The State of the Region

HAMPTON ROADS 2018

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

VIRGINIA BEACH-NORFOLK-
NEWPORT NEWS, VA-NC
METROPOLITAN STATISTICAL AREA
Gloucester County
Mathews County
James City County
Williamsburg
York County
Newport News
Poquoson
Hampton
Isle of Wight County
Norfolk
Portsmouth
Virginia Beach
Suffolk
Chesapeake
VIRGINIA
NORTH CAROLINA
Gates County
Currituck County

October 2018

Dear Reader:

This is Old Dominion University's 19th 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, John R. Broderick, 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.

The report maintains the goal of stimulating thought and discussion that will ultimately make Hampton Roads an even better place to live. We are proud of our region's many successes and the key role we play in national security. We also realize that it is possible to improve our performance. To do so, we must have accurate, objective information about "where we stand" so we can move to "where we want to be."

The 2018 State of the Region report is divided into seven parts:

Is It Morning Again in Hampton Roads?
The three pillars of our regional economy (defense, the port and tourism) have improved and prospects for growth are looking up. We ask whether Hampton Roads has finally emerged from a "lost decade" and if the future is bright.

A Complicated Subject: The Impact of Medicaid Expansion on Hampton Roads
Virginia will expand Medicaid, a health insurance program for low-income adults and children, on Jan. 1, 2019. Medicaid expansion will reduce the number of uninsured in Hampton Roads, but future costs remain uncertain.

Craft Brewing in Hampton Roads
The number of craft breweries in Hampton Roads has increased dramatically in recent years. We trace the development of this trend and explore the impact of craft brewing on our regional economy.

Too Much of a Good Thing? Multifamily Housing in Hampton Roads
Over the past decade, Hampton Roads has seen an increase in the construction of multifamily units, leading some to question whether there are too many apartments. Vacancy rates have started to decline and rent increases remain moderate, especially compared to many other cities in the United States.

Welcome to Your New Home: International Migration and Hampton Roads
Most new international migrants to Hampton Roads are educated, married and gainfully employed. We examine the impact of international migration and look at how immigrants are contributing to economic growth in our region.

Hampton City Schools: The Next Generation of Learning in Hampton Roads
Hampton Roads needs skilled workers. With unemployment approaching historical lows and the demand for a skilled workforce increasing, Hampton City Schools is engaging in an experiment to transform high school education. We delve into this effort and its potential benefit for our region.

Hampton Roads: In Search of a Social Media Identity
Facebook, Instagram, Twitter and Snapchat. These platforms define the lives of many Americans. We inquire to what degree Hampton Roads has an identity on social media and discuss the potential benefits of a social media brand.

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.

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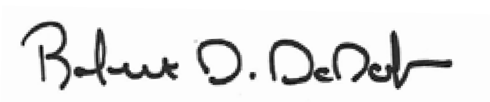
All 19 State of the Region reports are available at www.ceapodu.com. If you have comments or suggestions, please email us at rmcnab@odu.edu. Individual copies of the 2018 report may be purchased for $25 each.

Sincerely,



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Is It Morning Again In Hampton Roads?

IS IT MORNING AGAIN IN HAMPTON ROADS?

In 1984, President Ronald Reagan, seeking re-election to a second term against his opponent, former Vice President Walter Mondale, ran a political commercial that started with the optimistic phrase, "It's morning again in America." The spot ended with a simple question: "Why would we ever want to return to where we were less than four short years ago?"

Fast forward to 2018 in Hampton Roads. Perhaps it's time to be more optimistic about our regional economy. After a lost decade of stagnant economic growth and watching rival metropolitan areas prosper, is it, in fact, morning again in Hampton Roads?

The causes of our region's underwhelming economic performance are well known: the debilitating effects of the Great Recession, tepid increases in defense spending due to sequestration, and the out-migration of talent as a result of anemic private job creation. Impacting each of these was limited regional collaboration. We did not present a unified regional front to those in Washington, D.C., Richmond and elsewhere who might have made a difference. All too often, to quote Pogo, "We have met the enemy and he is us."

Perhaps, however, we are beginning to turn over the proverbial new leaf. Economic data suggest that Hampton Roads has mostly recovered from the Great Recession, which began in December 2007 and ended in June 2009. Our unemployment rate has fallen to almost 3 percent; more people than ever before are reporting that they are employed; and we finally have exceeded the number of jobs last seen prior to the recession. The federal defense budget has increased substantially, and the U.S. Navy is embarking on a shipbuilding and maintenance plan that will increase the demand for skilled workers in the trades. Housing prices are increasing and there has been a sustained rise in multifamily construction. The Port of Virginia is having another strong year and tourism continues to bolster the regional economy.

Yet, as economists are wont to say, on the other hand… Job creation in Hampton Roads lags that of other metropolitan areas in Virginia and the mid-Atlantic United States. There are gaps between the needs of employers and the skills of the labor force. Wages and earnings have yet to rise significantly, which is good news for employers, but a situation that also leads many to seek their fortunes elsewhere. Several of our cities have lost population due to domestic out-migration over the last decade.

Our region must also contend with an environment that is influenced by external actors. The ongoing global trade disputes have not only increased the price of steel but also lowered demand for some agricultural exports that move through the Port of Virginia. The favorable increases in defense spending may be temporary as federal deficits bloom in Washington, D.C. International migrants, however, are "voting with their feet" and moving to Hampton Roads. The influx of talent not only adds to our economy but also to the vibrant culture of our region.

How can we make sense of these conflicting economic data? Instead of picking one individual thread and proclaiming a conclusion, we argue that the overall tapestry of the economy is what is important. We need to take a step back and let the economic picture come into focus.

As English playwright John Heywood noted in 1546: "Whan the sunne shinth make hay." Let's review the economic data and decide whether it's truly morning again in Hampton Roads.

Growth In Output And Incomes

We estimate the economy of Hampton Roads grew only 0.9 percent (inflation-adjusted) in 2017 (see Table 1). However, our current forecast for 2018 is 2.2 percent. This improved outlook is due to increases in defense spending, the performance of the Port of Virginia, improvements in the housing sector and continued strength in the hotel and tourism industry. For the first time in a decade, Hampton Roads is on the cusp of consecutive years of real economic growth.

While a growth rate of 2.2 percent is quite an improvement over the sluggish rates over the last decade, it remains below our historical average of 2.6 percent for the last 30 years, and Hampton Roads still will grow more slowly than Virginia and the United States. Also, as we have noted in previous reports, the regional gross domestic product (GDP) estimates of the Bureau of Economic Analysis (BEA) should be viewed with caution, especially its most recent estimates. The BEA often makes substantial revisions up and down in its estimates, which in any case contain long lags. Although we are midway through 2018, the advance estimates released in September 2017 are only through 2016.

Consider that the BEA's 2015 advance estimate for GDP growth in Hampton Roads was 3.7 percent. The next release in 2017 reduced that estimate to 2.8 percent. The estimate will likely be revised again this year. Consequently, we should focus less on one specific year and take a longer view of metropolitan area growth. The longer-term picture, however, is not so enticing.

Graph 1 provides some perspective. From 2001 to 2009, economic growth in Hampton Roads outpaced that of the country, a sustained increase in economic activity that coincided with rapid increases in defense spending. The Great Recession and subsequent stagnation of defense spending led to a now familiar tale from 2009 to 2015: lackluster economic growth, anemic job creation and out-migration of residents to other locations in the U.S.

Real GDP growth in Hampton Roads ranked 312th among 382 metropolitan areas from 2011 to 2016. The proverbial light at the end of the tunnel is that our regional economy appears to have reversed this trend last year and accelerated into 2018.

TABLE 1

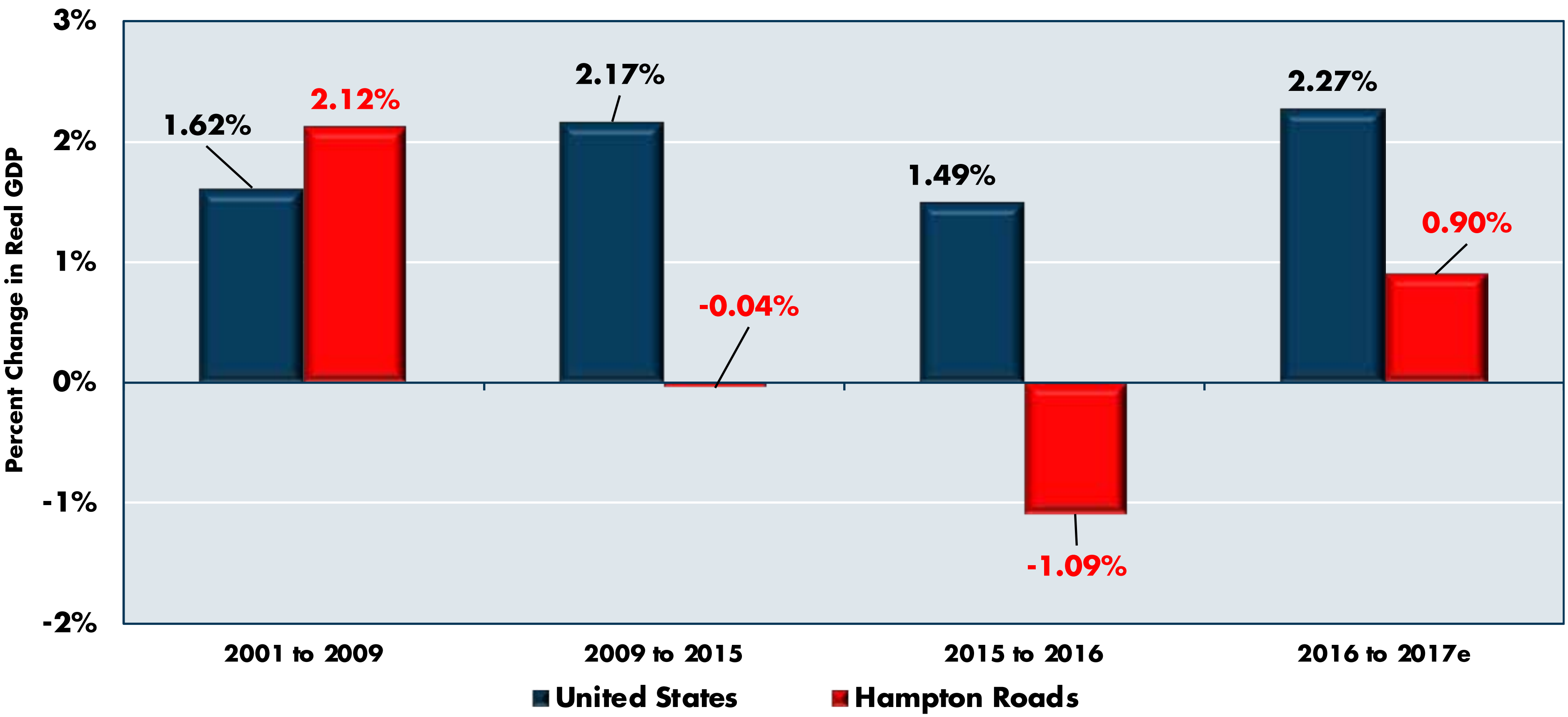
NOMINAL AND REAL (INFLATION-ADJUSTED) GROSS DOMESTIC PRODUCT: HAMPTON ROADS, 2006-2018 (THOUSANDS OF DOLLARS)

Year	Nominal GDP	Real GDP (Base Year = 2009)	Real GDP Growth Rate
2006	$77,004	$82,210	+5.3%
2007	$81,041	$83,585	+1.7%
2008	$81,146	$82,623	-1.2%
2009	$82,471	$82,471	-0.2%
2010	$82,107	$81,132	-1.6%
2011	$83,353	$81,361	+0.3%
2012	$84,485	$80,740	-0.8%
2013	$85,414	$80,263	-0.6%
2014	$87,084	$79,995	-0.3%
2015	$91,876	$82,260	+2.8%
2016	$92,827	$81,363	-1.1%
2017	$95,519	$82,095	+0.9%
2018	$100,008	$83,901	+2.2%

Sources: Bureau of Economic Analysis and the Dragas Center for Economic Analysis and Policy, Old Dominion University. 2017 is our estimate and 2018 is our forecast.

GRAPH 1

ANNUAL GROWTH RATE IN REAL GDP, HAMPTON ROADS AND THE UNITED STATES



Sources: Bureau of Economic Analysis and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data on GDP incorporate latest BEA revisions in September 2017. Hampton Roads GDP for 2017 is our estimate.

Emerging From The Great Recession

Our regional economy does not exist in a vacuum and the Great Recession was an illustration of how national economic conditions can influence economic activity in Hampton Roads. The tale of the recession for the United States is familiar by now: job losses, home foreclosures, and stagnation of wages and salaries. Added to the woes of our region was the impact of stagnation in defense spending. The latest jobs and employment data, however, tell us that our regional economy has finally emerged from the recession's shadow.[1]

Graph 2 illustrates that it took almost 76 months for the U.S. and the Commonwealth to recover the jobs lost during the recession. What was a recovery from the worst economic crisis since the Great Depression has turned into the second-longest economic expansion in U.S. history. With over 90 straight months of job growth, the country might be able to exceed the longest economic expansion of 120 months (March 1991 to March 2001), if there is not an unexpected economic shock or expansion of ongoing trade disputes.

Hampton Roads finally appears to be putting the Great Recession in the rearview mirror. By mid-2018, we had about 0.3 percent more jobs than at the prerecessionary peak of July 2007. As shown in Graph 3, by 2010, Hampton Roads lost more than 38,000 jobs from its previous peak level of employment, in 2007. In 2017, our region had about 4,000 more jobs on an annual basis than in 2007, making 2017 the first year our annual level of employment exceeded the prerecessionary peak.

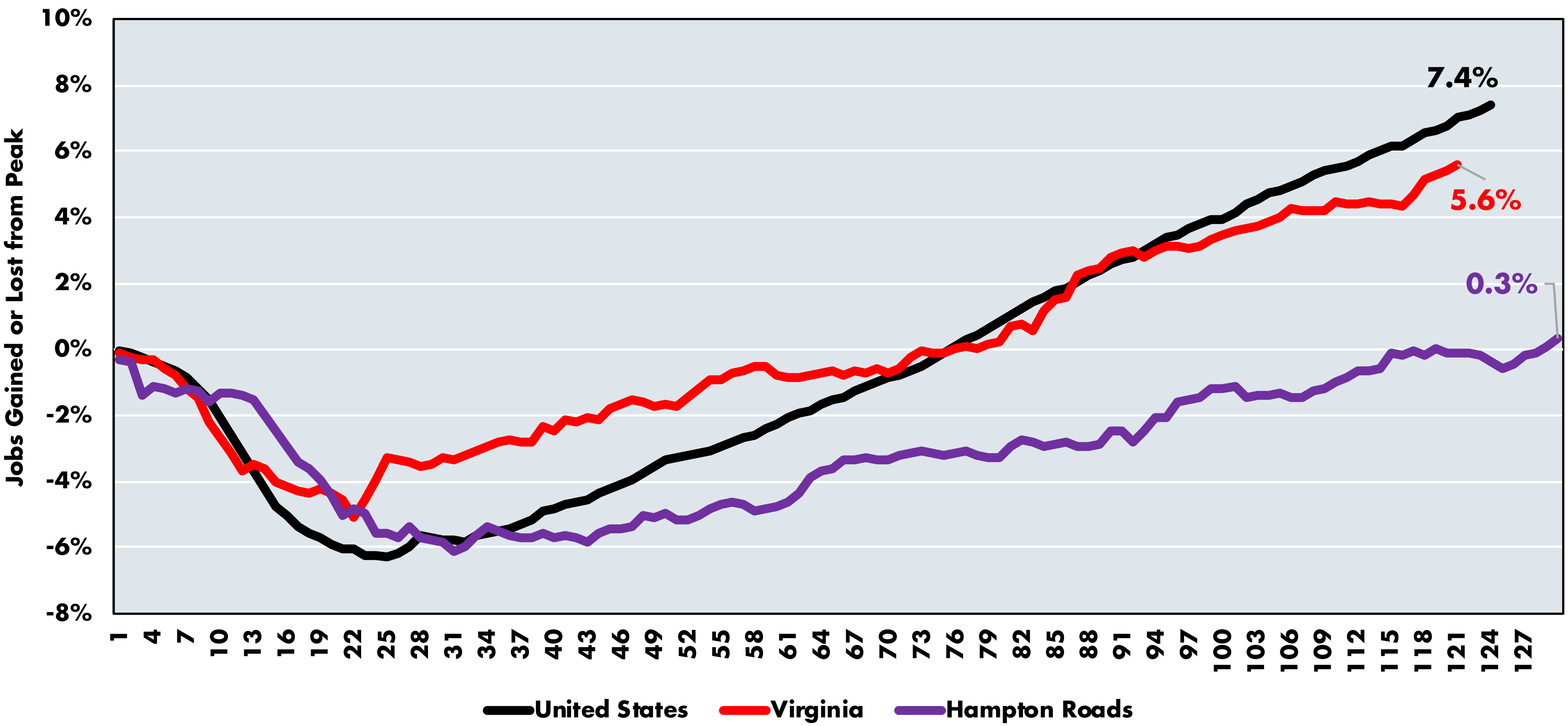
The climb out of the hole of the Great Recession has been slow, but mostly steady. From a low of 737,100 jobs in 2010, our region generated 42,800 new jobs through 2017. The number of health care and social assistance jobs continued to increase in Hampton Roads, followed by jobs in the accommodation and food sector (Graph 4). Additional jobs have been created in the transportation and warehousing sector, professional, scientific and technical services, and the management of companies. The largest losses have occurred in the construction, manufacturing, retail and wholesale trade, information, and real estate and rental sectors.

We do not want, however, to be accused of being Pollyannaish on the subject of job recovery in our region. Compared to our neighbors, we have fared poorly in generating jobs. While Virginia added almost 212,000 new jobs by May 2018 compared to the prerecession peak, only a few of these jobs have been in Hampton Roads. Most have been in Northern Virginia (149,400) and Richmond (54,800). North Carolina's performance is driven by large gains in Charlotte (175,500) and Raleigh (105,800). Even the Durham-Chapel Hill area generated 31,600 new jobs, while Hampton Roads only managed to create about 2,600 new jobs through May 2018.

1 The Current Population Survey (CPS) covers households and asks whether an individual was employed or actively seeking employment. The Current Establishment Survey (CES) covers businesses and reports the number of jobs. An individual who has two jobs would be counted once in the CPS and twice in the CES.

GRAPH 2

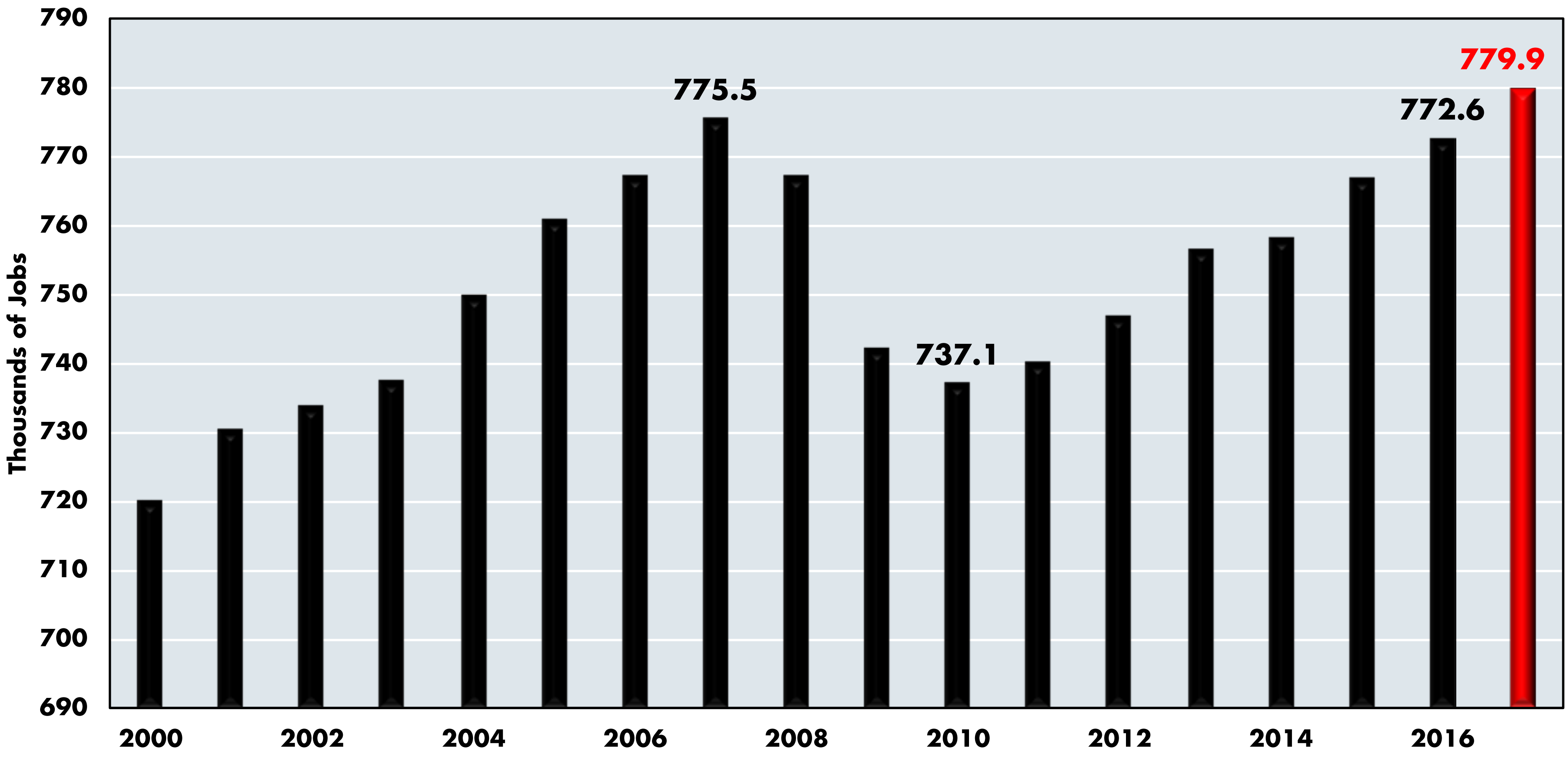
RECOVERY FROM THE GREAT RECESSION: MEASURED IN TOTAL JOBS RESTORED, 2008-2018*



Sources: Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Peak prerecession dates are January 2008 (United States), April 2008 (Virginia) and July 2007 (Hampton Roads). Data for U.S. through May 2018, Virginia and Hampton Roads through May 2018. U.S. data preliminary for April and May 2018. Virginia and Hampton Roads data are preliminary for May 2018. Seasonally adjusted data.

GRAPH 3

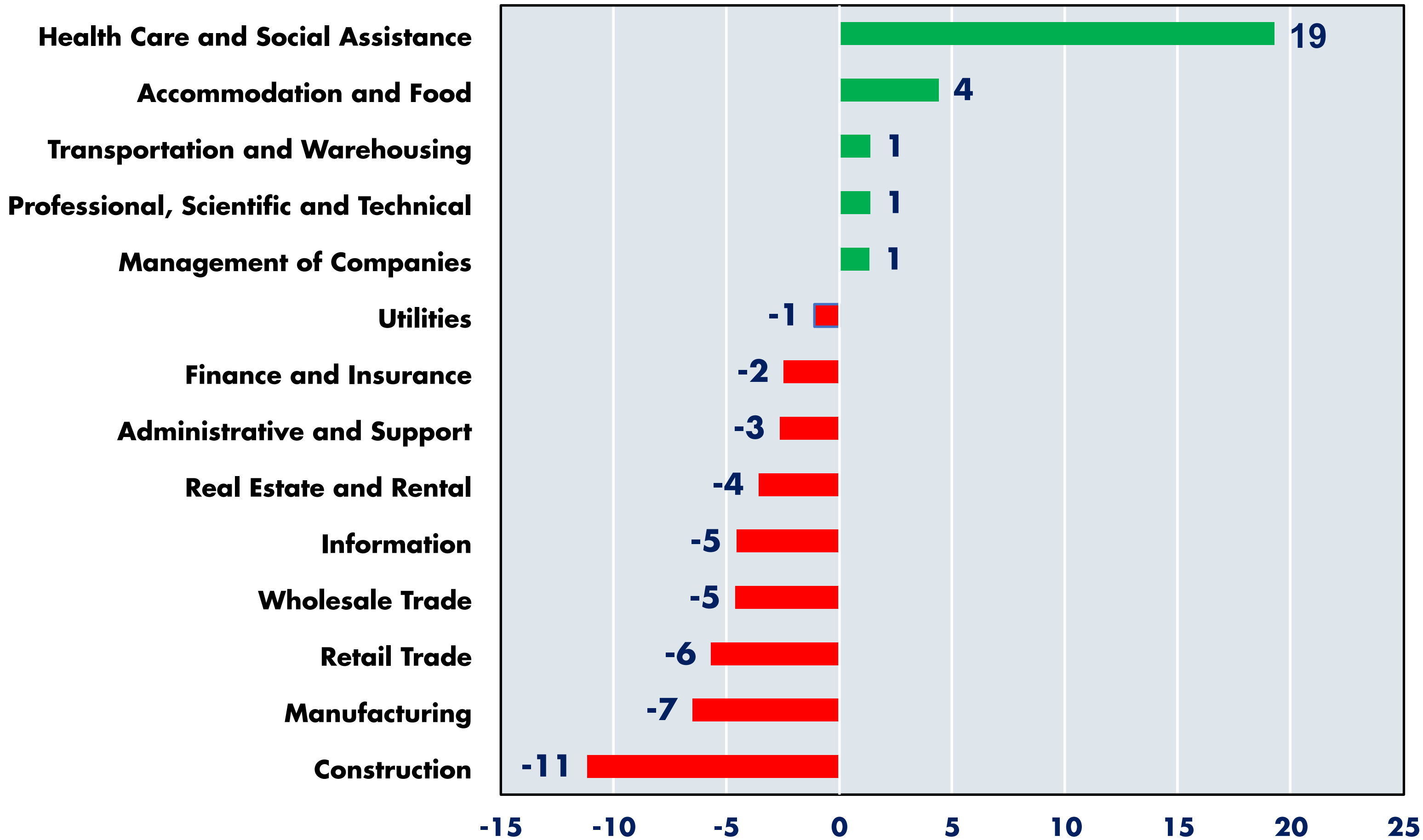
AVERAGE CIVILIAN NONFARM EMPLOYMENT (JOBS): HAMPTON ROADS, 2000–2017



Sources: U.S. Department of Labor CES data and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Annual averages based on non-seasonally adjusted data.

GRAPH 4

CHANGE IN PRIVATE-SECTOR EMPLOYMENT: SELECTED INDUSTRIES IN HAMPTON ROADS, 2007 Q1 TO 2017 Q1 (THOUSANDS)



Sources: Virginia Employment Commission: Covered Employment and Wages by Private Ownership and the Dragas Center for Economic Analysis and Policy, Old Dominion University

Slow Growth In Jobs, Faster Growth In Individual Employment

One curiosity is the slow increase in the number of jobs and the more rapid increase in the number of people reporting that they are employed. Why are there marked differences between the employment and jobs data? The different survey instruments account for some of the discrepancies. Employment data come from a monthly survey of households and are more sensitive to recent changes, as people tend to disclose immediately whether they are employed or not. Employment data also capture whether people are self-employed or engaged in short-term employment, such as driving for Uber, working through Thumbtack or pursuing other ventures in the emerging "gig" economy.

On the other hand, the jobs data come from a monthly survey of employers. If a person holds jobs with multiple employers, each employer will report the individual is working for them. The jobs data can thus significantly outpace the employment data if people are working multiple jobs.[2] Both measures provide valuable information.

Let's first delve into the employment data.

The number of people reporting that they were in the labor force in 2017 was comfortably above the prerecession peak in 2008 (Graph 5). On an annual basis, there were approximately 21,700 more people working or looking for work in 2017 than in 2008. The gains in employment were almost the same as the increases in the labor force, with 21,000 more people reporting that they were employed in 2017 than in 2008 (Graph 6).

The increases in the labor force and number of employed are reflected in the decline in the unemployment rate (Graph 7). In January 2007, the unemployment rate in Hampton Roads was 3.1 percent, well below the nation's 4.6 percent unemployment rate. At the trough of the recession, the unemployment rate here topped 8 percent. By mid-2018, our unemployment rate had fallen below 3.5 percent.

In Graph 8, we compare the recovery in jobs and employment in Hampton Roads to the prerecession peak. In the first 16 months of the recession, employment in Hampton Roads fell by 43,000 (from 797,000 to 754,000). Recovery ensued, but transpired in fits and starts. Finally, fully 98 months after our previous peak, individual employment in Hampton Roads eclipsed the level seen prior to the recession.

The recovery in jobs has been much slower, with the number of jobs only exceeding the prerecession peak in mid-2018, or almost 130 months past the prerecession peak in jobs. There is some evidence to suggest that Hampton Roads has added a higher percentage of nontraditional establishments (or "gig" economy jobs) than the U.S. or Virginia and this may account for the behavior of the jobs and employment data. We may also be seeing the conversion of some part-time to full-time jobs.

How can we reconcile the relatively poor job creation in Hampton Roads with declines in the unemployment rate? One explanation is contained in the labor force participation rate, which measures the percentage of the population that is either actively employed or seeking employment. The long-term decline of participation rates, coupled with the shock of the Great Recession, is a signal that many people either have dropped out of the labor force, or never entered it in the first place. Thus, puny job creation can be accompanied by declining unemployment rates because increasing numbers of people have decided not to seek work.

One reason why labor force participation rates have fallen is known as the "discouraged worker effect." It reflects individuals who: (a) have given up seeking work because there are no job openings, or (b) are not qualified to fill the jobs that do exist, or (c) would like to work but can only find part-time jobs, or (d) have qualified for disability and thus have exited the labor force. It also reflects individuals who have qualified for disability and thus have exited the labor force. Data on labor force participation for those 16 to 64, the prime working ages, show that participation has declined this decade in Virginia and

2 This occurs because the jobs data would count each of the jobs separately, while the employment data would only count the same individual once.

the major cities in Hampton Roads (Graph 9). "Nonparticipation" here refers to people who are neither employed nor looking for a job.

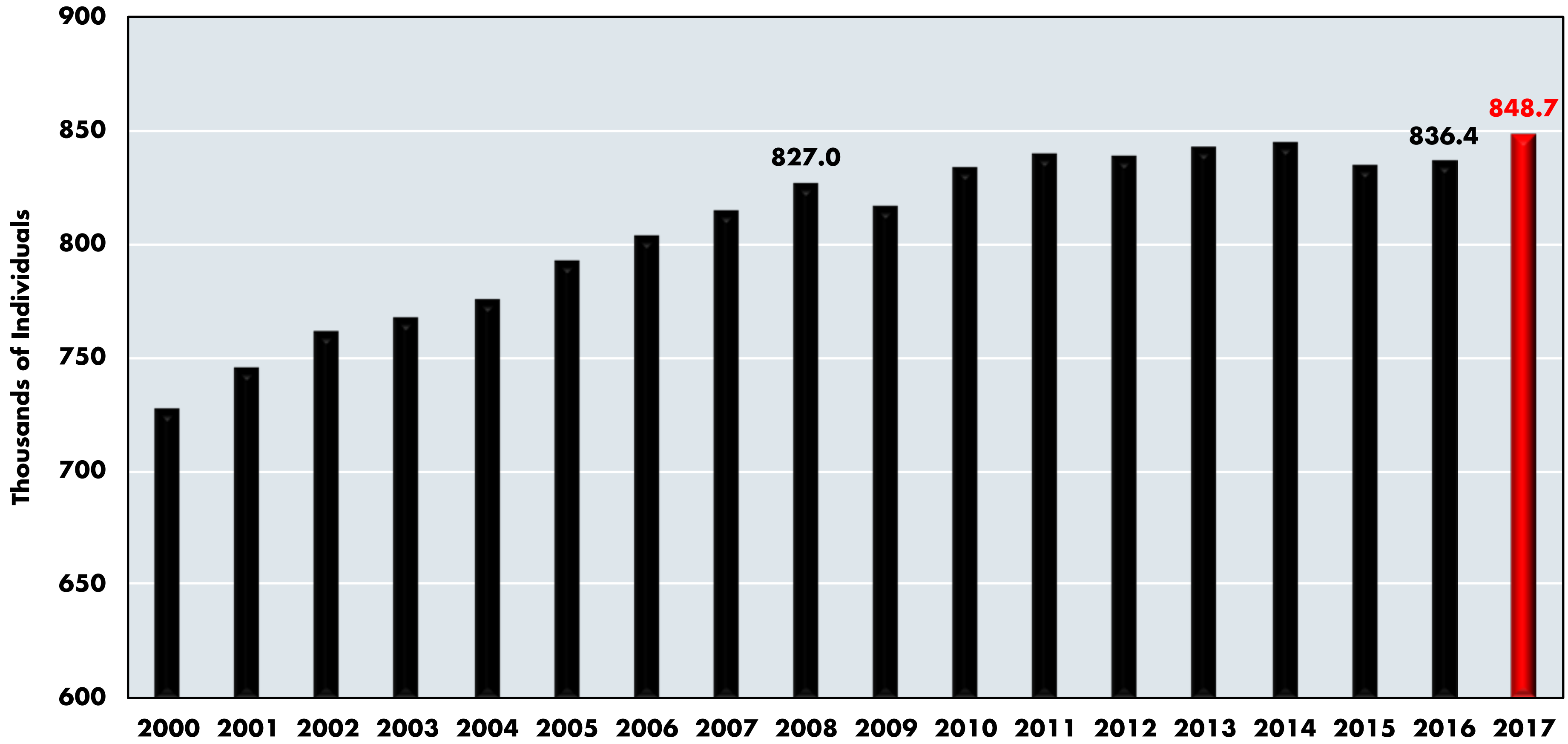
In Chesapeake, for example, between 2010 and 2016, labor force participation dipped from 70.3 percent to 66.3 percent, which translates to more than 5,700 people in that city.

Moving these discouraged individuals back into the labor force is vital to continuing the economic expansion. Society must, as we have noted in previous reports, devote resources to support people of working age who are not in the labor force. Whether these resources are in the form of a social safety net, public safety and health services or familial expenditures, we as a society bear major costs when a significant portion of our working-age population chooses not to work or is unable to do so. While there is recent evidence at the national level that some discouraged workers have been pulled back into the labor force by increasing wages and job opportunities, there remains a large segment of the working-age population that is outside the workforce. **The challenge is to create the incentives and programs to help these people transition back to gainful employment.**

Our point is simple: One cannot simply rely on one data series to draw conclusions about the labor market in Hampton Roads. The overall story is indeed positive, as both the number of people employed and the total number of jobs are improving and are expected to continue improving through 2018. Our regional economy's labor market recovery has been slow, fitful and frustrating at times, but it finally appears to be moving forward.

GRAPH 5

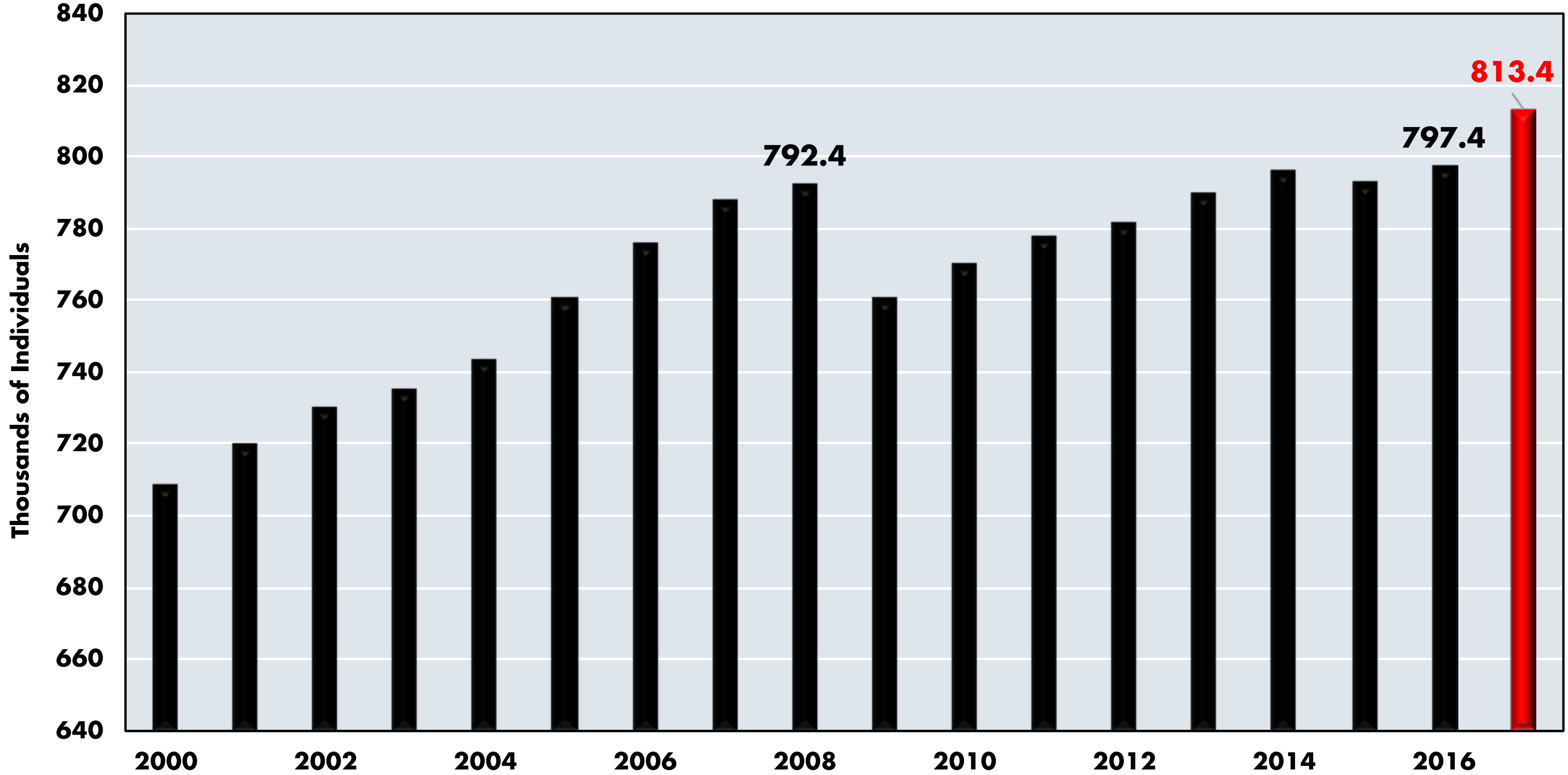
AVERAGE ANNUAL CIVILIAN LABOR FORCE: HAMPTON ROADS, 2000-2017



Sources: U.S. Department of Labor LAUS data and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Annual averages based on non-seasonally adjusted data. Data revised on April 20, 2018.

GRAPH 6

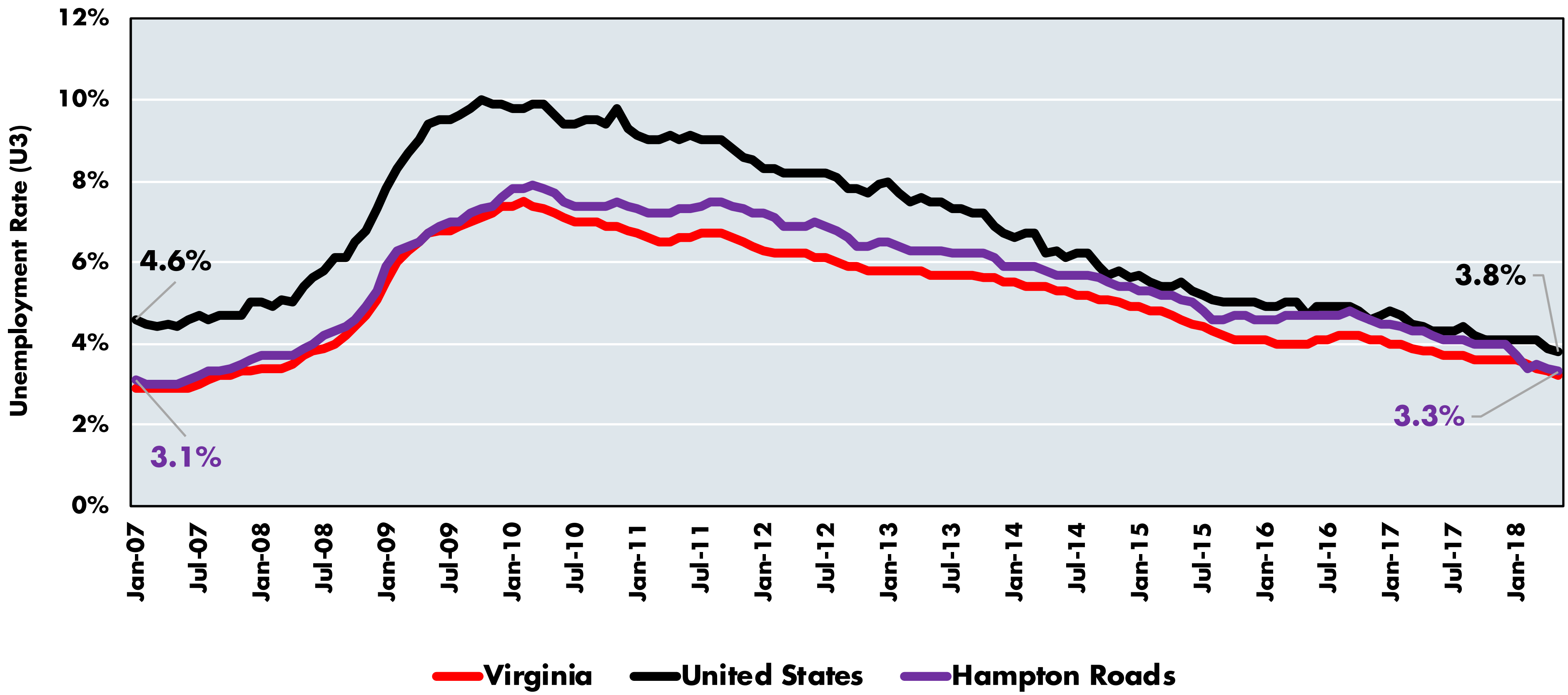
AVERAGE ANNUAL EMPLOYMENT: HAMPTON ROADS, 2000-2017



Sources: U.S. Department of Labor LAUS data and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Annual averages based on non-seasonally adjusted data. Data revised on April 20, 2018.

GRAPH 7

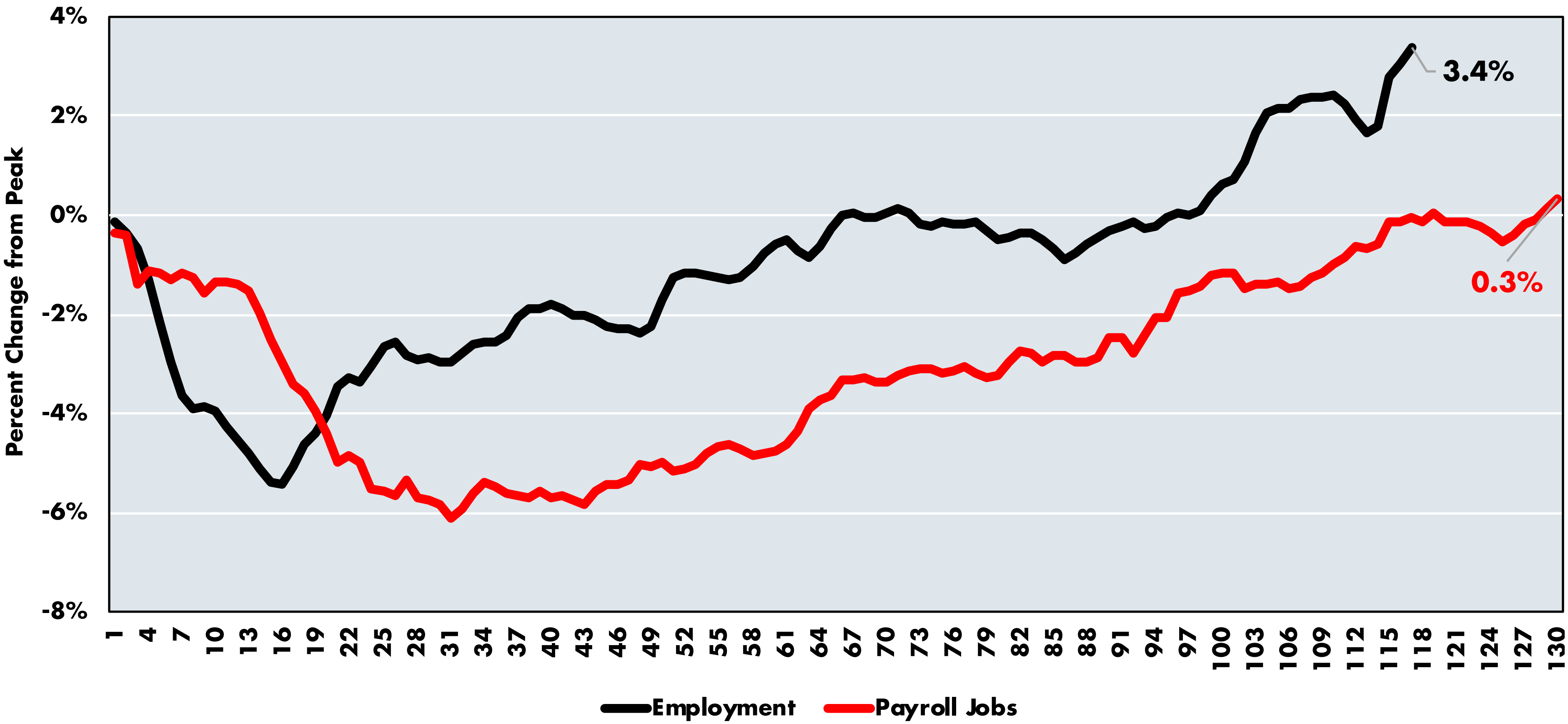
UNEMPLOYMENT RATE (U3): UNITED STATES, VIRGINIA AND HAMPTON ROADS, 2007–2018



Sources: Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Seasonally adjusted unemployment rates. Virginia, Hampton Roads and U.S. data through May 2018. Next update: U.S.: July 6, 2018; Virginia: July 20, 2018; Hampton Roads: Aug. 1, 2018.

GRAPH 8

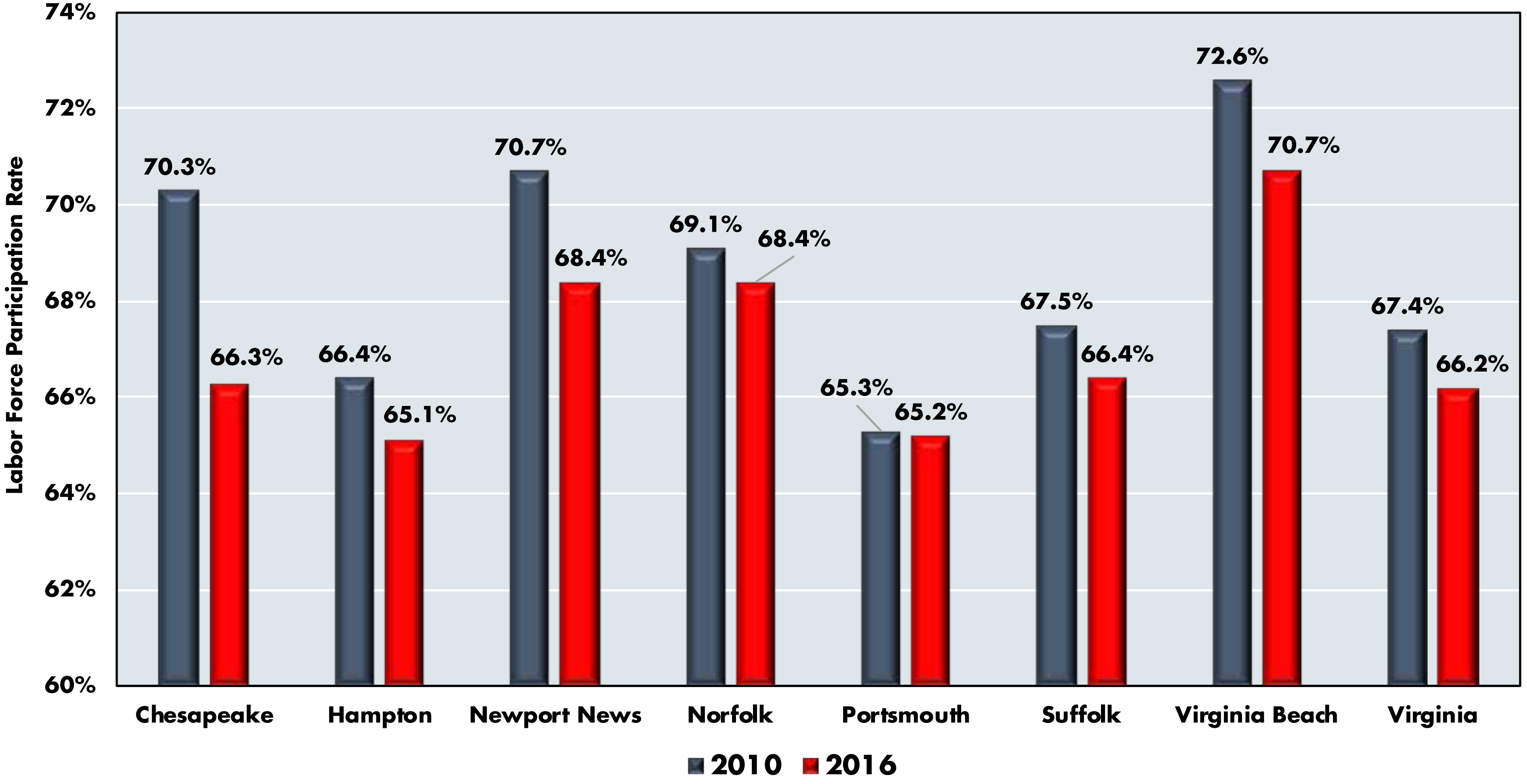
RECOVERY FROM THE GREAT RECESSION: MEASURED IN JOBS AND EMPLOYMENT RESTORED IN HAMPTON ROADS, 2007-2018*



Sources: Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Peak prerecession dates are July 2007 for payroll jobs and July 2008 for employment. Data are through May 2018. Hampton Roads data are preliminary for May 2018. Seasonally adjusted data.

