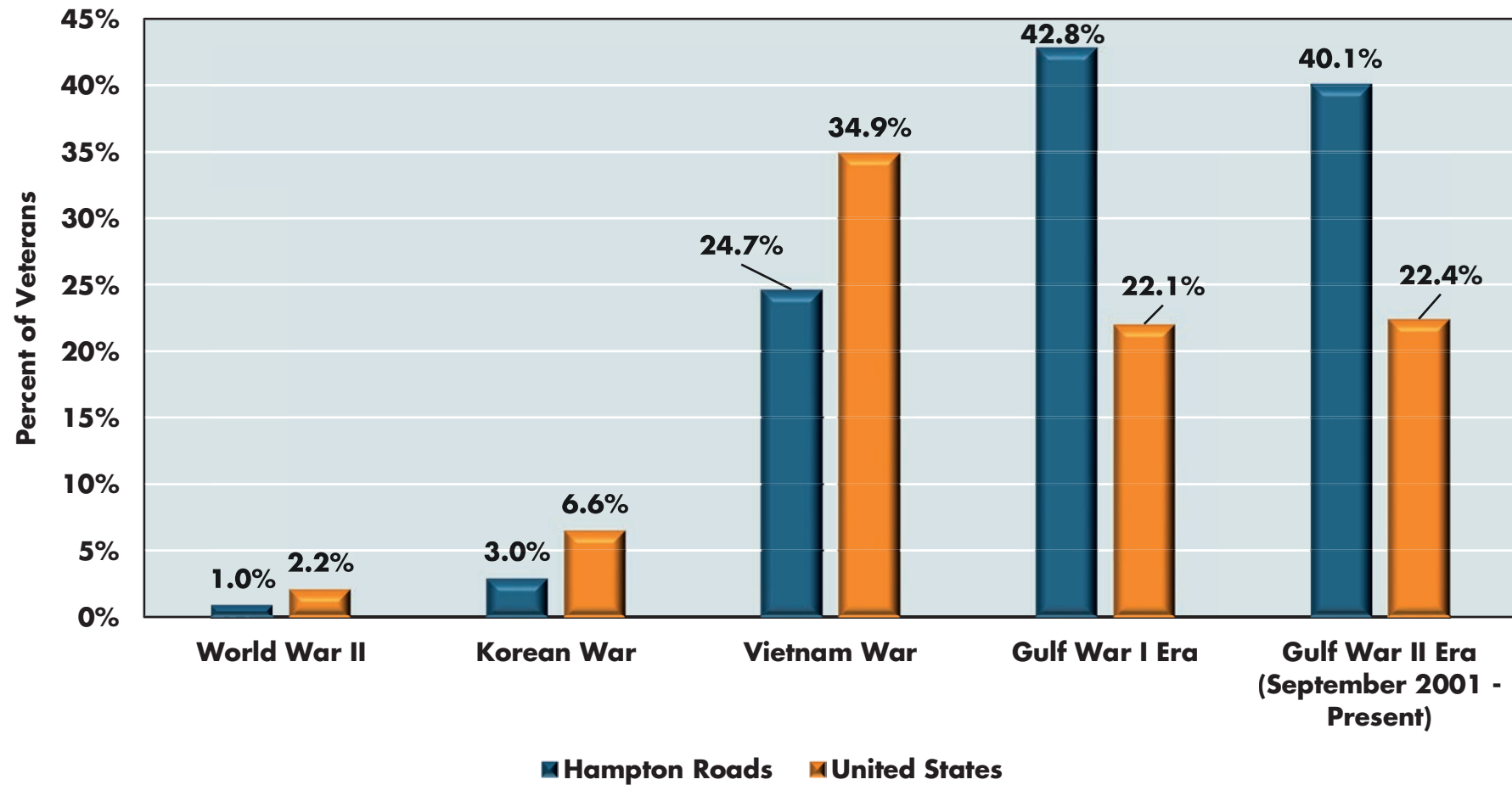
Area	Veterans	Veteran Share of Adult Population
Hampton	21,054	19.6%
Virginia Beach	62,378	17.5%
Newport News	24,237	17.1%
Norfolk	32,156	16.8%
York County	8,791	16.6%
Camden County	1,237	15.5%
Portsmouth	11,402	15.3%
Chesapeake	27,910	14.9%
Poquoson	1,390	14.4%
Suffolk	9,926	14.0%
Gloucester County	4,234	13.7%
Currituck County	2,902	13.5%
James County	8,279	13.3%
Isle of Wight County	3,940	13.1%
Mathews County	903	12.6%
Franklin	625	10.2%
Southampton County	1,440	9.9%
Williamsburg	1,326	9.7%
Gates County	819	9.7%
Hampton Roads MSA	224,949	16.1%

Sources: Veterans Affairs VetPop Model 2020 and Census Bureau American Community Survey 5-year estimates, 2017-2021. Adult population reflects individuals 18 years and older.



GRAPH 12

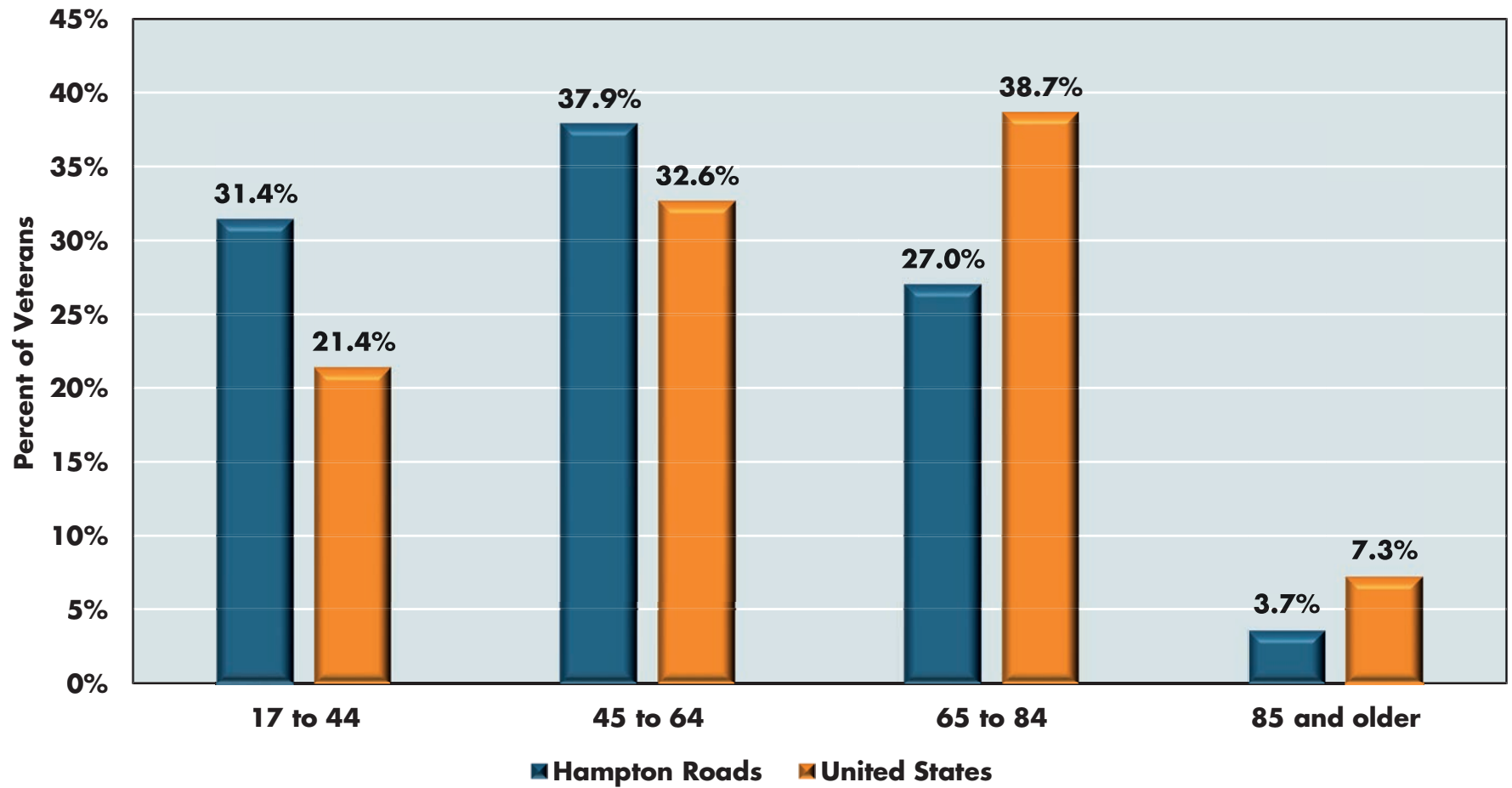
VETERAN POPULATION BY PERIOD OF SERVICE
HAMPTON ROADS AND THE UNITED STATES, 2021



Source: U.S. Census Bureau. 2000 reflects 2000 Decennial Census and estimates for 2021 reflect the American Community Survey 5-year estimates, 2017-2021. The total percentage of veterans exceeds 100% as service members can serve in more than one armed conflict period.

GRAPH 13

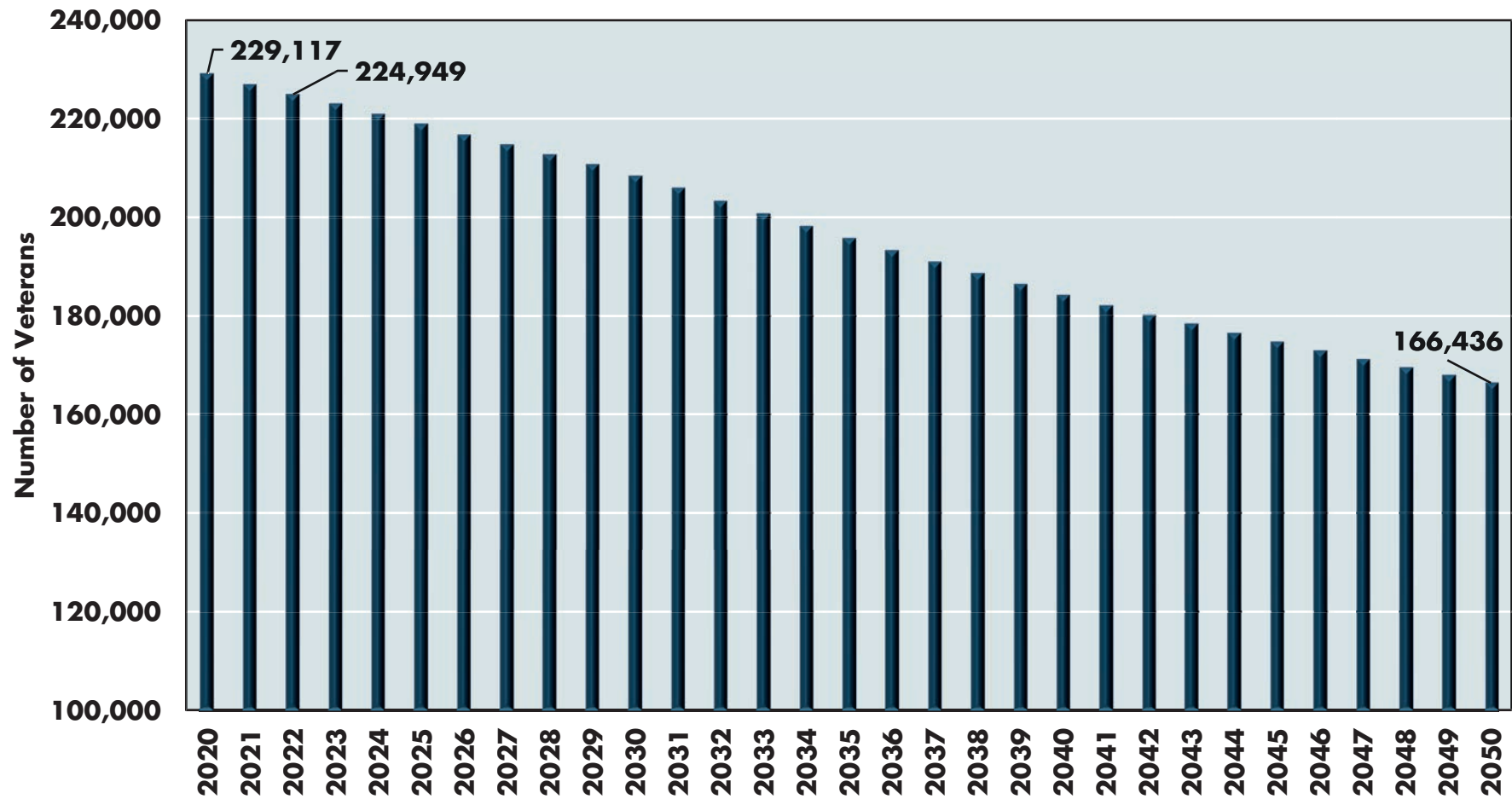
**VETERAN POPULATION BY AGE GROUP
HAMPTON ROADS AND THE UNITED STATES, 2022**



Source: Veterans Affairs VetPop 2020 Model.

GRAPH 14

**PROJECTED VETERAN POPULATION
HAMPTON ROADS MSA, 2020-2050**



Source: Veterans Affairs VetPop 2020 Model. Hampton Roads reflects the Virginia-Beach-Norfolk-Newport News, VA-NC metropolitan area.

Hampton Roads Veterans in Workforce

Veterans of the more recent service periods are more educated than veterans of previous generations as well as their non-veteran counterparts. In today's modern military, Gulf War veterans can receive STEM training on active duty. The expansion of education benefits such as the GI bill also allows veterans to enroll in post-secondary schooling. As illustrated in Graph 15, 40.2% of Hampton Roads veterans have some college education, compared to 31.8% of non-veteran adults in the region. Another 36.2% of veterans have at least a bachelor's degree or higher.

Hampton Roads veterans between the ages of 18 and 64 participated in the labor force at higher rates than their national counterparts (Graph 16). For these veterans, the labor force participation rate was 77.0% nationally and 82.2% in the region. The largest disparities in labor force participation rates are among veterans 55 to 64 years old, where 64.4% of veterans nationally were in the labor force while the labor force participation rate was 73.8% for Hampton Roads.

Veterans have also participated in the labor force at a greater rate than non-veteran residents in the region (Graph 17). Approximately 82.2% of veterans and 77.3% of non-veterans between the ages of 18 to 64 were in the labor force. The higher rates of labor force participation were consistent across all working age groups.

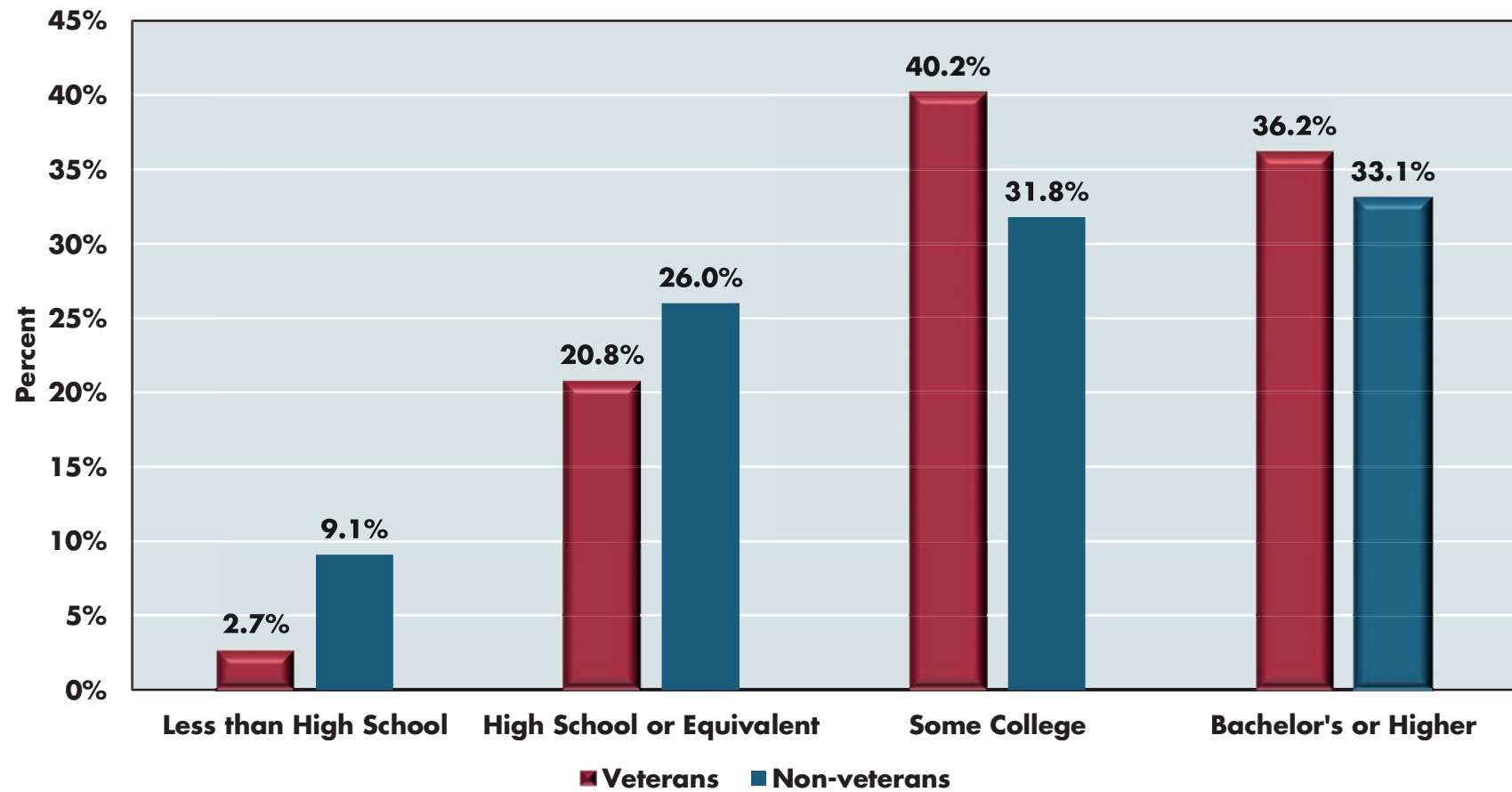
Veterans also impact the workforce in Hampton Roads through entrepreneurship. Using data from the U.S. Census, we estimate there were 2,404 veteran-owned businesses in Hampton Roads in 2020, employing more than 34,000 individuals (Table 7). Approximately 8.5% of firms in the region were veteran owned, 2.9 percentage points higher than the national average. These veteran-owned firms generated approximately \$2.3 billion in employee compensation in 2020.

Veterans in Hampton Roads were more educated and participated in the labor force at higher rates than their national counterparts as well as the non-veteran population in the region. Veterans are more likely to own a business in Hampton Roads. With thousands of service members separating from active duty annually in Hampton Roads, continuing to invest (and expanding investments) in veteran retention strategies is an obvious choice to spur economic development in the region.

TABLE 7		
VETERAN-OWNED BUSINESSES UNITED STATES AND HAMPTON ROADS, 2020		
	United States	Hampton Roads
Veteran-Owned Employer Firms	320,864	2,404
Number of Employees	3,643,317	34,278
Annual payroll (\$1,000)	\$176,552,142	\$2,271,930
Veteran Share of Employer Firms	5.6%	8.5%
Veteran Share of Annual Payroll	2.4%	7.1%
Source: U.S. Census Bureau Annual Business Survey, 2020. Business ownership is defined as having 51% or more of the stock or equity in the business.		

GRAPH 15

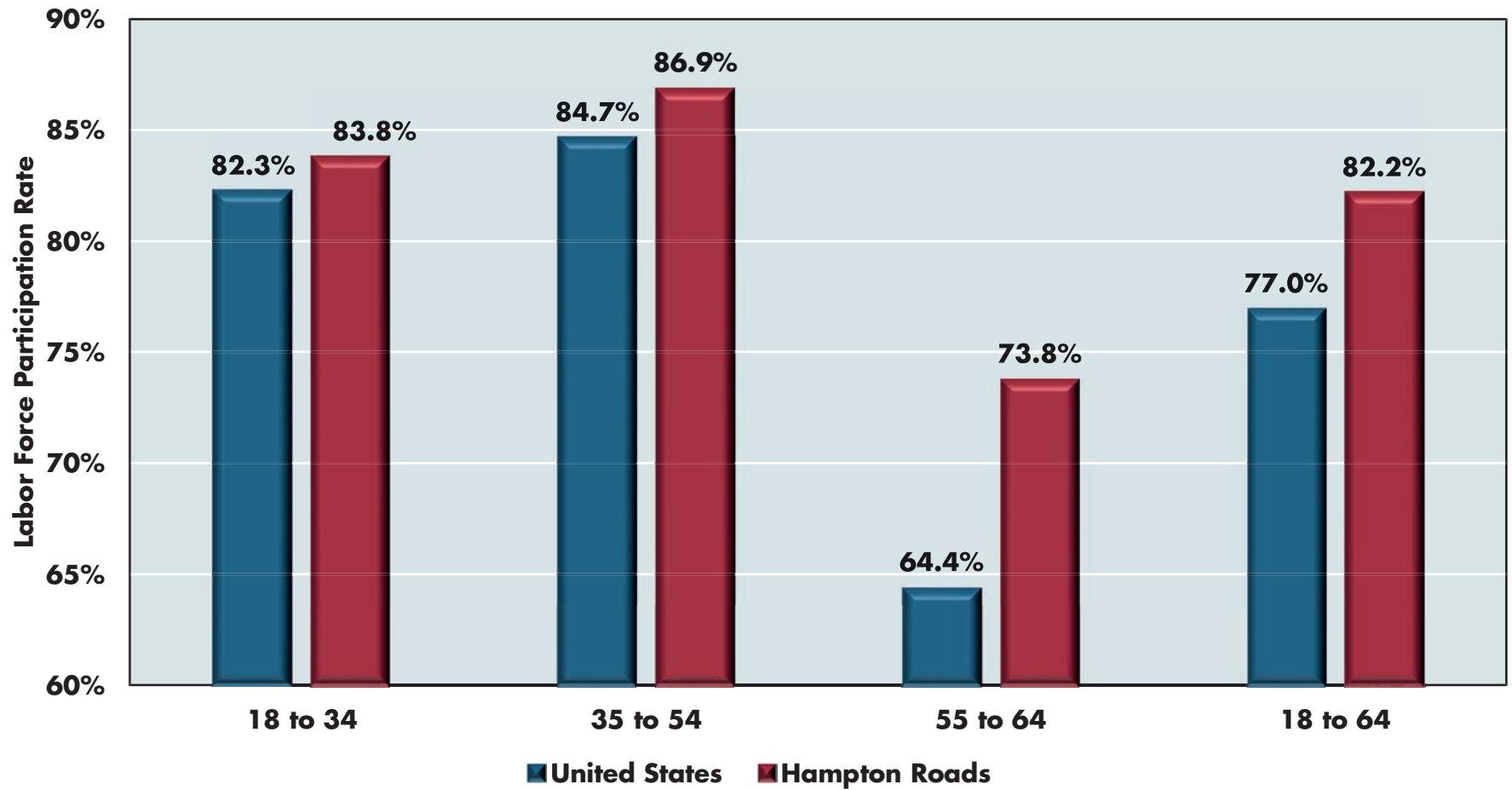
**EDUCATIONAL ATTAINMENT BY VETERAN STATUS
HAMPTON ROADS MSA, 2021**



Source: U.S. Census Bureau American Community Survey (ACS) 5-year estimates, 2017-2021.

GRAPH 16

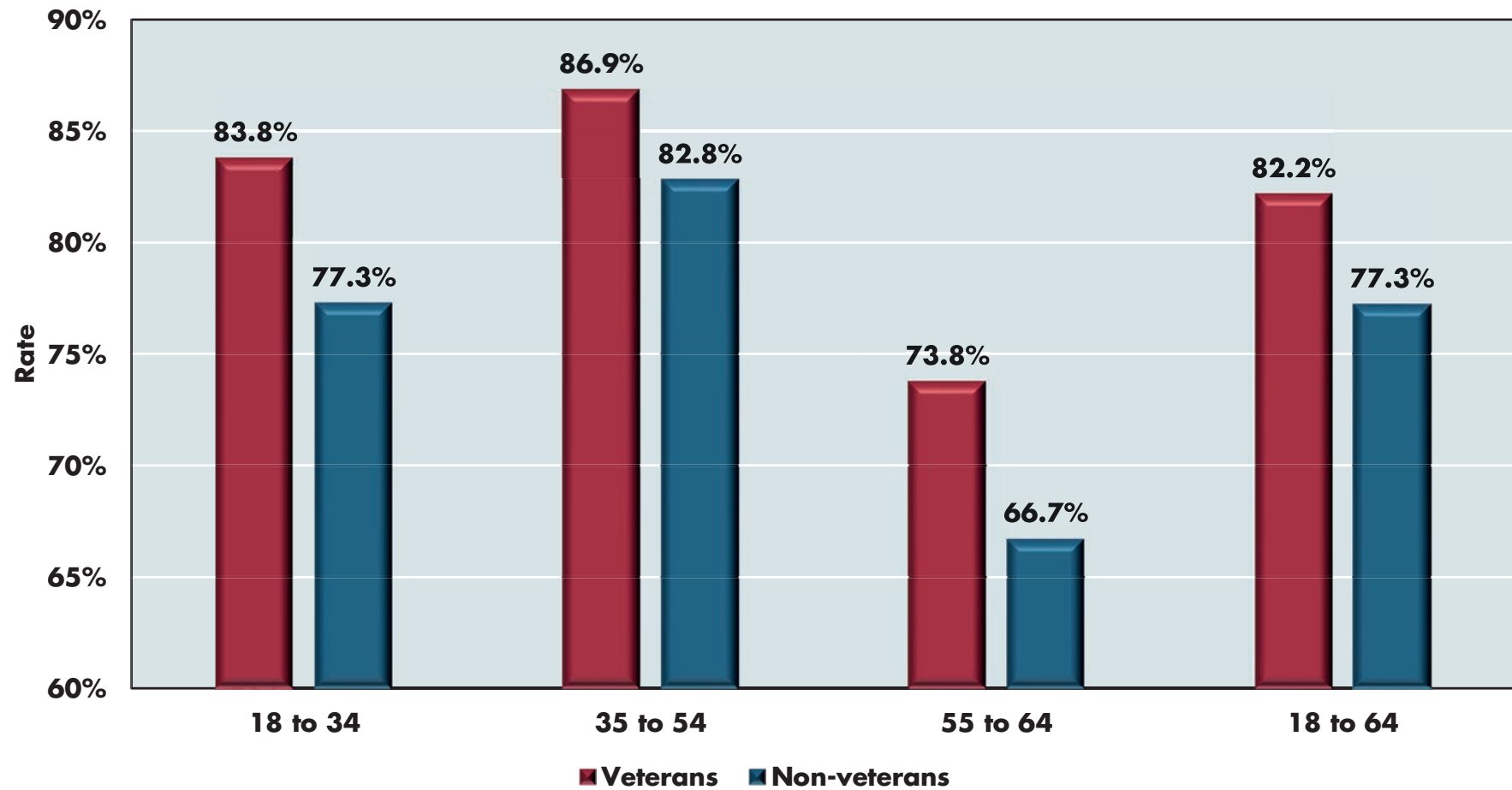
**VETERAN LABOR FORCE PARTICIPATION RATE BY AGE GROUP
UNITED STATES AND HAMPTON ROADS MSA, 2021**



Source: U.S. Census Bureau American Community Survey (ACS) 5-year estimates, 2017-2021.

GRAPH 17

LABOR FORCE PARTICIPATION RATE BY VETERAN STATUS AND AGE GROUP
HAMPTON ROADS MSA, 2021



Source: U.S. Census Bureau American Community Survey (ACS) 5-year estimates, 2017-2021.

A Brief Look at Military Retirees in Hampton Roads

Hampton Roads has the second largest military retiree population among all metro areas in the nation. In 2022, there were 68,659 military retirees in Hampton Roads, nearly 5% of the region's adult population (Table 8). In absolute terms, the only other metro area in the nation with more retirees is the Washington-Arlington-Alexandria metro area with 88,308 military retirees. Proportionally, however, Hampton Roads ranks first among large metro areas with a population of 1 million or more and 13th among all metro areas.

The presence of military retirees obviously correlates strongly with the number of military veterans in the region. Military retirees, however, typically receive pensions and other benefits. According to the Defense Manpower Data Center, there were 64,751 paid military retirees in Hampton Roads in 2022 (Table 9). These paid military retirees received almost \$200 million flows into the region on a monthly basis, averaging \$3,058 per paid military retiree. **In other words, military retirees received more than \$2.3 billion annually in Hampton Roads from DoD alone, fueling economic activity across the region.**



TABLE 8

**MILITARY RETIREES SHARE OF ADULT POPULATION
TOP 20 METROPOLITAN AREAS, 2021**

Metropolitan Area	Military Retirees	Total Adult Population	Retiree Share of Adult Population	Ranking
Hinesville, GA	4,948	58,081	8.5%	1
Crestview-Fort Walton Beach-Destin, FL	17,096	220,655	7.7%	2
Killeen-Temple, TX	25,618	343,256	7.5%	3
Jacksonville, NC	10,159	152,443	6.7%	4
Fayetteville, NC	23,460	386,454	6.1%	5
Lawton, OK	5,795	96,811	6.0%	6
Clarksville, TN-KY	13,345	231,942	5.8%	7
Warner Robins, GA	8,035	141,581	5.7%	8
Elizabethtown-Fort Knox, KY	6,591	117,462	5.6%	9
Sierra Vista-Douglas, AZ	5,245	98,244	5.3%	10
Pensacola-Ferry Pass-Brent, FL	20,478	395,069	5.2%	11
Colorado Springs, CO	28,555	569,783	5.0%	12
Virginia Beach-Norfolk-Newport News, VA-NC	68,659	1,394,369	4.9%	13
California-Lexington Park, MD	3,910	85,729	4.6%	14
Panama City, FL	6,154	143,083	4.3%	15
Bremerton-Silverdale-Port Orchard, WA	9,347	217,388	4.3%	16
Columbus, GA-AL	10,163	248,129	4.1%	17
Sumter, SC	4,201	105,574	4.0%	18
New Bern, NC	3,752	97,391	3.9%	19
Cheyenne, WY	2,952	76,728	3.8%	20

Source: U.S. Census Bureau American Community Survey 5-year estimates, 2017-2021.

TABLE 9

**MILITARY RETIREES AND PENSION PAYMENTS FROM DOD
UNITED STATES, VIRGINIA, AND HAMPTON ROADS, 2022**

	United States	Virginia	Hampton Roads
Military Retirees	2,238,572	160,067	68,659
Paid Military Retirees	2,043,658	151,078	64,751
Retiree Share of Adults 18+	0.9%	2.4%	5.3%
Retirees Share of Total Veterans	12.0%	23.2%	30.5%
Total Monthly Payment (In Millions)	\$5,362	\$515.7	\$197.9
Per Capita Payment	\$2,624	\$3,413	\$3,058
Source: Retirees data received from DMDC. Hampton Roads reflects the Virginia Beach-Norfolk-Newport News, VA-NC Metro Area. Per capital payment estimated as the total monthly payment per paid retiree.			

Final Thoughts

Military veterans are a foundational element of the Hampton Roads economy. Working age veterans are more likely to participate in the labor force than non-veterans. Military retirees in Hampton Roads received more than \$2.3 billion in pensions in 2022, and the Veterans Administration spent approximately another \$1.1 billion on goods and services in the region in the support of veterans. When we combine the inflow of federal dollars with veterans' ownership of firms, participation in the labor force and civic life, and service to the community, we can only conclude that military veterans are the fourth pillar of the Hampton Roads economy.

With a higher-than-average proportion of veterans in the population, Hampton Roads should continue to lean into strategies to attract and retain this population. Key agencies around the region, including the Hampton Roads Workforce Council, are leading this effort. Investing resources to promote transitions to employment in the region yields immediate benefits to employers and longer-term benefits by the flow of federal funds through these veterans and retirees into the region. Efforts to boost the retention rate of separating military service members should be a part of the discussion of the key industry clusters in Hampton Roads. These veterans bring experience that, in many cases, is immediately applicable in the areas of shipbuilding, renewable energy, unmanned systems, and similar industries.

Hampton Roads has a distinctive history with military service. For more than 200 years, the region has played a central role in the national security of the nation. Likewise, for this time, it has become home to those who have served the nation. In turn, these veterans have helped power the regional economy. Now, as we look forward to improving regional growth and diversifying the industrial base, let us continue to focus on how valued and valuable veterans are for life in Hampton Roads.

Get On The Bus: Public Transportation In Hampton Roads



GET ON THE BUS: PUBLIC TRANSPORTATION IN HAMPTON ROADS

"You can't understand a city without using its public transportation system."

