

Shock and Awe? COVID-19, Vaccines and the Recovery



SHOCK AND AWE? COVID-19, VACCINES AND THE RECOVERY

I have therefore determined, not only to inoculate all the Troops now here, that have not had it, but shall order Doctor Shippen to inoculate the Recruits as fast as they come into Philadelphia.
– Gen. George Washington, Feb. 5, 1777

Upon taking command of the Continental Army in 1775, Gen. George Washington faced two foes: the British and smallpox. As the Continental Army laid siege to British-held Boston, smallpox ravaged its troops and evidence mounted that the British, who were largely immune due to the endemic nature of the disease in England, were working to infect soldiers and civilians alike. Washington ordered infected soldiers and civilians be held in quarantine, but as the battlefield broadened, smallpox continued to spread. At the Battle of Quebec in December 1775, the Continental Army was so weakened by smallpox that it had to retreat from the field of battle. By February 1777, Washington had seen enough. He wrote to John Hancock, president of the Second Continental Congress, that he was ordering the inoculation of troops under his command.¹ The need was palpable. John Adams estimated in 1777 that for every soldier killed in battle, disease killed 10.

Washington ordered vaccination preparations to begin in secret because the political and social climate was not conducive to a public campaign. In 1776, at the height of the smallpox epidemic, the Continental Congress had passed an ordinance prohibiting Continental Army surgeons from inoculating soldiers. A number of states and localities had also passed laws prohibiting vaccination of soldiers and civilians. As the Washington-ordered inoculations continued in 1777 and into 1778 (almost always in secret, as soldiers required a month of convalescence), smallpox mortality rates in the Continental Army dropped from between 10% and 60% to less than 2%. Dr. Benjamin Rush, surgeon general to the Continental Army and a signer of the Declaration of Independence, observed in 1781: “The small-pox which once proved equally fatal to thousands, has been checked in its career, and in a great degree subdued by the practice of inoculation.”

Jean-Baptiste Alphonse Karr, a 19th-century French critic, journalist and novelist, noted, “The more things change, the more they are the same.”

¹ Smallpox inoculation at the time required a surgeon to lance a smallpox pustule and then insert the infected blade underneath the skin of an uninfected person. This crude form of inoculation typically resulted in a milder form of smallpox; however, some inoculated individuals contracted a more severe form of the disease and died as a result of the inoculation. See: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5463674/>.

COVID-19 vaccinations dramatically reduced infections, hospitalizations and deaths in Hampton Roads, Virginia and the United States in the first six months of 2021. Yet, vaccine hesitancy and resistance continue to challenge public health efforts and the economic recovery. Disinformation, amplified by social media and certain cable news networks, not only undermines efforts to improve public health, but also threatens the core tenets of the American experiment in democracy. Even with these challenges, however, Hampton Roads is poised to grow faster in 2021 than at any time in the previous decade, and conditions are favorable for continued growth in 2022.

Over the last 18 months, our region experienced a historical economic shock that, at its peak, left 1 in 10 workers unemployed, 4 in 10 small businesses reducing hours and many schools shifting to virtual instruction. These challenges sparked difficult conversations about why Hampton Roads failed to keep pace with the Commonwealth and the nation over the previous decade. Would a recovery find Hampton Roads again in envy of its peers?

Now, with an economic recovery before us, will we move beyond meetings to boost economic growth, or will we return to the behaviors of the past? As the pandemic has so aptly shown us, we will rise or fall together.

In this chapter, we examine Hampton Roads' recovery from the COVID-19 pandemic and the prospects for continued growth in 2022. We highlight the rebound in labor markets, the benefits of increasing vaccination rates in the region and the emergence of the COVID-19 delta variant, which has led to rising infections, primarily among the unvaccinated. We explore the impacts of COVID-19 on the region's residents and discuss whether the plans for recovery are sufficient. Lastly, we consider how changes in the national security environment may pose the next challenge for growth in Hampton Roads.

The Pandemic, Variants And Vaccines

In October 2020, Hampton Roads and Virginia appeared to have weathered the summer surge in COVID-19 infections, hospitalizations and deaths. Within two months, however, the region, Commonwealth and nation would enter a dark winter, with deaths surging nationally to an average of 3,000 a day. In Hampton Roads, the seven-day rolling average of residents testing positive for COVID-19 peaked at 1,437 on Jan. 20, 2021, more than three times that of the previous peak observed in July 2020 (Graph 1).

Yet, even as infections surged in the fall of 2020, clinical trials of the Pfizer/BioNTech and Moderna COVID-19 vaccines provided hope. With emergency use authorization from the U.S. Food and Drug Administration, vaccinations started in late December 2020, although demand far outstripped initial supply. An aggressive pivot toward greater production and distribution of these vaccines (and eventually the Johnson & Johnson vaccine) in early 2021 marked an inflection point in the course of the pandemic. By late spring, Americans 12 and older could go to pharmacies, doctors' offices, vaccination clinics and even public schools to receive a free COVID-19 shot without significant delay.

In late summer, booster shots were available for the immunocompromised and would soon be available for those 12 and older.

In Hampton Roads, the seven-day rolling average of positive COVID-19 tests fell from 1,437 on Jan. 20, 2021, to 65 on June 1, 2021, a decline of 95%. By the end of June, the seven-day average had fallen further to 36. However, the good news would not last as the COVID-19 delta variant gained traction in the region, Commonwealth and nation. By the end of July, the seven-day rolling average of cases in Hampton Roads had risen to 226.

A continuing (and unfortunate) theme of the COVID-19 pandemic is that Black residents of Hampton Roads have borne a disproportionate burden of the public health crisis. While Black residents comprised 30% of the region's population in 2019, they accounted for 33.8% of positive COVID-19 tests, 50.9% of hospitalizations and 44.6% of COVID-19 deaths (Graph 2). White residents, who made up 55% of the Hampton Roads population in 2019, accounted for approximately 40.8%, 37.6% and 48.4% of the region's positive tests, hospitalizations and deaths, respectively, from COVID-19.

Why have we observed a high toll among Black residents in the region and Commonwealth? First, Black workers are more likely to be employed in occupations that are at higher risk of exposure. Second, as we note below, Black vaccination rates through the first eight months of 2021 lagged those of other races in the region and Virginia. Third, inequities in access and provision of health care can also negatively influence the course of the disease in Black residents.²

There was, however, a significant difference from the previous wave that peaked in January 2021: the availability of safe and effective vaccines. While COVID-19 vaccines are fiercely debated on social media and have become conflated in the minds of some with political identity, data provide a stark picture of the impact of the virus on the vaccinated and unvaccinated populations.

Data from the Virginia Department of Health illustrate these stark differences. Between Jan. 17 and Aug. 13, 2021,

² See our discussion of vaccinations and employment by race in this chapter. For a national perspective, see <https://www.kff.org/coronavirus-covid-19/issue-brief/latest-data-on-covid-19-vaccinations-race-ethnicity>.

fully vaccinated individuals accounted for 0.09%, 0.005% and 0.001% of reported cases, hospitalizations and deaths in the Commonwealth. In July, the rates of infection and hospitalization from COVID-19 in Virginia were 35 times lower among the fully vaccinated. Rates of hospitalization were 20 times lower among the fully vaccinated when compared to the not fully vaccinated.

While vaccinations can reduce future inequities from COVID-19, there have been troubling lags in vaccination rates across Hampton Roads. Graph 3 displays the percentage of the population in Virginia and selected Hampton Roads cities and counties who were fully vaccinated as of March 1, June 1 and Aug. 1, 2021. Of the 16 cities and counties in the Virginia portion of Hampton Roads, four (Mathews County, Poquoson, James City County and York County) had vaccination rates that were higher than the Commonwealth average.

Graph 4 illustrates the share of the population by race in Hampton Roads and Virginia that were fully vaccinated by Aug. 6, 2021. Asian residents were more likely to be vaccinated than their counterparts in the region but lagged the Commonwealth average. White residents of Hampton Roads were almost as likely to be fully vaccinated as the average for whites across the Commonwealth, while Black residents of the region were approximately 5 percentage points behind the state's average. Hispanic residents of the region were far less likely to be fully vaccinated relative to the share of the Hispanic population in Virginia.

In the early phases of the vaccination campaign, a likely explanation for the disparity in vaccination rates had to do with differences in median household income as well as personal and professional networks. However, given that the COVID-19 vaccines are free, the lower rates of vaccinations in Hampton Roads are a matter of concern. If vaccination rates continue to lag among residents, they remain vulnerable to the scourge of COVID-19.

Given the proven benefits of the vaccines to individual and public health, working to educate residents and reduce vaccine hesitancy and resistance is key to sustaining a regional recovery. Unvaccinated people represent an opportunity for the virus to mutate and undermine vaccine efficacy, especially with the rise of more infectious variants of the virus. Those who remain unvaccinated by choice also present a challenge to employers, since they pose an undue risk to co-workers and customers who cannot be vaccinated. One need only recall the impact of COVID-19 on our tourism industry to understand how a sustained outbreak among the unvaccinated could undermine the prospects for a sustained recovery in Hampton Roads.

The good news is that as the number of vaccinations has increased, public opinion polls have seen robust declines in vaccine hesitancy. However, there is a fraction of the population that has hardened its hostility. Disinformation persists through social media and certain cable news networks, which have served as platforms for anti-vaccination rhetoric. Breaching these walls of mistrust requires concerted and sustained effort from trusted agents in the community. Unfortunately, we have ample evidence of Jonathan Swift's observation: "Falsehood flies, and truth comes limping after it."

GRAPH 1

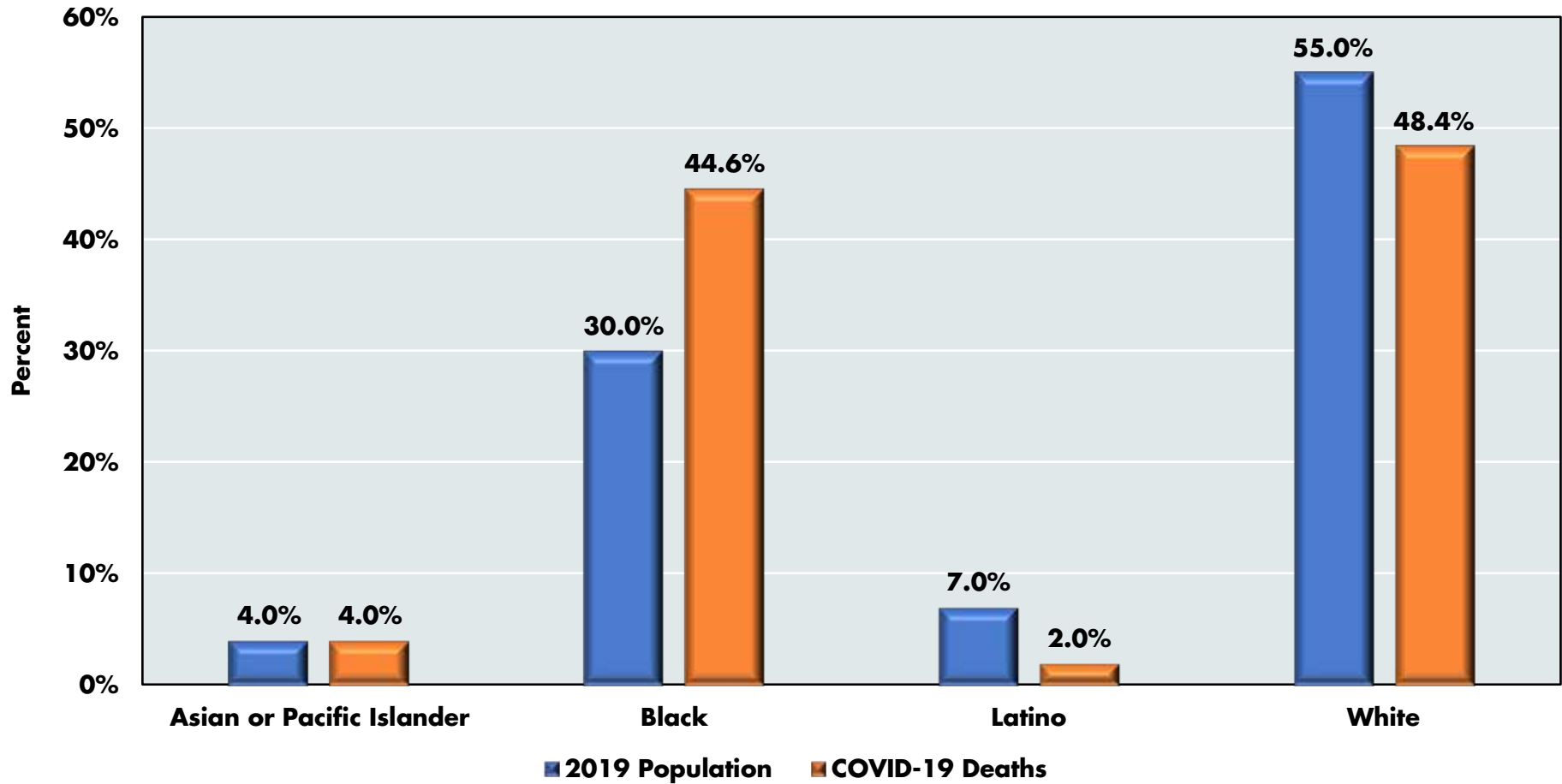
SEVEN-DAY ROLLING AVERAGE OF POSITIVE TESTS FOR COVID-19: HAMPTON ROADS
APRIL 1, 2020-JULY 31, 2021



Sources: Virginia Department of Health and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Virginia portion of the Virginia Beach-Norfolk-Newport News MSA.

GRAPH 2

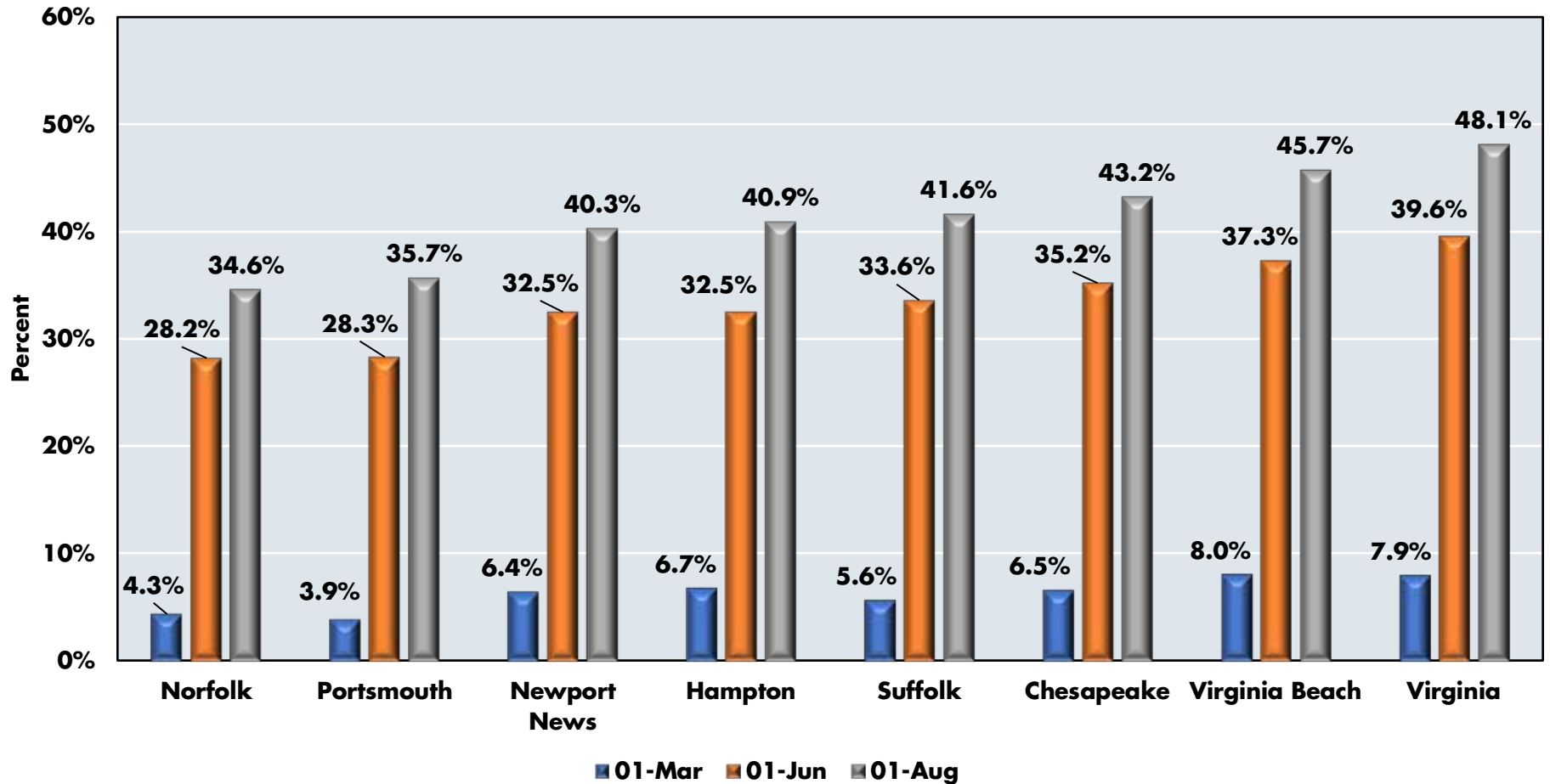
DISTRIBUTION OF POPULATION AND COVID-19 DEATHS: HAMPTON ROADS,*
JUNE 15, 2020-JULY 31, 2021



Sources: Virginia Department of Health and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Population data are from the 2019 American Community Survey 1-year estimates. COVID-19 data, from the Virginia Department of Health, cover the health districts of Chesapeake, Hampton, Norfolk, the Peninsula, Portsmouth, Virginia Beach and Western Tidewater. *Data at the city and county level are not available prior to June 15, 2020.