GRAPH 9

LABOR FORCE PARTICIPATION RATES: AGES 16-64 FOR THE LARGEST CITIES IN HAMPTON ROADS, 2010 AND 2016



Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Defense Spending In Hampton Roads

Defense spending in Hampton Roads has been compared metaphorically to a huge economic gorilla, impossible to ignore. Defense spending is the fuel for our economic engine, and the bedrock upon which the regional economy is built. Hampton Roads is home to more than 80,000 military personnel as well as a significant portion of the nation's shipbuilding and ship maintenance industrial base. Our recent economic woes can be attributed, in part, to the stagnation of defense spending.

Between 2000 and 2012, Department of Defense (DOD) spending almost doubled in Hampton Roads, rising at an annual rate of 5.8 percent (Graph 10). These rapid increases in defense spending dissipated with the onset of sequestration in 2013. From 2013 to 2016, defense spending in our region remained around $19 billion. **In 2017, direct defense spending approached $20 billion and we forecast that it will be $21.5 billion in 2018, subject to how much of the increased spending is for multiyear procurement contracts (ships, for example) and how much is for operations and maintenance.**

How important is defense spending in Hampton Roads? Graph 11 shows that it accounted for 46.1 percent of overall economic activity in 2011 and declined in importance through 2017. The recent boost in defense spending, however, will likely increase the share of defense spending in 2018 and into 2019. Our economic fortunes remain closely linked to those of the DOD.

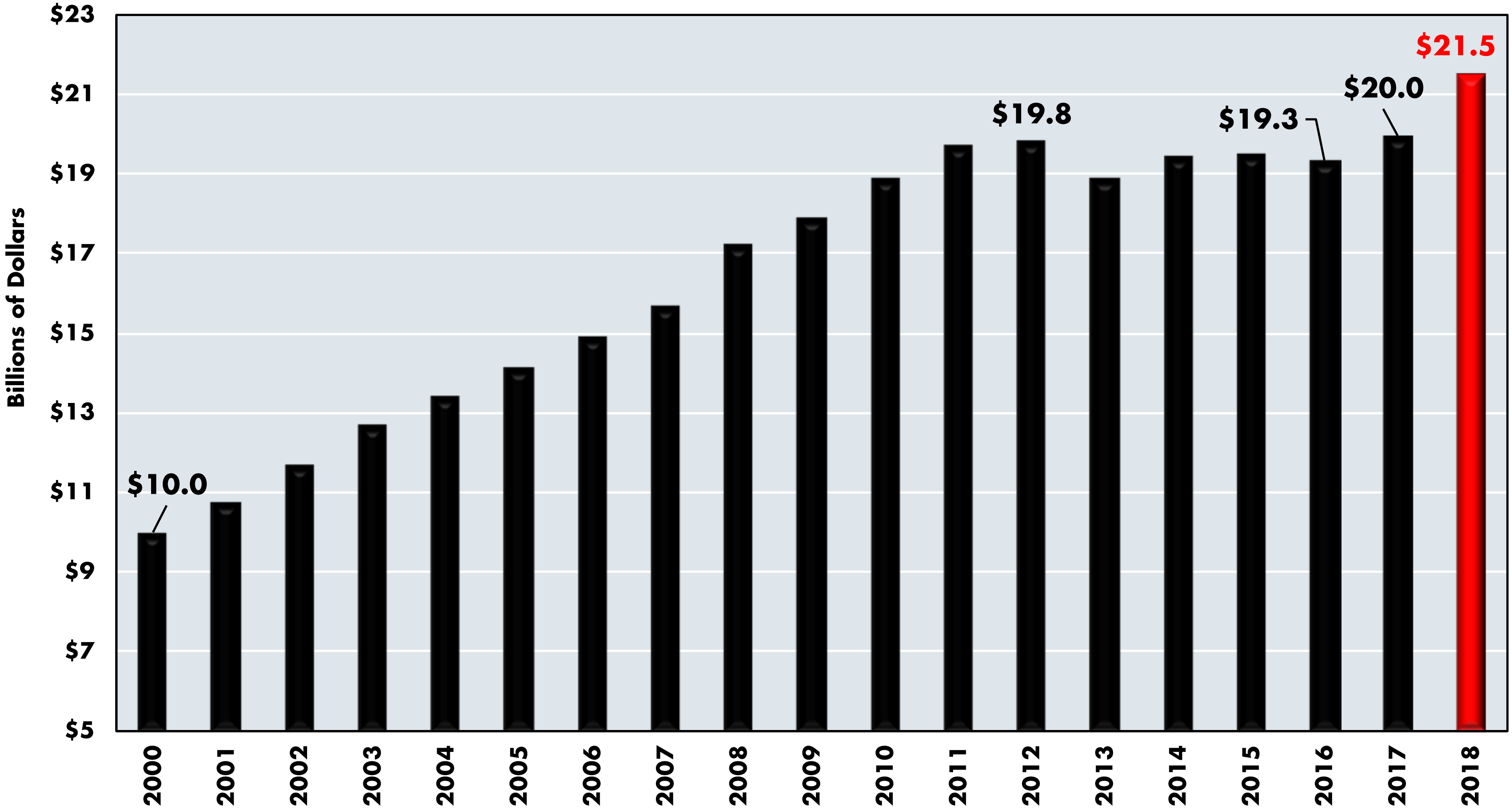
Defense spending in Hampton Roads is not just for ships and airplanes, but also people. While ships and aircraft are impressive, much of the impact of the defense sector in our region results from the activities of the people who are stationed here or work for the federal government. Expenditures on the people who build and maintain ships and aircraft and payments to military and civilian personnel provide thrust for our regional economic engine.

Graph 12 illustrates the changing levels and composition of military and federal civilian employment in Hampton Roads from 2001 to 2016. The number of military personnel peaked in 2003 at 113,369 and fell to 84,089 in 2016, a decline of 25.8 percent.[3] This decline was partially offset by an increase in the number of federal civilian personnel. In 2003, 46,414 federal civilians worked in Hampton Roads; by 2016, the number was 57,619, a rise of 24.1 percent.

3 The BEA defines the military group to include full-time personnel of the armed services plus the number of military reserve unit members that meet regularly for training. The number of military reserve members includes members of the Reserves and the National Guard.

GRAPH 10

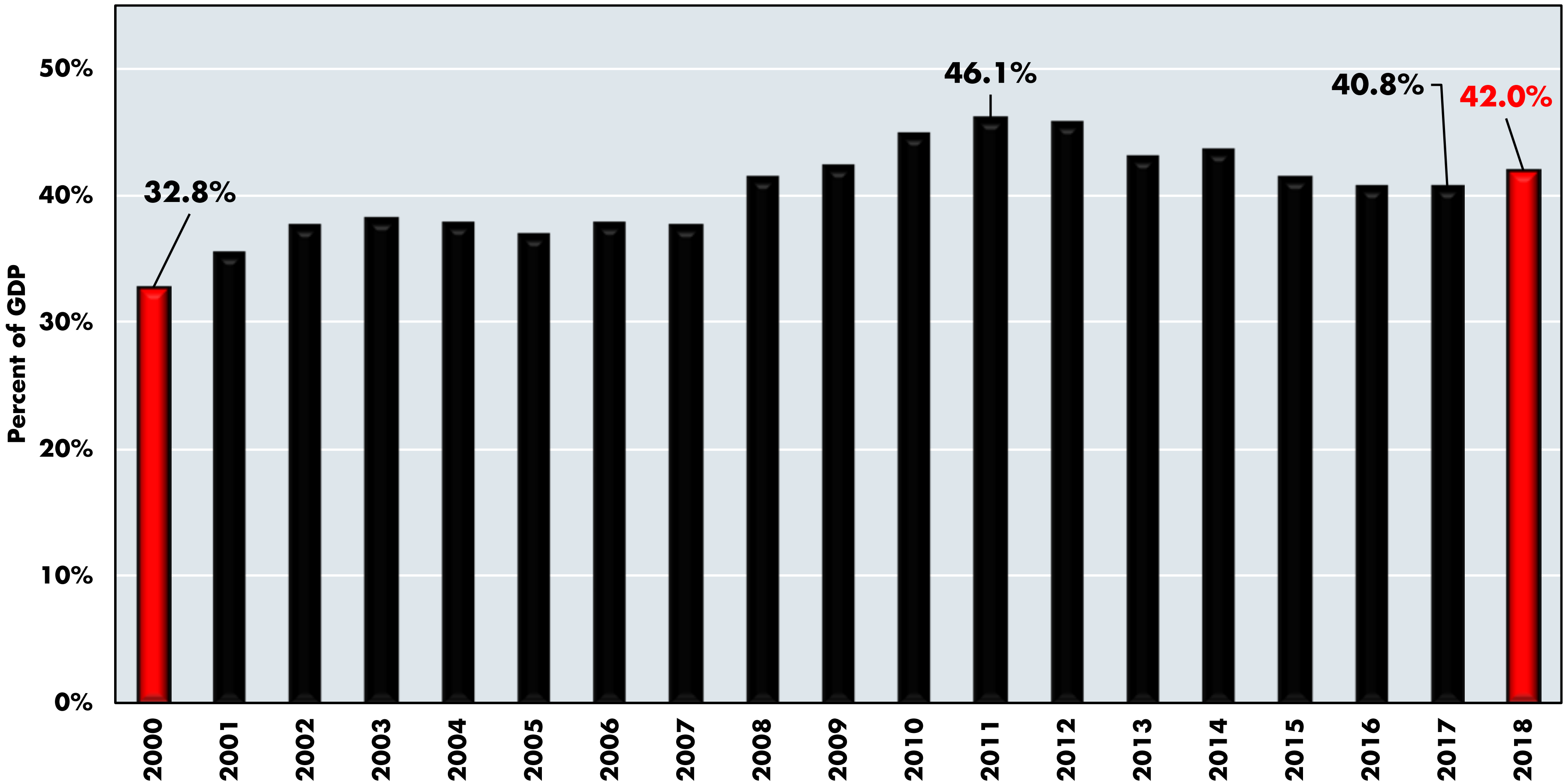
ESTIMATED DIRECT DEPARTMENT OF DEFENSE SPENDING IN HAMPTON ROADS, 2000-2018



Sources: U.S. 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 2017 are estimates, while 2018 is our forecast.

GRAPH 11

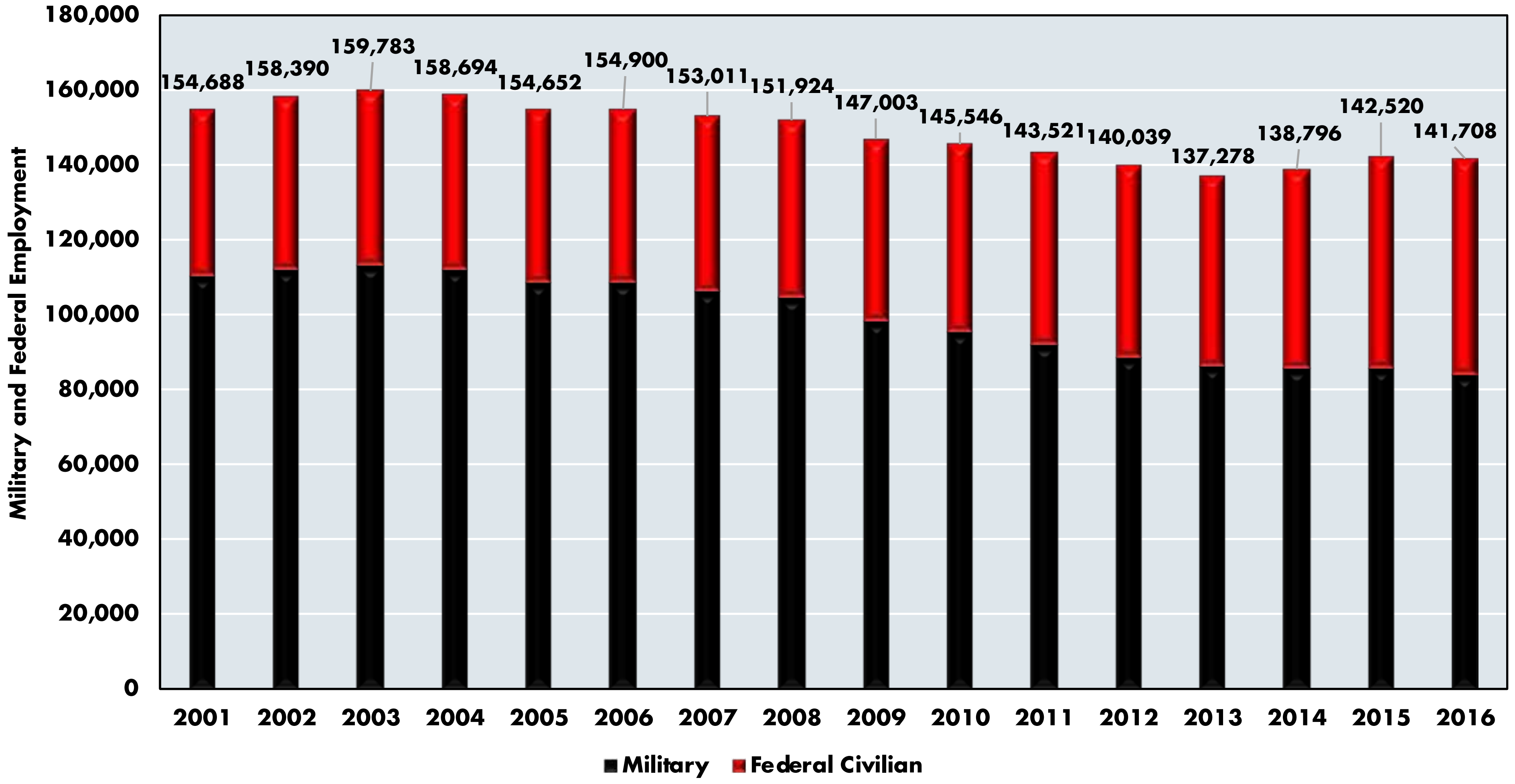
PERCENTAGE OF GROSS DOMESTIC PRODUCT ATTRIBUTABLE TO DOD SPENDING: HAMPTON ROADS, 2000-2018



Sources: U.S. Department of Defense, U.S. Department of Commerce and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data for 2016 and 2017 are estimates and data for 2018 are forecasts.

GRAPH 12

MILITARY AND FEDERAL CIVILIAN EMPLOYMENT IN HAMPTON ROADS, 2001-2016



Sources: Bureau of Economic Analysis, Total Full-Time and Part-Time Employment by NAICS Industry, and the Dragas Center for Economic Analysis and Policy, Old Dominion University

Part of our economic doldrums after the Great Recession can be attributed to the decline in military personnel. The gap between private-sector compensation and the compensation of military and federal civilian employees has only grown over time.[4]

In 2001, military compensation was 1.6 times higher than private-sector compensation. Relatively stagnant wages in the private sector over the last decade and repeated boosts to military pay have increased military compensation relative to the private sector. By 2016, the average compensation of a military service member was 2.2 times that of the average compensation of someone working in the private sector (Graph 13).

While federal civilian compensation has not grown as quickly as military compensation, it is higher today than in previous years. In 2001, federal civilian compensation was 2.2 times higher than private-sector compensation. By 2016, the average compensation of a federal civilian employee was 2.6 times greater than the average private-sector compensation.

Table 2 illustrates this gap for 2015 and 2016. Average military compensation for 2016 was $92,189, while average federal civilian compensation was $109,624. State and local employee compensation in 2016 was lower, at $64,164. Each of these sectors saw positive compensation growth from 2015 to 2016. Private-sector compensation, which was $41,751 in 2016, declined by 1 percent from 2015. **One way to think about this is that for each military service member lost, the private sector must generate 2.2 jobs to make up for the lost military compensation.**

TABLE 2

ESTIMATED AVERAGE COMPENSATION BY SELECTED INDUSTRY: HAMPTON ROADS, 2015-2016

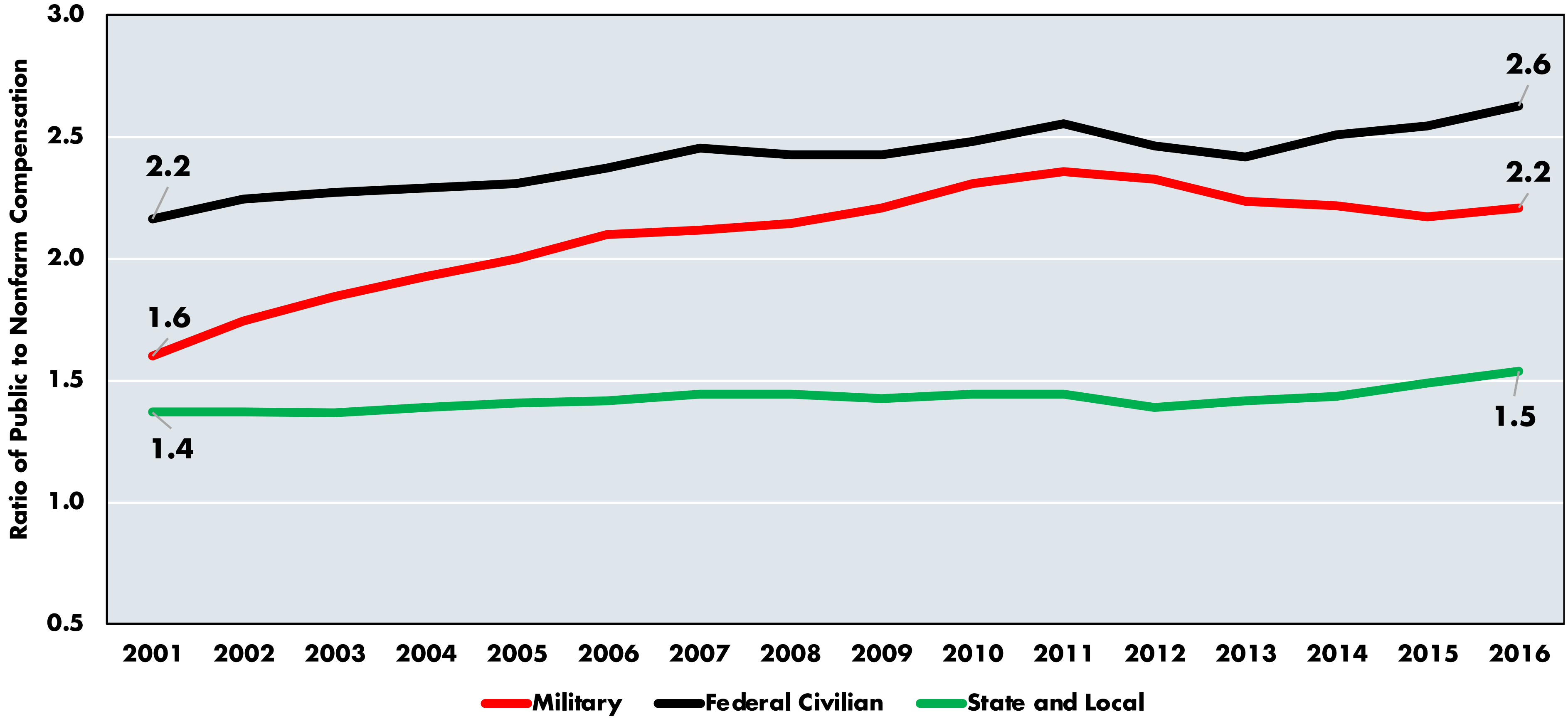
Industry	2015	2016	2015-2016 Percentage Change
Military	$91,561	$92,189	+0.7%
Federal Civilian	$107,322	$109,624	+2.2%
State and Local Government	$62,602	$64,164	+2.5%
Private Nonfarm	$42,189	$41,751	-1.0%

Sources: Bureau of Economic Analysis, Compensation of Employees by NAICS Industry, and the Dragas Center for Economic Analysis and Policy, Old Dominion University

4 Compensation is equal to salaries and wages plus the value of fringe benefits.

GRAPH 13

RATIO OF PUBLIC-SECTOR COMPENSATION TO NONFARM PRIVATE COMPENSATION: HAMPTON ROADS, 2001-2016



Sources: Bureau of Economic Analysis, Compensation of Employees and Total Full-Time and Part-Time Employment by NAICS Industry, and the Dragas Center for Economic Analysis and Policy, Old Dominion University

Defense Spending: Good News For Two Years

To understand how we ended up where we are, we must first understand where we started. In the fiscal year 2011 presidential budget, the five-year budget estimate was for base DOD spending to eclipse $600 billion by FY 2016 (Graph 14).[5] The passage of the Budget Control Act (BCA) of 2011 dashed these expectations. The BCA spending caps not only led to the sequestration of funding in FY 2013, but also limited spending growth in subsequent years. Even though Congress modified the caps on occasion, the modifications only provided temporary relief. The estimated DOD BCA cap of $525 billion for FY 2018 meant that over $400 billion in expected spending did not materialize from FY 2013 to FY 2017. At the same time, the continuing high operational tempo of the armed forces placed increasing pressure on personnel and equipment.

Early in 2018, it seemed that there might be a modest increase in the spending caps. The 2018 Continuing Resolution set annualized spending above the BCA caps, but well below President Trump's FY 2018 budget request. Congress, as it has done on previous occasions, deferred discussions of the debt ceiling and increased the BCA caps with another budget agreement, the Bipartisan Budget Agreement of 2018 (BBA 2018). BBA 2018 raised the spending caps by $296 billion over two years, with the national defense caps rising by $165 billion and the nondefense caps by $131 billion. The national defense spending caps increased by $80 billion in FY 18 and $85 billion in FY 19, not a trivial sum.

Approximately 4 percent of national defense spending occurs in Hampton Roads, though this average fluctuates depending on whether the spending is appropriated on an annual basis (operations and personnel) or multiyear basis (shipbuilding and complex ship maintenance). A reasonable assumption is that about $3 billion of the increase in national defense spending in FY 2018 will occur **over time** in Hampton Roads. A good portion of spending will be on shipbuilding, in line with the Navy's FY 2019 shipbuilding plan. Increased spending on ship maintenance is also likely as Navy leadership is developing a multiyear ship maintenance plan to complement the shipbuilding effort.

5 The "base budget," or "base spending," does not include Overseas Contingency Operations funding.

Furthermore, Congress is expected to allow the Navy to proceed with a two-carrier buy, expand DDG 51 (Arleigh Burke class destroyer) construction and fund the continued development of the Columbia class submarine in the FY 2019 appropriations bill.

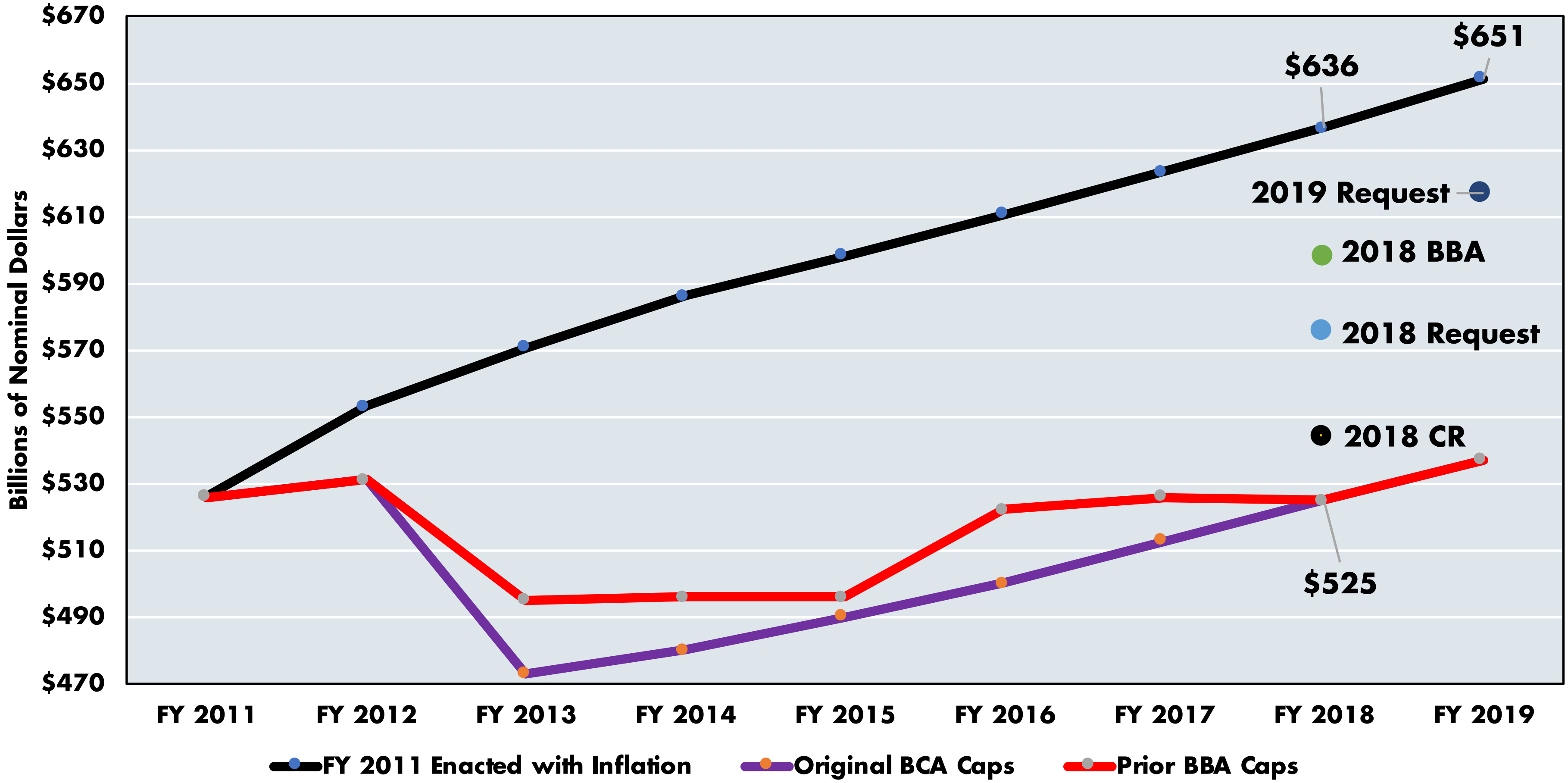
It also appears that Congress will complete work on a defense appropriations bill prior to the start of the new fiscal year. This would be significant progress, as many previous years have started under a Continuing Resolution. Not only would passage of a defense appropriations bill reduce uncertainty, it also would smooth DOD expenditures over the fiscal year and bring greater benefits to our region.

If we take a slightly longer view, then it seems likely that rapid increases in defense expenditures will moderate in the 2020s (Graph 15). The DOD base budget is projected to increase to $681 billion in FY 2020 and then grow roughly at the rate of inflation through FY 2023. This good news, however, must be tempered with the realization that, in the last year, policy actions have expanded the projected federal deficit by $2 trillion to $3 trillion through 2028. BBA 2018 added $300 billion in unfunded spending, while emergency response appropriations added about another $100 billion. The Tax Cuts and Jobs Act of 2017 added between $1.5 trillion and $2.5 trillion to the 10-year deficit and could add even more if certain tax-expensing provisions are made permanent. The annual federal operating deficit may eclipse $1 trillion by FY 2019 and, unless there are significant changes in law, will exceed $1 trillion annually in the 2020s (Graph 16).

As the deficit and debt grow, interest costs on the federal debt increase accordingly. In FY 2018, interest expenditures on the debt are forecast to be $316 billion, climbing to $992 billion in FY 2028 (Graph 17). Without concrete action by Congress and the president to address this fiscal imbalance, the federal government will spend more servicing our national debt than supporting national security by 2025. The optimism for the next two years is due in large measure to the lack of fiscal restraint by lawmakers in Washington.

GRAPH 14

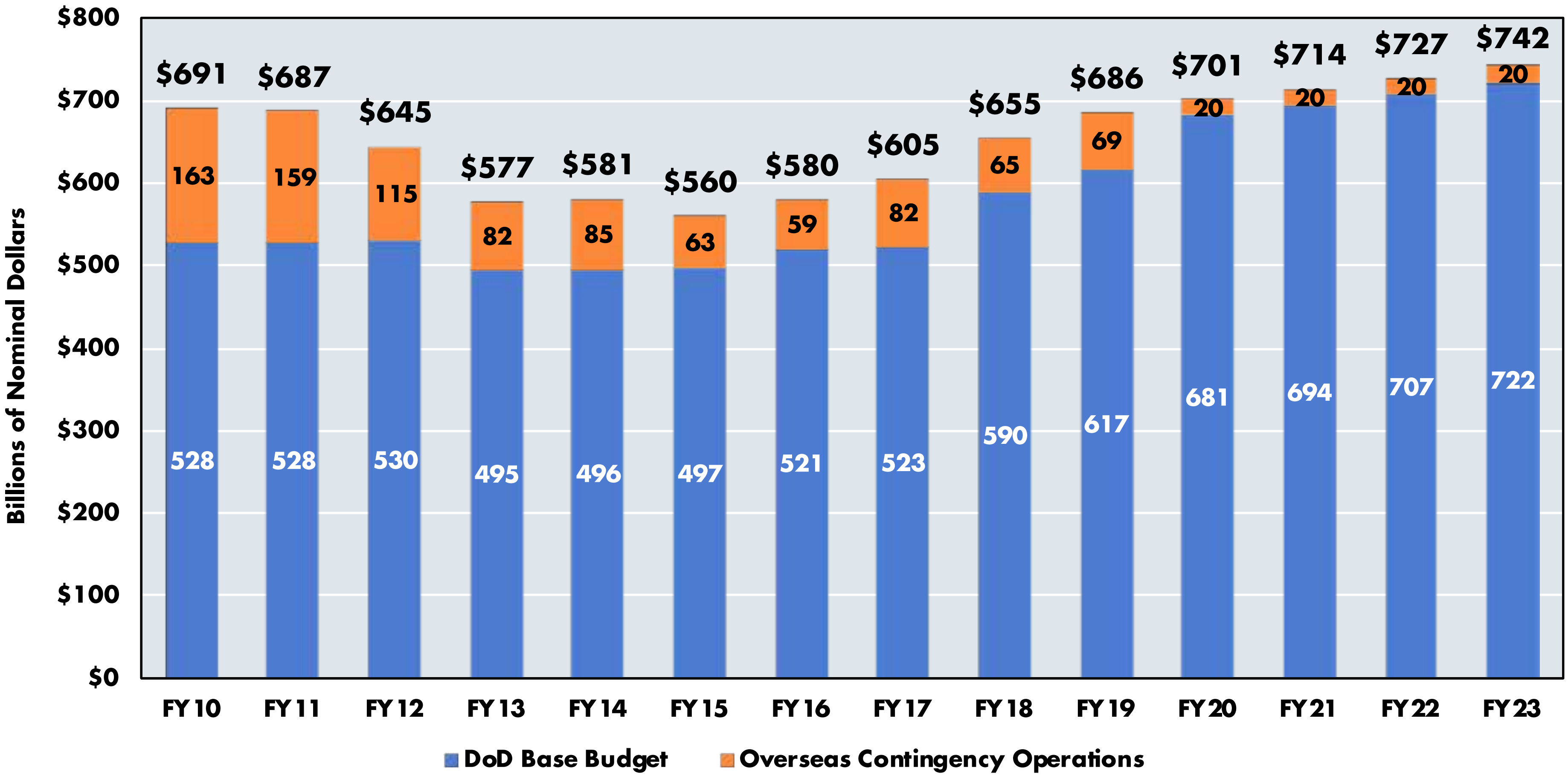
DEPARTMENT OF DEFENSE BASE BUDGET, FY 2011 – FY 2019



Sources: BCA2011, Budget Requests for FY 18 and FY 19, CBO Sequestration Update Report, Various Years, and the Dragas Center for Economic Analysis and Policy, Old Dominion University. FY 2011 Actual and FY 2012 Proposed Budget and FYDP. FY 18 and FY 19 are inflated from the FY 12 FYDP estimate of FY 17.

GRAPH 15

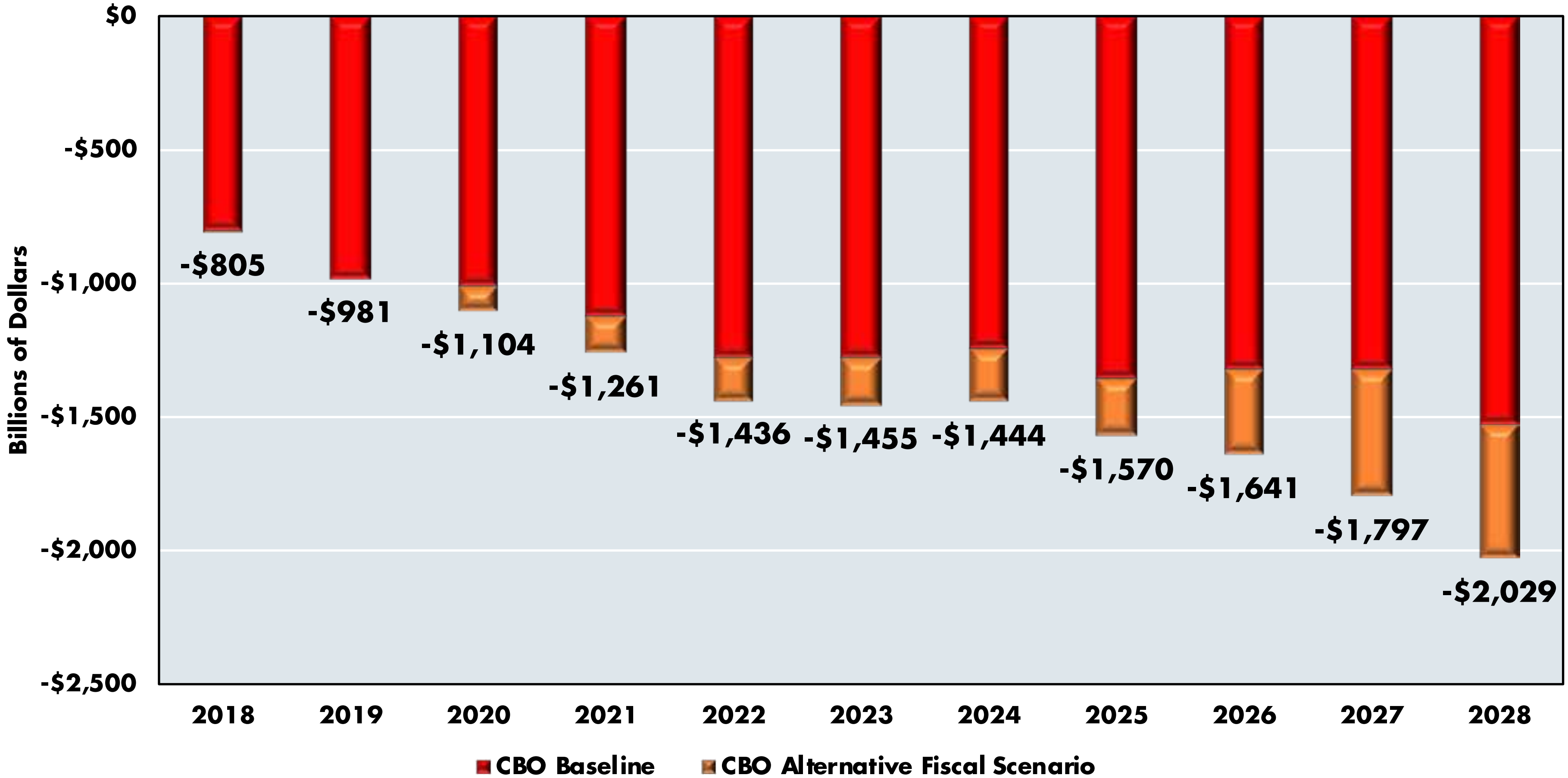
DEPARTMENT OF DEFENSE DISCRETIONARY BUDGET AUTHORITY, FY 2010 – FY 2023



Sources: U.S. Department of Defense and the Dragas Center for Economic Analysis and Policy, Old Dominion University. FY 2019 Budget Materials. FY 18 base budget includes $5 billion in missile defense authority. Nominal dollars.

GRAPH 16

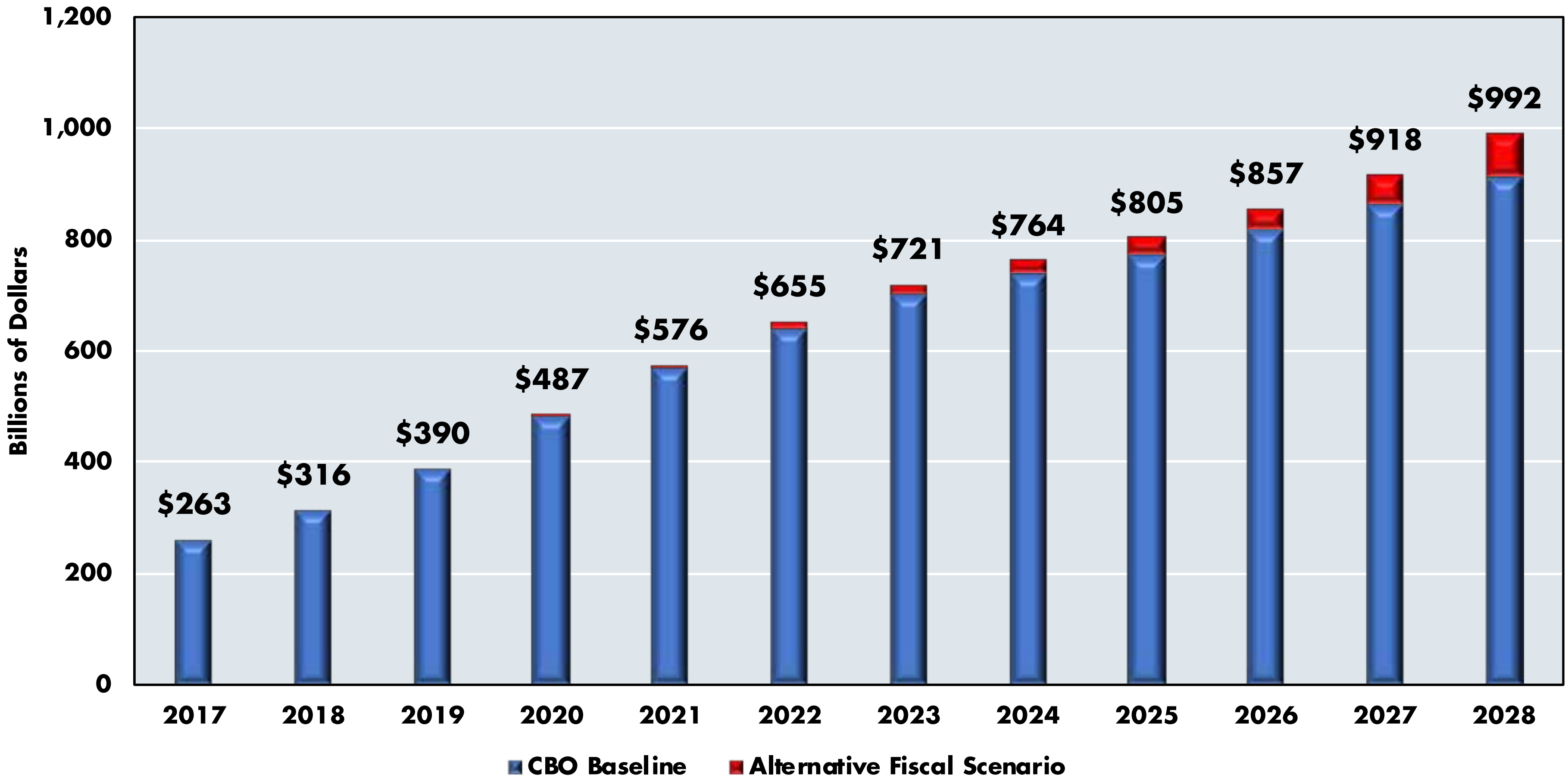
CONGRESSIONAL BUDGET OFFICE: PROJECTED FEDERAL DEFICIT, FY 2018 – FY 2028



Sources: Congressional Budget Office (2018), Budget and Economic Output: 2018 to 2028 and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Federal deficits in nominal dollars. The Alternative Fiscal Scenario assumes that many of the provisions of the Tax Cuts and Jobs Act of 2017 would be made permanent and many of the Affordable Care Act taxes are repealed, among others.

GRAPH 17

PROJECTED NET INTEREST: UNITED STATES, FY 2017 – FY 2028



Sources: Congressional Budget Office (2018), Budget and Economic Output: 2018 to 2028 and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Interest expenditures in nominal dollars. The Alternative Fiscal Scenario assumes that many of the provisions of the Tax Cuts and Jobs Act of 2017 would be made permanent and many of the Affordable Care Act taxes are repealed, among others.

The Port

The Port of Virginia is another key component in the region's economy. Through wise investments and management, the Port has experienced gratifying growth in cargo traffic. Depending on who is doing the counting, the direct and indirect impact of the Port may account for up to 10 percent of regional economic activity.

While the Great Recession resulted in an immediate decline in cargo tonnage, from 17.8 million tons in 2008 to 14.9 million tons in 2009, cargo levels started to grow again in 2010 (Graph 18). By 2013, cargo tonnage had risen to 18.8 million tons and continued to rise to 22 million tons at the end of 2017. A similar pattern emerges with 20-foot equivalent container units (TEUs). After peaking at 2.13 million TEUs in 2007, volume declined to 1.75 million TEUs by 2009 (Graph 19). By 2013, TEU traffic exceeded the prerecession peak and 2.84 million TEUs were shipped through the Port in 2017. From 2016 to 2017, general cargo tonnage and TEUs grew 5.3 percent and 7 percent, respectively. While the Port is approaching capacity, continuing investments should accommodate the projected increases in cargo traffic in the coming years.

Competition among ports on the East Coast remains strong (Graph 20). New York-New Jersey accounted for 34.5 percent of loaded TEUs in 2017. Savannah, which has taken some market share from New York-New Jersey, had 23.3 percent of loaded TEUs, while the Port of Virginia had 16.4 percent of loaded TEUs in 2017. Charleston accounted for 12.6 percent of the loaded TEU traffic. Competition among the ports will continue. The New York-New Jersey Port Authority, for example, recently completed a multibillion-dollar project to lift the Bayonne Bridge 215 feet to accommodate larger cargo ships.[6]

The inclusion of $350 million in the 2019 Virginia budget to start the process of dredging the shipping lanes to a depth of 55 feet was accompanied by another important initiative, the widening of the channel up to 1,400 feet. These efforts are necessary, as the Coast Guard currently must shut down the shipping lanes when ultra-wide cargo ships arrive and depart the Port. Savannah and Charleston are also exploring dredging to accommodate larger cargo ships.

Global trends in shipping continue to accelerate and will affect the Port of Virginia in the future. The average size of container ships continues to increase, and the average number of TEUs handled per container vessel call rose from 1,514 in 2016 to 1,798 in 2017 (Graph 21). **Since 2011, the average number of TEUs handled per container vessel call has increased by 55 percent. Wise investments in capacity and transport infrastructure are necessary to support the continued growth of the Port and our regional economy.**

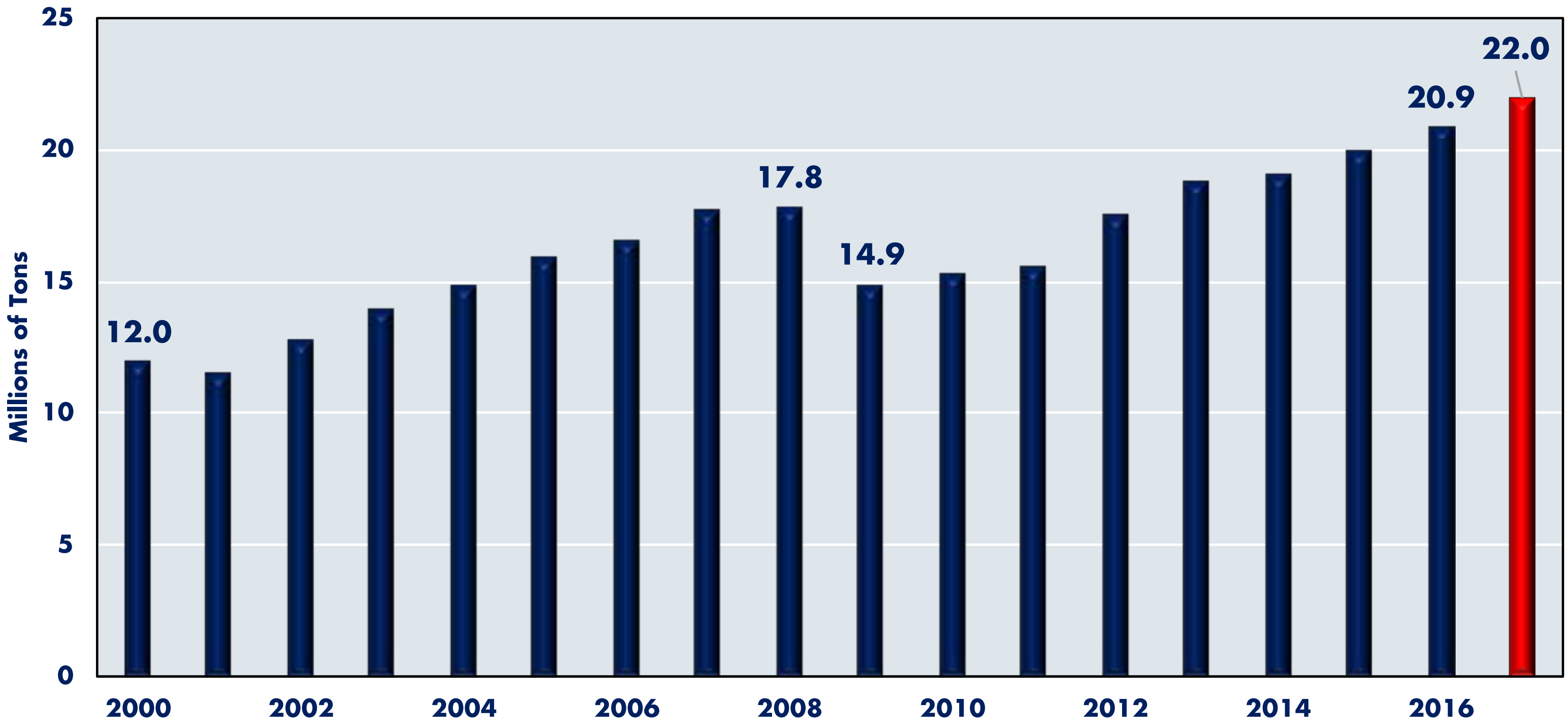
An emerging uncertainty is whether international trade tensions will negatively affect the Port. If the imposition of tariffs is a short-term negotiating strategy to force parties to the table, then it is likely that the trade tensions will not cause long-term harm to the operations of the Port. On the other hand, if the current momentum of tariffs and counter-tariffs continues, then a global trade war is possible. For the Port of Virginia, China is the No. 1 country of origin and destination. A prolonged trade conflict would reduce exports to China and other countries, though there may be some displacement. For example, soybean exports from the U.S. that were previously bound for China could be bought by a third country and re-exported to China to avoid the tariff regime. The longer and deeper a trade dispute, the higher the likelihood it would negatively impact the operations of the Port and the regional economy.

It is one thing for the United States to use its economic heft to renegotiate trade deals and tariffs with a single country, such as Canada, Mexico or China, or even a collection of countries, such as the European Union. It is quite another thing to take on all these countries at once. Even Voltaire's notoriously optimistic Dr. Pangloss would find it difficult to find sunshine amongst these international economic clouds.