Erol Ozan, Author

A well-functioning transit network is a regional asset. Public transportation empowers people to get wherever they need to go, regardless of whether they have a driver's license or access to a car. This is particularly essential in a region as geographically expansive as Hampton Roads, where 43% of us live and work in different localities.¹ Our cities and counties are knitted together by tunnels, bridges, and interstate highways that are not primarily intended for bikers or pedestrians. Buses, ferries, light rail, and other forms of transit enhance personal mobility and increase workforce participation while easing roadway congestion, reducing fuel consumption, and lowering carbon emissions.

According to an economic impact study commissioned by the Virginia Department of Rail and Public Transportation (DRPT), \$1.5 billion was spent on transit in Virginia in FY 2018 (\$1.2 billion from public sources). Public investment in transit brought \$2.53 billion in direct benefits, "including travel time savings, transportation cost savings, avoided vehicle crashes, emissions reductions, fuel savings, employment benefits, and expenditure savings for transit riders." This investment generated \$3.4 billion in economic activity (\$2.6 billion in northern Virginia, \$791 million in Hampton Roads and other urban areas, and \$43 million in rural areas). Every public dollar spent on transit generated \$2.86 statewide (\$3.02 in northern Virginia, \$2.51 in Hampton Roads and other urban areas, and \$1.68 in rural areas).²

Further, public transportation can add economic value in other ways that are not always easy to quantify. As the DRPT study notes, urban transit tends to incentivize higher density residential and commercial development—encouraging more efficient land use, reducing the need for parking, and

raising nearby property values. Tourist destinations benefit from transit options that help visitors get around easily. And large employers consider access to transit as one of many factors when deciding where to establish new headquarters or other major work sites.

The case for expanding public transportation networks in Hampton Roads and other metropolitan areas is strong—but transit succeeds only if people are willing to use it. A hard truth is that riders across the U.S. are abandoning public transportation. This longer-term trend can be explained in part, but not entirely, by the COVID-19 pandemic. Unsurprisingly, ridership plunged everywhere at the start of the pandemic; the National Transit Database reported an 81% decrease in national urban public transportation ridership between the months of April 2019 and April 2020.³ However, many U.S. transit systems had been shedding riders gradually since at least 2014, and transit use today has not come close to recovering to pre-pandemic levels. In Hampton Roads, the total number of transit rides taken each year decreased

¹ Hampton Roads Transportation Planning Organization, *State of Transportation in Hampton Roads 2022*, 35. Available at: <https://www.hrtpo.org/page/state-of-transportation/>

² Virginia Department of Rail and Public Transportation, *Economic Impacts of Public Transportation in the Commonwealth of Virginia* (February 2020), at: <https://www.drpt.virginia.gov/studies-and-reports/economic-impacts-of-public-transportation/>

³ National Transit Database, *National Transit Summaries and Trends 2021*, 6. Available at: <https://www.transit.dot.gov/ntd/annual-national-transit-summaries-and-trends>

66% from 2012 to 2021, including a 52% drop between 2019 and 2021.⁴ These declines in ridership were not limited to Hampton Roads, as public ridership dropped in Virginia by 38.3% from December 2018 and December 2022 (Graph 1).

There are numerous reasons for this decline, beginning with the growing number of people who now work part- or full-time from home. Other commuters left the workforce altogether during the pandemic and have not returned. Persons without a car have more transportation options now than they did just fifteen years ago—including ridesharing services such as Uber and Lyft, and electric or traditional bikes and scooters that are easily borrowed through mobile apps. What's more, the new services are potentially available 24-7 and may take their riders door-to-door. Traditional public transportation is less expensive than these new options, but it is also less convenient.

Hampton Roads has one of the lowest rates of transit ridership among similarly sized U.S. metropolitan areas, ranking 32nd among the 41 metro areas with populations between one and four million. (Our per capita spending on transit operating and capital expenses likewise ranked 32nd.) Meanwhile, nearly three-quarters of all Hampton Roads commuters drive alone by car to work, the 10th highest percentage among the same group of peers. Only 4.7% of jobs can be reached by public transportation within 60 minutes.⁵ The decentralized nature of our region, our multidirectional commuting patterns, and our localities' uneven coordination of transportation policy largely keeps us in our cars. Roadway congestion is not severe enough, or gas high prices high enough, for most drivers to seek alternatives—so transit in our region is primarily used by those who have no other option. For these riders, however, it remains an indispensable lifeline.

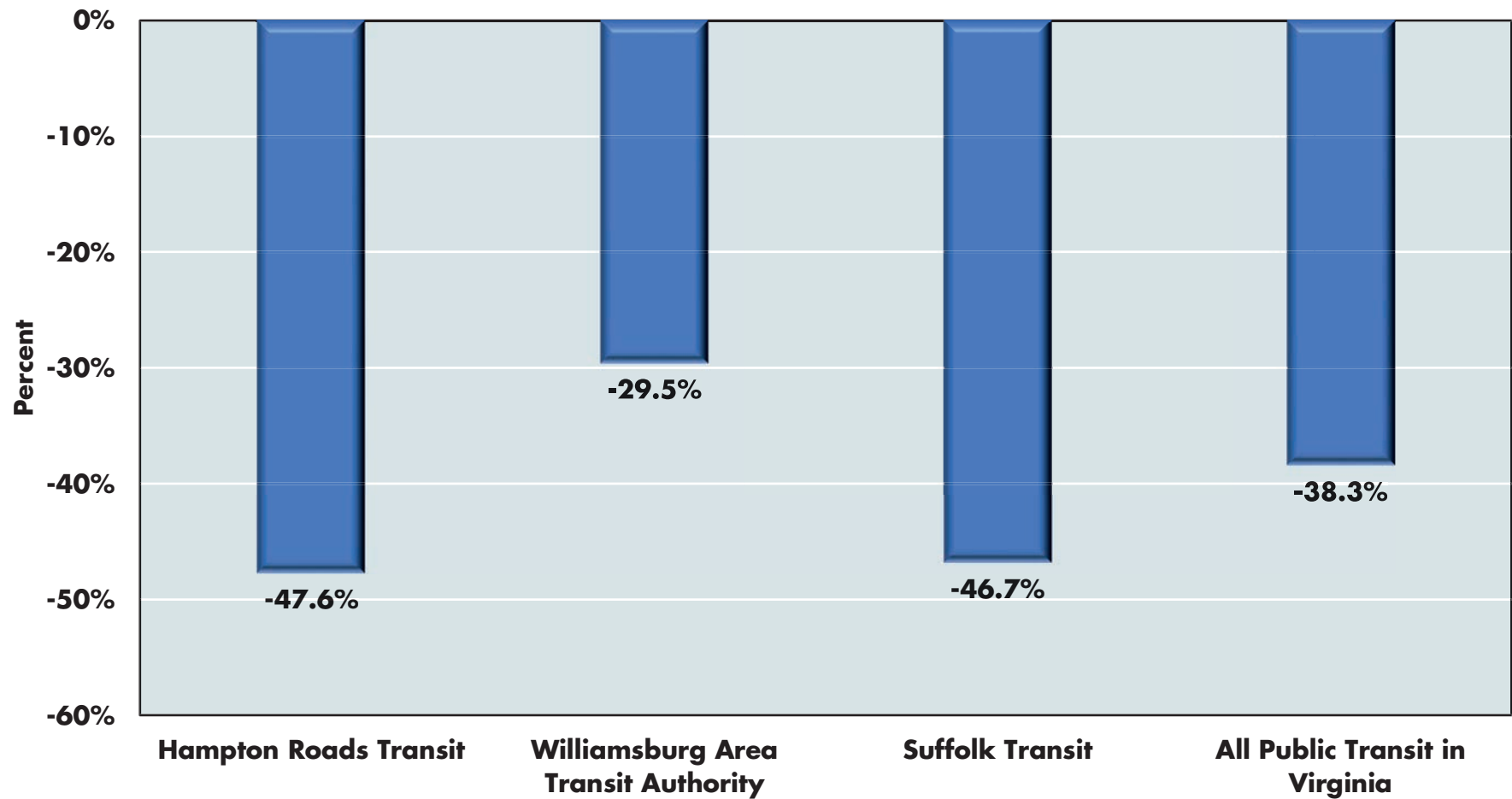
This chapter takes a closer look at how public transportation functions in Hampton Roads. We provide an overview of our region's three transit systems: Hampton Roads Transit (HRT), Suffolk Transit, and the Williamsburg Area Transit Authority (WATA), and we examine how they are funded. Our emphasis is on bus transit. Although light rail has dominated much of the public discussion about transit in our region, buses are the heart of these agencies' operations (Graph 2). The overwhelming majority of our region's transit passengers ride by bus, and will do so for the foreseeable future. This chapter highlights some of the most compelling proposals and recent innovations that seek to make buses and other forms of transit more accessible, appealing, and affordable to a wider circle of Hampton Roads residents.



⁴ *State of Transportation in Hampton Roads 2022*, 48; and Congressional Research Service, "Public Transportation Ridership: Implications of Recent Trends for Federal Policy," 10 November 2022, 2–3.

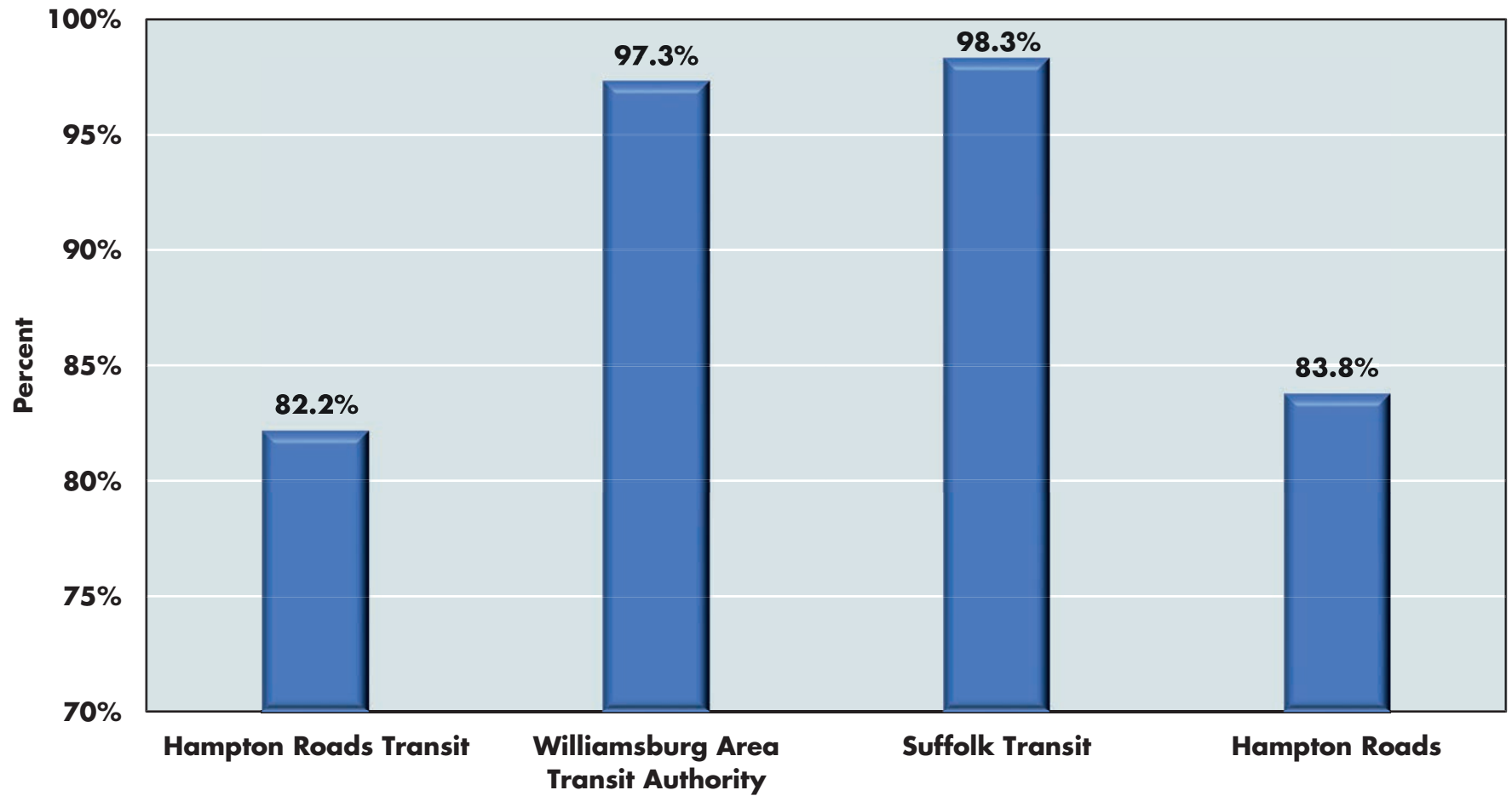
⁵ *State of Transportation in Hampton Roads 2022*, 36–38 and 50.

GRAPH 1
CHANGE IN PUBLIC TRANSIT RIDERSHIP
DECEMBER 2018 TO DECEMBER 2022



Source: Virginia Department of Rail and Transportation, at: <https://data.drpt.virginia.gov/stories/s/Transit-Performance-Data/c4e4-hrd6>

GRAPH 2
PERCENT OF PUBLIC RIDERSHIP BY BUS
HAMPTON ROADS, 2021



Source: Hampton Roads Transportation Planning Organization, The State of Transportation in Hampton Roads, 2022.

One region, three transit providers

Public transportation operates within a closely defined institutional framework. The Hampton Roads Transportation Planning Organization (HRTPO) is the federally mandated Metropolitan Planning Organization (MPO) that coordinates transportation planning across our region's 13 Virginia localities. Three separate transit providers operate within its purview, each of which serves a defined urbanized area, or UZA. Our region is home to one large UZA (defined by a population of more than one million) that is served by Hampton Roads Transit in the localities of Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, and Virginia Beach. In addition, the Williamsburg Area Transit Authority provides service in Williamsburg, James City County, and upper York County, while the city of Suffolk has its own transit network. Each of these two smaller providers effectively serves a small UZA (population of 50,000 to 200,000) within the greater region. While there is a bit of geographic overlap in the routes covered by the three providers, each serves a core population that is defined by its UZA.

Table 1 provides a brief overview of each of the public transit providers in Hampton Roads. Hampton Roads Transit is the largest provider, followed by the Williamsburg Area Transit Authority, and then Suffolk Transit. Hampton Roads Transit has the largest coverage area, with 438 square miles, and serves the largest population as well. All the transit agencies offer reduced fares to seniors, Medicare cardholders, and persons with disabilities. Let's briefly look at each of these public transit agencies.

Paratransit: Making transportation accessible to all

Public transportation providers must offer a comparable level of service to persons with disabilities, as set forth by the Americans with Disabilities Act of 1990. In practice, this means that providers are required to offer accessible transit options during the same hours as their fixed route service to origins and destinations within $\frac{3}{4}$ mile of the fixed routes. The accessible rides may not cost more than twice the standard bus fare. To meet this requirement, Hampton Roads' three transit systems offer paratransit, or demand response, service to all ADA-certified persons. Paratransit rides—generally in a van or other wheelchair-accessible vehicle, which may be shared with other riders—must be scheduled by phone or HRT Paratransit mobile app at least one day in advance. Further, all fixed-route HRT buses are equipped with ramps or wheelchair lifts, and ADA-certified persons may ride these buses for free.

TABLE 1

HAMPTON ROADS TRANSIT AGENCIES AT A GLANCE

	Hampton Roads Transit	Williamsburg Area Transit Authority	Suffolk Transit
Localities served	Chesapeake, Hampton, Newport News, Norfolk, Portsmouth, and Virginia Beach	Williamsburg, James City County, York County	Suffolk
Service area	438 square miles	144 square miles	73 square miles
Population	1,150,833	153,600	87,677
Annual passenger miles	32,178,023	3,381,621	N/A
Annual unlinked trips	6,491,615	610,291	108,658
Annual vehicle revenue miles	14,166,842	917,477	368,893
Annual vehicle revenue hours	979,042	58,569	20,268
Adult one-ride fare	\$2.00	\$1.50	\$1.50
Adult all-day fare	\$4.50	\$3.00	\$3.00
Monthly pass	\$70.00	\$45.00	\$57.50
Paratransit	\$3.50	\$3.00	\$3.00
Reduced fare	Seniors 65 and older, Medicare cardholders, persons with disabilities, unaccompanied riders 17 and under	Seniors 65 and older, Medicare cardholders, persons with disabilities, WJCC/York students	Seniors 65 and older, Medicare cardholders, persons with disabilities, students
Free rides	Children 17 and under with fare-paying adult, certified paratransit users, student Freedom Pass holders	Children 38 in. and under, William & Mary ID holders	Children 5 and under

Sources: Hampton Roads Transit, Williamsburg Area Transit Authority, Suffolk Transit, and National Transit Database profiles.

HAMPTON ROADS TRANSIT

Hampton Roads Transit (HRT) is Virginia's largest public transportation agency outside of the Washington Metro. It is the product of a 1999 merger between Pentran (serving Hampton and Newport News) and Tidewater Regional Transit (serving Chesapeake, Norfolk, Portsmouth, Suffolk, and Virginia Beach). Suffolk opted out of this union in 2011. HRT's governing body, the Transportation District Commission of Hampton Roads, includes one City Council member and one gubernatorial appointee from each of the six localities.

HRT operates a fleet of 275 buses, which cover 70 routes that crisscross our region. While hours and frequency of service vary from route to route, many buses run once an hour, seven days a week, from the early morning into the evening. The new 757 Express buses on Jefferson Avenue and Mercury Boulevard run every 15 minutes during peak travel times. Still other buses carry workers just a few times each day to large regional employers such as Amazon and the Newport News Shipyard. The Base Express, reintroduced after a 15-year hiatus in 2022, gives free rides to personnel around Naval Station Norfolk. VB Wave trolleys offer frequent service around the Virginia Beach Oceanfront between May and September, representing as much as 6% of HRT's annual ridership.

The Tide light rail line, which was introduced in 2011, serves 11 stations on 7.4 miles of track in the city of Norfolk. In 2016, 57% of Virginia Beach voters opposed spending local funds to extend the line to Town Center, and so the line ends at Newtown Road, just before the Virginia Beach border. A proposed extension to Sentara Leigh Hospital and the Military Circle redevelopment area would potentially link Norfolk's downtown to key destinations on the eastern side of the city. HRT is currently conducting the required environmental assessment for the extension. A formal proposal and accompanying financial plan, outlining expected federal, state, and local contributions, will likely come before Norfolk City Council in early 2024.

Three Elizabeth River ferries carry passengers between downtown Norfolk and downtown Portsmouth, with additional service to Harbor Park during

Tides home baseball games. The Traffix program also encourages additional commuting options such as carpooling and vanpooling.

At a regional transit advocacy day in May 2023, HRT President and Chief Executive Officer William Harrell described the present moment as the most exciting time for HRT since its founding in 1999. As we'll discuss below, his enthusiasm is driven in no small part by a new regional transit fund, which has begun to bear fruit in the form of the 757 Express bus network and other key improvements for HRT riders.

WILLIAMSBURG AREA TRANSIT AUTHORITY

The Williamsburg Area Transit Authority (WATA) was established in its present form in 2008. Its board of directors includes representatives from the City of Williamsburg, James City County, York County, the Colonial Williamsburg Foundation, and the College of William and Mary. WATA operates eleven fixed-route bus lines in Williamsburg, James City County, and upper York County, as well as the trolley in historic Yorktown. Most buses run once an hour between 6:00 a.m. and 9:00 p.m., Monday through Saturday, with shorter operating hours on Sunday. Riders can view buses' real-time location and upcoming stops on a flat-screen monitor inside each bus. The main point of connection with HRT is Lee Hall in Newport News, the end destination of a long WATA route that begins near Colonial Williamsburg.

WATA is poised for larger changes in 2023. The authority's new Executive Director, Matthew Scalia, had been serving in his position just eight days when we spoke to him in April. He and other members of his team explained to us that WATA expects to adopt a new strategic plan in September, oriented around increasing ridership and frequency of service. WATA was also about to introduce a new mobile ticketing app and to more fully integrate the Colonial Williamsburg shuttle buses within its network this fall. A new bus transfer center, near the Sentara Williamsburg Regional Medical Center in northern York County, is slated for completion in early 2026.

SUFFOLK TRANSIT

Only 29% of urban transit providers in the U.S. are run by an independent transit authority like HRT or WATA. A more common arrangement, particularly for smaller localities like Suffolk, is transit run directly by a city or county government (53% of all providers).⁶ Suffolk withdrew from HRT in 2011, after an efficiency study proposed eliminating two of the city's four bus routes due to low ridership. Suffolk now contracts with the non-profit organization Virginia Regional Transit to offer bus service on six different routes across the city. Suffolk possesses its own fleet of 12 small buses and two paratransit vans which are operated and maintained by Virginia Regional Transit. Most buses run once an hour between 6:30 a.m. and 6:30 p.m., Monday through Saturday. The Spot mobile app tracks the real-time position of every bus on a map, giving riders an easy overview of the entire transit system.

Transit Manager Maria Ptakowski describes the creation of Suffolk Transit as an amicable arrangement that has ultimately allowed the city to expand service within its borders in a cost-effective way. Suffolk passengers can transfer to HRT buses at three different points: College Drive in northern Suffolk, the Amazon fulfillment center in Northgate Commerce Park, and Chesapeake Square. Within the next three to five years, Suffolk Transit hopes to introduce an additional HRT transfer point at Victory Square in Portsmouth and a new commuter line on Route 460 to the town of Windsor.

⁶ National Transit Database, *National Transit Summaries and Trends 2021*, 5.

⁷ National Transit Database, *National Transit Summaries and Trends 2021*, 21.

⁸ Congressional Research Service, "Public Transportation Ridership: Implications of Recent Trends for Federal Policy," 1.

Who Pays for Public Transit?

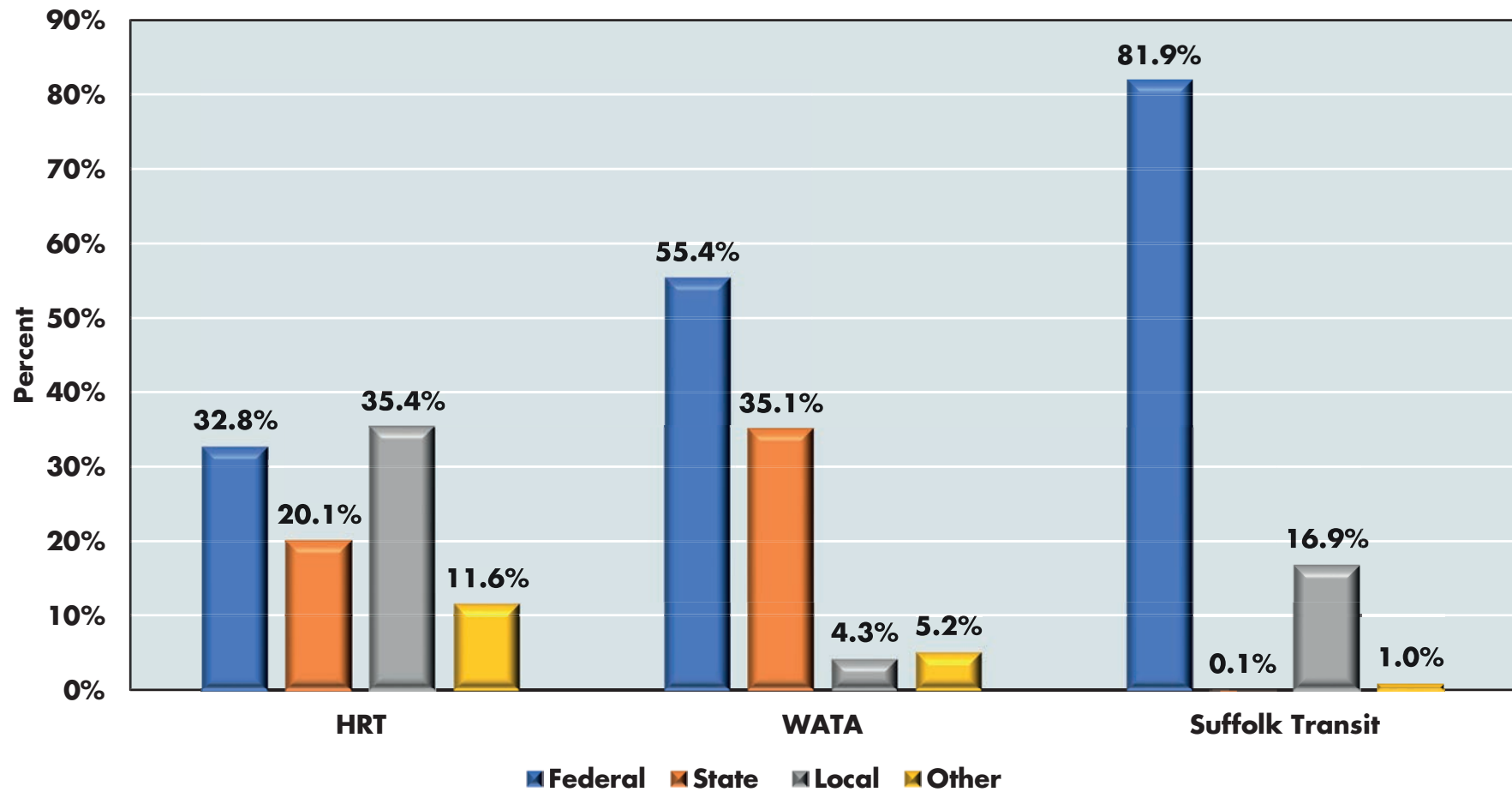
Transit in the U.S. today is not a money-making venture. A very few, high-ridership transit systems in places like New York City and San Francisco may cover more than half of their operating budgets from passenger fares (or at least they did before the pandemic). Everywhere else, "farebox recovery" is much lower. The National Transit Database indicates a 18.4% average recovery ratio across all U.S. transit systems for FY 2020 and a 12.8% ratio for FY 2021 in the midst of the pandemic.⁷ But the mean recovery ratio across all U.S. transit systems is certainly much lower, given the disproportionate influence of a few, very large urban providers. And even within transit systems, the proportion of operating expenses covered by fares varies dramatically between routes and modes of transit. Heavy and commuter rail tend to have the highest ratios, while paratransit has the lowest.

All of which is to say that most of the funding for transit in regions such as Hampton Roads comes from a mixture of federal, state, and local public dollars. Federal funds are often designated for capital expenses and sometimes require a local match. However, this situation changed dramatically in FY 2020 and FY 2021 as federal supplemental appropriations—emergency funding related to the pandemic—ballooned to an unprecedented \$69.5 billion or "about five times the pre-pandemic \$12 billion in annual federal public transportation support."⁸ The Coronavirus Aid, Relief, and Economic Security (CARES) Act, the American Rescue Plan (ARP), and other initiatives have sent billions of federal dollars to U.S. transit providers for both capital and operating expenses.

Thus, the most recent figures available from the National Transit Database, while broadly reflecting the mixture of sources that fund public transportation, are also quite exceptional, given the many ways that COVID-19 affected budgets and operations. Both WATA and Suffolk Transit eliminated fare collection altogether for several months during the pandemic. This policy means that non-government revenue, in part, declined significantly for these agencies in 2020 and 2021. In Graph 3, we provide a breakdown of total operating funding by source for each of the three public transit agencies in the region.

GRAPH 3

**TOTAL OPERATING FUNDING BY SOURCE
HAMPTON ROADS PUBLIC TRANSIT AGENCIES, 2021**



Source: National Transit Database agencies profiles, at: <https://www.transit.dot.gov/ntd> and National Transit Summaries & Trends 2021, p. 16, at: <https://www.transit.dot.gov/ntd/annual-national-transit-summaries-and-trends>

HRT's Cost Allocation Agreement and the challenges of regional transit

As a mid-sized transit agency, HRT has always relied on local subsidies as the largest source of its operating budget. The Cost Allocation Agreement between localities was a long-negotiated aspect of the 1999 merger that established HRT. According to this agreement, each city determines “how much service will be provided within its borders based on how much it is willing to pay for those services after all federal, state, and farebox revenues are applied. Each year, as part of the budgeting process, the [Transportation District] Commission will propose a public Transportation Service Plan (TSP) for the region. The TSP will contain a description of the service such as route name, hours of service to be provided, estimated cost, estimated revenue and estimated local share of the cost of service. Each participating city will have final determination on the type, amount and location of public transportation service provided within its borders. After each city has approved funding of its portion of the TSP, the Commission will approve and publish the TSP as the Transportation Service Plan of Hampton Roads.”⁹

Beyond determining how much local funding HRT receives, this arrangement explains some of the peculiarities in service that define our regional transit. A glance at the most recently published TSP shows that the six cities contribute at very different levels—for reasons having to do with politics, demographics, geography, and parochial interests. In FY 2022, Norfolk’s annual contribution of \$20,133,699 funded 19 bus lines, the Tide, paratransit, and the Elizabeth River ferries—a total of 350,810 service hours (Graph 4). At the other extreme, Chesapeake and Portsmouth each funded under 67,000 service hours, contributing \$2,821,863 and \$2,970,726, respectively. Given Portsmouth’s compact size, its transit network is still comparatively close-knit, while large stretches of Chesapeake have only limited bus access.

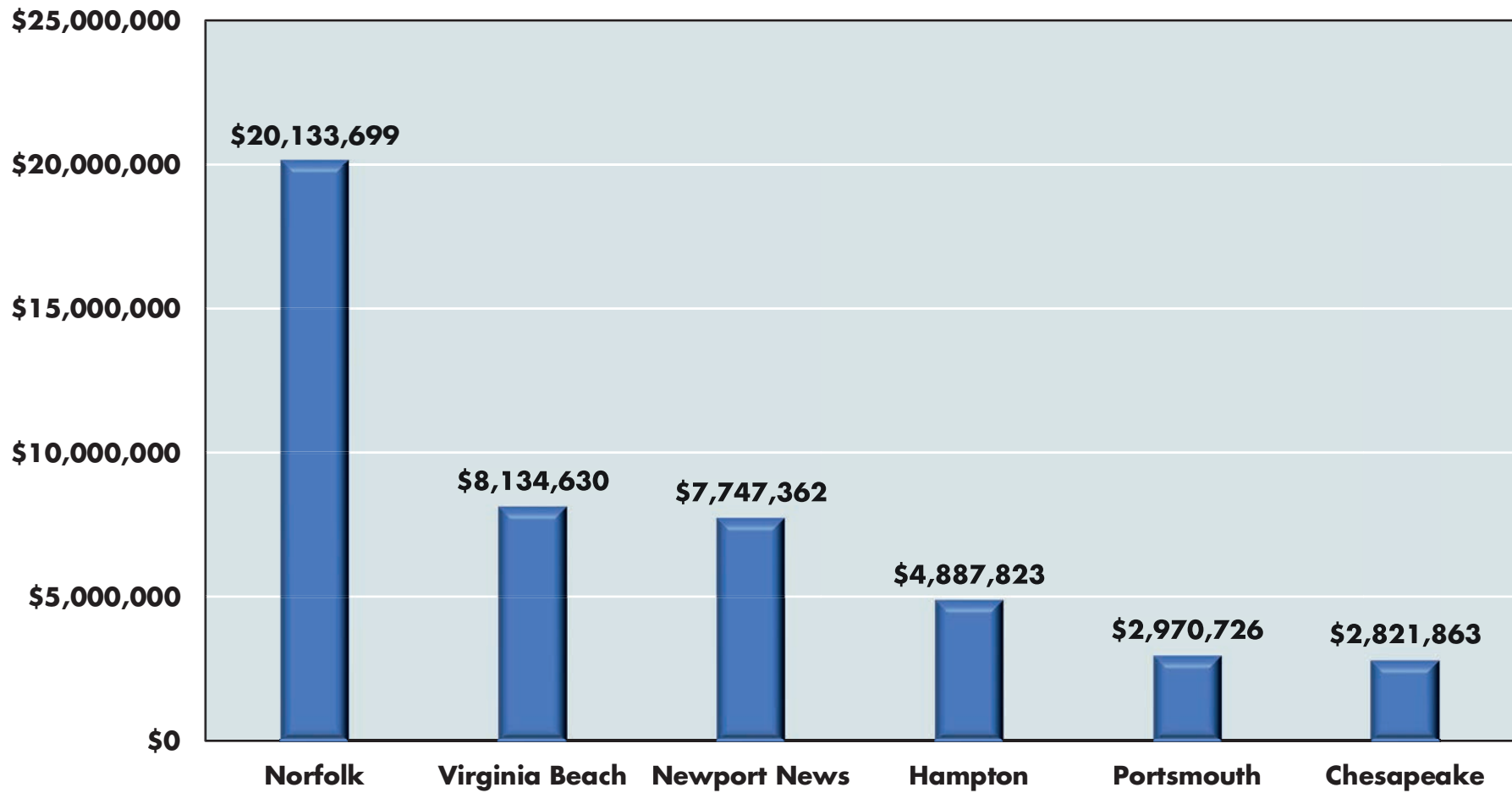
The challenges of operating a coherent regional transit network under these circumstances should be readily apparent. Riders who travel between localities may encounter different operating hours or levels of service, depending on the direction of their trip. Intercity bus routes are determined less by the overall needs of our region’s riders and more by a “lowest common denominator” of service that all localities on any given route are willing to subsidize.