GRAPH 3

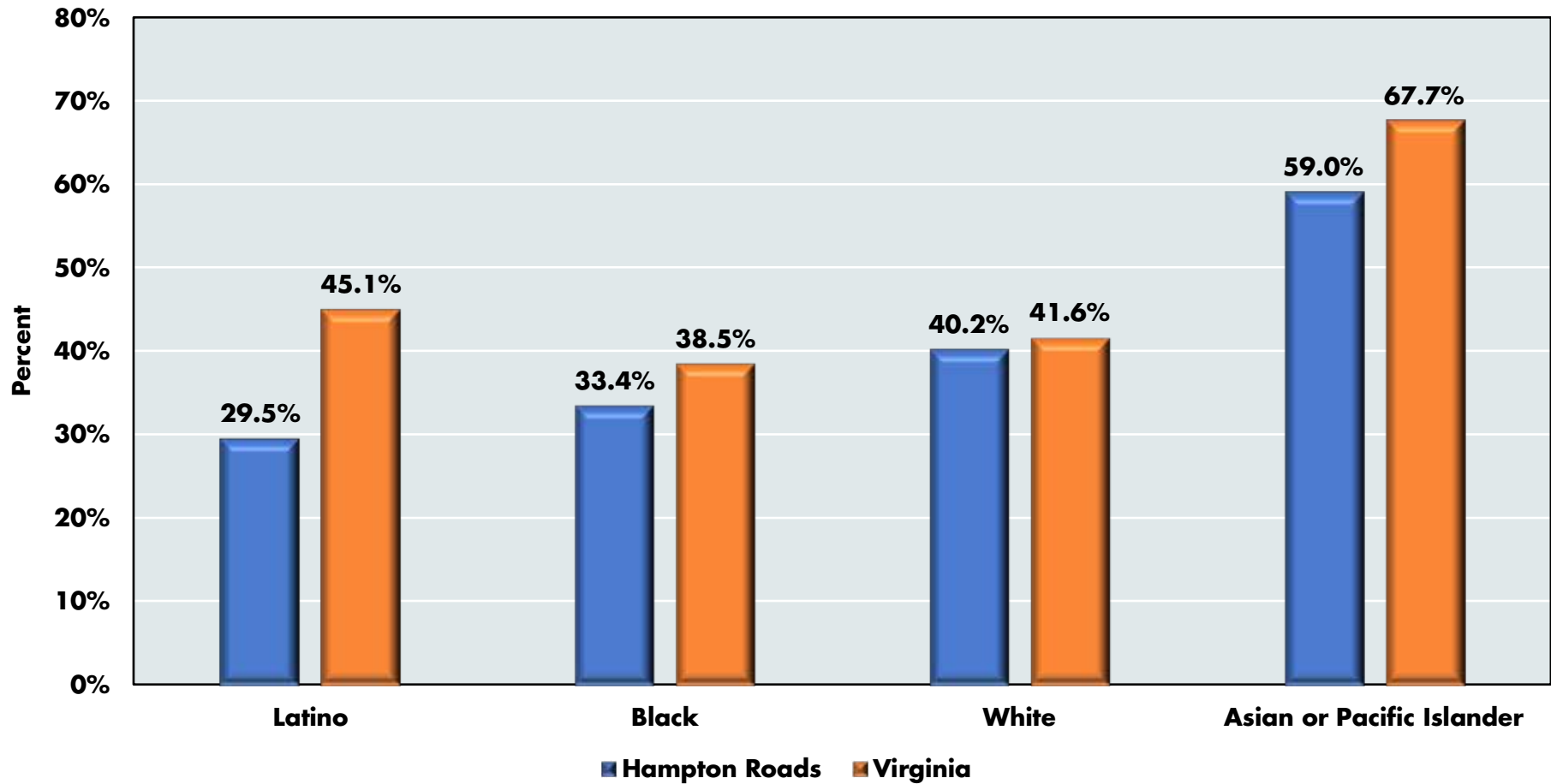
PERCENTAGE OF POPULATION FULLY VACCINATED: VIRGINIA AND SELECTED CITIES IN HAMPTON ROADS, MARCH 1, 2021, JUNE 1, 2021, AND AUG. 1, 2021



Sources: Virginia Department of Health, COVID-19 Vaccine Summary; U.S. Census Bureau 2019 Population Estimates; and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Doses administered by federal agencies within Virginia are not included, since the federal government does not provide information regarding location and demographics. "Fully vaccinated" equates to one dose of the Johnson & Johnson vaccine or two shots of either the Pfizer/BioNTech or Moderna vaccine. The percentage fully vaccinated is estimated using the total population of each geographical area.

GRAPH 4

SHARE OF POPULATION FULLY VACCINATED:
VIRGINIA AND HAMPTON ROADS, AS OF AUG. 6, 2021



Sources: U.S. Census Bureau 2019 Population Estimates, Virginia Department of Health and the Dragas Center for Economic Analysis and Policy, Old Dominion University. The data do not include doses administered by federal agencies or out-of-state residents; 326,154 out of 4,431,177 observations do not include race information and are excluded from the analysis. The percentage fully vaccinated is estimated using the total population of each geographical area.

A Weak Recovery? Labor Force And Employment In Hampton Roads

The labor market in Hampton Roads is typically seasonal; that is, the number of people in the labor force looking for work or actively employed peaks in the summer and reaches its lowest point in the winter. In 2019, however, labor markets appeared to be gaining steam by the fall and into the winter of 2020. As illustrated in Graph 5, the civilian labor force and individual employment in Hampton Roads peaked at 874,900 and 852,600 individuals, respectively, in February 2020.

This positive upswing was soon dashed, however, by the emergence of the COVID-19 pandemic, social distancing measures and a rapid decline in domestic and international tourism. By May 2020, the civilian labor force was 5% smaller than in February 2020, while individual employment had declined by approximately 12.2%. The labor force and employment rebounded to some extent during the summer of 2020, but the recovery plateaued in the fall. At the beginning of 2021, the civilian labor force and individual employment in Hampton Roads were 5% and 8.5% lower, respectively, than in February 2020. Even though economic expectations improved in the spring of 2021, the civilian labor force continued to contract – a troubling development.

The headline unemployment rate is equal to the ratio of the number of unemployed people in the labor force to the overall labor force. The number of unemployed in Hampton Roads declined from a high of 109,046 in April 2020 to 40,191 in June 2021. Over the same period, the civilian labor force declined from 853,762 to 824,884. After peaking at 12.8% in April 2020, the unemployment rate in Hampton Roads steadily declined, falling to 4.9% in June 2021 (Graph 6).

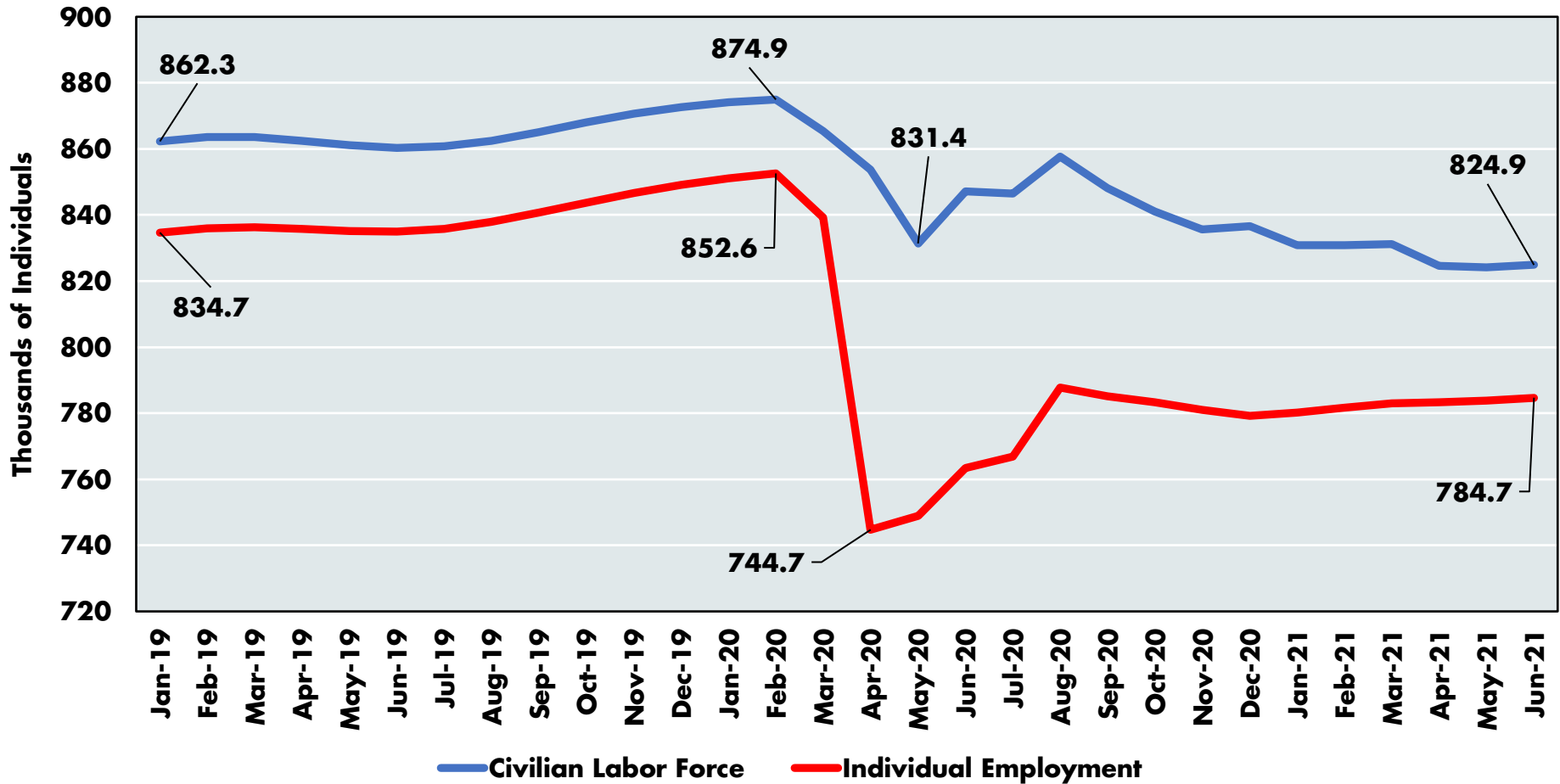
The decline in the unemployment rate in Hampton Roads in 2021 is the result of two factors: an increase in individual employment (good) and a decline in the civilian labor force (bad). From January to June 2021, unemployment has fallen by 10,417 individuals but only 4,448 individuals were gainfully employed. The remaining 5,969 left the labor force. A declining labor force is not a sign of a robust regional economic recovery.

If the 50,057 workers who left the labor force since February 2020 had remained in it as unemployed individuals, the region's unemployment rate in June 2021 would have been 10.9%, 2.2 times higher than the reported unemployment rate.



GRAPH 5

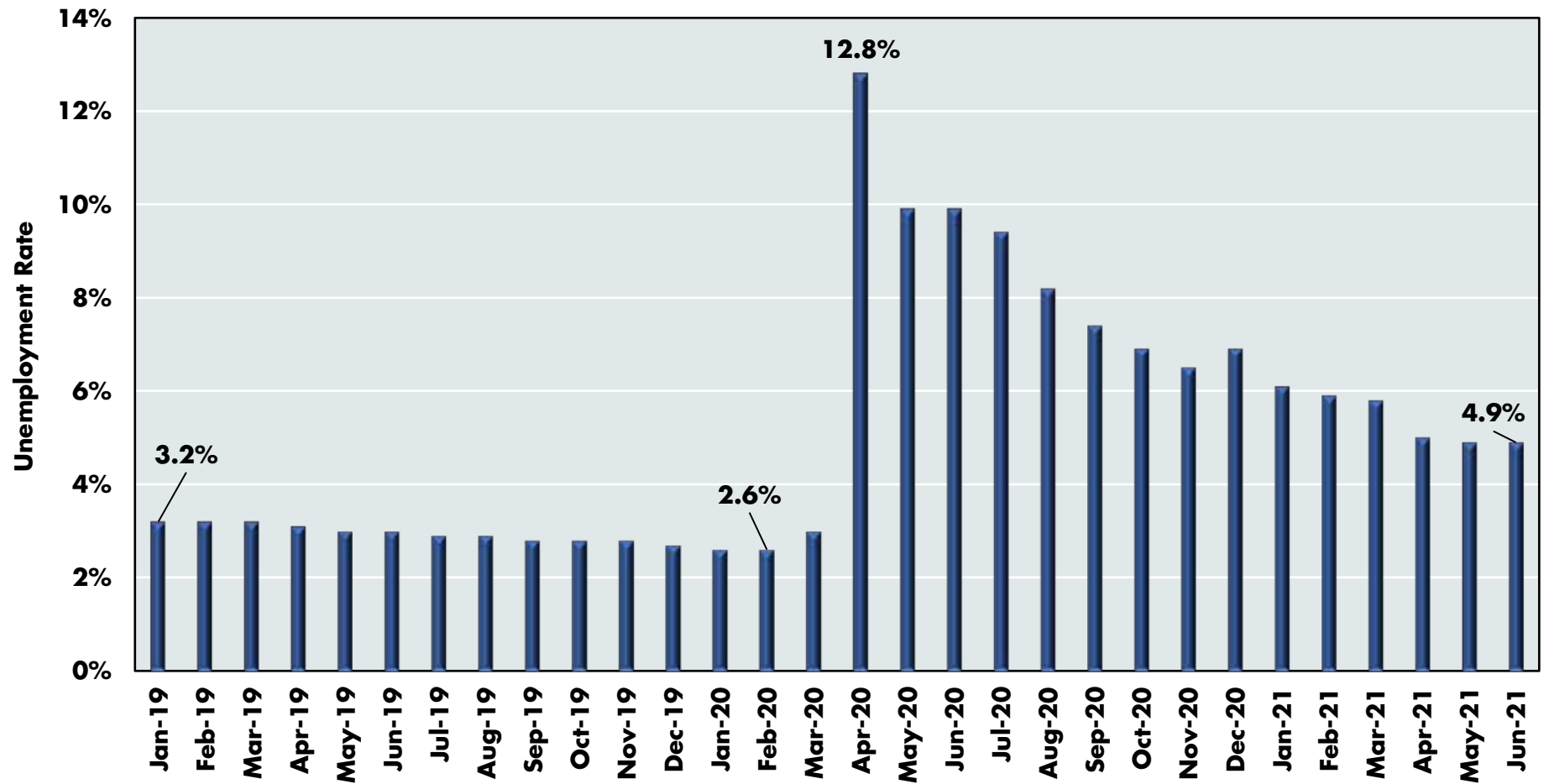
CIVILIAN LABOR FORCE AND INDIVIDUAL EMPLOYMENT:
HAMPTON ROADS, JANUARY 2019-JUNE 2021



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

GRAPH 6

HEADLINE UNEMPLOYMENT RATE (U3):
HAMPTON ROADS, JANUARY 2019-JUNE 2021



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

Did Expanded Unemployment Cause A Labor Shortage?

Employers in some sectors of the region reported difficulties in finding workers to fill available positions in the spring and summer of 2020. The leisure and hospitality sector appeared to be the most challenged by this development. Nationally, as well as in Virginia, online job postings surged past prepandemic levels. As more people in the labor force were employed, employers faced increasing difficulties to fill open positions. The question was: Where were all the workers?

A confluence of factors likely explains the apparent shortage of workers in lower-wage sectors. First, some workers left the labor force entirely. The absence of these individuals meant that employers were competing for a smaller pool of labor. Second, national evidence suggests that a greater proportion of women left the labor force or transitioned to part-time employment. Remote and hybrid schooling, coupled with constraints on the availability of child care, limited the ability of some to work full time, if at all. Third, some workers were (and remain) concerned about contracting the coronavirus.

Finally, expanded unemployment benefits may have influenced some workers on the margin. Recent findings from the National Bureau of Economic Research suggest that expanded unemployment benefits played a role in reducing job applications; a 10% increase in benefits contributed to a 3.6% decline in applications. For some workers, expanded benefits disincentivized work. Why? During the first eight months of 2021, full unemployment benefits in Virginia amounted to \$678 a week (\$378 regular plus \$300 expanded) or \$16.95 an hour.

In the summer of 2021, some states opted out of expanded unemployment benefits entirely, eliminating any financial incentive to remain on unemployment. Other states, including Virginia, reimposed job search stipulations, requiring individuals receiving unemployment to apply for two

or more jobs a week. As one might have expected, states that discontinued expanded unemployment saw declines in unemployment insurance claims. Yet, anecdotal complaints from employers in these states continued regarding difficulties in attracting and retaining employees in low-wage positions. Perhaps the only certainty is that this question will generate a large body of academic research in the coming decade.