6 https://www.joc.com/port-news/us-ports/port-new-york-and-new-jersey/ny-nj-handles-mega-ships-post-bayonne-bridge-lift-stride_20180618.html

GRAPH 18

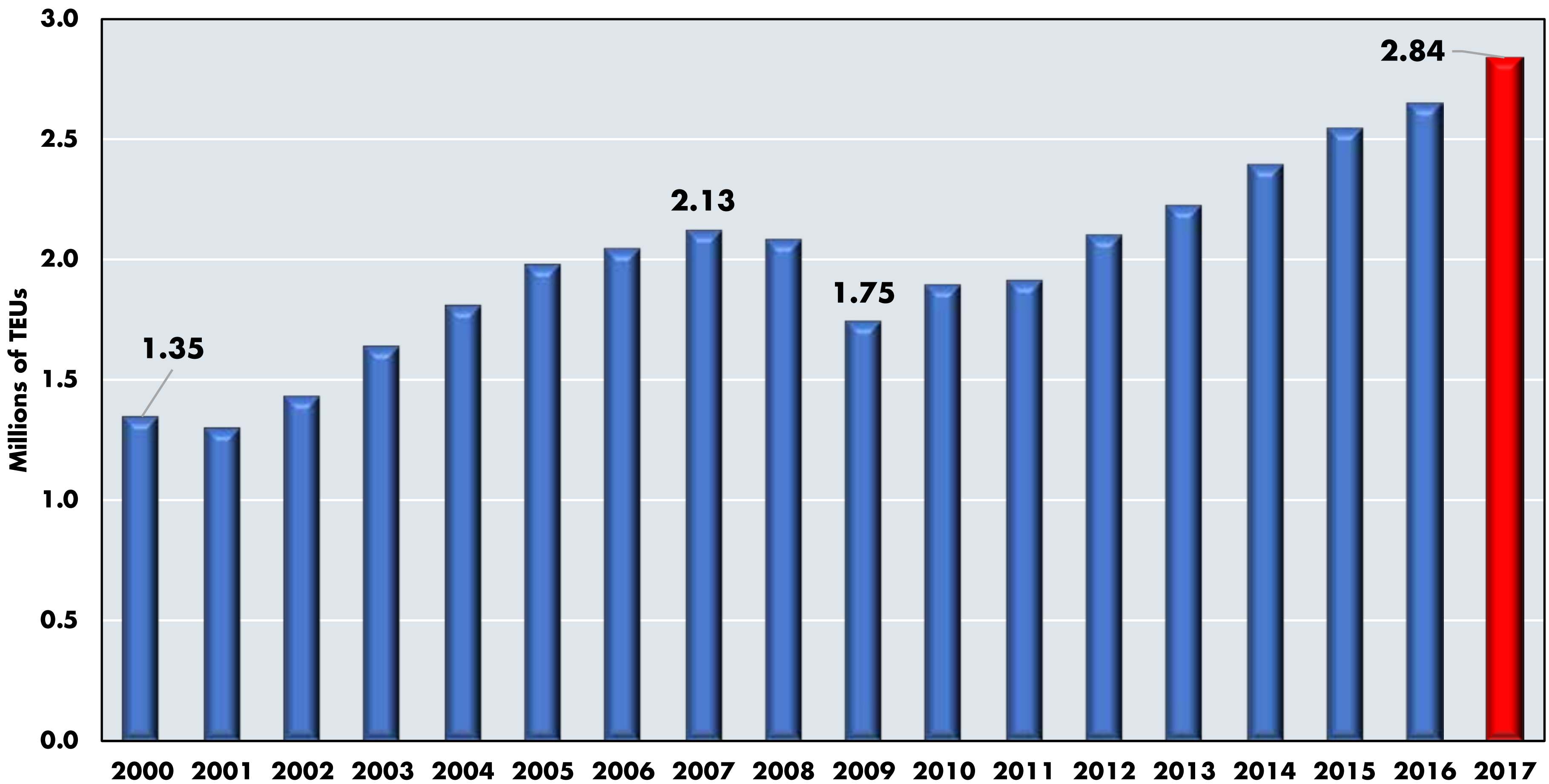
GENERAL CARGO TONNAGE: PORT OF VIRGINIA, 2000-2017



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

GRAPH 19

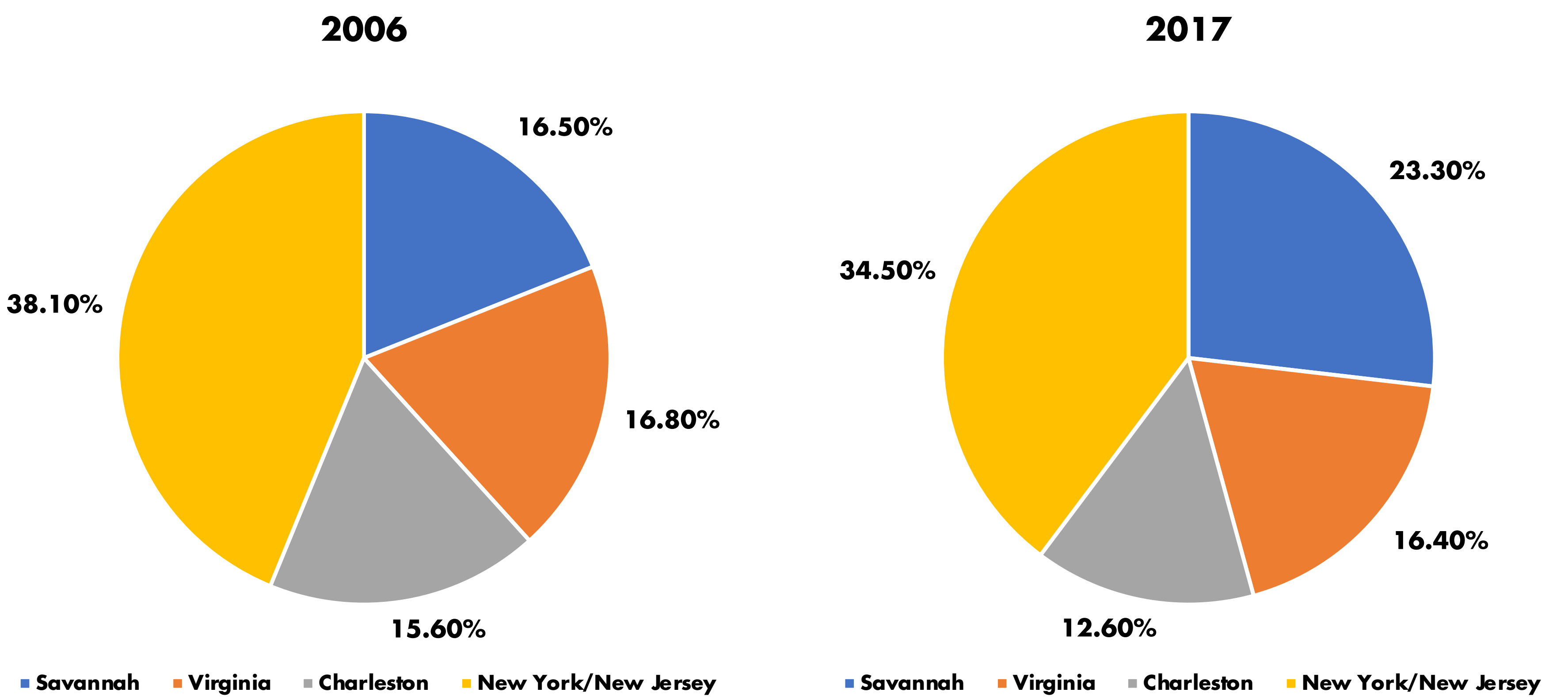
TWENTY-FOOT EQUIVALENT CONTAINER UNITS (TEUS): PORT OF VIRGINIA, 2000-2017



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

GRAPH 20

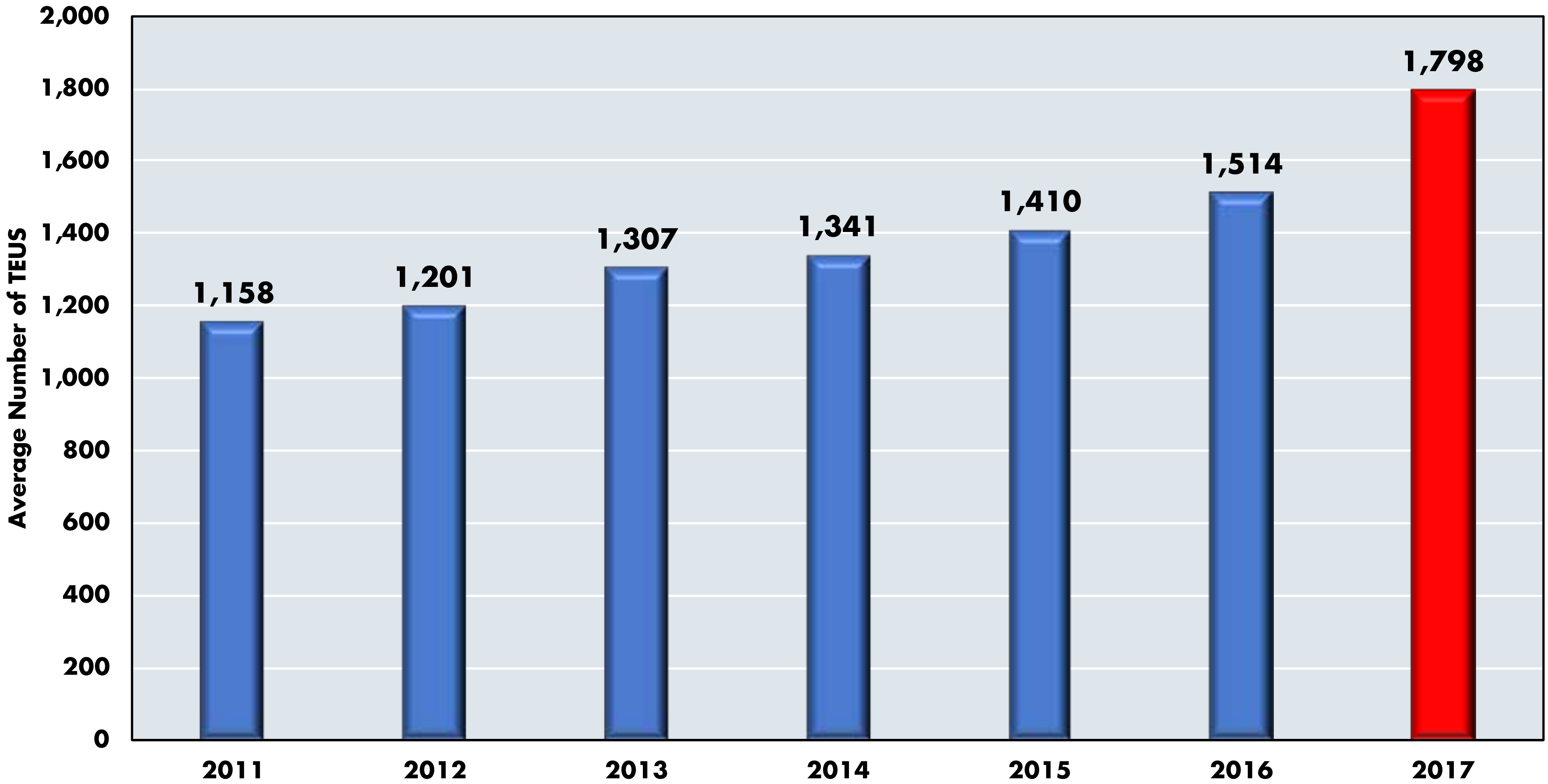
SHARES OF TOTAL LOADED TEU CONTAINERS FOR SELECTED PORTS ON THE EAST COAST, 2006 AND 2017



Sources: American Association of Port Authorities and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Market shares exclude TEUs for Philadelphia, Miami, Palm Beach and Port Everglades.

GRAPH 21

AVERAGE TEUS PER CONTAINER VESSEL CALL: PORT OF VIRGINIA, 2011-2017



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

Continued Recovery In Single-Family Housing

The single-family residential housing market in Hampton Roads continues to recover from the twin impacts of the Great Recession and the stagnation of defense spending. Sales, median prices, inventories and time on market have all trended in the right direction for sellers, though at a slower pace than observed in many other metropolitan markets. We expect the market to continue to improve through 2018 in concert with increased defense spending and other positive developments in our regional economy.

From 2002 to 2007, the median sales price of existing residential homes increased by 91 percent, but then declined 19 percent from 2007 to 2011 (Table 3). **Since the trough of the housing market in 2011, median sales prices have increased by almost 22 percent, but remained 2 percent below the previous peak of $223,000.** With the improving economy in 2018, it is likely that the median sales price of existing residential housing will finally exceed the historical peak.

Another sign of the improving health of the residential housing market is the increase in the number of homes sold and the decline in the average days on market (Graph 22). Almost 9,000 more existing homes were sold in 2017 compared to the bottom of the market in 2010. The average number of days on market also declined from a high of 102 in 2011 to 71 in 2017. While the number of sales is approaching the historical high, we remain far away from the historical low of 27 days on market in 2004.

TABLE 3

MEDIAN SALES PRICE OF EXISTING RESIDENTIAL HOMES: HAMPTON ROADS, 2002-2017

Year	Median Price	Percent Change Year to Year
2002	$116,900	7.3%
2003	$130,000	11.2%
2004	$156,500	20.4%
2005	$192,000	22.7%
2006	$214,900	11.9%
2007	$223,000	3.8%
2008	$219,000	-1.8%
2009	$207,000	-5.5%
2010	$203,900	-1.5%
2011	$180,000	-11.7%
2012	$185,000	+2.8%
2013	$190,000	+2.7%
2014	$193,205	+1.7%
2015	$203,000	+5.1%
2016	$210,000	+3.4%
2017	$219,000	+4.3%

91% Increase from 2002-07

19% Decrease from 2007-11

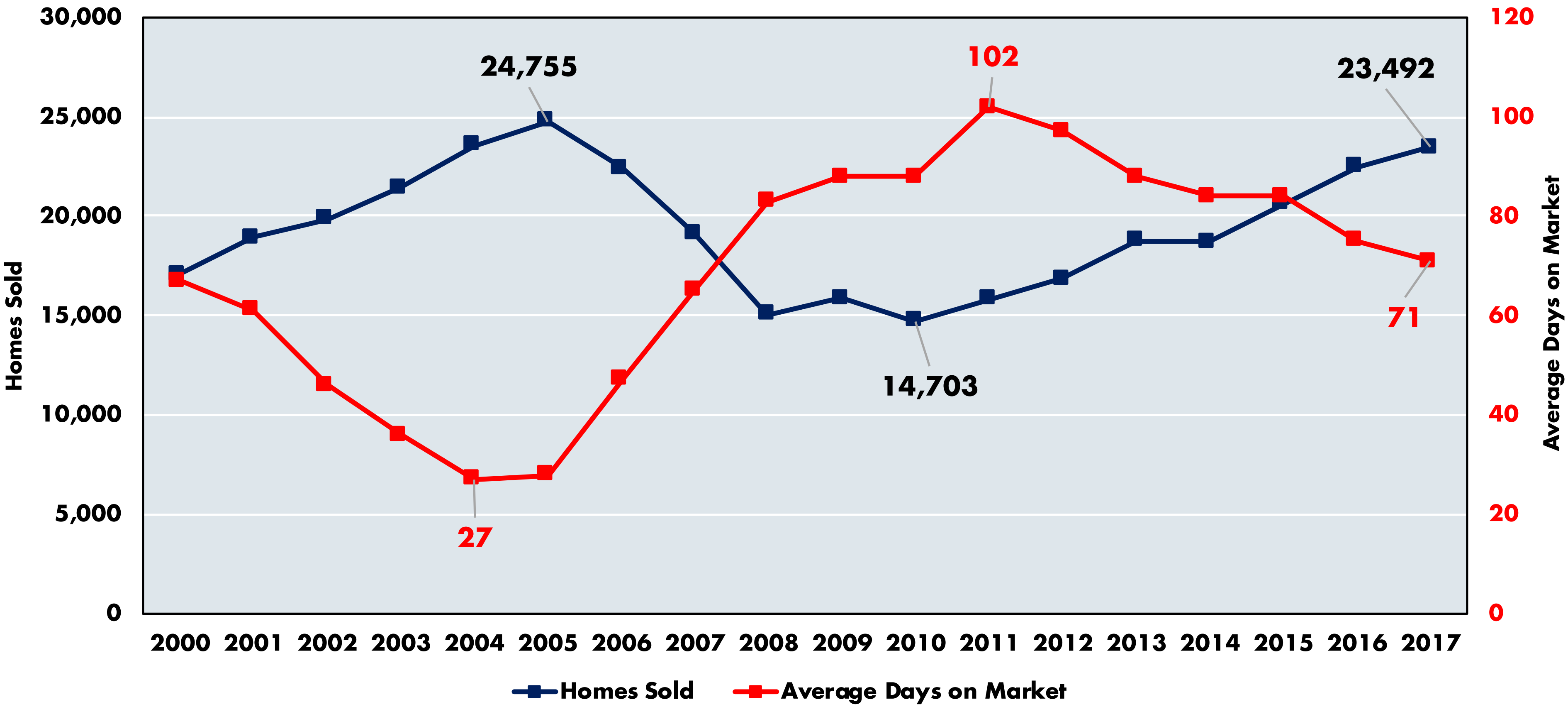
Sources: Real Estate Information Network and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Information deemed reliable but not guaranteed. Figures reported here represent only those properties that are listed through REIN by REIN members.

Evidence of the improving real estate market for sellers also appears in the inventory of homes on the market (Graph 23). The number of homes on the market peaked in 2010 at 13,070 and declined to 8,222 in 2017. The number of homes on the market now matches that seen in the late 1990s, though it remains far away from the low of 2,616 homes in 2004. We are unlikely to return to the heyday of the housing market of the early 2000s even if economic activity were to pick up pace significantly. Housing credit, while easier to obtain than in 2010, remains distant from the days of NINJA (no income – no job – no asset) loans.

The combination of a smaller inventory of existing homes on the market and a steadily increasing volume of sales has led to a decrease in the months of supply of all available existing homes for sale in Hampton Roads (Graph 24). Historically, our region has had about 5.6 months of homes on the market relative to average monthly sales rates. In 2017, the available supply of homes dipped below the historical average, and this trend has continued in 2018. As of May 2018, it would take approximately 4.1 months to clear the existing supply of homes. As the supply becomes more constrained, we should expect median sales prices to increase.

GRAPH 22

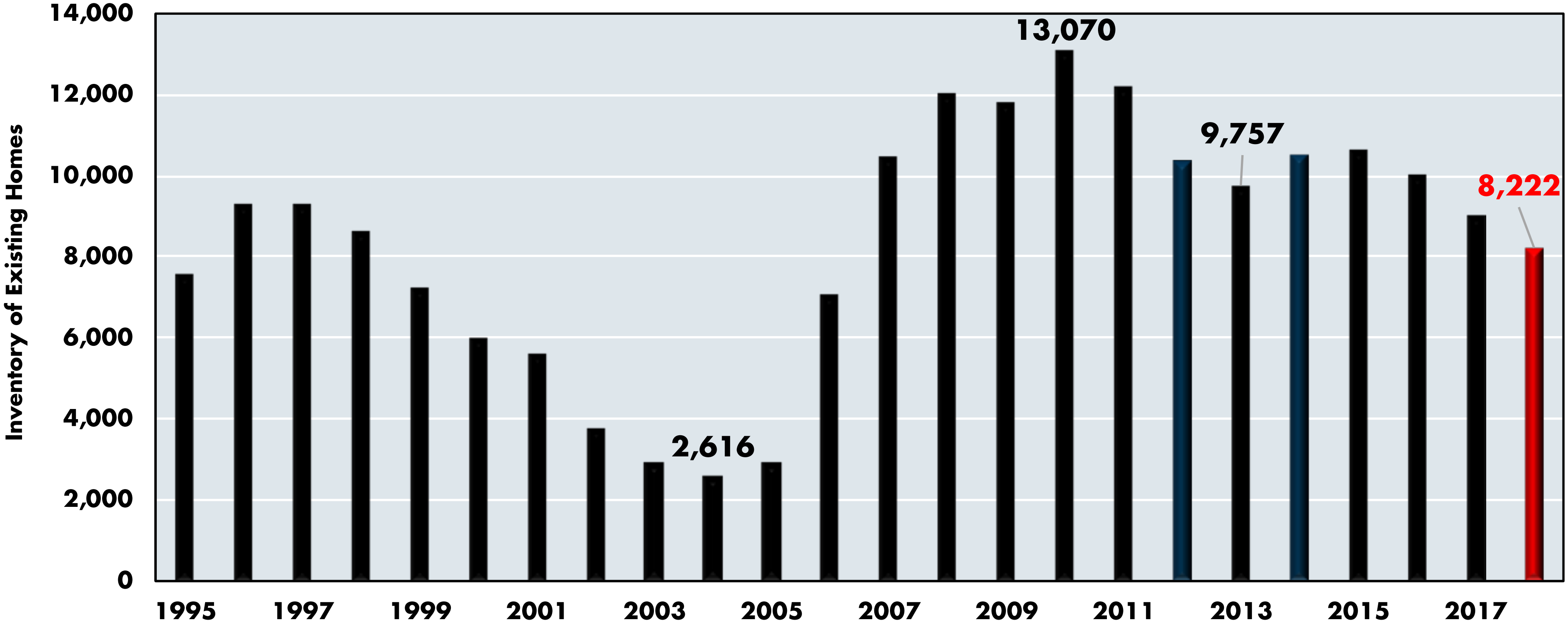
EXISTING RESIDENTIAL HOMES SOLD AND AVERAGE DAYS ON THE MARKET: HAMPTON ROADS, 2000-2017



Sources: Real Estate Information Network and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Information deemed reliable but not guaranteed. Days on Market is calculated from the date listed to the date under contract for existing homes sold.

GRAPH 23

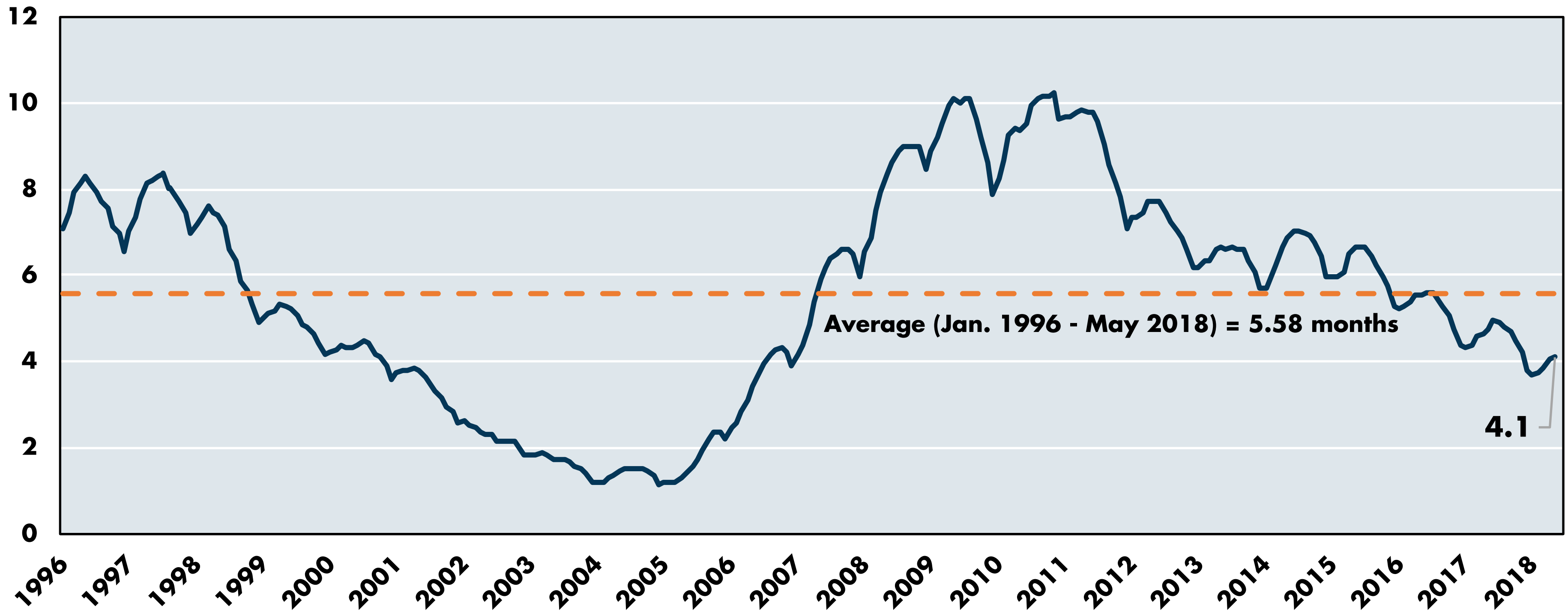
ESTIMATED INVENTORY OF EXISTING RESIDENTIAL HOMES AS MEASURED BY ACTIVE LISTINGS ON MAY 31 OF EACH YEAR: HAMPTON ROADS, 1995–2018



Sources: Real Estate Information Network and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Information deemed reliable but not guaranteed.

GRAPH 24

ESTIMATED MONTHS OF SUPPLY OF ALL EXISTING HOMES IN HAMPTON ROADS: BASED ON AVERAGE SALES IN THE LAST 12 MONTHS, JANUARY 1996 – MAY 2018



Sources: Real Estate Information Network and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Information deemed reliable but not guaranteed.

Housing: Distressed Homes Continue To Decline

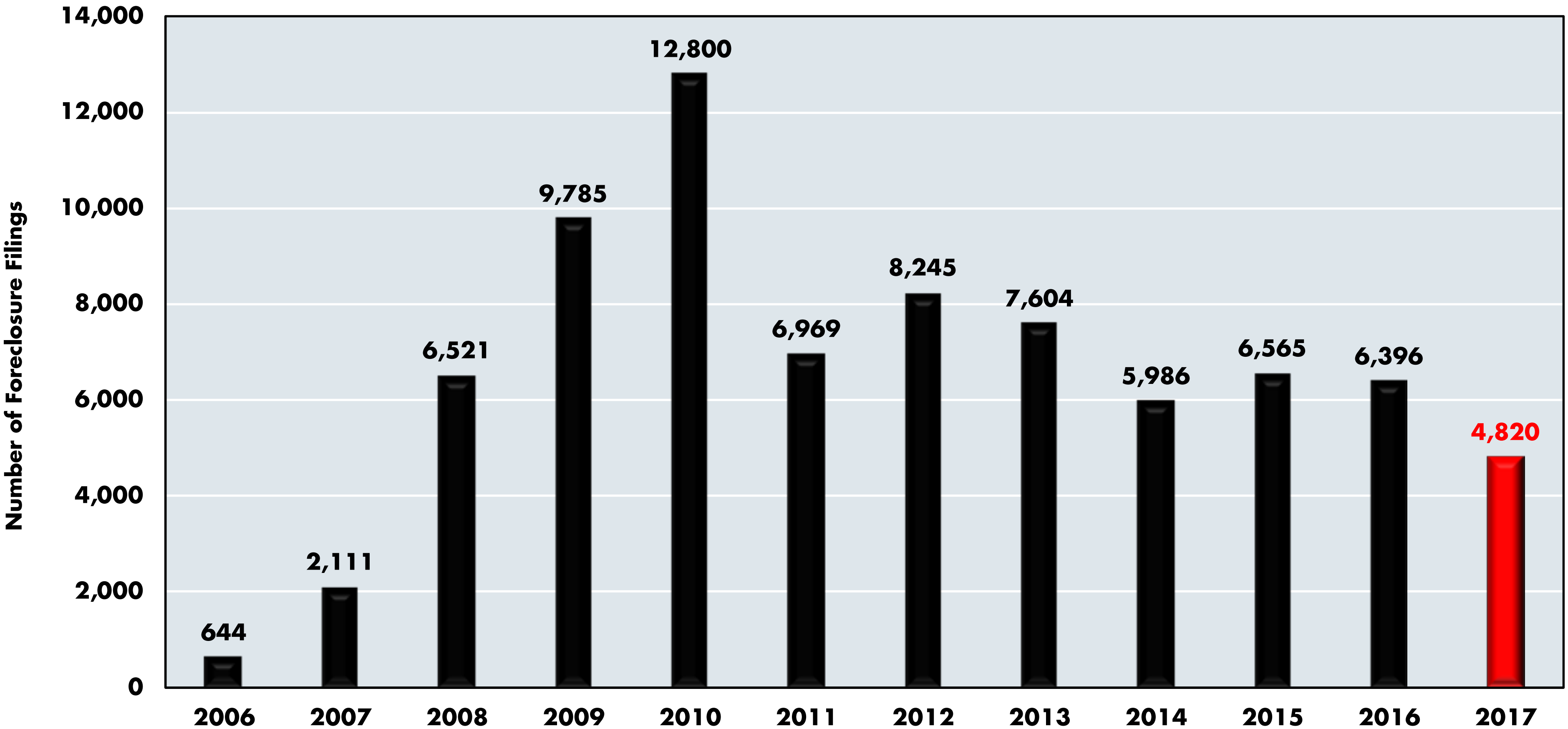
A welcome development and a sign of an improving Hampton Roads economy is the continued decline in residential foreclosure filings (Graph 25). The impact of the Great Recession was evident with the rapid climb of foreclosure filings, from 644 in 2006 to 12,800 by 2010. However, in 2017, foreclosure filings were only 38 percent of their peak 2010 level and declined by almost 1,600 filings between 2016 and 2017. Even so, foreclosure filings in 2017 remained more than twice as high as in 2007, suggesting that some homeowners continue to experience economic difficulties.

A distressed residential real estate property is one that is sold in a short sale, or which is a bank-owned property. In June 2008, the number of distressed listings in Hampton Roads was 606, rising over 500 percent to a peak of 3,224 in November 2010. Since then, we have observed a steady decline in listings of distressed properties, to 872 in May 2018 (Graph 26). The decline in listings is an indicator of the improving health of the single-family residential real estate market in Hampton Roads.

Distressed properties sell at substantial discounts and depress growth in residential sales prices. As shown in Table 4, in 2017, the average short-sale home sold for only 65 percent of the median sales price of a nondistressed property. A bank-owned (REO) property sold for only 50.1 percent. As distressed properties clear, discounts will become less common and median prices will rise.

GRAPH 25

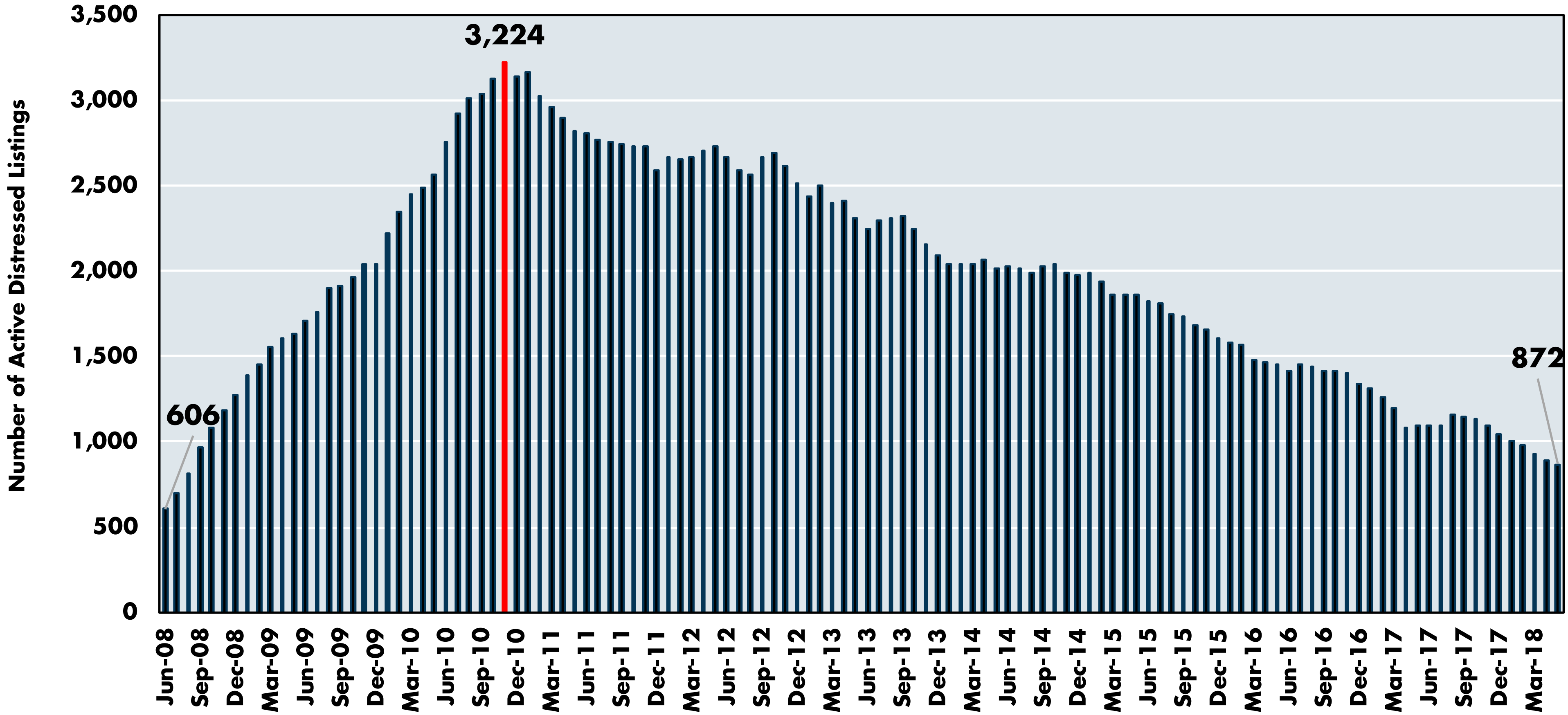
HAMPTON ROADS RESIDENTIAL FORECLOSURE FILINGS, 2006-2017



Sources: Attom Data Solutions, formerly known as RealtyTrac, and the Dragas Center for Economic Analysis and Policy, Old Dominion University

GRAPH 26

NUMBER OF ACTIVE LISTINGS OF DISTRESSED HOMES (REO AND SHORT SALES): HAMPTON ROADS, JUNE 2008 – MAY 2018



Sources: Real Estate Information Network and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Information deemed reliable but not guaranteed.

TABLE 4

AVERAGE PRICE OF EXISTING NONDISTRESSED, SHORT SALE AND REO RESIDENTIAL HOMES SOLD IN HAMPTON ROADS, 2006-2016

Year	Nondistressed Sales	Short Sales	Short Sales Price % Nondistressed Price	REO Sales	REO Price % Nondistressed Sales
2006	$250,254	$241,666	96.6	$120,817	48.3
2007	$261,723	$237,897	90.9	$163,421	62.4
2008	$255,852	$239,110	93.5	$184,462	72.1
2009	$243,902	$239,913	98.4	$164,229	67.3
2010	$251,572	$231,211	91.9	$151,612	60.3
2011	$236,358	$212,967	90.1	$135,304	57.3
2012	$237,215	$187,527	79.1	$134,535	56.7
2013	$245,344	$180,001	73.4	$131,644	53.7
2014	$244,940	$171,745	70.1	$128,242	52.4
2015	$251,941	$174,577	69.3	$130,959	52.0
2016	$254,815	$171,432	67.3	$131,143	51.5
2017	$258,431	$167,926	65.0	$129,501	50.1

Sources: Real Estate Information Network and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Information deemed reliable but not guaranteed. Distressed homes are bank-owned or short-sale homes.

Housing Affordability

A traditional part of the American dream is owning your own home, though some question whether this dream is still attainable during periods of rising housing prices and slow wage growth. Yet, interest rates remain historically low and the residential housing market in Hampton Roads is surprisingly affordable, especially compared to Northern Virginia. Let's look at the numbers.

Table 5 compares the cost of renting a three-bedroom home to the cost of owning a three-bedroom home in Hampton Roads. We include as ownership costs the typical monthly principal, interest and taxes paid for the median-priced three-bedroom and compare this total to the cost of renting the same. The ratio of ownership costs to rental costs is recorded in the last column of Table 5. One can see that the 2017 ratio was 1.26, indicating that renting was approximately 26 percent more expensive than owning. While this ratio is not quite as high as it was in 2013, it still represents a historically favorable circumstance for owning rather than renting.

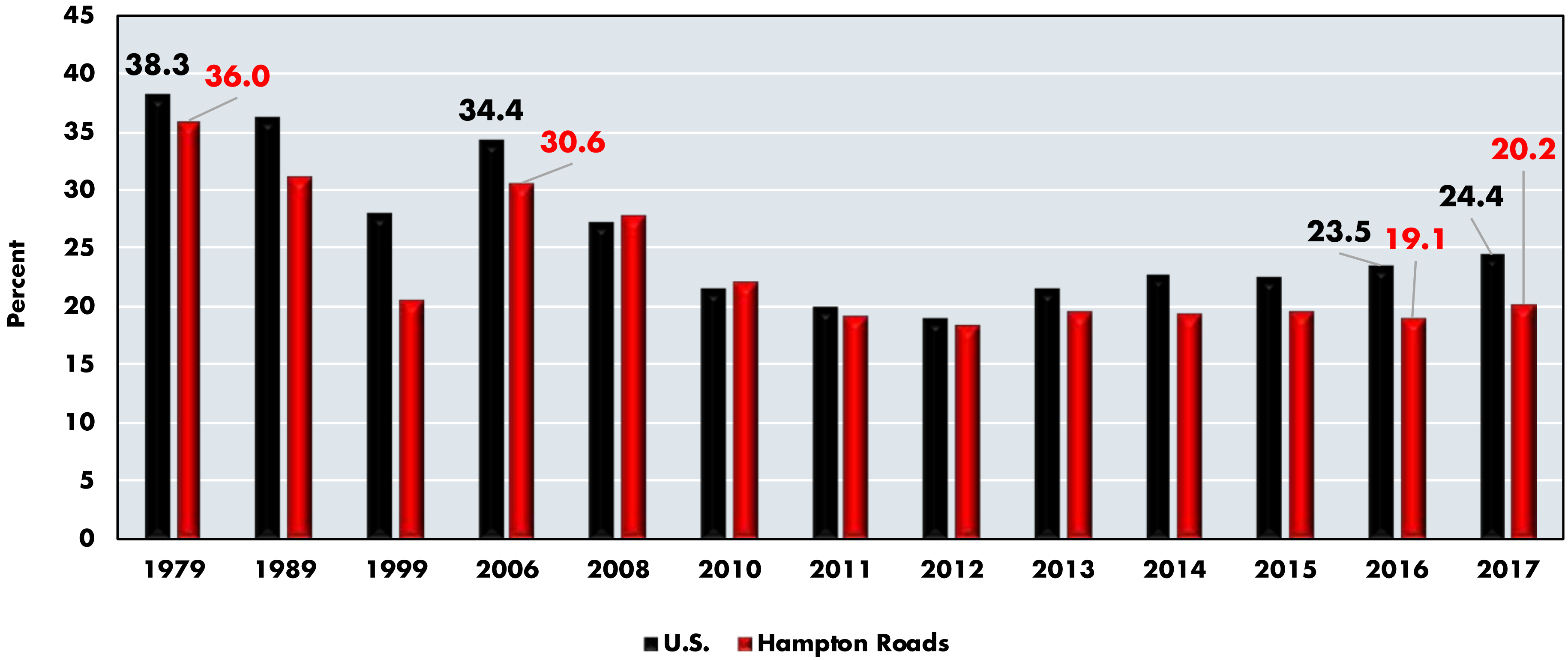
How does Hampton Roads fare when compared to the United States? Graph 27 examines the median price of a home compared to median income. As housing becomes more expensive, the percentage of income needed to own a home will increase unless incomes grow at the same rate. In 1979, householders with median income in Hampton Roads would have paid 36 percent of their income for housing, but in 2017 they only needed to pay 20.2 percent of their income. As a percentage of income, housing in Hampton Roads is less expensive today than it was 10 or even 20 years ago. Households in Hampton Roads also pay less for housing as a percentage of their incomes relative to the median household in the United States, illustrating that our region is an affordable place to own a home.

TABLE 5 ESTIMATED HOUSE RENTAL AND PRINCIPAL, INTEREST AND TAXES FOR A HOUSE PAYMENT IN HAMPTON ROADS, 2003-2017			
Year	Median Monthly Rent for a Three-Bedroom House	PI&T Monthly for a Median-Priced Existing House	Ratio of Monthly Rent to PI&T
2003	1,037	890	1.16
2004	1,044	1,073	0.97
2005	1,087	1,315	0.83
2006	1,118	1,533	0.73
2007	1,164	1,598	0.73
2008	1,247	1,507	0.83
2009	1,236	1,307	0.95
2010	1,277	1,233	1.04
2011	1,319	1,071	1.23
2012	1,454	1,015	1.43
2013	1,570	1,080	1.45
2014	1,562	1,118	1.40
2015	1,530	1,154	1.33
2016	1,601	1,163	1.38
2017	1,577	1,254	1.26

Sources: U.S. Department of Housing and Urban Development and the Dragas Center for Economic Analysis and Policy, Old Dominion University. It is assumed that the real estate tax rate is 1% and the tax reduction received by homeowners would compensate for homeowners' insurance and maintenance expenditures. The prevailing 30-year average mortgage rate is used for each year. For example, the rate used for 2015 is 3.85 percent, for 2016 it is 3.65 percent and for 2017 it is 4.00 percent.

GRAPH 27

HOUSING AFFORDABILITY
MONTHLY PAYMENT FOR A MEDIAN-PRICE RESALE HOUSE AS A PERCENT OF MEDIAN HOUSEHOLD MONTHLY INCOME: HAMPTON ROADS AND THE U.S., 1979-2017



Source: The Dragas Center for Economic Analysis and Policy, Old Dominion University. The prevailing 30-year average mortgage rate is used for each year. For example, rate used for 2015 is 3.85 percent, for 2016 it is 3.65 percent and for 2017 it was 4.00 percent.

The Hotel Industry

The hotel industry in Hampton Roads has transformed itself in the aftermath of the Great Recession. From 2004 to 2010, hotel room supply increased by 16.8 percent, peaking in 2010 (Graph 28). Since 2010, the supply of hotel rooms has declined by 7.1 percent, while the number of occupied hotel rooms increased by 10.2 percent. A consequence of decreasing supply and increasing occupancy is that nominal hotel revenue increased by 5.9 percent in 2015, 6.7 percent in 2016 and 4.8 percent in 2017 (Graph 29). After adjusting for the effects of inflation, these increases are somewhat more moderate, but hotel revenue in real terms in 2017 was 0.5 percent above the 2007 level, a historical high. With improving economic conditions, real hotel revenue should continue to increase in 2018 even though the rise of short-term rentals continues to pressure some properties.

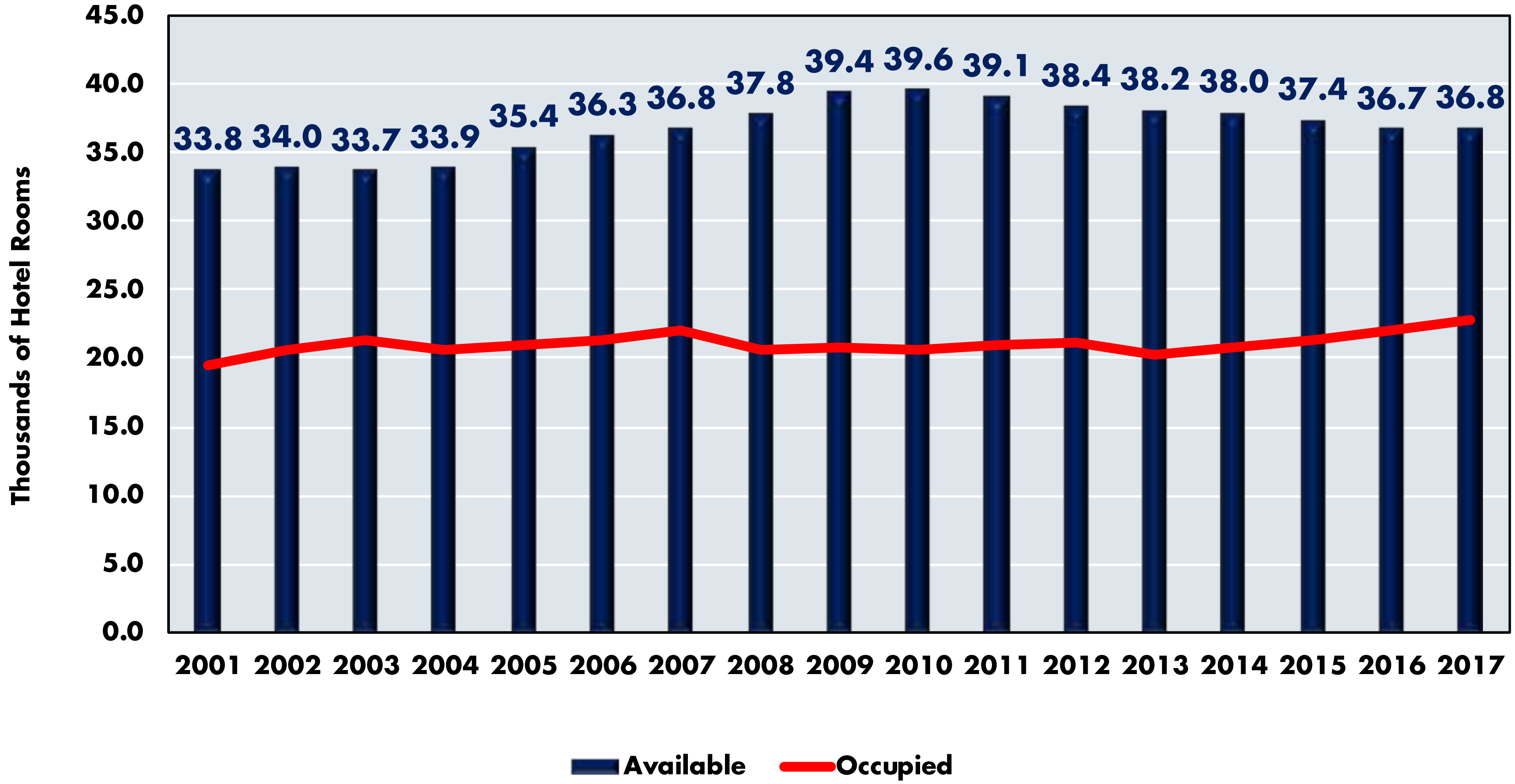
The regional geographic submarkets in Hampton Roads have diverged in terms of their performance in recent years. Let's initially look at the Norfolk-Portsmouth market. Between 2016 and 2017, hotel revenue in this submarket grew by 14.4 percent (Graph 30). The opening of The Main in Norfolk not only raised the competitive bar, but also increased hotel revenues. The other submarkets also saw healthy growth in hotel revenues, with the exception of Williamsburg.

If we measure market share as a percentage of hotel revenues, then Virginia Beach emerges as the clear winner from 2000 to 2017. In 2000, Virginia Beach held a 34 percent market share of total hotel revenues in Hampton Roads (Table 6). By 2017, it had increased its share to 39.6 percent. The Chesapeake-Suffolk submarket also increased its share from 7.5 percent in 2000 to 12.8 percent in 2017. Over this time period, the market share of Newport News-Hampton increased, while that of Norfolk-Portsmouth declined slightly. The market share of Williamsburg, a market that includes the Historic Triangle, declined 11 percentage points between 2000 and 2017.

Hotel revenues reflect a variety of factors. For example, when older hotels are replaced with higher-quality new hotels, this ordinarily results in increased revenues, even though the total number of rooms may not have changed.

GRAPH 28

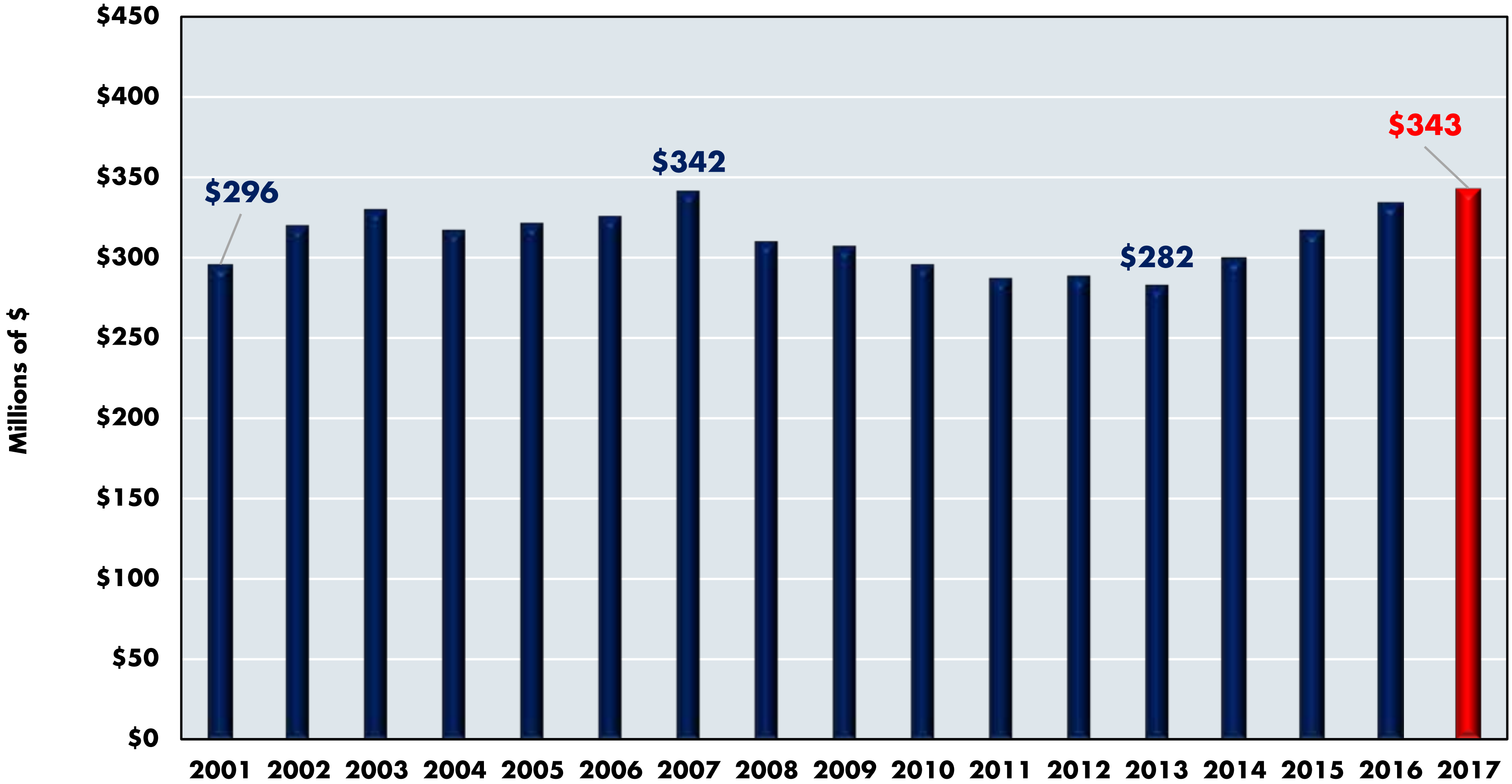
AVAILABLE AND OCCUPIED HOTEL ROOMS: HAMPTON ROADS, 2001-2017



Sources: STR Trend Report, Jan. 22, 2018, and the Dragas Center for Economic Analysis and Policy, Old Dominion University

GRAPH 29

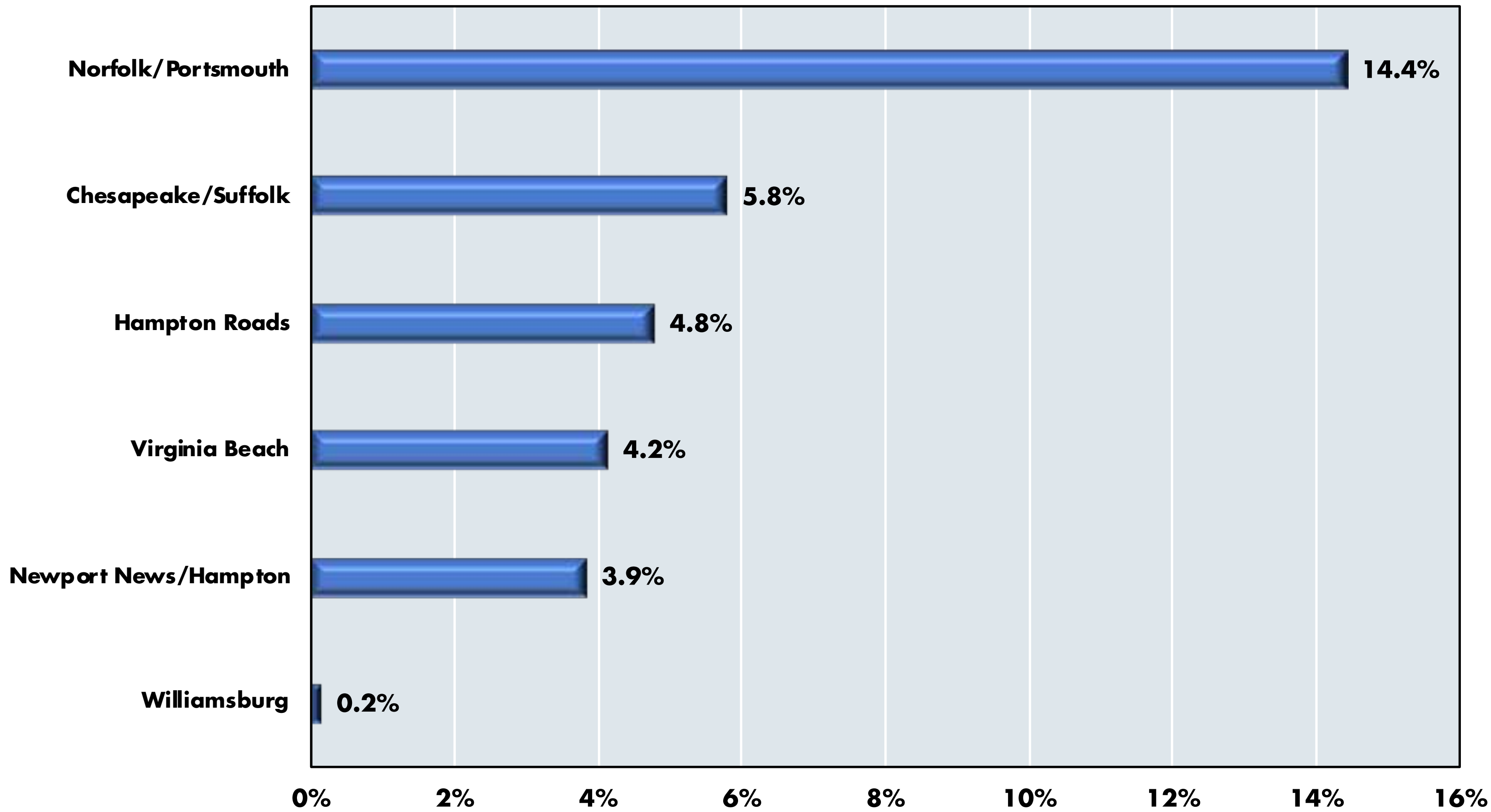
REAL HOTEL REVENUE: HAMPTON ROADS, 2001-2017



Sources: STR Trend Report, Jan. 25, 2017, Jan. 22, 2018, Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University

GRAPH 30

PERCENTAGE CHANGE IN HOTEL REVENUE: HAMPTON ROADS SUBMARKETS, 2016-2017



Sources: STR Trend Report, Jan. 22, 2018, and the Dragas Center for Economic Analysis and Policy, Old Dominion University

TABLE 6 ESTIMATED MARKET SHARES AS MEASURED BY SHARE OF HOTEL REVENUE: HAMPTON ROADS SUBMARKETS, 2000 AND 2017		
	2000	2017
Chesapeake-Suffolk	7.5%	12.8%
Norfolk-Portsmouth	14.7%	13.8%
Newport News-Hampton	13.2%	14.3%
Virginia Beach	34.0%	39.6%
Williamsburg	30.6%	19.6%

Sources: STR Trend Report, Jan. 25, 2017, and Jan. 22, 2018, and the Dragas Center for Economic Analysis and Policy, Old Dominion University

Another measure of the health of the hotel industry is called RevPAR – revenue per available room. RevPAR takes into account both demand and supply influences. If RevPAR is increasing, then hotels are booking more rooms or charging more for occupied rooms, or both. The most useful measure of RevPAR is real RevPAR, which accounts for the effects of inflation. Real RevPAR data can be compared across years.