⁹ Transportation District Commission of Hampton Roads, Fiscal Year 2022 Operating Budget, 27, at: <https://gohrt.com/agency/finance/>

GRAPH 4

TOTAL LOCAL CONTRIBUTIONS TO HAMPTON ROADS TRANSIT, FY 2022



Source: HRT Fiscal Year 2022 Operating Budget.

Transit transformation and regional funding

In response to these regional challenges and the nationwide decline in transit ridership, the Transportation District Commission of Hampton Roads launched an ambitious Transit Transformation Project in the fall of 2018, seeking to create a better regional bus system. In a June 2019 op-ed, the chairs of the project's Regional Advisory Panel, Portsmouth Mayor John Rowe and Hampton Mayor Donnie Tuck, noted that HRT had maintained "roughly the same patchwork of routes and service levels" for the past two decades and that HRT's bus operating costs were 20% less than those of peer agencies. Making the case for "a regional bus system that is more relevant and responsive to needs across Hampton Roads," they challenged city leaders "to foster new approaches to pay for public transportation in a sustainable way."¹⁰

Project leaders identified four action areas at the end of 2019:

- Implementing regional standards to achieve a more effective bus network
- Leveraging technology and service innovations
- Expanding regional collaboration and partnerships
- Exploring new business models for public transit

The Transit Transformation Project did not make specific recommendations for regional funding, although lobbying efforts were certainly underway. Just as COVID-19 was beginning to spread across the country, the 2020 General Assembly passed House Bill 1726 and Senate Bill 1038, which created the Hampton Roads Regional Transit Fund (HRRTF). Signed into law by Governor Northam in September 2020, the legislation created the first dedicated regional funding source for public transportation. The HRRTF is now administered through the Hampton Roads Transportation Accountability Commission (HRTAC) and paid for by "an additional grantor's tax of \$.06 per \$100 real estate value in the six cities served by HRT, a regional transient

occupancy tax of 1% of the charge for occupancy in the six cities, and a reallocation of statewide recordation taxes."¹¹ As a result, 5.4% of HRT's operating budget in FY 2022 came from new regional funding.¹²

Largely unnoticed by our local news media in the year of its inception, the HRRTF has been described to us by multiple observers as a public transportation "game changer." The \$65 million it generated through May 2022 has enabled significant progress toward the Transit Transformation Project's goals—supporting a regional network of 757 Express buses, new technologies such as mobile fare payment and real-time bus information, and the construction of more than 600 bus shelters. The HRRTF legislation also directed the Hampton Roads Transportation Planning Organization (HRTPO) to assemble a Regional Transit Advisory Panel of community leaders, to be responsible for providing "ongoing advice in the regional planning process".



¹⁰ John Rowe and Donnie Tuck, "Help remake regional transportation," *The Virginian-Pilot* (16 June 2019), at: https://www.pilotonline.com/opinion/columns/article_a889864a-8e33-11e9-b29b-a7321ca2a071.html

¹¹ *State of Transportation in Hampton Roads 2022*, 51.

¹² Transportation District Commission of Hampton Roads, Fiscal Year 2022 Operating Budget, 23.

The big picture: Long-range planning and the HRTPO

The Hampton Roads Transportation Planning Organization (HRTPO) is closely involved in numerous aspects of regional transportation planning. Among its key responsibilities is developing and maintaining a Long-Range Transportation Plan (LRTP), which seeks “to guide multimodal investments that promote an efficient, reliable, and well-connected transportation system while maximizing the use of scarce funds.”¹³ The plan is a “living document” and is comprehensively updated every five years. It is informed by an array of economic, technical, geographic, and demographic considerations which can be explored in greater depth on the HRTPO website.

The 2045 LRTP, which was adopted in June 2021, includes around 300 candidate projects which are described “as the most robust projects the region can afford over the next 20 years to help improve the transportation system.” The great majority of these projects involve highways, interchanges, bridges, and tunnels, but the plan also includes intermodal freight, active transportation (biking and walking), and transit projects. Transit candidate projects include the proposed transit extension to Norfolk Naval Station, high-capacity transit extensions to Suffolk and the Greenbrier area of Chesapeake, as well as new ferry and rail service.

All candidate projects receive a prioritization score that is based on their utility, viability, and economic vitality—but even highly scoring projects are not guaranteed realization. Their fates are tied to many external factors, including the state of the economy, the will of voters, and shifting priorities in local, state, and federal administrations. Indeed, Hampton Roads has a history of ambitious, but ultimately unrealized, transit proposals. The extent to which the HRTPO can change this game by encouraging broader regional investment in transit remains to be seen.

BETTER BUSES

According to the February 2023 update of the LRTP, four transit projects are currently underway, with an estimated project cost of \$882.4 million. Not coincidentally, all involve buses—an emphasis that reflects the ambitions of the Transit Transformation Project and the unfulfilled hopes around light rail. It also mirrors a broader shift in federal transit policy, which has increasingly moved away from funding new rail systems, particularly in mid-sized regions, and toward bus rapid transit, zero-emission vehicles, and other improvements to existing bus service. Economists and transportation experts largely agree that light rail makes the most economic sense “in corridors where ridership is high—but not where a bus could carry the same load.”¹⁴ Bus routes are much more easily reconfigured in response to changing traffic patterns, and the new electric buses are able to operate in an environmentally sustainable way. Here are some of the most important innovations ahead for Hampton Roads bus riders.

757 EXPRESS BUSES

The first 757 Express buses hit the road on HRT’s Route 112 (Jefferson Avenue in Newport News) in October 2022. It is one of 13 “backbone routes” [see **HRT regional backbone map, page 117**] that will provide more frequent service, consistent across all localities, on our region’s busiest corridors. 757 Express buses now run at 15-minute intervals during the peak weekday travel times of 6:00-9:00 a.m. and 3:00-6:00 p.m. on Jefferson Avenue and Mercury Boulevard. HRT plans to extend this level of service to Route 20 (Virginia Beach Boulevard), the busiest bus route in the Commonwealth, later this fall.

Fifteen-minute intervals are considered “frequent” in transit—a standard currently met by few buses in Hampton Roads, but one that would enhance their viability for many more users. As transit advocate Steven Higashide notes: “The difference between a bus that runs every half hour and a bus that runs every 15 minutes is the difference between planning your life around a schedule and the freedom to show up and leave when you want.”¹⁵ Having

¹³ Hampton Roads 2045 Long-Range Transportation Plan, 2045 LRTP Overview, at: <https://storymaps.arcgis.com/stories/015e33b5167e4265b2e72aabfab81fa3>

¹⁴ Christof Spieler, *Trains Buses People: An Opinionated Atlas of US and Canadian Transit*, 2nd ed. (Washington DC: Island Press, 2021), 27.

¹⁵ Steven Higashide, *Better Buses Better Cities* (Washington DC: Island Press, 2019), 23.

to transfer between buses that run just once an hour—a typical interval in our region—means that even short-distance trips can easily take more than two hours. The 757 Express proposal will benefit current riders and likely attract new ones. HRT reports that ridership on Route 112 increased 20% in the new service’s first six months. The fly in the ointment is a persistent shortage of bus drivers, which will make full implementation on all 13 routes a formidable challenge.

MOBILE PAYMENTS

“Buying coffee with your phone is easy. Paying for the subway is a pain.”¹⁶ This recent Washington Post headline highlights one way that transit is perceived to have fallen out of step with users’ needs. (A 2016 survey found that 88% of HRT riders owned a smartphone; the proportion today is likely higher.) Until this year, boarding a bus anywhere in Hampton Roads without a pre-purchased farecard meant needing not only cash, but also exact change. When we spoke with the WATA and HRT teams this spring, we learned that both transit authorities were planning to introduce mobile payment options on all of their buses—WATA, in July 2023 and HRT, in a gradual rollout over the next few years.

Accepting mobile payments is not just a matter of convenience, but can also be a tool for promoting equity. Riders in our region have long had the option of purchasing monthly passes. A frequent rider might save around \$20 by paying per month—but only if they had the funds on hand (between \$45 and \$70) to pay all at once. Mobile payment options allow riders who pay one day at a time still to take advantage of lower monthly rates. New mobile apps can track how much riders have spent per month, “capping” their fare once they reach the amount of a monthly pass. Smartphone owners (or, potentially, smartcard holders) who do not have a debit or credit card can still use cash to load their accounts.

ELECTRIFICATION

Virginia may be on the road to using less gasoline and diesel in the future. Legislation passed by the General Assembly in 2021 obliges the Commonwealth to follow California’s strict emissions standards, which require all new vehicles sold by 2035 to be independent of fossil fuels (though we recognize there is considerable debate whether to continue to follow California’s standards). Our region’s transit providers are actively considering when and how to electrify their fleets.

HRT has been a leader in this arena, introducing its first six electric buses on Route 20 (Virginia Beach Boulevard) in the fall of 2020. These vehicles are currently charged and serviced at HRT’s 18th Street facility in Norfolk. A new state-of-the-art facility in Virginia Beach’s Corporate Landing Business Park, slated for completion in 2028, will make room for many more. HRT plans to transition fully to a zero-emissions fleet by 2049. Meanwhile, Suffolk Transit recently received a \$565,000 Department of Transportation grant for the purchase of two electric buses and charging stations, and WATA is observing this fast-changing field and weighing its options.

Electric buses are quiet, clean, and comparatively inexpensive to maintain, but their up-front costs are steep. A full-size, fully equipped electric bus now costs around \$1.5 million, according to HRT Planning and Development Director Ray Amoruso—about twice as much as a traditional diesel vehicle. Moreover, there are significant costs associated with introducing the new buses—purchasing and installing charging stations and associated technology, hiring specialists, and retraining drivers and mechanics. New federal grants can cover many of these expenditures; the 2021 Infrastructure Investment and Jobs Act (IIJA) provides a hefty \$1.1 billion per year specifically for this purpose. Grant Sparks, director of transit planning for the Virginia DRPT, advises localities to “let Uncle Sam pay for your electrification efforts and save yourself from spending any local or state funding on this.”¹⁷

¹⁶ Shira Ovide, “Buying coffee with your phone is easy. Paying for the subway is a pain,” *The Washington Post* (21 March 2023), at: <https://www.washingtonpost.com/technology/2023/03/21/wageworks-edenred-mta-digital-wallets/>
¹⁷ Congressional Research Service, “Public Transportation Ridership: Implications of Recent Trends for Federal Policy,” 11; and Wyatt Gordon, “As Congress bankrolls electric conversion for bus fleets, is Virginia ready?” *Virginia Mercury* (8 June 2022), at: <https://www.virginiamercury.com/2022/06/08/as-congress-bankrolls-electric-conversion-for-bus-fleets-is-virginia-ready/>

BUS RAPID TRANSIT

Further down the road is the possibility of bus rapid transit (BRT), sometimes called “light rail on rubber tires.” BRT relies on innovations such as dedicated bus lanes, elevated boarding platforms, traffic-signal priority, and off-board fare collection, enabling passengers to get on and off quickly, and buses to glide through busy traffic corridors. A celebrated nearby example is Richmond’s Pulse, which runs on a 7.6-mile route along Broad Street and Main Street, far surpassing ridership expectations since its 2018 introduction. In Hampton Roads, a possible BRT route on Jefferson Avenue and Mercury Boulevard has been studied. BRT is also being considered for Phase 2 of the Tide extension project. Instead of extending light rail to Norfolk Naval Station, as once proposed, a BRT route on Military Highway could potentially connect Norfolk Naval Station with the Tide and eventually the Greenbrier area in Chesapeake.

AUTONOMOUS VEHICLES

Another possibility for the future, still dependent on developing technologies, involves autonomous vehicles. A Congressional research report from November 2022 calls driverless vehicle technology “perhaps the biggest unknown but potentially most disruptive factor for future public transportation ridership. Estimates of when fully autonomous vehicles will be in use in urban environments vary from a few years to a few decades.”¹⁸ Earlier this year, the Norfolk Innovation Corridor, in cooperation with Yunex Traffic and the Siemens Ingenuity Center in Austin, Texas, suggested a Colley Avenue pilot project for autonomous vehicles which could potentially connect the western terminus of the Tide at the Norfolk medical complex with the main campus of Old Dominion University. The future of the proposal will depend on key stakeholders (including HRT, ODU, EVMS, and the City of Norfolk) deciding to move forward with the project and applying for federal grant funding.

MOBILITY ON DEMAND

Transit providers everywhere have begun to consider how the successful ridesharing model of Uber and Lyft might be applied to public transportation. In a sense, this model is not new; paratransit users have long ordered rides on demand within a defined service area. The new question is whether the service could be extended to many more riders on the much shorter notice they have come to expect. This kind of “microtransit” is difficult to scale upward. If a key goal of transit is reducing urban traffic or efficiently moving large numbers of people across long distances, then traditional fixed-route service is usually a better solution. In other situations, however, microtransit could be a useful complement or even replacement for fixed-route buses.

HRT conducted a microtransit pilot project, HRT OnDemand, between July 2022 and February 2023. The experiment took place in select areas of Newport News (around Christopher Newport University, Patrick Henry Mall, and the Denbigh neighborhood) and Virginia Beach (around Town Center, Virginia Wesleyan University, and the Bayside neighborhood), where users could order rides through a dedicated app. Passengers were directed to a nearby “virtual bus stop,” to be picked up by an HRT van potentially shared with other users. HRT reports that 29,514 riders used the service during the six-month trial period and that a second, 12-month pilot project will begin soon.

The City of Virginia Beach initiated its own pilot program in 2022, contracting with the Florida-based company Freebee to offer free rides around the Oceanfront. In this case, passengers used the Freebee app to order rides (also potentially shared with other users) in one of five electric Tesla Model X vehicles. The service provided 91,151 rides in the area between 42nd Street, General Booth Boulevard, and Birdneck Road in its first 12 months. In 2023 city officials renewed the Freebee contract and increased the summertime fleet to ten vehicles.¹⁹

¹⁸ Congressional Research Service, “Public Transportation Ridership: Implications of Recent Trends for Federal Policy,” 12.

¹⁹ Stacy Parker, “Virginia Beach funds year-round free rides at the Oceanfront,” *The Virginian-Pilot* (20 May 2023), at: <https://www.pilotonline.com/news/transportation/vp-nw-freebee-renewed-0518-20230520-ml36jo53vfeaxgwmxy6rrzig44-story.html>

The City of Suffolk, meanwhile, is considering how microtransit might extend the reach of its existing bus routes. The Chuckatuck, Holland, and Whaleyville areas do not have enough residents to sustain fixed-route buses, but an on-demand service might one day carry riders from these neighborhoods to an existing bus line or downtown Suffolk.

FREE RIDES AND TRANSIT EQUITY

One of the hottest topics in transit today is the free ride. Metro areas as diverse as Albuquerque, Kansas City, North Carolina's Research Triangle, and Missoula, Montana, have all recently eliminated or paused bus fares, seeking to increase ridership and improve transit access. The zero-fare movement gained momentum during the pandemic, subsidized in part by COVID relief funds and driven by the need for social distancing. A 2022 DRPT Transit Equity and Modernization Study reports that "roughly half of Virginia's transit agencies have expressed an interest in implementing zero-fare transit," and that "eleven agencies have already fully or partially implemented zero-fare transit."²⁰ WATA and Suffolk Transit introduced free rides at the start of the pandemic, primarily to reduce contact between drivers and passengers, but resumed fare collection in July 2021.

Proponents of free rides argue that transit should be considered a public service—similar to schools and libraries or police and fire departments. If tax dollars pay for paving and maintaining roads, even in places with comparatively few drivers, so the argument goes, why not for buses or other forms of transit? This is an interesting and important public policy question. As transit currently functions in the U.S., however, financial trade-offs must be made. Is it better to reduce fares or enhance service? Should buses run everywhere a few times a day? Or should they run more often, but only on the busiest corridors? Transportation and city planners make these kinds of hard decisions all the time, seeking the best use of limited resources.

Our region's transit providers survey their users regularly. Hampton Roads riders typically prioritize concerns about quality of service (frequency, reliability, and safety) over free or less expensive rides—responses that resemble survey results elsewhere around the country.²¹ In short, free rides mean little if they can't get you to work on time or wherever else you need to go. One way of interpreting the loss of transit riders over the past 10 years is that people who can pay more for services like Uber and Lyft may increasingly be choosing to do so, voting with their feet for reliability and convenience over inexpensive rides.

The Transit Equity and Modernization Study notes that zero-fare transit "is not a one-size-fits-all solution," and that "several other policies and strategies have been shown to provide equity benefits." This is particularly true in regions such as Hampton Roads, where the existing level of service is comparatively low. None of our region's transit providers plan to eliminate fares altogether in the foreseeable future (although certain groups are already eligible for free rides). Instead of free rides, HRT and WATA are focusing on increasing the frequency of service on certain key routes, and Suffolk Transit is considering longer hours and broader geographic coverage.

HRT's ongoing installation of more than 600 bus shelters equipped with solar-powered lighting, benches, and trash cans is an important development in this context. Before February 2021, only around 200 of 2,700 HRT bus stops had a shelter, a bench, or both. New amenities mean that fewer riders will have to stand in the dark, rain, or summer sun while waiting for a bus. HRT President and Chief Executive Officer William Harrell affirms that, beyond free rides, "equity also starts with providing clean bus shelters, better technology, and reliable bus service to each customer we serve."²²

²⁰ HJ 542 Final Report, Virginia Transit Equity and Modernization Study (August 2022), at: <https://www.vatransitequity.com/>

²¹ Spieler, *Trains Buses People*, 22; Jerusalem Demsas, "Buses Shouldn't Be Free," *The Atlantic* (9 December 2022), at: <https://www.theatlantic.com/ideas/archive/2022/12/washington-dc-free-bus-transit/672407/>; and TransitCenter, *Who's on Board 2019: How to Win Back America's Transit Riders*, at: <https://transitcenter.org/publication/whos-on-board-2019/>

²² Gavin Stone, "New and improved bus shelters are popping up across Hampton Roads," *The Virginian-Pilot* (15 September 2022), at: <https://www.pilotonline.com/news/transportation/vp-nw-hampton-bus-shelters-20220915-2q5uyftwojqg3nox27l6t5lc5u-story.html>; and Josh Janney and Cianna Morales, "Hampton Roads Transit is providing free rides on Friday to celebrate Rosa Parks' legacy. Could it ever happen year-round?" *The Virginian-Pilot* (2 February 2023), at: <https://www.pilotonline.com/news/transportation/dp-nw-hrt-transit-equity-day-20230202-xpck5mckvjg2pavcptyaud253a-story.html>

Final Thoughts

Public transportation in Hampton Roads and elsewhere in the U.S. is in a moment of transition, sparked by technological change, pandemic disruptions, a growing emphasis on social equity, and a longer-term loss of riders that cannot be ignored. Critics of transit argue—not incorrectly—that ballooning government subsidies have, in too many cases, brought diminishing results.²³ Overall, we tend to agree with transit advocate Christof Spieler, who says that riders want “transit that gets them where they want to go, when they want to go there, in a reasonable and predictable amount of time, in an understandable way. If transit delivers that, more people will ride. . . . But transit that ignores these basic principles simply won’t attract riders.”²⁴ It seems clear that major innovations, such as the ones discussed in this chapter, are necessary to make public transportation a practical and desirable option for many more people in Hampton Roads.

You can probably use transit to get where you need to go—if you have plenty of time. Although Hampton Roads has some significant “transit deserts” (notably, rural areas outside our urban core, lower York County, Poquoson, and parts of southern Chesapeake and Virginia Beach), our major commercial and population centers are connected by at least hourly bus service. However, finding a connection that will take you where you need to go, in the time that you have, may not be feasible. Only 4.7% of our region’s jobs can be reached by public transportation within 60 minutes. At a time when employers everywhere are struggling to attract and retain employees, our region’s bus network is of only limited assistance connecting workers and jobs.

Smartphones have made our region’s buses easier to use, but getting around without one might be a challenge. HRT, WATA, and Suffolk Transit have all adopted live bus tracking, which means that anyone waiting for a bus can follow its progress in real time—either on the providers’ websites, through dedicated apps like Spot or Transit, or mapping and navigation platforms such as Google Maps. If you’re wondering how to take a bus anywhere in Hampton Roads, these services can tell you immediately—in

some cases, informing you how much the ride will cost, proposing multiple routes, or suggesting how to combine your ride with Lyft or a Lime scooter to reach your destination faster. On the other hand, if you’re not aware of these new technologies or able to access them, you will find very little to orient you at most bus stops. Even at transfer hubs and other busy locations, there are typically few maps, signs, schedules, or other instructions that might facilitate your ride or give you a broader idea of where transit can take you. HRT does expect to install real-time customer displays at key transfer centers by the end of 2023. In general, however, we found that getting around successfully by bus means getting online first.

We are on the way to regional integration but there is still a ways to go. The Hampton Roads Regional Transit Fund (HRRTF) is a major milestone on the road to a more dynamic and integrated regional transit network, although the new revenue stream applies only to the six cities that are served by HRT. A framework for broader regional cooperation does not yet exist. Hampton Roads’ three transit providers have a collegial relationship and meet every so often under the auspices of the HRTPO. However, riders who need to transfer between networks, or who live or work near these networks’ boundaries, are likely to have fewer transit options. Further, an HRT pass is not valid on WATA or Suffolk Transit (or vice versa), so passengers transferring between systems must pay more.

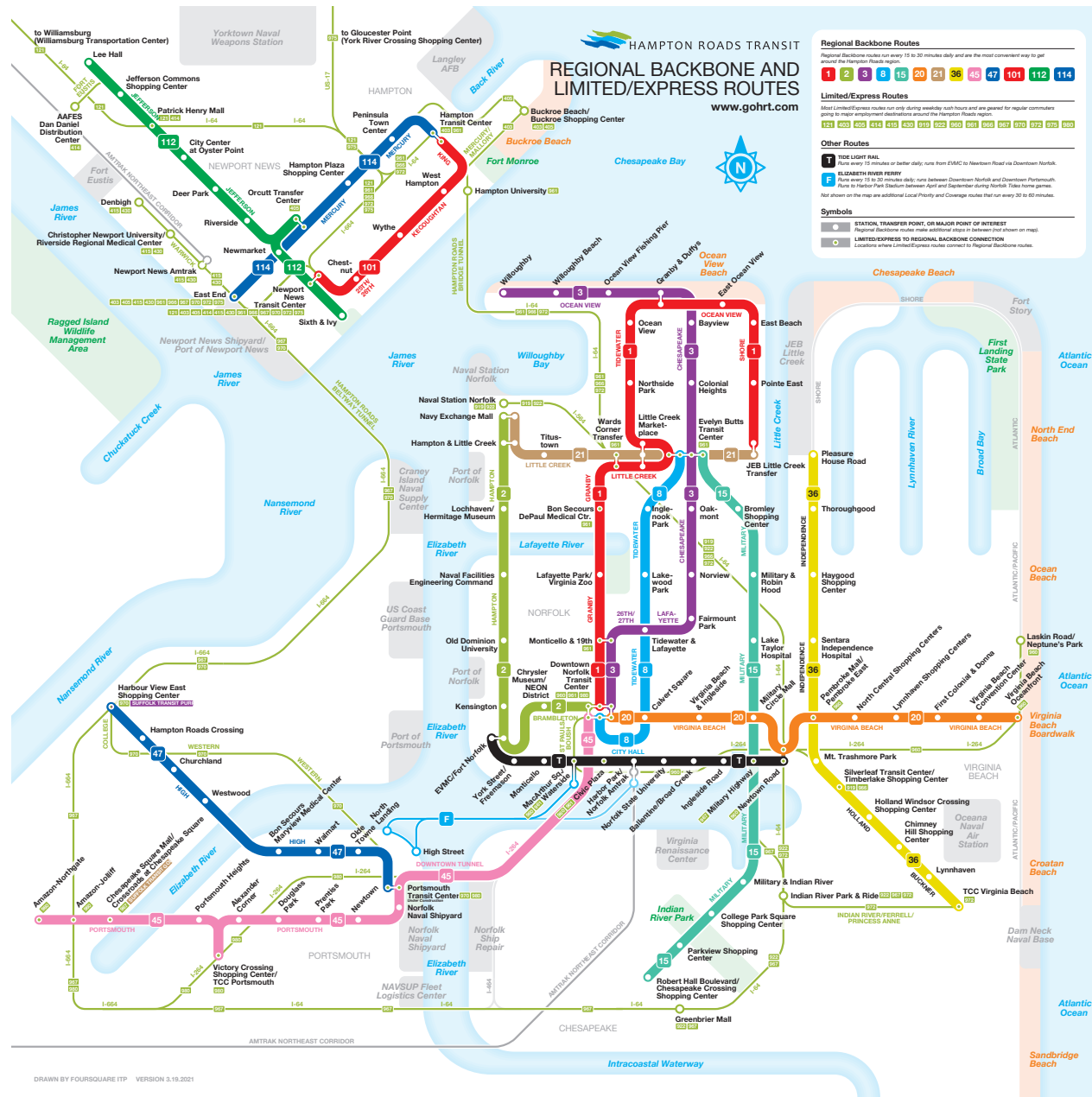
Fewer transit options intensify the financial pressures on Hampton Roads workers. Past State of the Region reports have addressed some of the cost-of-living challenges Hampton Roads workers face. In 2022, we found that 35% of our region’s households can be considered cost-burdened (spending more than 30% of their income on housing). In 2020, we learned that 1 of 9 residents had recently experienced food insecurity. Both situations are exacerbated by our comparatively underdeveloped transit system. Even lower-income households may be compelled to own one or more cars in order to cover their transportation needs, placing further strain on already tight budgets. And living in a “food desert” is that much more dire for households without adequate transportation. Frequent and reliable transit options can connect people not only with jobs but also healthy sources of food and other necessities.

²³ Randal O’Toole, “Transit: The Urban Parasite,” Policy Analysis No. 889, Cato Institute (20 April 2020), at: <https://www.cato.org/policy-analysis/transit-urban-parasite>

²⁴ Spieler, *Trains Buses People*, 33.

FIGURE 1

HAMPTON ROADS TRANSIT REGIONAL BACKBONE MAP



Death and Dying in Hampton Roads



DEATH AND DYING IN HAMPTON ROADS

"Life Is Pleasant. Death Is Peaceful. It's the Transition That's Troublesome."

Isaac Asimov

First introduced in the United States in 1963, hospice care is the specialized treatment that provides support and comfort to patients who are terminally ill with a general life expectancy of six months or less. According to the National Center for Health Statistics, more than 1.5 million patients received hospice services in the US in 2017.¹ These individuals suffered from life-limiting illnesses such as end-stage heart disease; cancer; neurodegenerative diseases, such as Parkinson's disease; lung or kidney disease; or Alzheimer's and other dementias.

Hospice care was added as a permanent Medicare benefit in 1985 and is designed to help patients live as comfortably as possible during their remaining time, with a focus on managing symptoms, pain relief, and end-of-life (EOL) support. This care is often provided at home but can also be delivered in an outpatient clinic or inpatient setting. In 2020, Medicare spending on hospice care reached \$22.4 billion.² As the population ages in Hampton Roads, Virginia, and the United States, hospice care will only increase in importance over the coming decade.

Quality care is essential for patients with serious and terminal illnesses as it improves patient outcomes, provides comprehensive and specialized care, manages pain and symptoms, offers emotional support, ensures dignified end-of-life care, promotes coordination and continuity of care, and embraces patient and family-centered approaches. A recent interview with a family member of a hospice patient who recently passed away from colon cancer in Norfolk provided insight on quality care and understanding the system. "When my Mom was diagnosed and began receiving hospice care visits in my home, I had no idea where the person was coming from, a profit/nonprofit, I didn't even know there was a distinction. I thought it was run by a church or other nonprofit. However, all hospices are not the same, care can come from for-profits, part of a national chain. Also, within my family, my brother near

Franklin wanted to help me with respite care if we could find home hospice care in his rural location. However, it was very difficult and that even limited our family choices. Before my mother's illness, I knew extraordinarily little about who provided hospice care in Norfolk or other locations in the area. Over time, I learned what services were available and that my Mom did have a choice in providers, but it was slow and difficult."

In this chapter, we will take a close look at serious disease and hospice care in the United States and Virginia. We examine the demand for hospice care by Medicare beneficiaries and the changing nature of hospice care suppliers as now more than two-thirds of hospices nationwide operate as for-profit entities. We scan our region for care services for the seriously ill and ultimately ask the question: what is the state of end-of-life care in Hampton Roads?

¹ Post-acute and Long-term Care Providers and Services Users in the United States, 2017–2018 Analytical and Epidemiological Studies, National Center for Health Statistics, Series 3, Number 47, May 2022.

² Value of Hospice in Medicare, NORC at the University of Chicago, March 2023, https://www.nhpco.org/wp-content/uploads/Value_Hospice_in_Medicare.pdf

A Primer on Hospice Care

If we wish to focus on hospice and end-of-life (EOL) care, then we need to sharpen our awareness of terminology. For those who are not acquainted with this topic or have not experienced the death of a loved one in this way, language can be a challenge surrounding this often difficult to discuss subject. To avoid confusion, we define commonly used terms in this chapter and provide a discussion of each term. To start, there are different types of care for individuals with illnesses: curative, palliative, and hospice.

Curative care refers to treatments provided to an individual at any age or illness stage with the primary goal of curing their illness or condition. A hospital stay for an appendectomy is an example of curative care. Curative care can range from relatively mild conditions to quite complex medical conditions that require intensive medical intervention and extended stays in medical facilities.

Palliative care is care designed to soothe the symptoms of someone suffering from a serious illness and is typically part of care for people with cancer. For any age or stage of illness, this type of care may also be referred to as supportive care. Palliative care can be administered at the same time as curative care and may even assist in illness recovery, if recovery is possible.

Hospice care is a specific type of palliative care for individuals who have been identified to have six months or less of life due to severe illness, life threatening condition and/or other medical factors. When a patient chooses hospice care, they waive their rights to Medicare coverage of disease-focused curative treatments for their terminal illness. However, treatments and services to reduce pain or symptom severity and manage terminal illness and related conditions are included in the hospice benefit. This prognosis can only be determined by a physician, and the hospice benefit does not expire. The initial hospice benefit period starts when the patient signs up for hospice and the period lasts for 90 days, if needed. After the first 90 days, the patient will be approved for an additional 90 days. Treatment during hospice care refers to alleviating symptoms and providing comfort when possible as there is no curative treatment being administered.

A patient always has control over the type of care received. For example, if a medical condition or illness improves or the patient prefers to leave hospice care, they are free to do so. Medical professionals would agree that when six months or less is identified for hospice qualification, this determination is based upon the expected course of the patient's medical condition. However, no two patients are ever the same, and disease progression may be faster or slower than the six-month time frame. After six months, a patient may be recertified after an in-person visit by a qualified health professional when the patient's condition remains life-limiting.

Patients and their loved ones often want and need information and support surrounding the seriousness or finality of a diagnosed illness. However, medical professionals are only in the position to estimate this information based on what they know about the patient's medical history and the diagnosed illness. Over- or underestimating life span is fraught for many reasons. Supportive care to deal with the emotional challenges associated with an end-of-life diagnosis and care are available through hospice including counseling and respite care. Respite care provides short-term relief for the primary caregiver of an ill patient and offers the caregiver assistance and rest from providing constant care for a temporary period of time.

Lastly, after the patient's death, bereavement services are designed to help individuals navigate the difficult emotions that come with losing a loved one. The Medicare Hospice Benefit provides bereavement services for at least one year. Many religious organizations also provide bereavement services, for example, the Grief Share program is commonplace throughout churches in Hampton Roads.

Hospice Care and Health in the United States

Inspired by St. Christopher's Hospice in London in 1967, Florence Wald founded the first "official" hospice in the United States. Established in 1973 in Branford, Connecticut, the Connecticut Hospice eventually became the model for hospice care across the nation. Dr. Elisabeth Kübler-Ross' groundbreaking book, *On Death and Dying*, which described five stages of grief, propelled the relatively new discussion of end-of-life care for the terminally ill to the American lexicon over 50 years ago. Evidence suggests that the prevalence of certain diseases has increased over time and expanded social awareness of serious illness and end-of-life conditions; this is vital to promoting better health outcomes and creating a supportive environment for those impacted. The National Institute on Aging defines serious illness as "a disease or condition with a high risk of death." Awareness initiatives play a crucial role in improving public health, advancing research, and enhancing the quality of life for individuals and communities. Consider the importance of the discussion of serious diseases such as cancer in the United States and Virginia.