As the unemployment rolls continue to shrink, our focus will need to shift to bringing back workers who have left the labor force entirely. Fully opening public schools, increasing child care availability and convincing the reluctant among us to get vaccinated will be necessary for this to occur. The recovery may be on the way, but it is not complete.



Unemployment Claims In Hampton Roads

When discussing unemployment claims, it is important to make the distinction between initial and continued claims. Initial claims represent the number of people who have filed a request for unemployment benefits after separation from an employer. Continued claims, or what is known as insured unemployment, reflect those who have already filed their initial claim, had the claim accepted by the government and continue to file claims to receive benefits for the current week of unemployment. In other words, continued claims represent the number of insured unemployed people, while initial claims reflect the number of initial requests for unemployment benefits in a given week.

In the spring of 2020, Congress passed, and President Trump signed into law, the Pandemic Unemployment Assistance (PUA) and Pandemic Emergency Unemployment Compensation (PEUC) programs. The PUA program provided up to 79 weeks of unemployment benefits for the self-employed, freelancers and independent contractors who would not typically qualify for regular state unemployment benefits. The PEUC program provided an additional 13 weeks of unemployment benefits for those who exhausted their state benefits. A number of states ended participation in these programs in the summer of 2021 and authorization for these programs lapsed in September 2021. Data for PUA and PEUC filings were only available at the state and federal levels.

In 2007, before the full impact of the Great Recession was felt in Hampton Roads, an average of 2,733 initial unemployment claims were filed monthly (Graph 7). Even though the recession was officially over in 2009, average monthly initial unemployment claims continued to rise in the region, reaching 8,257 in 2010. In retrospect, while the Great Recession was significant, its economic shock paled in comparison to the COVID-19 pandemic. **Average monthly claims were 3.4 times higher in 2020 than in 2010 and 13.2 times higher than in 2019.**

In August 2007, 2,872 initial unemployment claims were filed in Hampton Roads. Three years later, monthly initial unemployment claims peaked at 10,600. In other words, it took 36 months for the level of initial claims to rise from its prerecessionary low to its recessionary peak. In February 2020, 1,961 monthly initial unemployment claims were filed in Hampton Roads. Two months later, monthly initial claims rocketed to 76,723, an increase of 3,812% (Graph 8). The adjectives “unprecedented” and “historic” seem inadequate to describe the magnitude of the shock this had on labor markets in Hampton Roads.

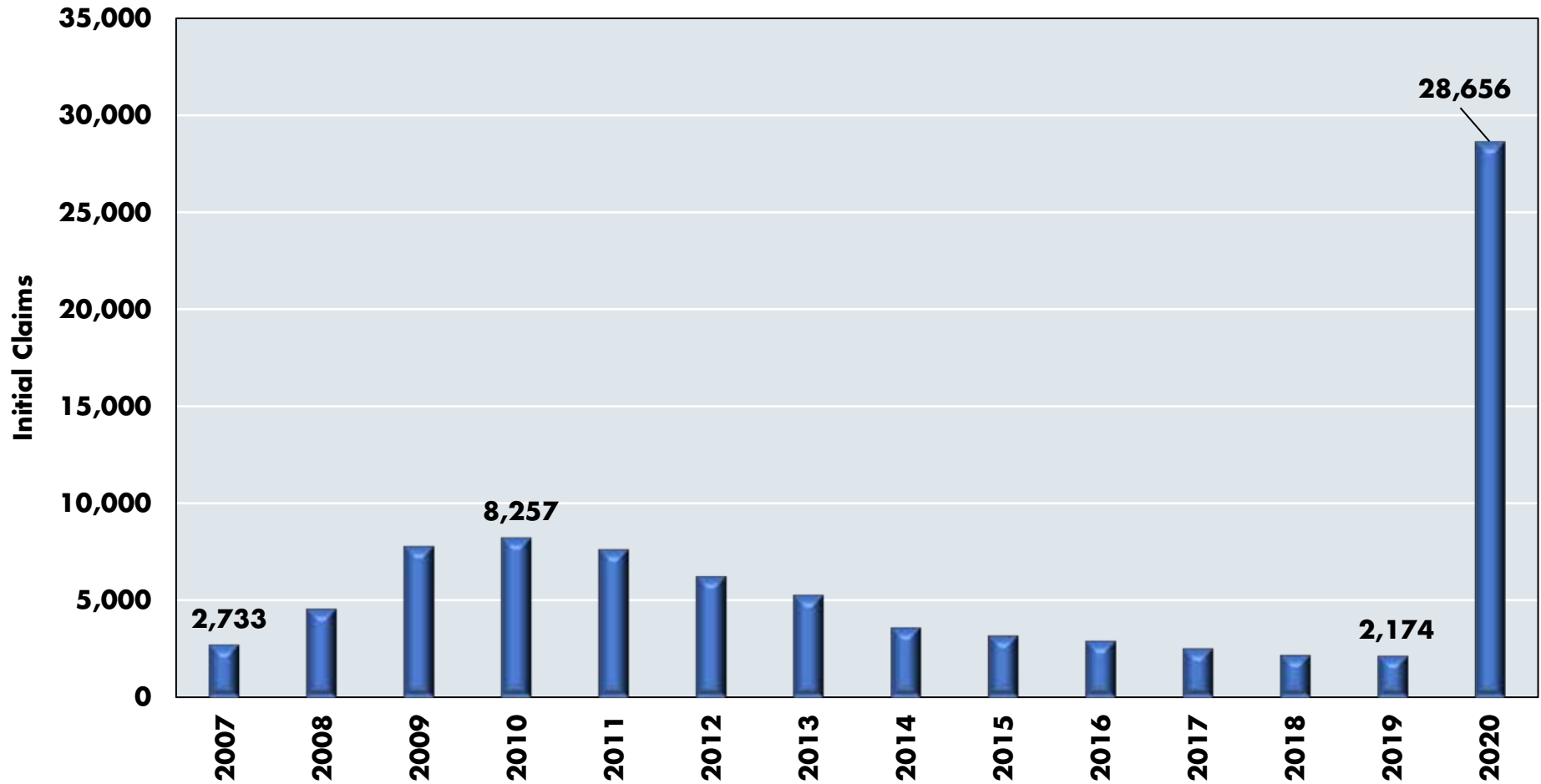
If there is a modicum of good news, it is that initial claims and continued claims have generally trended downward in 2021. While one can think of initial claims as representing “turbulence” in the regional economy, continued claims represent “slack.” An individual receiving continued unemployed benefits remains in the labor force and, as of the last week of May in Virginia, must actively search for employment each week.³

Graph 9 illustrates the change in weekly continued claims for unemployment benefits in Hampton Roads from March 14, 2020, to July 31, 2021. Continued claims increased from 4,315 for the week ending March 14, 2020, to 88,436 for the week ending May 16, 2020. At the peak, more than 1 in 10 workers in the region were receiving unemployment benefits. As Hampton Roads reopened in the summer of 2020, continued claims fell sharply, dropping to 13,936 at the end of December 2020. While continued claims remained above the prepandemic level during the first half of 2021, there has been measured progress in reducing the number of workers in the region receiving unemployment benefits.

³ In March 2020, Virginia Gov. Ralph Northam temporarily waived the requirement that unemployed individuals must actively search for work. This requirement came back into force on June 1, 2021. Virginians receiving unemployment benefits must apply for two or more jobs a week and report the details to the Virginia Employment Commission.

GRAPH 7

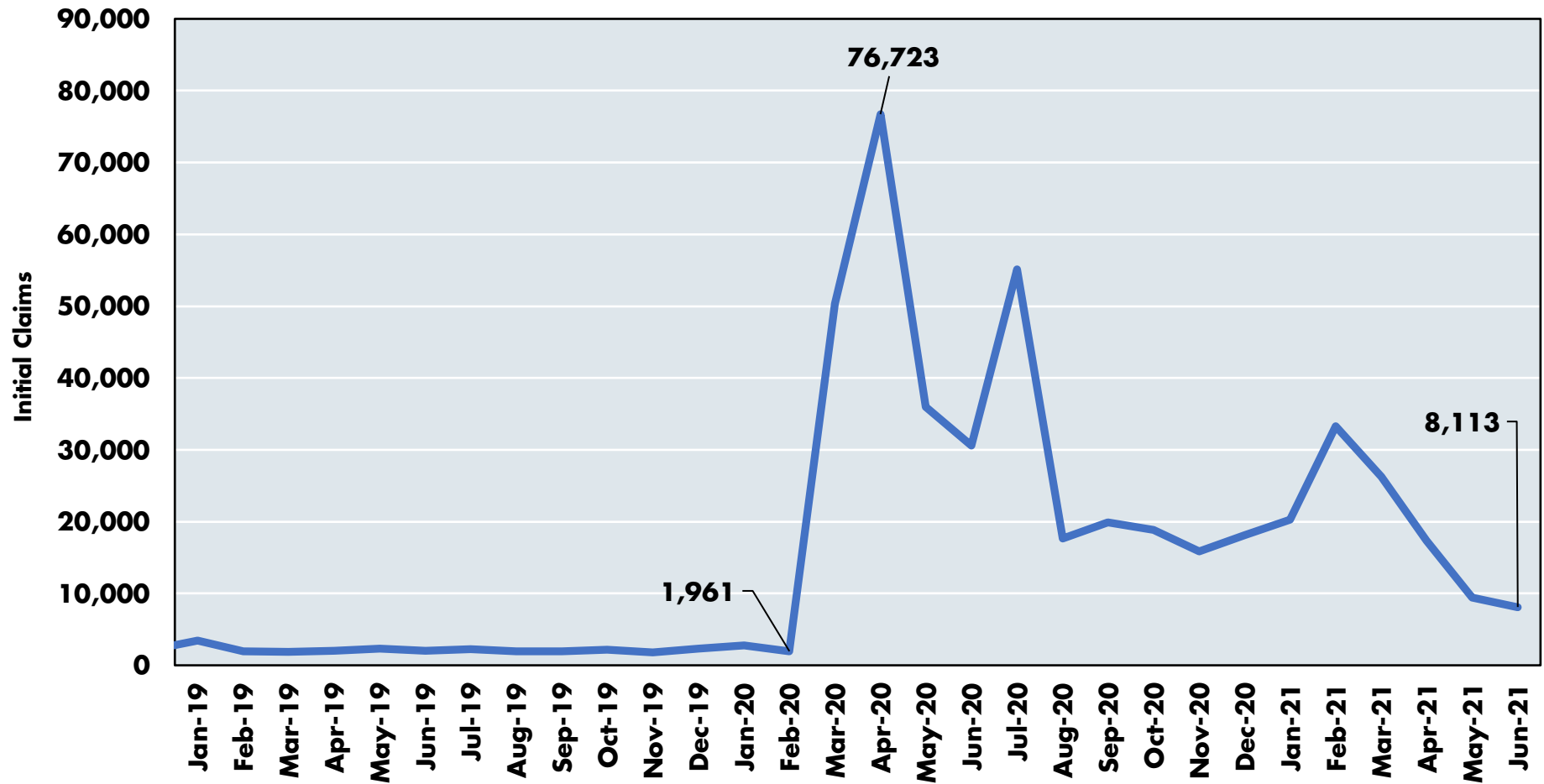
AVERAGE MONTHLY INITIAL UNEMPLOYMENT CLAIMS:
HAMPTON ROADS, 2007-2020



Sources: Virginia Employment Commission and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data are not seasonally adjusted and do not include PUA and PEUC claims.

GRAPH 8

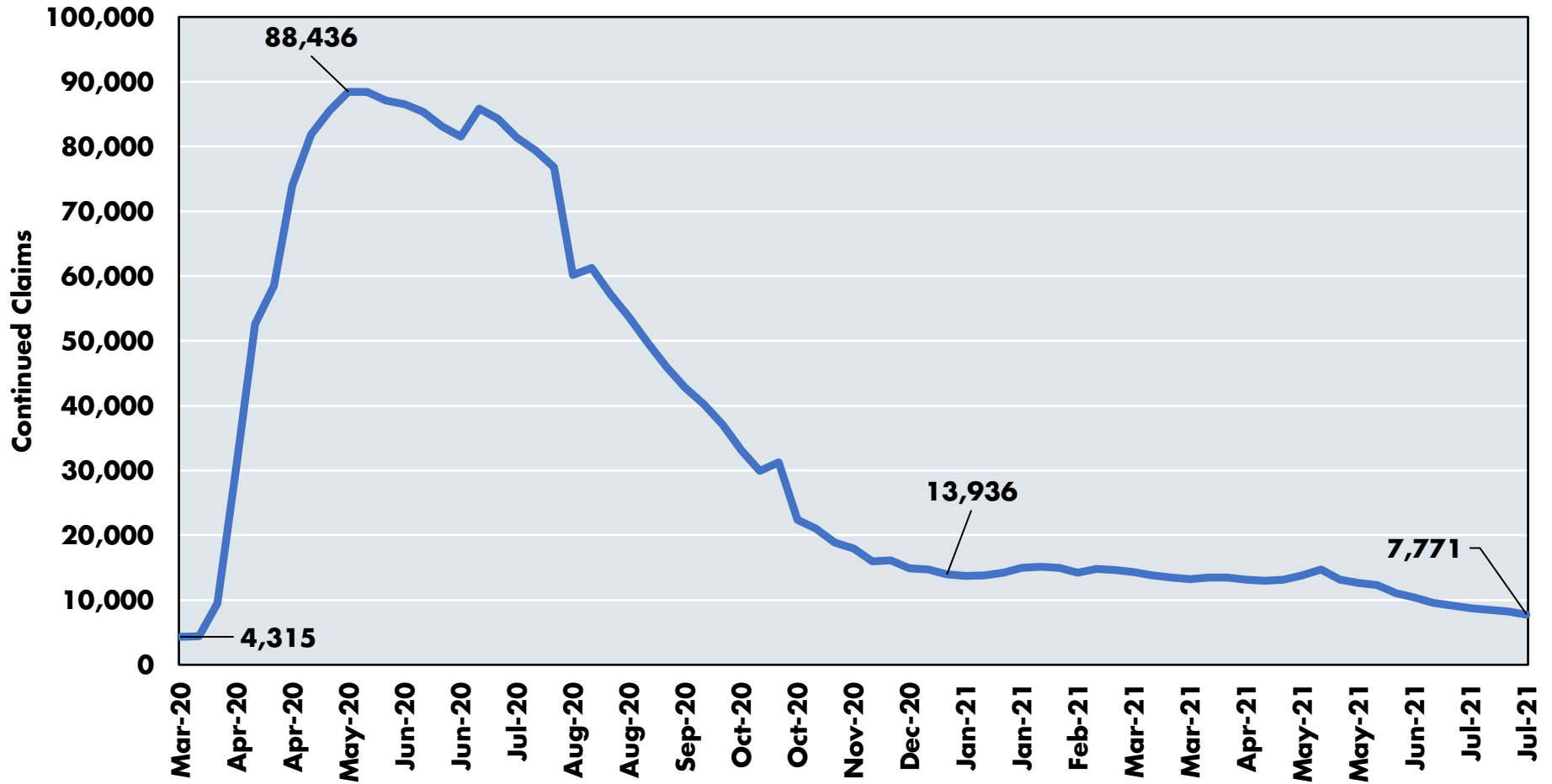
MONTHLY INITIAL UNEMPLOYMENT CLAIMS:
HAMPTON ROADS, JANUARY 2019-JUNE 2021



Sources: Virginia Employment Commission and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data are not seasonally adjusted and do not include PUA and PEUC claims.

GRAPH 9

CONTINUED UNEMPLOYMENT CLAIMS:
HAMPTON ROADS, WEEK ENDING MARCH 14, 2020-JULY 31, 2021



Sources: Virginia Employment Commission and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data are not seasonally adjusted and do not include PUA and PEUC claims.

Will The Lost Jobs Come Back?

In January 2020, there were a record 804,500 jobs in Hampton Roads (Graph 10). Prospects for the region were improving: defense spending was projected to increase, travel and tourism looked forward to another banner year and global trade volumes were expected to recover from the effects of ill-conceived trade conflicts with China and Europe. Three months later, however, employers had cut 1 in 10 jobs in the region as the COVID-19 pandemic continued to extract its economic toll.

Thankfully, the region did not remain at the nadir of job losses for long, but the climb back to the prepandemic peak has been arduous and is not yet complete. By October 2020, almost 65,000 of the lost jobs had returned, but progress has been slow in 2021. From January to June 2021, the region shed jobs while job growth accelerated at the national level. The erosion in payrolls finally halted in June 2020, but the region still remains 42,100 jobs below the peak observed in January 2020.

To understand why, we can gain perspective by diving into the numbers. We ask: Which sectors have grown since 2019 and which have shrunk? We compare the number of jobs from each sector in Hampton Roads to the same month in 2019; otherwise, we might bias our conclusions given the significant declines in nonfarm payrolls in the first half of 2020.

While there were 33,000 fewer jobs in June 2021 than in June 2019, 84.4% (28,100) of the job losses were concentrated in three sectors: leisure and hospitality, education and health services, and local government (Graph 11).