From 2007 to 2017, real RevPAR in the U.S. increased by 7.9 percent, even while it was declining 4.3 percent in Virginia (Table 7). The news was better for Hampton Roads because real RevPAR increased by 0.4 percent from 2007 to 2017. This signals a recovery of our regional hotel sector from the effects of the Great Recession and federal financial sequestration.

Examining the submarkets in Hampton Roads, Virginia Beach and Williamsburg increased their RevPARs by 7.5 and 4 percent, respectively. Other submarkets saw decreases in RevPAR, especially Chesapeake-Suffolk, where RevPAR decreased 14.8 percent, primarily due to a rapid increase in the supply of hotel rooms.

TABLE 7 REVPAR IN SELECTED MARKETS, 2000 AND 2017				
	2007 Nominal RevPAR	2017 Nominal RevPAR	2007-2017 Nominal Growth	2007-2017 Real Growth
United States	$65.54	83.57	+27.5%	+7.9%
Virginia	$61.91	$70.06	+13.2%	-4.3%
Hampton Roads	$52.78	$62.64	+18.7%	+0.4%
Chesapeake-Suffolk	$52.90	$53.28	+0.7%	-14.8%
Norfolk-Portsmouth	$54.05	$59.85	+10.7%	-6.3%
Newport News-Hampton	$41.49	$46.67	+12.5%	-4.9%
Virginia Beach	$64.29	$81.72	+27.1%	+7.5%
Williamsburg	$47.47	$58.34	+22.9%	+4.0%

Sources: STR Trend Report, Jan. 25, 2017, and Jan. 22, 2018, Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University

Final Thoughts

Each of the pillars of our regional economy is showing signs of improving health. Defense spending is increasing in 2018 and is projected to increase into 2019.

The Port of Virginia continues to shine and is expected to handle a record amount of traffic this year.

The housing sector has continued its moderate recovery from the Great Recession and sequestration, though foreclosures and distressed properties continue to loom over it.

Tourism has grown and each of the hotel submarkets in Hampton Roads saw positive revenue growth in 2017.

Harkening back to Ronald Reagan's campaign commercial, it looks as if a new morning is dawning, as more people are working in Hampton Roads this year than ever before. The challenge now is to sustain and accelerate this growth.

Even with the economic uncertainty resulting from the burgeoning trade conflict between the United States and China (and possibly the European Union, Canada and Mexico), we remain optimistic about prospects for growth for the remainder of 2018 and into 2019. The opportunity exists for Hampton Roads to build upon the lessons learned from the Great Recession and sequestration and to improve collaboration, seek out administrative efficiencies and promote regional development. Yes, our expectations are subject to the usual caveats about economic and political shocks, but it does appear that it is morning again in Hampton Roads.

A Complicated Subject: The Impact Of Medicaid Expansion On Hampton Roads

A COMPLICATED SUBJECT: THE IMPACT OF MEDICAID EXPANSION ON HAMPTON ROADS

This is about getting out there and helping to bend the cost of health care for every Virginian.
– Sen. Frank Wagner, R-Virginia Beach

(This) abandons Virginia's long-standing reputation for fiscal responsibility.
– Sen. Thomas K. Norment, R-Williamsburg[1]

On July 1, 2018, after years of heated debate, Virginia became the 33rd state (along with the District of Columbia) to sign an expansion of Medicaid coverage into law. Effective Jan. 1, 2019, the Commonwealth will extend Medicaid eligibility to approximately 400,000 more Virginians. Now is the time to take a look at the potential impact of Medicaid expansion on Hampton Roads.

Program Overview

Medicaid is a joint program between the federal government and the states to provide health coverage for low-income individuals. Medicaid operates in conjunction with another federal-state partnership, the Children's Health Insurance Program (CHIP), which aims to improve children's health insurance coverage and outcomes. According to the Centers for Medicare and Medicaid Services, more than 73 million Americans were enrolled in Medicaid and CHIP in May 2018; about 1 million of those enrollees reside in Virginia. Medicaid is one of the largest payers for health services in the U.S., with total spending topping $550 billion in 2016.

The impact of Medicaid expansion on Virginians is not merely an academic question. Chavelia Franklin, a 49-year-old certified nursing assistant, recently told The Virginian-Pilot she works only 12 hours a week, even though she is willing to work more. "Unfortunately, I fell into the gap where I didn't make enough money or hours for Obamacare," she said. Franklin made too much money to qualify for Medicaid, but not enough money to receive subsidized health insurance through the marketplace exchanges. What happens when she gets sick? "It forces me to go to the emergency room, which draws a humongous bill."[2]

State participation in the Medicaid program is voluntary, although every state participates. Why then has Medicaid expansion generated such heated debate? In 2012, the U.S. Supreme Court ruled that states could not be coerced by the federal government to expand Medicaid.[3] The choice of whether and when to expand would be left to individual states, with some choosing to expand immediately and others, such as Virginia, opting to debate

1 Both quotes come from Laura Vozzella and Gregory S. Schneider, "Virginia General Assembly Approves Medicaid Expansion to 400,000 Low-Income Residents," The Washington Post (May 30, 2018). Sen. Wagner voted in favor; Sen. Norment, the majority leader, voted nay.

2 https://pilotonline.com/news/local/columnist/roger-chesley/article_bc6ed2fa-900f-11e8-9a99-bf11176d81d5.html.

3 National Federation of Independent Business v. Sebelius, 567 U.S. 519 (2012).

the merits of expansion before making a decision. To incentivize states to enroll new participants, the federal government initially covered 100 percent of the cost of new enrollees. In 2019, it will reimburse expansion states for 93 percent of the cost of new enrollees, a share that will decline and remain at 90 percent in 2020 and beyond. This is a much higher rate of reimbursement than the 50/50 split for existing Medicaid enrollees in Virginia.

In this chapter, we will look at how Medicaid expansion may affect health insurance coverage and health care in Hampton Roads. We'll consider opposing views, the history of health insurance, current eligibility, future eligibility under expansion and financial impact. It's complicated, but a topic worthy of discussion.

Two Sides Of The Debate

Detractors of expansion contend that the Medicaid program is poorly run, inefficient and an unwise use of the public purse. They also argue that the costs of Medicaid expansion have swelled beyond predictions. This claim is true, both because Medicaid has attracted more users than forecasted, and the average cost per user has exceeded expectations. New enrollments have outpaced Congressional Budget Office estimates by more than 50 percent. Costs per new Medicaid participant have been up to 50 percent higher than those projected by the Centers for Medicare and Medicaid. Even if the federal government continues to reimburse states for 90 percent of the costs associated with new enrollees, critics fear that costs will balloon at the federal and state level.[4]

Supporters, however, note that state expenditures per newly eligible Medicaid recipient fell by 6.9 percent in 2016 and are expected to decline further as states gain experience, and services for people with less urgent health problems increase. Further, multiple states have found that their health-related and criminal justice expenditures decline due to increased Medicaid coverage.[5] Proponents also cite numerous empirical studies showing Medicaid expansion

4 See Henry J. Kaiser Family Foundation, March 28, 2018, and the Mercatus Center, Charles Blahous, June 28, 2017, for more details.
5 See Henry J. Kaiser Family Foundation, March 28, 2018, and the Center on Budget and Policy Priorities, Judith Solomon, Jan. 24, 2017, for study details.

increases the scope of insurance coverage, produces demonstrably healthier individuals and has minimal or no adverse labor market participation effects.[6] (These effects appear to be more pronounced in poorer communities.)

Almost 135,000 residents, or 8 percent of the population of the Virginia portion of Hampton Roads, lacked health insurance in 2016.[7] More than 25 percent of our region's population received their health insurance through Tricare or the Department of Veterans Affairs (VA) in 2016. Only two of the nation's metropolitan areas, each with much smaller populations than Hampton Roads, had a higher percentage covered by Tricare and the VA in 2016: Fayetteville, North Carolina, and Clarksville, Tennessee.

6 Laura Antonisse, Rachel Garfield, Robin Rudowitz and Samantha Artiga, "The Effects of Medicaid Expansion under the ACA: Updated Findings from a Literature Review," Henry J. Kaiser Family Foundation (March 28, 2018), www.kff.org/medicaid/issue-brief/the-effects-of-medicaid-expansion-under-the-aca-updated-findings-from-a-literature-review-march-2018.
7 The Virginia portion of the Virginia Beach-Norfolk metropolitan statistical area includes the counties of Gloucester, Isle of Wight, James City, Mathews and York and the cities of Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach and Williamsburg.

Between 15,000 and 27,000 newly eligible adults in Hampton Roads are expected to enroll in Medicaid once expansion is fully implemented. Annual uncompensated care costs for health care providers are expected to decline between $18 million and $25 million. **Even with Medicaid expansion, the number of uninsured adults in Hampton Roads will still approach 100,000.** Along with the large number of residents who will remain without insurance, **we caution that if the federal government were to lower its reimbursement share for new Medicaid expansion enrollees to that of existing Medicaid enrollees, the costs of expansion could increase by a factor of five.**

Accidents Of History: Health Insurance In The United States

Constant change has been the trademark of health insurance in the United States over the past 150 years. Historian John Murray found that by the mid-1800s, employers, unions and fraternal organizations had established "sickness funds" as a form of insurance. Employees would typically contribute 1 percent of their weekly wages to the sickness funds, which would then pay sick or disabled employees up to 60 percent of their lost wages. By 1890, there were more than 1,300 such funds, and Murray estimates that 20 percent of industrial workers belonged to a sickness fund in the early 1900s.[8] While not health insurance per se, these funds provided workers with a semblance of indemnity coverage.

In the late 1920s, to encourage patients to pay their bills, hospitals started offering plans where medical payments would be forgiven if one paid a monthly fee. This eventually evolved into the modern Blue Cross system.[9] Blue Shield, established in 1939, mirrored the expansion of the Blue Cross system, although the Blue Shield program paid consumers, who were then responsible for paying physicians.

During World War II, the federal government instituted wage and price controls, along with rationing, to control inflation and redirect resources to the war effort. Facing labor shortages as the conscription of men increased over the course of the war, businesses and industry increasingly turned to women, leading to a significant rise in female labor force participation. The rising strength of unions led to demands for additional forms of compensation, including the provision of health insurance. By 1944, the National War Labor Board exempted employer-sponsored health insurance from wage controls, and the Internal Revenue Service (IRS) ruled that employees did not have to pay income taxes on premiums paid by employers. These factors combined so that firms, constrained in their ability to offer workers higher wages, increased other forms of compensation, including employer-sponsored health insurance. One anonymous employer noted, "It was a case of paying the money for insurance for their employees or Uncle Sam in taxes."[10]

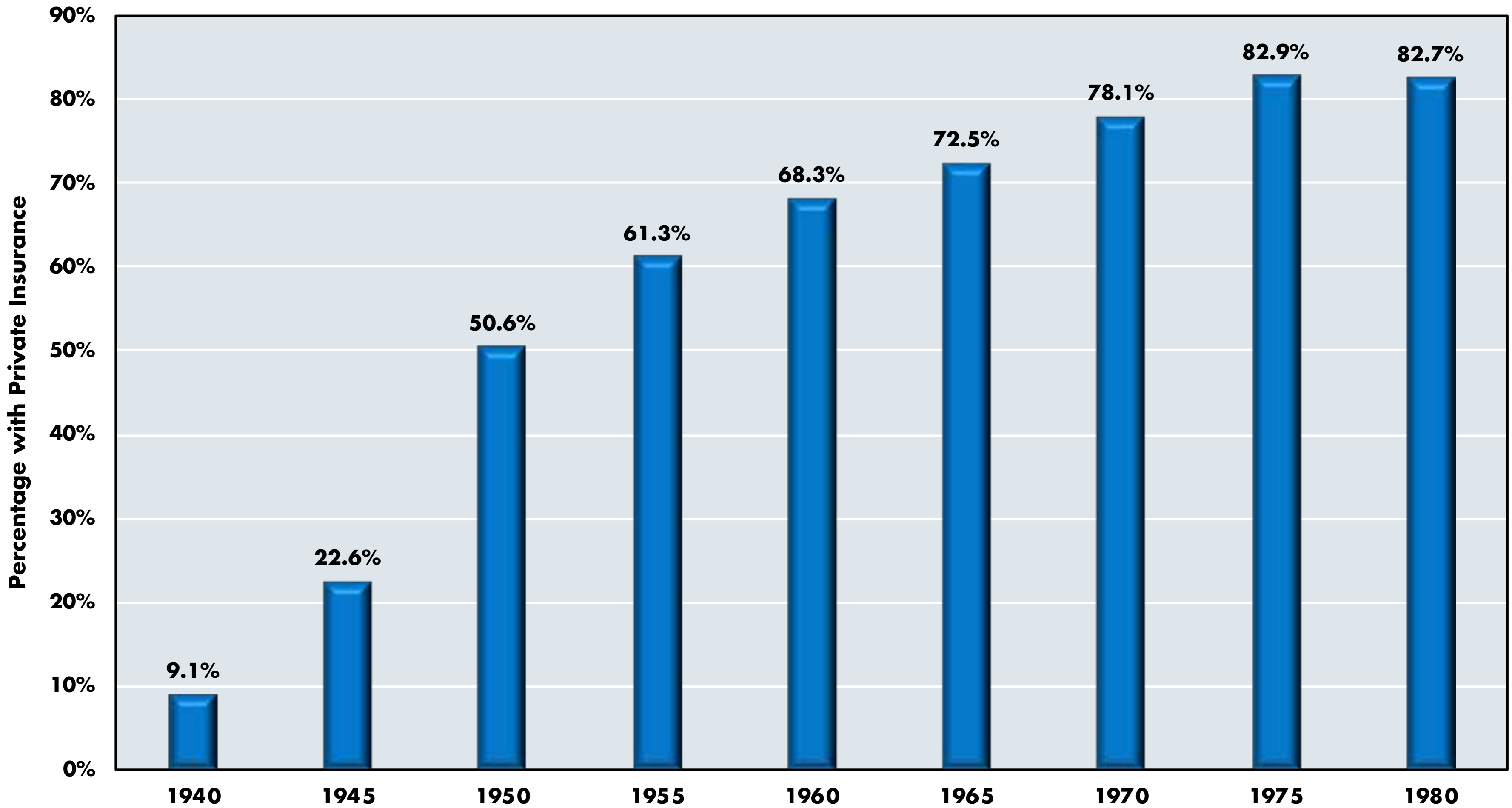
While precise historical data on private health insurance coverage are difficult to come by, Michael Morrisey notes in his book "Health Insurance" that coverage by any type of private health insurance rapidly increased during and after World War II. As we illustrate in Graph 1, 9.1 percent of Americans had some form of private health insurance in 1940, a percentage that vaulted to 50.6 percent by 1950.

8 Murray, J.E., 2007, *Origins of American Health Insurance: A History of Industrial Sickness Funds*, New Haven, CT: Yale University Press.
9 Blumberg, Alex and Davidson, Adam, "Accidents of History Created U.S. Health System," NPR special series "Planet Money," Oct. 22, 2009, https://www.npr.org/templates/story/story.php?storyId=114045132.

10 Gordon, Colin, 2003, *Dead on Arrival: The Politics of Health Care in Twentieth-Century America*, Princeton: Princeton University Press.

GRAPH 1

PERCENTAGE OF POPULATION WITH SOME FORM OF PRIVATE HEALTH INSURANCE: UNITED STATES, 1940-1980



Source: Michael Morrisey, 2008, "Health Insurance, Second Edition," Chicago: Health Administration Press

Almost every president since World War II has called for reforms to the health insurance system in the United States. Most recently, the 2010 Patient Protection and Affordable Care Act (PPACA), otherwise known as Obamacare, attempted to strike a balance between private health insurance and public intervention in the marketplace. Obamacare allowed states to expand Medicaid coverage with higher federal rates of reimbursement, created health insurance marketplaces where individuals could compare plan costs and benefits across standardized plans, offered a federal tax credit for those earning between 100 and 400 percent of the Federal Poverty Level (FPL), prevented denial of coverage based on pre-existing conditions, and allowed young adults up to age 26 to remain on family policies. One of the most unpopular provisions of Obamacare was the mandate requiring individuals to purchase health insurance or face a financial penalty. The 2017 Tax Cuts and Jobs Act, however, reduced the penalty to zero, effectively eliminating the individual mandate as of Jan. 1, 2019.

Having health insurance, however, does not mean that one is immune from health care costs. A 2016 survey conducted by the Kaiser Family Foundation and the New York Times found that 20 percent of respondents had problems paying medical bills in the past year and, for those without health insurance, over 50 percent reported difficulty paying medical bills. One study from 2011 claimed that up to 26 percent of bankruptcies filed by low-income households were related to out-of-pocket medical costs.[11] These bills can be very problematic when combined with low savings amounts, leading to delayed procedures, which in turn can lead to poorer health outcomes.

Americans are generally unsatisfied with the state of the health care system but are happy with their doctors. **More than 70 percent of Americans responded in a February 2018 Gallup poll that the U.S. health care system is in a "state of crisis" or "has major problems."[12] Yet, when asked about their personal health care experience, three-quarters of employed Americans said their health care was "excellent" or "good."** These responses are like Americans' perceptions of Congress versus their individual representative or senator: unhappy with the institution but satisfied at the personal level.

11 "The Burden of Medical Debt: January 2016 Results from the Kaiser Family Foundation/New York Times Medical Bills Survey," and Gross, T. and Notowidigdo, M.J. (2011), "Health insurance and the consumer bankruptcy decision: Evidence from expansions of Medicaid," *Journal of Public Economics*, 95(7), 767-778.

12 http://news.gallup.com/poll/226607/news-americans-satisfaction-healthcare.aspx.

Critics of the U.S. health care system often argue that the Canadian system operates with lower costs and better outcomes. While 100 percent of Canadians have health insurance, not all services are covered, so individuals do have out-of-pocket expenses, and health needs may not always guarantee prompt access to care. The 2017 edition of "Waiting Your Turn," a report by the Canadian think tank Fraser Institute, found that wait times for medically necessary treatments reached the highest recorded levels in 2017. The median wait time from a general practitioner's initial referral to a specialist to final receipt of treatment was more than 21 weeks. Canadians could also expect to wait about four weeks for an ultrasound or a computed tomography (CT) scan and almost 11 weeks for a magnetic resonance imaging (MRI) scan. Every health care system has tradeoffs.

Who Has Health Insurance?

Today, the U.S. Census Bureau tracks not only how many Americans have health insurance, but also what types of organizations provide that insurance. Reflecting the fact that some people may have been covered by more than one type of health insurance during the year, Table 1 shows that in 2016, the majority of Americans had some form of health insurance through their employer. Another 16 percent directly purchased a plan through a private insurer or the Obamacare Marketplace exchanges. Over one-third of Americans received health insurance through Medicare (16.7 percent) or Medicaid (19.4 percent). About 5 percent of Americans received health insurance through either Tricare or the VA. Lastly, 8.8 percent of Americans were uninsured in 2016.

TABLE 1

HEALTH INSURANCE COVERAGE IN THE UNITED STATES: NUMBERS AND RATES, 2013 AND 2016 (IN THOUSANDS)

	2013 Number	2013 Rate	2016 Number	2016 Rate	Change from 2013 to 2016
Any Health Plan	271,606	86.7%	292,320	91.2%	+4.6%
Employer-based	174,418	55.7%	178,455	55.7%	0.0%
Direct-purchase	35,755	11.4%	51,961	16.2%	+4.8%
Medicare	49,020	15.6%	53,372	16.7%	+1.1%
Medicaid	54,919	17.5%	62,303	19.4%	+1.9%
Military Health Care	14,016	4.5%	14,638	4.6%	+0.1%
Uninsured	41,795	13.3%	28,052	8.8%	-4.6%
Total	313,401	--	320,372	--	--

Source: U.S. Census (2017), Health Insurance Coverage in the United States: 2016. Percentages may not sum to 100 percent, as people can be covered by more than one type of health insurance during the year. Individuals were considered uninsured if they were uninsured for the entire calendar year.

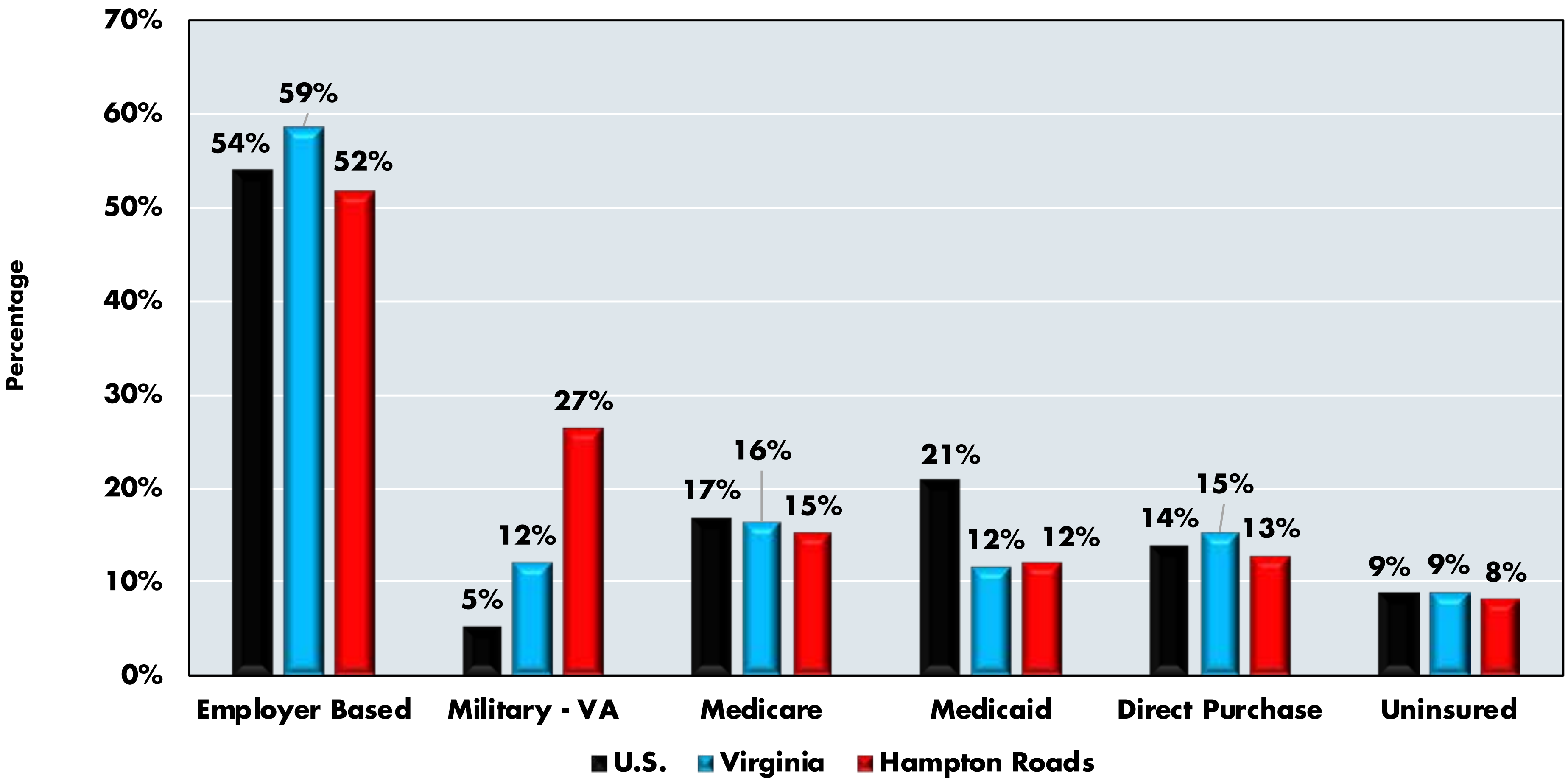
In 2016, Hampton Roads' uninsured rate of 8 percent was slightly below that of the United States and Virginia (Graph 2). **Over 25 percent of the population in Hampton Roads was insured through Tricare or the VA, the highest for any metropolitan area in the U.S. with a population over 1 million.** Given the large percentage of the population covered through Tricare and/or the VA, the percentage of individuals with employer-sponsored coverage and direct purchase insurance (where one directly buys private insurance, including via the marketplace exchanges) was lower in Hampton Roads than the U.S. or Virginia. Lastly, the percentage of individuals reporting coverage through Medicare or Medicaid was also lower in Hampton Roads than the U.S. or Virginia.

Insured rates also vary within Hampton Roads. As illustrated in Table 2, the percentage of insured varies from a low of 85.4 percent in Norfolk to a high of 96.1 percent in Poquoson. The impact of Medicaid expansion is likely to be greater in those cities and counties with higher rates of uninsured residents.

Ariel Phelps is a Virginia Beach resident, and once she turned 27, she could no longer stay on her father's health insurance plan. She is currently pursuing a master's degree and earns too little for coverage through Obamacare, but too much to qualify for Medicaid. As noted in a July 25, 2018, article in The Virginian-Pilot, when Phelps had a recent health scare, she received care through Planned Parenthood. "It worked out. … But I had to pay out of pocket," Phelps said.

GRAPH 2

HEALTH CARE COVERAGE TYPES FOR ALL INDIVIDUALS: UNITED STATES, VIRGINIA AND HAMPTON ROADS, 2016



Source: Estimates based on the 2016 American Community Survey one-year microdata. Only 0.51, 0.06 and 0.08 percent of respondents for the U.S., Virginia and Hampton Roads, respectively, stated that they only had Indian Health Service insurance and are excluded from the graph. Percentages may not sum to 100 percent, as individuals may have more than one type of health insurance.

TABLE 2 HEALTH INSURANCE COVERAGE IN CITIES AND COUNTIES OF HAMPTON ROADS, 2012-2016					
Locality	**Total Population**	**Number of Insured**	**Percentage Insured**	**Number of Uninsured**	**Percentage Uninsured**
Chesapeake	220,652	202,265	91.7	18,387	8.3
Gloucester County	36,385	32,480	89.3	3,905	10.7
Hampton	131,597	116,152	88.3	15,445	11.7
Isle of Wight County	35,549	32,919	92.6	2,630	7.4
James City County	70,246	64,930	92.4	5,316	7.6
Mathews County	8,757	8,024	91.6	733	8.4
Newport News	172,213	150,795	87.6	21,418	12.4
Norfolk	218,963	186,980	85.4	31,983	14.6
Poquoson	11,864	11,401	96.1	463	3.9
Portsmouth	92,130	80,623	87.5	11,507	12.5
Suffolk	84,759	77,062	90.9	7,697	9.1
Virginia Beach	424,254	384,568	90.6	39,686	9.4
Williamsburg	14,825	14,050	94.8	775	5.2
York County	63,499	59,714	94.0	3,785	6.0
Source: U.S. Census Bureau, 2012-2016 American Community Survey data obtained through American Fact Finder. Total population is the civilian noninstitutional population.					

Who Is Currently Eligible For Medicaid In Virginia?

Until Jan. 1, 2019, the Virginia Medicaid program is limited to residents of the Commonwealth who are U.S. citizens, permanent residents or legal residents in need of health insurance. To qualify, individuals must be pregnant, a parent or relative caretaker of a dependent child or children under age 19, under age 21 and in foster care, in a nursing facility, blind, disabled, or 65 years of age or older.[13] Nondisabled adults without children are currently not eligible to enroll in Virginia's Medicaid program.

Who can enroll in Medicaid in the Commonwealth is determined, in part, by household income. Virginia sets income eligibility guidelines relative to the Federal Poverty Levels (FPL), which are determined by the U.S. Department of Health and Human Services.[14] The income eligibility thresholds for each category of Medicaid eligibility are based on these poverty limits (Table 3).

13 Individuals who receive Social Security disability benefits (https://www.ssa.gov/benefits/disability/) may be eligible to enroll in Medicaid, https://www.healthcare.gov/people-with-disabilities/ssi-and-medicaid/.
14 https://aspe.hhs.gov/poverty-guidelines.

TABLE 3 2018 FEDERAL POVERTY LIMITS AND MEDICAID INCOME ELIGIBILITY GUIDELINES				
Number of Persons in Household	Annual Federal Poverty Limits	Pregnant Women and Children*	Aged, Blind and Disabled Adults	FAMIS and FAMIS Plus
	--	148% of FPL	80% of FPL	205% of FPL
1	$12,140	$17,968	$9,712	$24,887
2	$16,460	$24,361	$13,168	$33,743
3	$20,780	$30,755	$16,632	$42,599
4	$25,100	$37,148	$20,080	$51,455
5	$29,420	$43,542	$23,536	$60,311
6	$33,740	$49,936	$26,992	$69,167

Sources: Federal Poverty Guidelines, U.S. Department of Health and Human Services and Virginia DMAS. For households with more than six persons, add $4,320 per individual to the FPL. *For pregnant women who qualify for Medicaid only in households with more than six persons, add $6,394 per individual. For FAMIS and FAMIS Plus, Virginia's CHIP programs for households where income exceeds 148 percent of FPL, add $8,856 per additional household member. Table includes 5 percent income disregard for children, parents and pregnant women. The income disregard means that, for certain groups of individuals, the first 5 percent of income is not included in income eligibility calculations.

Currently, Virginia's income guidelines are the same across all localities for pregnant women and children under the age of 19, in that countable income cannot exceed 148 percent of FPL. For the aged, blind and disabled, countable income cannot exceed 80 percent of FPL.

Parents and caretakers of children under the age of 18 who qualify in the category of Low Income Families with Children (LIFC), however, face income guidelines that depend on where they live.[15] **The LIFC income guidelines can cause confusion and may deter work effort. As illustrated in Table 4, a family of three with countable income of around $10,000 a year would be eligible for Medicaid in Hampton but would become ineligible if they moved to any other jurisdiction in Hampton Roads.**

TABLE 4 MEDICAID INCOME ELIGIBILITY GUIDELINES FOR LOW-INCOME FAMILIES WITH CHILDREN, EFFECTIVE JULY 1, 2017	
	Maximum Annual Countable Income
Gloucester, Isle of Wight County, James City County, Mathews County, Suffolk, York County	$6,720
Chesapeake, Newport News, Norfolk, Poquoson, Portsmouth, Virginia Beach, Williamsburg	$7,968
Hampton	$10,536

Source: Virginia Department of Medical Assistance Services, "Medical Assistance Eligibility Policy & Guidance," Chapter 4 (May 2018), Appendix 5. Annual countable income is determined by the geographical income category monthly income guideline plus the 5 percent FPL Disregard. For a family of three, the 5 percent FPL Disregard is $87 per month.

15 Virginia Department of Medical Assistance Services, "Medical Assistance Eligibility Policy & Guidance," Chapter 4 (May 2018).

Who Will Be Eligible To Enroll Once Expansion Occurs In Virginia?

On Jan. 1, 2019, nondisabled adults with countable incomes up to 138 percent of the FPL will become eligible to enroll in the Virginia Medicaid program (Table 5). The income thresholds for disabled adults and low-income families will also adjust upward. These changes are not insignificant.

A single, childless, nondisabled adult who is ineligible for Medicaid in 2018 could earn up to $16,754 and be eligible for Medicaid in 2019. For a single, disabled adult, the income limit rises from $9,712 in 2018 to $16,754 in 2019. Families will also see a rise in income limits. **A family of three in Norfolk, for example, will see the income limit rise from $7,968 in 2018 to $28,677 in 2019.**

TABLE 5

2018 FEDERAL POVERTY LIMITS AND EXPANSION INCOME LIMITS BY HOUSEHOLD

Number of Persons in Household	Federal Poverty Limit	Medicaid Enrollees as of Jan. 1, 2019 (138 percent of FPL)
1	$12,140	$16,754
2	$16,460	$22,715
3	$20,780	$28,677
4	$25,100	$34,638
5	$29,420	$40,600
6	$33,740	$46,562

Sources: Federal Poverty Guidelines, U.S. Department of Health and Human Services and Coverva.org/expansion. For households with more than six persons, add $4,320 per individual to the FPL.

Who Among The Nonelderly Has Insurance In Hampton Roads?

People who are 65 and older are automatically eligible for Medicare, even if they continue to carry private health insurance. While some individuals 65 and older may qualify for Medicaid (as it offers benefits such as nursing home care and personal care services), these "dual eligibles" already have health insurance through Medicare. This is important since Medicaid only pays after Medicare, private-employer group health plans and Medicare supplements have paid.[16] An individual who has Medicare and qualifies for Medicaid would not be considered as transitioning from uninsured status to insured status.

Almost 135,000 residents of Hampton Roads under the age of 65 lacked health insurance coverage in 2016 (Table 6). Of this number, nearly 119,000 were adults and about 16,000 were under the age of 19.

Approximately 42,000 adults lacked health insurance and earned less than 138 percent of the Federal Poverty Level, the target group for Medicaid expansion in 2016. **Surprisingly, almost 7,000 residents of Hampton Roads under the age of 19 lacked health insurance even though their households earned less than 138 percent of the poverty limit. In many cases, these children should be eligible for Medicaid or Virginia's FAMIS or FAMIS Plus programs. It appears that some children may fall through the cracks in the system.**

16 https://www.medicare.gov/your-medicare-costs/help-paying-costs/medicaid/medicaid.html.

TABLE 6

NUMBER OF UNINSURED UNDER 65 BY FEDERAL POVERTY CATEGORY: HAMPTON ROADS, 2016

	Adults (19 to 64 Years)	Minors (0 to 18 Years)	Total
Less than 100% of FPL	30,254	5,310	35,564
100% to 138% of FPL	11,898	1,465	13,363
139% to 400% of FPL	56,273	6,945	63,218
Greater than 400% of FPL	20,513	1,943	22,456
Total	118,938	15,663	134,601

Source: Hampton Roads estimates based on the 2016 American Community Survey 1-year microdata.

Martha Harding's case was recently highlighted by the Virginia Poverty Law Center. She cares for four grandchildren who are on Medicaid, and works in a minimum-wage administrative job. "I don't have insurance, and I worry about what would happen to my grandchildren if I get sick or hurt and can't work. Hardworking people like me, age 55 to 64, have a difficult time because we are not yet able to get Medicare due to age and can't go on Medicaid because we try to earn money to take care of our families."

Focusing On The Working-Age Population In Hampton Roads

As many lower-income people who are disabled, pregnant, or children may already qualify for Medicaid, the impact of Medicaid expansion is likely to be greatest among working-age adults. Expansion, however, does not mean that these individuals will automatically be enrolled in Medicaid. They will need to actively seek to enroll in the program. Based upon the behavior of the uninsured in other states where Medicaid previously expanded, we know that not all eligible individuals will enroll. The additional requirement that nondisabled adults must work or volunteer may deter some from enrolling in Medicaid.

Table 7 illustrates that the uninsured rate for the working-age (19-64) population in Hampton Roads was 11.4 percent in 2016, compared to 12.6 percent for the entire U.S. population. As with the general population, over one-fourth of the working-age population receives health insurance through Tricare or the VA. As one might expect, a higher percentage was covered by employer-based group health insurance plans, and a lower percentage was covered by Medicare relative to the total population. Within the working-age population in Hampton Roads, 7.1 percent were covered by Medicaid, compared to 15.4 percent for the United States.

TABLE 7 HAMPTON ROADS AND UNITED STATES HEALTH INSURANCE PROVIDER DISTRIBUTION: INDIVIDUALS AGES 19-64, 2016		
Type of Insurance	**United States**	**Hampton Roads**
Employer-based	**60.6%**	**56.2%**
Tricare	**2.5%**	**21.7%**
Medicaid	**15.4%**	**7.1%**
Direct Purchase	**12.0%**	**11.3%**
Veterans Affairs	**1.7%**	**3.9%**
Medicare	**4.0%**	**3.2%**
Indian Health Service	**0.5%**	**0.1%**
Uninsured	**12.6%**	**11.4%**

Source: Hampton Roads estimates based on the 2016 American Community Survey 1-year microdata. Sample only includes individuals ages 19-64. Percentages may not sum to 100 percent, as individuals may have more than one type of health insurance

Estimating The Take-Up Rate Of Medicaid

What percentage of the eligible population can we reasonably expect to take up, or enroll in, Medicaid on or after Jan. 1, 2019? To answer this question, we draw upon the experience of Maryland and West Virginia, states that expanded Medicaid in 2014.

In both states, the insured rate increased following Medicaid expansion. By comparing the insured rate in 2013 with the insured rate in 2016, we can estimate the "take-up" rate. The take-up rate is an estimate of the percentage of individuals who added health insurance from 2013 to 2016. To make matters slightly more complicated, take-up rates vary by state and income category.

Maryland and West Virginia started out at different points. In 2013, a higher percentage of the population of Maryland reported having health insurance than West Virginia.[17] Because where you start often determines where you finish, the estimated take-up rates for the two states are quite different.

As shown in Table 8, Maryland's take-up rate was almost 30 percent for people earning less than 100 percent of the poverty limit. For those earning between 100 and 138 percent of the poverty limit, the take-up rate was about 46 percent. What does this mean? If you earned less than 100 percent of the poverty limit in Maryland, you were 30 percent more likely to have health insurance in 2016 when compared to 2013.

A similar but more significant story emerges from West Virginia. For those earning less than 100 percent of the poverty limit, the take-up rate was almost 63 percent. The take-up rate was even higher for people with incomes between 100 and 138 percent of the poverty limit, about 68 percent. Why the higher take-up rates? A contributing factor was the starting point, in which a lower percentage of West Virginia's population was uninsured prior to Medicaid expansion.

TABLE 8 ESTIMATED TAKE-UP RATES FOR MARYLAND AND WEST VIRGINIA, 2016				
	Maryland		**West Virginia**	
	Less than 100% of FPL	**100% to 138% of FPL**	**Less than 100% of FPL**	**100% to 138% of FPL**
2016	**29.9%**	**45.5%**	**62.5%**	**67.6%**

Source: 2016 American Community Survey one-year microdata. Sample only includes adults ages 19-64. The take-up rate is determined by the rise in the percentage of individuals reporting any health insurance coverage in each year relative to the percentage of individuals reporting health insurance coverage in 2013.

Drawing upon the experience of Maryland and West Virginia, we estimate the take-up rate for Medicaid expansion in Hampton Roads will be 44 percent for people with incomes

17 For Maryland, in 2013, 73.4 percent of those earning less than 100 percent of FPL and 69.6 percent of those between 100 and 138 percent of FPL reported having health insurance. For West Virginia, 64.1 percent of those earning less than 100 percent of FPL and 62.6 percent of those between 100 and 138 percent of FPL reported having health insurance

less than 100 percent of FPL and 55 percent for those with incomes between 100 and 138 percent of FPL.

Some might argue that these take-up rates are too low. In 2016, the Urban Institute estimated a take-up rate of 56.8 percent for a potential Medicaid expansion in Virginia.[18] In 2017, the Virginia Department of Medical Assistance Services (DMAS) projected take-up rates and enrollment for Medicaid expansion in Virginia. DMAS estimated that 85 percent of eligible (and interested) adults with incomes between 0 and 138 percent of FPL would enroll due to Medicaid expansion.[19] Of the 370,000 adults without insurance and sufficiently low incomes, 238,544 would enroll in Medicaid and 60,000 would transfer from other health insurance plans. From this, we obtain a take-up rate of 64.5 percent.

Of course, each of these estimates is, at best, a projection. We don't know exactly how many people will enroll in Virginia because the Commonwealth is different from other states. Hampton Roads is also different from other metropolitan areas in Virginia. Every estimate is fraught with uncertainty, and the best course of action is to present a range of outcomes for the interested reader.

How Many Will Enroll After Medicaid Expansion In Hampton Roads?

Table 9 presents low, medium, and high estimates of Medicaid enrollment in Hampton Roads after expansion.

Low estimates: If newly eligible individuals in Hampton Roads take up Medicaid insurance at the low take-up rates, about 20,000 newly eligible adults in Hampton Roads will enroll in Medicaid. Of these, we estimate that 13,276 will have incomes less than 100 percent of FPL and about 6,509 will have incomes between 100 and 138 percent of FPL.

Medium estimates: If newly eligible individuals in Hampton Roads take up Medicaid insurance at the medium take-up rates, about 24,000 newly eligible adults in Hampton Roads will enroll in Medicaid. Of this number, 17,184 will have incomes less than 100 percent of FPL and 6,758 will have incomes between 100 and 138 percent of FPL.

High estimates: Lastly, if newly eligible individuals enroll at the high take-up rates, about 27,000 Hampton Roads adults will enroll in Medicaid – 19,505 with incomes less than 100 percent of FPL and 7,671 with incomes between 100 and 138 percent of FPL.

Regardless of one's assumptions about take-up rates, Medicaid expansion will not result in every eligible individual enrolling in Medicaid. **Between 15,000 and 22,000 adults in Hampton Roads who might be eligible for Medicaid may not enroll. Some of these individuals may never enroll, others may lack information about Medicaid and some may be deterred by potential work requirements.** Contrary to some public perceptions, however, many adult Medicaid enrollees already work. In fact, the increased income eligibility limits may result in increased work effort by Medicaid recipients, who will be able to earn more without endangering their enrollment.[20]

Finally, Medicaid expansion does not address those who make more than 138 percent of the poverty limit. **Including all income groups, almost 100,000 adults will remain uninsured in Hampton Roads after Medicaid expansion.**

18 Buettgens, M. and Kenney, G.M. "What if More States Expanded Medicaid in 2017? Changes in Eligibility, Enrollment, and the Uninsured," (2016) Urban Institute.

19 DMAS estimated that 370,00 adults with incomes between 0 and 138 percent of FPL did not have insurance and 22.8 percent would remain ineligible for Medicaid; 5,000 of the remaining individuals would never enroll. Given an 85 percent take-up rate for these remaining individuals, 238,544 of 370,000 would enroll and 60,000 other individuals would transition from other insurance plans.

20 "Kaiser Family Foundation: Distribution of the Nonelderly with Medicaid by Family Work Status," https://www.kff.org/medicaid/state-indicator/distribution-by-employment-status-4. For further discussion regarding Medicaid work requirements, who is affected and impacts on enrollment, see "Medicaid and Work Requirements: New Guidance, State Waiver Details and Key Issues," Musumeci, M.B., Garfield, R. and Rudowitz, R. (Jan. 16, 2018). Retrieved online May 31, 2018, from https://www.kff.org/medicaid/issue-brief/medicaid-and-work-requirements-new-guidance-state-waiver-details-and-key-issues.

TABLE 9

ESTIMATED IMPACT OF MEDICAID EXPANSION ON ADULTS IN HAMPTON ROADS

Income Group	Total Adults	Low Take-Up		Medium Take-Up		High Take-Up	
		Newly Insured	Remaining Uninsured	Newly Insured	Remaining Uninsured	Newly Insured	Remaining Uninsured
Less than 100% of FPL	30,254	13,276	16,978	17,184	13,070	19,505	10,749
100% to 138% of FPL	11,898	6,509	5,389	6,758	5,140	7,671	4,227
139% to 400% of FPL	56,273	0	56,273	0	56,273	0	56,273
Greater than 400% of FPL	20,513	0	20,513	0	20,513	0	20,513
Totals	118,938	19,785	99,153	23,942	94,996	27,176	91,762

Source: 2016 American Community Survey 1-year microdata files. Low estimate based on take-up in Maryland/West Virginia post-ACA expansion, medium estimate based on take-up in Buettgens and Kenney (2016) and high estimate based on DMAS 2017 estimate.

There Is No Such Thing As A Free Lunch

As part of Obamacare, the federal government match rate for expansion population costs (otherwise known as the Federal Medical Assistance Percentage, or FMAP) was 100 percent for 2014 to 2016. In other words, the federal government reimbursed states for 100 percent of the direct costs of newly eligible enrollees during this period.

Since then, the federal government reimbursement rate has declined and will be 93 percent in 2019. The FMAP ratchets down to 90 percent for 2020 and subsequent years.[21] For $1,000 in newly eligible enrollee costs in 2019, Virginia will bear $70 of the cost and the federal government will bear $930. In 2020 and beyond, for the same amount of cost, Virginia will bear $100 and the federal government will bear $900. To many, this seems too good a deal to pass up, but there are worries about the future.

Part of the hesitance to adopt the Medicaid expansion has been the lower FMAP rates states receive on previously eligible Medicaid enrollees and fears that future law changes might result in the newly eligible Medicaid enrollees receiving the same FMAP rates as current enrollees. With the current historically high federal budget deficits and debt, it is quite likely (if not guaranteed) that future federal spending will have to change, and likely in ways that shift more fiduciary burdens to the states. Current enrollee FMAP rates are adjusted each year based on state per capita income relative to the national rate, whereby states with comparatively higher per capita incomes receive lower FMAP percentages. For fiscal years 2010 to 2018, Virginia is subject to an FMAP rate of 50 percent for its current Medicaid-enrolled citizens.[22] The federal government matches Virginia's expenditure dollar-for-dollar.

While Virginia has been criticized in the past for being one of the more restrictive states with respect to Medicaid eligibility, this policy choice works in the Commonwealth's favor with regard to Medicaid expansion. With Medicaid expansion, more generous states which had previously allowed low-income, nondisabled, nonelderly adults to enroll in Medicaid received reduced reimbursements compared to states which chose to expand Medicaid in 2014 and beyond. By 2020, however, the matching rate will be equal for enrollees in the expansion income category across states.[23] Virginia, on the other hand, having previously been excluded from this group, will now be able to count all newly eligible enrollees with incomes 138 percent or less of FPL as being eligible for higher FMAP reimbursement. Obviously, receiving 90 percent reimbursement for newly eligible enrollees versus 50 percent is to Virginia's benefit.

Table 10 includes estimates for the possible cost per enrollee and cost overall for Virginia from 2019 to 2021 if the Medicaid expansion incurs costs comparable to those of current enrollees. We continue to use our previous take-up rate estimates of 44 percent for people with incomes less than 100 percent of FPL and 55 percent for those with incomes between 100 and 138 percent of FPL. We also assume that costs per enrollee will continue at the 2 percent rate observed from 2007 to 2013.[24] In the first scenario, we front-load the number of newly eligible individuals estimated to enroll in Medicaid into 2019. One can think of this scenario in terms of estimating the upper limit of costs and imposing the full costs of Medicaid expansion in Hampton Roads in 2019. In the second scenario, we mirror the take-up of Medicaid in Maryland and West Virginia and the costs are fully realized by 2021.

For the newly eligible enrollees in Hampton Roads, we estimate that costs to the Commonwealth will range from about $10 million to $15 million in 2019, depending on one's assumptions about the take-up rate. By 2021, the Commonwealth will incur costs between $16 million and $22 million for new Medicaid enrollees in Hampton Roads.

We caution that if federal reimbursement rates for newly eligible enrollees dropped to the 50 percent rate for currently enrolled participants, the estimated costs in Table 10 could multiply by a factor of five. Medicaid expansion costs in Hampton Roads would increase to between $78 million to $108 million in 2021, depending on the take-up rate of Medicaid expansion.