Heart disease and cancer are the leading causes of death in the nation. In 2020, over 1.6 million new cases of cancer were reported, and over 602,000 people died of cancer. One of every five deaths in the United States is due to cancer. Cancer is the leading cause of death in midlife and is poised to become the leading cause of death overall as the number of people diagnosed with and dying from cancer continues to increase.³ By 2050, the number of colorectal cancers is predicted to exceed the total number of lung and bronchus cancers.⁴ It is important to note that while the incidence of certain cancers has increased, advancements in medical treatments and interventions have also improved survival rates for many types of cancer. Early detection, better treatment options, and increased awareness have helped in managing and treating cancer more effectively. Nonetheless, especially as our population ages, it stands to reason that age is a significant risk factor for many types of cancer, and as life expectancy has increased, more individuals are living long

enough to develop cancer. Individuals with a Stage 4 diagnosis, as defined by the National Cancer Institute as cancer having spread to "distant parts of the body," will be offered support care as curative care becomes limited.

The Bureau of Economic Analysis (BEA) Health Care account estimates health care spending by medical disease. Graph 1 illustrates the rise of disease costs in the United States from 2001 to 2020 with cancer remaining relatively persistent over that period. Of special note in Graph 1 is the impact of the COVID-19 pandemic's first year spending on infectious diseases, jumping from \$83.3 billion in 2019 to more than \$222 billion in 2020.

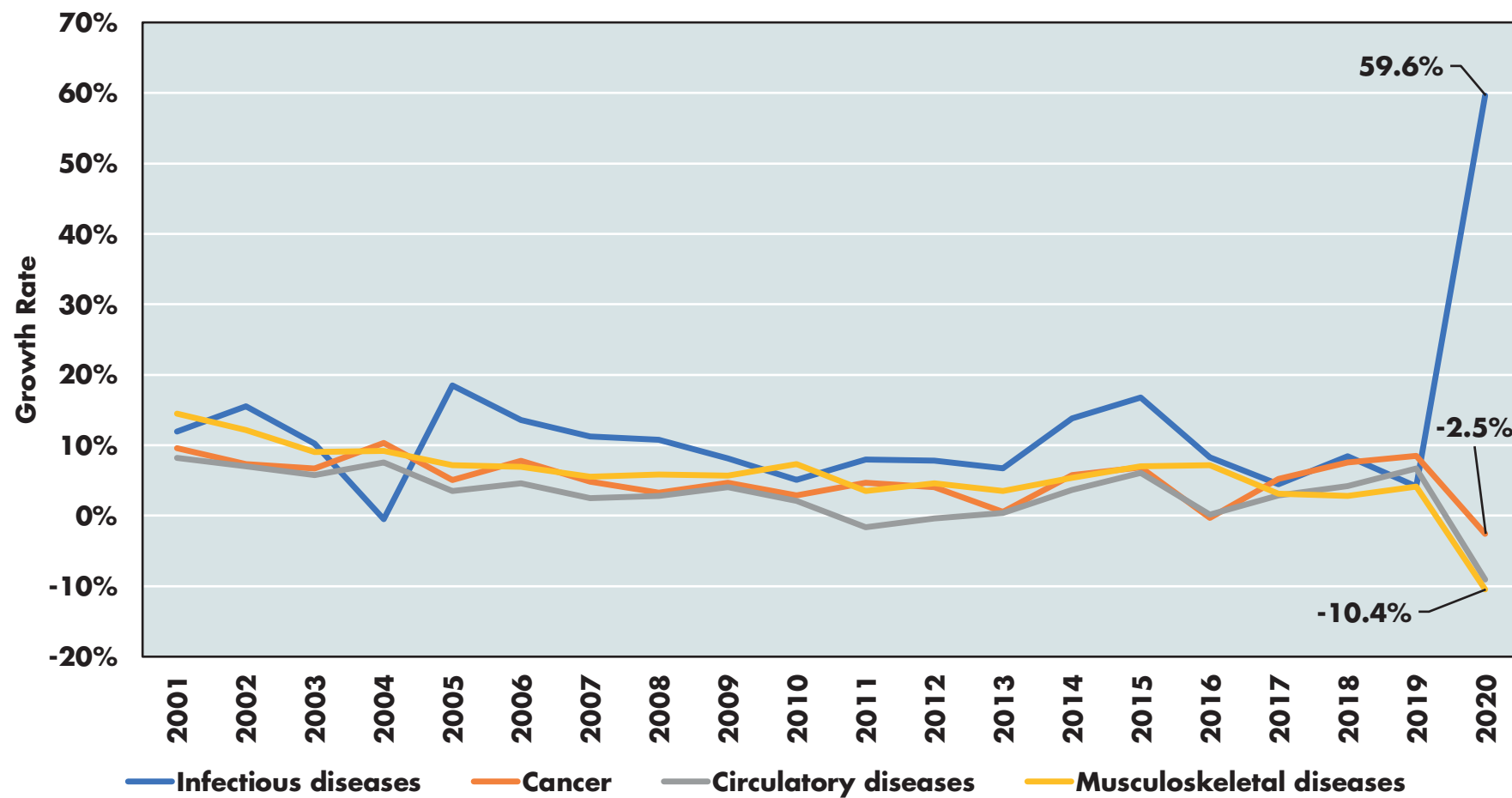
The Centers for Disease Control (CDC) officials have cautioned interpreting 2020 hospice data because the pandemic disordered health services. Closures and the suspension of health services due to social distancing led to delays and/or reductions in cancer screening, diagnosis, and reporting of disease. It is suspected that any decline in new cancer cases in 2020 may be due to the disruption of COVID-19 on routine health services. In addition, during the midst of the pandemic, deaths of the terminally ill were complicated by the introduction of COVID-19 fatalities. The long-lasting impacts of COVID-19 on data gathering in the United States include disruptions to data collection, changes in data collection methods, increased focus on health data, disparities and equity considerations, and reliance on real-time data. These effects will likely shape health care going forward in the post-pandemic era.

Table 1 reports the top 10 leading causes of death in the U.S. and Virginia in 2021 as reported by the National Vital Statistics System (NVSS) and CDC WONDER. Not surprisingly, the top-five leading causes of death for the nation and the Commonwealth are the same. We note (again) that these statistics are impacted by the COVID-19 pandemic, with COVID-19 deaths ranking third nationally and in Virginia in 2021.

³ U.S. Cancer Statistics Working Group. 2023. <https://www.cdc.gov/cancer/U.S.cs/dataviz/index.htm>

⁴ Weir HK, Thompson TD, Stewart SL, White MC. Cancer Incidence Projections in the United States Between 2015 and 2050. *Prev Chronic Dis.* 2021 Jun 10;18:E59. doi: 10.5888/pcd18.210006. PMID: 34114543; PMCID: PMC8220959

GRAPH 1
ANNUAL EXPENDITURE GROWTH BY DISEASE
UNITED STATES, 2001-2020



Source: US Bureau of Economic Analysis, <https://www.bea.gov/news/blog/2023-02-10/new-health-care-statistics-first-year-covid-19-pandemic>

TABLE 1 TEN LEADING CAUSES OF DEATH, UNITED STATES, 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.

Table 2 reports the number of cancer deaths and death rate in the Commonwealth for selected years, 2005 to 2021. The number of deaths from cancer in Virginia has risen since 2005 but so has the population of the state. If we examine the death rate from cancer, which is equal to the number of cancer deaths relative to the population, then the story is different. In 2005, the death rate from cancer in the Commonwealth was 190.0 per 100,000 residents. In 2019, the cancer death rate had fallen to 144.9 per 100,000 residents. While the death rate increased in 2021, it was still almost 21% below the level observed in 2005.

TABLE 2 CANCER MORTALITY, VIRGINIA, SELECTED YEARS, 2005-2021		
Year	Death Rates	Number Of Deaths
2005	190.0	13,877
2014	161.5	14,749
2015	159.5	14,947
2016	156.1	15,027
2017	152.6	15,064
2018	149.3	15,148
2019	144.9	15,045
2020	146.6	15,499
2021	150.5	15,724

Sources: CDC WONDER and the Dragas Center for Economic Analysis and Policy, Old Dominion University. The number of deaths per 100,000 total Virginia population.

Life-threatening diseases and conditions in the United States and Virginia such as cancer, respiratory diseases, and neurodegenerative disorders, contribute to a demand for end-of-life care services. One important factor in meeting the potential increase in demand for hospice care is that policymakers and communities should work together to ensure adequate resources, funding, and access to hospice services. This includes expanding hospice programs, increasing awareness and education about end-of-life care options, and supporting initiatives that promote compassionate and high-quality care for individuals with life-limiting illnesses. One such monumental change, the inclusion of hospice services as a Medicare benefit, drastically changed end-of-life care in the United States over 40 years ago.

Hospice Care and the Medicare Benefit

In 1982, the Medicare Hospice Benefit was added to the Social Security Act, which allowed hospice care to be covered by Medicare. This addition was a significant development in United States health care for several reasons. By including a hospice benefit, Medicare expanded access to specialized end-of-life care for millions of eligible beneficiaries. This ensured that individuals nearing the end-of-life could receive the necessary support and services without facing financial hardship. Graphs 2 and 3 report Medicare beneficiary participation and Hospice spending because of this landmark policy change. **In 2020, there were more than 1.7 million Medicare patients receiving hospice care.**

According to the National Hospice and Palliative Care Organization (NHPCO), Virginia had a 46.2% utilization of hospice with Medicare decedents receiving one or more days of hospice care and being enrolled in hospice at the time of death in 2020 (Table 3). In the U.S., Utah is the state with the highest utilization at over 60%, and New York had the lowest use with 24%. The average length of stay in 2020 for the 1.72 million Medicare patients in Hospice care was 97 days. The NHPCO reports that it is the largest increase in the previous five years.⁵ The number of beneficiaries using hospice services at the end-of-life grew 9% in 2020. A principal diagnosis of cancer was the leading diagnosis among Medicare hospice patients, followed by circulatory/heart disease and dementia. Table 4 reports total number of traditional Medicare hospice users in the U.S. and Virginia in 2020.

Prior to the addition of the Medicare hospice benefit, individuals and their families often had to bear these expenses themselves or rely on limited insurance coverage. Another gain of adding a hospice benefit to Medicare was that individuals now received the ability to choose the type and location of care aligning with their personal preferences and values. The inclusion of a hospice benefit in Medicare demonstrated a recognition of the unique needs

and challenges faced by individuals nearing the end-of-life. It highlighted the importance of providing specialized care, support, and resources. This governmental acknowledgment helped foster a broader societal understanding of end-of-life care and the significance of compassionate and comprehensive services for patients and their families. Adding a hospice benefit to Medicare was a landmark development because it expanded access to specialized end-of-life care, provided financial relief, empowered patient choice, improved care coordination, emphasized palliative care, and recognized the specific needs of individuals nearing the end-of-life.⁶

The Virginia Association for Hospices and Palliative Care states Medicare coverage includes doctor and nursing care, hospice aides, social work services, counseling services, supplies, physical, occupational and speech therapy, pain management, respite care, and grief support. Hospice care is available in a variety of settings, including in the home, hospice facilities, and hospitals. In the Medicare Payment Advisory Commission presentation to Congress in 2023, the independent congressional agency reported that the number of hospice providers increased by 6% in 2021 because of for-profit hospices, following a decades-long trend of increases in for-profit providers.⁷ As of 2020, over 70% of providers were for-profit. Graph 4 shows the total number of hospice providers in the United States. In 2020, there were over 5,000 Medicaid-certified hospices operating in the U.S.

Graph 5 reports data by the NHPCO on the total number of Medicare decedents using Hospice in the U.S. in 2019 and 2020 by principal diagnosis. In 2020, there were 374,992 deaths in U.S. hospices due to Alzheimers, dementias, and Parkinsons. The impact of the global pandemic is evident as over 31,000 hospice users died from COVID-19, which was non-existent in the 2019 data. In 2020, Medicare decedents in hospice care at the time of their death were majority female and white. Other racial groups were comparable in hospice usage: 36% Asian American, 35.5% Black, 33.5% American Indian/Alaska Native and 33.3% Hispanic.

⁵ Hospice Care in America - NHPCO's Facts and Figures 2022 <https://www.nhpco.org/wp-content/uploads/NHPCO-Facts-Figures-2022.pdf>

⁶ For more key facts on the history of Hospice including the AIDS crisis and the Patient Care Act, visit <https://www.nhpco.org/hospice-care-overview/history-of-hospice/>

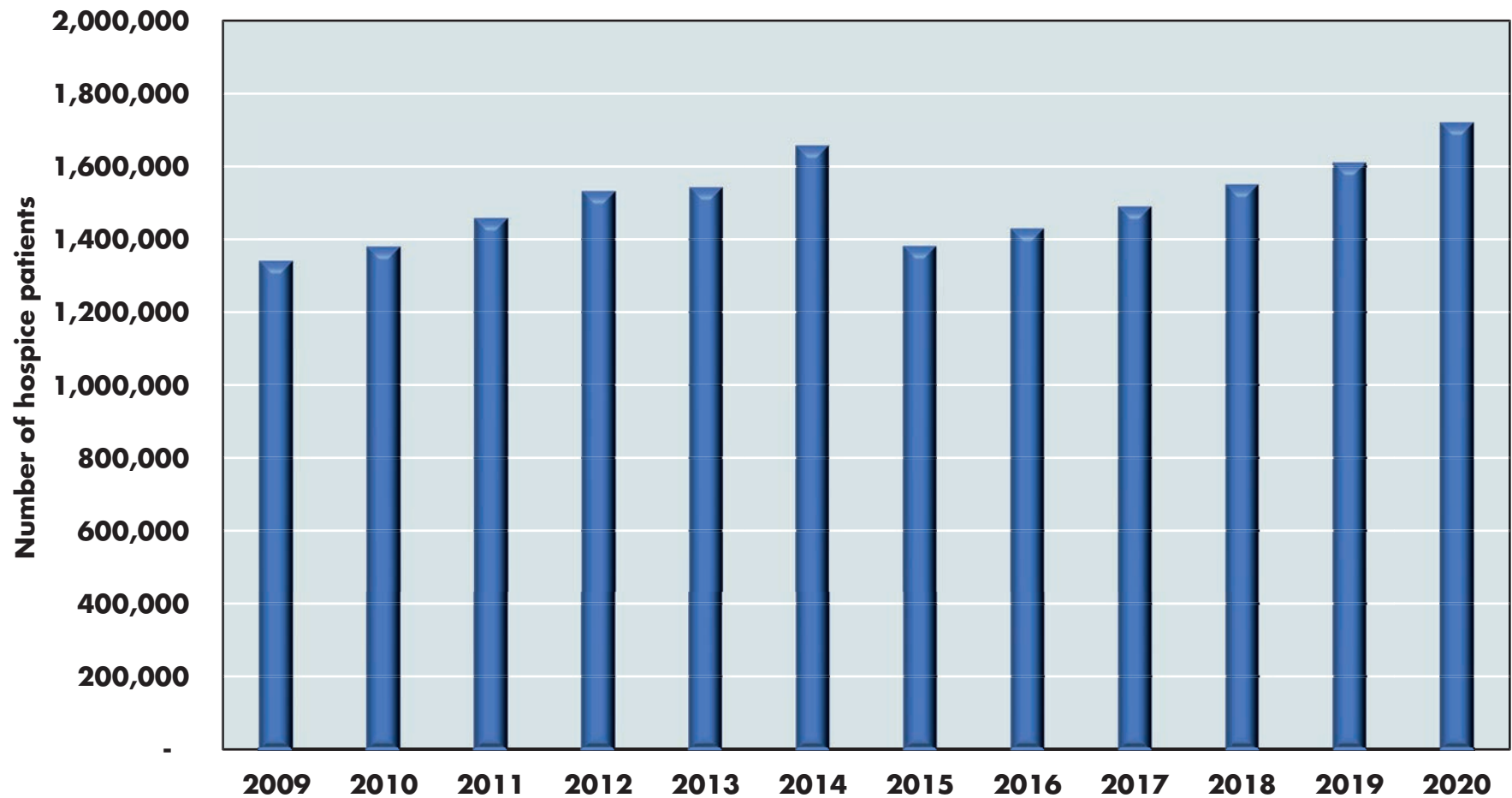
⁷ Medicare Payment Advisory Commission report https://www.medpac.gov/wp-content/uploads/2023/03/Mar23_MedPAC_Report_To_Congress_SEC.pdf

Graph 6 presents the share of Medicare recipients who utilized hospice services in 2021. The largest age category for this population is 59% of the oldest adults over the age of 85. While many may think hospice is only for the elderly population, the data suggest otherwise. More than 1 in 4 hospice patients in 2020 were under the age of 65.

TABLE 3		
USE OF HOSPICE SERVICES IN TRADITIONAL MEDICARE, UNITED STATES AND VIRGINIA, 2020		
	Total Part A Enrollees	Total Persons with Utilization
United States	61,211,371	1,717,193
Virginia	1,540,473	39,930
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.		



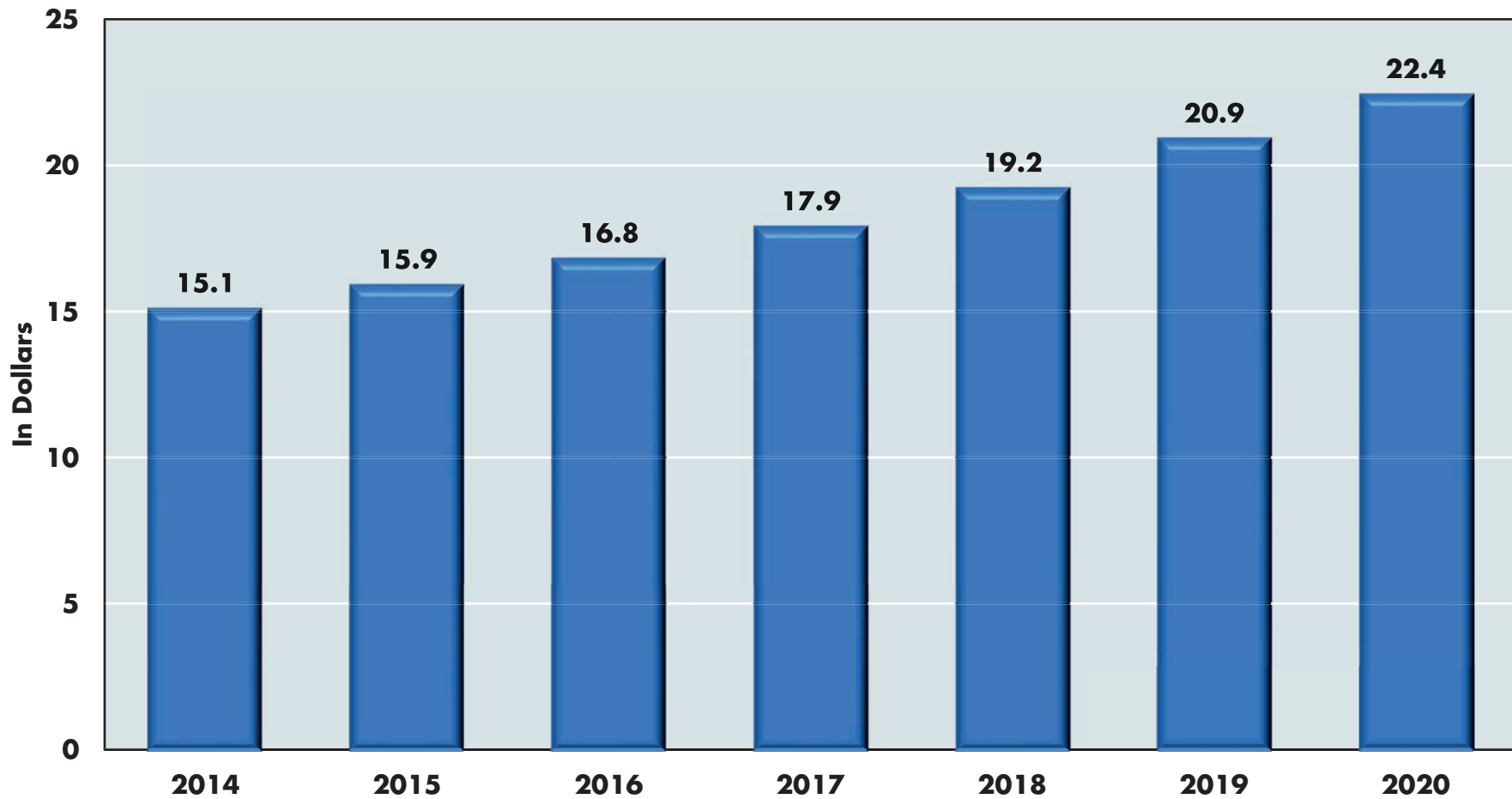
GRAPH 2
POPULATION OF MEDICARE HOSPICE PATIENTS
UNITED STATES, 2009-2020



Source: Hospice Care in America - NHPCO's Facts and Figures 2023 and MedPAC Report to Congress, https://www.medpac.gov/wp-content/uploads/2023/03/Mar23_MedPAC_Report_To_Congress_SEC.pdf

GRAPH 3

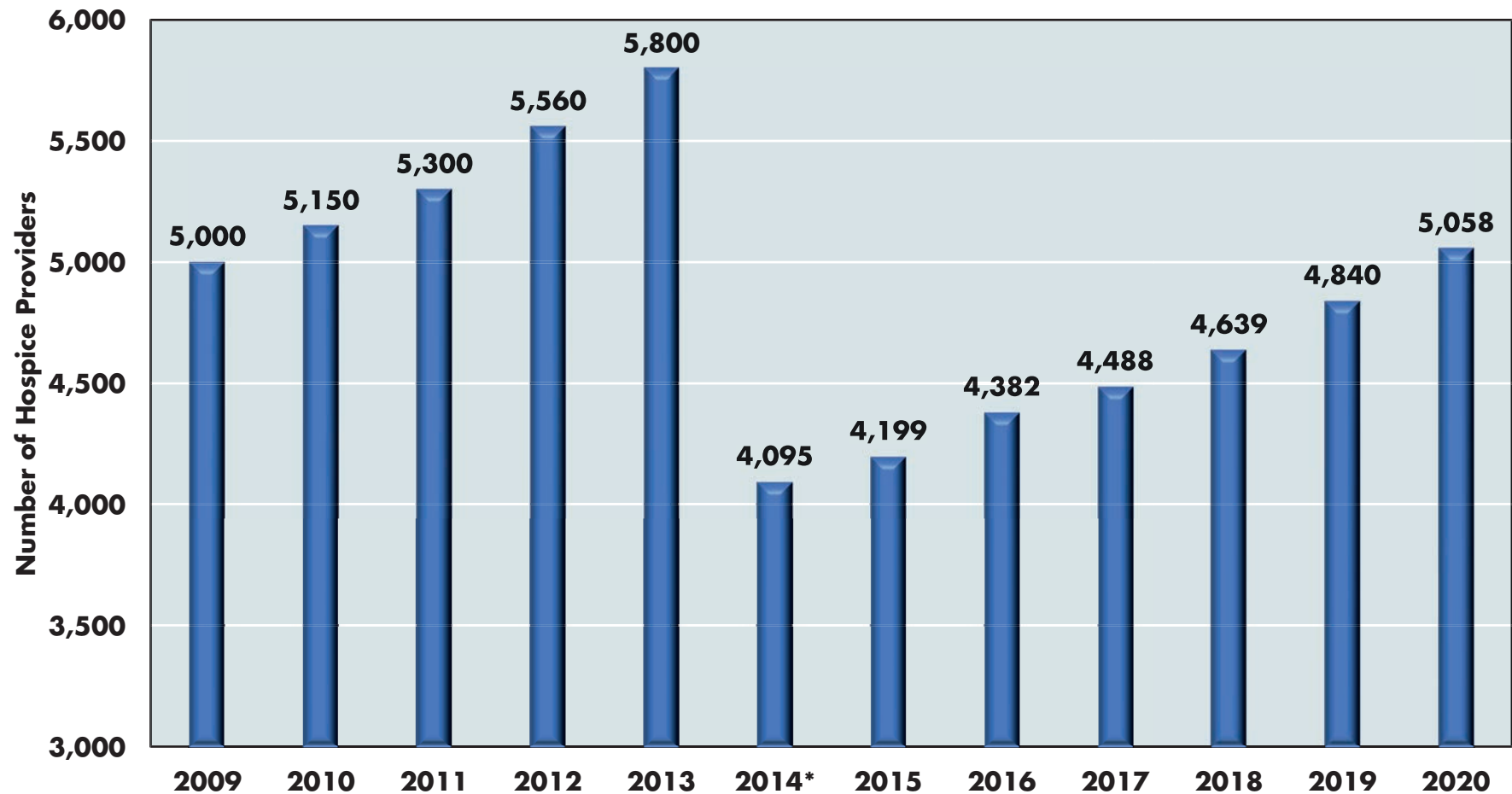
**U.S. MEDICARE SPENDING, HOSPICE, 2014-2020
(IN BILLION U.S. DOLLARS)**



Source: Medicare Payment Advisory Commission report, 2023, https://www.medpac.gov/wp-content/uploads/2023/03/Mar23_MedPAC_Report_To_Congress_SEC.pdf

GRAPH 4

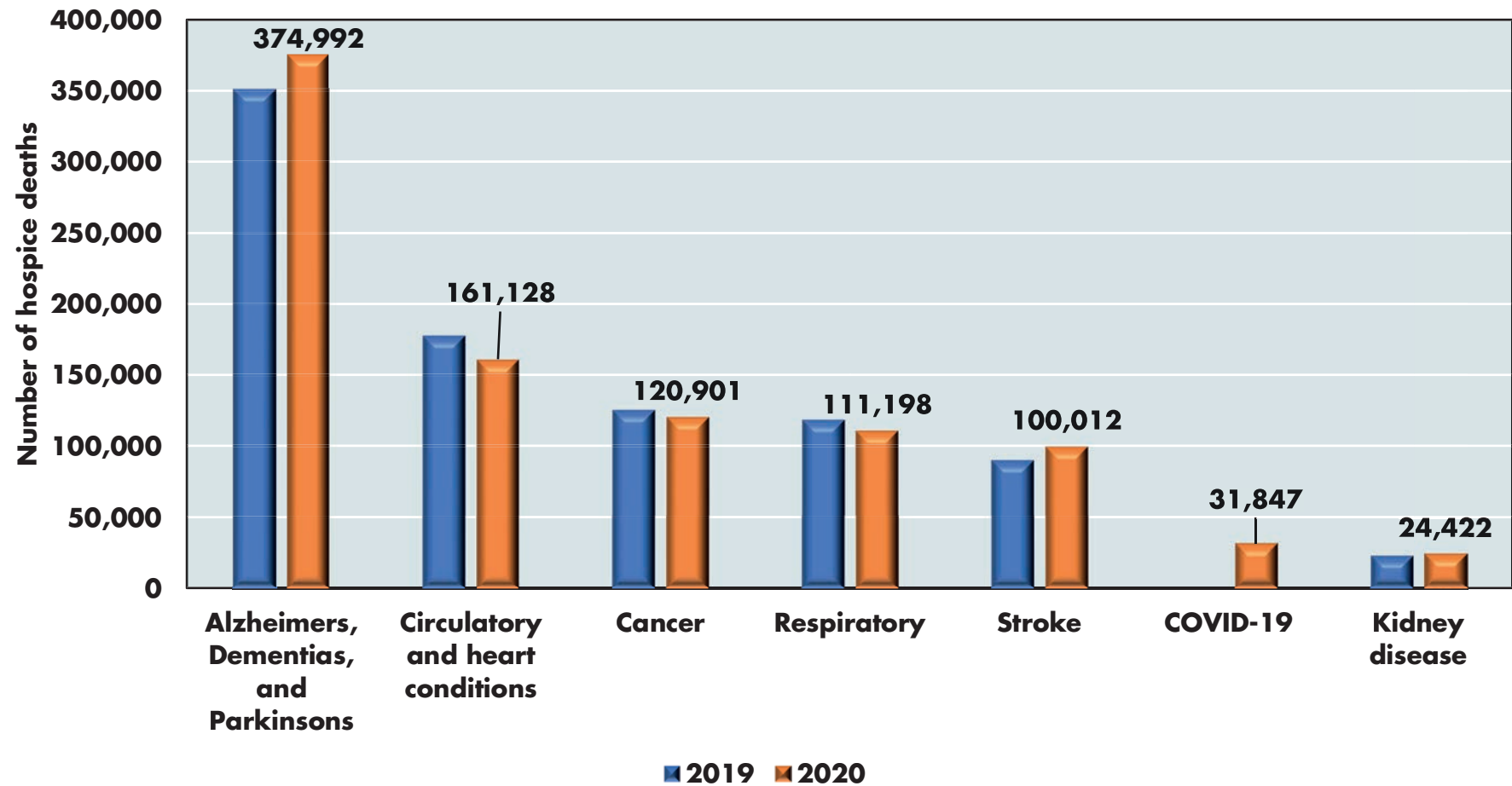
POPULATION OF U.S. HOSPICE PROVIDERS, 2009-2020



Sources: Hospice Care in America - NHPCO's Facts and Figures 2022, <https://www.nhpc.org/wp-content/uploads/NHPCO-Facts-Figures-2022.pdf> ; *Hospice providers beginning in 2014 to 2020 are Medicaid Certified Hospices.

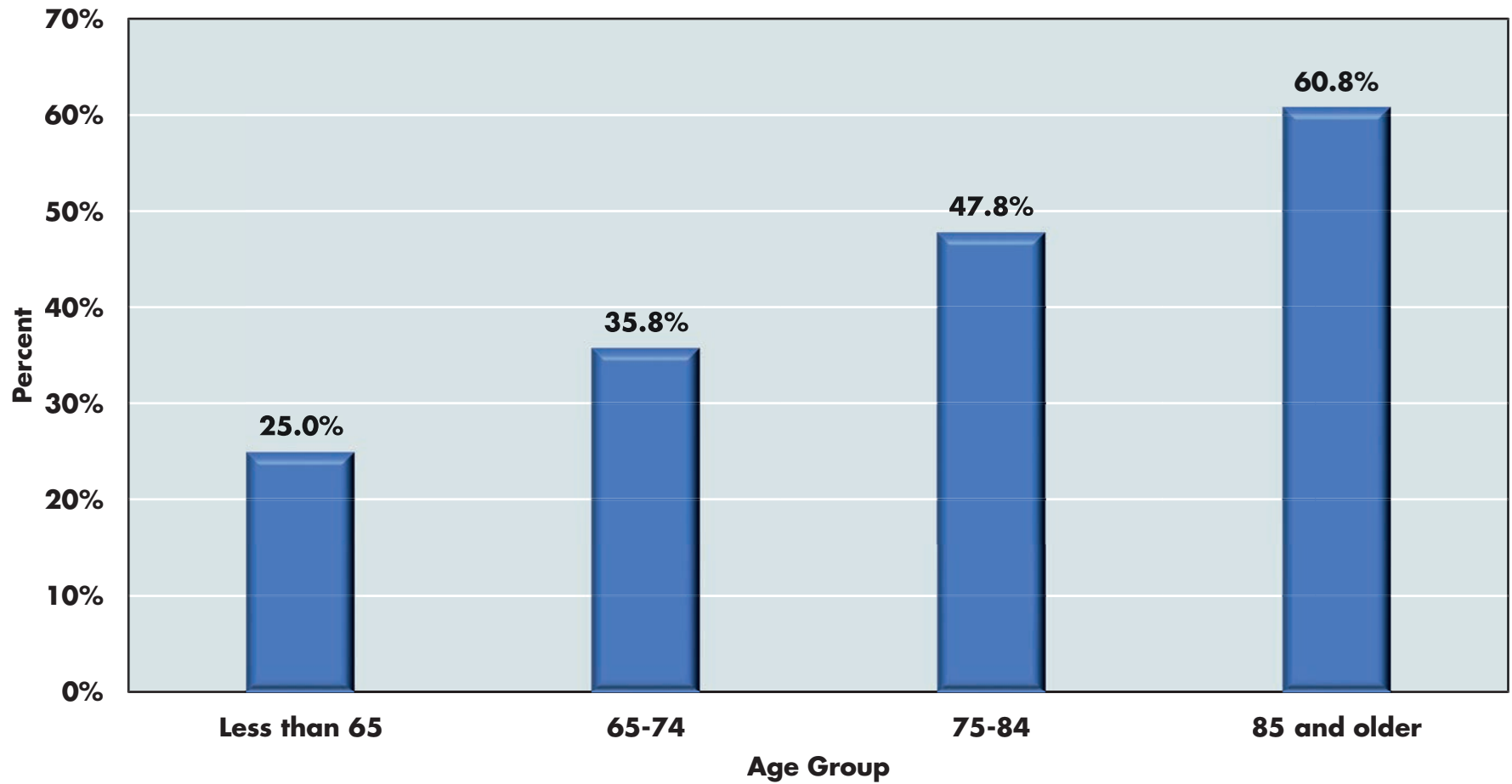
GRAPH 5

**POPULATION OF MEDICAID HOSPICE DEATHS, UNITED STATES
2019-2020, BY PRINCIPAL DIAGNOSIS**



Sources: Hospice Care in America - NHPCO's Facts and Figures 2022, <https://www.nhpc.org/wp-content/uploads/NHPCO-Facts-Figures-2022.pdf>

GRAPH 6
SHARE OF MEDICARE DECEDENTS USING HOSPICE
AGE GROUP, 2021



Source: MedPAC March 2023 Report to Congress, Table 10-3, https://www.medpac.gov/wp-content/uploads/2023/03/Mar23_MedPAC_Report_To_Congress_SEC.pdf

Hospice Care Delivered

The three most common places people at the end-of-life pass away are at home, in a hospital, or in a care facility. While not everyone may control where they will die, people who know that end-of-life is approaching may have the opportunity to plan their type of care, where they will receive it and the role of family and friends to help. Hospice care is typically provided in the patient's home, but it can also be provided in a hospice facility, nursing home, or hospital. Hospice care teams usually consist of a physician, nurses, social workers, counselors, and volunteers who work together to provide comprehensive care to patients and their families.