Two of the three sectors, leisure and hospitality and education and health services, should ameliorate the losses in 2021. As domestic travel increases, demand for hotels, restaurants, bars and other leisure and hospitality services will rise. We should observe increased hiring in education and health services

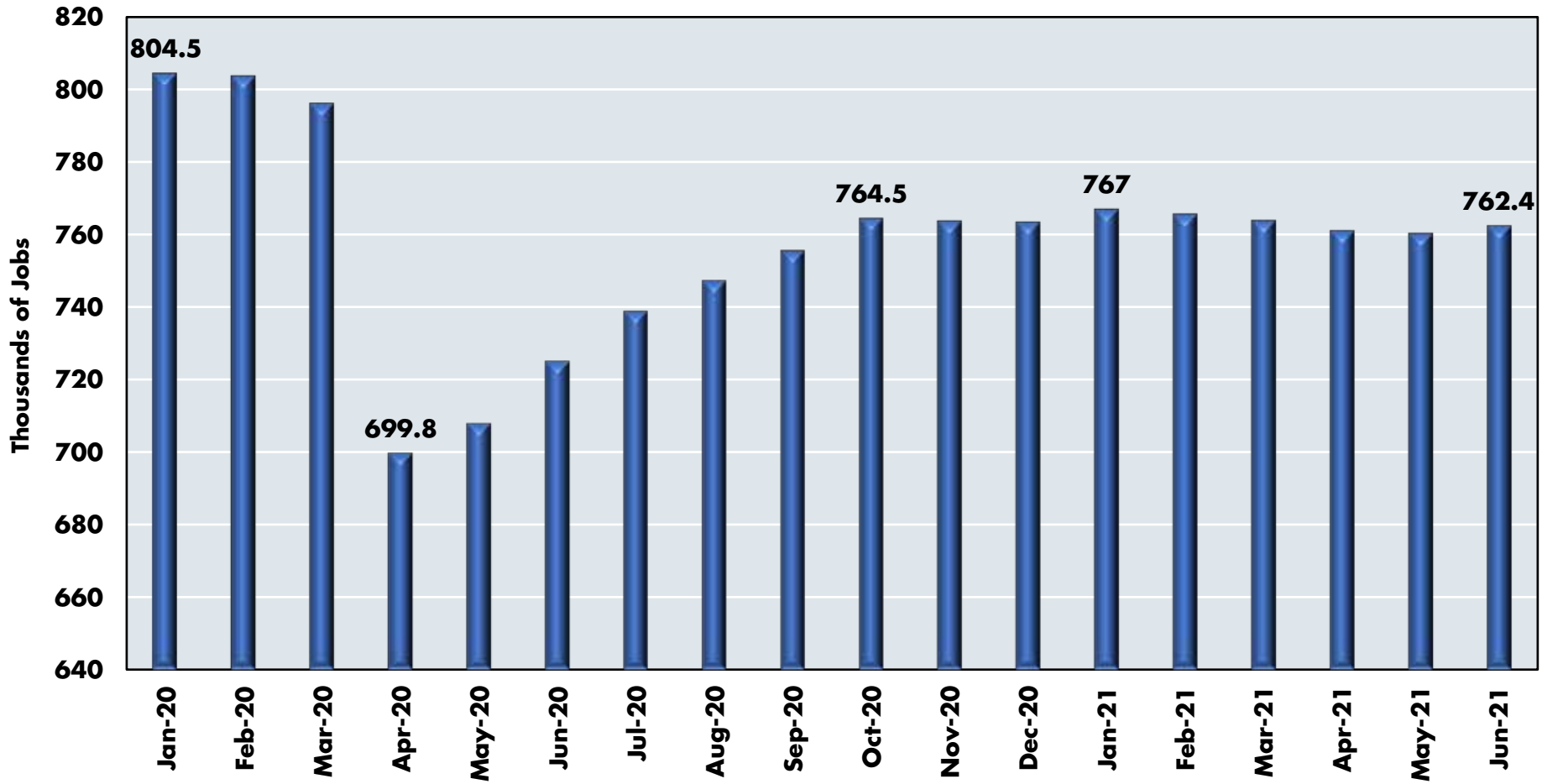
in the second half of 2021 as schools reopen fully and hospitals return to the normal pattern of elective surgeries. While the delta variant may require masking in public schools and hospitals, limiting outbreaks is key to a sustained economic recovery. Local government payrolls may lag other sectors due to the nature of the public budget cycle. Cities and counties typically hold budget meetings in winter and spring and start the new budget year on July 1. There is a lag between improving economic conditions, tax revenues and government hiring.

The open question is whether Hampton Roads will better its record from the previous economic expansion. From February 2010, which represents the trough in nonfarm payrolls following the Great Recession, to the end of the expansion in February 2020, the United States increased nonfarm payrolls by 17.6% (Graph 12). Over the same period, nonfarm payrolls in Hampton Roads increased by 9.5%. At the lowest point of the COVID-19 recession, the U.S. had shed almost all the jobs created over the previous economic expansion. For Hampton Roads, the experience was more traumatic. The region not only shed all the jobs gained over the previous decade, but it bottomed out with 5% fewer jobs than at the worst point following the Great Recession.

It seems that Hampton Roads is playing the same, sad song. While job growth accelerated at the national level, the region (again) fell behind. The Hampton Roads economy may pick up speed in the coming months as travel and tourism and defense spending increase, but the question remains: Have we addressed the causes of our relatively tepid growth in the previous economic expansion, or have we grown increasingly reliant and complacent, ignoring the real possibility that the largess of the federal government could one day come to an end?

GRAPH 10

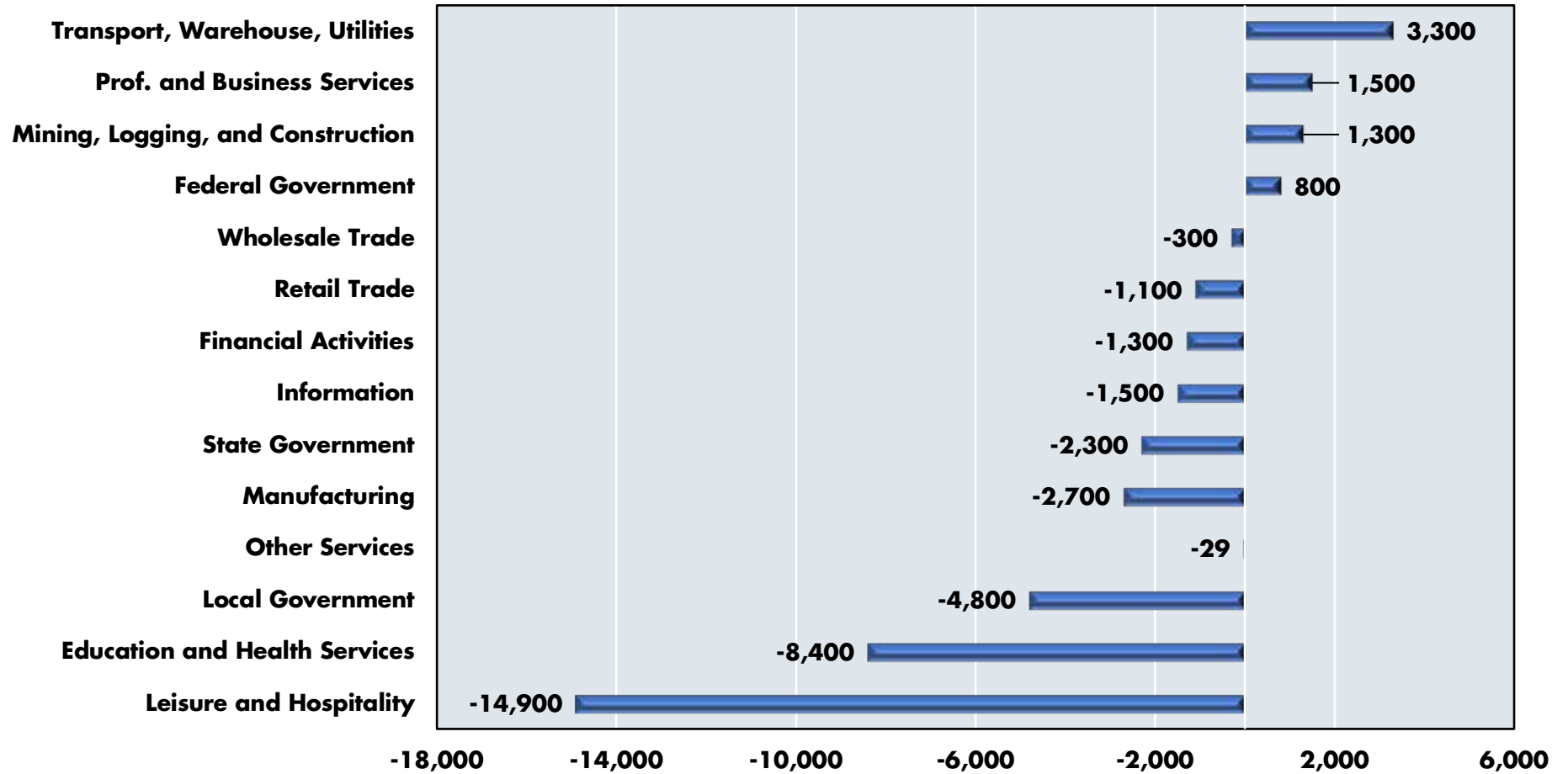
NONFARM PAYROLLS (JOBS) IN HAMPTON ROADS:
JANUARY 2020-JUNE 2021



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

GRAPH 11

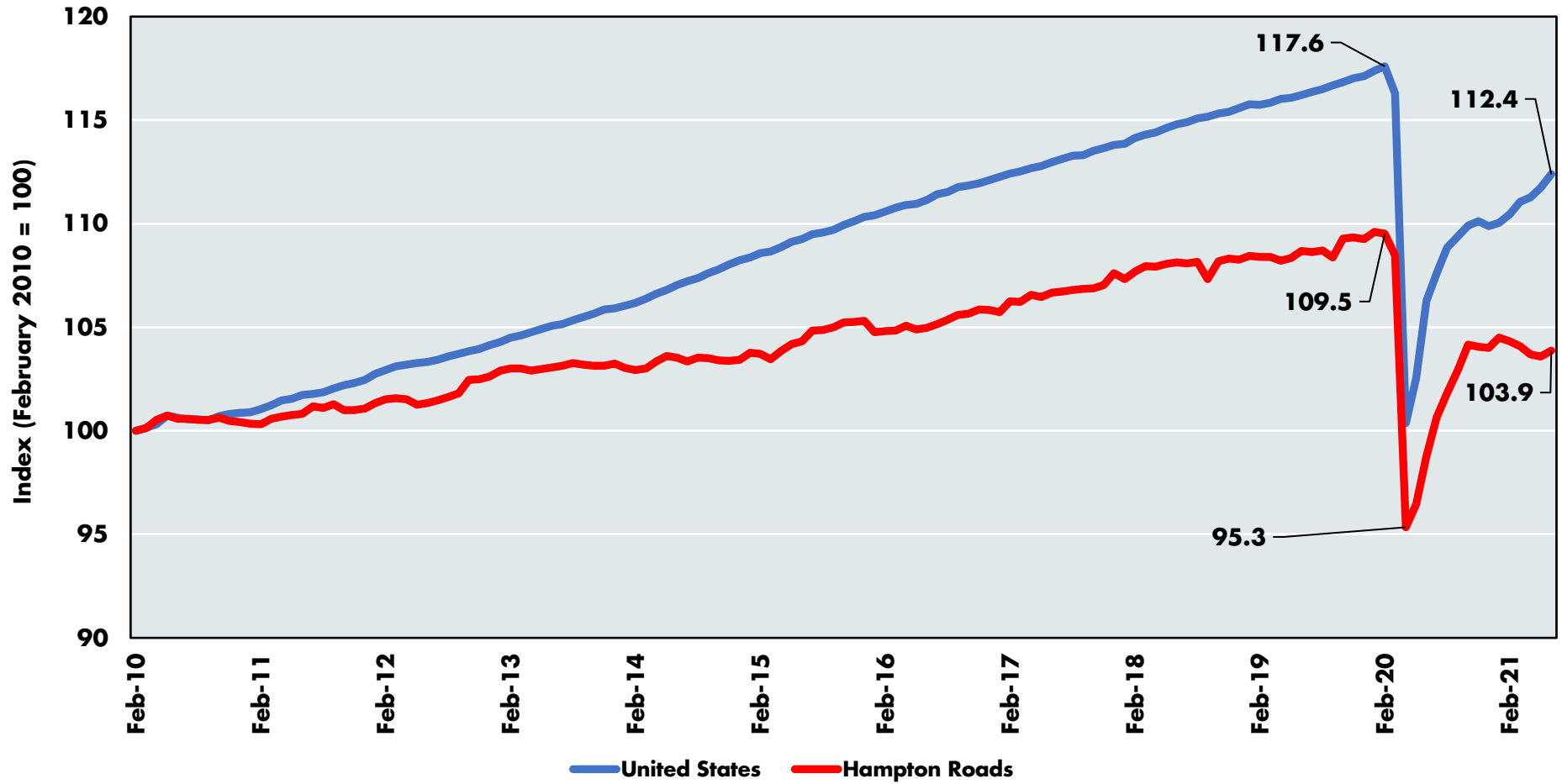
CHANGE IN NONFARM PAYROLLS (JOBS) IN HAMPTON ROADS:
JUNE 2019-JUNE 2021



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

GRAPH 12

CUMULATIVE GROWTH IN NONFARM PAYROLLS (JOBS):
HAMPTON ROADS, FEBRUARY 2010-JUNE 2021



Sources: U.S. Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data are seasonally adjusted. The trough in nonfarm payrolls following the Great Recession was February 2010.

Can Hampton Roads Rely On Defense Spending?

In an age when investors jump into “meme stocks” like GameStop and AMC or invest in cryptocurrencies like Bitcoin and Dogecoin, the idiom that one should not put all their eggs in one basket continues to apply. While we may read about the lucky investor who can now retire thanks to a fortuitous investment (gamble) in GameStop, we cannot forget that there are two sides to every trade. When fortunes turn, those who bet their life savings on an unlikely stock or cleverly named cryptocurrency can suddenly find themselves adrift.

The Department of Defense (DOD) has fueled the Hampton Roads economy for decades. As illustrated in Graph 13, from 2000 to 2008, DOD spending in the region increased by almost 73%. It should be no surprise that economic activity flourished during this period. When the Budget Control Act of 2011 and subsequent modifications moderated the growth in defense spending, however, our economy faltered. In the latter half of the last decade, Congress lifted and finally eliminated the discretionary spending caps that constrained the DOD base budget. Concurrently, direct DOD spending in the region increased, powering economic activity and job growth.

We estimate that direct DOD spending in Hampton Roads will reach almost \$25 billion in 2021. If one includes the ripple effects of this spending, 4 of every 10 dollars spent in Hampton Roads can be traced back to the DOD. It should be no surprise that defense spending is one of the pillars (if not the central pillar) of the regional economy.

President Joe Biden proposed a base DOD budget of \$715 billion for FY 2022, a 1.6% increase from FY 2021 (Graph 14).⁴ In inflation-adjusted terms, this represents a real decline in the DOD base budget, and that assumes this modest nominal increase makes it past opposition from some in the president’s own party in Congress.

⁴ We note that the DOD now presents the base budget as the combination of what used to be the base budget and the overseas contingency operations (OCO) budgets.