21 Medicaid's Federal Medical Assistance Percentage (FMAP) Congressional Research Service report 7-5700 by Mitchell, A., Feb. 9, 2016.
22 State Health Facts: Federal Medical Assistance Percentage (FMAP) for Medicaid and Multiplier, retrieved March 6, 2018, from https://www.kff.org/medicaid/state-indicator/federal-matching-rate-and-multiplier.
23 Congressional Research Service, 2018, Medicaid's Federal Medical Assistance Percentage (FMAP).
24 "Medicaid at a Glance" by the Virginia Department of Medical Assistance Services, http://www.dmas.virginia.gov/files/links/221/MAG%202018%20FINAL.021518.pdf

TABLE 10

ESTIMATES OF STATE COSTS FOR MEDICAID ENROLLEES IN HAMPTON ROADS

		Virginia's Cost per Enrollee		All Medicaid Expansion Occurs in 2019			Gradual Expansion of Medicaid*		
Year	Total Cost per Enrollee	Current Enrollee Cost	Newly Eligible Cost	Low Take-up Estimate	Medium Take-up Estimate	High Take-up Estimate	Low Take-up Estimate	Medium Take-up Estimate	High Take-up Estimate
2018	$7,479	$3,739							
2019	$7,628	$3,814	$534	$10,564,586	$12,784,408	$14,511,057	$4,757,255	$5,756,845	$6,534,359
2020	$7,781	$3,890	$778	$15,394,111	$18,628,708	$21,144,683	$13,705,569	$16,585,371	$18,825,374
2021	$7,936	$3,968	$794	$15,701,994	$19,001,283	$21,567,577	$15,701,994	$19,001,283	$21,567,577

Source: Kaiser Medicaid Spending Per Enrollee (full or partial benefit) for FY 2014. 2015 and after are per-enrollee cost estimates based on the 2007-2013 yearly average change of 2 percent from DMAS "Medicaid at a Glance." FMAP rates are 50 percent per current enrollee and are 93 percent in 2019 and 90 percent in 2020 and beyond. *Cost estimates assume take-up rates that mirror the three-year time profile of Maryland and West Virginia expansion enrollees; not all who eventually signed up for Medicaid in these states did so directly after initial eligibility in January 2014.

Uncompensated Care And The Financial Impact Of Medicaid Expansion

Prior to Obamacare, most states did not extend Medicaid insurance to low-income, nondisabled, childless adults under the age of 65. As the 1986 Emergency Medical Treatment and Labor Act forbade hospitals to turn away patients from emergency departments based on their ability to pay, one intent of Obamacare was to reduce the amount of uncompensated care provided by hospitals.[25] The numbers of uninsured are associated with lower hospital margins,[26] so one can reasonably argue that uncompensated care costs are not fully passed on by hospitals to other parties. Two recent studies found that when comparing Medicaid expansion states to nonexpansion states, uncompensated care costs drop by 1.0 to 1.7 percent.[27, 28]

Examples abound of how uncompensated care and bad-debt costs reduce the bottom line for hospitals in Hampton Roads. The Virginia Health Information System contains valuable information on the financial performance of hospitals throughout Virginia.[29] In 2016, Bon Secours Mary Immaculate Hospital in Newport News reported $25.7 million in charity care costs and $10.2 million in bad debts. Sentara Norfolk General Hospital reported delivering $165.9 million in charity care and $61.6 million in bad debts. Chesapeake Regional Medical Center had $12.3 million in charity costs and $44.3 million in bad-debt costs for the same period. In 2016, reported uncompensated-care costs likely exceeded $500 million and bad debts were over $850 million for hospitals in Hampton Roads. While some may argue that the costs of charity care and bad debts are overstated, as these costs are based on the full price of hospital services, we should be able to agree that uncompensated care and

25 "Emergency Medical Treatment and Labor Act (EMTALA)," Centers for Medicare & Medicaid Services, retrieved online March 13, 2013, from https://www.cms.gov/Regulations-and-Guidance/Legislation/EMTALA/index.html.

26 Garthwaite, C., Gross, T. and Notowidigdo, M.J. (2018), "Hospitals as insurers of last resort," *American Economic Journal: Applied Economics*, 10(1), 1-39.

27 Dranove, D., Garthwaite, C. and Ody, C. (2016), "Uncompensated care decreased at hospitals in Medicaid expansion states but not at hospitals in nonexpansion states," *Health Affairs*, 35(8), 1471-1479.

28 "How Has the ACA Changed Finances for Different Types of Hospitals? Updated Insights from 2015 Cost Report Data," Blauvin, F. (April 2017), Urban Institute.

29 http://www.vhi.org/hospital_region.asp.

bad-debt costs negatively affected the bottom line of hospitals in Hampton Roads.

It stands to reason that if these costs are being incurred for specific patients without payment, additional revenues must be generated from those who are able or willing to pay to cover these uncompensated costs. Whether these costs are paid eventually by other patients, insurance companies, hospitals or governments, it should be clear that uncompensated care is a burden on the health care system.

Reductions in uncompensated-care costs can be substantial as people move from uninsured to insured status, with one estimate suggesting savings may reach $800 per newly insured individual.[30] Using this estimate, Medicaid expansion in Virginia could reduce direct annual uncompensated-care costs by $16 million to $22 million in Hampton Roads. Another recent study found that uncompensated-care costs drop by as much as 40 percent in Medicaid expansion states.[31] Such a drop would result in annual savings in the tens of millions of dollars to providers in Hampton Roads. Regardless of which estimate one uses, a reduction in uncompensated costs and, indirectly, bad debts, will improve financial outcomes for health care providers.

30 Garthwaite, C., Gross, T. and Notowidigdo, M.J. (2018), "Hospitals as insurers of last resort," *American Economic Journal: Applied Economics*, 10(1), 1-39.
31 http://ccf.georgetown.edu/wp-content/uploads/2016/05/Medicaid_hospitals-clinics-June-2016.pdf.

Final Thoughts

Virginia's decision to expand Medicaid will undoubtedly impact the overall picture of health care insurance and services in Hampton Roads. We estimate that of the 119,000 adults under the age of 65 without health insurance in Hampton Roads, between 20,000 and 27,000 will become eligible and enroll in Medicaid expansion. Uncompensated-care costs will decrease but the demand for health care services will increase, creating a higher demand for emergency department services and primary care physicians.

Expanding Medicaid in Virginia will not increase insurance coverage rates in Hampton Roads to 100 percent. We expect uninsured rates to drop to around 6 percent over time and almost 100,000 adults in our region will remain without health insurance. About 56,000 of these adults earn between 139 and 400 percent of FPL and 20,500 earn more than 400 percent of FPL. Increasing health insurance subsidies for these individuals may be one policy option, but it would involve substantial costs.

For newly covered residents, out-of-pocket expenses for health care will decline, leading to increased consumption. The increased demand for health care services will lead to gains in employment. The demand for city health care services will also decline, and an additional benefit is likely to be a reduction in the number of calls for emergency personnel to respond to routine medical conditions. Many current recipients of Medicaid will also be able to work more hours without endangering their eligibility, a positive factor in today's tight labor market.

The more successful the Commonwealth is in enrolling newly eligible individuals, the larger the potential decline in uncompensated-care costs. This, in part, explains why S&P Global Ratings recently stated that Medicaid expansion would be "credit positive" for Virginia's hospitals.[32]

We should not blithely assume that the federal government will continue to reimburse Virginia in perpetuity for new enrollees at a higher rate than existing enrollees. A reduction in the FMAP or an economic downturn that places significant pressure on the federal budget could result in a retrenchment of

32 https://www.richmond.com/news/virginia/government-politics/general-assembly/s-p-finds-medicaid-expansion-positive-for-va-hospitals-credit/article_27c9eb6d-d076-5759-8bd2-b546d3011194.html.

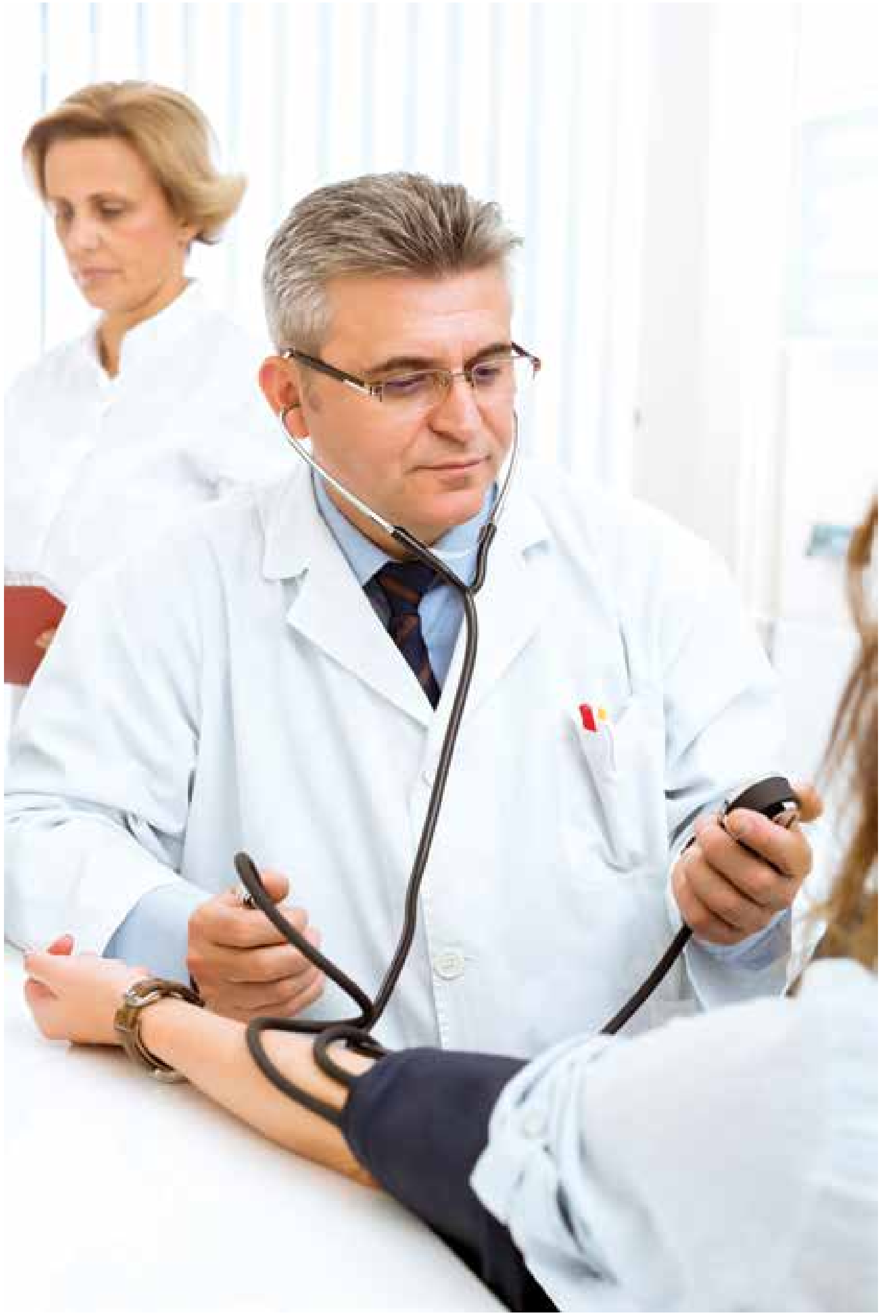
Medicaid eligibility and an increase in the uninsured rate. While history may be a guide, it is also not a promise.

Simply put, if the federal government were to reduce its reimbursement rate for new enrollees to 50 percent, Virginia's costs could increase by hundreds of millions of dollars. The Hampton Roads portion of these costs would approach $100 million, depending on how many newly eligible residents sign up for Medicaid.

In the end, if the intent of Medicaid expansion is to lower the number of uninsured among the most vulnerable in Hampton Roads, it will likely succeed in that goal. Medicaid expansion will also improve the financial health of hospitals and, over time, the health outcomes for new enrollees. Current and prospective enrollees may also be able to earn more income without threatening their eligibility, a boon to the economy of the region. Lastly, the federal government will bear most of the cost of new enrollees, which may be a net benefit to the state budget.

Medicaid expansion costs, however, will not be zero and there is a risk that costs could increase substantially in the future. The Commonwealth could mitigate some of the financial risks by setting aside some or all the current tax windfall resulting from the Tax Cuts and Jobs Act of 2017. Avoiding the temptation to return all this windfall to taxpayers is also important, as we are likely closer to the next recession than farther away from it. Investing in enrollment efforts and administrative capability at the state and local level will be necessary to cope with the influx of new enrollees.

Medicaid expansion will neither be free nor easy, but will likely have a net positive economic benefit for Hampton Roads. Now that the debate is over, the work begins in earnest.



Craft Brewing In Hampton Roads

CRAFT BREWING IN HAMPTON ROADS

Beer is proof that God loves us and wants us to be happy.
– Often incorrectly attributed to Benjamin Franklin

The beer industry has experienced a renaissance with the rise of craft breweries and beer. The craft beer scene, typically characterized by small independent local breweries producing unique flavors, has swept across the country. Graph 1 shows craft beer production in the United States grew by double-digit annual rates in the first half of the decade. However, craft beer production slowed to more pedestrian levels of growth in 2016 and 2017. Nonetheless, craft beer has steadily increased its share of the total beer market. Bart Watson, chief economist for the Brewers Association, the craft brewers' trade group, attributes this growth to changing consumer tastes for fuller flavor, greater product variety and increasing support for local businesses.[1]

As the craft beer movement was gaining steam, Virginia was in danger of missing out on the party. Breweries in the Commonwealth were not able to sell their beer on-premise without a restaurant license, a privilege allowed to the state's wineries. On-site sales locations, which go by such names as tasting rooms, tap rooms, beer halls, beer gardens, etc., had become a staple of the craft beer movement. Craft beer enthusiasts outside the Commonwealth were flocking to breweries where they could sip on a draft or flight (several small glasses of different beers) with the stainless-steel equipment that fermented their beverage in the background. Virginia breweries were missing out on this class of consumers who value experience (in this case the brewery atmosphere) along with the products they purchase.[2] They were instead left competing for distribution to retail sites with older, more established brands.

This changed in 2012 when the General Assembly passed SB 604 (signed by then Gov. Bob McDonnell, in a brewery no less), which cleared the way for on-site beer sales. This legislation made it more profitable for large and small breweries alike to operate within the state. By serving beer on-site, brewers are able to circumvent the three-tier marketing system (producer-distributor-retailer) that had lingered since the repeal of Prohibition. Now they can market their unique concoctions directly to drinkers, and subsequently help their bottom line. Breweries earn approximately five times more on a beer sold in a tasting room than the same beer distributed to a grocery store or restaurant. Thus, if thirsty customers continue to visit tasting rooms, even relatively small craft breweries can not only survive, but also thrive.

Furthermore, SB 604 lowered the risk for entrepreneurs to start craft breweries in the Commonwealth, and allowed them to experiment with different ingredients, locations and brewery atmospheres. McDonnell remarked while signing the bill that it would "make it easier for our breweries to serve as destinations for potential customers."[3] And Mike Killelea, chairman of the Virginia Craft Brewers Guild, noted that it would "help existing breweries flourish and create opportunities for new craft breweries to enter the market."[4] This is undoubtedly also good for consumers.

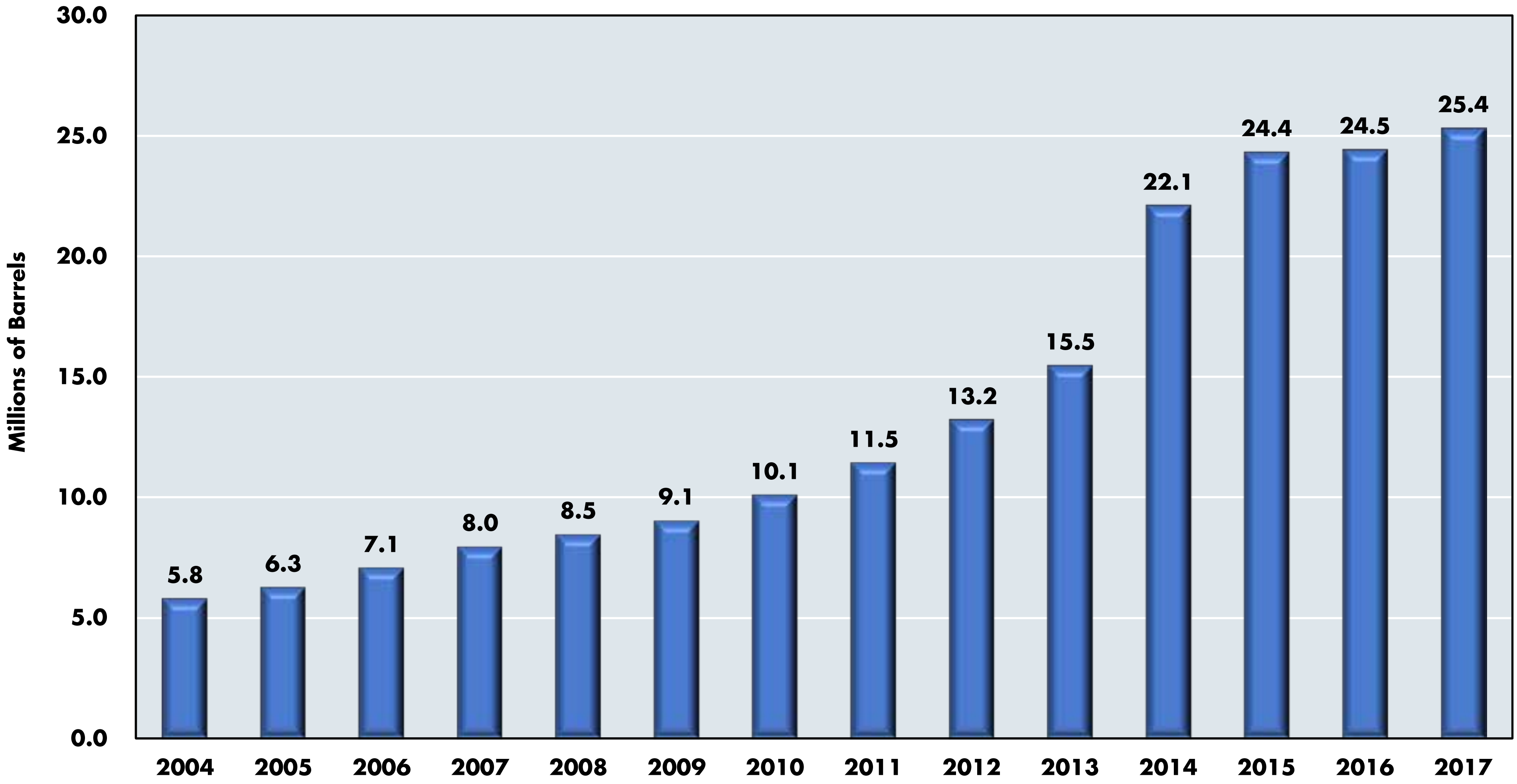
Before the passage of SB 604, there were only four craft breweries in Hampton Roads. By May 1, 2018, the number of craft breweries had increased to 29. Because of the nature of the industry, the number and type of breweries changes quickly, as evidenced by the announcements of new breweries in the summer of 2018.

1 https://www.theatlantic.com/business/archive/2018/01/craft-beer-industry/550850
2 Research published in 2014 shows that beer tourists are motivated to visit a brewery by four main factors: craft brewery experience, enjoyment, socialization and beer consumption, Kraftchick, J.F., Byrd, E.T., Canziani, B. and Gladwell, N.J. (2014), "Understanding beer tourist motivation," *Tourism Management Perspectives*, 12, 41-47.

3 http://beerpulse.com/2012/05/virginia-governor-signs-two-laws-supporting-in-state-craft-breweries
4 https://www.brewersassociation.org/current-issues/va-governor-signs-bill-enhancing-small-brewery-sales.

GRAPH 1

TOTAL CRAFT BEER PRODUCTION IN THE UNITED STATES, 2004-2017
(IN MILLIONS OF BARRELS)



Source: Brewers Association

Local craft breweries are both satisfying drinkers' palates and helping revitalize rundown sections of cities, spurring the creation of supporting businesses and providing a local outlet for consumer spending that otherwise would have left the region. In many places, local craft breweries are not only a destination for a new kind of consumer, the craft beer tourist, but also a new neighborhood meeting place akin to the town square of long ago. These breweries can also serve as a source of competition with other local venues for scarce entertainment spending, and as such contribute to vibrant economic growth.

In this chapter, we take a closer look at the craft brewery industry and the role it plays in Hampton Roads.

What Is A Craft Brewery?

The term "craft beer" deserves some unpacking. Some prefer to define craft beer not by what it is, but by what it is not. In this light, craft beer is not produced by one of the "big beer" conglomerates like Anheuser-Busch InBev (AB InBev) or MillerCoors, which we'll refer to as macro brewers. While useful, this distinction has become thornier. The macro brewing companies have begun to purchase smaller regional breweries, such as AB InBev's purchase of Devils Backbone Brewing Co. in Virginia's Shenandoah Valley and Wicked Weed in Asheville, North Carolina, among others. In the industry, these have come to be known as "phantom brands" since most of the beer-drinking public is not aware that Devils Backbone and Wicked Weed are owned by the macro brewery AB InBev.

The Brewers Association provides further guidance on defining craft brewers. In 2017, the trade group even launched a certification and labeling program to help consumers differentiate between phantom and macro brands, with breweries falling under their definition of craft beer. They note, "An American craft brewer is small, independent and traditional." They go on to flesh out these characteristics. "Small" indicates the brewery produces 6 million barrels (186 million gallons) or fewer each year. This eliminates the macro brewers, but still includes many large producers like the Boston Beer Co. (known for its flagship brand Samuel Adams), which have more in common with macro brewers than their smaller craft counterparts. "Independent" denotes that the craft brewer has the majority of the ownership stake or control in the company. "Traditional" purports that a brewery uses traditional or innovative brewing ingredients. The notion of traditional ingredients harkens back to the Reinheitsgebot, the German beer purity law of 1516. The Reinheitsgebot only permitted beer to be produced from water, hops and barley.[5] In practical terms, the use of traditional ingredients contrasts craft beer from other flavored malt beverages, like hard lemonade. Outside of using traditional ingredients, craft beer is often characterized by unique twists and distinctive flavors created by including nontraditional ingredients such as fruits, chocolate and much more. The Brewers Association goes on to note that most craft breweries tend to be involved in their local communities through philanthropy, volunteerism and sponsorship of local events.

What signifies a brewery as "craft" should not be confused with what some refer to as craft beer industry market segments. Again, the Brewers Association provides guidance on the differences among a microbrewery, brewpub, contract brewing company and regional craft brewer. Microbreweries produce fewer than 15,000 barrels a year and sell 75 percent of their beer off-site. Brewpubs, on the other hand, are restaurant-breweries that sell a higher percentage of beer on-site and emphasize the quality of food offerings. Contract breweries outsource the production of their beer to another brewery. Finally, regional breweries, as previously defined, are independent breweries with most of their production using traditional or innovative ingredients and have annual production between 15,000 and 6 million barrels.

Despite the range of distinctions and definitions, when thinking about the Hampton Roads craft brewery scene, we focus on breweries that fit the simplest of these definitions. These breweries are small, independent and produce beer with distinctive flavors. All the breweries in Hampton Roads fall under this broad definition.

5 Yeast was left off the original Reinheitsgebot, despite its important role in the fermentation process. It was later added to modern versions of the regulation.

The Craft Beer Producers

A BRIEF HISTORY OF CRAFT BREWING

Many credit Fritz Maytag, the great-grandson of Maytag Corp. founder Frederick Maytag, as the father of modern American craft brewing.[6] In 1965, Maytag purchased San Francisco's floundering Anchor Brewing Co. Founded in 1896, it was on the precipice of going out of business due to declining sales and competition from lighter beers mass-produced by macro breweries. Maytag was able to revitalize Anchor Brewing and at the same time inspire a generation of craft brewers. He understood that his small brewery would not be able to compete with the low prices of macro brewers. Instead, he would need to compete with expensive imported brands on variety and quality. By 1975, Anchor brewed the first American India pale ale, American barley wine and the first American wheat beer since Prohibition. The brewery also revived many beer enthusiasts' favorite part of the holiday season, custom spiced beer. Maytag's ability to produce innovative products would become a staple of the craft beer movement.

Producing an innovative product was crucial for the survival of Anchor Brewing. However, Maytag likely did more for the future of craft beer by inspiring both the home brew movement and several early craft-brewing pioneers. First, he indirectly helped give rise to the home brew movement, where, as the name suggests, individuals make small batches of beer in their homes to share with friends and family. One of the original home brew pioneers, Fred Eckhardt, began home brewing after a visit to Maytag's brewery. Eckhardt later penned the book "A Treatise on Lager" in 1970, which was instrumental in launching the home brew movement. By the early 1980s, hundreds of people were contacting Maytag for advice on how to start a brewery. His most notable protégé was Ken Grossman, co-founder of Sierra Nevada Brewing Co., who incidentally started home brewing after reading Eckhardt's book.

6 More information on the history of craft brewing can be found at Elzinga, K.G., Tremblay, C.H. and Tremblay, V.J. (2015), "Craft beer in the United States: History, numbers, and geography," *Journal of Wine Economics*, 10(3), 242-274.

Why the history lesson? Because the traits that spurred the nascent craft beer industry in the 1960s and 1970s also propel it today. Craft brewers continue to create products with unique tastes using nontraditional ingredients. Beer has come a long way from the traditional Reinheitsgebot ingredients of water, hops and barley. Now craft brewers include ingredients that range from apricots to zucchini,[7] and a wide variety in between. Craft brewers are even experimenting with fermenting beer in bourbon and wine barrels to create truly unique flavors. Furthermore, one would be hard-pressed to find a recent craft brewery founder who didn't start out home brewing. The collaborative culture still exists today. Breweries often undertake joint brewing projects and established breweries serve as a training ground for future entrepreneurs.

BEER PRODUCTION BY THE NUMBERS

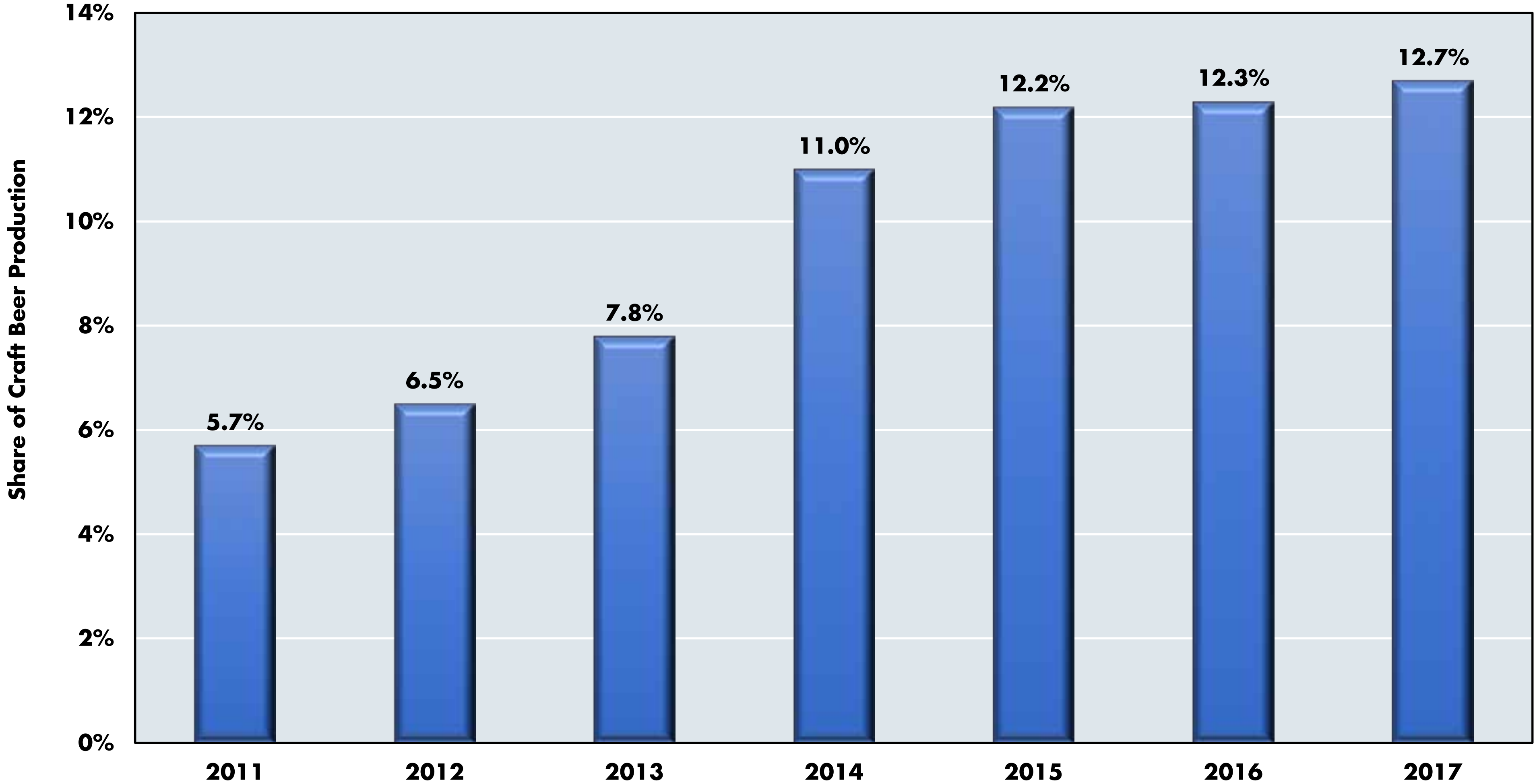
Now on to some numbers. As shown in Graph 2, the market share of craft beer, compared to total beer, more than doubled over a six-year period – from 5.7 percent in 2011 to 12.7 percent in 2017. In comparison, craft beer made up less than 3 percent of the total beer market merely a decade ago. Over the last decade, the beer industry has gone through a significant transformation. Table 1 shows some specifics by comparing the number of breweries and the amount of beer produced (both craft and non-craft beer) for different size categories between 2007 and 2017. First, in 2017 there were more than 3.5 times the number of breweries compared to 2007. This growth took place at a time when the total amount of domestic beer production declined by over 6 percent.

Most size categories saw an increase in the number of breweries. The largest (6,000,001 barrels or more) declined both in quantity of breweries and amount of production. While this inevitably represents some consolidation by the largest players in the business, nonetheless this is also a harbinger for the decline in non-craft beer and the rise of smaller, boutique breweries. The smaller-scale breweries (fewer than 30,000 barrels) grew from 1,332 in 2007 to 4,927 in 2017, representing a 270 percent increase over the decade. Furthermore, production for the smaller brewers increased by 240 percent (more than 5,000,000 barrels), while the larger facilities that produce 100,000 or more barrels actually saw a 10 percent decline in volume over the last decade.

7 https://untappd.com/b/blackwater-draw-brewing-company-zucchini-bread-beer/475086.

GRAPH 2

SHARE OF CRAFT BEER PRODUCTION IN TOTAL BEER PRODUCTION: UNITED STATES, 2001-2017



Source: Brewers Association

TABLE 1

NUMBER OF BREWERIES BY PRODUCTION SIZE, 2007-2017

	Number of Breweries		Total Barrels Produced	
Size	**2007**	**2017**	**2007**	**2017**
6,000,001 Barrels and Over	17	15	167,562,085.40	135,615,117.47
1,000,001 to 6,000,000 Barrels	3	9	13,003,841.85	22,156,697.28
500,001 to 1,000,000 Barrels	10	10	6,641,984.43	6,253,029.02
100,001 to 500,000 Barrels	24	40	4,972,430.67	8,792,844.25
60,001 to 100,000 Barrels	20	41	1,513,844.02	3,175,932.85
30,001 to 60,000 Barrels	34	53	1,441,864.66	2,230,144.53
15,001 to 30,000 Barrels	26	99	538,169.53	2,062,332.14
7,501 to 15,000 Barrels	41	152	452,233.35	1,565,335.71
1,001 to 7,500 Barrels	356	1,030	819,158.91	2,656,419.36
1 to 1,000 Barrels	909	3,646	355,171.47	1,073,977.86
Total	**1440**	**5095**	**197,300,784.29**	**185,581,830.47**

Source: Department of the Treasury Alcohol and Tobacco Tax and Trade Bureau (TTB)
* Created 1,000,001 to 6,000,000 Barrels category for 2016 data
** Removed under 1 Barrel producers
1) Number of Breweries - Count of brewery premises reporting production operations and paying taxes during the calendar year, from TTB data records.
2) Size - Based on Annual Production - The listed strata of breweries is based on the total amount of beer, in barrels, produced during the calendar year by each brewer.
3) Barrels Produced - Total barrels of beer produced by the breweries comprising the named strata of data. Totals from each brewer are drawn from lines 2 and 3, column (g), of TTB Forms 5130.9 - Brewer's Report of Operations, and lines 1 and 2 of TTB Form 5130.26 - Brewpub Report of Operations submitted by brewers for operations during the calendar year.

To provide context on the size of the facilities displayed, no brewery in Hampton Roads comes close to producing the volume of the top few categories, and most produce fewer than 15,000 barrels. One thing is for certain: The beer industry is becoming less concentrated among a few large producers.

There also has been an evolution in the craft beer market segments. Graph 3 compares market segments using data from the Brewers Association. Regional and microbreweries were a significant driving force of growth in the craft beer industry. Regional breweries, the independent breweries with annual production between 15,000 and 6 million barrels, accounted for 64 percent of production in 2004, increasing to 79 percent by 2014 but declining to 70 percent in 2017. Microbreweries accounted for 12 percent of the market share in 2004 and have risen steadily to account for more than 22 percent in 2017. The production growth from regional breweries has stalled in recent years, while smaller microbrewery output has continued to rise.

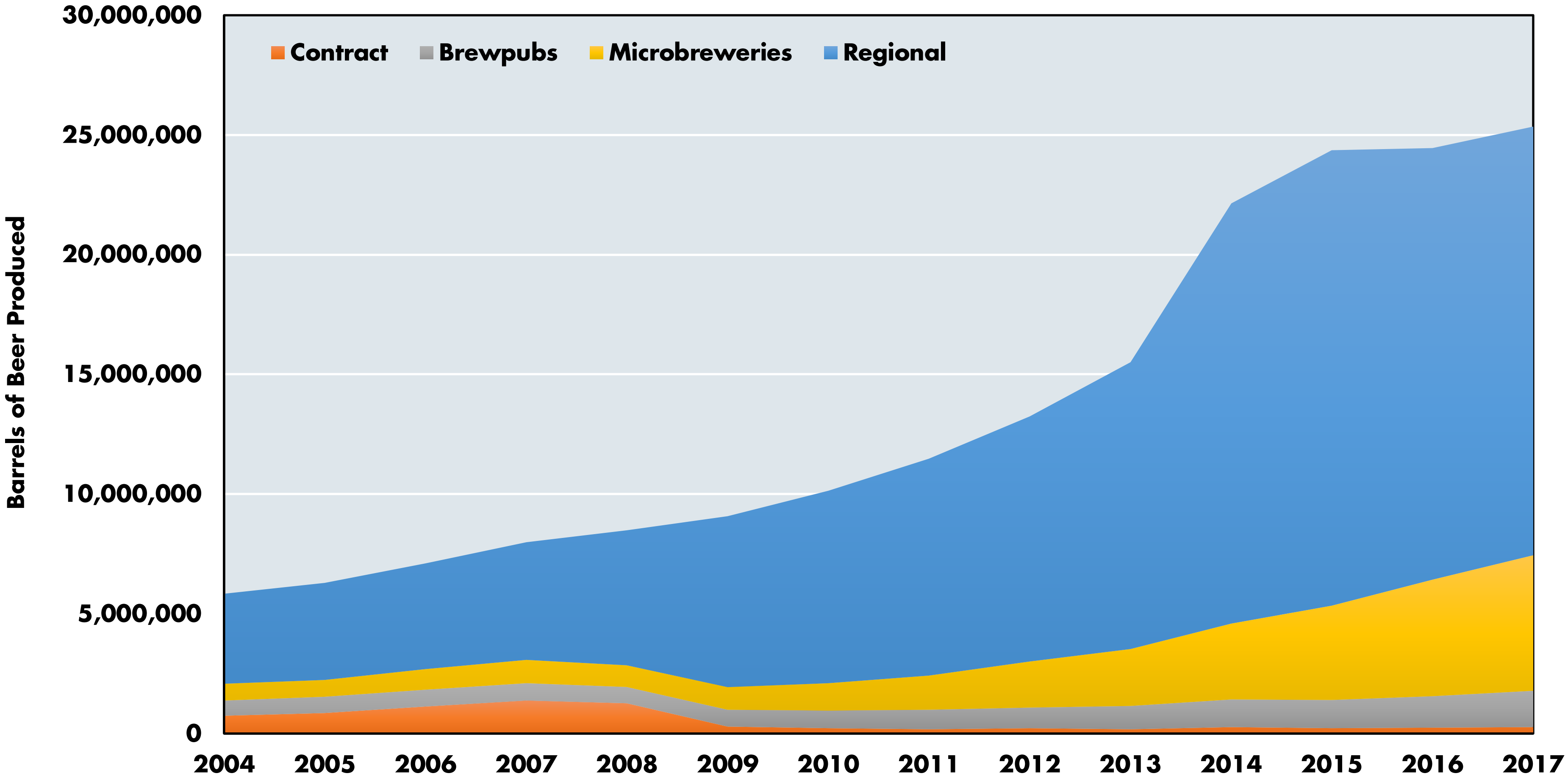
As we will see later in this chapter, the brewery industry in Hampton Roads displays strong parallels to the aggregate national trends.

Our craft brewery scene is made up primarily of brewpubs and microbreweries, which have continued to thrive in recent years. Green Flash would have been the lone brewery representing the regional brewery segment. In 2018, in the face of increasing competition, Green Flash shuttered its Virginia Beach brewery and stopped distribution in many states. After defaulting on a commercial loan, Green Flash was sold to a group of private investors and now has new management. New Realm Brewing, based in Atlanta, purchased Green Flash's Virginia Beach facility and recently reopened the tasting room and production line[8].

8 https://www.brewbound.com/news/green-flash-brewing-hires-top-anheuser-busch-executive-new-ceo

GRAPH 3

HISTORICAL CRAFT BREWERY PRODUCTION BY CATEGORY



Source: Brewers Association

BEER MARKETS

Beer production was dispersed among many breweries prior to Prohibition. The Brewers Association estimates there were almost 2,000 active permitted U.S. breweries at the turn of the 20th century. This is similar to the number of breweries in the country 100 years later. However, between these periods a few large producers dominated the industry, such as the macro brewers mentioned earlier. Understanding the post-Prohibition market structure, which economists call an oligopoly (literally meaning a small number of sellers), yields insights on the evolution of the industry and how craft beer and macro beer might compete in the future.

Following the repeal of Prohibition, there was a brief spike in the number of breweries, which quickly diminished to a few big producers (the macro beer oligopolists). The oligopoly market structure explains in part why the large producers focused on producing essentially the same beer, the American pale lager. These brewers initially competed on price (or the flip side of the coin on lower costs of production), but they also wanted a consistent taste that was suitable to the masses. Brewers were looking to reach a broad range of consumers and provide a dependable product for drinkers throughout the country. Their goal was similar to what McDonald's was doing with the hamburger, providing a low-cost product amenable to the average consumer. Furthermore, by focusing on a core product, they were able to leverage their size and save costs on production, advertising and distribution. This strategy proved quite profitable.

While the American pale lager grew in popularity after Prohibition, it did not satisfy the demands of beer drinkers who desired something more from their beverage. A growing number of consumers were demanding locally produced craft beer with greater variety in terms of styles and flavors, and most importantly they were willing to pay more for it. This change in consumer demand for beer mimics the "buy local" movement in other food- and drink-related sectors, which has picked up steam in recent years and helped spur the craft beer movement.

Beer production is an inherently capital-intensive process, meaning breweries rely on machinery such as fermentation tanks and automated bottling machines instead of labor to produce the final product. The large macro brewers leveraged this to make large batches of a single type of beer at a low cost. However, as the number of craft breweries grew, the cost of craft brewing equipment and production diminished. This allowed craft brewers to make a greater variety of beer in smaller batches, giving craft beer enthusiasts new beer to sample on a regular basis.

In many ways, craft brewers are competing on different dimensions than the macro brewers before them. The competition is not rooted in price, but instead on things like taste, variety and tap room atmosphere. This type of product differentiation is evident in Hampton Roads. For example, Young Veterans Brewing in Virginia Beach is known for its flagship product, Pineapple Grenade, which differs from the brews of its local competitors. In the same light, Oozlefinch Craft Brewery boasts a unique location at historic Fort Monroe in Hampton.

The macro brewers have not had much success jumping directly into the craft beer market. For example, Budweiser American Ale was a notable attempt, but it was discontinued in 2015 due to floundering sales. It appears that instead of competing in the craft brewery market directly with their own brands, macro breweries have moved to purchasing successful craft breweries, such as Devils Backbone. Beer industry insiders believe that as a part of this strategy, the macro brewers will use their size to reduce costs for their purchased craft brands. This could lead them again to compete based on price; however, this time it would be with smaller craft beer producers.

THE CRAFT BEER DRINKERS

Let's now turn to the drinkers. There is a stereotype of the people who drink craft beer and frequent craft breweries. They are caricatured as young Caucasian men with white-collar jobs, likely sport beards and perhaps have a few discreet tattoos, and are outdoorsy on the weekends. It would be difficult to confirm these stereotypes, but it is useful to determine if this portrait is generally accurate and if there are any places of potential growth for the industry.

Table 2 shows the demographic breakdown for the age 21-plus population as well as the percentage of each demographic group of weekly beer (macro or craft) drinkers and of those that drink beer weekly and choose craft beer. In general, the data bear out the stereotype. White non-Hispanics are the largest racial group that consume craft beer, and men are more likely than women to both drink beer in general and choose craft beer weekly. Millennials are the largest generation of craft beer drinkers, and people who earn over $75,000 a year are the most likely income group to drink craft beer.

TABLE 2

WHO ARE THE CRAFT BEER DRINKERS: GENDER, GENERATION, INCOME AND RACE

	% Population 21+	Weekly Beer Drinkers	Weekly Craft Beer Drinkers
Male	49%	74%	75%
Female	51%	26%	25%
Millennials	29%	41%	57%
Gen Xers	25%	27%	24%
Boomers	35%	27%	17%
Matures	10%	5%	2%
Under $35K	29%	20%	13%
$35K - $50K	11%	9%	6%
$50K - $75K	18%	17%	15%
$75K +	42%	54%	66%
White (Non-Hispanic)	65%	62%	60%
African American (Non-Hispanic)	12%	11%	10%
Hispanic	15%	20%	21%
Asian/Other	6%	6%	9%
Multiracial	14%	19%	24%

Source: https://www.brewersassociation.org/communicating-craft/understanding-todays-craft-beer-lovers-millennials-women-hispanics/

There is reason for optimism for craft brewers. First, the current demographics of craft beer drinkers bode well for the industry, as the younger millennials become of drinking age and older millennials advance up the socioeconomic ladder. Second, Hispanics are a growing segment of the population and some in the industry believe they could prove to be the next frontier for growth in the industry.[9] Finally, craft beer has grown without tapping into over half of the population – women. The variety of flavors is one of the strengths of craft beer. Breweries are actively creating beer options to cater to women, and several breweries, like High Heel Brewing, started with women in mind.

Craft beer is inextricably tied to the broader "buy local" movement. Buying local includes things like local food from farmers markets and products from local artisans. A recent National Public Radio segment noted how craft beer enthusiasts increasingly desire local products, even by neighborhood within a city.[10] Table 3 shows that for consumers who drink at least a few times per year, this link is tighter for craft beer than for other alcoholic beverages. Sixty-seven percent of consumers say that locally produced craft beer is "very" or "somewhat" important in their purchasing decision. Further, the desire to buy locally produced craft beer is even more important to younger consumers, where 71 percent say that craft beer produced locally is an important determinant of their shopping. This is a good sign for smaller, local breweries in their competition against national and international brands.

Selling beer on premise (for example, in a tasting room) is the most important sales avenue for many breweries. Thus, it is important to understand what brings customers through the doors. According to a Nielsen survey and analysis by the Brewers Association, the most common reason a craft beer drinker visits a tasting room is that they "offer beers that are not available elsewhere." Thus, variety is a crucial draw. However, the story does not end there. Table 4 shows the average number of visits for each reason consumers chose to visit a tasting room. While variety might get the occasional visitor, it's the quality and atmosphere (including a family friendly atmosphere) that get people to keep coming back. This has helped differentiate breweries from local bars and made some breweries the local meeting place for millennials and families.

9 https://www.forbes.com/sites/taranurin/2017/04/07/craft-beer-needs-more-diversity-and-growth-one-community-can-solve-both-problems.
10 http://www.kpbs.org/news/2018/apr/12/what-rise-and-fall-san-diegos-green-flash-mean-cra.

TABLE 3

HOW IMPORTANT IS BEING LOCALLY MADE IN YOUR PURCHASE DECISION FOR . . .

	Craft Beer	Beer	Wine	Spirits
Total: Age 21 +	67%	45%	34%	23%
Age 21-34	71%	53%	34%	25%

Percentages are respondents that answered "very true" and "somewhat important."

Sources: Nielsen Quick Query Omnibus Survey, 12-17, 2015. (Base: LDA consumers who drink at least several times per year)
https://www.brewersassociation.org/insights/local-beer/
http://msue.anr.msu.edu/uploads/235/92786/Great_Lakes_-_Beer_Barley_and_Hops.pdf

TABLE 4

WHY DO CRAFT DRINKERS CHOOSE TO VISIT A TASTING ROOM?

Average brewery visits (both near home and while traveling) for each reason for visiting a brewery.

Reason for Visit	Average Visits for Those Who Chose Reason
Family Friendly	17.6
Pairings	12.2
Atmosphere	11.3
Fresh Beer	8.1
Staff	7.9
Unique Beers	6.9
Tours	6

Source: Brewers Association
Note: Respondents could select multiple choices.

Craft distilleries are beginning to open around the country, riding the wave of the craft beer boom. According to the American Craft Spirits Association, there were more than 1,300 craft spirit producers in the United States in 2016. As of early 2018, Hampton Roads was home to a handful of craft distilleries. However, consumers don't appear to have the same desire to purchase locally made spirits as they do craft beer. As noted in Table 3, only approximately 25 percent of consumers reported that spirits produced locally are "very" or "somewhat" important in their purchasing decision.

The Virginia And Hampton Roads Craft Beer Scene

HOW HAS VIRGINIA FARED?

The Brewers Association publishes an annual list of the top 50 U.S. craft brewing companies based on sales volume.[11] Beer enthusiasts would recognize many of the brewery names and their flagship products. Based on the 2017 numbers, the largest craft breweries in the country are geographically clustered in the Northeast, West Coast and near the Rocky Mountains and the Great Lakes. Of the nation's top 50 breweries, the closest to the Commonwealth are Dogfish Head (No. 12) in Milton, Delaware, and Flying Dog Brewery (No. 28) out of Frederick, Maryland.

Unfortunately, there is not a brewery well known enough to put Virginia (or Hampton Roads) on the map. Most of the 50 largest craft breweries have a long history in the industry. Only Richmond's Legend Brewing Co., the Commonwealth's oldest craft brewery still in operation, competes with the larger players on age. Despite its lack of a big player in the craft game, Virginia still has potential at the local level. The large players focus on widespread distribution of their product for growth. This strategy proved dicey for some, such as Green Flash's recent bankruptcy and cutbacks at Colorado's New Belgium Brewing Co. This suggests increased competition for breweries undertaking this strategy. In contrast, once they were able to open tasting rooms, small breweries in Virginia have been able to focus on serving their local community.

First, let's look at how Virginia compares to the rest of the country in craft beer production. Graph 4 shows the total number of craft beer barrels produced in 2016 for each state, while Graph 5 provides a similar metric (in gallons instead of barrels) for the drinking-age population. Unsurprisingly, the overall level of production is concentrated in a few states with large anchor breweries. For instance, Yuengling fuels Pennsylvania's large production amount. Virginia ranks 21st overall (Graph 4), yet significantly below neighboring North Carolina (at No. 5). This could be due to North Carolina's strong brewing presence in the western part of the state near the Blue Ridge Mountains, which attracts a significant number of tourists. For example, 38 percent of the nation's brewing visitors are reportedly tourists in North Carolina.[12] In comparison, Virginia's Shenandoah Valley tends to be thought of as wine country, instead of as a craft brewery destination. The Commonwealth fares lower on the proverbial totem pole, dropping to 33rd overall, when we take the drinking-age population into account.