One of the biggest misconceptions about home hospice care (regardless of whether a private or nonprofit entity is providing the services) is that it is daily, comprehensive care. Although there are different levels of hospice care provided, the home hospice benefit primarily entails intermittent care. This implies that the care provider routinely spends less than an hour during each visit to the patient as part of their routine care. These visits may occur infrequently throughout the week or daily, and the primary burden of home hospice typically falls on family members.

Most hospice patients are eligible for Medicare. There is no deductible for hospice services although there may be a very small co-payment for prescriptions and for respite care. In most states, Medicaid offers similar coverage. It is important to note that original Medicare covers hospice even if the patient is enrolled in a Medicare Advantage Plan. Military families have hospice coverage through Tricare, and hospices will accept private payment or self-pay. End-of-life (EOL) care is usually covered by Medicare (fully covered under Medicare Part A), Medicaid, and/or a mix of private insurance plans.⁸

For the past several decades, the hospice industry has transitioned from a mostly not-for-profit sector to one where nearly 66% of all agencies operate on a for-profit basis. A substantial driver of this trend has been the growth of large publicly traded for-profit hospice chains. Facilitated by relatively easy market entry and the prospect of stable Medicare payments, these firms have made strategic hospice investments in recent years, raising numerous quality concerns among some policymakers and patient advocates, especially as many of these corporations have little experience in previously providing these services and often rely on a model of reducing care visits to cut labor costs.⁹

In a 2019 report by the U.S. Government Accountability Office presented to Congress, patients in for-profit hospices were less likely than patients in nonprofit hospices to have received any hospice visits in the last three days of life according to a 2014 to 2017 analysis of federal data.¹⁰ In *Complaints About Hospice Care in the United States, 2005-2015* published in the *Journal of Palliative Medicine* in 2018, for-profit agencies were between 1.3 and 1.5 times more likely than not-for-profits to have patients and family members complain of alleged substandard care and a deficiency. Graph 7 reports U.S. hospice ownership percentages by corporation type in 2020.

The main difference between for-profit and nonprofit hospice programs is their financial structure and the way they use their revenue. For-profit hospice programs are owned and operated by private companies or individuals who seek to make a profit. They are accountable to their shareholders and investors, and their primary goal is to generate revenue. As such, for-profit hospice programs may charge higher fees for their services, and they may be more likely to focus on marketing and profitability. Nonprofit hospice programs are typically owned and operated by charitable organizations or community groups. They do not seek to make a profit, and any surplus revenue is reinvested into the organization to support its mission. Nonprofit organizations typically have a governing board that oversees their operations and ensures that they fulfill their charitable mission. This accountability structure can help maintain high standards of care and ensure that resources are used

⁸ Details on coverage may be found at <https://www.medicare.gov/Pubs/pdf/02154-medicare-hospice-benefits.pdf> and <https://www.medicaid.gov/medicaid/benefits/hospice-benefits/index.html>

⁹ Acquisitions of Hospice Agencies by Private Equity Firms and Publicly Traded Corporations, 2020 <https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2779069>; Stevenson DG, Grabowski DC, Keating NL, Huskamp HA. Effect of ownership on hospice service use: 2005-2011. *J Am Geriatr Soc.* 2016;64(5):1024-1031. doi:10.1111/jgs.14093; Stevenson DG, Grabowski DC. Private equity investment and nursing home care: is it a big deal? *Health Aff (Millwood).* 2008;27(5):1399-1408. doi:10.1377/hlthaff.27.5.1399

¹⁰ MEDICARE HOSPICE CARE Opportunities Exist to Strengthen CMS Oversight of Hospice Providers, <https://src.bna.com/MQG>

appropriately. Nonprofit hospice programs may be more focused on providing high-quality care and meeting the needs of their patients and families, rather than generating revenue. There are also some other differences between for-profit and nonprofit hospice programs. Nonprofit hospice programs may be far more likely to provide care to patients who are uninsured or underinsured and are often deeply rooted in the communities they serve, while for-profit hospice programs may focus more on patients who have private insurance or Medicare.

In the 2019 *State-by-State Report Card on Access to Palliative Care in Our Nation's Hospitals* published by the Center to Advance Palliative Care (CAPC) and the National Palliative Care Research Center (NPCRC), the U.S. exhibited continued growth in the overall number of hospital palliative care teams with 72% of U.S. hospitals with 50 or more beds reporting a palliative care team. These hospitals served 87% of all hospitalized patients in the United States. CAPC researchers present geographical differences, the status of for-profit or nonprofit hospitals, and hospital size as factors deeply impacting the quality of patient care for those living with a serious illness.

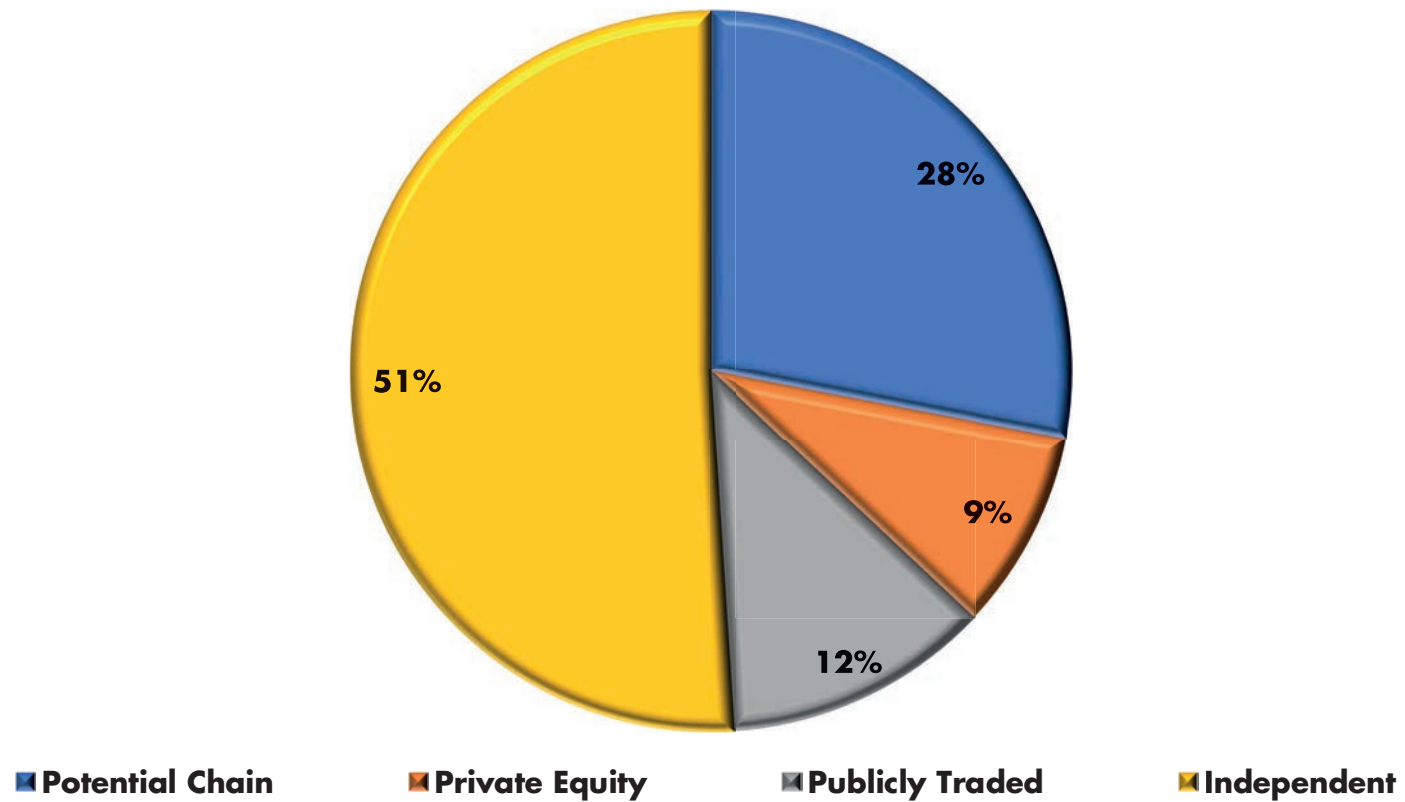
One of the key findings of the report is that access to palliative care is still unreliable in the U.S. and that nonprofit hospitals are more far likely than for-profit hospitals to provide palliative care. Virginia received a letter grade of A/86.5,

and Table 4 details the Commonwealth's ranking in the 2019 report. The Virginia Association for Home Care and Hospice has renewed calls for additional sources of funding and support for palliative care and training including more non-physician professionals such as palliative nurses. Citing the American Academy of Hospice and Palliative Medicine, the organization states that over the next 20 years, the demand for palliative care will grow by more than 20%, while over the same time, the palliative physician workforce will grow by only 1%.

It is important to note that the previously mentioned distinctions do not imply that all for-profit hospice providers are deficient or that all nonprofit providers are superior. There are excellent organizations on both sides of the spectrum. The aim of highlighting the differences here is to provide patients and family members with the necessary information to make an informed decision based on their preferences, values, and the specific qualities they seek in a hospice care provider. Transparency and accountability can promote higher quality hospice care.

TABLE 4									
PALLIATIVE CARE PROGRAMS IN U.S. HOSPITALS, VIRGINIA, LETTER GRADE, 2019									
Limited to U.S. Hospitals with 50 or More Beds									
State	Letter Grade	Number Grade	Total Programs/ Hospitals	By Hospital Type			Sale Community Provider	>300 beds	<50 beds*
				Nonprofit	For-Profit	Public			
Virginia	A	86.5	(45/52)	97.4 (38/39)	40.0 (4/10)	100.0 (3/3)	60.0 (3/5)	100.0 (15/15)	45.0 (9/20)
Source: https://reportcard.capc.org/Note : Additional data on hospital palliative care programs were obtained from the National Palliative Care Registry™ (registry.capc.org) and CAPC's Mapping Community Palliative Care initiative (mapping.capc.org).									

GRAPH 7
MEDICARE HOSPICE BY
CORPORATE OWNERSHIP PERCENTAGE, UNITED STATES, 2020



Source: 2022 State Hospice Report, Hospice Analytics https://www.nationalhospiceanalytics.com/library/2022_State_Hospice_Report_2020_Medicare_Data.pdf

What's missing in Hospice Care in Hampton Roads

It is important to note that while there may not be a shortage of hospice care overall in the United States, there are specific communities, particularly in poor and/rural areas, which do not have adequate access to hospice services.¹¹ The majority of hospice patients are cared for by unpaid and often untrained family caregivers. The need for family members willing to serve as caregivers for their loved ones is anticipated to grow exponentially as the nation's population ages. The CDC has called the impending caregiver shortage, compounded by the COVID-19 pandemic, an emerging public health crisis. Addressing these disparities in access to care is an important goal for the hospice industry and healthcare system as a whole, especially as our population ages.

The latest data available on hospice care across the United States suggests that the Hampton Roads region appears to be the largest Metropolitan Statistical Area (MSA) in the nation without a freestanding hospice house. The single nearest comparable facility, Hospice House of Williamsburg, is a community-supported home identified as a Social Model Hospice Home (SMHh). What are free-standing or independent hospices? Free-standing or independent hospices are specialized healthcare facilities or organizations that provide end-of-life care and support to patients with terminal illnesses and their families. Unlike hospice services that are affiliated with or operated within a hospital or healthcare system, free-standing or independent hospices operate as separate entities that exclusively serve individuals within six months of death.

As previously mentioned, hospice care is often primarily intermittent care, daily and/or weekly visitations that are usually less than an hour in length. In fact, it is important to know that seriously ill patients usually require someone at home with the patient 24 hours a day, 7 days a week, and this can dramatically

impact the patient's family. Unfortunately, in-home visits by hospice workers and part-time caregivers do not work well for many patients and their families. On-site hospice services at home are not 24/7, and this means that family caregivers are responsible for most of the care needs including administering medications, providing personal care, and coordinating health services – most of whom do not feel comfortable or qualified to do so. All too often, family members quickly run out of work leave to coordinate and administer care from home. Patients deserve to have their symptoms and pain addressed quickly by medical experts to maximize the quality of life that remains. Additionally, many patients do not want their families traumatized by their death in the home.

Around the United States, many communities have freestanding inpatient hospice facilities to assist individuals who do not have caregivers available at home or need around-the-clock physical care. In many states, respite care (temporary care by someone other than their primary caregiver) is often provided at inpatient hospice facilities. Another benefit of an inpatient hospice facility is that they are designed to provide a peaceful and comfortable environment for residents. They often offer private rooms, family gathering spaces, gardens, and amenities like massage therapy, music therapy, and pet therapy. These amenities contribute to the well-being and comfort of residents and their families. The vast majority of hospice houses need ongoing charitable support or endowments to operate.

Virginia has only eight hospice houses in the entire state, far fewer per capita than neighboring states. For example, 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. In 2020, MSA data analysis found that Raleigh, NC, (Wake County) and Hampton Roads were relatively comparable markets in median age, household income (HHI) and overall population. They serve similar demographic groups, and both do not have enough freestanding hospice houses to meet the needs of their residents. However, the vast difference between our area and Raleigh is that in 2009, a freestanding 20-bed hospice house, the William M. Dunlap Center for Caring – “Hospice Home” – was opened in Cary after the North Carolina Council of State awarded 8.7 acres of land for the project. All

¹¹ See Hospice and palliative care access issues in rural areas. Am J Hosp Palliat Care. 2013;30(2):172–177.

patients are served regardless of ability to pay or insurance status, with donations covering uninsured costs. In 2017, based upon overwhelming need, an additional 10-bed wing was added to serve the population after an aggressive “Power of 10” capital campaign. In 2018, at the 40th anniversary of the Hospice of Wake County (HOWC)/Transitions LifeCare’s work in Wake County, medical and caregiving teams reported serving 570 hospice patients, 100 Home Health Patients, 870 Palliative Care patients, and 51 children in the Transitions Kids program *daily*.¹²

In January 2020, an independent study of the business case for a freestanding hospice house in Hampton Roads was completed. The study identified the need for at least 45 inpatient beds in Hampton Roads. Figure 1 reports on this need.

An organized network of dedicated health professionals, business leaders and concerned citizens are responsible for the \$9.56 million Dozoretz Hospice House of Hampton Roads breaking ground in 2022. Under construction, it will address an urgent need to care for the region’s terminally ill patients in a specialized setting.

The Dozoretz Hospice House of Hampton Roads will be the region’s first freestanding inpatient hospice home and is expected to open in early 2024. The city of Virginia Beach contributed 2.5 acres of land and through a series of significant donations, the 501(c)(3) non-profit facility will open and operate in the Red Mill neighborhood. The hospice house will offer 12 private bedroom suites for patients and will include a screened porch, chapel, living room with fireplace, and a kitchen. Family will have 24/7 access to the facility to spend time with their loved one. Professionally licensed medical personnel, along with trained volunteers, will staff the facility. The Hospice House staff members will be available 24 hours a day, 365 days a year. It will be the mission of the staff

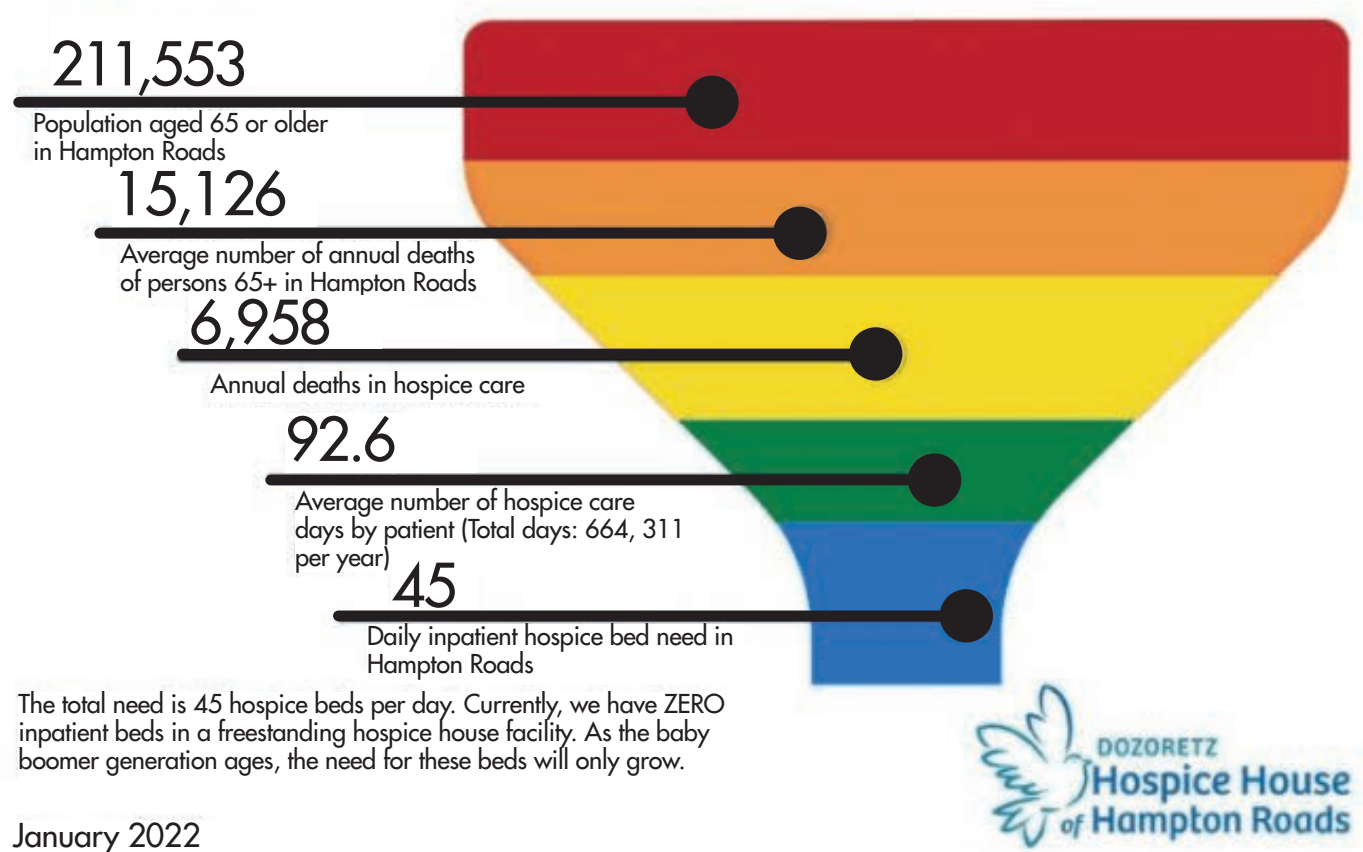


The Dozoretz Hospice House of Hampton Roads (DHHHR), www.hospicehousehr.org

to walk side-by-side with patients and offer support, not only for any physical symptoms, but for emotional and spiritual needs too. This support will extend to family members and friends. The DHHHR will partner with Westminster-Canterbury on Chesapeake Bay (WC) and Beth Shalom Village. WC will manage the medical care and daily operations of the hospice house. Beth Shalom will oversee the billing and account management.

¹² <https://www.transitionslifecare.org/patients/hospice/hospice-home/> Note: Hospice of Wake County (HOWC) changed names to Transitions LifeCare in 2013.

FIGURE 1
UNMET NEED OF HOSPICE BEDS IN HAMPTON ROADS
2020



Source: Dozoretz Hospice House of Hampton Roads

Dr. Paul F. Schellhammer, retired urologist and immediate past chairman of the Dozoretz Hospice House of Hampton Roads Board of Directors, told us that “most importantly, hospice care is not giving up hope or hastening death. Instead, it is choosing to celebrate what time patients have left and making them as comfortable as possible. For their family, it means spending quality time with their loved ones instead of having to focus on caregiving and other daily tasks that are required in a home hospice setting.” Marissa Galicia-Castillio, MD, Director, EVMS Glennan Center for Geriatrics and Gerontology, told us, “We have patients and families that need this hospice house because they don’t have the resources to stay at home. Our practice has several patients a month with this unmet human need. I joined the DHHR’s board because I strongly believe we need a place where family members have the support to truly be present for their loved ones whose time may be short.” All too often, the burdens are great for family members, and some run out of leave from their work to coordinate and administer care from home. Additionally, many people, especially older adults today, do not have close friends or relatives nearby to help with their care. Inpatient hospice care in a Hospice House provides support in these situations, ensuring no one dies alone.

A new freestanding inpatient hospice home in Hampton Roads brings end-of-life care closer to the community. Although located in Virginia Beach, this facility will serve our entire region. This allows patients to receive care in a familiar setting, surrounded by their loved ones and within their local community. It fosters a sense of belonging and support, as individuals may have established connections and relationships within the community that can be strengthened during their end-of-life journey. In addition to providing hospice beds, Dozoretz Hospice House will operate a Bereavement Center that will serve families and their loved ones. Bereavement is the time of mourning after a loss. The bereavement care team will work with loved ones to help them navigate the grieving process. Trained volunteers, clergy members and professional counselors will provide personalized support for at least a year after a patient’s death. The establishment of the home in Hampton Roads is a positive development as it improves access to specialized care, enhances the quality of care provided, supports caregivers, offers emotional and psychosocial support, and brings community-centered care to individuals facing end-of-life circumstances.



A patient's suite equipped with a private patio and a couch for family members to stay overnight in the Dozoretz Hospice House. Artist rendering: <https://www.hospicehousehr.org/new-page>

Local Specialized Services for the Dying

Some readers may be familiar with a traditional Doula, a trained professional who provides physical and emotional childbirth support to an expectant mother in labor. A more unusual type of Doula has emerged in the last 10 years, known as an End-of-Life (EOL) or Death Doula.¹³ These doulas are trained professionals that assist an individual in their end-of-life days. EOL doulas specifically assist with the needs of the dying person. This may include talking with the person about dying “including how dying may feel” and what they may experience, helping them identify their final wishes including a plan for what they want after their death. Doulas can also assist in communicating with

family members and friends as well as creating memories and writing final letters before passing forward. Doulas are different from hospice or palliative care in that they do not provide medical services, medical evaluations and medications for comfort and pain. However, Doulas may be on the staff of a Hospice Team. Amy Nixon of Comforting Hands in Newport News provides compassionate end-of-life doula care. “My focus is on bringing total physical, informational, and emotional support to my clients and their loved ones. As death is imminent, I sit vigil with the caregiver and/or loved ones. This is usually the hardest part for everyone, and here I provide gentle guidance and support. Emotions can run high, and loved ones often don’t know quite what to do. It is here that I can help turn an anxiety and fear-filled experience into a meaningful one.” Table 5 provides a directory of selected Doulas in our region.

TABLE 5

SELECTED END-OF-LIFE DOULAS, HAMPTON ROADS

NAME	PHONE	EMAIL	LOCATION	SERVICE AREA
Sade’ Combs	804-210-0030	-	Richmond	Richmond, Hampton Roads
Cryst’l Gatto	503-781-6909	Cryst.l785@gmail.com	Lanexa	Williamsburg
Krystal Giordano	-	deathdoula@etadmirations.com	Virginia Beach	Hampton Roads
Anisa Glowczak	757-572-4609	goodmourningcc@gmail.com	Virginia Beach	Hampton Roads
Dr. Michelle Joachim	757-642-1396	MichelleNJo@gmail.com	Chesapeake	Hampton Roads
Amy Nixon	757-987-5991	amy@comfortinghands.net	Newport News	Hampton Roads Peninsula
Ann Petty	757-985-7377	ann.petty.r@gmail.com	Virginia Beach	Hampton Roads
Ashley White	304-308-0123	ashleynicole046@hotmail.com	Newport News	Hampton Roads

¹³ Readers may prefer “end-of-life” doula rather than “death” doula as some cultures are uncomfortable with the term “death”. By offering the term “end-of-life doula,” it allows for a more inclusive and adaptable approach to support. Some people may feel more comfortable with a term that focuses on the entire end-of-life journey rather than solely on death, aligning with diverse personal and cultural perspectives.

Final Thoughts

Talking about serious illness, hospice care, and EOL matters can be challenging for several reasons. Death and dying are often considered uncomfortable topics in American culture. There is a general societal reluctance to openly discuss these subjects, which can create barriers to meaningful conversations about EOL decisions. There is fear and denial, and many individuals fear facing their mortality or the mortality of their loved ones. This fear, combined with a natural inclination to deny the inevitability of death, can make it difficult to broach the topic and engage in discussions about serious illness and end-of-life care.

In the United States, there is a strong emphasis on medical interventions and the pursuit of curative treatments. This focus on “fighting” illness and extending life can overshadow conversations about the limitations of medical interventions and the importance of quality-of-life considerations, including hospice care. There is also a widespread lack of awareness and understanding about hospice care and end-of-life options. The American healthcare system is often criticized for its fragmentation, which can impede effective communication and coordination of care. This fragmentation can make it challenging for patients, families, and healthcare providers to navigate the complex landscape of serious illness and end-of-life decision-making. Compounding the confusion is that many people are unaware of the available benefits and availability of no- or low-cost hospice services, leading to a lack of proactive discussions and planning for end-of-life. Unfortunately, there is evidence that substantial proportions of patients (especially in rural areas) have only pursued hospice care late in the dying process, which is not uncommon.¹⁴

We are a diverse nation with a wide range of cultural and religious beliefs surrounding death and dying. These diverse perspectives can influence attitudes toward discussing serious illness and end-of-life care, leading to varying levels of comfort and difficulty in addressing these topics. When death becomes a taboo topic within a family, it can create emotional isolation for individuals who may need support during difficult times. If someone is grieving or facing a terminal illness, the inability to openly express their emotions and fears can lead to feelings of loneliness and increased psychological distress. Avoiding discussions about death can lead to family disagreements and conflicts when critical decisions need to be made. Different family members may have varying perspectives on medical treatments which can cause tension and strain relationships. EOL decisions, such as advance care planning and the use of medical interventions, can involve complex legal and ethical considerations. Varying state laws, confusion surrounding terminology, and ethical dilemmas related to issues like withholding or withdrawing treatment can add layers of complexity to these discussions.

Overcoming these numerous challenges requires promoting open dialogue, increasing public education about hospice and end-of-life options, improving healthcare communication and coordination (especially in underserved communities) and fostering a cultural shift that normalizes conversations about serious illness and end-of-life care. Creating supportive environments that encourage and facilitate these discussions can help individuals and families make informed decisions and receive the appropriate care and support during these important life stages. Promoting societal awareness of EOL care helps combat the stigma often associated with serious illnesses, including cancer. By encouraging open discussion and understanding, individuals facing heart disease, cancer, kidney failure, chronic obstructive pulmonary disease and other serious conditions are less likely to feel isolated or judged. Increased awareness fosters compassion and empathy, creating a more inclusive and supportive environment for those affected.

¹⁴ Baernholdt M, Campbell CL, Hinton ID, Yan G, Lewis E. Quality of hospice care: comparison between rural and urban residents. *J Nurs Care Qual.* 2015 Jul-Sep;30(3):247-53. doi: 10.1097/NCQ.000000000000108. PMID: 25546093; PMCID: PMC4582410 and Robinson CA, Pesut B, Bottorff JL. Issues in rural palliative care: Views from the countryside. *J Rural Health.* 2010;26(1):78-84.

Hospice services provide a valuable benefit. The goal of hospice care is to provide patients with the highest quality of life possible, while also supporting their families and caregivers during a challenging time. Hospice care emphasizes comfort, dignity and respect, and it can be a valuable resource for patients and families facing the end-of-life. The economic impact of hospice care is also clear. **In the *Value of Hospice in Medicare* report presented by NORC at the University of Chicago, the total costs for Medicare beneficiaries who used hospice care in the last year of life was 3.1% lower than for those beneficiaries that did not use hospice.** Hospice care is often more cost-effective compared to aggressive medical interventions or prolonged hospital stays. By shifting the focus from curative treatments to comfort care, hospice can reduce unnecessary hospitalizations, emergency room visits, and intensive care utilization. This not only lowers healthcare costs but also helps patients and families avoid financial burdens associated with extensive medical interventions.

In 2024, the Dozoretz Hospice House of Hampton Roads will finally serve our community as the region's first freestanding inpatient hospice home. This achievement is a testament to the dedication and tireless efforts of numerous individuals, organizations, and the larger community to provide much-needed services to our citizens. As hospice care expands in our region, we can expect a greater level of community engagement and awareness regarding end-of-life matters. This increased understanding will encourage open dialogue, reduce the stigma surrounding death and dying, and empower community members to have proactive discussions and make informed decisions about their end-of-life care.

Having a hospice house in our region is a tremendous achievement that will positively impact the lives of many individuals and their families. The hospice house will complement the efforts of our region's hospitals and home hospice providers in providing care for end-of-life residents. The hospice house means that people facing serious illnesses will now have access to another form of specialized care and support in their final stages, ensuring their comfort and dignity. Expanding hospice care in our region not only brings about improved quality of life for individuals but also offers economic and healthcare benefits. By reducing unnecessary hospitalizations and intensive care utilization, hospice can promote a more efficient and coordinated healthcare system, benefiting patients and healthcare providers alike.

In the face of tough issues, especially death and dying, it is our willingness as a community to confront and tackle them head-on that unveils our true strength and resilience. For it is through these courageous conversations and actions that we pave the way for progress, understanding, and the best care for members of one of our most vulnerable populations.

Should Taxpayers Subsidize Private Facilities in Hampton Roads? Glitz vs Reality



SHOULD TAXPAYERS SUBSIDIZE PRIVATE FACILITIES IN HAMPTON ROADS? GLITZ VS REALITY

"A great city is that which has the greatest men and women."

Walt Whitman

What is it that makes a city or region "great?" What defines a city or region as being legitimately "big time" and presumably makes it a desirable place to live? Is it a large population? Its economic and political clout? Amenities? Facilities? Tall buildings? Orchestras and museums? Climate? Attractive scenery? People?

Many of our public leaders often act as if they know the answers to these questions. By their decisions and advocacy, they provide us with their perceptions of those answers. Often, their decisions tell the tale — they believe the presence or absence of substantial public buildings, stadiums, casinos, museums, shopping centers and entertainment complexes are the "must have" elements of a great city or region. If such things are present and provide citizens with the ability to boast about them, the city or region in question is "big time."

Likewise, if these things are absent, the city or region is assumed to be somewhat of a backwater. In this way of looking at the world, having a major league sports team, large entertainment venues, and other highly visible amenities are signs of success. Likewise, the absence of such facilities is a signal that the city is "falling behind" its competitors. If we build it, to paraphrase a popular movie, jobs and new residents will come. If we don't, jobs and people will flee in search of somewhere with these amenities.

We hasten to point out that those who believe that facilities make a city are to some degree correct. A positive correlation often exists between large public buildings and "big time" recognition. Nevertheless, the argument

that such features are the secret to being recognized as a "big time" city or region has some notable holes. The first is that there is little or no connection between professional sports stadiums, casinos, and large concert venues and conventional measures of economic well being. There is sparse or even zero evidence that the presence of major league sports franchises exerts any positive effect on home prices, per capita incomes, net migration rates, or rates of economic growth.¹ Despite these facts in evidence, large public investments in stadiums or similar entertainment venues are increasingly common, often extracted by implicit or explicit threats to move to a more receptive location if demands are not met.

Second, investment of public resources in such enterprises, while popular with fans and those who stand to profit for their development and operation, may crowd out other public investments. If a city or region chooses to subsidize the development of a stadium or concert venue, it will have fewer dollars to spend on roads, K-12 education, and public health. The same tax dollar cannot be spent twice. The benefits from these less visible expenditures are more spread out across the community but generally offer significantly higher rates of return. To put it simply, choices must be made, and, in some cases, decision makers choose facilities that yield fewer benefits to taxpayers.

¹ See, among many, Kevin J. Delaney and Rick Eckstein, *Public Dollars, Private Stadiums* (New Brunswick, NJ: Rutgers University Press, 2003) and Paul Oyer, *An Economist Goes to the Game* (New Haven, CT: Yale University Press, 2022).