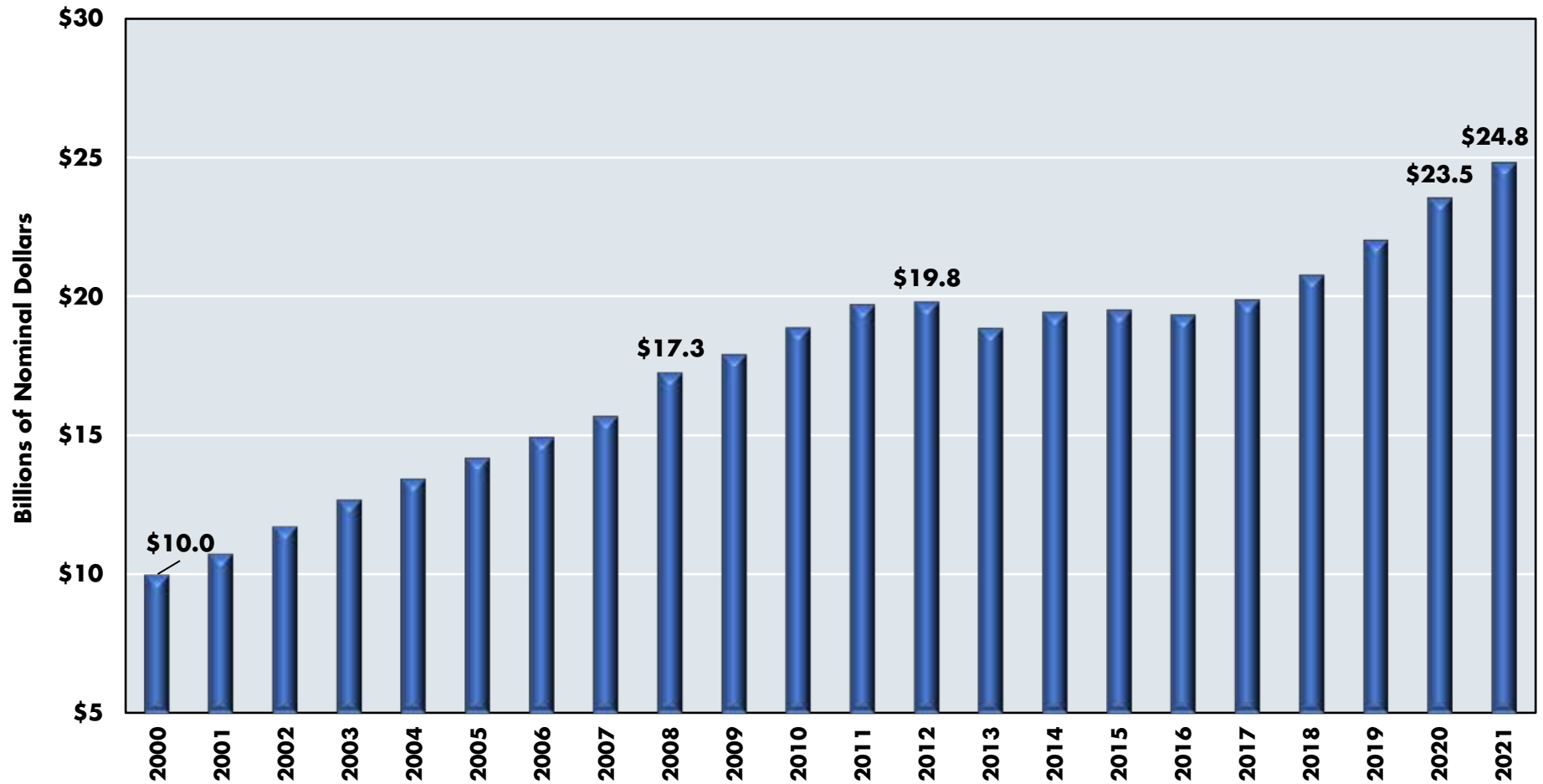
The Office of Management and Budget (OMB) projects the DOD budget will grow at (or more likely below) the rate of inflation for the next five years. After several years of increasing budgets, the base budget is flat in real terms, and it is likely that future direct spending in Hampton Roads will remain near FY 2022 levels as a result.

Even the relatively modest increases in the DOD budget in the coming years could well be constrained by the unbridled spending habits of Congress and the president. The last time the federal government ran a surplus was FY 2000, and that was quickly undone by tax cuts in 2001 and 2003, as well as the fiscal impact of wars in Iraq and Afghanistan (Graph 15). After the fiscal response to the Great Recession, budget discipline (to some extent) and economic growth reduced the deficit to \$442 billion in FY 2015. By FY 2019, the deficit had reached \$984 billion as the Tax Cuts and Jobs Act of 2017 reduced revenue growth, and the discretionary spending caps were abandoned. The fiscal response to the COVID-19 pandemic was relatively swift and large in magnitude and likely staved off an ever-greater economic shock. However, the deficit rocketed to \$3.1 trillion in FY 2020. While the federal deficit may also approach \$3 trillion in FY 2021, the passage of a large infrastructure bill and proposed increases in nondefense discretionary spending would certainly yield higher deficits in the future.

While we cannot say for certain when markets will demand higher rates of return for U.S. treasuries, we do know that the federal debt exceeded 100% of U.S. gross domestic product in FY 2020. Even if we exclude holdings of the Federal Reserve, the federal government owes the public \$17 trillion. By mid-decade, this debt will certainly top \$20 trillion. At some point, the butcher’s bill will come due, and when it does, the federal government will find itself having to raise taxes and cut expenditures. The DOD, as the largest discretionary program in the federal government, is an obvious target in such a scenario.

GRAPH 13

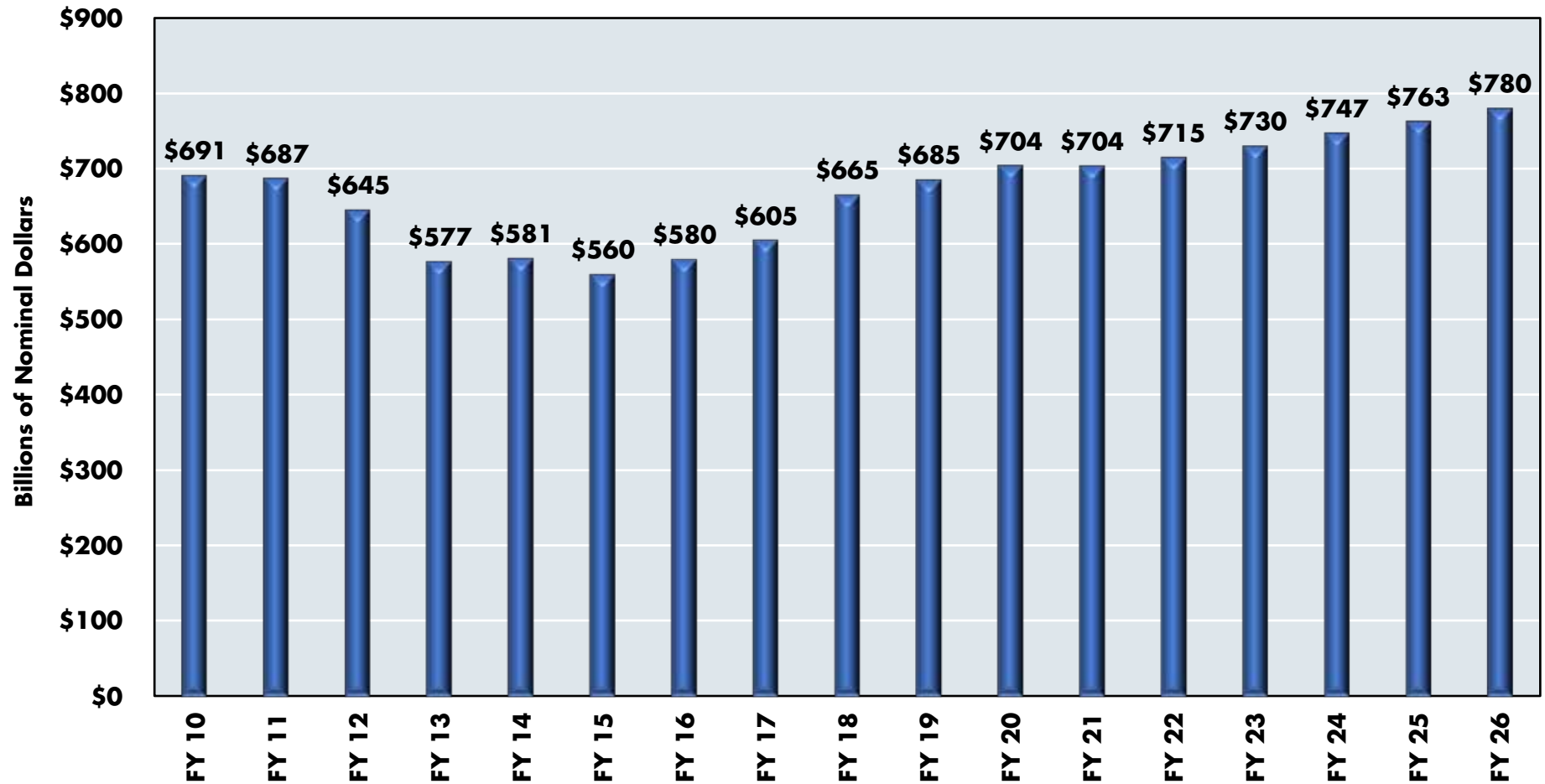
ESTIMATED DIRECT DEPARTMENT OF DEFENSE SPENDING IN HAMPTON ROADS,
2000-2021



Sources: Department of Defense and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Includes federal civilian and military personnel and procurement. Data for 2020 and 2021 are estimates. Last updated on Dec. 19, 2020. Procurement data updated on May 18, 2021.

GRAPH 14

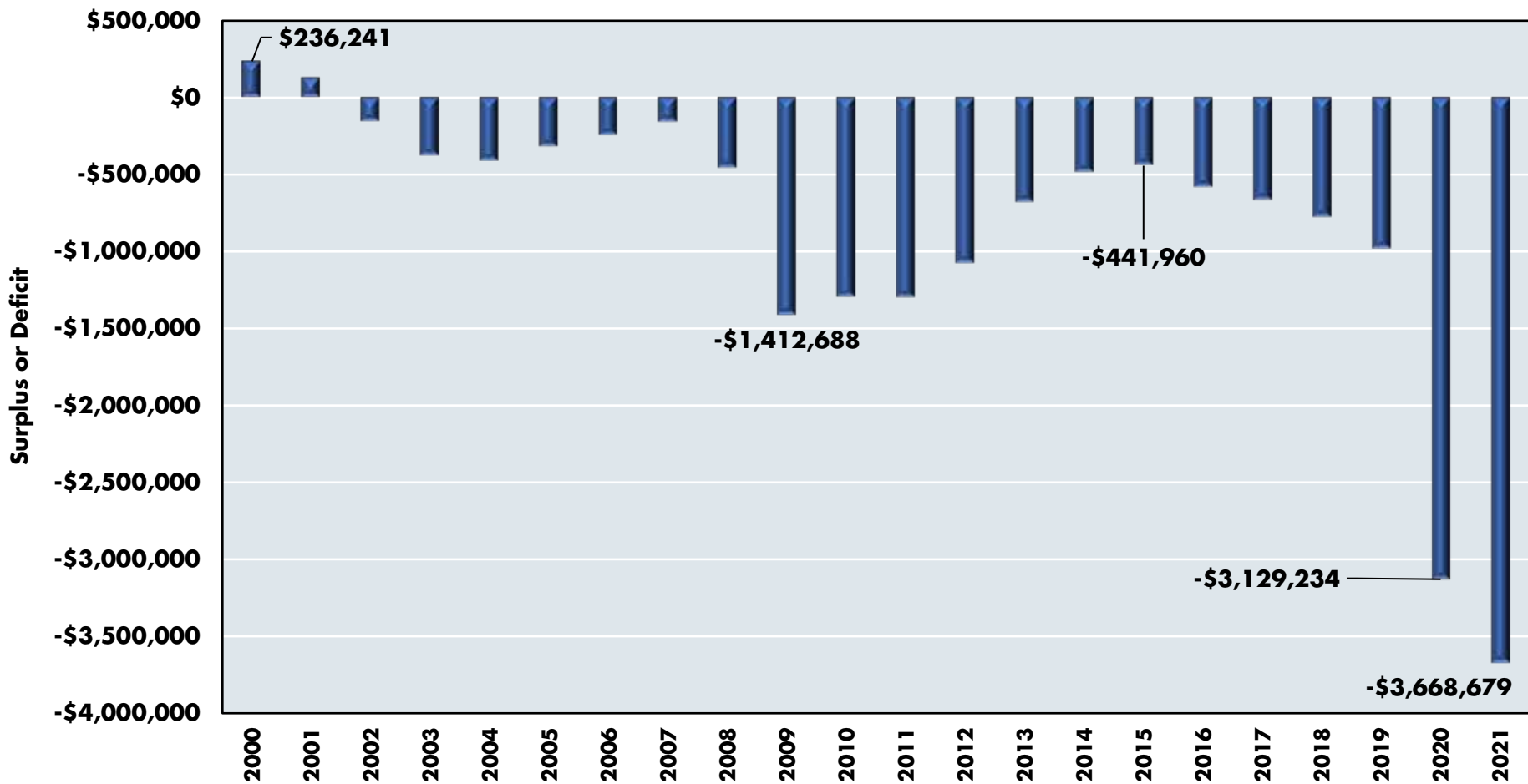
DEPARTMENT OF DEFENSE DISCRETIONARY BUDGET AUTHORITY,
FISCAL YEAR 2010-FISCAL YEAR 2026*



Sources: Dragas Center for Economic Analysis and Policy, Old Dominion University; Office of Management and Budget FY 2022 Presidential Budget (Table 20-1 Policy); and Office of the Secretary of Defense (Comptroller) Department of Defense Fiscal Year 2022 Budget Request (May 2021). 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. Does not include emergency budget authority. *FY 2022 to FY 2026 data are projections.

GRAPH 15

FEDERAL BUDGET SURPLUS OR DEFICIT IN MILLIONS OF NOMINAL DOLLARS,
FISCAL YEAR 2000-FISCAL YEAR 2021



Sources: Dragas Center for Economic Analysis and Policy, Old Dominion University, and Office of Management and Budget FY 2022 Presidential Budget (Table 1.1 – Summary of Receipts, Outlays, and Surpluses or Deficits: 1789 - 2026). Estimated deficit for FY 2021.

Cybersecurity And Budgets: Two Immediate Challenges

Even if the Department of Defense budget remains constant in real terms, there are strategic challenges that, if left unaddressed, will lead to unacceptable levels of risk. The ransomware infection of Colonial Pipeline on May 7, 2021, illustrated the vulnerability of critical infrastructure to cyberattack. The U.S. military is increasingly reliant on networked systems to achieve battlefield superiority – networks that may be vulnerable to intrusion and attack. Even if the military networks are secure, if hackers were to attack civilian firms that supply the DOD, could the U.S. military be rendered impotent and find itself unable to fight protracted battles? Without aggressive investments in offensive and defensive cyber capabilities, the nation and its armed forces will remain vulnerable to cyberattack.

A more immediate challenge that hits closer to home is the rising cost of weapons systems. The Congressional Research Service noted that the estimated procurement costs of the Ford-class carriers remain an area of concern. Relative to the procurement costs of the FY 2008 budget, the estimated procurement costs of nuclear aircraft carriers CVN 78, CVN 79 and CVN 80 have grown 27%, 29.8% and 15.8%, respectively.⁵ Even if the carriers represent a significant leap in capabilities, can the U.S. Navy afford to put these multibillion-dollar assets at risk in the South China Sea or Persian Gulf? Or will it have to surround these carriers with an increasing number of other ships and submarines to lower vulnerability?

The Navy is not the only military service with programs that have run over schedule and budget. For the Air Force, the F-35 program's lifecycle program cost is likely to exceed \$1.7 trillion.⁶ Also, the Air Force's KC-46 tanker is restricted in the operations it can perform, has cost Boeing \$5 billion in unanticipated fixes and was characterized as a \$226 million "lemon" by Rep. Rob Wittman, R-Virginia, in a June 2021 Armed Services Committee hearing.⁷

5 Congressional Research Service, "Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress," June 7, 2021.

6 <https://www.stripes.com/news/us/pentagon-reportedly-estimates-that-the-f-35-budget-plan-is-running-10-billion-short-through-2025-1.644700>.

7 <https://www.defensenews.com/air/2021/06/17/more-cost-overruns-are-coming-down-the-line-for-boeing-as-the-kc-46-program-logs-another-two-technical-deficiencies/>.

Cost and schedule overruns impact current and future capabilities. To pay for modernization efforts, the Marine Corps is planning to eliminate tanks, nine helicopter squadrons, three infantry battalions and three military police battalions, among others. The Army has come to a similar realization that it can either increase end strength or modernize the force, but not both.

In its FY 2022 budget proposal, the Air Force proposed cutting 200 aircraft from the current fleet to redirect resources to research and development.⁸

The Battlefield Is Changing: Can The DOD Respond?

U.S. forces have long enjoyed air superiority on the battlefield. Air superiority not only allows soldiers to maneuver without fear of reprisal, but it also provides them the security to build large bases and operate sophisticated supply chains, as well as the luxury of planning when and where to strike the enemy. The Gulf War of 1991 illustrated how air superiority and the ability to maneuver ground forces in secret can create significant tactical advantage. While Iraqi forces hunkered down in Kuwait anticipating an amphibious invasion, the coalition forces used airpower to help ground forces "swing around" Iraqi defense in Kuwait (see photo on page 28).

The 2nd Armored Cavalry Regiment (2nd ACR) provided the punch to the campaign against Iraqi forces. During an 82-hour span, the 2nd ACR moved 120 miles and engaged elements of five different Iraqi divisions. At the Battle of 73 Easting on Feb. 26, 1991, the 2nd ACR fought alongside the 1st Infantry Division's (1st ID) two leading brigades against elements of the Iraqi 12th Armored Division and the Tawakalna Division of the Iraqi Republican Guard. Even though the U.S. forces were outnumbered, the 2nd ACR and 1st ID destroyed 160 tanks, 180 personnel carriers, 12 artillery pieces and more than 80 wheeled vehicles, effectively wiping out several Iraqi brigades.

8 <https://www.msn.com/en-us/news/us/the-commandant-of-the-marine-corps-is-charging-into-the-future-but-some-arent-ready-for-change/ar-AAmpBsS>.



M-1A1 ABRAMS FROM THE 3RD ARMORED DIVISION: OPERATION DESERT STORM, 1991. U.S. NATIONAL ARCHIVES

The Battle of 73 Easting may well have been the last time that U.S. forces fight a major tank-on-tank battle. The Gulf War demonstrated the foolishness of engaging the U.S. military in force-on-force combat. While the U.S. continued to wield advanced weaponry on the battlefields of Iraq and Afghanistan into this century, the enemy had learned that direct engagement was an unwise, if not deadly, decision. During these conflicts, our forces found themselves engaged in a low-intensity conflict where the enemy often used cheap improvised explosive devices (IEDs) to counter the technological advantages of the U.S. military.