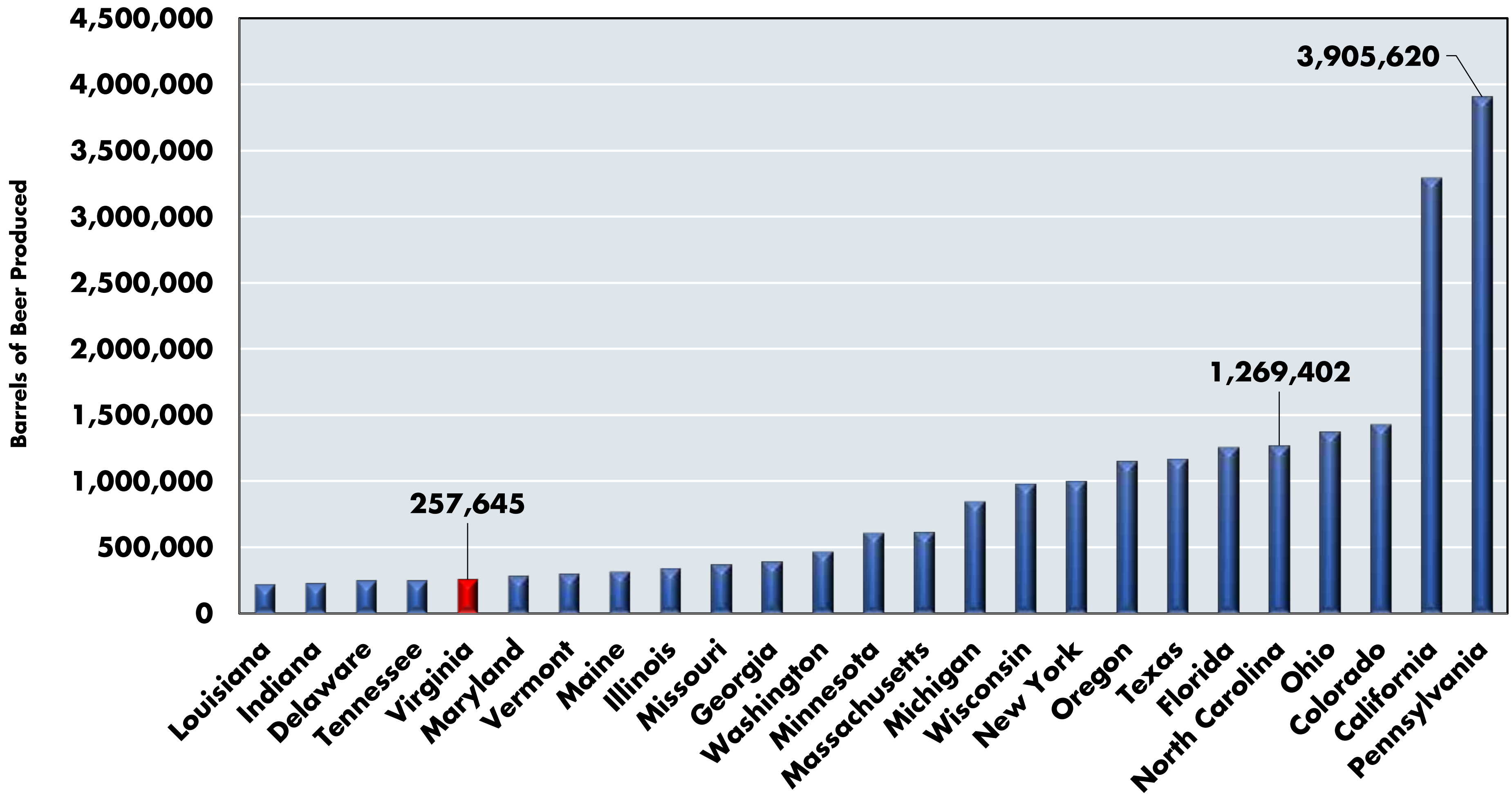
Production is a useful metric, but it can be distorted by large export-oriented brewers or areas with a strong tourism base. On the other hand, the number of breweries may be a better metric for local residents' access to craft beer- and brewery-related amenities. Graph 6 shows that Virginia doesn't lag behind the rest of the country in the number of breweries. It measures the number of breweries per 100,000 residents for the Commonwealth, North Carolina and the United States. Taking population into account allows us to consider the number of breweries in each location on more of an equal playing field. Virginia's brewery trajectory mimics North Carolina and the rest of the U.S. The graph shows what some in the business community refer to as "hockey stick" growth, accelerating right around 2012. The Commonwealth now has approximately 2.5 breweries for every 100,000 people, which is slightly higher than for the nation.

11 https://www.brewersassociation.org/press-releases/brewers-association-releases-2017-top-50-brewing-companies-by-sales-volume.

12 https://www.citylab.com/life/2017/08/can-craft-breweries-transform-americas-post-industrial-neighborhoods/536943.

GRAPH 4

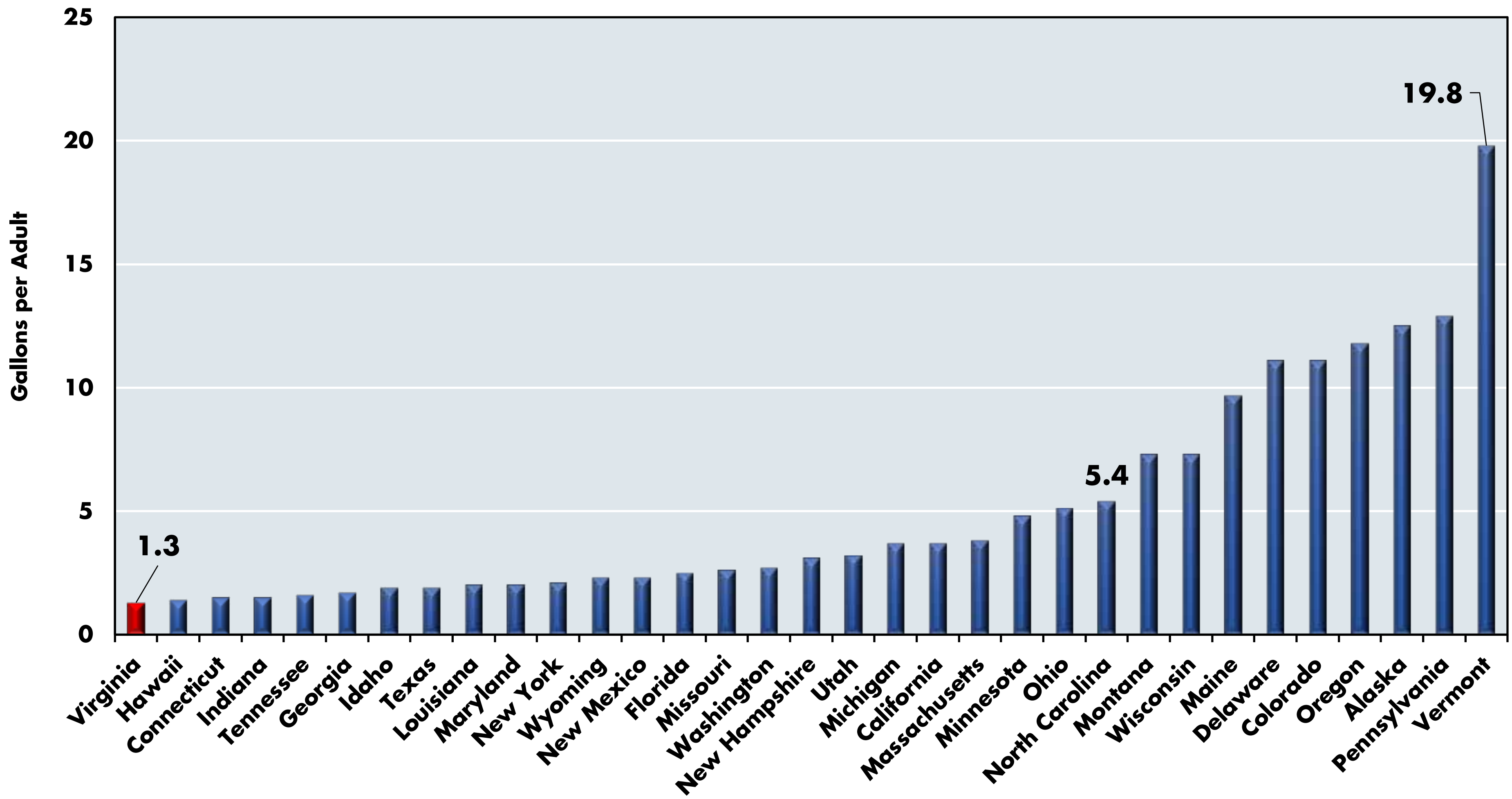
CRAFT BEER BARRELS PRODUCED IN 2016 FOR SELECTED STATES



Source: Brewers Association

GRAPH 5

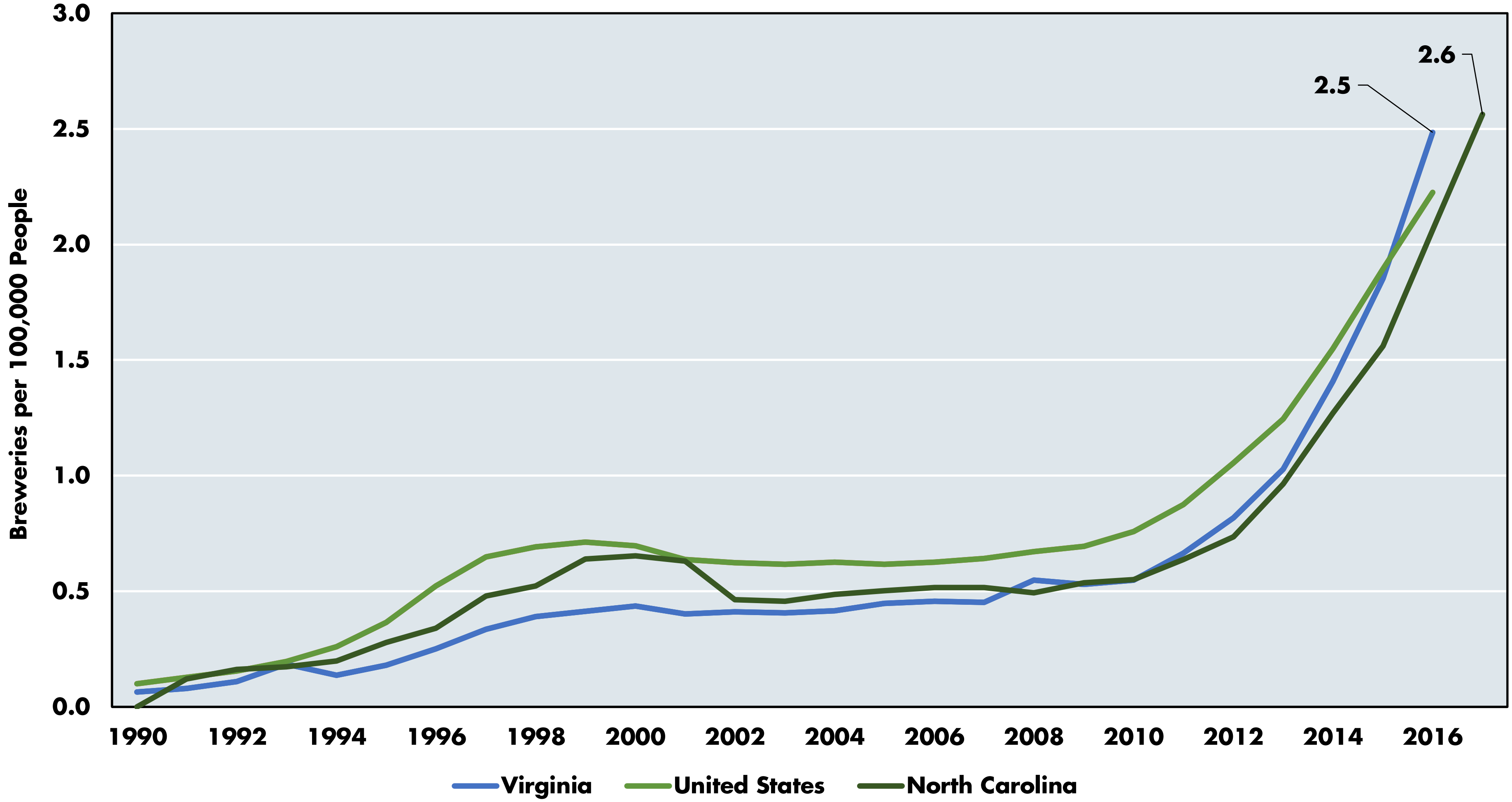
CRAFT BEER PRODUCTION IN GALLONS IN SELECTED STATES: ADULTS AGE 21+, 2016



Source: Brewers Association

GRAPH 6

BREWERIES PER 100,000 RESIDENTS IN VIRGINIA, NORTH CAROLINA AND THE U.S. (1990-2016)



Source: Brewers Association

CRAFT BEER IN HAMPTON ROADS

On many accounts, Hampton Roads appears to have a thriving craft beer scene. Figure 1 provided the locations of some of the breweries in our region as of May 1, 2018, while new craft breweries continue to open in neighborhoods throughout the area. The region also hosts successful craft beer festivals in Norfolk and Virginia Beach throughout the year.

The emergence of the craft-brewing culture in our region might be viewed as a break from the past. Historically, Hampton Roads lagged in beer production and consumption. Demographics played a role, as immigrants to the region did not have as strong of a beer-brewing and consumption tradition when compared to Boston, Chicago or St. Louis. African-Americans and Hispanics also tend to consume alcohol less frequently than non-Hispanic whites, leading to a lower demand for alcohol in general.[13] Lastly, overall beer consumption has declined in the United States, so one might argue that craft brewing is a larger slice of a shrinking pie.

This leads us to several natural questions. How does Hampton Roads compare to other regions? Is the market saturated or do we have room for further growth? We look at each of these questions in turn.

Unfortunately, there are no consistent publicly available data for craft beer production across regions. Thus, we look at how the number of breweries in Hampton Roads compares to other East Coast areas. Table 5 shows information on brewery establishments by region. The Quarterly Census of Employment and Wages (QCEW) data differ slightly from our count of breweries in Hampton Roads for 2016, due to how it defines establishment and the industry classification it uses. Nonetheless, QCEW provides a consistent measure across regions. In 2016, Hampton Roads did not fare well compared to other East Coast cities. It ranked near the bottom of our selected cities with 0.69 breweries per 100,000 residents. This is despite the large military presence that gives us a disproportionate number of prime craft beer-drinking residents.

13 In the 2016 National Survey on Drug Use and Health, almost 71 percent non-Hispanic whites had consumed alcohol within the last 30 days compared to 9.8 percent of African-Americans and 13.6 percent of Hispanics.

Next, we turn to whether the local craft brewery market is saturated or there remains room for the brewery industry to grow. We start by considering how many craft brewery establishments there are in Hampton Roads compared to the U.S. using a concept called a location quotient. An area's location quotient provides an objective measure of concentration for an industry in a region. The location quotient compares the region's share of an industry (for example, craft breweries in Hampton Roads) with the industry share for the nation. Hampton Roads has a 2016 craft brewery establishment location quotient of 0.99. Intuitively, this means that there is the same share of craft breweries in our region as the nation. Hampton Roads is about average in its number of craft brewery options compared to the nation, yet as the table shows, we still lag behind some of our regional competitors. Furthermore, when we take into account local demographics like the age, income and education profile, we estimate that Hampton Roads has the number of breweries one would anticipate when compared with other regions.

It appears that the number of breweries in Hampton Roads is on pace with other regions, based on current conditions. However, national trends in the beer and craft beer industry continue to evolve. As the industry changes, we expect the local craft brewery scene also to adjust.

First, the industry has become more competitive as it has matured. Those within the industry note that five years ago a brewery didn't need a solid business plan or even quality beer to be successful. However, those days appear to be over. While still only a small fraction of the overall industry, unsuccessful breweries are beginning to close. In particular, there were 165 closures in 2017, up 42 percent from 2016.[14]

Second, we showed earlier (Graph 1) that the overall level of craft production has begun to level off. This was inevitable, as it's challenging for any industry to continue double-digit growth for long. Craft brewers not only face increased competition from macro brewers as they lose market share, but also from wineries and craft distillers. To continue to expand, craft brewers must continue to win over converts from underserved demographics and other alcoholic beverage groups.

14 https://www.washingtonpost.com/news/business/wp/2018/04/10/the-craft-beer-industrys-buzz-is-wearing-off.

Third, within the craft brewery industry there has been a transition from growth coming from large producers to smaller-scale boutique breweries (Graph 3). That is, consumers appear to be shifting away from national craft brands like New Belgium or Green Flash and toward craft beer from within their city or neighborhood. This is certainly good news for current and future Hampton Roads breweries, even if it suggests that the smaller, local breweries are eating away at their larger counterparts.

TABLE 5

CRAFT BREWERY ESTABLISHMENTS FOR SELECTED AREAS, 2016

Region	Establishments	Population	Establishments per 100,000 People	Location Quotient for Establishments
Asheville, NC	27	452,319	5.97	6.68
Baltimore, MD	17	2,798,886	0.61	0.8
Charleston, SC	16	761,155	2.10	2.78
Charlotte, NC	33	2,474,314	1.33	1.66
Cincinnati, OH	23	2,165,139	1.06	1.47
Columbus, OH	23	2,041,520	1.13	1.67
Durham-Chapel Hill, NC	9	559,535	1.61	2.15
Hampton Roads, VA	12	1,726,907	0.69	0.99
Nashville, TN	21	1,865,298	1.13	1.53
Philadelphia, PA	31	6,070,500	0.51	0.65
Pittsburgh, PA	17	2,342,299	0.73	0.92
Richmond, VA	19	1,281,708	1.48	1.67
Salisbury, MD-DE	7	400,200	1.75	2.03
Washington, DC	55	6,131,977	0.90	0.98

Source: Data on establishments and location quotients for establishments are from the Quarterly Census of Employment and Wages for NAICS 31212. Population figures are from the Bureau of Economic Analysis.

There is a growing trend of large West Coast craft breweries opening satellite locations east of the Mississippi. Several cities in Virginia have been the beneficiaries of this expansion. For instance, two California breweries, Stone and Green Flash, opened facilities to service the East Coast in Richmond and Virginia Beach, respectively. These breweries have provided both cities with increased credibility among beer enthusiasts, and attracted craft beer tourism to each area. It is not out the ordinary for a craft beer drinker to make a trip to either large brewery, and visit several local establishments in the process.

This expansion has not always been smooth, however. In March 2018, a little over a year after beginning production in Virginia Beach, Green Flash closed that operation. In the aftermath, reports pointed to increased competition and the brewery's overextension of debt to finance its expansion. Green Flash's closure speaks less to the desirability of Virginia Beach as a craft beer destination, and more to the growing competition among national distributors in the craft beer market.

Local Craft Development: When Craft Beer Brews Up Some Businesses And Harms Others

Craft beer and craft breweries have come a long way from their modest home-brewing and beer club roots. Whole industries have emerged around the craft scene, ranging from apps like Untappd, for beer enthusiasts to track and rate beers and breweries, to universities offering brewing degrees, among others. At the local level, craft breweries can serve as an impetus to economic growth and spur the creation of other brewery-related businesses. However, they can also serve as a source of competition with other local venues for scarce entertainment spending. In this section we examine the role craft breweries can play in local economic development.

Recent studies have attempted to quantify the total economic impact of the craft brewery industry on a variety of different geographies (city, state and national). These are typically done by, or on behalf of, industry trade groups. For example, the Brewers Association produced a report that found the craft brewery industry contributed $67.8 billion and more than 456,000 full-time equivalent jobs to the U.S. economy in 2016, while it purported that Virginia saw a $1.37 billion boost in economic activity. The Brewers Association finds an even larger amount of overall employment created by the craft brewery industry.

These reports typically use multipliers to quantify the total economic impact of the craft brewery industry. The models are based on a series of assumptions on how the local economy functions. These assumptions are critical to generating the final economic impact, and differing assumptions can lead to disparate results. Our goal here is not to critique individual studies or undertake our own economic impact analysis of the craft brewery industry in Hampton Roads. Instead, we will use some of the core components from economic impact models and insights from urban economics to flesh out the effect of the burgeoning craft brewery industry on the Hampton Roads economy.

The first critical assumptions relate to how economic activity "ripples through" and "leaks" from the region and the Commonwealth. The ripples start with spending on constructing and operating a brewery – wages to employees, raw material, brewing equipment, etc. Economic development practitioners typically refer to the initial spending as the "direct effect." We can see the labor portion of this by looking at the employment and wages for workers in the brewery industry.

Table 6 provides details using data from the 2016 Quarterly Census of Employment and Wages. Hampton Roads fares well on these metrics compared to other regions, with over 600 people working at a brewery in some form and annual wages per employee topping out at $83,000. We must temper this good news with the perspective that there were about 770,000 jobs in Hampton Roads in 2016. Craft brewing is growing but remains a small player in the jobs picture in Hampton Roads.

TABLE 6

CRAFT BREWERY EMPLOYMENT AND WAGES FOR SELECTED AREAS, 2016

	Employment	Total Annual Wages	Annual Wages per Employee
Asheville, NC	982	$34,082,727	$34,707
Baltimore, MD	181	$6,747,988	$37,282
Charlotte, NC	673	$23,797,888	$35,361
Cincinnati, OH	1,045	$78,772,978	$75,381
Columbus, OH	719	$53,584,829	$74,527
Hampton Roads, VA	627	$52,085,565	$83,071
Pittsburgh, PA	328	$10,903,885	$33,244
Richmond, VA	267	$7,267,779	$27,220
Salisbury, MD-DE	173	$8,077,324	$46,690
Washington, DC	634	$17,121,031	$27,005

Source: Data from the Quarterly Census of Employment and Wages for NAICS 31212

The QCEW uses data from establishments, so workers with more than one job would be counted more than once. Thus, hidden within the employment and wage numbers is the craft brewery industry's tie to the so-called "gig economy." The gig economy has become more prominent in recent years with the advent of companies like Uber, Lyft and Airbnb. In the craft brewery world, only a handful of "full-time" workers undertake the actual brewing and other day-to-day brewery operations. Many of the employees are part-time workers, such as teachers, who enjoy the atmosphere and attractive hours offered by craft breweries. Similar to other part-time or gig jobs, craft breweries are helping to supplement incomes for many households. In total, more than $52 million in wages was paid to brewery workers in Hampton Roads in 2016.

The initial splash comes from the spending by the craft brewery. There are further ripples from spending by brewery suppliers and their employees. All of this economic activity helps support jobs and additional spending. Combined, the initial splash and subsequent ripples make up what economic development practitioners refer to as the "multiplier."

However, the size of the multiplier and the ripple effects is determined by how much spending leaks out of the economy. Let's start by thinking of the craft brewery industry's effect on the economy as beer flowing into a stein. The money that flows through our local economy is akin to beer being poured into the glass. However, some of the beer spills, or leaks, out of the stein as frothy foam or due to an overly exuberant pour. As more spending leaks out of the region, the economic impact of the craft brewery industry diminishes. For craft brewing this could come from equipment purchased from California or Germany, or hops from Yakima Valley in Washington. Similarly, the economic impact depends on how much of their wages brewery employees spend on local goods and services. In general, economic ripples inside Hampton Roads and Virginia that are generated by the craft brewery industry are reduced when expenditure leakages occur.

The initial splash and ripples are important; however, we shouldn't forget about the amount of beer poured into the glass. Put another way, in the absence of a local craft beer scene, some spending would still take place in Hampton Roads, while some would certainly leave the area. The most likely beneficiaries would be craft breweries in Richmond and North Carolina. Keeping some of the spending local outweighs it all draining out of town.

Next, any economic impact study must also rely upon assumptions concerning the degree of "agglomeration" – often referred to as clustering – that is present. While it might seem counterintuitive for breweries to locate near each other and compete for drinkers, businesses in related industries often benefit as they cluster together in the same area.

First, agglomeration can increase a brewery's profit potential on the production side by increasing labor supplies, reducing costs, stimulating firm productivity

Entrepreneurship in Distribution

The majority of craft breweries distribute their beer, at least to some extent, outside of the brewery. However, a 1920s Prohibition-era law forces brewers to go through wholesale distributors to sell their beer at restaurants, bars and retailers. The macro brewers are able to leverage their size in this process, but for small breweries, this is a very small part of their business, sending a few surplus kegs or bottles to local restaurants. The desire to sell their beer in retail outlets is typically less about higher profits – it is more lucrative to sell at the brewery – and more about winning new customers that might not normally visit their brewery. For these smaller breweries it is tough to gain traction with one of the region's larger distributors because of the high production demands. Pretty Ugly Distribution in Chesapeake, an offshoot of Big Ugly Brewing, is filling this void. Pretty Ugly began distributing Big Ugly beer and has expanded to other small breweries within the region. While not a large venture, Pretty Ugly has found a unique and important home in the craft beer marketplace.

and spurring innovation. The craft brewery community is known for its high degree of congeniality and collaboration. This has carried over from the early days when craft brewers would share knowledge to legitimize the industry and increase sales in a battle against the common foe – macro brewers.

Nowadays it is common for larger, established breweries to aid their smaller counterparts. While the brewing process may be largely a science, running a successful brewery is still largely an art form. The art is often shared among those inside the industry – such as an established brewery like O'Connor serving as a training ground for future entrepreneurs (for example, the founders of Young Veterans Brewing Co.), or breweries collaborating on specialty brews. This commitment to a vibrant local beer culture has even extended to the sourcing of raw materials. Sierra Nevada, which opened an East Coast production facility in Asheville, reportedly buys bulk commodities and sells them at lower prices to small breweries. The agglomeration effects for production reduce the cost (and risk) to starting a brewery in an area that already has a craft presence.

The clustering of craft breweries in a region or neighborhood can also stimulate demand and increase foot traffic. Increasing the number of drinkers that make their way through the doors is appealing to many brewers because of the high profit margin from on-premise sales. Graph 3 showed that in several places within Hampton Roads, breweries are located in close proximity to each other. In fact, it is not uncommon for a brewery to experience a boost in sales when a competitor opens nearby. The increased sales are due to customers attracted to a wider variety of beer options and brewery atmospheres they can experience in a single trip. While it may have been a strategic decision to leverage the reputation and marketing of their rivals on the part of BenchTop and Rip Rap by locating mere blocks from Smartmouth and O'Connor, nonetheless these moves will likely lead to a profitable outcome for both breweries and create a brewing district that is convenient for many drinkers.

A single large anchor brewery can put a city or region on the craft beer map. In the same way, several breweries close to each other can do the same for a neighborhood, creating a local beer district. The revitalization of manufacturing and warehouse districts has been a common theme nationally in the craft beer renaissance. Beer production is an inherently capital-intensive process. It requires a significant amount of space and high-pitched ceilings for the large fermentation tanks. This, along with relatively inexpensive rent, has made old warehouses an attractive option for brewers. Norfolk's Chelsea neighborhood, which is located west of Hampton Boulevard near EVMS, is an example of this type of urban renewal in action. It is now home to Smartmouth, BenchTop and the highly acclaimed non-brewery, The Birch, which bills itself as a craft beer, cider and grilled cheese bar. Those who remember Chelsea 10 years ago would be pleasantly surprised by the transformation that has taken place, which is in no small part due to great food and craft beer.

Economist Joseph Schumpeter coined the term "creative destruction" in the 1940s to describe the process whereby innovative products and industries disrupt the status quo. Schumpeter was coming of age in an era when the automobile was replacing the horse and blacksmith. The current craft beer trend has not produced the same upheaval as the innovations of Schumpeter's day. While craft beer market share has grown, it has not destroyed the "big beer" industry. However, the craft beer revolution has changed the local economy in Hampton Roads in subtle, yet important ways, many of which are difficult to measure using traditional economic impact models.

While starting a craft brewery is an entrepreneurial venture itself, a slew of ancillary businesses have also formed around craft beer. Only a few breweries in the region sell food from an in-house kitchen. Instead, most breweries focus on producing beer and often coordinate with other businesses to service their hungry drinkers. Food trucks are the most visible of these entrepreneurial businesses.

The number and variety of different cuisine options would almost certainly be lower without thirsty craft beer drinkers. In a similar fashion, some local businesses have seen an influx of orders to produce the merchandise sold at breweries, such as souvenir shirts and caps, pint glasses and even beer soap. Some of the merchandise production inevitably leaks to firms outside of the region or country; however, craft breweries often have a commitment to the community they serve. They participate in the spirit of the "buy local" movement by sourcing from local vendors. Finally, larger production facilities have space dedicated to bottling and canning, although mobile canners have filled this void for space-constrained facilities.

Breweries also have turned into event and meeting spaces. They host a wide variety of community gatherings, including music festivals, along with arts and crafts shows featuring products created by local artisans. They also host weddings, wedding receptions, baby showers, trivia nights, book clubs, paint nights and the like. As hosting events gains popularity, some breweries have expanded or opened new locations to meet the growing demand. Big Ugly Brewing, for example, recently opened an expanded facility on Battlefield Boulevard in Chesapeake in the summer of 2018.

This brings us to the final part of the local economic development effect of craft brewing, which economists refer to as "crowding out." This relates to part of Schumpeter's notion of creative destruction, where the growth of the craft brewery industry can hurt incumbent businesses through increased local competition for scarce entertainment dollars. This is particularly tough to measure, because the decrease in spending is spread across many sectors of the economy, ranging from movie theaters to sporting events, and more.

Craft breweries compete most directly with restaurants and traditional bars. Restaurants could experience lower patronage and spending as customers visit local breweries. Furthermore, this competition has created some tension between breweries and bars in some areas. For example, some New Jersey bar owners boycotted selling locally produced craft beer, arguing that due to differences in regulations, the competitors were not playing on an equal playing field.[15] On the other hand, many bars have accepted locally produced craft beer, choosing to embrace the movement rather than get left behind. While this is a natural part of competition, it merely points to the fact that there are winners as well as some losers due to the rise of craft brewing.

15 http://www.nj.com/opinion/index.ssf/2017/09/should_liquor_licenses_be_required_at_craft_brewer.html.

Final Thoughts

The craft brewery industry in Hampton Roads has expanded rapidly in recent years. It is still an open question as to how many breweries and how much production a local area can sustain; nonetheless, the industry is likely here to stay. Craft breweries check several boxes on the economic development list. They can attract tourists and visitors, help brand an area and create local identity, and produce a product that can be exported. Craft breweries also represent a local amenity that some argue attracts well-educated, affluent people to a region and provides a local spending outlet. It fits in with what regional economic development guru Richard Florida would advocate to attract the "creative class" and spur local economic growth. Florida notes in his 2002 book "The Rise of the Creative Class" that cities should invest in amenities that attract the creative class type of people. This development strategy was discussed in depth in the 2013 State of the Region report. This group of people tends also to be what Florida refers to as "knowledge workers," who power economic growth. Therefore, it is important to consider whether we should be using public money to incentivize amenities like local breweries.

Several high-profile breweries in Hampton Roads have received economic development incentives to either begin or expand production – most notably, the Virginia Beach Development Authority's grant of $275,000 to Green Flash Brewing Co., which as we noted previously, closed in early 2018. The decision to incentivize Green Flash to locate in Virginia Beach, instead of in a neighboring state, is water under the bridge. Nonetheless, it did provide some benefits. Chief among these is the credibility that Green Flash brought to the Hampton Roads craft brewery scene. The purchase by New Realm Brewing is a heartening sign that the facility will continue to be put to good use.

In general, it is important to keep in mind that amenities like craft breweries can simultaneously act as drivers of local growth and as an inevitable outcome of an economically and culturally vibrant region. This makes it similar to the chicken and egg conundrum. Does attracting cultural amenities like breweries increase growth prospects or do breweries naturally open in growing areas? While it might have made some sense to try and attract a big fish like Green Flash a few years ago, as the industry has grown, the economic rationale for incentivizing breweries certainly diminishes. This is also true for local brewery expansions, such as Smartmouth and Young Veterans Brewing venturing to the Oceanfront. The industry is at a place now where breweries should pick locations based on demand for their product and consumers should determine the winners and losers.

Too Much Of A Good Thing? Multifamily Housing In Hampton Roads

TOO MUCH OF A GOOD THING? MULTIFAMILY HOUSING IN HAMPTON ROADS

We talk virtually every day about how renting is becoming less and less affordable. I think the answer is just that housing is becoming less and less affordable and renting is the more affordable of the two.
– David Brickman, executive vice president and head of Freddie Mac Multifamily

In 1931, James Truslow Adams, an American historian, coined the term "American dream," defining it as "that dream of a land in which life should be better and richer and fuller for everyone, with opportunity for each according to ability or achievement." Over time, this vision of America permeated the national conversation and was distilled to a simple message: If you work hard and stay out of trouble, you can achieve whatever your heart desires.

An integral part of the American dream has been homeownership. A 2017 survey by ING Group, a Dutch multinational banking and financial services organization, echoed this sentiment with 68 percent of respondents viewing homeownership as a symbol of success and 60 percent of renters preferring to own their own home.[1] These attitudes may be changing. A February 2018 survey by Freddie Mac, a public government-sponsored enterprise, found that 67 percent of renters viewed renting as more affordable than owning and 54 percent thought renting was a good choice for their financial situation.[2] Is the archetypical white picket fence fading as part of the American dream?

While median housing prices in Hampton Roads have not increased as rapidly as other markets in the United States since the end of the Great Recession in 2009, housing prices have trended upward. The number of existing homes sold in May 2018 increased by 5 percent relative to May 2017, while the active inventory of available homes declined by 9 percent over the same period. The average number of days on market also fell from 68 in May 2017 to 57 in May 2018, and the median sales price increased by $10,000, or 4.6 percent, over the one-year period.[3] Good news for homeowners, potentially bad news for those looking to buy their first home.

If owner-occupied housing is becoming relatively more expensive, then we would expect an increase in the demand for multifamily housing. While apartments are typically not as large as single-family homes, there are potential benefits. The bare studio with a shared bathroom is a thing of yesteryear. New upscale apartments include on-site gyms, resort style pools, grilling stations and business centers, great amenities that were once considered beyond the reach of most renters. Renters also appear to be more satisfied with their lot in life. Not only were more than two-thirds of surveyed renters satisfied with their rental experience, but these renters also indicated they didn't plan to move, even if their rent increased (Freddie Mac, February 2018).

Multifamily housing is an important part of the housing market in Hampton Roads. More than one-third of households in the region rent. CoStar, a commerical real estate analytics company, estimated that there were 108,000

1 ING (November 2017), "Home ownership – a smarter choice? Buying out of reach for many people in Europe," https://www.slideshare.net/ING/ing-international-survey-homes-and-mortgages-2017-rent-vs-own.
2 Freddie Mac (February 2018), "Profile of Today's Renter," https://mf.freddiemac.com/research/insight/20180404_preference_for_renting.html

3 Real Estate Information Network, 2018, where Hampton Roads is defined as the counties of Isle of Wight, James City, Southampton, Surry and York, and the cities of Chesapeake, Franklin, Williamsburg, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk and Virginia Beach.

market-rate apartment units, with a valuation of $12.5 billion, in Hampton Roads at the end of the second quarter of 2018.

In this chapter, we explore the changing demographics of homeownership and whether the American dream should now include renting, in addition to ownership. We explore how builders have responded to changing preferences and circumstances by shifting construction portfolios and whether this has affected multifamily housing availability in Hampton Roads. As announcements of new multifamily construction projects in the region continue, we ask whether there is sufficient demand to fill current and projected units. Lastly, we delve into several submarkets in Hampton Roads.

Homeownership: Central To Rights And Public Policy

Homeownership is part of the American ethos, lauded in popular culture and public policy. Owning a home is typically the result of years of hard work, a symbol of personal success, and offers significant rights to do as one wishes to the real property in question. **In the United States, people typically own real property in fee simple interest, the maximum ownership interest possible under law. With limited exceptions, the fee simple interest owner possesses the title to the real property and can use, modify and dispose of the property as they wish. Sir Edward Coke, a barrister, judge and politician in Renaissance England, eloquently expressed this concept in 1604: "That the house of everyone is to him as his Castle and Fortress as well for defence against injury and violence, as for his repose."**

The U.S. Constitution protects private property rights primarily through the Fifth Amendment's Just Compensation clause: ". . . nor shall private property be taken for public use without just compensation." Simply put, the government typically can only take private property through two mechanisms: by condemning the property and seizing the title from the owner (eminent domain) or through regulations that, in effect, limit the ability of owners to enjoy the fruits of their private property (regulatory taking). Recent decisions by the U.S. Supreme Court of the United States have taken an increasingly dimmer view of regulatory limitations on private property, embracing the view that a home is indeed a castle.

Public policy continues to reinforce the goal of homeownership. Homeowners may deduct mortgage interest costs associated with buying, constructing or improving a first home (and second home, in some cases) from their federal tax returns for mortgages up to $750,000. Homeowners may also deduct some or all property taxes associated with their primary residence, subject to the cap of $10,000 in combined state and local income taxes, state and local sales taxes, and property taxes. While these limits are lower than in recent years due to the passage of the Tax Cuts and Jobs Act of 2017, it should be clear that homeowners are subsidized through the tax system for their housing consumption. **Renters receive no such tax relief.**

The preference for homeownership extends beyond the tax code. Ginnie Mae, a wholly owned government corporation, provides market liquidity to federally sponsored mortgage lending programs. While many may not have heard of Ginnie Mae, it recently announced that its total outstanding principal balance on mortgage-backed securities was $1.96 trillion in May 2018, not a trivial sum (Ginnie Mae, June 2018). The federal government also provides secondary mortgage markets with liquidity through two government-sponsored enterprises, Fannie Mae and Freddie Mac. These organizations buy mortgages on the secondary market, combine them into a mortgage-backed security and then sell the security to investors. As a result, the supply of capital available for lending increases, mortgage interest rates are lower than they would be otherwise and it becomes cheaper to use a mortgage to purchase a home.

Fannie Mae and Freddie Mac are not small enterprises, with $109 billion and $67 billion in revenue in 2017, respectively. From January to May 2018, 96 percent of residential mortgage-backed securities in the United States were issued by Fannie Mae, Freddie Mac or other federal agencies (Urban Institute, June 2018).

If you have a mortgage on your home, your mortgage has likely been bought, packaged and sold by one of these institutions. For better or worse, the federal government is more involved in mortgage-backed securities than at any time prior to the Great Recession.

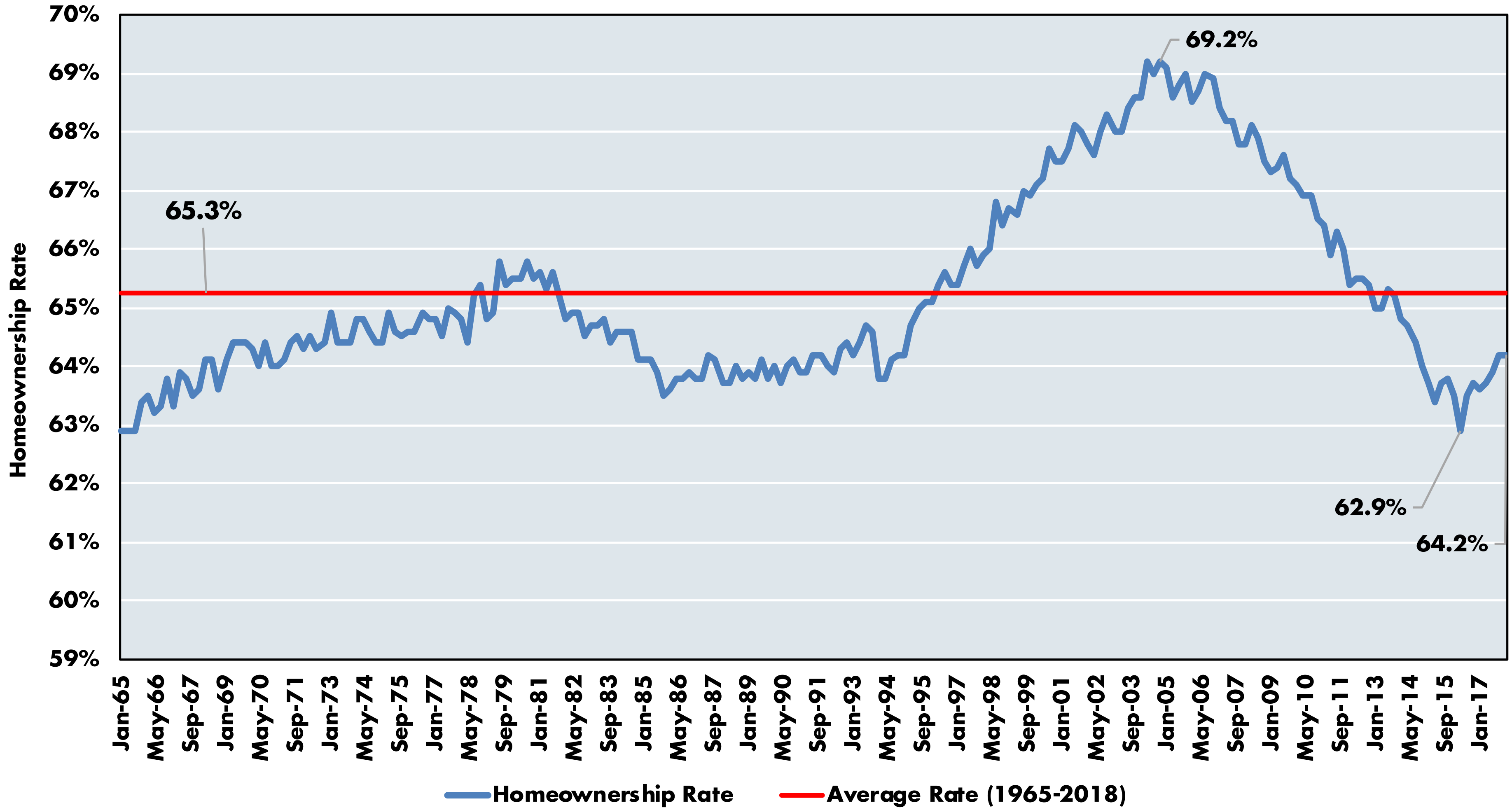
How Have Homeownership Rates Changed Over Time?

Yet, for all these interventions in the residential housing market, the country's homeownership rate has hovered around its long-term average of 65 percent since 1965. The U.S. Census Bureau tracks homeownership and, as illustrated in Graph 1, the homeownership rate increases during economic expansions and declines, as one might suspect, during economic contractions. Prior to the Great Recession, which began in December 2007, the homeownership rate peaked at 69.2 percent in the second quarter of 2004, falling thereafter to a low of 62.9 percent in the second quarter of 2016. At the end of the first quarter of 2018, the homeownership rate for the United States was 64.2 percent, still below the long-term average. **Despite billions (if not trillions) of dollars invested in public policy efforts, homeownership rates remain stubbornly persistent.**

Graph 2 paints a picture of declining homeownership rates in Hampton Roads from a peak of almost 73 percent in the fourth quarter of 2005 to a low of about 54 percent in the second quarter of 2016. While we recognize that homeownership rates are more volatile at the metropolitan level, they clearly trended downward in Hampton Roads from 2005 to 2016. We can attribute some of this decline to the aftereffects of the Great Recession, the impact of sequestration and relatively stagnant job creation in Hampton Roads. **The good news is that homeownership rates have rebounded from their lows, reaching a high of 66 percent in the second quarter of 2017.** Rates declined in the latter half of 2017 and into the first quarter of 2018, but we expect improvement in the latter half of 2018 as the regional economy improves.

GRAPH 1

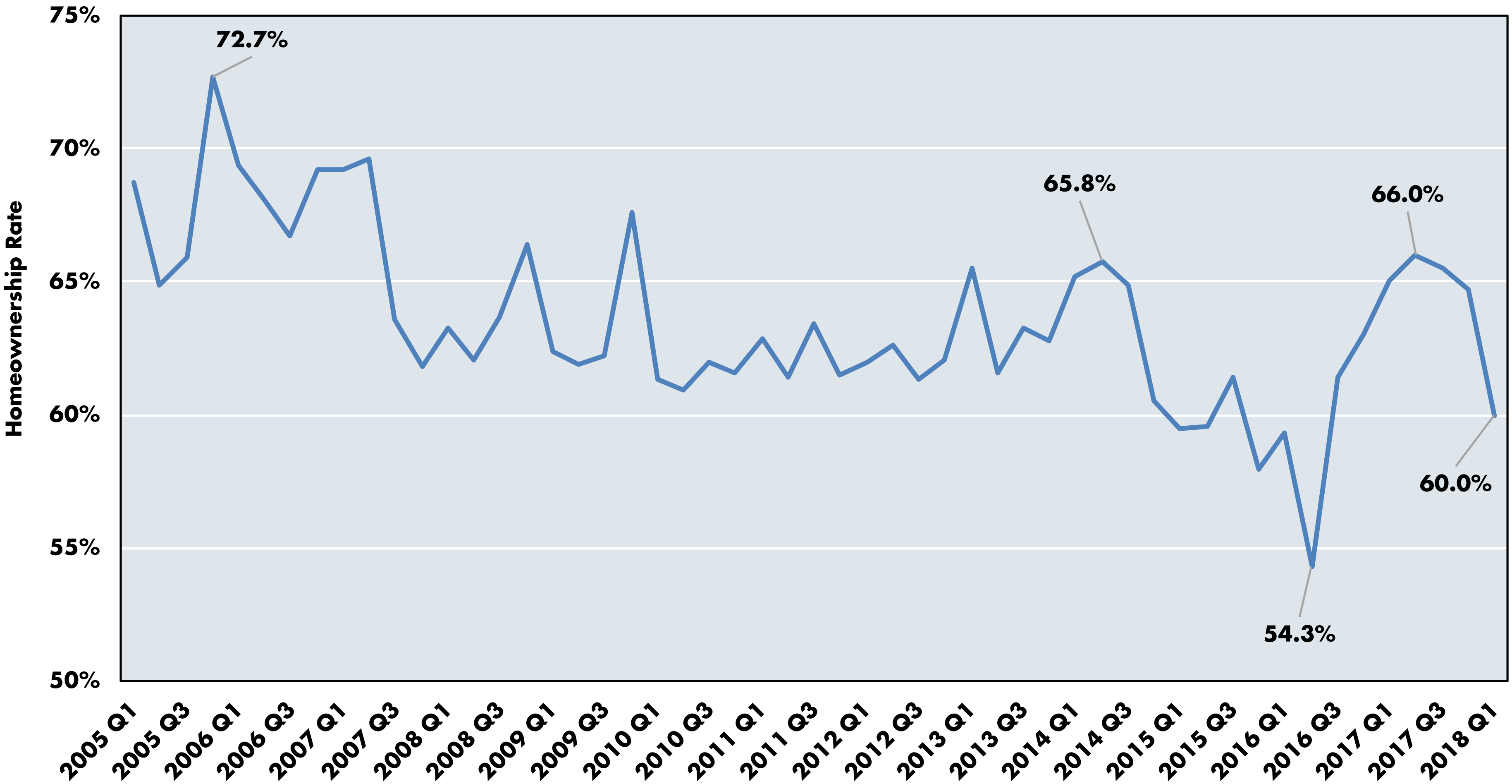
HOMEOWNERSHIP RATES IN THE UNITED STATES, 1ST QUARTER 1965 TO 1ST QUARTER 2018



Source: U.S. Census Bureau (2018), Housing Vacancies and Homeownership

GRAPH 2

HOMEOWNERSHIP RATES IN HAMPTON ROADS, 1ST QUARTER 2005 TO 1ST QUARTER 2018



Sources: U.S. Census Bureau (2018), Current Population Survey, Quarterly Vacancy and Homeownership Rates by State and MSA, and the Dragas Center for Economic Analysis and Policy, Old Dominion University

Homeownership Across The Generations

What evidence is there that millennials and Gen Xers are owning homes at a lower rate than previous generations? Table 1 presents homeownership rates by birth cohort from the U.S. Census. For example, the homeownership rate for those born between 1956 and 1960 was 37.7 percent when these individuals were between 25 and 29 years old. Compare this to people born between 1986 and 1990, whose homeownership rate was only 31.7 percent when they were between 25 and 29 years old. This decline is present in almost every age cohort. **A person born between 1986 and 1990 was 6 percent less likely to own a home than someone born between 1956 and 1960. This decline is present in almost every age cohort. Younger people today are less likely to own a home compared to previous generations when they were the same age.**

Demographics In Hampton Roads

According to the U.S. Census, 636,750 households, comprising 1.7 million people, called Hampton Roads home in 2016.[4] Sixty-one percent of households lived in owner-occupied housing while 39 percent occupied rental housing. With an average household size of 2.51 individuals per rental household, about 623,000 people live in rental housing in Hampton Roads, or approximately 36.3 percent of the population.

Compared to the United States, more households rent in Hampton Roads and the pool of potential renters is a larger segment of the overall population. **As shown in Graph 3, 38.8 percent of the Hampton Roads population is in the "sweet spot" for the multifamily housing market (ages 18-44), compared to 36.2 percent of the U.S. population in 2016. Not only is the potential rental market larger in Hampton Roads as a percentage of the population, but the region also skews younger than the U.S., in part due to the large military presence.**

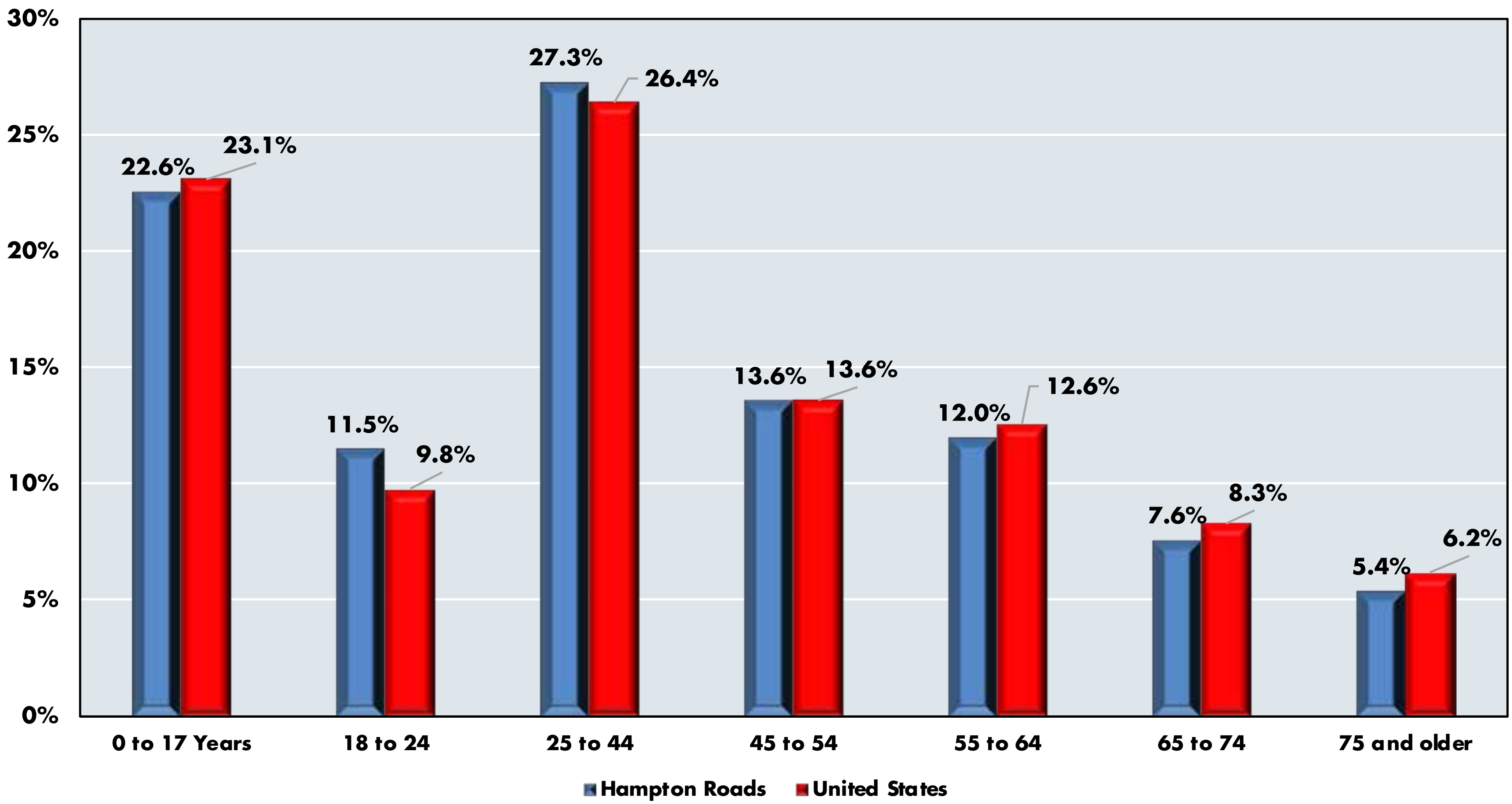
Given the transient nature of military assignments, many active-duty service members choose to rent rather than own. There are some unique protections for military service members, mostly due to the Servicemembers Civil Relief Act. The law provides a variety of protections for active-duty service members, to include the immediate termination of a lease due to deployment or reassignment to another military post.[5] Challenges aside, members of the military are often sought by rental property owners due to their steady income, maturity and conduct.