In this chapter, we examine the arguments surrounding public investments in these highly visible facilities. We pose questions that should be asked when considering such investments and explore the potential opportunity costs of these projects. We offer a cautionary tale that such projects are sold as transformative but often fail to generate the promised benefits.

What Questions Should We Be Asking?

When city and regional leaders consider using public funds to, in effect, subsidize the construction (and sometimes, operations) of sports stadiums, resort parks, and similar projects, there are hard questions to ask. First, and foremost, who will patronize these facilities? Will many of the visitors come from inside the region or will the new stadium, park, or venue attract a significant number of visitors from outside the local area? We ask this question because of the simple observation: the same dollar cannot be spent twice at the same time.

If many of the patrons of these facilities come from inside the locality in question, then the economic impact of their spending will be close to zero. Consider a resident of Portsmouth that decides to patronize the new casino for entertainment and dinner in Portsmouth. The resident, given that they have only so many dollars to spend, must shift their spending from other establishments. In other words, the dollars spent at the casino are dollars not spent elsewhere in the city.

Expenditure displacement is the label economists and other analysts attach to the switching phenomena just described. Expenditures that are displaced from one business to another in Portsmouth do not register any net economic gain for the city. But, let's say, the resident in question used to go to Virginia Beach and now dines and gambles in Portsmouth? On the surface, Portsmouth "wins" and Virginia Beach "loses," as spending shifts from one city to another. However, if we zoom out to the regional perspective, the net

economic impact is still close to zero as the spending merely moves from one city to another in the region.

Expenditure displacement is one reason that many economic impact studies either focus on localities or assume that there will be an influx of visitors from outside the region. Focusing on city-level impacts allows one to make the argument that there will be an influx of "new money," but this spending may be largely drawn from other localities in the region. In other words, from a regional perspective, one is "robbing Peter to pay Paul" as spending is largely recycled within the region.

The second question is whether the new venue or facility will attract visitors from outside the region. Visitors from outside the region bring in "new money" which increases the economic impacts associated with the new facility. Proponents correctly argue that cities and counties can levy additional taxes on these visitors, in effect, exporting these taxes. A professional sports stadium, for example, could spur economic growth if it lured in visitors who, in turn, consumed local goods and services. However, there is little evidence to support these arguments.² Overly optimistic projections of visitors from outside the local area bias projections of economic impact upward and understate the costs to taxpayers over the lifecycle of the project.

The third question, and often one glossed over in presentations of a new stadium, concert venue, or outdoor sports park is what happens if plans fail to come to fruition? Who becomes responsible for the stadium or venue when a professional sports team doesn't come to the area or, if one does come, and then leaves for another city that offers even more incentives? When the National Football League approved the Rams' request for relocation from St. Louis to Los Angeles in 2016, Missouri taxpayers continued to be responsible for \$144 million in debt and maintenance costs.³ At least St. Louis still had a venue. Seattle and Philadelphia, on other hand, continued to make debt payments for more than a decade after the Kingdom and Veterans Stadium were torn down, respectively. This is a familiar refrain; taxpayers are left

² Roger Noll and Andrew Zimbalist (1997). "Sports, Jobs, and Taxes: The Economic Impact of Sports Teams and Stadiums." Washington, DC, Brookings.

³ <https://www.reuters.com/article/us-sports-nfl-stadiums-insight-idUSKCN0VC0EP>

“holding the bag” even if the reason for the accumulation of public debt has left town.

These questions may become even more difficult if the facility in question depends on the weather. One only needs to walk the beaches around Hampton Roads in January to understand why the summer months are when money is made for the hospitality and tourism industry. Seasonality means that, unlike an indoor casino or entertainment venue, that there may be only 4 to 6 months a year when the facility is able to host events and attract visitors. Seasonality also may mean that patronage shifts even more towards residents in the off-season months, further eroding the potential economic impact of a facility.

It is instructive to look at the economic impact (or lack thereof) that professional sports teams make on their communities when the cities or regions invest in new stadiums, or when they make financial commitments to lure these teams to relocate. The accumulated evidence in this regard tells us that the typical professional sports team makes no visible difference in its home area’s economic growth rate, or upon per capita incomes in that region, or in the prices of that region’s real estate.⁴ In other words, researchers were unable to find any statistically significant effect when examining the data on stadiums, growth, income, and other measures of economic performance. The most recent survey bluntly concluded that “... the large subsidies commonly devoted to constructing professional sports venues are not justified as worthwhile public investments.”⁵

Does Pride Really Count for Something?

A 2022 survey of the literature relating to professional sports team stadium subsidies revealed that between 1970 and 2020, state and local governments devoted \$33 billion in public funds to assist in the construction of major league sports facilities in the United States and Canada.⁶ A recent example in point: in 2022, the State of New York and Erie County, New York pledged an estimated \$850 million to fund the construction of a new \$1.4 billion stadium for the Buffalo Bills.⁷ The Oakland Athletics, at the time of writing, continued to seek public funds to subsidize the construction of a new stadium. When attempts to extract more public resources from Oakland failed, the team announced that they would be moving to Las Vegas.⁸ The Tampa Bay Devil Rays may not be far behind, reportedly up for sale and looking for “something new” as the lease on their current stadium expires after the 2027 season.⁹

The Washington Commanders NFL team continues to implore the Commonwealth of Virginia to subsidize the move of franchise from its current location in suburban Maryland to a location in Northern Virginia. In 2022, even with another losing record, the Commanders reported a net operating income of \$130 million. This is a remarkable financial performance given that the *Washington Post* has reported recently that the Commanders were suffering from “plummeting popularity.” No less than 48% of avowed Commander fans indicated that they were “less interested” in the team than they had been in the previous decade.¹⁰ Declining fortunes on the field and fan interest appeared to have little impact on the value of the franchise. In May 2023, the Commanders were sold to a group of investors for a reported \$6.05 billion, a deal that set an NFL record for the most expensive sale in league history.¹¹

4 J Bradbury, John Charles and Coates, Dennis and Humphreys, Brad R., The Impact of Professional Sports Franchises and Venues on Local Economies: A Comprehensive Survey (January 31, 2022). *Journal of Economic Surveys*, forthcoming, available at SSRN: <https://ssrn.com/abstract=4022547>

5 Bradbury *et al.* in their Abstract.

6 John Charles Bradbury, Dennis Coates, and Brad R. Humphreys, “The Impact of Professional Sports Franchises and Venues on Local Economies: A Comprehensive Survey,” *Journal of Economic Surveys* (forthcoming).

7 Jesse McKinley, “Public Fools Most of the \$1.4 Billion for a Stadium. Buffalo Fans Cheer,” *New York Times* (April 16, 2022), www.nytimes.com/2022/04/16/nyregion/new-buffalo.

8 Matt Snyder, “Oakland to Las Vegas: A’s move could be held up over request for nearly \$400M in public funding, per report,” (May 18, 2023). <https://www.cbssports.com/mlb/news/oakland-to-las-vegas-as-move-could-be-held-up-over-request-for-nearly-400m-in-public-funding-per-report/>

9 Ken Rosenthal and Chandler Rome, “Rays have potential buyers, both local and for relocation, interested in franchise: Sources,” (May 21, 2023). *The Athletic*. <https://theathletic.com/4538457/2023/05/21/tampa-bay-rays-potential-sale-interest/>

10 Rick Maese and Scott Clement, “Commanders’ potential sale comes amid plummeting popularity, poll finds,” *Washington Post* (March 28, 2023), www.washingtonpost.com/sports/2023/03/28/commanders-poll-popularity-sale.

11 Mark Maske and Nicki Jhabvala, “Josh Harris has a signed, exclusive deal with Daniel Snyder for Commanders,” *Washington Post* (May 12, 2023). <https://www.washingtonpost.com/sports/2023/05/12/josh-harris-dan-snyder-commanders-deal/>

The record-setting deal for the Washington Commanders occurred even though there were numerous allegations of impropriety swirling around the franchise. The Commanders were fined by the NFL in 2021 for operating a “highly unprofessional” workplace that permitted “bullying and intimidation” of women employees.¹² In November 2022, D.C. Attorney General Karl Racine filed a consumer protection lawsuit against the Washington Commanders, franchise owner Daniel Snyder, the NFL, and Commissioner Roger Goodell, accusing them of colluding to deceive and mislead customers about an investigation of the team’s workplace culture. A second lawsuit followed soon thereafter alleging the team “prioritized its own revenues over fairness and deceived District consumers by wrongly withholding their security deposits that should have been automatically repaid under consumers’ contracts, and improperly using those deposits for the Team’s own purposes.”¹³ Whether or not the allegations or borne out in court, one thing is for certain, there was little impact on the franchise value.

With a sale, for all intents and purposes, being approved prior to the start of the 2023 NFL season, the question is why would the team now seek out public funds for a new stadium? The team’s current lease at FedEx Field in Landover Maryland expires after the 2027 season. This opens a window of opportunity for the team to relocate. Alas, new stadiums, are expensive. Suppose the Commanders’ heart is set on a new stadium that would cost \$2.0 billion. If the franchise devoted \$120 million of its current annual operating income to paying for a new stadium, and borrowed the \$2.0 billion at 6%, then it would take approximately 30 years for it to pay off the new \$2.0 billion facility. Suffice it to say that the Commanders have a strong financial incentive to have some other party — a collection of governments, perhaps — assume much of this financial burden.

The Virginia General Assembly has devoted time and attention to the situation relating to the Commanders during every recent legislative session. Legislators act as if they are unaware of the propensity of professional teams to move (leaving the previous host state high and dry with empty facilities) and the gap between projections of economic impact and what materializes once the professional stadium is built. There is a stark lesson here for local decision makers: ask what would happen if the investors who occupy the new stadium, sports complex, entertainment park, or venue decide it’s time to move on. Who is left holding the debt and responsibility for a facility that now lies empty?

Threats made by professional sports teams and/or entertainers that “we will leave town” constitute a time-honored negotiating technique. Witness the Richmond Flying Squirrels minor league Class-Double AA baseball team explicitly saying that it will leave town if the city does not complete a new \$80 million stadium that “meets major league standards” prior to the 2025 deadline the team has set.¹⁴ Richmond’s Mayor, Levar Stoney, probably unwisely replied that the Squirrels “aren’t going anywhere” because the “city plans to deliver on its promise of a new facility before the deadline.”¹⁵ Unwise? Yes, because that is precisely the reaction the Flying Squirrels ownership hoped to elicit. In fact, if the City of Richmond wishes to negotiate the best deal for the city, then it must adopt a different negotiating stance and be prepared to lose the team to another more generous city.

Further, the City of Richmond baseball venture suffers from a disease that seemingly afflicts all similar public projects — cost inflation. Originally billed as a \$50 million expenditure, the estimated cost ballooned to \$80 million, and the latest rendition is priced at \$110 million.¹⁶ The new Diamond will be part of an ambitious \$2.4 billion mixed-used development. City leaders previously promised that the stadium development would be accomplished “without costing taxpayers.”¹⁷ Observing all this, the *Richmond Times-Dispatch* editorial

12 Will Hobson, Mark Maske, Liz Clarke and Beth Reinhard. “NFL fines Washington Football Team \$10 million; Tanya Snyder to run operations for now.” *Washington Post* (July 2, 2021). <https://www.washingtonpost.com/sports/2021/07/01/daniel-snyder-nfl-fine-sexual-harassment-investigation/>

13 Mark Maske and Nicki Jhabvala. “D.C. attorney general files second lawsuit against Commanders,” *Washington Post* (November 17, 2022). <https://www.washingtonpost.com/sports/2022/11/17/dc-attorney-general-washington-commanders/>

14 Em Holter, “Stoney: Flying Squirrels aren’t going anywhere,” *Richmond Times-Dispatch* (April 19, 2023), https://richmond.com/news/local/government/politics/richmond-flying-squirrels-mayor-levar-stoney-the-diamond/article_25f8c942-de2b-11ed-9bdc-3bf6c7338307.html.

15 Em Holter.

16 “Opinion: Want a new stadium? Make it a regional effort,” *Richmond Times-Dispatch* (April 23, 2023), To build a new ballpark, Richmond needs a regional approach and “Opinion: Richmond Stadium Proposal Raises More Questions Than It Answers,” *Richmond Times-Dispatch* (April 30, 2023),

17 *Richmond Times-Dispatch* (April 23, 2023).

board wisely noted that “Sports stadiums are money pits” and that there were opportunity costs associated with the project — the same well-located land would generate “millions in tax revenue for the city” if it were used for commercial purposes other than the baseball park.¹⁸ The editorial board generated an empirical example that supposed the City of Richmond would borrow the entire \$80 million (one of the originally cited cost estimates) at 5.0% interest and concluded that the project was burdened by “tricky math.”¹⁹ If the math was tricky at \$80 million, then it was all the more so at the most recently cited price of \$110 million. Part of the editorial board’s disdain for the financial aspects of the project was based upon the City’s intent to borrow \$20 million from one of the project’s developers and pay the developer 8.0% interest — not exactly borrowing money at municipal bond rates, which in early May 2023 were hovering at about 2.5% for an AAA rated ten-year bonds.²⁰

However, the *Times-Dispatch* Editorial Board was not finished, and wrote yet another lengthy editorial that opined that the “stadium proposal raises more questions than answers.”²¹ The newspaper noted that the cost of the enterprise continued to inflate, the precise means of paying for the new facility were not clear, and there might be much better alternative uses for the many of the 179 acres of land in question. Meanwhile, the city has agreed to pay \$3.5 million for repairs and improvements to the existing Diamond facility even though it may soon be demolished.²²

Why Do Governments Subsidize Venues?

The reasons for governmental financial generosity where major league sports franchises are concerned are complex and go beyond the usually fallacious belief that paying for a stadium is a good public economic investment. Non-economic motives often appear to matter, that is, public leaders often proclaim that local or regional “pride” or “standing” is at stake. Of course, estimating the monetary value of such feelings is impossible and that may be why non-economic arguments are the fallback position when the economic calculus is not in favor of public subsidies. Proponents that such investments will bolster local or regional pride fail to recognize that, in some cases, pride goes before a fall.

History is replete with non-economic arguments in favor of public subsidies for sports stadiums and similar types of venues. In March 2023, Wisconsin Governor Tony Evers introduced a proposal involving the Milwaukee Brewers that will result in that state investing \$300 million in improvements for the Brewers’ retractable roof American Family Stadium, which itself originally was constructed with public tax funding. Improving the stadium, it was said, would “ensure [that] Major League Baseball is preserved in our state for the next generation.”²³ The pride of being associated with professional baseball appeared to loom large in the mind of the Governor and his supporters, even though the Associated Press story covering the initiative noted that “Numerous economic studies have shown that public stadium financing is a bad deal for many communities.”²⁴

In return for the subsidy, the Brewers pledged that they would lease the improved stadium facility until 2043. Insofar as public investments in stadiums are concerned, \$300 million is a small number. Most stadium projects cost much more. But even this more modest subsidy provokes an obvious question

18 *Richmond Times-Dispatch* (April 23, 2023).

19 *Richmond Times-Dispatch* (April 23, 2023).

20 FMS Bonds, Inc., “Municipal Market Yields,” AAA Rated Muni Bonds, www.fmsbonds.com/market-yields.

21 *Richmond Times-Dispatch* (April 30, 2023).

22 Em Holter, “Richmond moves closer to finalizing Diamond deal,” *Richmond Times-Dispatch* (May 2, 2023), City Council pushes forward on Diamond deal (richmond.com).

23 Associated Press, “Governor Wants to give Brewers nearly \$300M to repair stadium,” www.espn.com/mlb/story/_/id/35657048/governor-wants-give-brewers-nearly-300m-repair-stadium.

24 Associated Press.

— why couldn't the Brewers have paid for this improvement themselves? *Forbes Magazine*, which annually estimates the value of major league professional sports franchises, reported that the value of the Brewers rose from \$562 million in 2012 to \$1.28 billion in 2021.²⁵ Earlier, in 2015, the State of Wisconsin agreed to pay the Milwaukee Bucks National Basketball Association team \$250 million to help build a new arena after the team's owners had threatened to leave. Somewhat ironically, during the same year, Governor Scott Walker signed legislation that reduced state support for public higher education in Wisconsin by \$300 million.²⁶

It is fair to observe that the reasons for governmental financial generosity insofar as major projects are concerned frequently relate to subjective factors such as a city's or region's image and normatively whether a city or region is perceived to be a good place to live. Such investments therefore often are described as being transformational and literally moving a city or region from a lower to higher tier of status. Hampton Roads is no exception. Whether it is statements about the transformative impacts of casinos, water parks, or stadiums, local decision makers in Hampton Roads often appeal to local or regional pride. What is absent from the conversation is the recognition that public subsidies often crowd out other, less visible projects today and in the future. There is, as the saying goes, no such thing as a free lunch.

Hampton Roads can learn from the experience of other cities and states. If there is a strong business case for a sports stadium, sports park, or entertainment venue, then investors should be able to tap into financial markets. The San Francisco Giants serve as an example. Voters rejected public financing of a new stadium four times before the team decided that the only way to build a new stadium was to do so privately.

The new stadium cost \$315 million, of which about \$140 was raised by sponsorships and other deals. The Giants borrowed the remaining \$170 million and paid off the 20-year mortgage in 2017.²⁷ San Francisco provided tax abatements and upgraded the infrastructure around the stadium, but taxpayers are much better off than other localities that provided similar incentives AND subsidized the construction of a new stadium (or in some cases, stadiums). We recognize that such ventures might require incentives but prefer taxpayers not to be raked over the proverbial coals in the pursuit of venues with dubious long-term benefits to the region in terms of economic growth.

Tax Increment Financing: A Solution that Works.

Our analysis to this point has focused upon examples coming from the realm of professional sports. This largely reflects the availability of data. Subsidies to professional sports teams usually are widely publicized and the approximate values of their franchises are known because of the reporting of *Forbes Magazine*. This renders it possible to calculate whether a specific public investment relating to a sports team has been worthwhile. The same data often are not available for other governmental investments such as roads, transit, schools, and public safety that benefit private firms and individuals.

In fact, cities often construct infrastructure, apply special tax rates, and utilize a strategy generally referred to as "tax increment financing." Tax Increment Financing (TIF) is a mechanism by which a portion of real estate taxes generated within a specific district are used pay for public improvements within the district's boundaries. A key feature of a TIF is that property owners pay no greater rate than the prevailing locality rate.

²⁵ *Forbes Magazine*, "The Business of Baseball," www.forbes.com/mlb-valuations/list/#tab:overall.

²⁶ Paul Oyer, *An Economist Goes to the Game: How to Throw Away \$580 Million and Other Surprising Insights from the Economics of Sports*. New Haven: Yale University Press, 2022, at 141.

²⁷ Craig Calcaterra, "The AT&T Park mortgage is paid off," *NBC Sports* (February 23, 2017), <https://mlb.nbc.com/2017/02/23/the-at-t-park-mortgage-is-paid-off/>

To understand how a TIF operates, we first must define the geographical area (the “district”) and the base year of the TIF.²⁸ The base year establishes the “base assessed value” of real estate within a district in the year preceding the ordinance creating the district. Each year, the real estate assessor will update the “current assessed” value of property within the district. Any taxes received from the lower of the base or current assessed value remit to the locality’s general fund. For example, if the booked assessed value was \$250 million and the currently assessed value was \$225 million, then the taxes levied on the currently assessed value would not flow into the general fund.

On the other hand, any real estate taxes received from when the current assessed value is higher than the booked assessed value result into a flow of revenue into the district fund. If, for example, the booked assessed value was \$250 million and the current assessed value was \$300 million, then the revenue for the booked assessed value would flow to the general fund while the **incremental taxes** resulting from the \$50 million in increased value of property would flow into the district’s fund.

The fund, in most cases, can only be used to pay for “development project costs” and to secure and service debt for improvements within the locality. In other words, the locality can issue bonds to fund public improvements that are tied to the incremental revenue of the district. If, as noted by the *Code of Virginia*, there are “surplus funds,” these funds are retained in the district fund. If all the obligations of the district are fulfilled, a portion or all of the surplus may be transferred to the city or county budget.²⁹ A locality may also choose to dissolve the TIF when all its obligations or commitments have been paid.

TIF Districts are nothing new to Hampton Roads. Chesapeake, for example, has two TIF Districts: Greenbrier and South Norfolk.³⁰ Let’s dive briefly into the operations of the Greenbrier TIF, which was created in 2004 to support the activities of one of the larger mixed-used development areas in Hampton Roads. During the 2021 Fiscal Year (FY), the Greenbrier TIF generated approximately \$11.9 million in revenue for the district fund, of which \$1.3

million was used for debt service, about \$1 million for economic development activities, \$2.8 million was transferred to schools, and \$ 1.3 million was sent elsewhere. At the end of FY 2021, the Greenbrier TIF District fund had approximately \$12.8 million on hand.

In Virginia Beach, the Sandbridge community consists of nearly five miles of beachfront property and is a major tourist attraction. The city created the Sandbridge Special Service District (SSD) in 1995 as a means of providing financing of beach and shoreline management within the district. Revenue for the Sandbridge SSD comes from a real estate surcharge, supplemental lodging taxes, plus parking and other miscellaneous revenues.

Virginia Beach created the Sandbridge TIF District on December 1, 1998 to provide funding in addition to that provided by the Sandbridge SSD. The City created the TIF to fund projects related to the “construction, maintenance, nourishment, and restoration of the public beach and shoreline in the Sandbridge District.”³¹ Virginia Beach established the booked assessment value as equal to the real estate assessment in FY 1998. The booked assessment value for the Sandbridge TIF was set at \$206.1 million. As the real estate values rose in the Sandbridge TIF District, taxes levied on the incremental gains flowed into the district fund (Graph 1). Again, we note these revenues are derived from the incremental gains in assessed values since the base year. Revenues from the booked assessed value continue to flow into the city’s general coffers to this day.

The important question at hand is whether the development around the Greenbrier district in Chesapeake or Sandbridge district in Virginia would have occurred in the absence of a TIF? In all likelihood, the answer is a qualified “yes.” Development would have still occurred, but public improvements fostering the development (or beach replenishment) would have not likely occurred as quickly.

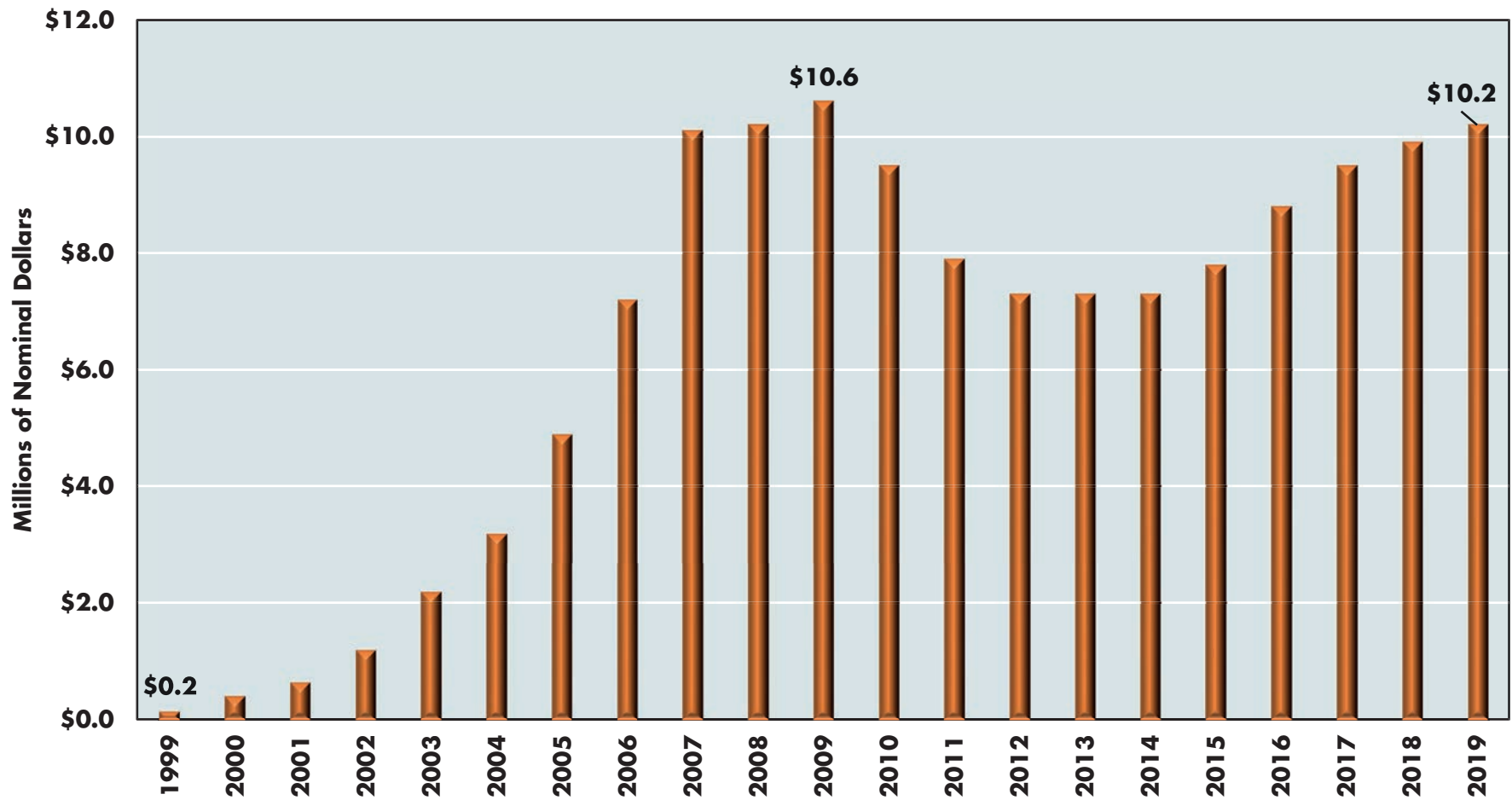
28 Code of Virginia, § 58.1-3245.2 “Tax Increment Financing”.

29 Code of Virginia, § 58.1-3245.4. Issuance of obligations for project costs.

30 City of Chesapeake, Tax Increment Financing Districts Summary, Approved Capital Improvement Program, FY 2023 – FY 2027. <https://www.cityofchesapeake.net/DocumentCenter/View/298/FY-2023-to-2027-Approved-Capital-Improvement-Program-PDF>

31 Lyndon S. Remias, “Audit of the Sandbridge Tax Increment Financing and Sandbridge Special Service District Funds” (March 12, 2020), www.vbgov.com/government/departments/city-auditors-office/Documents/Audit%20Reports/20200313-AUD-Audit%20of%20Sandbridge%20SSD%20and%20TIF-FINAL%20REPORT.pdf.

GRAPH 1
SANDBRIDGE TAX INCREMENT FINANCING DISTRICT REVENUES
1999-2019



Source: Virginia Beach, Office of the City Auditor, "Audit of the Sandbridge Tax Increment Financial and Sandbridge Special Service District Funds," March 13, 2020.

A 2020 report by Lyndon S. Remias, City Auditor for the City of Virginia Beach, revealed that property values in the Sandbridge area in 2019 were lower than they were in 2011, but the funds generated by the district had paid for beach replenishment in the form of sand placed on beaches that had eroded. Overall, the Sandbridge TIF District was viewed as a success. Without it — implying a world in which landowners would have to address beach erosion on their own — it is quite doubtful that beach nourishment would have occurred at the level observed. Yet reality is that the TIF District redirected tax dollars that otherwise would have gone into the city's general fund. The argument for this particular district is that except for this redirection, and the sand replenishment that it supported, Sandbridge might have withered, and hence the City would have been suffered from sharply reduced tax dollars in that area of the City.

Two non-controversial conclusions can be drawn about the Sandbridge TIF District. First, as result of the TIF and sand replenishment, Sandbridge has flourished, and private property owners have benefitted. Second, consequently, the City of Virginia Beach likely collected tax revenues that otherwise it would have lost.

We focus on the Sandbridge TIF District because it is an apparent success story. But this is a success story that inspires questions. Can the Sandbridge results be generalized? Those who advocate public subsidies of private activities often argue that this is the case. And tax increment district financing has been used with apparent success multiple times across Hampton Roads. Witness the use of tax increment financing as one tool to spur the development of Virginia Beach's Town Center. Apparently, more than 80% of the funds used to develop Town Center came from private sources and the TIF district was vital in priming the pump to generate those investments. It would seem there is a strong rationale for a TIF to support development activities, but this does not mean we should avoid asking the hard questions.

Yet every instance is different, and one must ask the relevant questions every time. First, will the public subsidy produce measurable gains that make this investment worthwhile when its revenues and costs are discounted at a realistic rate of interest? Second, is the distribution of gains between the private participants and the public appropriate? Third, how are the risks of this venture being shared? Fourth, and related to the previous point, to what extent do the private parties involved in the deal have the ability to back out of a project and leave the public stranded?

Are these hard questions? Undoubtedly. Yet these are questions worth asking whether the locality is Virginia Beach and the Atlantic Park project or Norfolk and the proposed casino development. If nothing else, asking these questions and publicly disclosing the data improves transparency and accountability for taxpayers whose funds are being spent in support of these ventures.



Final Thoughts

We must not leave this topic without noting there is no sense of mystery about characteristics of great cities. Yes, they do boast attractive, even iconic facilities and attractions. Who does not associate the Empire State Building and the Statue of Liberty with New York City? But where do the New York Giants and New York Jets play their National Football League home football games? At MetLife Stadium in East Rutherford, New Jersey. This is an object lesson that stadiums and large public venues do not a great city make.

What does New York City have that East Rutherford does not? A huge financial economy that features banks, insurance companies, and the New York Stock Exchange. World-class universities including Columbia University and New York University. Renowned medical and health complexes. An unmatched cultural and artistic scene. The United Nations and so on.

The point is that entertainment venues, stadiums and the like seldom are the fuel that makes cities and regions great. Such amenities complement the vital ingredients but do not constitute the vital ingredients themselves. When cities and regions decide that buildings are the things that make them great, they are often on the wrong path. Sometimes, the splashy new stadium, or park turns into an anchor as teams and tastes move on. One only needs to look at NASCAR to see how interest in a sport can rise and fall, leaving locales with underutilized facilities (or tracks not being used at all).

Based upon accumulated economic research and the experiences of other cities and regions (and remembering Walt Whitman):

- Attract and retain very high-quality K-12 public school teachers
- Ensure high speed fiber optic access throughout the city
- Support apprenticeships and internships
- Expand higher education capacity, especially in scientific, technology, and health fields
- Provide financial sustenance and seed monies to scientific and technology entrepreneurs
- Partner with the newly merged ODU/EVMS institution to attract new talent

Are these investments as exciting as luring a new sports team or entertainment park to the region? Perhaps not, but these are recommendations that build the foundation to attract and retain talent. The region cannot grow its key industry clusters without people, and people follow jobs not stadiums or parks. If the private business case exists, we opine, let the investors pay for the venue. If needed, the city or county can create a TIF to fund infrastructure improvements because the TIF is based on gains on value, which, if the business case is strong, will happen when the venue is built and operating. Perhaps this is not the most appealing argument for local and regional pride, but it is one that protects taxpayers' pocketbooks.

The Virginia Museum of Contemporary Art: Challenges, Opportunities, and Economic Impact



THE VIRGINIA MUSEUM OF CONTEMPORARY ART: CHALLENGES, OPPORTUNITIES, AND ECONOMIC IMPACT

"A picture is a poem without words."

Horace

Regardless of their location throughout the world and all 50 U.S. states, museums play a critical role in educating and enriching the communities around them. Prior to the onset of the COVID-19 pandemic, museums, historical sites, and similar institutions in the United States supported more than 700,000 jobs and contributed an average of \$50 billion annually to the national economy.¹ During the initial months of the pandemic, however, almost every museum was closed to the public, resulting in significant layoffs and declines in revenue. In a recent survey by the American Alliance of Museums, almost 1 in 5 museum directors responded that there was some risk of their museum closing permanently due to the pandemic. The loss of museums would not only have a profound economic impact, but it would also alter the collective culture of the region, state, and nation. Sister Wendy Beckett, a unique art historian and popular television host once noted, "A country that has few museums is both materially poor and spiritually poor...museums, like theatres and libraries, are a means to freedom."

While the word "museum" might suggest displays of art or sculpture, the range and depth of organizations classified as museums may surprise the reader. Museums are charged with conserving, protecting, and displaying treasures from our past that might otherwise be lost to private collectors or even to the ages. Organizations focused on the visual arts, historical events and individuals, military services, various aspects of nature, science, and technology may reside in a small house or in multiple buildings storing hundreds of thousands of irreplaceable objects. These organizations are much more than a place to display or recreate history; they have a considerable role in the culture and economy of communities throughout Hampton Roads, Virginia, and the United States.