A seismic shift is now underway on the modern battlefield. In the fall of 2020, Armenia and Azerbaijan engaged in an armed conflict over the territory of Nagorno-Karabakh. What differentiated this conflict was Azerbaijan's heavy use of drones against Armenian forces (see photo below). The Azerbaijanis procured drones from Israel and Turkey and also converted older manned aircraft to unmanned aircraft. This drone-centric strategy included the use of "kamikaze drones," which dove into targets with an explosive load. These drone strikes inflicted serious losses among Armenian tanks, artillery,

air defense systems and military personnel. The widespread use of drones allowed Azerbaijan to attack Armenia's command and control and supply elements, which were positioned behind the front lines. Armenian forces found themselves unable to resupply, limited in maneuver and exposed to attacks on a constant basis. Azerbaijani forces secured a decisive victory, in part due to the widespread use of unmanned aircraft.

The list of countries and nonstate actors using drones continues to grow, increasing the threat to U.S. forces around the globe. The Iranian Revolutionary Guard aptly demonstrated this potential threat when it claimed it had overflown the USS Nimitz with an unmanned aircraft as it passed through the Strait of Hormuz in 2020 (see photo on page 29).⁹ It's not much of a leap to envision a future where the battlefield is dominated by unmanned aircraft and vehicles, and large manned platforms represent targets of opportunity.



AZERBAIJAN DRONE STRIKE ON AN ARMENIAN TANK. AZERBAIJAN MINISTRY OF DEFENSE, SEPTEMBER 2020. [HTTPS://WWW.YOUTUBE.COM/WATCH?V=0Y71UN8UG-U](https://www.youtube.com/watch?v=0Y71UN8UG-U)

⁹ <https://www.express.co.uk/news/world/1426268/World-War-3-fears-iran-drone-footage-aircraft-carrier-US-warship-video-vn>.



IRANIAN REVOLUTIONARY GUARD DRONE PHOTO OF THE USS NIMITZ, JULY 2020. [HTTPS://WWW.THEGUARDIAN.COM/WORLD/2020/SEP/23/IRAN-DRONE-US-AIRCRAFT-CARRIER-REPORT](https://www.theguardian.com/world/2020/sep/23/iran-drone-us-aircraft-carrier-report)

The U.S. military is facing asymmetries in warfare and cost structure. Tanks and armored personnel carriers require long supply chains and are vulnerable to IEDs and drone attacks. The F-35 costs \$36,000 an hour to operate and requires sophisticated supply chains, as well as large air bases. The Navy's carriers are increasingly expensive to procure, test and, eventually, operate at sea. The Air Force's MQ-9 Reaper drone is more capable than the Turkish Bayraktar TB2 (used by an increasing number of countries) but is also estimated to be six times more expensive than the Turkish drone.

While history generally does not repeat, when it comes to weapons systems, the current U.S. warfare strategy echoes that of battleship-centric countries after World War I. Once considered crucial to naval power, battleships were soon outdated due to the rise of naval aviation. Innovation diminished the utility of these large warships; the last one commissioned by the United States was the USS Missouri in 1944. By 1960, the last battleship ever built, the HMS Vanguard, was sold for scrap.

Hampton Roads has long built and maintained large ships and submarines, platforms that are increasingly vulnerable to the cybersecurity and drone revolutions on the modern battlefield. As costs rise, the DOD is faced with the choice of maintaining current weapons systems or investing in modernization efforts. Currently, many of our "new" weapons programs are evolutions of existing platforms: a newer carrier, submarine, fighter aircraft, bomber or wheeled vehicle.

We are at an inflection point in military affairs. Unmanned combat aircraft will be followed by unmanned ships and submarines. The Turkish Bayraktar TB2 can loiter above the battlefield for 27 hours without refueling and at a fraction of the cost of a manned aircraft. The DOD, at some point, will have to pivot toward newer weapons systems that are cheaper, quicker to build and more autonomous. When this happens, our military services will need fewer soldiers, sailors, airmen and Marines. Instead of an aircraft carrier with 5,000 sailors, imagine a drone cargo carrier with hundreds of unmanned (and expendable) aircraft and only hundreds of sailors. Hampton Roads would not fare well in such a transition.

Change is coming. It may not be today or tomorrow, but within years the force structure of the U.S. military will need to adapt to the advances in technology or have change forced upon it on a future battlefield. The question for us in Hampton Roads is whether we will realize early enough that diversification of the economic base is no longer a luxury but a necessity for the continued vitality of the region.

Home Is Where The Heart Is (If You Can Afford It)

Five years ago, the tale of the Hampton Roads real estate market was spun around the lasting impact of the Great Recession. Foreclosures continued to retard growth in single-family home prices, and while sales of previously owned homes were increasing, there was nostalgia for the “good years” prior to the recession. The onset of the pandemic brought a measure of worry, but this was quickly set aside as sales and valuations continued to increase in 2020. Now, with 2021 drawing to a close, the losses of the Great Recession have been cast aside as the housing market continues to surge to new heights.

Graph 16 illustrates the seasonal nature of the Hampton Roads housing market and the transitory impact of the COVID-19 economic shock. Sales of existing single-family homes increased from 2,810 in July 2019 to 3,175 in July 2020, a jump of 13%. In 2021, sales continued to bound upward, with the number of homes sold rising by 30.6% from April 2020 to April 2021, 38.2% from May 2020 to May 2021 and 28.9% from June 2020 to June 2021. There were numerous reports of sellers receiving multiple offers above the asking price and entering into sales contracts within days of listing their homes.

There are, as economists are fond of saying, two sides of a market. Low interest rates, coupled with a K-shaped economic shock that left salaried workers largely unaffected, meant that demand for single-family homes continued to rise during a global pandemic. On the other hand, the supply side of the housing market contracted as the inventory of homes for sale fell precipitously in 2020 and into 2021 (Graph 17). The inventory of existing homes declined by more than half (53.5%) between June 2019 and June 2021. Falling inventories were largely due to brisk sales relative to new listings coming on the market. With demand increasing and supply falling, there was only one direction for median housing prices to go, and that was up.

As shown in Graph 18, the median sales price climbed from \$237,300 (June 2018) to \$245,000 (June 2019) to \$254,900 (June 2020) to \$289,900 (June 2021). We remind the reader that Hampton Roads was just emerging from the trough of the pandemic shock in May 2020, yet the real estate market barely seemed to notice the economic turmoil. The first half of 2021 was a seller’s market, with prices climbing through the spring and into summer.

While the real estate market has been, to borrow a term from ESPN, “en fuego” for the last three years, we must also avoid recency bias. We need only return to 2007, when real estate and equities were a “sure thing” and one could “never lose.” Rising inflation and deficits will likely lead to increasing interest rates sooner rather than later. As capital becomes more expensive, the market for homes will cool and the rapid gains of recent times will retreat into memory. It may be time to be more, rather than less, cautious about how the real estate market will perform over the coming 24 months.



GRAPH 16

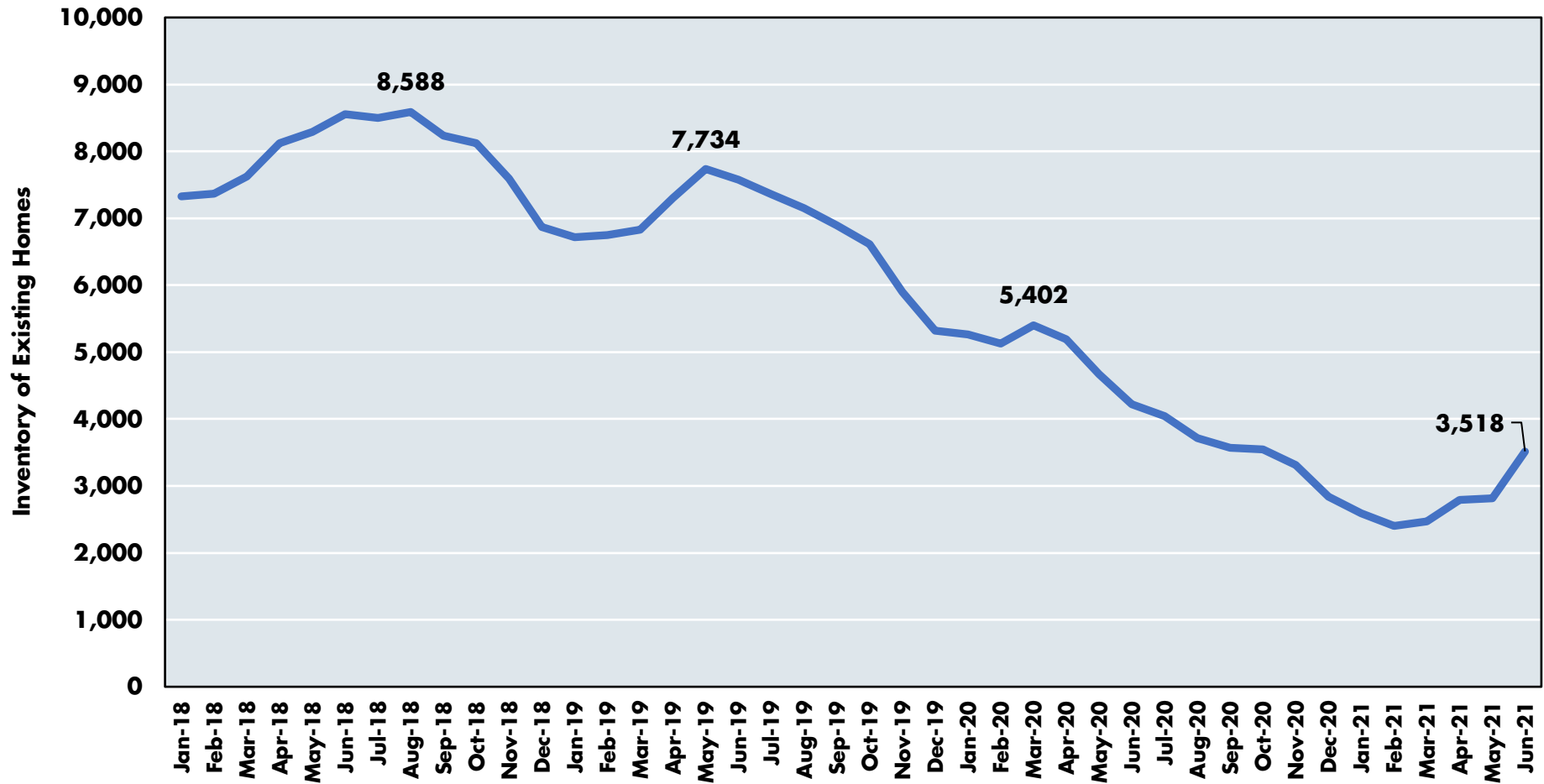
NUMBER OF EXISTING SINGLE-FAMILY HOMES SOLD:
HAMPTON ROADS, JANUARY 2019-JUNE 2021



Sources: Real Estate Information Network and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data are not seasonally adjusted.

GRAPH 17

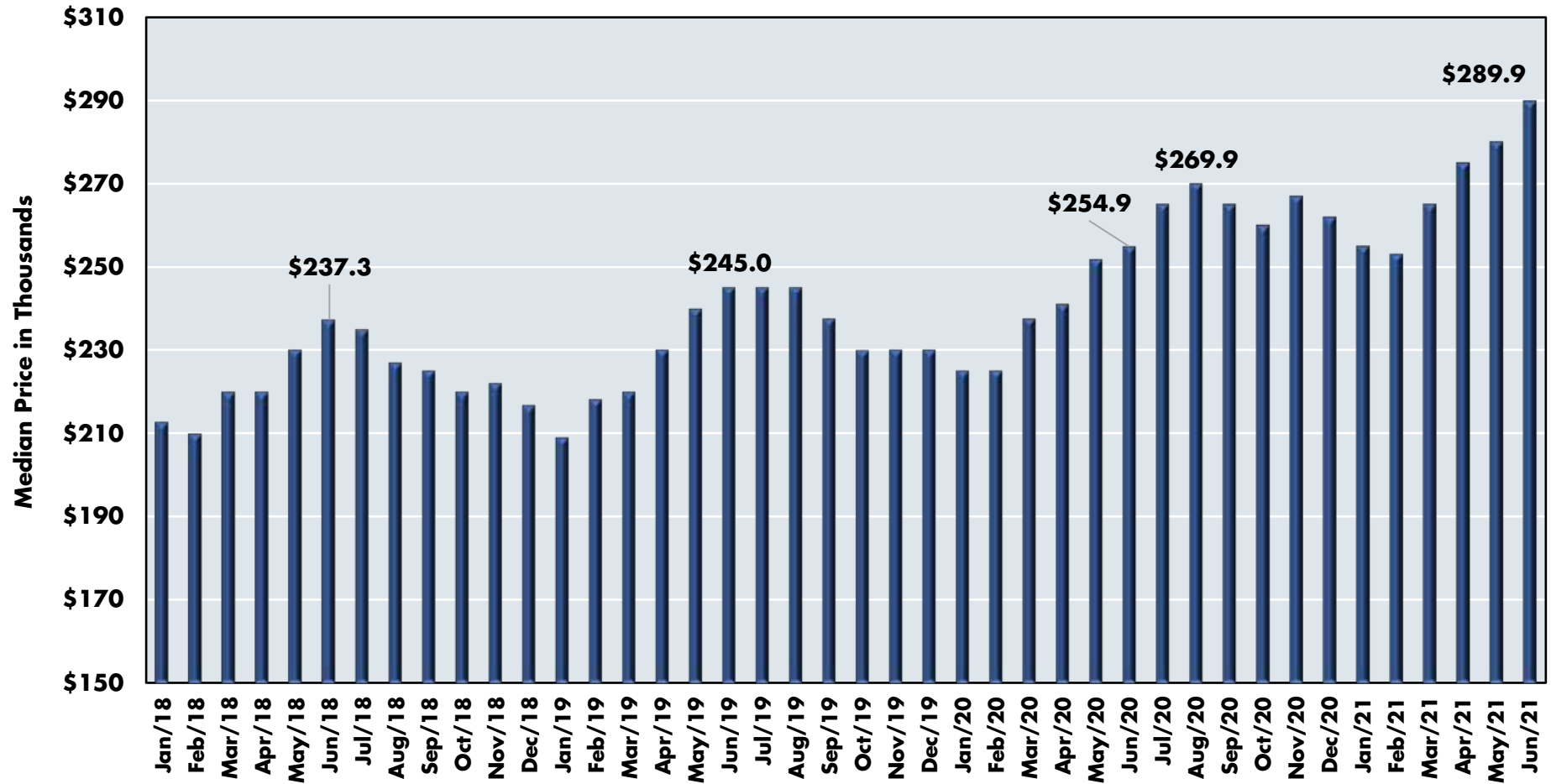
INVENTORY OF EXISTING SINGLE-FAMILY RESIDENTIAL HOMES:
HAMPTON ROADS, JANUARY 2018-JUNE 2021



Sources: Real Estate Information Network and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data are not seasonally adjusted.

GRAPH 18

MEDIAN PRICE OF EXISTING SINGLE-FAMILY HOMES SOLD:
HAMPTON ROADS, JANUARY 2018-JUNE 2021



Sources: Real Estate Information Network and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data are not seasonally adjusted.

The Port: Fair Winds But Troubled Seas

The Port of Virginia's performance over the last decade illustrates the importance of effective management even as the Port struggled to retain market share. A return to profitability and increasing levels of cargo traffic boded well for the Port prior to the pandemic. The Port was not without challenges, however, as the Trump administration's ill-advised trade conflicts undermined trade with China and Europe. At the start of 2020, even with these challenges, the Port could look forward to another year of growth.

By May 2020, however, traffic at the Port of Virginia had plummeted, with loaded 20-foot equivalent container units (TEUs) falling 23% from May 2019 (Graph 19). Yet, the Port proved markedly resilient. By September 2020, loaded TEU traffic had eclipsed 2019 levels, and approximately 24,000 more TEUs crossed through the Port in December 2020 than December 2019. Loaded TEU flows through the Port continued to increase in 2021, and it set a record for total loaded TEUs in May 2021. Empty TEUs (which are, as the name suggests, empty) also set a record in May 2021, as these containers were shipped from the Port to other locations.