4 U.S. Census, 2012-2016 American Community Survey, 5-Year Estimates.
5 For further information, see https://www.justice.gov/servicemembers/servicemembers-civil-relief-act-scra.

TABLE 1								
HOMEOWNERSHIP RATES FOR THE UNITED STATES BY BIRTH COHORT, 1985-2015								
	25 to 29 Years	30 to 34 Years	35 to 39 Years	40 to 44 Years	45 to 49 Years	50 to 54 Years	55 to 59 Years	60 to 64 Years
Born 1946 to 1950	..	..	65.4%	69.8%	73.7%	78.5%	80.6%	80.4%
Born 1951 to 1955	..	54.0%	63.0%	68.6%	74.7%	78.3%	77.7%	76.2%
Born 1956 to 1960	37.7%	51.8%	62.1%	70.6%	75.0%	75.0%	74.7%	76.9%
Born 1961 to 1965	35.2%	53.1%	65.0%	71.7%	75.0%	75.0%	74.7%	..
Born 1966 to 1970	34.4%	54.6%	66.6%	67.9%	68.0%	..	..	..
Born 1971 to 1975	38.1%	56.8%	61.9%	61.6%	..	..	..	..
Born 1976 to 1980	40.9%	51.6%	55.3%	..	..	..	..	..
Born 1981 to 1985	36.8%	45.9%	..	..	..	..	..	..
Born 1986 to 1990	31.7%	..	..	..	..	..	..	..
Source: U.S. Census, 2017, "Homeownership Rates for the United States"								

GRAPH 3

POPULATION DISTRIBUTION IN HAMPTON ROADS AND THE UNITED STATES, 2016



Source: U.S. Census, Table S0501, 2012-2016 American Community Survey Estimates

Residential Construction In Hampton Roads

With changing preferences, demographics and financial conditions, we might expect the demand for multifamily housing to change over time. Developers, in response, would shift their portfolios to build more multifamily housing and reduce construction of single-family homes. We have seen this response in the United States over the last decade, and this shift appears to be more pronounced in Hampton Roads.

Graph 4 provides information on building permits issued for single-family and multifamily residences. We created an index that is equal to 100 in 1997. In 2005, the annual volume of permits for buildings of five or more units was about 180 percent more than in 1997. New building permits were about 20 percent higher in 2005 compared to 1997. The paths diverged after 2005, with new permits for housing falling, such that in 2017, the number of annual permits was approximately 31 percent below that in 1997. On the other hand, permits for multifamily housing initially declined after the Great Recession but remain 45 percent above where they were in 1997. **Developers continue to build multifamily units rather than single-family units.**

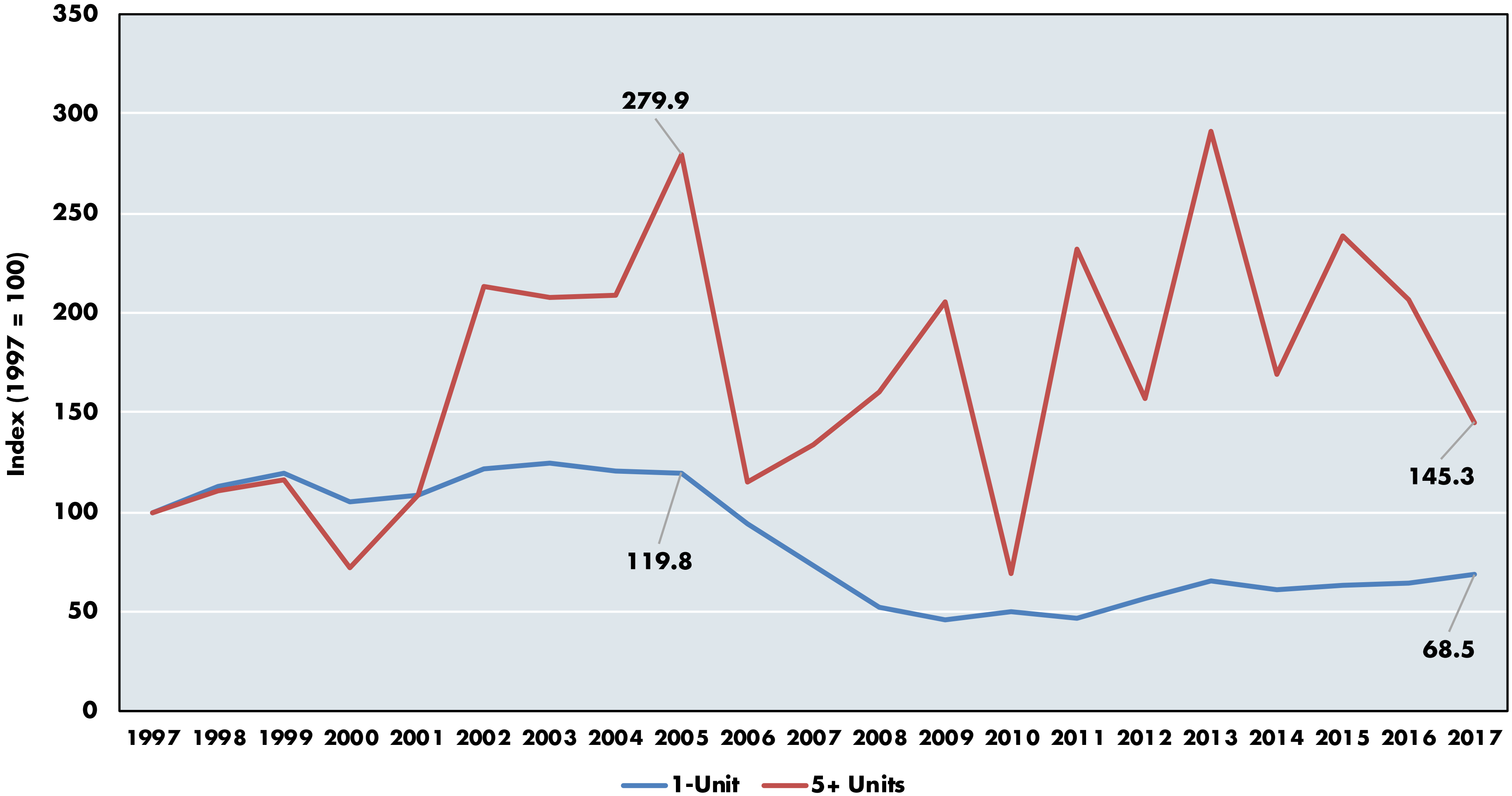
One potential critique of building permit data is that some building permits may not translate into actual construction. Permits for buildings with five or more units may also include multifamily units, condominiums and townhomes. **Graph 5 illustrates that building permits and construction closely follow each other, especially after the Great Recession. From 2005 to 2017, there were 26,494 building permits for buildings with five or more units and there were 24,137 multifamily units constructed or under construction in this period. About 90 percent of building permits for five or more units in Hampton Roads were for multifamily units.**

With new construction, the supply of multifamily residences has increased over the last decade and is forecasted to increase through 2022. Graph 6 shows that the supply of apartments rose from about 93,000 in 2006 to almost 109,000 in 2017, an increase of 16.6 percent. **CoStar forecasts that apartment construction will continue apace, growing annually at a rate of 5.9 percent through 2022. By 2022, Hampton Roads will approach 115,000 market-rate multifamily housing units.**

As the multifamily housing market adjusts over the coming years, there is a measure of good news. If move-outs exceed move-ins, then the supply of available apartments increases. Graph 7 shows that increases in supply outstripped increases in demand for multifamily housing for most years from 2006 to 2016. As developers restrain new construction in the coming years, the market will adjust, reducing the number of vacant multifamily units.

GRAPH 4

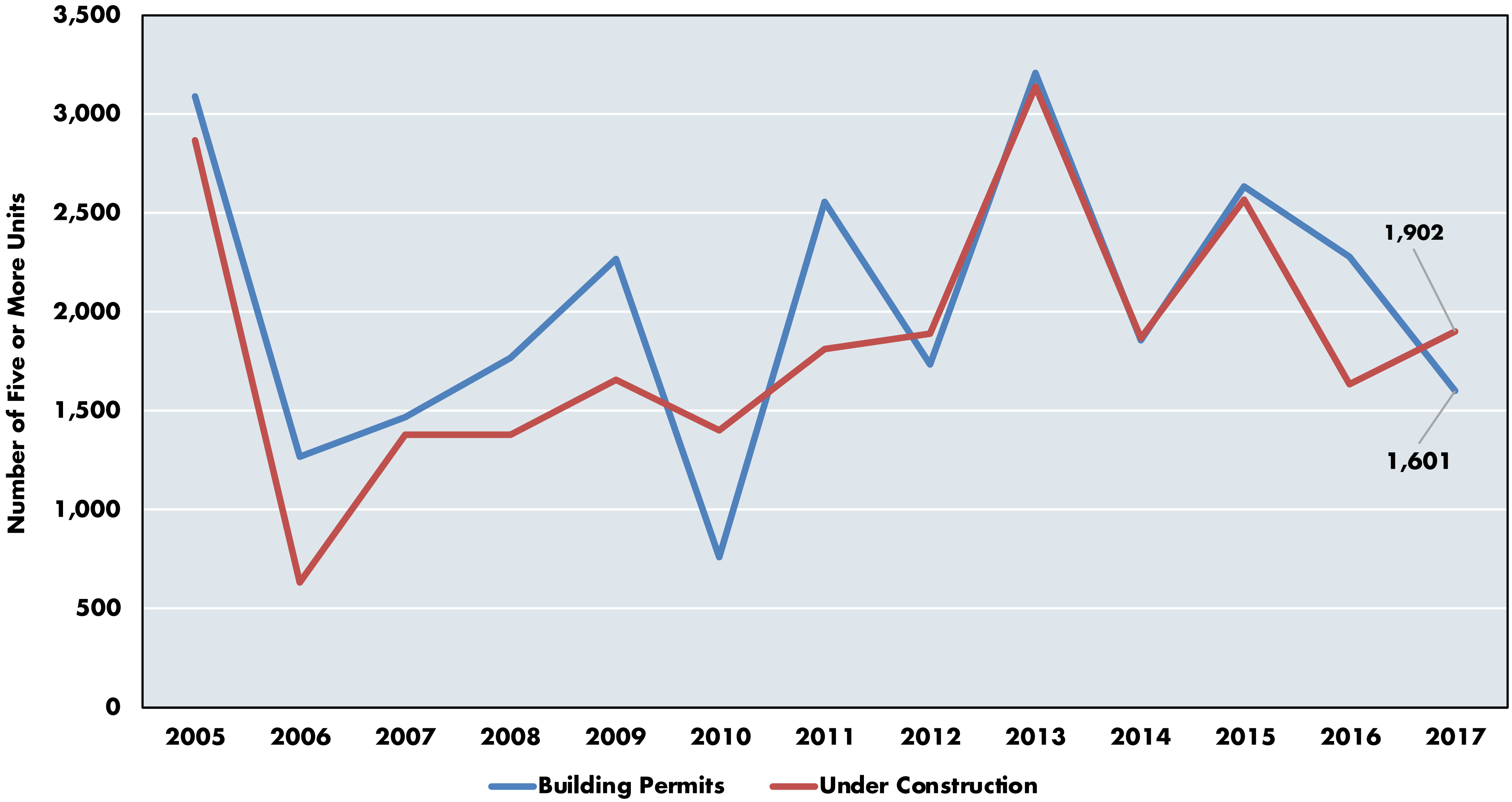
INDEX OF ANNUAL BUILDING PERMITS FOR ONE UNIT AND FIVE OR MORE UNITS: HAMPTON ROADS, 1997–2017



Sources: U.S. Census Bureau, Residential Construction Branch, and the Dragas Center for Economic Analysis and Policy, Old Dominion University

GRAPH 5

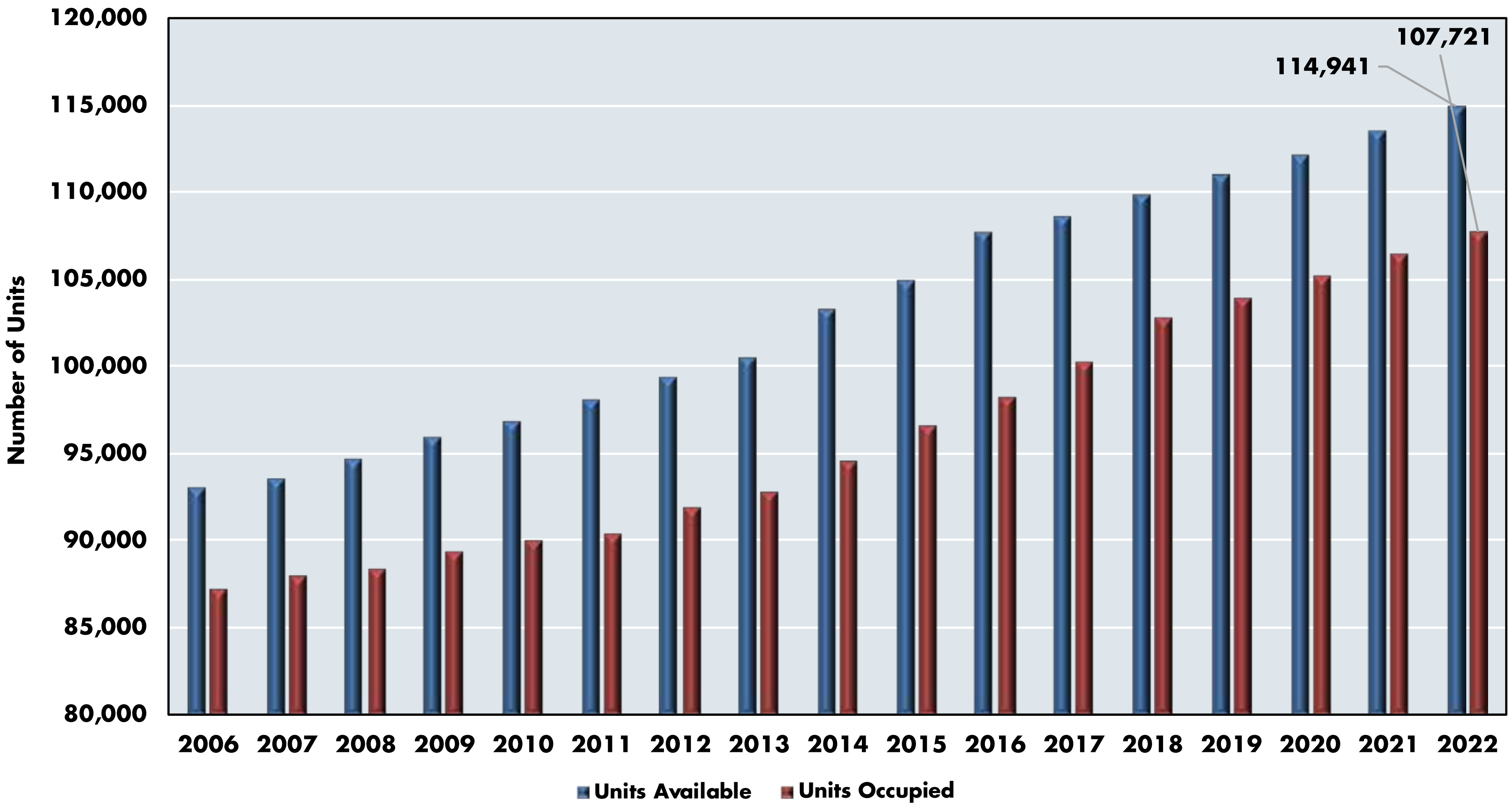
BUILDING PERMITS AND NEW CONSTRUCTION OF BUILDINGS WITH FIVE OR MORE UNITS: HAMPTON ROADS, 2005-2017



Sources: Building permit data are from the U.S. Census Bureau, Residential Construction Branch. Under-construction data are from CoStar Market Analytics.

GRAPH 6

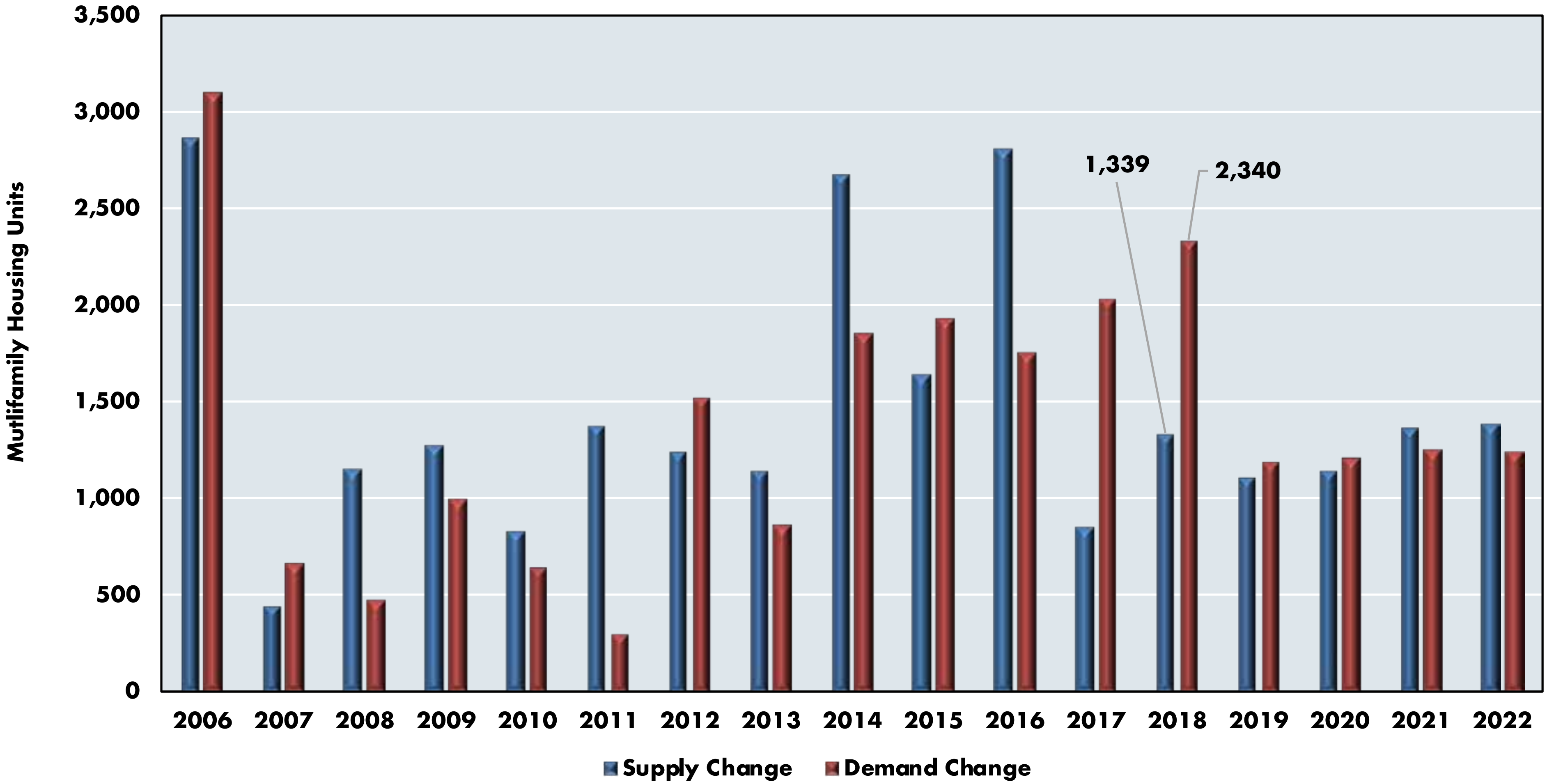
MULTIFAMILY UNITS AVAILABLE AND OCCUPIED: HAMPTON ROADS, 2006-2022



Sources: U.S. Census, CoStar Market Analytics and the Dragas Center for Economic Analysis and Policy, Old Dominion University

GRAPH 7

CHANGES IN SUPPLY AND DEMAND FOR MULTIFAMILY HOUSING: HAMPTON ROADS, 2006-2022



Sources: U.S. Census, CoStar Market Analytics and the Dragas Center for Economic Analysis and Policy, Old Dominion University

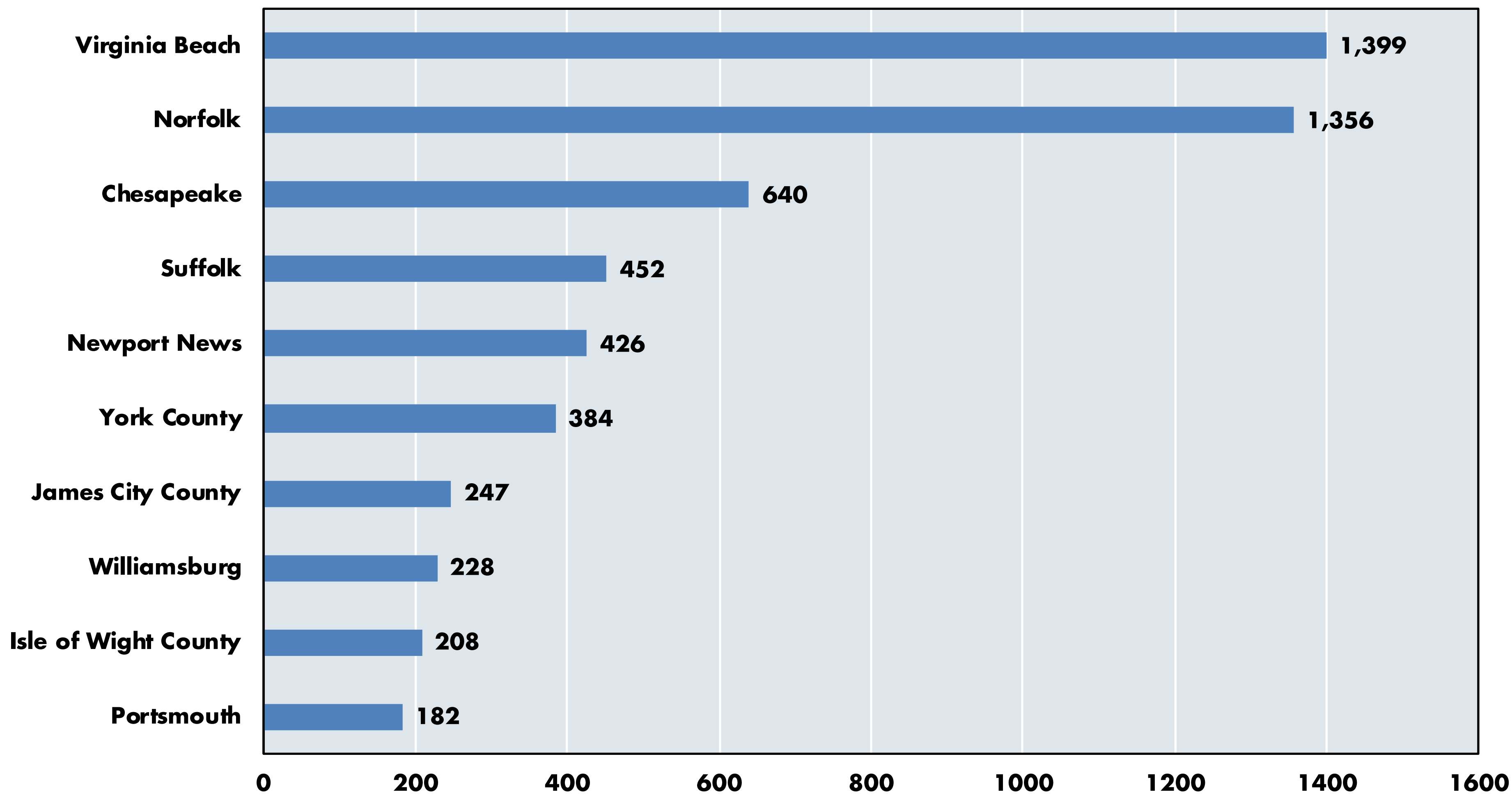
New Multifamily Housing And Vacancies In Hampton Roads

Most localities in Hampton Roads have seen increases in the supply of multifamily housing over the last decade. As one might expect, the larger cities and counties have seen more mutlifamily deliveries. Graph 8 illustrates that Virginia Beach and Norfolk have each added more than 1,300 multifamily units since 2015, trailed by Chesapeake with 640 units and Suffolk with 452 units. While Isle of Wight's new deliveries amounted to a 37.5 percent increase in mutlifamily inventory, Virginia Beach's absolute increase was 6.7 times larger than Isle of Wight.

Graph 9 displays the vacancy rate for multifamily housing in Hampton Roads and the United States from 2006 to 2022. Vacancy rates in our region have increased over the past decade, peaking at 8.7 percent in 2016. The corresponding slowdown in building permits shown in Graph 5 is forecasted to lower vacancy rates to 6.3 percent by 2022.

GRAPH 8

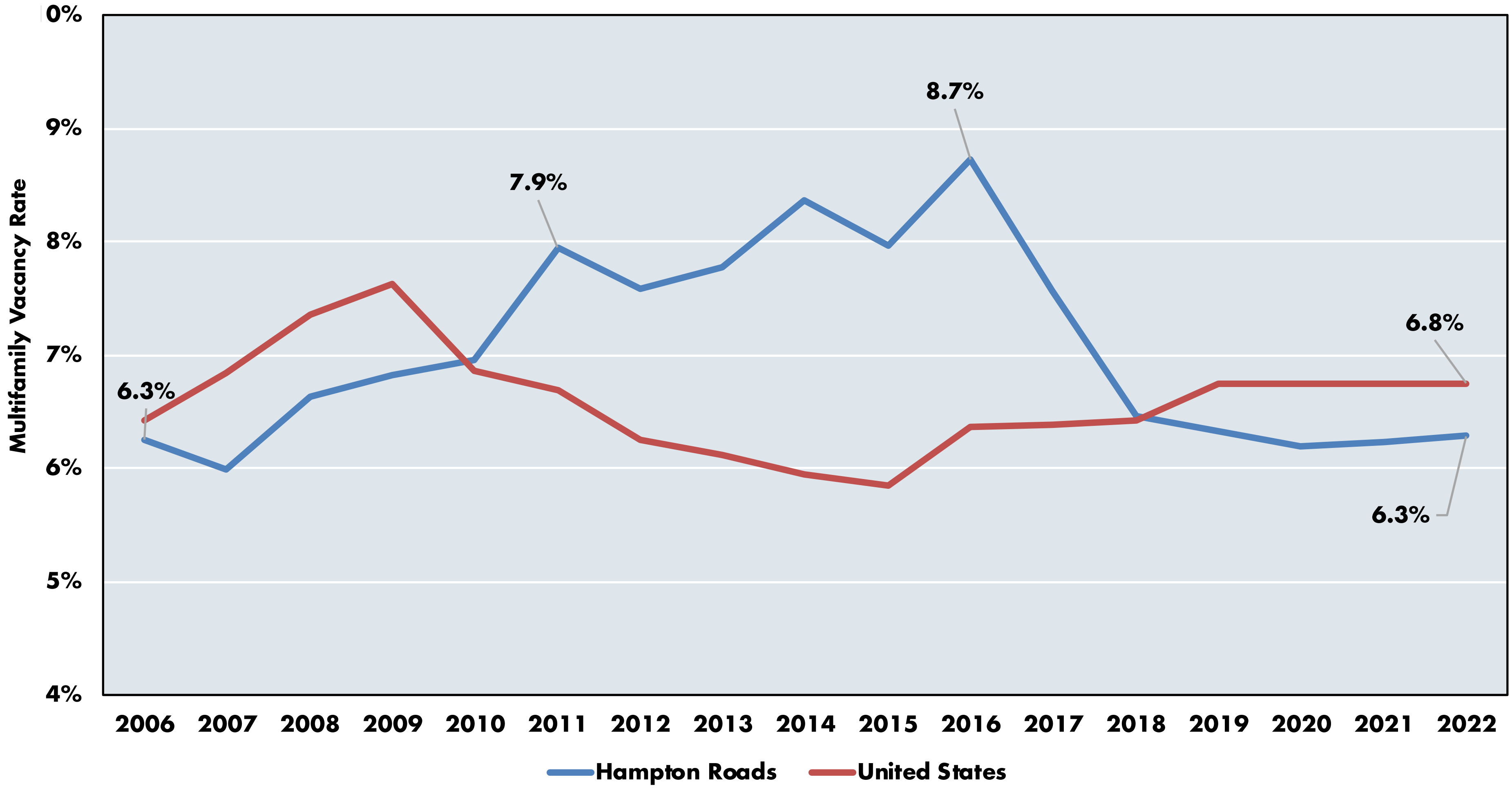
NET NEW MULTIFAMILY DELIVERIES, 2015-2017



Sources: CoStar Market Analytics and the Dragas Center for Economic Analysis and Policy, Old Dominion University

GRAPH 9

MULTIFAMILY VACANCY RATE IN HAMPTON ROADS AND THE UNITED STATES, 2006-2022



Sources: CoStar Market Analytics and the Dragas Center for Economic Analysis and Policy, Old Dominion University

Apartment Affordability In Hampton Roads

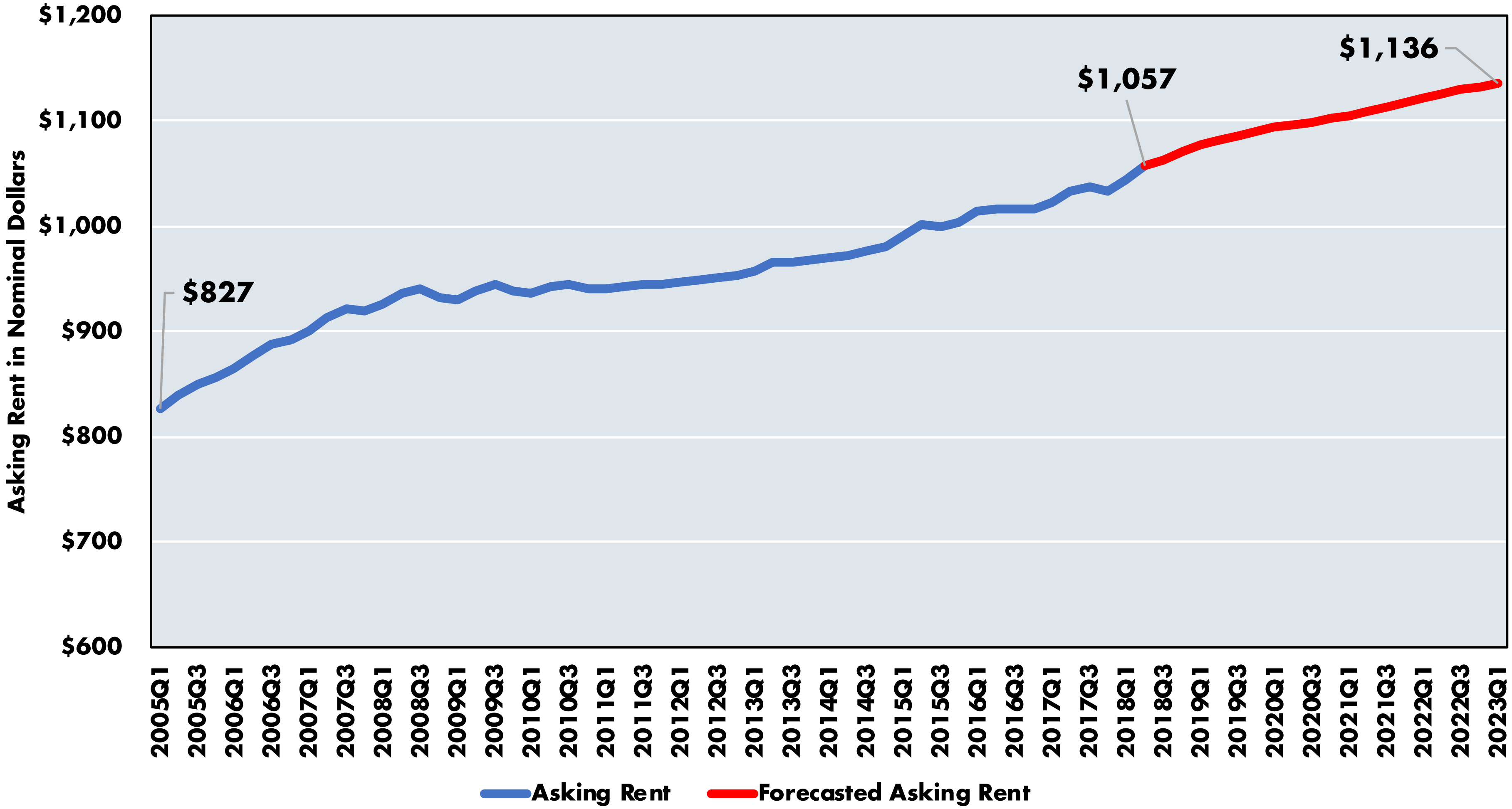
Higher vacancy rates in Hampton Roads may not be good news for owners and developers of multifamily housing but are providing a measure of relief to renters, especially compared to Richmond and Northern Virginia. Average rents as of the second quarter of 2018, however, topped the $1,000 per month benchmark due to new construction of luxury apartments. Newer, luxury apartments rent at a premium relative to existing apartment stock, so the rise in rent is more closely tied to improving quality than increasing scarcity.

Graph 10 shows that asking rents in Hampton Roads were $1,057 per month, on average, at the end of the second quarter of 2018. Rents in Hampton Roads remain lower than in nearby metropolitan areas such as Richmond ($1,073 per month), Raleigh ($1,098 per month) and Charlotte ($1,107 per month). On average, the highest rents in Hampton Roads are in Chesapeake ($1,175 per month), Virginia Beach ($1,151 per month) and Norfolk ($1,024 per month). The most affordable rents are in Newport News ($921 per month), Portsmouth ($953 per month) and Hampton ($973 per month).

Vacancy rates, much like rental rates, vary by locality in Hampton Roads. As shown in Graph 11, with a vacancy rate of 3.5 percent in the second quarter of 2018, it should be no surprise that multifamily units are being built rapidly in Isle of Wight County. York County, on the other hand, had more than 12 percent of units vacant, suggesting that the market is currently overbuilt relative to demand. For the cities in Hampton Roads, Williamburg has the lowest vacancy rate of about 3.8 percent and Newport News has the highest rate at 8.3 percent. With the recent news about new shipbuilding and hiring at Newport News Shipbuilding, it would not be surprising to see vacancy rates decline in Newport News and Hampton in the coming months.

GRAPH 10

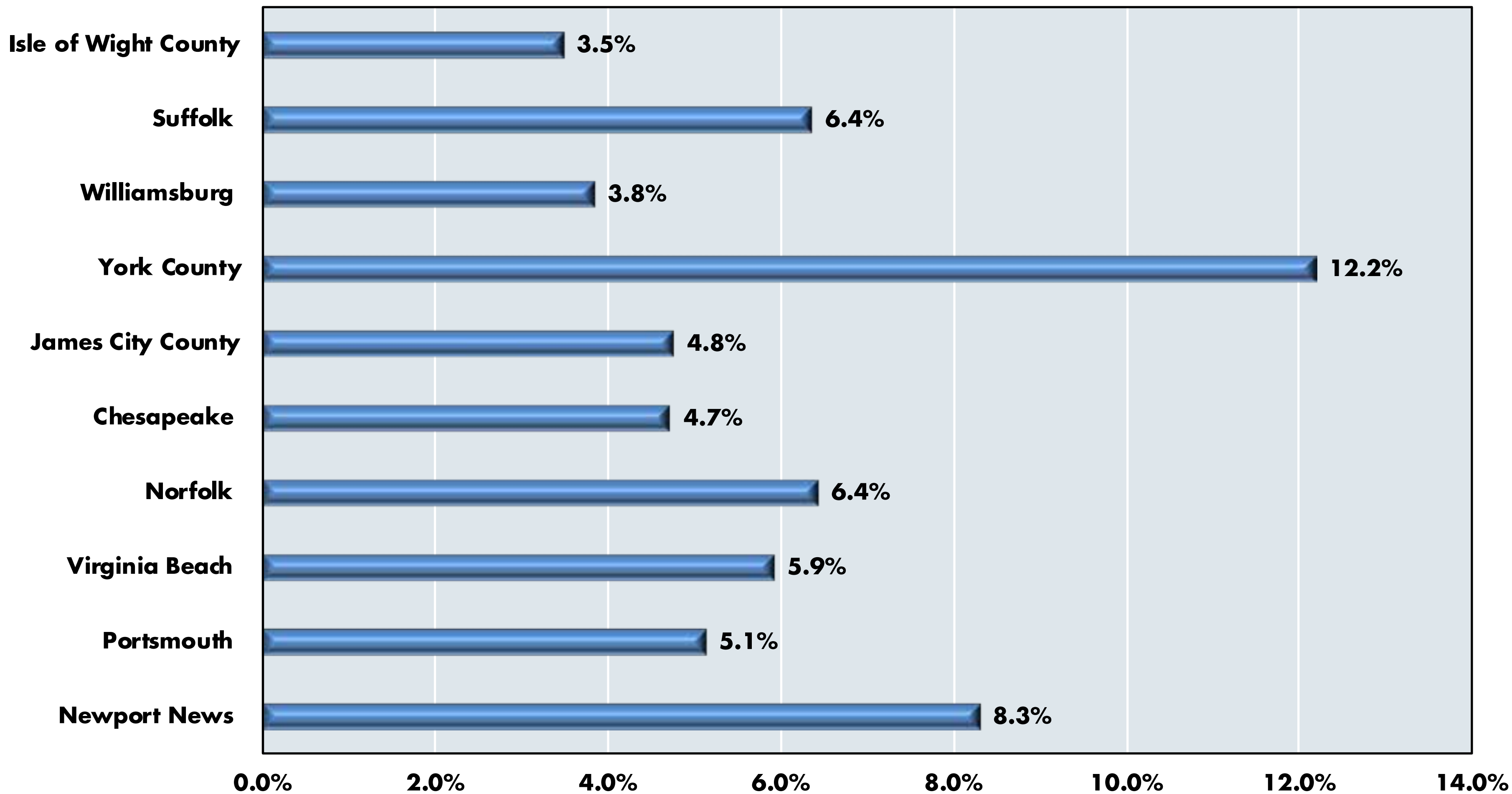
ASKING RENTS: HAMPTON ROADS, 1ST QUARTER 2006 TO 4TH QUARTER 2022



Sources: CoStar Market Analytics and the Dragas Center for Economic Analysis and Policy, Old Dominion University

GRAPH 11

VACANCY RATES: HAMPTON ROADS, 2ND QUARTER 2018



Sources: CoStar Market Analytics and the Dragas Center for Economic Analysis and Policy, Old Dominion University

Luxury Apartments: Living In Style

Not all new housing is created equal. New multifamily housing units may appear similar to older apartment builds in shape but often are crafted with a range of amenities in mind. Not only are more upscale properties entering the market, but, in some cases, developers are transitioning pre-existing structures into multifamily housing.

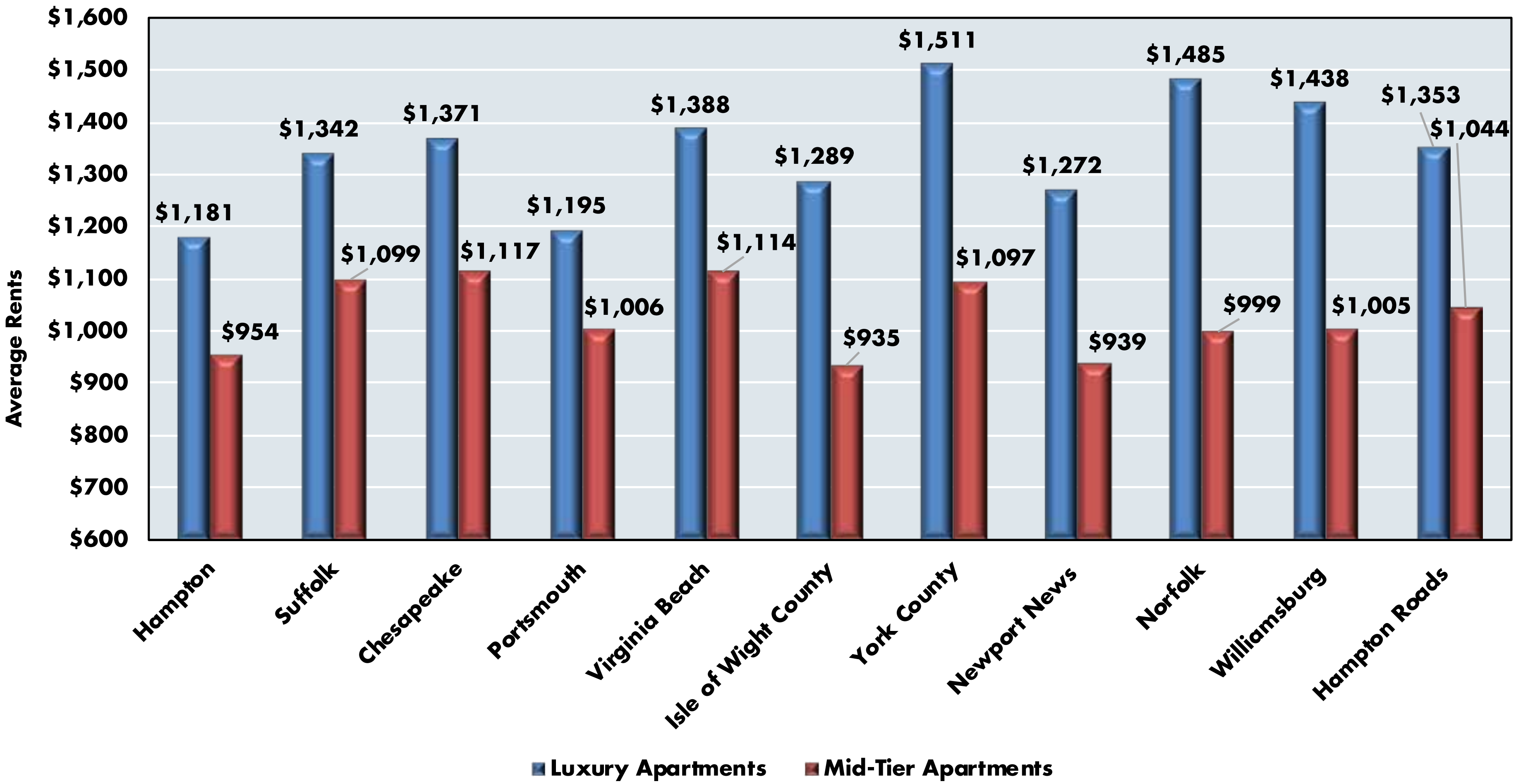
In recent years, developers have been buying existing and blighted real estate for conversion opportunities and are often granted historic tax credits for improving obsolete real estate and turning it into upgraded housing. For example, the Hampton Roads Housing Co. converted the former Kempsville High School building in Virginia Beach into multifamily housing of 168 units, with asking rents starting at around $1,495 a month.

"Buddy" Gadams' Marathon Development Group has been active in Hampton Roads, particularly in Norfolk, where the developer has delivered several new apartment properties. Marathon Development's most recent significant projects are the Edge @ 450 apartments and 1 Commercial Place, both located in downtown Norfolk. The former Bank of America building at 1 Commercial Place, a $90 million conversion of a 24-story office tower into 275 luxury apartments branded as the Icon at City Walk Apartments, opened in the first quarter of 2018.

Graph 12 shows rents in luxury apartments and mid-tier apartments as of the second quarter of 2018. Luxury apartments rented for an average of $1,347 a month while mid-tier properties rented for an average of $1,024 a month. Rent levels in low-tier properties averaged $870 a month.

GRAPH 12

AVERAGE RENT FOR LUXURY AND MID-TIER RENTAL PROPERTIES, 2ND QUARTER 2018



Sources: CoStar Market Analytics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Luxury apartments are 4- and 5-star rated, while mid-tier apartments are 3-star rated.

Final Thoughts

Affordability is in the eye of the beholder. What we might consider to be expensive in Hampton Roads is unobtainable in many other metropolitan areas. Consider that a recent article (by the real-estate blog network Curbed) comparison-shopped what $4,500 a month would rent you in San Francisco (not much), and you obtain a picture of affordability that depends on where you live.[6]

It is unlikely that we will return to the homeownership rates seen prior to the Great Recession. Baby boomers will downsize over the coming years, while many millennials and Gen Xers are financially constrained by debt and other obligations. These financial considerations will undoubtedly dampen demand for owner-occupied housing relative to rental housing.

Changing preferences also play a role as evidenced by the number of Gen Xers and baby boomers who state that they prefer renting to owning. Homeownership rates will continue to rise with age, albeit at a slower pace than for previous generations. This bodes well for the multifamily-rental housing sector, and we should expect developers to continue to shift their portfolios in the direction of rental housing. Renting, in the minds of many, is easier and less risky than owning. The homeownership ethos is subtly shifting over time.

Is there "too much" multifamily housing in Hampton Roads? While developers may have increased inventories rapidly earlier in the decade, slower rates of construction and increasing demand are evidence of the market self-correcting. The evidence suggests that vacancy rates in Hampton Roads will fall below those for the United States in coming years. With changing preferences in favor of multifamily housing and improving growth, it may be time for developers to increase, rather than constrain, construction.

What if the rent is considered too high? We typically loathe recommending government interventions, and the multifamily market is no exception in this regard. If there are concerns about affordability, then we recommend increasing incomes through improvements in workforce education and training, rather than distorting markets through government intervention, whether explicit (rent control) or implicit (housing requirements for developers). These distortions often benefit a small number of people at a significant cost to the taxpayer.

Our dreams define and make us. The evolving American dream today may place less emphasis on homeownership and more emphasis on finding the right place to call home. For an increasing number of residents of Hampton Roads, this means renting is now part of our shared dream of being in a better place to live and work.

6 https://sf.curbed.com/2018/6/26/17504312/what-4500-rents-you-in-san-francisco-right-now.

Welcome To Your New Home: International Migration And Hampton Roads

The bosom of America is open to receive not only the Opulent and respectable Stranger, but the oppressed and persecuted of all Nations and Religions; whom we shall welcome to a participation of all our rights and privileges, if by decency and propriety of conduct they appear to merit the enjoyment.
– George Washington, 1783

WELCOME TO YOUR NEW HOME: INTERNATIONAL MIGRATION AND HAMPTON ROADS

The United States, as the popular refrain goes, is a nation of immigrants. Immigrants are defined as people who reside in a country that are not citizens of the country by birth, regardless of their legal status.[1] In 2017, there were about 44 million immigrants in the United States, or 14 percent of the population. When their U.S.-born children are counted, all told, on the order of 87 million immigrants lived in the United States in 2017, accounting for 27 percent of the total population.

To paraphrase another refrain, immigration fuels the U.S. economy. Not only is our country a magnet for workers around the world, immigrants are more likely to start a new company than native-born Americans.[2] A short list of first-generation immigrant entrepreneurs includes such notable names as Sergey Brin (Google), Anne Elisabeth "Liz" Claiborne (Liz Claiborne), Elon Musk (currently of Tesla, SpaceX and the Boring Co.), Levi Strauss (Levi Strauss & Co.) and Alberto "Beto" Perez (Zumba), among many others. Second-generation immigrants include Jeff Bezos (Amazon), Estee Lauder (Estee Lauder Companies) and Steve Jobs (Apple). In 2017, 43 percent of American companies were founded or co-founded by an immigrant or the child of an immigrant. According to the National Foundation for American Policy, more than half of the current crop of U.S.-based startups, valued at $1 billion or more, were founded by immigrants.[3]

1 The population of immigrants includes naturalized citizens, lawful permanent residents, certain legal nonresidents, those admitted as refugees or claiming asylum and individuals illegally residing in the U.S.
2 "The Economic Case for Welcoming Immigrant Entrepreneurs," 2015, https://www.kauffman.org/what-we-do/resources/entrepreneurship-policy-digest/the-economic-case-for-welcoming-immigrant-entrepreneurs. Sari Pekkala Kerr and Stephen R. Kerr, "Immigrants Play a Disproportionate Role in American Entrepreneurship," *Harvard Business Review* (Oct. 3, 2016).
3 "Immigrant Founders of the 2017 Fortune 500," http://startupsusa.org/fortune500/. Note that the Center for American Entrepreneurship counted only founders whose country of origin it could independently verify.

An objective examination of empirical studies on the contribution of immigrant labor to the U.S. economy reveals that, even by the most conservative estimates, immigration is a net benefit to the economy. **George Borjas, one of the most prominent economists on the topic of immigration, found that the presence of all immigrant workers (legal and illegal) increased the size of the U.S. economy by $1.6 trillion annually**.[4] The recent slowdown in potential gross domestic product (GDP) – the amount the economy could possibly produce – is primarily due to slower workforce growth, a situation that could plausibly be addressed through immigration. States with higher concentrations of foreign-born workers experience faster productivity growth.[5] A 2018 simulation of what would happen if foreign-born individuals stopped immigrating to the U.S. concluded that the economy would be 20 percent smaller by 2060 than it would otherwise be under normal immigration flows.[6]

4 George Bojas (2013), "Immigration and the American Worker," https://sites.hks.harvard.edu/fs/gborjas/publications/popular/CIS2013.pdf.
5 "The Effect of Immigration On Productivity: Evidence From U.S. States," G. Perri, 2012, https://www.mitpressjournals.org/doi/abs/10.1162/REST_a_00137?journalCode=rest.
6 Jared Bernstein (2018), "The U.S. Immigration Debate: What's the Shouting For?" and Frederick Treyz and Peter Evangelakis, "Immigration and United States Economic Growth" (2018).