The support for museums is broad and bipartisan. A pre-pandemic survey of museum attendees found that 81% of Americans responded that they visited museums to "have fun," while 69% noted that their visit was a "cultural

activity." Eighty-nine percent of Americans, regardless of party persuasion, believed that museums provided important economic impacts back to their communities.² Museums were consistently ranked among the most trusted institutions nationally pre-pandemic, and a 2021 survey found that almost 9 out of 10 Americans shared that view.³ No other type of institution was as trusted as museums in the 2021 survey.

The Virginia Museum of Contemporary Art (Virginia MOCA for short) in Virginia Beach is a cultural jewel that continues to provide the region with remarkable artistic resources and programming. From Fiscal Year (FY) 2017 to FY 2022, Virginia MOCA attracted at least \$2.1 million in gifts from outside the city, gifts that were largely expended within Virginia Beach. Virginia MOCA also attracts visitors to the city; two most recent major exhibitions from November 2021 to September 2022

¹ American Alliance of Museums, Museum Facts and Data, <https://www.aam-us.org/wp-content/uploads/2022/02/Museum-Facts-2022-v2.pdf>

² LaPlaca Cohen/Kelton Global 2017 U.S. Culture Track Survey. <http://culturetrack.com/research/reports/> and AAM's Museums & Public Opinion 2017.

³ American Alliance of Museums, Museums and Trust 2021, <https://www.aam-us.org/2021/09/30/museums-and-trust-2021/>.

attracted 18,050 visitors, more than 59% of whom were from outside Virginia Beach.⁴

We examine the economic impact of Virginia MOCA's operations from FY 2016 to FY 2021. Direct spending by Virginia MOCA lifted annual economic output and regional GDP by approximately \$5.2 million and \$3.0 million in 2021 dollars, respectively, from FY 2016 to FY 2021. Using the attendance data, we estimate that museum visitors contributed at least \$537,000 in economic output and \$322,116 to regional GDP annually. These estimates suggest that a lower bound for the economic impact of Virginia MOCA is approximately \$5.7 million annually, and its average annual contribution to regional GDP is about \$3.3 million a year. We find that for every dollar invested in Virginia MOCA by the public and private donors, economic activity in Hampton Roads increased by more than three dollars.

We note that these estimates do not include the annual economic impact of Virginia MOCA's Boardwalk Art Show and, given that the 2022 event attracted more than 150 artists and thousands (if not tens of thousands) of visitors, we argue that the economic impact of Virginia MOCA is likely significantly higher than our initial estimates would suggest. We are, unfortunately, limited by what data are currently available. Accurately determining how many people visit the Boardwalk Art Show, where these visitors reside, and how much they spend is not only in the interest of Virginia MOCA but also the city of Virginia Beach.

In this report, we discuss how museums are part of the lives of Americans. We delve into who visits museums and estimate how many people volunteer in museums in Hampton Roads. We explore perceptions about Virginia MOCA before estimating its economic impact. We conclude with thoughts on how Virginia MOCA can leverage its reputation and economic impact to improve its visibility in the region and continue to grow attendance and donations in the post-pandemic environment.

⁴ These periods coincide with two major exhibitions at Virginia MOCA.

Museums – Recovering from COVID-19

Table 1 illustrates the highest attendance museums in the United States in 2019 and how attendance dropped dramatically in 2020. To say that the COVID-19 pandemic undermined museum attendance would be an understatement. In 2020, attendance at the top-20 museums in the United States fell from 49.8 million to almost 7.9 million. In 2021, estimated attendance rebounded somewhat to 13.4 million, however, this was about 33% of total attendance in 2019. It may take several years before we again observe pre-COVID attendance levels.

While every museum is unique, there are common characteristics across the museum industry. Museum revenue, in general, is driven by domestic attendance by U.S. residents, destination trips by international tourists, the prevalence of households earning more than \$100,000 annually, and the performance of financial markets. After reaching a high of \$19.0 billion in 2019, museum and historical site revenue declined to approximately \$16.9 billion in 2020 (Graph 1). However, the good news is that revenue is projected to reach \$19.4 billion in 2022 even while attendance continues to recover from the pandemic shock of 2020 (Graph 2).

Turning our attention to art museums, private donations, earned revenue, and endowment income accounted for most of the revenue in 2017 (Graph 2). Attracting visitors is crucial to generating revenue in the short term and for cultivating donations in the long term. Private gifts and recurring donations often make the difference in the financial viability of museums. Store sales accounted for the majority of earned revenue in 2017, and these sales were especially important for the one in three museums that offered free admission or a suggested donation for admission.

TABLE 1

HIGHEST ATTENDANCE MUSEUMS IN THE UNITED STATES, 2019-2021*

Museum	Location	2019	2020	2021
Metropolitan Museum of Art	New York	6,770,000	1,125,000	1,958,000
National Museum of Natural History	District of Columbia	4,200,000	573,000	982,000
National Gallery of Art	District of Columbia	4,074,000	730,000	1,705,000
National Air and Space Museum	District of Columbia	3,200,000	267,000	411,000
National Museum of American History	District of Columbia	2,800,000	311,000	570,000
California Science Center	California	2,200,000	271,000	726,000
National Museum of African American History	District of Columbia	2,000,000	368,000	393,000
Smithsonian American Art Museum	District of Columbia	2,000,000	387,000	420,000
Museum of Modern Art	New York	1,992,000	706,000	1,161,000

Source: AECOM 2021 Theme and Museum Index: The Global Attractions Attendance Report <https://aecom.com/wp-content/uploads/documents/reports/AECOM-Theme-Index-2021.pdf>.

*The American Museum of Natural History reported 5,000,000 visitors in 2019 but did not report attendance for 2020 and 2021 and is thus not included in the table for comparative purposes.

GRAPH 1

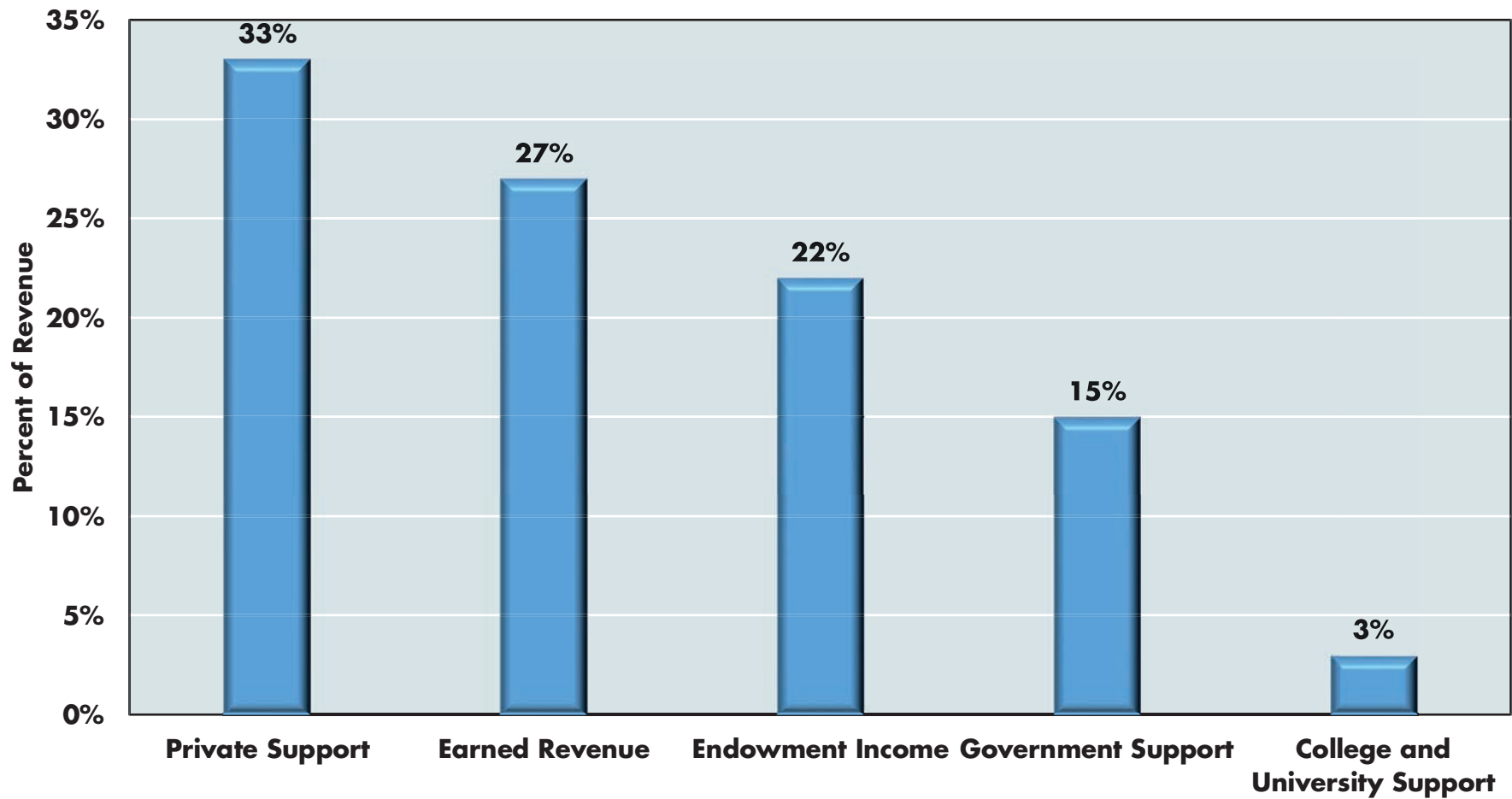
REVENUE FOR MUSEUMS, HISTORICAL SITES, AND SIMILAR INSTITUTIONS, UNITED STATES 2012-2022
BILLIONS OF NOMINAL DOLLARS



Source: "Industry Revenue of Heritage Institutions in the U.S. from 2012 to 2023 (in Billion U.S. Dollars)." NAICS Code: 712, Statista - The Statistics Portal, Statista. November 2022. *Forecasted revenue.

GRAPH 2

SOURCES OF REVENUE FOR ART MUSEUMS IN THE UNITED STATES, 2017



Source: Art Museums by the Numbers, Association of Art Museum Directors, 2018.

The Museum Environment in Hampton Roads

The economy of Hampton Roads rests on three pillars: national defense, the Port of Virginia, and tourism. The hospitality and tourism sectors not only draw numerous visitors, but have, in part, fueled the recovery of the regional economy. Nominal hotel revenues are likely to exceed \$1 billion in 2022, and the hospitality and tourism industry employs approximately 1 in 11 workers in the region. In a recent survey of tourists asking why they chose to visit Hampton Roads, visits to historical sites and museums were popular activities, rivaling beach trips and fine dining (see Graph 3). The museums in Hampton Roads straddle these pillars, adding not only to the economy but to the cultural fabric of the region as well.

Hampton Roads offers a comprehensive assortment of offerings to those desiring to visit a museum, historic location, or similar institution. From broad to specific, museums and historical sites such as the Virginia Aquarium, Virginia Zoo, the Virginia Living Museum, the Virginia Air and Space Museum, and the Virginia Sports Hall of Fame provide a wide range of exhibit programming. The museums in Virginia's Historic Triangle focus on the experience of the American Revolution and colonial-era Virginia and include Colonial Williamsburg, The American Revolution Museum, the Yorktown Victory Center Museum, and the Jamestown Settlement.

Additionally, the great variety of historic homes complement the more traditional museums in Hampton Roads. Historic homes contain exhibits on an individual or family, typically from the 1719 to 1931 period, and include Lee Hall Mansion, home to affluent planter Richard Decatur Lee and one of the last remaining antebellum homes on the Virginia Peninsula; the Moses Myers House, built by an early entrepreneur; and Riddick's Folly, which was occupied by Mills Riddick, a prominent Revolutionary. Aberdeen Gardens Historic Homes is of note as it portrays the homes built in 1935 for African American workers as part of the New Deal program. Historic houses not only reflect

the architecture of the time, but also offer visitors a glimpse of the previous occupants' lifestyle of and a view into the everyday life of famous (and not-so-famous) Americans. Given the region's strong connection to the military, it should be no surprise that several museums focus on military history. Of particular interest to military aficionados are the Military Aviation Museum in Virginia Beach, the Virginia War Museum and the U.S. Army Transportation Museum in Newport News, and the American Revolution Museum at Yorktown.

A measure of the span and depth of the arts community is Southern Methodist University's Arts Vibrancy Index.⁵ The Arts Vibrancy Index estimates the relative rank of a county by weighting measures of (1) Arts Providers, (2) Arts Dollars, (3) Government Support, (4) Socio-economic characteristics, and (5) Other Leisure activities. The higher the reported index values for these dimensions, the more "vibrant" the arts community in the county or region. More than 3,100 counties are ranked in the most recent edition of the Arts Vibrancy Index.

Table 2 highlights the 2022 index values for selected cities and counties in the Hampton Roads region. Williamsburg, with a score of 95, and Virginia Beach, with a score of 94 for the Arts Providers category, ranked ahead of more than 2,900 counties across the United States.⁶ Norfolk (88), Chesapeake (87), Portsmouth (84), and Hampton (80) were not far behind Virginia Beach and Williamsburg. Another positive signal for support for the arts is how the localities in Hampton Roads fare with regards to Arts Dollars.⁷ Each of the selected localities again performs well relative to the national average with regards to revenue (earned and donated) and expenses (including employee compensation). In other words, the selected localities in Hampton Roads "earn" more and "spend" more on arts and culture on a per capita basis than many of their counterparts across the nation.

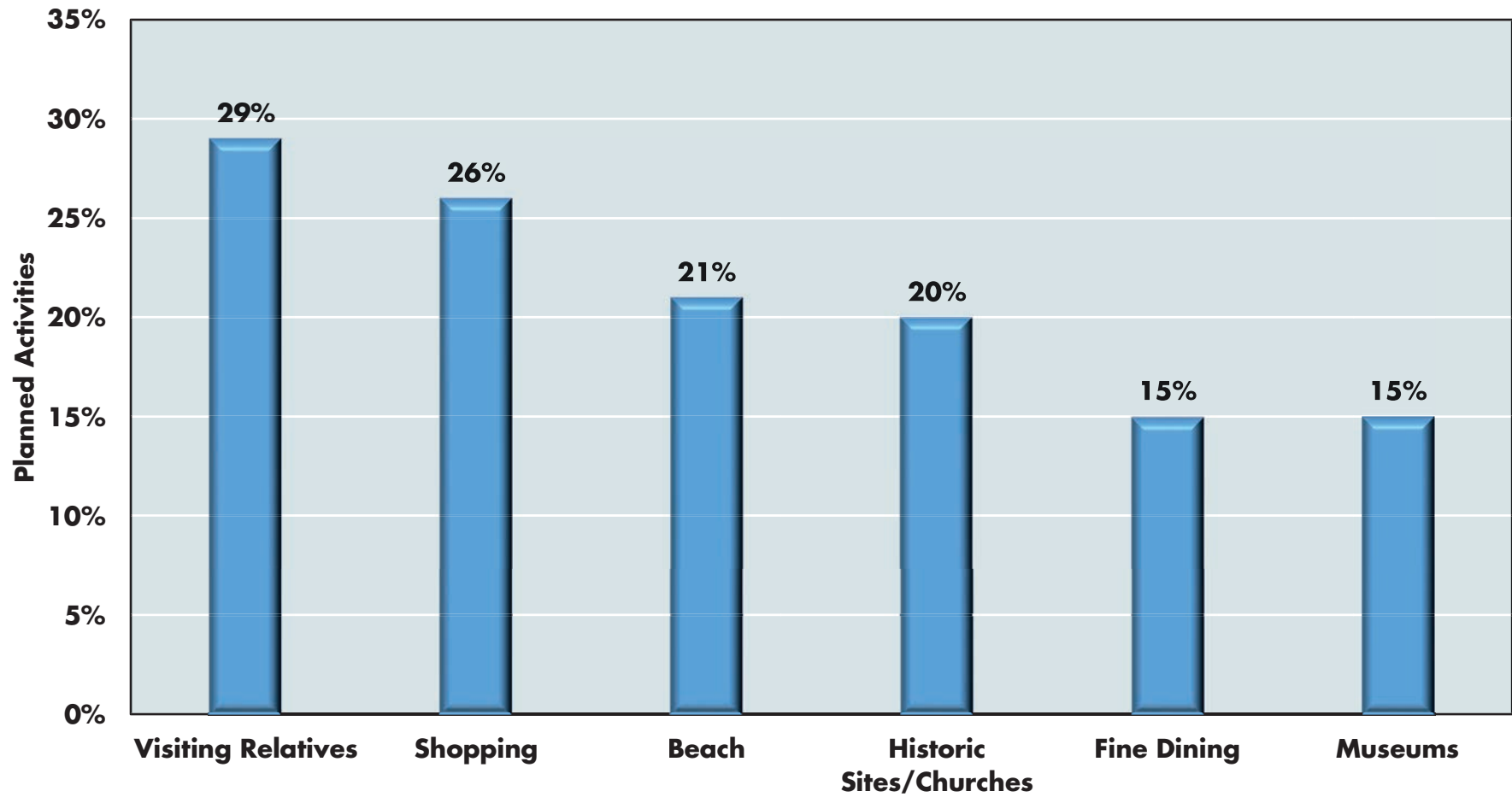
⁵ <https://dataarts.smu.edu/ArtsVibrancyMap/>

⁶ The Arts Providers category measures the number of artists, arts and culture employees, arts and cultural organizations, and arts, culture and entertainment firms in a geographic area. For more information, see <https://culturaldata.org/arts-vibrancy-2022/methodology>.

⁷ The Arts Dollars category measures program revenue, contributed revenue, total expenses, and total compensation of employees. For more information, see <https://culturaldata.org/arts-vibrancy-2022/methodology>.

GRAPH 3

TOP ACTIVITIES OF VISITORS TO COASTAL VIRGINIA – HAMPTON ROADS, 2020-2025



Source: Virginia Tourism Corporation, 2020-2025 Strategic Tourism Plan, Regional Plan: Coastal VA – Hampton Roads.

TABLE 2
2022 ARTS VIBRANCY SCORES OF SELECTED LOCALITIES
IN HAMPTON ROADS

Location	Arts Providers	Arts Dollars	Government Support	Socio-Economic	Other Leisure
Chesapeake	87	78	81	92	81
Hampton	80	91	91	76	80
Newport News	78	89	81	80	77
Norfolk	88	95	96	76	73
Portsmouth	84	95	96	73	70
Suffolk	68	82	89	79	60
Virginia Beach	94	83	80	93	93
Williamsburg	95	94	97	97	98

Source: Southern Methodist University, Arts Vibrancy Index (2022).

When it comes to federal and state government support, the SMU index suggests that the region receives an above average amount of federal and state dollars.⁸ Here, Williamsburg (97), Norfolk (96), and Portsmouth (96) rank the highest among the selected localities, however, we note that each of the larger cities in the region ranks well above the national average with regards to state and federal arts and culture dollars. The data suggest a vibrant environment for arts and culture in Hampton Roads. The challenge for the region is to build upon these local success stories to develop a cohesive and regional arts and culture environment to attract even more visitors (and their dollars) to Hampton Roads.



⁸ The Government Support category measures state art dollars, state art grants, federal art dollars, and federal arts grants. We note that the Government Support category does not include local arts and culture expenditures.

The Museum Economic Environment in Hampton Roads

From an economic perspective, in 2017, (the most recent estimates available) museums, historical sites, and similar institutions produced approximately \$0.1 billion of regional GDP. The average annual growth in economic activity for this sector in Hampton Roads over the previous decade was 1.1%, 2.8 percentage points below that of the nation. The slower pace of economic growth was reflected in output per worker, which was \$97,000 in the most recent data, about \$47,000 less than similar institutions across the nation.⁹

In 2019, museums, historical sites, and similar institutions in Hampton Roads employed, on average, 1,784 individuals (Graph 4). As with museums across the nation, the COVID-19 pandemic adversely impacted museum attendance and revenues. Museums in the region reduced employment in the face of declining revenues. In 2021, average employment by private museums in Hampton Roads declined to 1,545 individuals. There is a modicum of good news in that average employment increased to 1,645 in 2022, but this is still below the pre-pandemic level of employment.

Graph 5 illustrates the relative performance of employment in the museum, historical sites, and similar institutions industry for Hampton Roads, Virginia, and the United States from 2002 to 2022. From 2002 to 2019, private employment increased nationally by 47.6% but declined by 1.9% in Virginia and 23.4% in Hampton Roads. The employment data prior to the onset of the COVID-19 pandemic do not portray Hampton Roads in a good light, especially when compared to the growth of the industry nationally.

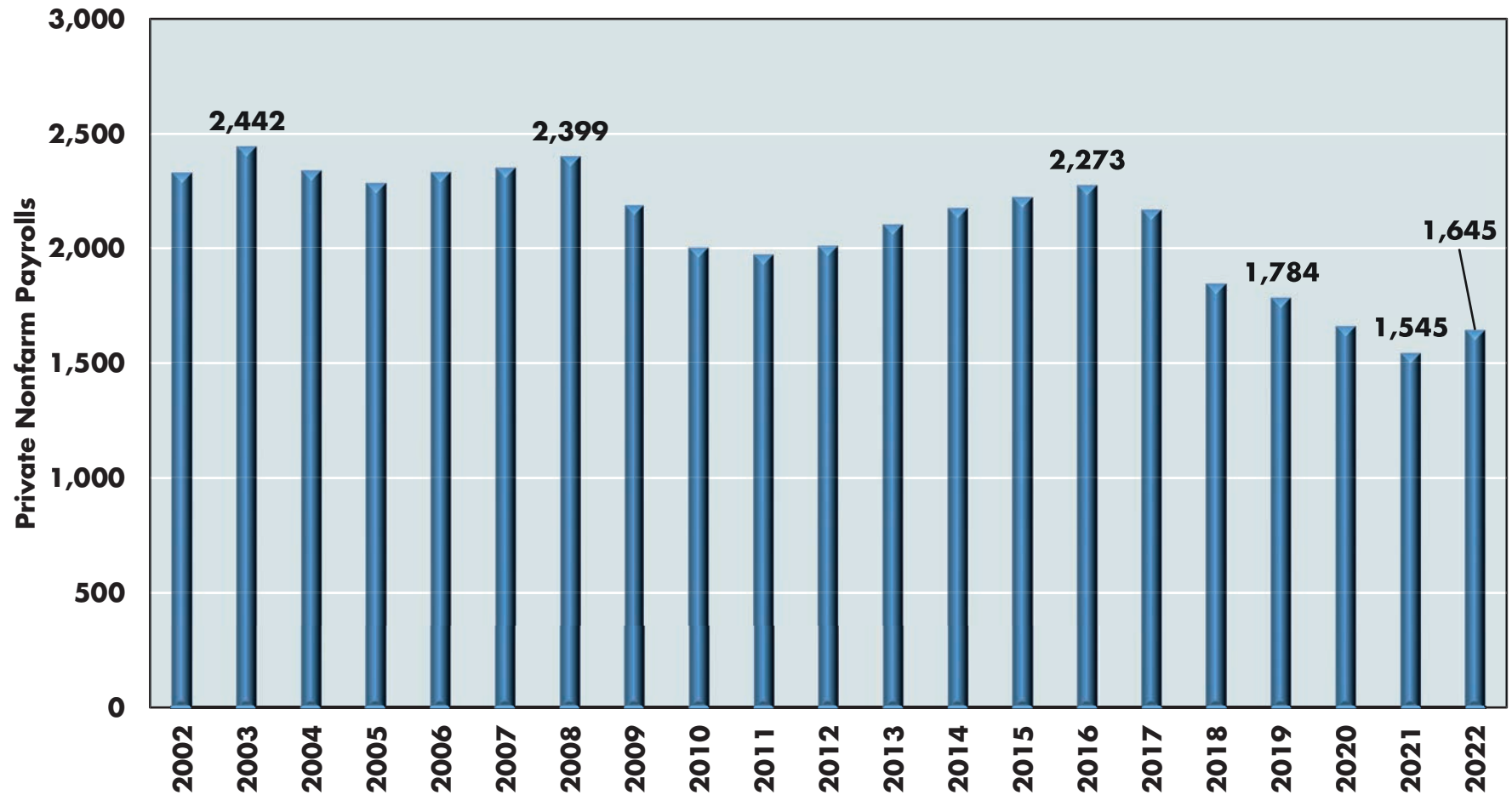
At the end of 2022, employment in the museum, historical sites, and similar institutions remained below pre-COVID levels. Nationally, employment in 2022 was 10.8% lower than 2019 while it was 9.2% lower in the Commonwealth and only 7.8% lower in Hampton Roads. If there is a sliver of good news, it is that employment in Hampton Roads has recovered more rapidly post-COVID than the state or nation. However, drawing back, we can also observe that, from a jobs basis, the industry has fared worse in Hampton Roads over the last two decades.

These estimates do not include the numerous volunteers who selflessly dedicated their time and energy to support the area's museums. Using data gathered at some of the largest museums in Hampton Roads, we estimate that there were approximately 7,000 volunteers in 2016, with a 7 volunteer to 1 paid employee ratio.¹⁰ Extrapolating from this estimate suggests that over 10,000 people (and likely closer to 15,000) volunteered their time in support of museums, historical sites, zoos, and parks in the region pre-pandemic. The value of this labor is not trivial. Assuming 10 hours of volunteer work a week by 10,000 residents of Hampton Roads yields an annual contribution of approximately \$15.4 million in labor to museums in the region. Time has value, and Hampton Roads residents provided a valuable contribution by volunteering at local museums and other cultural institutions.

⁹ Industry spotlight, Chmura Economics, Museums, Historical Sites, and Similar Institutions, Virginia Beach – Norfolk – Newport News Metropolitan Statistical Area, 2019.

¹⁰ Estimated using publicly available sources (IRS Form 990s)

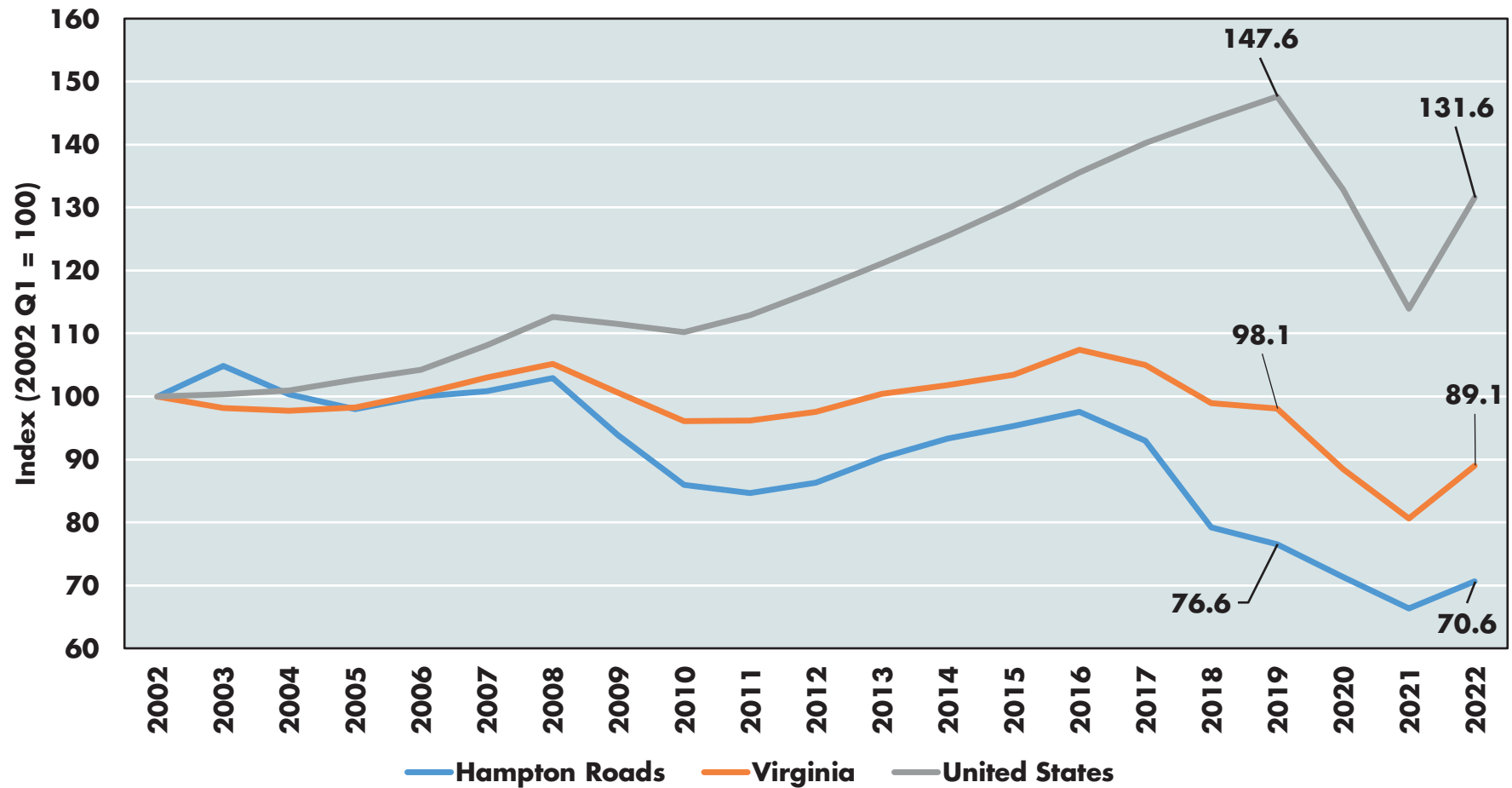
GRAPH 4
PRIVATE NONFARM EMPLOYMENT
MUSEUMS, HISTORICAL SITES, AND SIMILAR INSTITUTIONS
HAMPTON ROADS, 2002-2022



Source: JOBSEQ, Chmura Economics (2023). NAICS code 712, quarterly employment estimates. Data for 2022 Q4 are preliminary estimates.

GRAPH 5

INDEX OF PRIVATE NONFARM EMPLOYMENT
MUSEUMS, HISTORICAL SITES, AND SIMILAR INSTITUTIONS
HAMPTON ROADS, VIRGINIA, AND THE UNITED STATES, 2002 Q1 – 2022 Q3



Source: JOBSEQ, Chmura Economics (2023). NAICS code 712, quarterly employment estimates. Data for 2022 Q4 are preliminary estimates.

The Virginia Museum of Contemporary Art

Virginia MOCA is a vibrant cultural jewel that continues to provide the region with remarkable artistic resources and programming. The museum's readily accessible headquarters located at the end of I-264 in Virginia Beach is only six blocks from the oceanfront. Virginia MOCA's most visible activity, as far as the public is concerned, has been its sponsorship/exhibition/participation in the annual Boardwalk Art Show along the Virginia Beach oceanfront. This popular event attracts tens of thousands of individuals to the oceanfront and to the City of Virginia Beach. The 2022 show was held October 21-23, and more than 150 artists exhibited and sold their work.

Though many Hampton Roads residents, especially those located west of Virginia Beach, may only be vaguely aware (or even completely unaware) of Virginia MOCA,¹¹ the museum has assembled an enviable history of hosting notable contemporary art exhibitions and sponsoring enticing artistic activities. These typically include guided tours, interactive sessions with artists, workshops, and themed programs and exhibitions that focus on essential aspects of the human experience or serve a particular clientele, such as children. Representative is the *More Than Shelter* exhibition that found a diverse set of 11 artists addressing the myriad ways human beings satisfy their basic needs for food, water, and shelter and how those activities affect both them and others. In 2023, Virginia MOCA will host a show presenting the works of Kara Walker, a Black artist whose work often focuses on racial- and gender-related topics that are frequently in the news today.

Especially notable, however, was the *Maya Lin: A Study of Water* exhibit that Virginia MOCA hosted between April and September 2022. Maya Lin, who, at age 21, had already won the national design competition for the Vietnam Veterans Memorial in Washington, D.C., is internationally known and respected for her artistic work relating to landscapes and environmental issues. She received the Presidential Medal of Freedom in 2016. By any

standard, it was a coup for Virginia MOCA to attract Maya Lin's work, and not surprisingly, this exhibition was heavily patronized.

Hosting Maya Lin's artistic work underscored the respect with which Virginia MOCA is held in the wider community of artists. Nonetheless, many individuals (including elected officials and community leaders) appear to be substantially uninformed, even completely unaware, of Virginia MOCA's programs and significance. Our conversations revealed that large numbers of individuals in Virginia Beach have never been to any Virginia MOCA-sponsored event at the museum, and their only exposure has been at the annual Virginia Beach Boardwalk Art Show.

Therein resides the crux of the challenge facing Virginia MOCA. It is a major league artistic facility that focuses on exhibitions and does not collect art in the fashion of the Chrysler Museum in Norfolk. It would represent "fiscal suicide" for Virginia MOCA to attempt to develop a collection, one of its strongest supporters asserted. The cost of obtaining and maintaining a permanent collection, from this perspective, would require the museum to aggressively seek out additional sources of revenue and undermine its distinctive character of hosting nationally, if not internationally, renowned exhibitions.