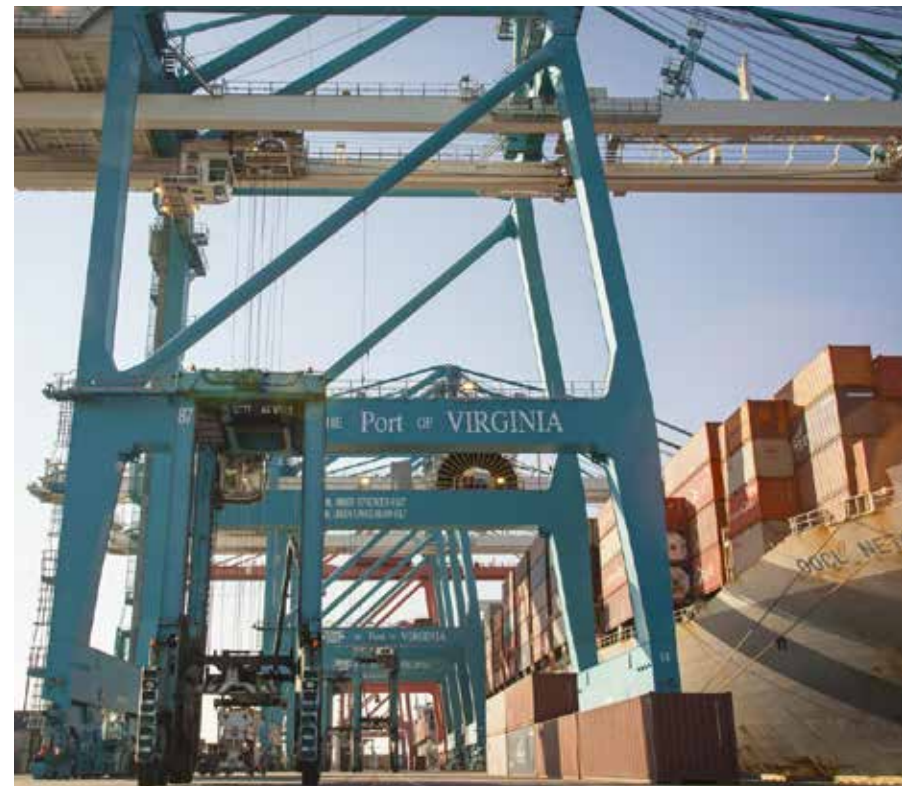
Import and export loaded TEU flows have increased in 2021 (Graph 20). Compared to May 2019, loaded TEU export traffic in May 2021 increased by 13.2%. Loaded TEU import flows, on the other hand, increased by 21.2% from May 2019 to May 2021. The sustained increases in imports are another signal of the ongoing economic recovery in the United States, as American consumers' demand for imported goods continues to increase.

Graph 21 displays the share of total loaded TEUs for four major East Coast ports from 2006 to 2021. Two phenomena are readily observable: the rise of the Port of Savannah and the relative decline of the Port of New York/New Jersey. As for the Port of Virginia, its market share in 2020 was the same as it was in 2011; the Port's market share has varied somewhat year to year, but it has not managed to grab a larger share of the market over time.

This is the challenge the Port must address in the coming years, since its competitors are not standing still.

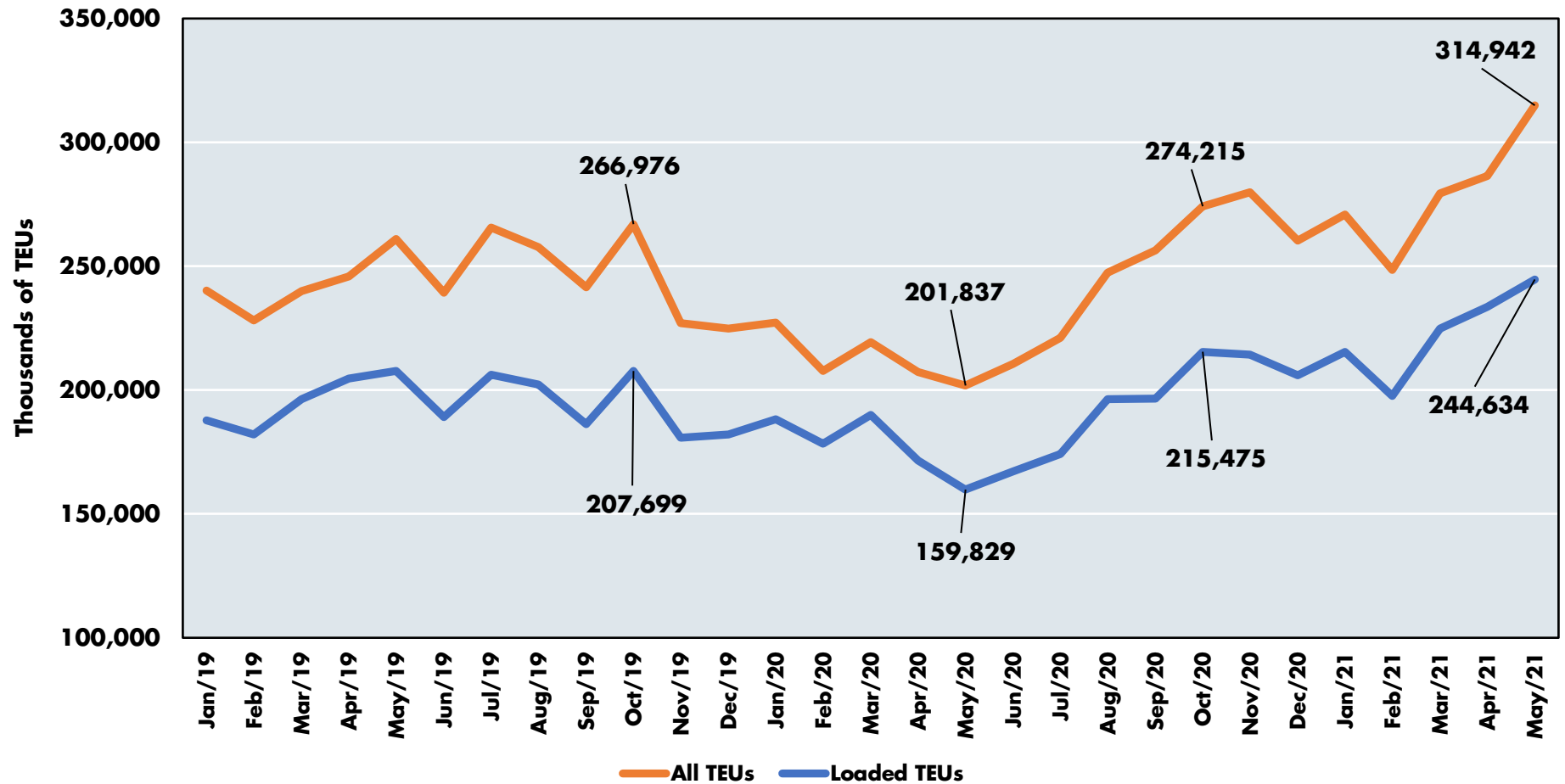
To its credit, the Port of Virginia has invested in facilities and technology to handle more cargo. The Commonwealth and the federal government are putting money into dredging the port channel to accommodate more traffic. These efforts are indeed laudable. Improving the infrastructure in and surrounding the Port is crucial to attracting cargo traffic.

Undoubtedly, the Port of Virginia provides fuel for the region's economic engine. The challenge now facing the Port is to ward off the rise of competitors and to gain and sustain market share. What is beyond the Port's control is whether economic activity in Virginia and surrounding states will be sufficiently robust to enable it to achieve this goal.



GRAPH 19

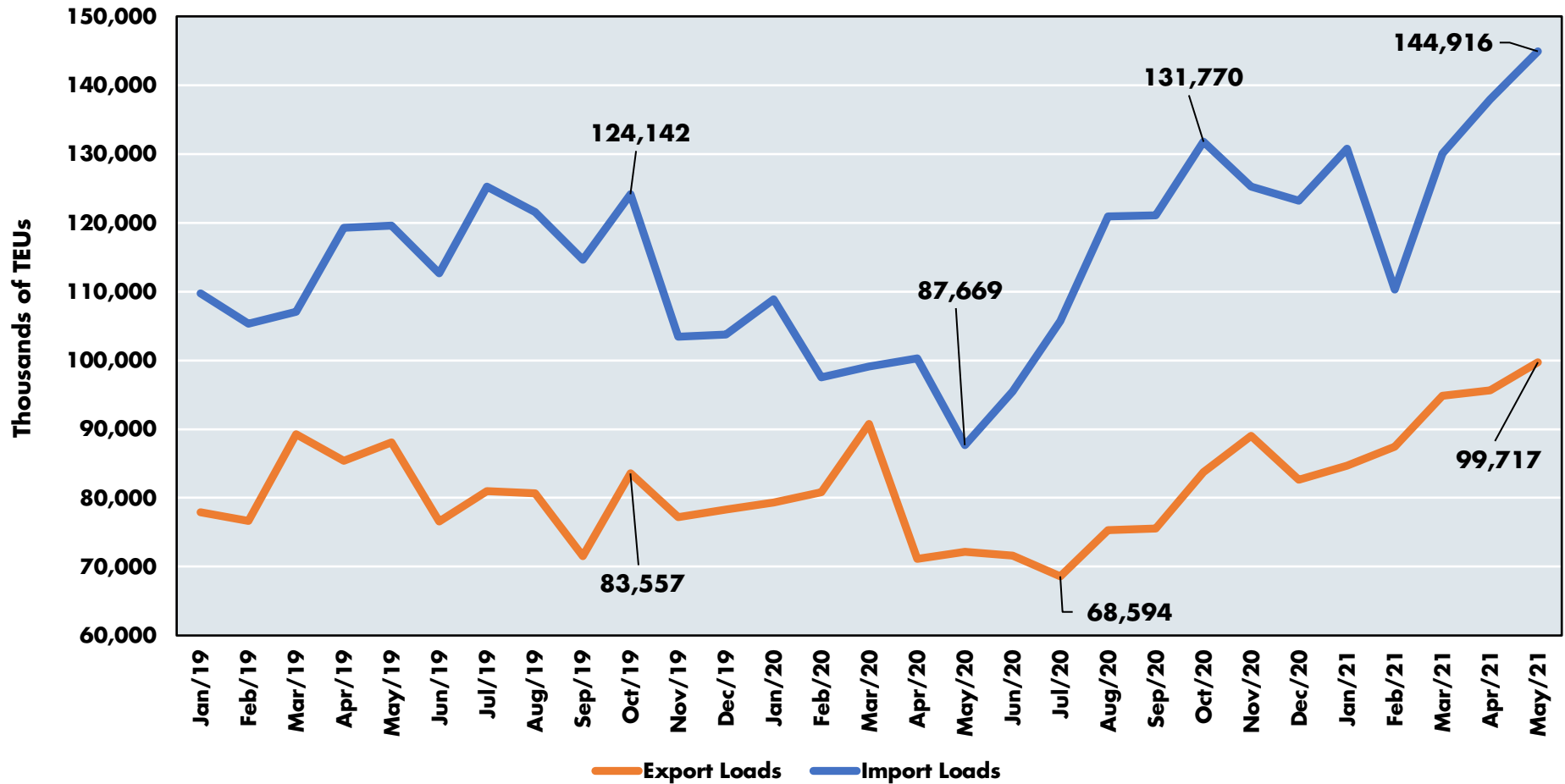
TOTAL AND LOADED 20-FOOT EQUIVALENT CONTAINER UNITS (TEUS):
PORT OF VIRGINIA, JANUARY 2019-MAY 2021



Sources: Virginia Port Authority and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data are not seasonally adjusted.

GRAPH 20

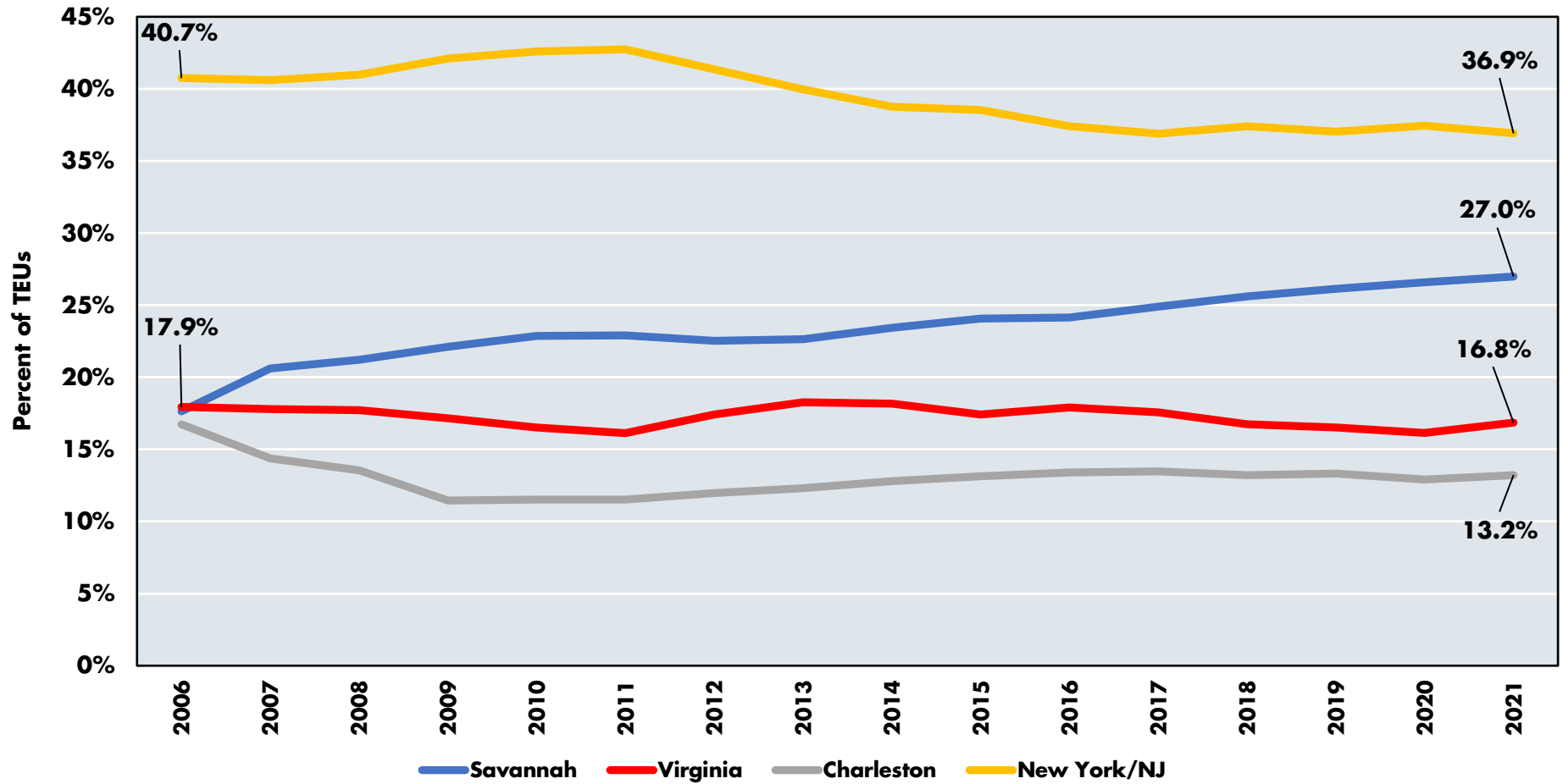
EXPORT AND IMPORT LOADED 20-FOOT EQUIVALENT CONTAINER UNITS (TEUS):
PORT OF VIRGINIA, JANUARY 2019-MAY 2021



Sources: Virginia Port Authority and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data are not seasonally adjusted.

GRAPH 21

SHARE OF TOTAL LOADED TEUS FOR SELECTED EAST COAST PORTS,*
2006-2021



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. *Data for 2021 are through April 2021.

A Recession For Some, A Recovery For Others

Much of the economic news in 2021 has been good. Retail sales are up, employers are hiring, unemployment rolls are declining and trade volumes are up. Inflation remains a concern, given the trillions of dollars of fiscal and monetary stimulus pumped into the national economy over the past 18 months. America may be on the road to recovery from the COVID-19 pandemic, but for some, the economic shock continues to linger.

Graph 22 illustrates that the shock in 2020 was concentrated among hourly workers. While average employment for salaried workers dipped nationally by approximately 500,000 from 2019 to 2020, hourly employment declined by 9 million Americans. Among salaried workers, male employment declined by about 500,000 (1.5%) while female employment slipped by approximately 100,000 (0.4%). For salaried workers, the pandemic, in general, created a bit of mild economic turbulence.

National data reveal the economic damage wrought on hourly workers. One in 10 hourly workers lost employment in 2020; male employment fell by 4.1 million (10%) and female employment dropped by 4.9 million (11.8%). While salaried workers encountered only mild economic turbulence in 2020, hourly workers found themselves on a plane with pilots suffering from food poisoning, an engine on fire and all nearby airports unavailable due to heavy fog. This economic trauma may help explain why workers quit their jobs at record rates in early summer 2021.

Who was affected by the economic shock is more than an academic question. It has implications for both those who will experience income and wealth gains during the recovery and those who will face continued economic hardship. Diving into the data, we unearth two observations, one surprising and one familiar. Our first observation is that while the number of Asian Americans in the labor force declined by 1.4% from February 2020 to June 2021, Asian American employment fell by 4.7% (Graph 23). The decline in employment

among Asian American workers was similar to that for Blacks, whites and Hispanics, but it was relatively larger when compared to the decline in the labor force. Two factors appeared to contribute to this ahistorical rise in unemployment. First, many Asian American workers were more likely to be employed by businesses engaged in person-to-person services (restaurants, bars, small stores) that experienced the greatest shock from the pandemic.¹⁰ Second, unemployed Asian American workers were more likely to be among the ranks of the long-term unemployed (27 weeks of unemployment or longer). A third (and perhaps not entirely surprising) observation is that even though Black and white workers left the labor force at roughly the same rate, Black employment fell more than white employment.

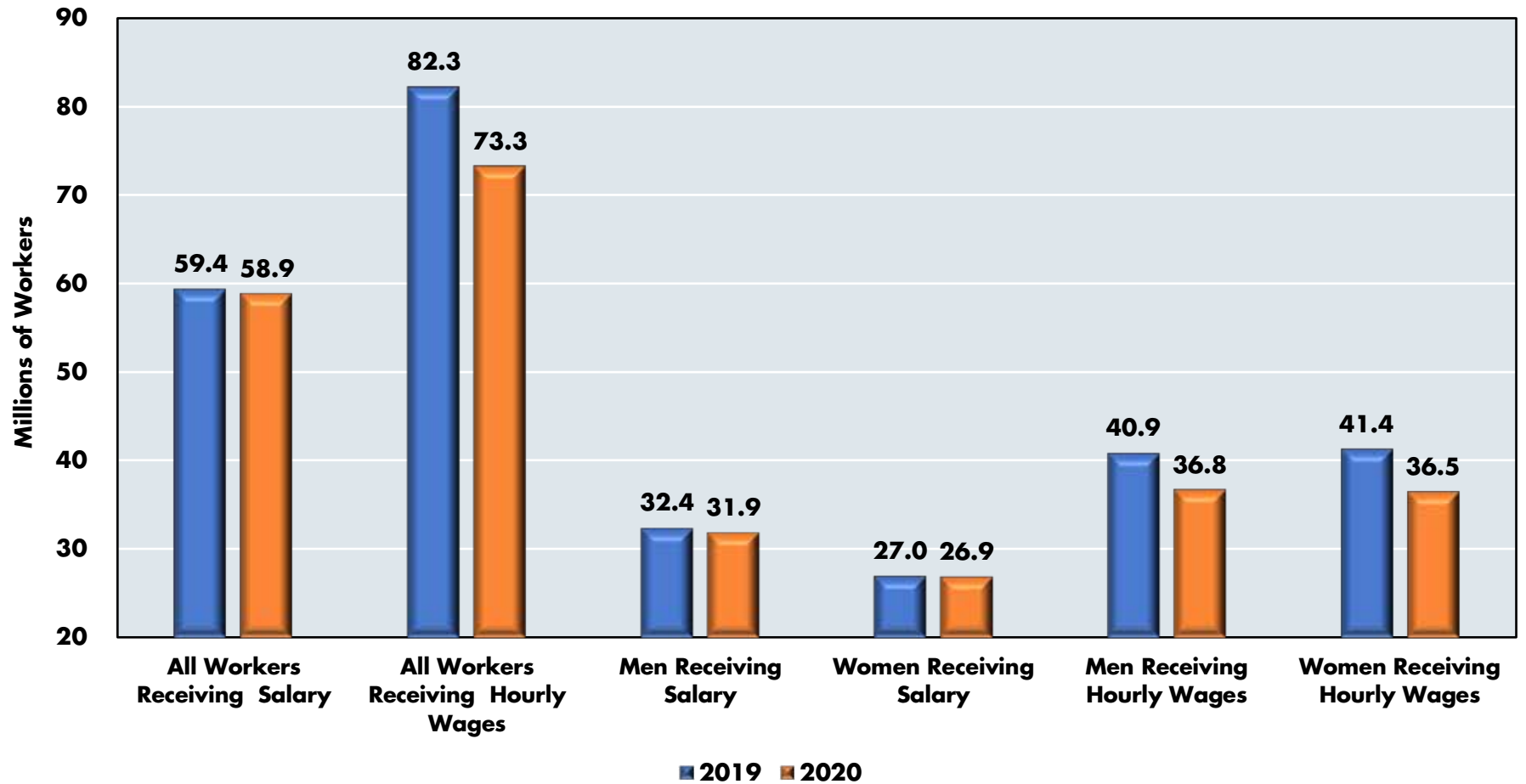
Graph 24 provides data on the change in the labor force and employment by race and gender. The number of white men in the labor force declined by 2.3% from February 2020 to June 2021. Over the same period, the number of Black men in the labor force increased by 1.4%. However, employment dropped by 4.8% and 2.9% for white and Black men, respectively. For women, the declines were more pronounced. The number of Black and white women in the labor force declined by 3.5% and 2.6%, respectively, over the same period. While employment of white women declined by 4.8% from February 2020 to June 2021, Black women's employment dropped by 7.2%.

Even when the pandemic recedes in the rearview mirror, there will be lasting economic damage. For hourly workers, especially those in the leisure and hospitality, education and public health, and local government sectors, the last 18 months have not been kind. For some of these employees, scant savings have been depleted, housing has been lost and remote schooling has left many minority children further behind their peers. The challenge will be to remember those who suffered the most even as the good times roll on for many of us.

¹⁰ <https://www.marketwatch.com/story/asian-american-businesses-are-dealing-with-two-viruses-reeling-from-racist-incidents-many-are-hurting-financially-during-covid-19-11613610159>.

GRAPH 22

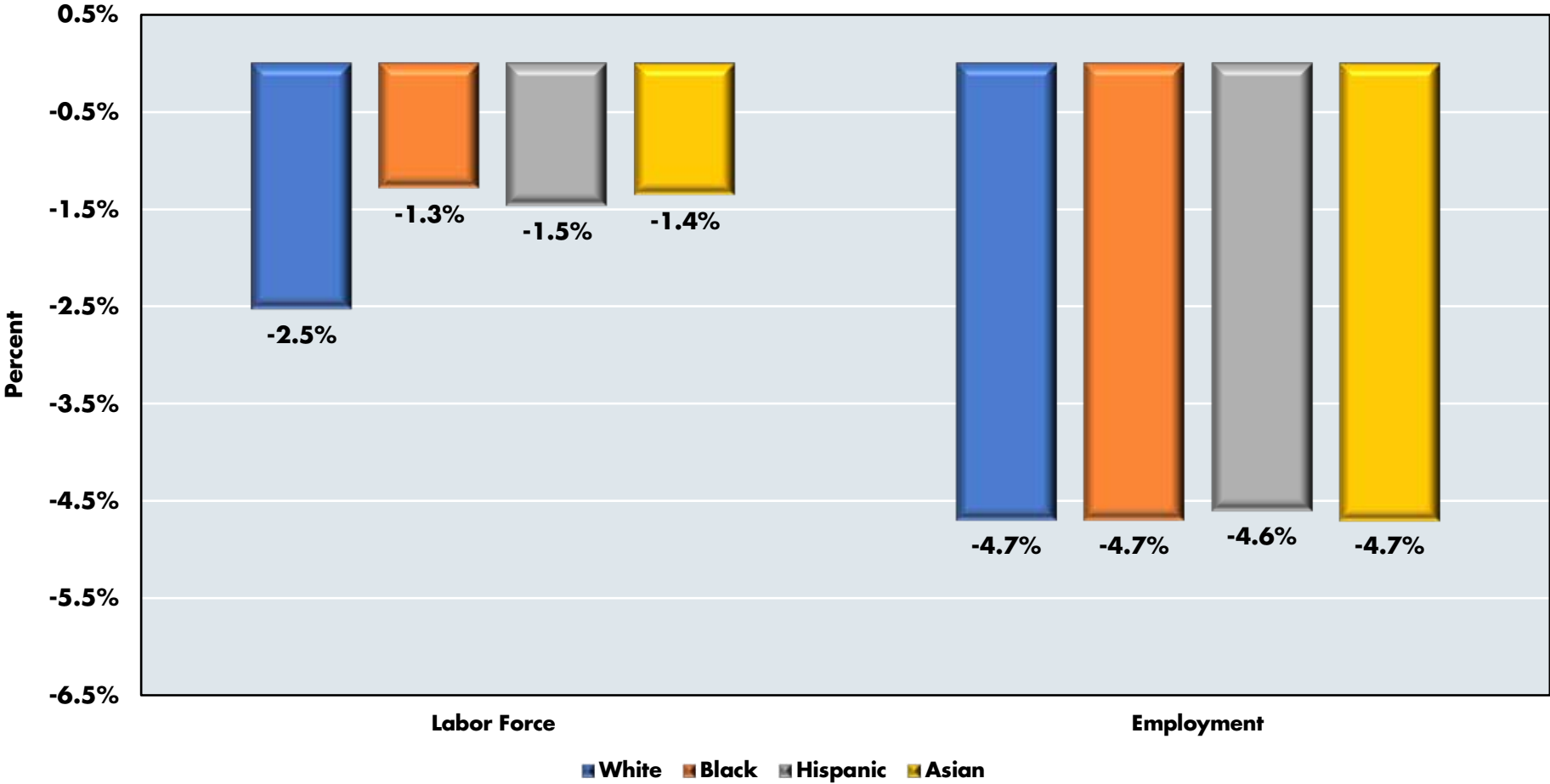
WAGE AND SALARIED WORKERS:
UNITED STATES, 2019 AND 2020



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

GRAPH 23

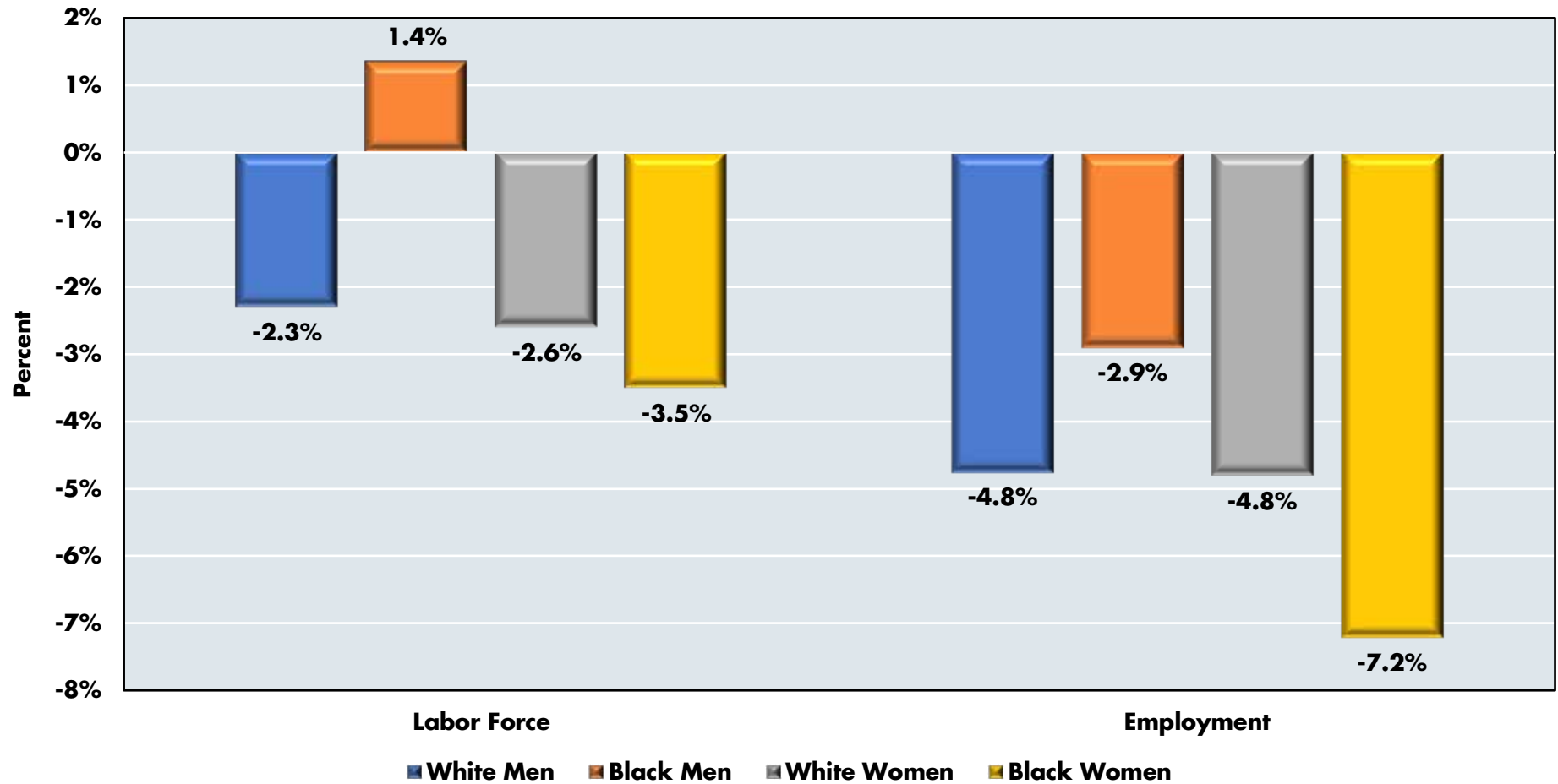
CHANGE IN CIVILIAN LABOR FORCE AND EMPLOYMENT BY RACE:
UNITED STATES, FEBRUARY 2020-JUNE 2021



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

GRAPH 24

CHANGE IN CIVILIAN LABOR FORCE AND EMPLOYMENT BY SELECTED RACE AND GENDER:
UNITED STATES, FEBRUARY 2020-JUNE 2021



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

Final Thoughts

Over the past 18 months, Hampton Roads residents have experienced school closures, widespread job loss, restrictions on social activities and, more recently, some semblance of a return to normality. The COVID-19 pandemic and economic shock exposed the impact of disinformation on our social discourse, politics and public health. Now, as economic activity picks up, we can look forward to a brighter future if we decide to work together to diversify the regional economy, combat those who would undermine our efforts to improve public health and leverage our existing strengths to remind the nation of our engineering mettle, scientific prowess and efforts to lead in renewable energy.

A return to the prepandemic status quo is both attractive and dangerous. Hampton Roads will undoubtedly continue to play a vital role in the nation's defense. However, we have seen over the last decade how dependence on decisions in Washington, D.C., can sink even the best efforts to promote regional economic development.

It is time to move beyond quiet discussions of the "D" word: that is, diversification of the region's economic base. We can be an asset to the national defense and work to seek additional sources of economic vitality. However, we must escape the pull of inertia and history. Too often, talk of reform has ebbed as budgetary conditions have improved in Congress. Now, as we emerge from a historic economic shock, is the time to be bold.

One effort to encourage conversations on diversification has appeared in the form of the 757 Recovery and Resilience Action Framework, self-described as "a game plan created by and for the 757's business community to help accelerate the region's economic recovery from the COVID-19 pandemic." We applaud the private and public discussions on how to not only recover from the pandemic's economic shock, but also how to foster coordination and cooperation among the cities and counties in Hampton Roads. If there is one lesson of the pandemic, it is that we are all in this together.

A focus on key industries (renewable energy, advanced manufacturing, cybersecurity, health services) is important. The question is whether this effort will survive as economic growth accelerates and the immediate need for crisis response fades. Cynics will note that the dustbin of history in Hampton Roads is littered with attempts to improve collaboration among its cities and counties. To paraphrase Ronald Reagan, we will trust the region's leaders to keep pushing forward, but will also objectively verify whether their efforts bear fruit over time.

One recommendation for enhancing our economic outlook is to encourage the region's high-quality medical institutions to foster the development of an "education-medical" center. Hampton Roads is fortunate to be home to Eastern Virginia Medical School (EVMS) and several institutions of higher education. EVMS and Old Dominion University bring in approximately \$100 million in federally funded research annually; to put this in context, that's about 10% of the federal research funding awarded to Johns Hopkins University each year. Merely wishing that we could double or triple our federal research funds will bear no fruit. We must realize that an education-medical complex is only possible if all the major players agree to set aside their parochial interests and come together. This effort will be a heavy lift, but in its favor is the fact that Sentara Healthcare brings financial resources and know-how to the table to complement the capabilities of EVMS and ODU. We believe that an education-medical center built around Sentara-EVMS-ODU and other higher education institutions is not only necessary, but also central to the region's growth.

We need only look north to Richmond to see how the battle over the merger of Medical College of Virginia and Richmond Professional Institute to form Virginia Commonwealth University (VCU) played out. There was such opposition to this merger that the General Assembly stipulated the Medical College of Virginia would retain its name in perpetuity. Today, VCU is the Richmond area's only Level 1 trauma center. Newsweek recently ranked VCU third best among all Virginia hospitals and in the Top 100 of all U.S. hospitals.

VCU's efforts in creating an education-medical center are illustrated in its ability to attract research funding. VCU reached \$310 million in sponsored research funding in FY 2019, of which \$90 million came from the National Institutes of Health. Building an education-medical center in Hampton Roads will not take place overnight, but, unlike other gambles to spur growth, it is more likely to lead to higher-paying jobs and economic expansion in the long term.

Another recommendation (which has been made before but is worth repeating) is to consolidate public services across the cities and counties of Hampton Roads. How many library systems, fire departments, and police and sheriff departments are necessary for a region of 1.7 million people? Each local system requires an administrative support structure. As Parkinson's law notes, "work expands so as to fill the time available for its completion," and the numerous, duplicative administrative structures in our region are no exception. If a trip to the General Assembly is needed to obtain the appropriate legal authorities, taxpayers would surely be supportive of such an effort to lower costs and increase efficiency.

None of these proposals is easy. If they were, they would already be undertaken. They will require time, consensus and concerted effort. In 2020, the COVID-19 pandemic spurred many discussions and calls for action. Now, as we approach 2022, we must avoid the sense that we have done enough, that we have endured, and that is sufficient. Benjamin E. Mays, who is credited with laying the intellectual foundations of the civil rights movement in this country, aptly observed: "The tragedy of life is often not in our failure, but rather in our complacency; not in our doing too much, but rather in our doing too little; not in our living above our ability, but rather in our living below our capacities."

Now is the time for Hampton Roads to strive to do too much, rather than too little. Yes, there is a chance we may fail, but if we do not resolve to be bold, our only success will be measured by the degree of our timidity.