Virginia MOCA's exhibitions place it in the top ten among exhibition-oriented arts facilities nationally, perhaps even in the top half-dozen. However, there was surprisingly little recognition of this status among those we interviewed within Hampton Roads or generally in the City of Virginia Beach. If there is a perceived lack of recognition among those who patronize the arts community in the region, it is not a leap to conclude that awareness of Virginia MOCA among the public is limited. The good news, however, is that raising awareness is a tangible course of action that can be undertaken in the coming years.

The Maya Lin exhibition was a visible demonstration of what is possible. City officials increasingly understand Virginia MOCA's potential to bring guests to Virginia Beach and to make the city a more attractive and enticing milieu

¹¹ We interviewed individuals in public and private positions throughout the region for this section. We thank them for their availability and opinions regarding Virginia MOCA. As is our custom, unless otherwise noted, our interviews are anonymous.

for those individuals considering it as a permanent place to reside. We would observe that no thriving metropolitan area in the United States is without a robust cultural scene and that this is a *sine qua non* for cities on the move upward.

Virginia MOCA's current location at the end of I-264 initially seems ideal but is problematic in that the museum is not readily visible unless one is standing nearby. "It is tucked away behind the trees," commented a supporter. Ideally, Virginia MOCA facilities should be more visible and located in a high vehicular and foot traffic area. Virginia MOCA's recently announced move to a new building on the grounds of Virginia Wesleyan University addresses this concern. This move is a vote of confidence in the work of Virginia MOCA and its impact on the surrounding communities.

Virginia MOCA reported the receipt of \$1.74 million in gifts in 2020.¹² This is nothing to sneeze at but is only a fraction of the \$12.41 million in gifts that went to a somewhat analogous civic treasure, Norfolk's Chrysler Museum.¹³ Virginia MOCA has yet to connect consistently and on a large scale with the major donors who possess the ability to move its programming to another level. But the record shows improvement in this regard, substantially due to the efforts and organization of its Director, Ms. Gary Ryan.

As illustrated in Graph 6, Virginia MOCA has increased gifts by 175.5% from FY 2017 to FY 2022. We note that the museum attracted more gifts after the advent of the COVID-19 pandemic, a positive signal from individual donors about the value of the museum in the midst of a severe economic shock to the arts community. From FY 2017 to FY 2022, approximately 18% of individual gifts were from outside Virginia Beach. In FY 2022, for example, Virginia MOCA attracted \$411,162 in gifts from outside Virginia Beach, resources that would have likely been directed elsewhere if not for its presence in the city.

¹² MOCA's IRS Form 990 for 2020.

¹³ Chrysler Museum's IRS Form 990 for 2020.

¹⁴ IRS Form 990 for both entities.

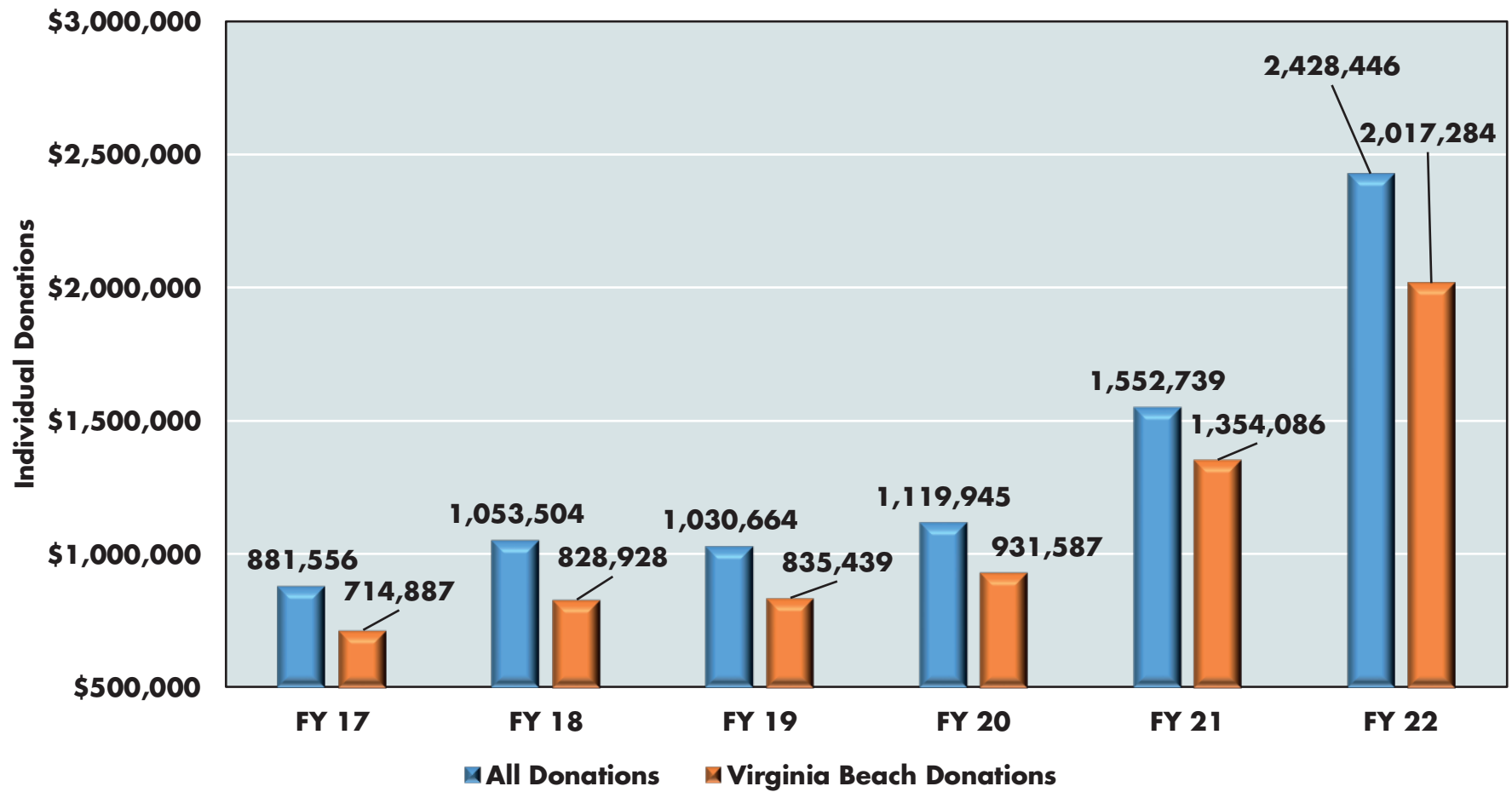
Even so, Virginia MOCA is far more financially dependent upon its donors than is the Chrysler Museum. In 2020, 88% of Virginia MOCA's income came from donors, whereas the comparable figure was only 65% at the Chrysler.¹⁴ While this is an unfair comparison in many ways, given the comparative maturity and backgrounds of these two artistic venues, it underlines the extent to which Virginia MOCA must mature financially and politically if it is to increase its impact on the region. The Chrysler, for example, recently used the City of Norfolk as a vehicle to acquire additional property and appears to knowledgeable outsiders to be more closely connected to that city than Virginia MOCA is to the City of Virginia Beach.

Our conversations with informed individuals in Hampton Roads revealed that some donors prefer to make financial gifts to artistic venues (such as the Chrysler Museum) that house permanent collections of art as opposed to Virginia MOCA, which has no collection and sponsors exhibitions. There is a sense among some that financial gifts to Virginia MOCA, while good, have a limited permanent, multi-generational impact. This is not to say that Virginia MOCA should attempt to develop its own permanent art collection, because it simply does not have the financial means to do so. But it is a recognition that the fundraising milieu surrounding Virginia MOCA is not comparable to the art museums such as the Chrysler.

A variety of knowledgeable individuals with whom we spoke were advocates of increased cooperation with the Chrysler Museum and even the Virginia Museum of Fine Arts in Richmond, which historically has regarded itself as the Commonwealth's major art museum. This perception, however, appears to be contrary to facts on the ground as Virginia MOCA has worked with other arts institutions in Hampton Roads and Virginia in the past. Most recently, for example, Virginia MOCA recently embarked on a long term sculpture program with the VMFA. Improving awareness of these efforts would benefit all the institutions in the long-term.



GRAPH 6
NOMINAL GIVING TO VIRGINIA MOCA
FISCAL 2017-FISCAL 2022



Source: Virginia MOCA (2022)

A Brief Review of Estimating Economic Impacts

Spending by Virginia MOCA and its visitors ripples throughout Hampton Roads, increasing economic output and employment in the region. In this section, we quantify the economic impact of Virginia MOCA's spending and the visitors it attracts to the region on the Hampton Roads economy. Our analysis consists of two components. The first component examines the economic impact of Virginia MOCA's cumulative direct expenditures from fiscal year 2016 to 2021. The second component of our analysis focuses on the impact of spending by visitors from outside of the region who attended one of the museum's exhibitions held between November 2021 and July 2022.

To understand our approach, it is helpful to imagine a pebble dropped in a puddle. The direct impact on employment, sales, and employee compensation ripples through the rest of the economy like the waves moving outward through the puddle. These ripples represent the indirect and induced impacts realized through the interconnectedness of the local economy. The indirect impact comes from economic activity at companies frequented by museum employees and companies that provide services to the museum. The induced impact comes via additional spending due to increases in income generated by companies directly and indirectly affected by museum employment or spending.

These spillovers create a total economic impact that is larger than the direct impact. The notion of an economic multiplier summarizes the total economic impact of a change in economic activity. If a firm invests \$1 million (direct impact) that in turn generates \$300,000 in indirect economic impacts and \$200,000 in induced economic impacts, then the economic impact multiplier effect is $(\$1,000,000 + \$300,000 + \$200,000) / \$1,000,000 = 1.5$.

There are two important considerations when evaluating economic multipliers. First, the size of the multiplier inherently depends on how much of the economic activity continues to recycle within the region. If a firm obtains most of its materials from outside the region (a "leakage"), then the actual multiplier effect will necessarily be smaller. Second, the multiplier effect, where spending spills over to a variety of other sectors, is great when the direct impact is positive; however, it is equally painful when there is a reduction in direct economic activity.

To ensure a common framework for interpretation, we define commonly used terms from the economic impact literature below.

- **Compensation** – the total payroll cost of employees, including wages, salaries, and all benefits.
- **Employment** – the annual average of full-time, part-time, and seasonal employment in an industry or region.
- **Output** – the measure of the total value of goods produced in an industry. However, output from one industry utilizes output from other industries, so the measure overstates the contribution of an industry to GDP.
- **Value Added** – the total market value of all final goods and services produced in a region in each period. Value added is the measure of the increase or decrease in GDP.

The Economic Impact of Virginia MOCA Expenditures in Hampton Roads

To estimate the total economic impact of Virginia MOCA's operations in Hampton Roads from 2016 to 2021, we first aggregate annual expenditures into two broad categories: administrative (salaries, advertising, etc.) and operations and maintenance (exhibition programs, utilities, and so on). We use the Consumer Price Index (CPI) from the Bureau of Labor Statistics (BLS), adjusted to reflect a base year of 2021, to estimate real (inflation-adjusted) expenditures in 2021 dollars. To account for the time value of money, we compute the present value of real spending by Virginia MOCA in 2021 dollars.¹⁵

Table 3 presents estimates of the value of Virginia MOCA's expenditures over the period of analysis. We estimate the real present value of Virginia MOCA's spending from FY 2016 to FY 2021 is approximately \$16.5 million. In other words, the historical spending by Virginia MOCA over this period would be the equivalent of spending \$16.5 million in 2021.

We use the Bureau of Economic Analysis (BEA) Regional Input-Output Modeling System (RIMS-II) to generate estimates of indirect and induced economic impacts resulting from direct expenditures. We remind the reader that our estimates are in real discounted (inflation-adjusted) 2021 dollars. Table 4 presents the economic impact of cumulative direct spending by Virginia MOCA from FY 2016 to FY 2021. For this period, the real present value of direct expenditures was \$16.4 million. These direct expenditures created approximately \$31.5 million in economic output and lifted Hampton Roads real GDP by about \$18 million. We estimate direct spending by Virginia MOCA over the six-year period lifted employment in Hampton Roads by 222 jobs.

TABLE 3 VIRGINIA MOCA EXPENDITURES, FY 2016-FY 2021 MILLIONS OF 2021 DOLLARS		
Fiscal Year	Real Undiscounted Total Expenditures	Real Present Value of Total Expenditures
2016	\$2,294,499	\$3,218,153
2017	\$2,228,215	\$2,920,736
2018	\$2,402,034	\$2,942,594
2019	\$2,191,044	\$2,508,527
2020	\$2,071,049	\$2,216,022
2021	\$2,662,933	\$2,662,933
Total	\$13,849,774	\$16,468,965
Source: Dragas Center for Economic Analysis and Policy. Expenditure data provided by Virginia MOCA for fiscal years 2016 to 2021. Fiscal year refers to July to June. Real spending adjusted for inflation using the Bureau of Labor Statistics' Consumer Price Index for all Urban Consumers (CPI-U).		

TABLE 4 ECONOMIC IMPACT OF VIRGINIA MOCA HISTORICAL EXPENDITURES FY 2016-FY 2021 MILLIONS OF 2021 DOLLARS				
Direct Spending	Total Output	Value-Added	Compensation	Jobs
\$16.4	\$31.5	\$18.0	\$12.1	222
Source: Dragas Center for Economic Analysis and Policy.				

¹⁵ We use a real discount rate to discount constant-dollar expenditures. We assume a 7% discount rate following OMB Circular A-94, which notes constant-dollar cost-benefit analyses of proposed investments should utilize a real discount rate of 7% (Office of Management and Budget, 2012). The Present Value of expenditures in 2016, for example, is equal to the real value of expenditures * (1+0.07)⁻⁵.

The Economic Impact of Virginia MOCA Visitor Spending in Hampton Roads

Virginia MOCA exhibitions have attracted visitors from across the country, and in some cases from across the globe, to the Hampton Roads region. Spending by out-of-town visitors to the museum on lodging, meals, entertainment, and other activities during their stay in the region ripples through the Hampton Roads economy.

Graph 7 illustrates reports admissions to Virginia MOCA from FY 2010 to FY 2022. Before discussing Graph 7, however, we must make one important caveat: data prior to FY 21 represent all admissions, regardless of purpose, while data for FY 2021 and FY 2022 only represent exhibition admissions. We thus discuss these data separately as data prior to FY 2021 overstates the number of exhibition-only attendances. From FY 2010 to FY 2020, average admissions (for any reason) were 10,727.¹⁶

Focusing on the most recent data for FY 2021 and FY 2022, the COVID-19 pandemic shock and subsequent recovery is obvious. In FY 2021, only 8,678 individuals attended an exhibition at Virginia MOCA. Attendance rebounded sharply by FY 2022, increasing to 17,068, a 49.2% increase from FY 2021. Regardless of who was counted as attending an event at Virginia MOCA, FY 2022 sets a record. The ability of Virginia MOCA to respond nimbly to the pandemic and its continued ability to attract exhibitions of international import provided the foundation for the recovery in admissions.

Turning to the question of the economic impact of visitors to Virginia MOCA, we use individual-level data on admissions to estimate total direct visitor spending of nonresident attendees to one of the museum's exhibition programs, *Maya Lin: A Study of Water and Shaping Memories/Made in Virginia*, between November 2021 to September 2022.¹⁷ As shown in Table 5, approximately 18,050 individuals attended Virginia MOCA exhibitions during this period. To account for displacement, we exclude spending by attendees who reside within the region. From an economic impact perspective, spending by residents visiting the museum can be considered "old" money that is simply "redistributed" from existing spending in a region.

To conservatively estimate Virginia MOCA's impact, we only consider the impact of spending by visitors who reside outside of Hampton Roads, that is, "new" money injected into the region. This approach is conservative in that it assumes that residents inside the region fully shift expenditures from one source of entertainment to spending associated with Virginia MOCA. Without specific data on consumer spending, we argue that a conservative and transparent approach will produce a more robust set of estimates. We thus caution the reader that our estimates are biased downward and provide a floor, rather than a ceiling, for the estimated impact of visitor spending.

Of the 18,050 visitors to the museum, approximately 36.1% (6,518) were from outside of Hampton Roads. This number of visitors underscores the argument that Virginia MOCA is attracting visitors to Virginia Beach. To estimate the economic impact of nonresident visitor spending directly attributable to Virginia MOCA, we must first consider how many nonresident attendees travelled to the region specifically to visit the museum. We provide a conservative estimate that approximately 10% of nonresident attendees travelled to the region specifically to visit the museum.¹⁸ As illustrated in Table 6, we estimate real direct spending by visitors who travelled to Hampton Roads specifically to visit Virginia MOCA to be approximately \$150,442.

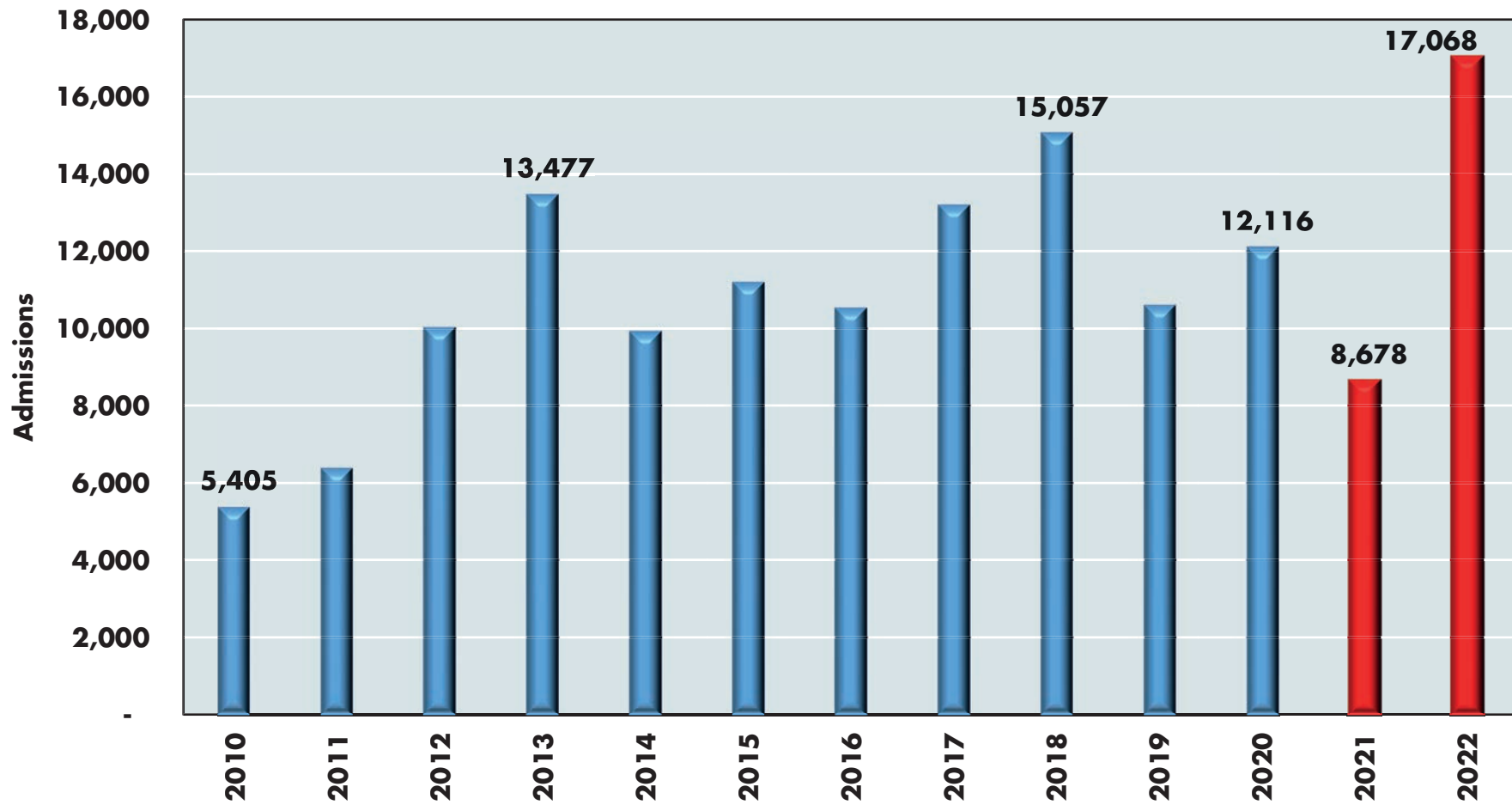
¹⁶ The Michael Kagan/Charged/Echard Wheeler exhibition cycle ended on February 16, 2020. The new exhibition cycle consisting of Shifting Gaze, New Waves, and Hampton Boyer was virtual from March 21, 2020 and transitioned to in-person attendance on July 11, 2020.

¹⁷ We note that the data in Table 4 cross two fiscal years and are not directly comparable with the fiscal year data in the preceding admissions graph.

¹⁸ Lawton and Rowe (2009) found 20% of visitors reported the museum as the main reason for their visit. Our data reflects attendance at exhibitions of well-known artists, not daily attendance for the entire museum. We can therefore assume our estimates are conservative and represent a lower bound.

GRAPH 7

ADMISSIONS TO VIRGINIA MOCA, FISCAL YEAR 2010-FISCAL YEAR 2022



Source: Virginia MOCA (2022). Data prior to FY 2021 represent aggregated admissions while data for FY 2021 and FY 2022 are reported individual admissions, including information about the number of tickets and the zip code of the individual requesting tickets for admission.

TABLE 5

**VIRGINIA MOCA ATTENDANCE
MAYA LIN AND SHAPING MEMORIES/MADE IN VIRGINIA
EXHIBITION CYCLES
NOVEMBER 2021-SEPTEMBER 2022**

Exhibition Cycle	Total Attendees	Hampton Roads Nonresidents	Share of Hampton Roads Nonresidents
Maya Lin: A Study of Water	13,428	5,121	38.1%
Shaping Memories/Made in Virginia	4,622	1,397	30.2%
Total Attendance	18,050	6,518	36.1%

Sources: Virginia MOCA and the Dragas Center for Economic Analysis and Policy. Excludes 208 attendees who did not report address information.

TABLE 6

**VIRGINIA MOCA EXHIBITIONS DIRECT VISITOR SPENDING
HAMPTON ROADS, 2021
VISITORS TRAVELING TO MOCA**

	Unit	Visitor Spending (In 2021 dollars)
Nonresidents	652	
Average Time in Hampton Roads	3 days	
Daily Spending	\$32.88 ¹⁹	
Total Daily Spending		\$64,294
Average Nights in Hampton Roads	2 nights	
Average Daily Room Rate (ADR)	\$132.17/night ²⁰	
Total Lodging Sales		\$86,148
Total Direct Visitor Spending		\$150,442

Source: Dragas Center for Economic Analysis and Policy and Stevens, 2018. Daily spending and the ADR of hotel rooms in Virginia Beach converted to 2021 dollars. To estimate total lodging sales, we assume an average visitor party of two individuals who share one hotel room for two nights.

¹⁹ Arts & Economic Prosperity 5: The Economic Impact of Nonprofit Arts and Cultural Organizations and Their Audiences in the City of Virginia Beach.

²⁰ STR Hotel Trend Reports November 2021 to July 2022. Estimated average ADR over the study period for the Virginia Beach submarket.

We can also estimate the direct visitor spending attributable to Virginia MOCA for the remaining 90% of nonresidents who attended the art exhibition during their visit to Hampton Roads (Table 7). We assume the visit to Virginia MOCA accounted for 10% of their total time in the region, representing 10% of total direct visitor spending. We estimate approximately \$135,398 in direct visitor spending by nonresident attendees who made visiting Virginia MOCA part of their trip.

Graph 8 shows the economic impact of direct visitor spending attributed to Virginia MOCA. We estimate total direct visitor spending by nonresident visitors to be approximately \$285,840. Accounting for the total economic impact, visitor spending lifted Hampton Roads' GDP by \$492,788 over the 11-month study period. These estimates provide evidence of Virginia MOCA's impact and how, by attracting visitors and increasing visitor spending, it has an economic impact larger than its direct spending.

On an annualized basis (and based on conservative assumptions), visitors to Virginia MOCA lift economic output in Hampton Roads by at least \$537,000 annually. Unless there is another significant economic shock akin to the onset of the COVID-19 pandemic, we are confident that average attendance at Virginia MOCA's exhibitions will rise relative to the pre-pandemic average. As Virginia MOCA attracts more visitors to the city of Virginia Beach and Hampton Roads, the impact of visitor spending will continue to increase in the near-term. We also note that as more data on attendance at the Boardwalk Art Show becomes available, the estimates of visitor economic impact will likely rise significantly in the future.

TABLE 7
VIRGINIA MOCA EXHIBITIONS DIRECT VISITOR SPENDING IN HAMPTON ROADS IN 2021 DOLLARS VISITORS WHO MADE VISITING VIRGINIA MOCA PART OF THEIR STAY

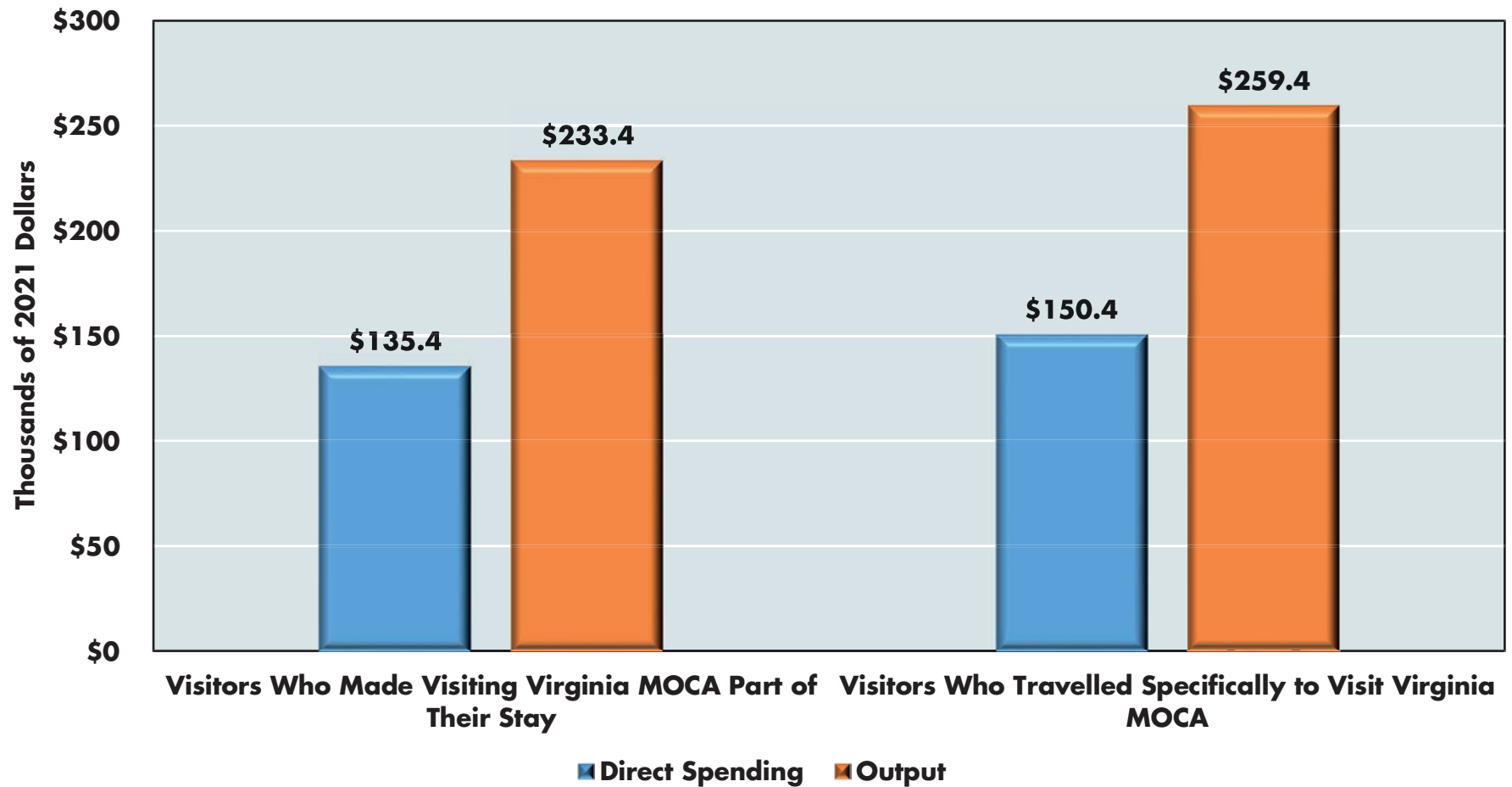
	Unit	Visitor Spending (In 2021 dollars)
Nonresidents	5,866	
Average Time in Hampton Roads	3 days	
Daily Spending	\$32.88 ²¹	
Total Daily Spending		\$578,642
Average Nights in Hampton Roads	2 nights	
Average Daily Room Rate (ADR)	\$132.17/night ²²	
Total Lodging Sales		\$775,336
Total Direct Visitor Spending (10% of Total)		\$135,398

Source: Dragas Center for Economic Analysis and Policy and Stevens, 2018. Daily spending and the ADR of hotel rooms in Virginia Beach converted to 2021 dollars. To estimate total lodging sales, we assume an average visitor party of two individuals who share one hotel room for two nights. We assume 10% of total direct visitor spending of nonresidents is attributed to expenditures made while visiting Virginia MOCA's Exhibition.

²¹ Arts & Economic Prosperity 5: The Economic Impact of Nonprofit Arts and Cultural Organizations and Their Audiences in the City of Virginia Beach.

²² STR Hotel Trend Reports November 2021 to July 2022. Estimated average ADR over the study period for the Virginia Beach submarket.

GRAPH 8
VIRGINIA MOCA VISITOR SPENDING
REAL DIRECT SPENDING AND ECONOMIC OUTPUT IN 2021 DOLLARS
NOVEMBER 2021-SEPTEMBER 2022



Source: Dragas Center for Economic Analysis and Policy. These estimates are based on our assumptions on the composition of visitors to Virginia MOCA and draw upon the literature.

Final Thoughts

Museums provide valuable services to the residents of Hampton Roads and are an integral part of our societal fabric. As Winston Churchill once said, “The farther backward you can look, the farther forward you are likely to see.” A vibrant museum sector is not only good for local communities, but it also provides a distinct economic benefit, drawing tourists from outside the region. The challenge, much like that facing the Hampton Roads economy, is how to grow the museum community to lessen its dependence on public resources. Reaching out to underserved communities, improving education and outreach, and making sound investments in collections adapted to the demographics of Hampton Roads are all wise courses of action.

Direct spending by Virginia MOCA lifted annual economic output and regional GDP by approximately \$5.2 million and \$3.0 million in 2021 dollars, respectively, from FY 2016 to FY 2021. Using the attendance data from two major recent exhibitions, we estimate that museum visitors contributed at least \$537,000 in economic output and \$322,116 to regional GDP annually. Our conservative estimates suggest that a lower bound for the economic impact of Virginia MOCA is approximately \$5.7 million annually, and its average annual contribution to regional GDP is about \$3.3 million a year. Virginia MOCA “punches above its weight” relative to other museums in the region in attracting internationally renowned exhibitions and for its effective use of public and private funds.

However, our research also suggests that there is work to be done. Virginia MOCA is not as well-known as other museums in the region. Improving visibility, ensuring Virginia MOCA’s contributions to the region are understood by policy makers, cultivating a wider donor base, and continuing to capitalize on the Boardwalk Art Show are wise courses of action. Continuing to gather attendance data and collect digital engagement statistics are key to understanding the composition of those who attend and support exhibitions and what contribution these visitors make to the local economy.

Each year when the Virginia General Assembly meets, the budget the two houses agree upon contains hundreds of effectively earmarked appropriations for organizations around the Commonwealth. These appropriations vary in size from \$25,000 to several million dollars. It is plausible that Virginia MOCA, the Virginia Museum of Fine Arts, and the Chrysler Museum might unite behind a financial earmark request to the General Assembly to support the arts in Virginia. A vital key to this strategy is to find politically powerful legislative sponsors for the earmark request. If worthy agencies such as the United Way of Southwest Virginia, the Carilion Clinic, and the Virginia Early Childhood Foundation can receive earmarks, then so also can Virginia’s arts community.

A broader examination of the Boardwalk Art Show, which will require survey data from vendors and visitors, should also be considered to develop estimates of the economic impact of this annual event. Given that 150 artists and tens of thousands of visitors attend this event (some estimates suggest up to 250,000 visitors), the contributions to the local economy are likely in the millions of dollars. We caution that previous estimates were pre-pandemic and should be carefully examined in the future. Lastly, because volunteers are a critical part of any museum’s operations, Virginia MOCA should capture volunteer hours and include these non-compensated hours in future estimates of economic impact. These efforts will take time but will certainly illuminate the other important impacts of Virginia MOCA on the economy of Virginia Beach, the region, and the Commonwealth of Virginia.



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