While much of the empirical evidence is on the side of immigration, we would be remiss if we did not note that there is evidence that not all immigration is beneficial. Since a disproportionate share of today's immigrants to the United States possess lower-level skills, immigration and the resulting competition with native-born high school dropouts drives down earnings, on average, between $800 and $1,500 a year.[7]

Also, the current visa system can be exploited to displace skilled workers, leading to calls to restrict certain types of visas (H-1B visas, for example). On the other hand, while some argue that immigration leads to increased criminal activity, an analysis of urban crime rates from 1970 to 2010 found that immigration was consistently linked to decreases in violent and property crime.[8]

Hampton Roads, on the other hand, is not the United States. In many cases, foreign-born immigrants are more highly educated, gainfully employed and part of vibrant communities. Understanding how and where these individuals contribute to the economic and social fabric of Hampton Roads is the goal of this chapter.

This chapter examines the impact of international migration on Hampton Roads. We discuss where immigrants come from and take a look at the similarities to (and differences from) the native-born population. We introduce some leading members of the Hampton Roads community who are part of our immigrant population. Finally, we highlight how many immigrants play a vital role in the economic and social fabric of our region.

7 http://www.politico.com/magazine/story/2016/09/trump-clinton-immigration-economy-unemployment-jobs-214216.
8 https://www.tandfonline.com/doi/abs/10.1080/15377938.2016.1261057. See also https://www.aeaweb.org/articles?id=10.1257/aer.p20151041.

Foreign Born: What Does It Mean?

Before we dive into the details about immigration, we need to clearly define nativity status – that is, whether someone is native born or foreign born. According to the U.S. Census, **"native born" is anyone who was a U.S. citizen at birth**. Native-born individuals were born in the United States, Puerto Rico, a U.S. island area (for example, Guam) or abroad of U.S. citizen parent(s). **"Foreign born" refers to anyone who is not a U.S. citizen at birth.** Foreign-born residents include naturalized U.S. citizens, lawful permanent residents, temporary migrants (international students, for example), humanitarian migrants (refugees and asylees) and unauthorized migrants.

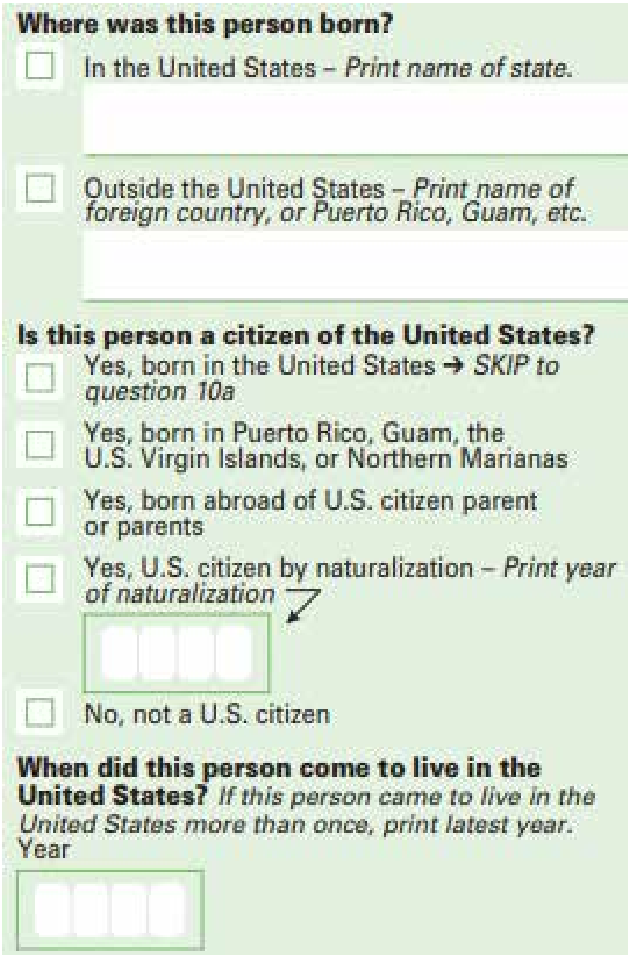
The U.S. Census currently asks three questions in the American Community Survey (ACS) regarding place of birth, citizenship and year of entry into the United States to estimate the native- and foreign-born segments of the population.[9] Responses to these questions are confidential and cannot be shared, a prohibition that includes other federal agencies and law enforcement entities. A point of interest is that these questions are not new. The first decennial census inquiring about citizenship was in 1820, place of birth (1850) and year of entry (1890).

From 1960 to 2010, however, the decennial census has not included the citizenship question and data on citizenship come from the ACS, which covers approximately 2.6 percent of the population. There are plans to include the citizenship question in the 2020 Census, following the format of the ACS. Whether including the citizenship question in the decennial census will depress response is a matter of debate and beyond the scope of our discussion. We thus rely on the ACS data where possible in this chapter. Figure 1 illustrates the three questions as collected by the U.S. Census on the 2017 ACS.

9 https://www.census.gov/acs/www/about/why-we-ask-each-question/citizenship.

FIGURE 1

QUESTIONS ABOUT NATIVITY, 2017 AMERICAN COMMUNITY SURVEY


Where was this person born?

☐ In the United States – *Print name of state.*

☐ Outside the United States – *Print name of foreign country, or Puerto Rico, Guam, etc.*

Is this person a citizen of the United States?

☐ Yes, born in the United States → *SKIP to question 10a*

☐ Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas

☐ Yes, born abroad of U.S. citizen parent or parents

☐ Yes, U.S. citizen by naturalization – *Print year of naturalization*

☐ No, not a U.S. citizen

When did this person come to live in the United States? *If this person came to live in the United States more than once, print latest year.*

Year

Source: U.S. Census Bureau, 2017 American Community Survey

Coming To America: Different Roads, Same Destination

As more immigrants call Hampton Roads home, it is important to understand the differences among the classes of admission. To say that there is a wide number of classes would be an understatement. Some classes of admission include family-sponsored preferences, immediate relatives of U.S. citizens, employment-based preferences (includes priority workers, professionals with advanced degrees or aliens of exceptional ability, skilled workers, professionals, and unskilled workers, special immigrants and employment creation), diversity refugees, asylees, parolees, children born abroad to alien residents, special visas that include the Nicaraguan Adjustment and Central American Relief Act and the Haitian Refugee Immigration Fairness Act.

One of the more controversial methods of lawful entry and employment is through the H-1B visa program. H-1B visas allow highly skilled foreign workers in "specialty occupations" to live and work in the U.S. with an employer's sponsorship for up to six years.[10] The clear majority of all H-1B visas are issued in the IT sector, most often to citizens of India. Only 700 H-1B visas were issued for Hampton Roads in 2016, compared to 4,400 for Raleigh and 64,800 for Northern Virginia. The average salary of the H-1B visa holder topped $73,000 and a majority of these workers held an advanced degree. Critics of the program point to displacement of U.S. workers and there are continued calls in some quarters to reform or eliminate the program entirely.[11]

Many immigrants to the United States obtain lawful permanent resident status (or a "green card") through familial relationships. In general, U.S. immigration law allows citizens to sponsor parents, spouses, minor unmarried children, married or adult children, and brothers and sisters. The immediate relative category for U.S. citizens, however, is limited to spouses, unmarried children

10 Government Accountability Office, H-1B Visa Program, "Reforms are Needed to Minimize the Risks and Costs of Current Program," GAO-11-26, January 2011.
11 Sam Trimbach, "Giving the Market a Microphone: Solutions to the Ongoing Displacement of U.S. Workers through the H1B Visa Program," 37, *Northwestern Journal of International Law & Business*, 275 (2017).

under 21 years of age, and parents (if the U.S. citizen is 21 or older). Other relatives must apply though family-based preferences.

Depending on the type of familial relationship, the wait for a green card can range from months (for immediate relatives of U.S. citizens) to decades (for the lowest-preference applicants of lawful permanent residents).[12] **In 2016, of those obtaining green card status in the Commonwealth, 48 percent were immediate relatives (spouses, unmarried children and parents) of U.S. citizens.**

Naturalized citizens are foreign-born residents who have lived in the United States for at least five years, applied for naturalization and passed a citizenship test, in addition to other requirements. The Pew Research Center reports an upward trend in the number of naturalized citizens – from 14.4 million in 2005 to 19.8 million in 2015, a 37 percent increase.

In 2016, an estimated 1,031,169 immigrants called Virginia home, more than 50 percent of whom were naturalized citizens. Most immigrants in Virginia are not newcomers, with around 83 percent having been in the United States for more than five years. In fact, nearly 70 percent of Virginia's immigrants have been in the country for more than 10 years.

MY LAN TRAN

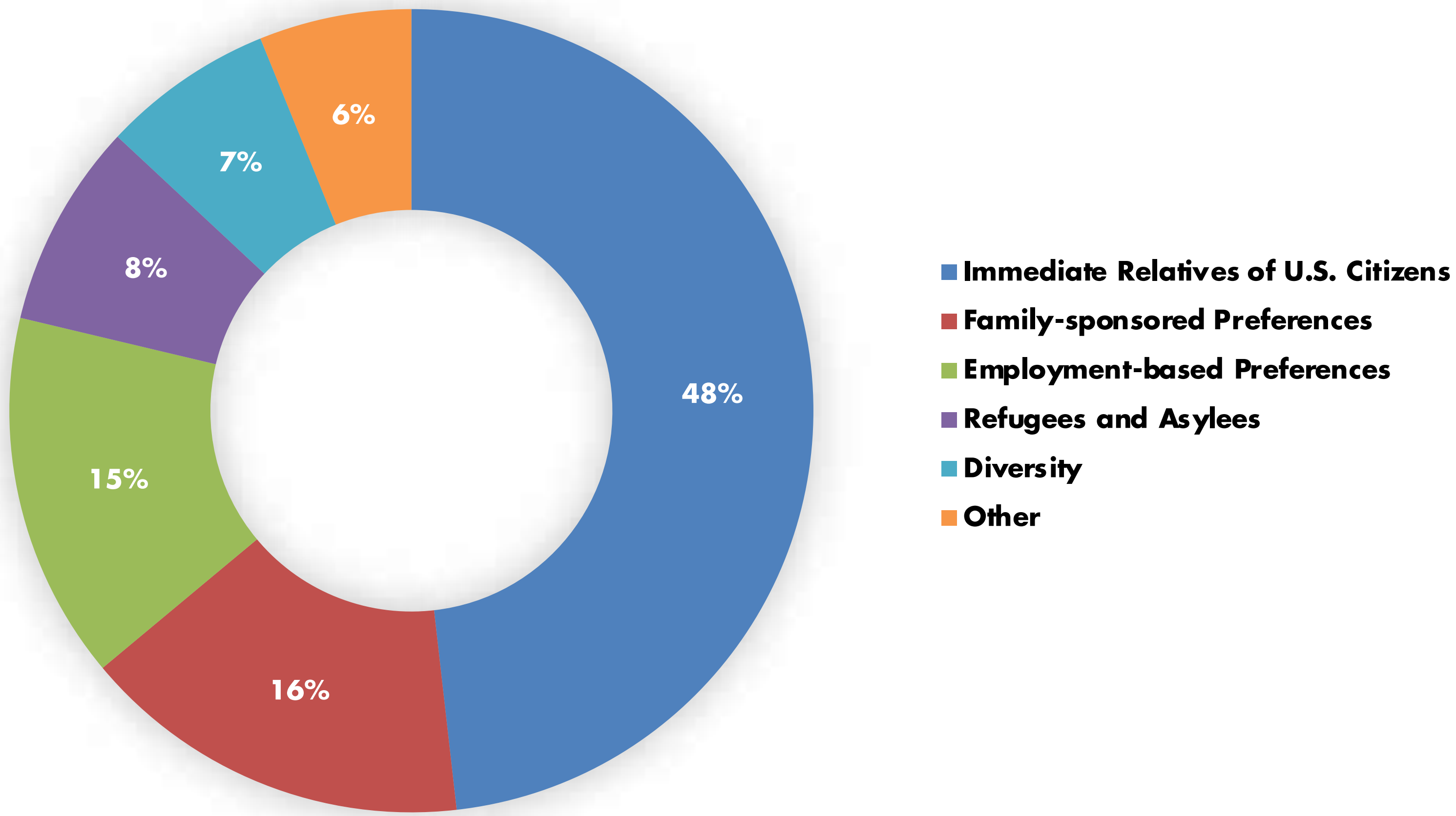
For those who enter the country as refugees, permanent resident status is justified by humanitarian concerns or is otherwise deemed in the national interest. My Lan Tran, the current executive director of the Virginia Asian Chamber of Commerce and director of the Virginia Asian Foundation, arrived in the United States over 40 years ago. "As a Southern Vietnamese, I came to the U.S. on April 29, 1975, one day before the fall of Saigon. My father, who at the time played an important senior technical role in the engineering facilities at the U.S Embassy and military base in Saigon, was planning to take us to Australia to escape possible punishments. At the last minute, due to administrative reasons, the evacuation to Australia did not happen and we ended up in Massachusetts. We were political refugees."

Naturalized in 1982, Tran has been a community leader and a fierce advocate for the Asian community in the United States. She has served as deputy director for the Massachusetts Department of Labor and Workforce Development, trade promotion manager for the Virginia Economic Development Partnership and senior program manager for the city of Richmond's Office of Minority Business Development.

12 https://www.uscis.gov/greencard/eligibility-categories.

GRAPH 1

CLASS OF ADMISSION – PERSONS OBTAINING LAWFUL PERMANENT RESIDENT STATUS (GREEN CARD): COMMONWEALTH OF VIRGINIA, FISCAL YEAR 2016



Source: U.S. Department of Homeland Security, 2018

How Many Immigrants Are There?

Table 1 presents the share of the foreign-born population for the nation and the 15 states with the largest foreign-born populations. California not only had the largest economy in 2016, but also the highest foreign-born share (27 percent of the population). **Eleven of the 15 states with the largest shares of immigrants also had real (after inflation) GDP per capita higher than the U.S. average in 2016.**

TABLE 1 PERCENT FOREIGN-BORN POPULATION, 2016			
State	Percent of Foreign Born	Real GDP (Millions)	Real GDP Per Capita
United States	13.5%	$16,383,812	$50,660
California	27.0%	$2,317,466	$59,974
New York	22.6%	$1,279,883	$64,522
New Jersey	21.8%	$506,639	$56,428
Florida	19.9%	$818,162	$39,608
Nevada	19.3%	$129,746	$44,142
Hawaii	17.9%	$74,241	$51,964
Texas	16.7%	$1,481,866	$53,104
Massachusetts	15.7%	$444,685	$65,168
Maryland	14.7%	$336,094	$55,786
Connecticut	14.0%	$225,110	$62,745
Illinois	13.9%	$697,084	$54,308
Rhode Island	13.5%	$50,406	$47,662
Washington	13.5%	$420,809	$57,796
Arizona	13.4%	$269,024	$38,940
Virginia	11.9%	$432,862	$51,443

Sources: U.S. Census Bureau and 2012-2016 American Community Survey 5-Year Estimates and the Bureau of Economic Analysis. Real GDP is calculated with 2009 as the base year and is from the Bureau of Economic Analysis.

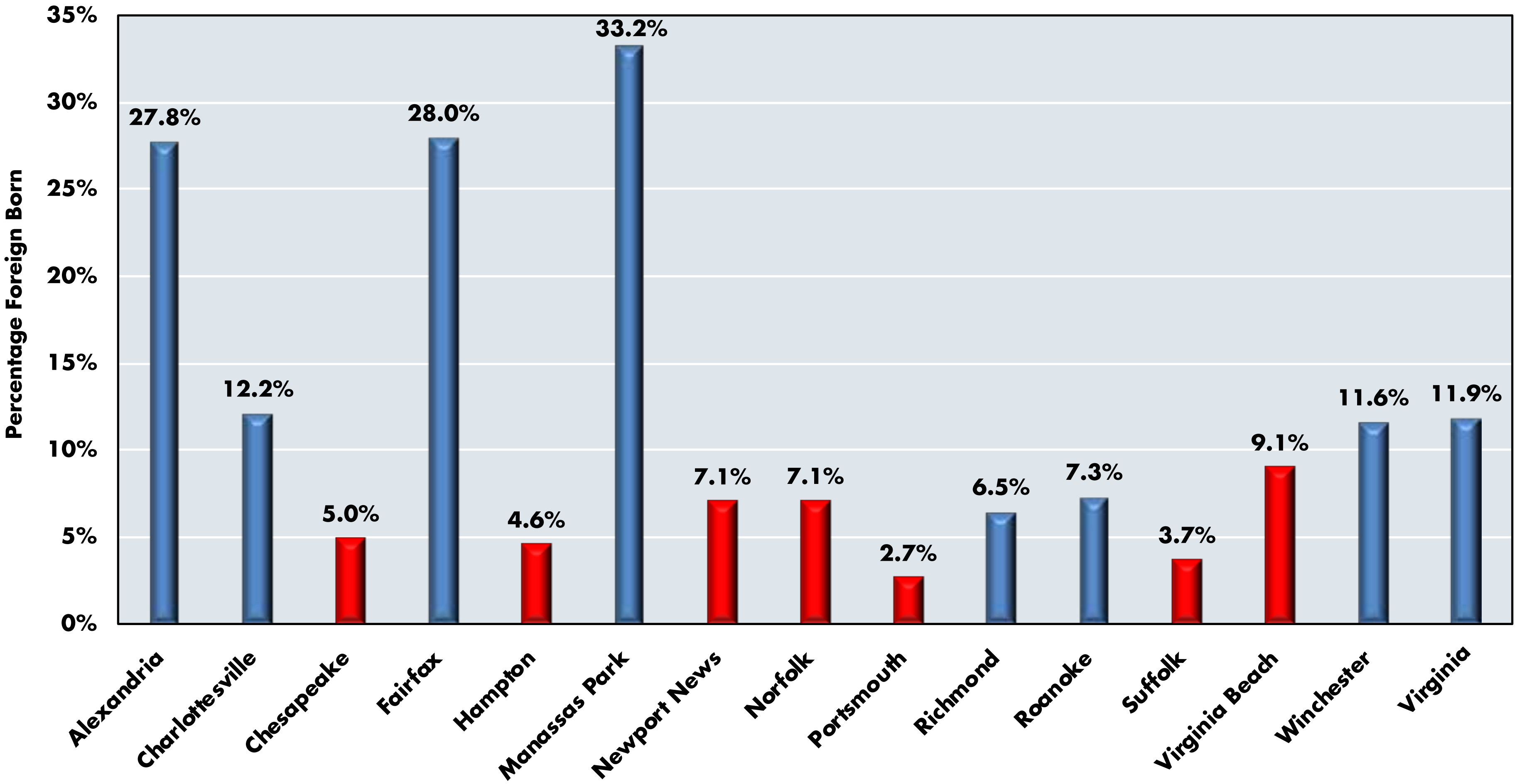
Graph 2 reports the percentage of foreign-born residents for selected cities in Hampton Roads and the Commonwealth. **The change in Virginia is stunning in a historical perspective. Fifty years ago, only 1 in 100 Virginians was foreign born; by 2016, the ratio was 1 out of 11.** In some cities, the percentage of foreign born exceeded 25 percent – 33.2 percent of the population was foreign born in Manassas Park in 2016, followed closely by Fairfax and Alexandria. Virginia Beach, with 9.1 percent, had the highest share of foreign-born residents in Hampton Roads, while Portsmouth had the lowest, at 2.7 percent.

Hampton Roads is no exception to national and state trends. **In 2006, 5.7 percent of the region's population was foreign born; by 2016, this share was 6.5 percent. As illustrated in Table 2, foreign-born residents of Hampton Roads tend to be older. In 2016, the median age of the native-born population was 35, while the median age of naturalized citizens and non-U.S. citizens was 50.2 and 37.2, respectively. Immigrants are also more likely to be employed. For those 16 and older, about 72 percent of non-U.S. citizens were employed, compared to approximately 61 percent of naturalized citizens and 58 percent of U.S. citizens.**

For the population 25 years and older, educational attainment also varies. Thirty-eight percent of naturalized citizens hold a bachelor's, graduate or professional degree, compared to 31 percent of U.S. citizens and 29 percent of non-U.S. citizens. At the other end of the educational spectrum, only 8.3 percent of native-born residents had less than a high school degree compared to 10.4 percent of naturalized citizens and 24.3 percent of non-U.S. citizens.

GRAPH 2

PERCENTAGE OF FOREIGN-BORN PERSONS IN THE POPULATION: SELECTED CITIES IN VIRGINIA, 2012-2016



Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

TABLE 2 DEMOGRAPHIC SNAPSHOT OF HAMPTON ROADS: 2016 AMERICAN COMMUNITY SURVEY, 1-YEAR ESTIMATES					
	Total	Total Native	Total Foreign Born	Foreign Born; Naturalized Citizen	Foreign Born; Not a U.S. Citizen
TOTAL POPULATION	1,725,937	1,614,024	111,913	67,338	44,575
SEX AND AGE					
Male	49.2%	49.3%	47.3%	42.3%	55.0%
Female	50.8%	50.7%	52.7%	57.7%	45.0%
Under 5 years	6.2%	6.6%	0.5%	-	1.2%
5 to 17 years	16.0%	16.8%	4.6%	2.5%	7.9%
18 to 24 years	11.3%	11.4%	9.0%	6.3%	13.1%
25 to 44 years	27.2%	26.6%	37.0%	30.2%	47.2%
45 to 54 years	13.0%	12.5%	19.0%	21.0%	15.9%
55 to 64 years	12.5%	12.3%	14.8%	18.7%	9.0%
65 to 74 years	8.2%	8.1%	9.0%	12.9%	2.9%
75 to 84 years	4.1%	4.1%	4.7%	6.4%	2.2%
Median age (years)	35.9	35.0	44.4	50.2	37.2
MARITAL STATUS					
Population 15 years and over	1,406,228	1,299,061	107,167	66,043	41,124
Never married	35.0%	36.1%	22.6%	16.3%	32.8%
Now married, except separated	45.4%	44.2%	60.0%	63.9%	53.7%
Divorced or separated	14.1%	14.3%	11.8%	12.6%	10.7%
Widowed	5.4%	5.4%	5.6%	7.2%	2.9%

TABLE 2 CONTINUED DEMOGRAPHIC SNAPSHOT OF HAMPTON ROADS: 2016 AMERICAN COMMUNITY SURVEY, 1-YEAR ESTIMATES					
	Total	Total Native	Total Foreign Born	Foreign Born; Naturalized Citizen	Foreign Born; Not a U.S. Citizen
EDUCATIONAL ATTAINMENT					
Population 25 years and over	1,147,651	1,051,564	96,087	61,419	34,668
Less than high school graduate	8.9%	8.3%	15.4%	10.4%	24.3%
High school graduate (includes equivalency)	25.1%	25.4%	21.8%	19.6%	25.7%
Some college or associate degree	34.6%	35.3%	27.8%	31.9%	20.4%
Bachelor's degree	19.6%	19.5%	20.9%	23.8%	15.9%
Graduate or professional degree	11.8%	11.6%	14.1%	14.4%	13.6%
EMPLOYMENT STATUS					
Population 16 years and over	1,384,943	1,278,082	106,861	65,851	41,010
In labor force	67.4%	67.1%	71.0%	68.5%	74.9%
Civilian labor force	61.8%	61.4%	67.4%	63.1%	74.2%
Employed	58.3%	57.7%	65.3%	61.4%	71.6%
Unemployed	3.5%	3.6%	2.1%	1.7%	2.6%
Armed forces	5.5%	5.7%	3.6%	5.4%	0.7%
Not in labor force	32.6%	32.9%	29.0%	31.5%	25.1%

Source: U.S. Census Bureau, American Community Survey Population Estimates, 2017

Arrivals And Departures: Migration To And From Hampton Roads

People come, and people go. Where they come from and where they go is revealing, as we tend to "vote with our feet." Whether it is for jobs, quality of life or affordability, migration implicitly reveals the attractiveness of a region. Whether net migration is a positive (reflecting more inflows than outflows) or negative is more than just an academic concern. A city, region or state with out-migration is losing people and, invariably, businesses.

From 2010 to 2017, the total population of Hampton Roads increased by 48,429. At first glance this appears to be good news in that we are not shrinking, like some cities in the Northeast. Births outnumbered deaths by 65,852 over this period, so the natural increase in the population was positive. Net migration, on the other hand, was negative, with domestic departures outnumbering international arrivals, lowering population growth.

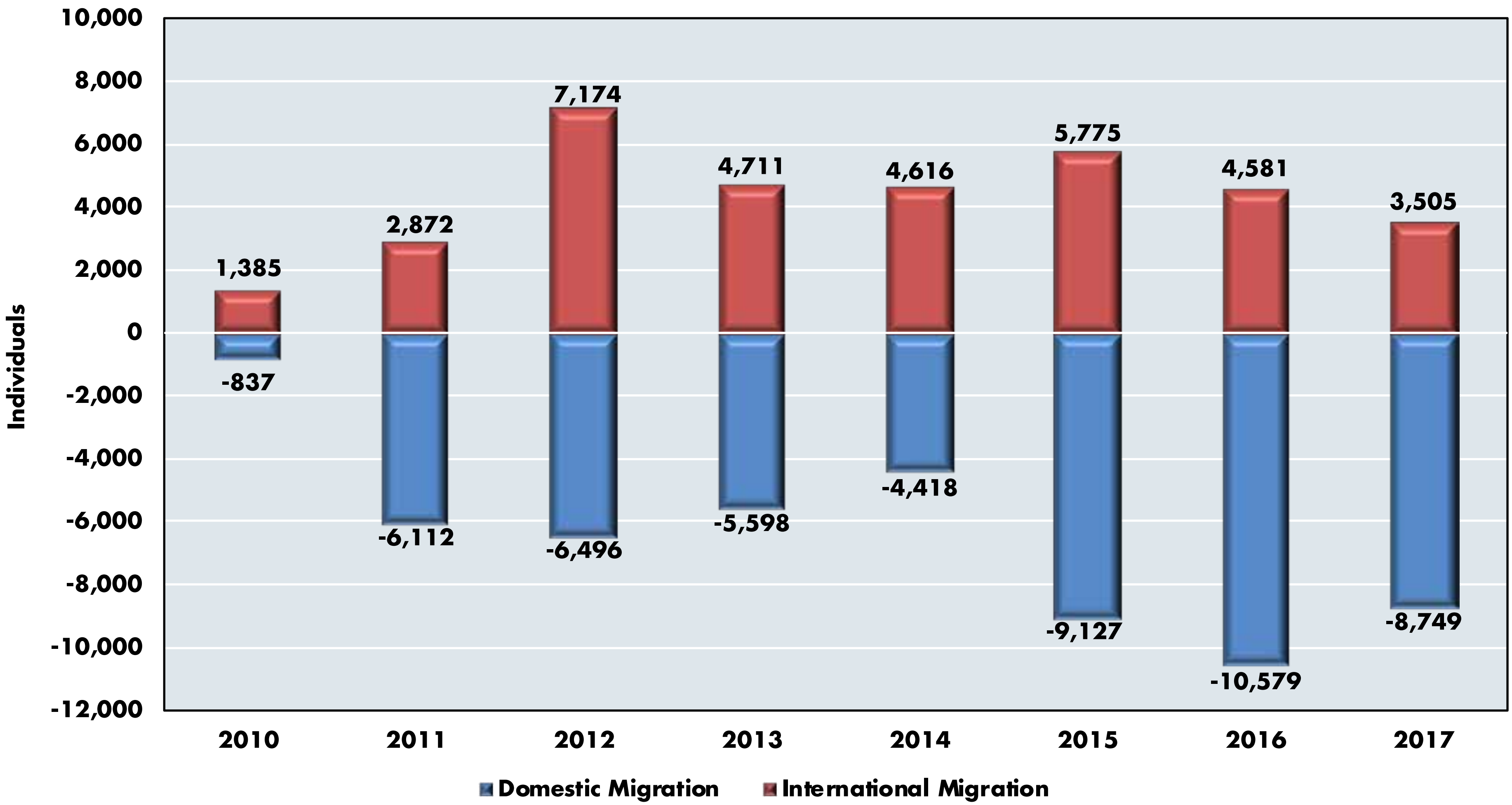
Graph 3 illustrates the good news about international migration, the bad news about net migration and the ugly news about domestic migration. **Almost 52,000 people left Hampton Roads for other locations in the U.S. from 2010 to 2017. If not for the arrival of about 34,000 international migrants, the region would have barely increased in size. While net migration was slightly positive in 2010, 2012 and 2014, large outflows to other domestic destinations, especially in the last three years, overran these small gains.**

The cities and counties that comprise Hampton Roads have different stories to tell. As shown in Table 3, Chesapeake, James City County, Suffolk and Virginia Beach gained significant population, but for different reasons. Chesapeake not only saw a natural increase in population, but also the largest positive net migration flows in Hampton Roads. James City County, on the other hand, saw almost no change in its population due to births versus deaths but did experience a large inflow of domestic migrants. Suffolk's population growth was almost evenly split between the natural increase and positive net migration. Lastly, Virginia Beach's overall population increased, not because of migration, but due to a large natural increase in the population.

Other cities in Hampton Roads fared poorly from 2010 to 2017 with regard to net migration. Hampton, Newport News and Norfolk each experienced negative net migration, as domestic outflows outpaced international inflows. In some cases (Gates County, Hampton, Newport News, Portsmouth), negative net migration exacerbated or led to an overall loss in population. Without international migration, in each of these cases the decline in population would have been worse.

GRAPH 3

DOMESTIC AND INTERNATIONAL MIGRATION: HAMPTON ROADS, APRIL 1, 2010 – JULY 1, 2017



Source: U.S. Census Bureau, Estimates of the Components of the Resident Population Change, Annual Estimates, 2018. Migration data include the movement of members of the armed services.

TABLE 3 CUMULATIVE POPULATION CHANGE IN HAMPTON ROADS, APRIL 1, 2010 – JULY 1, 2017							
			Vital Events		Net Migration		
	Total Population Change	Natural Increase	Births	Deaths	Total	International	Domestic
Chesapeake	18,091	8,716	20,967	12,251	9,441	3,115	6,326
Currituck County	2,784	224	1,796	1,572	2,543	5	2,538
Gates County	-642	-63	771	834	-583	43	-626
Gloucester County	434	1	2,635	2,634	455	134	321
Hampton	-2,715	4,141	12,874	8,733	-6,881	2,311	-9,192
Isle of Wight County	1,279	-6	2,493	2,499	1,306	231	1,075
James City County	8,141	109	4,871	4,762	7,993	832	7,161
Mathews County	-197	-407	438	845	218	71	147
Newport News	-1,575	9,854	20,452	10,598	-11,537	4,537	-16,074
Norfolk	1,880	12,736	26,819	14,083	-10,781	7,893	-18,674
Portsmouth	-955	3,560	11,092	7,532	-4.490	1,084	-5,574
Suffolk	5,667	2,974	8,337	5,363	2,707	784	1,923
Virginia Beach	12,528	22,467	44,188	21,721	-9,824	11,125	-20,949
Williamsburg	1,713	743	2,689	1,946	965	847	118
York County	2,476	1,602	4,640	3,038	861	1,525	-664

Source: U.S. Census Bureau, Estimates of the Components of Resident Population Change, April 1, 2010, to July 1, 2017. Net international migration for the United States includes the international migration of both native- and foreign-born populations. It includes the net international migration of the foreign born, the net migration between the United States and Puerto Rico, the net migration of natives to and from the United States, and the net movement of the armed forces population between the United States and overseas.

Who Is Coming To Hampton Roads?

Every home is unique, and Hampton Roads is no different. The characteristics of the population in our region differ from those of Richmond, Northern Virginia and other regions. Part of this is due to how immigrant communities form. Throughout U.S. history, whether it was the arrival of Irish and German immigrants in the 1800s or immigrants from the Philippines and Mexico today, the first stop is often a community with other people of similar origins who can offer support and guidance. **In 2016, the Philippines, Mexico, China, the United Kingdom and Vietnam were the top five countries of origin for the foreign-born population in Hampton Roads.** Table 4 lists the top 12 countries of origin for Hampton Roads.

Table 5 presents the characteristics of the foreign-born population in Hampton Roads in 2016. More than 39 percent of the foreign-born population classified themselves as Asian, followed by about 33 percent as white, almost 22 percent as Hispanic and 15 percent as black or African-American. Immigrants to Hampton Roads are not a homogeneous group. Their individuality, perspectives and experiences add to the tapestry of life in our region.

Let's take a look at the Asian, Hispanic and Indian communities in Hampton Roads.

TABLE 4

TOP 12 ORIGIN COUNTRIES FOR THE FOREIGN-BORN POPULATION: VIRGINIA PORTION OF HAMPTON ROADS, 2016

Origin County	Population
Philippines	20,871
Mexico	7,097
China, excluding Hong Kong and Taiwan	4,611
United Kingdom (includes crown dependencies)	4,122
Vietnam	4,052
Germany	3,998
India	3,981
South Korea	3,918
Jamaica	3,417
Honduras	2,871
El Salvador	2,713
Canada	2,462

Sources: U.S. Census Bureau, American Community Survey, 2012-2016 5-Year Estimates, and the Dragas Center for Economic Analysis and Policy, Old Dominion University

TABLE 5 FOREIGN-BORN RACE AND HISPANIC-ORIGIN ESTIMATES: VIRGINIA PORTION OF HAMPTON ROADS, 2016			
	Total Foreign Born	Foreign Born; Naturalized Citizen	Foreign Born; Not a U.S. Citizen
POPULATION ESTIMATES	111,913	67,338	44,575
RACE AND HISPANIC OR LATINO ORIGIN			
White	32.7%	30.8%	35.5%
Black or African-American	15.0%	15.8%	13.9%
American Indian and Alaska Native	0.1%	0.2%	0.0%
Asian	39.2%	46.1%	28.7%
Native Hawaiian and Other Pacific Islander	0.2%	0.1%	0.3%
Some Other Race	9.9%	3.3%	19.9%
Two or More Races	2.9%	3.7%	1.8%
Hispanic or Latino Origin (of Any Race)	21.5%	13.9%	32.8%

Source: U.S. Census Bureau, 2016 American Community Survey Population Estimates, 2018

The Asian Communities Of Hampton Roads: Diverse, Influential And Impactful

Fifty years ago, less than 1 percent of the U.S. population was born in Asia; today it is nearly 6 percent. The largest percentage of foreign-born residents of Virginia in 2016 was born in Asia. Of the 112,000 foreign-born residents of Hampton Roads, almost 48,000 were born in Asia, making Asia the largest geographical departure point for our region.

Table 6 shows that there is not one Asian community in Hampton Roads but a collection of communities from different countries in Asia. Immigrants to Hampton Roads span the Asian continent, with the largest populations coming from the Philippines, China, Vietnam, India and South Korea. There are also immigrants here from 28 other Asian countries, including the Western Asian countries of Iraq, Turkey and Lebanon.

TABLE 6 ASIAN COUNTRIES OF ORIGIN FOR THE FOREIGN-BORN POPULATION: VIRGINIA PORTION OF HAMPTON ROADS, 2016	
Asia:	47,994
Eastern Asia:	11,339
China:	5,572
China, excluding Hong Kong and Taiwan	4,611
Hong Kong	264
Taiwan	697
Japan	1,848
South Korea	3,918
Other Eastern Asia	1
South Central Asia:	6,803
Afghanistan	423
Bangladesh	135
India	3,981
Iran	800
Kazakhstan	125
Nepal	239
Pakistan	546
Sri Lanka	205
Uzbekistan	87
Other South Central Asia	262
South Eastern Asia:	27,087
Cambodia	730
Indonesia	277
Laos	105
Malaysia	125

TABLE 6 CONTINUED ASIAN COUNTRIES OF ORIGIN FOR THE FOREIGN-BORN POPULATION: VIRGINIA PORTION OF HAMPTON ROADS, 2016	
Burma	255
Philippines	20,871
Singapore	23
Thailand	649
Vietnam	4,052
Western Asia:	2,742
Iraq	566
Israel	276
Jordan	53
Kuwait	30
Lebanon	293
Saudi Arabia	374
Syria	166
Yemen	14
Turkey	586
Armenia	42
Other Western Asia	342
Asia (not elsewhere classified)	23
Source: American Community Survey, 2012-2016 5-Year Estimates	

The Filipino-American Community In Virginia Beach

Of the 53,284 residents born in the Philippines and now residing in Virginia, 20,871 call Hampton Roads home. Natives of the Philippines comprise the largest Asian population in Hampton Roads, with Virginia Beach alone having the highest concentration of Filipino residents in the Commonwealth. After serving as a critical theater of battle during World War II, the Philippines became one of America's most dependable military allies following independence in 1946. Over time, many Filipinos gained access to American citizenship through service in the U.S. Navy and settled in Hampton Roads.

The official language of the Philippines is Filipino, and the language is based on Tagalog. According to the U.S. Census, there are over 1.6 million Tagalog speakers in the United States; California is the largest state, with more than 760,000 speakers. Virginia Beach is among the top 25 largest cities in the number of Tagalog speakers and is the largest in the Commonwealth, pushing Virginia onto the top 10 list of states with individuals reporting speaking Tagalog, at nearly 44,000 speakers.

In 2009, Virginia Beach's Ron Villanueva became the first Filipino-American ever to be elected to Virginia state government as a member of the Virginia House of Delegates. He was re-elected to four consecutive terms before losing his bid for a fifth term, and his representation marked an important milestone for the Filipino-American community.

In 2010, the Council of United Filipino Organizations of Tidewater (CUFOT) established the Philippine Cultural Center in Virginia Beach to preserve and promote Philippine and Filipino-American history and culture, particularly in Hampton Roads. **This is the only such center in the country that is completely owned by the Filipino-American community. The enterprise involved no assistance from external sources, such as federal, state and city governments, or private foundations.**

Thirty-two dedicated families, known as the board of trustees, financially backed the initial $988,500 construction loan, which was paid in 14 years through collaborative efforts within the community. Dr. Cynthia Romero, CUFOT chairman, oversees the operation and maintenance of the center. She is the current director of the M. Foscue Brock Institute for Community and Global Health at Eastern Virginia Medical School. Previously, she served as the Virginia state health commissioner. She is the daughter of Philippine natives and center board of trustees members Deacon Cris Romero, past CUFOT chairman, and Dr. Aleli Romero, a well-known physician in the region.

The Indian-American Community In Hampton Roads

Educational, economic and professional opportunities offered by the United States have been highly attractive to Asian Indians. Hampton Roads is home to a substantial Asian Indian community that is the third largest in the Commonwealth of Virginia, behind Northern Virginia and Richmond. Virginia residents of Asian Indian descent are younger and more likely to live in a married-couple household with children than Virginia's population at large. Nearly 78 percent of Virginia's Asian Indians over the age of 25 possess a bachelor's degree or higher, compared to nearly 34 percent of the general population in the same age group. More than half of Virginia's Asian Indian households earn $100,000 or more per year, compared to nearly 28 percent of all Virginia households. The members of Hampton Roads' Asian Indian community reflect the diversity of India itself, which consists of 28 different states and seven union territories.

THE HINDU TEMPLE AND COMMUNITY CENTER OF HAMPTON ROADS

The Hindu Temple and Community Center complex features a 24,000-square-foot facility on about 20 acres of land in Chesapeake. It was completed in 1997 at a cost of about $1.7 million. The Hindu community in Hampton Roads, representing fewer than 800 families, raised all the money for the complex and it has been debt-free since 2000. The Hindu Temple and Community Center provides a focal point for both the religious and cultural activities of Hampton Roads' Hindu community.

DILIP DESAI

Virginia Beach resident Dilip Desai recalled that when he first came to the area in 1974, there were few Asian Indian families and he didn't know if he would even stay in the United States. However, he soon became impressed by the number of entrepreneurial opportunities available to anyone who was willing to work hard. After serving as internal auditor at Norfolk State University for several years, Desai co-founded LTD Management Co., LLC (predecessor to LTD Hospitality Group) in 1983. For more than three decades as a naturalized citizen, he has developed, owned, managed and sold more than 40 hotels across the mid-Atlantic region. Headquartered in Chesapeake, LTD Hospitality Group currently manages over $500 million worth of premium-branded hotel assets and employs more than 800 people. In the community service arena, Desai served as a board member as well as treasurer of Cape Henry Collegiate School's board of trustees. Former Virginia Gov. Mark Warner appointed him as a member of the Commonwealth's Budget Advisory Board, which advises the governor on all matters related to hospitality. Desai's children manage successful careers in Virginia as well.

PRATIK KOTHARI

Many Asian Indians come to the United States to pursue graduate study and often bring along spouses, children and other family members. Pratik Kothari first arrived in the U.S. from Mumbai, India, in 2003 and moved to Hampton Roads in 2004 to earn a master's degree in computer science. Although he worked for reQuire LLC (from 2004 to 2014), Pratik had bigger plans. With his wife, Jinal Kothari, the two dreamt of starting a business that they would name TechArk. Pratik is the "Tech" and Jinal, an architect, is the "Ark." Kothari left reQuire in 2014 and committed himself full time to running TechArk. Six years in the making, with clients across Europe, Canada and North America, the business currently operates internationally and has 14 employees. Headquartered in Norfolk, TechArk Solutions provides custom web and mobile programming services, digital marketing and website design services. Kothari, who became a U.S. citizen in 2017, is happy to call Hampton Roads home and the place where he is raising his children. "My family and I feel blessed to live in Hampton Roads. There are so many great things that work together to make this region truly attractive – comfortable lifestyle, safe communities, great schools and, above all, the people. We have been fortunate to make wonderful friends for life."

Hispanic Communities In Hampton Roads: Stories To Tell

The Hispanic share of the U.S. population has been growing steadily for the last 50 years, rising from 3.5 percent of the overall population in 1960 to 17.3 percent of the population in 2017. Hispanics accounted for 13 percent of the native population and 45.5 percent of the foreign-born population. Despite some claims that immigration is driving up the share of the Hispanic population, the foreign-born share of the adult Hispanic population has been declining since 2007.[13] We must take care to note that, according to the U.S. Census Bureau, Hispanic origin can be viewed as the heritage, nationality, lineage or country of birth of the person or the person's parents or ancestors before arriving in the United States. People who identify as Hispanic, Latino or Spanish may be of any race.

According to the U.S. Census, of Virginia's 8,310,301 residents in 2016, almost 725,000 identified as Hispanic or Latino. Of Hampton Roads' almost 110,000 foreign-born residents in 2016, 22.1 percent identified as Hispanic or Latino.

As indicated in Table 7, more than 20 Spanish-speaking countries represent over 24,000 Hispanic foreign-born natives in Hampton Roads. Individuals from Mexico comprise the second-largest foreign-born population, with Honduras, El Salvador and Colombia also well represented in the area. Virginia Beach, Norfolk and Newport News have some of the largest populations in the state that identify as Hispanic.

Spanish is the official language in 20 countries around the world. There are more than 400 million native speakers of Spanish, making it second only to Chinese in terms of the most-spoken languages in the world. According to the U.S. Census, over 70 percent of Hispanics age 5 and older spoke Spanish at home in 2016. Additionally, the United States is home to nearly 12 million bilingual Spanish speakers, which makes us the second-largest Spanish-speaking country in the world – after Mexico. In Hampton Roads, Spanish is the "second" language of our region, with over 62,000 individuals reporting that they speak Spanish at home. Hampton Roads' first Spanish-language radio station began broadcasting in 2005; in 2017, WVXX (La Selecta), 1050 AM, expanded with the addition of 103.3 FM.

In 2018, the Hampton Roads Hispanic Chamber of Commerce celebrated 15 years as the leading advocate for the Hispanic business community. A new governing board also introduced a different name and logo for the organization as it sets its eyes on the future. Now known as the Hispanic Chamber of Commerce of Coastal Virginia (*Camara de Comercio Hispana de la Costa de Virginia)*, it hopes to reinvigorate its efforts to provide support to the Hispanic community not only on the Southside and Peninsula, but also throughout Coastal Virginia.

13 http://www.pewhispanic.org/2017/09/18/facts-on-u-s-latinos/#share-foreign-born.

TABLE 7 SPANISH-SPEAKING COUNTRIES OF ORIGIN OF THE FOREIGN-BORN POPULATION: VIRGINIA PORTION OF HAMPTON ROADS, 2016	
Argentina	386
Belize	196
Bolivia	364
Brazil	582
Chile	65
Colombia	1,773
Costa Rica	209
Cuba	1,405
Dominican Republic	922
Ecuador	238
El Salvador	2,713
Guatemala	1,200
Guyana	981
Honduras	2,871
Mexico	7,097
Nicaragua	283
Other South America	29
Panama	1,629
Peru	1,467
Spain	588
Uruguay	163
Venezuela	354

Sources: Dragas Center for Economic Analysis and Policy, Old Dominion University, and 2012-2016 American Community Survey 5-Year Estimates

JULIAN BAENA

Julian Baena, membership director for the Hispanic Chamber of Commerce of Coastal Virginia, stated, "There are pockets of communities in Hampton Roads and we want to bring them all together. The chamber is more dedicated than ever to helping our diverse community." He hopes that by developing new initiatives for members as well as focusing on long-standing traditions – such as supporting the Hispanic Scholarship Fund and promoting major events like Nuestra Feria, the Virginia Beach Latin Festival and the Norfolk Latin Festival – the chamber will be the leading resource for Hispanics from the region as well as those coming into Hampton Roads for the first time from countries throughout North and Latin America.

Other Communities And Organizations Of Interest

Our previous discussion only highlights a few of the communities that contribute to the fabric of Hampton Roads. To say that there is a large organized and diverse set of organizations that support immigrant communities in Hampton Roads would be an understatement (see Table 8). Each of these organizations welcomes the participation of their specific community and the broader Hampton Roads community. **The innate desire to break bread together builds fellowship not only within these communities but, more importantly, across them. Together, as it is commonly said, we are stronger.**

TABLE 8 ORGANIZATIONS SUPPORTING HAMPTON ROADS' LARGEST IMMIGRANT COMMUNITIES		
NAME	**DESCRIPTION**	**WEBSITE/CONTACT INFORMATION**
Asian Indians of Hampton Roads	Facilitates the involvement of people of Asian Indian origin in Hampton Roads in the mainstream of American social fabric and promotes events such as India Fest	http://www.aihr.org/ http://www.aihr.org/IndiaFest/
Asian Pacific American Heritage Organization	Celebrates and raises public awareness of the many important contributions made by Pacific Americans; sponsors the yearly Asian Fest event	https://www.apaho.org/
Association of American Physicians of Indian Origin Hampton Roads	Represents physicians, dentists and other medical scientists of Indian heritage in Hampton Roads; raises funds to support local free clinics, as well as organizes a free health camp each year	http://www.aapihr.org/
Caritas Felices de Hampton Roads	Promotes the well-being of children and youth with special needs in the Hispanic community through information and advocacy, with family support in Spanish	http://www.cfelices.org/
Chua Giac Hoa	First Buddhist place of worship in Hampton Roads	2019 Cora St., Chesapeake, Virginia Phone: 757-286-5998
Hampton Roads Refugee Action Group	Provides refugees with donations, English assistance and employment services	http://hrefugeeactiongroup.wixsite.com/hrag
Hindu Temple and Community Center of Hampton Roads	Supports an extensive calendar of religious and cultural activities and events, including the Cricket Club, and its annual Taste of India event, held at Old Dominion University's Ted Constant Center every April	http://www.hindutemplehr.org/ https://cricclubs.com/HRCO https://toihr.com/
Hispanic Chamber of Commerce of Coastal Virginia (Camara de Comercio Hispana de la Costa de Virginia)	Serves as principal resource and advocate for the joint promotion of Hispanic businesses, consumers and organizations, as well as supports the Hispanic Scholarship Fund, Nuestra Feria, the Virginia Beach Latin Festival and the Norfolk Latin Festival	www.linkedin.com/company/hampton-roads-hispanic-chamber-of-commerce/

TABLE 8

ORGANIZATIONS SUPPORTING HAMPTON ROADS' LARGEST IMMIGRANT COMMUNITIES

NAME	DESCRIPTION	WEBSITE/CONTACT INFORMATION
Philippine Cultural Center of Virginia	Serves as the center of social celebration, civic and religious functions, and community meeting space for Filipinos of Hampton Roads	http://philippineculturalcenter.com/
St. Gregory the Great Catholic Church	Provides weekly mass in Spanish; also, a Filipino-American ministry meets every month	http://stgregoryvabeach.org/index.php/ministerio-hispano http://stgregoryvabeach.org/index.php/ministries/filipino-american-ministry
Hispanic Leadership Forum of Hampton Roads Inc.	Develops leaders within the Hispanic community through education, the arts and cultural engagement	https://hispanicleaderhr.com/
Virginia Asian Chamber of Commerce	Promotes and facilitates the success of its members, Asian American and Pacific American businesses, other diverse businesses and the communities they serve through networking, outreach, advocacy and education	http://aabac.org/
Virginia Asian Foundation	Offers students an invaluable internship experience with the Virginia Asian Chamber of Commerce in its community outreach and education programs (for students majoring in public relations, arts and communications)	http://aabac.org/va-asian-foundation/
Virginia Coalition of Latino Organizations	Coalition of nonprofit organizations serves and supports the Latino/Hispanic immigrant communities in Virginia and advocates for the rights of Latino immigrants in the Commonwealth	http://vacolao.org/

Source: Dragas Center for Economic Analysis and Policy, Old Dominion University

Final Thoughts

The history of the United States is marked by cycles of immigration. As the preferences of the citizenry have changed, immigration policy in the U.S. has vacillated between welcoming immigrants and swinging the door shut. Whether it was the Irish and Germans of the 1800s, Eastern and Southern Europeans of the late 1800s and early 1900s, or the advent of Hispanic immigration in the mid-1900s, each immigration wave has been followed by a rise in anti-immigration sentiment. The economic contributions of many of these immigrants, however, cannot be obscured.

The majority (if not overwhelming) amount of empirical evidence points to the conclusion that immigration leads to increased innovation, a better-educated workforce, greater occupational specialization and higher economic productivity.[14] In 2014, immigrants started 28.5 percent of all new businesses in the United States. While native-born citizens have seen rates of new businesses decline by 10 percent, immigrants have seen their rates increase by more than 50 percent. An immigrant is now more than twice as likely to start a business as a native-born citizen.[15]

We would be naïve to suggest that unfettered immigration is the solution to the long-term decline in the labor force participation rate of native-born Americans. Whether the current familial-based system of legal immigration is best suited for the workforce needs of America is a debate worth having, subject to the caveat that we can empirically and objectively examine whether a merit- or familial-based system is better for economic growth in the U.S. Focusing on policies that reward entrepreneurship and innovation without creating incentives to displace existing U.S. workers would be a wise course of action.

With few exceptions, Hampton Roads' net migration numbers have been lackluster in recent years. Without international migration, however, the story would have a dismal ending. Hampton Roads may not be keeping residents from voting with their feet to other locations in the U.S., but we are succeeding in being an attractive destination for migrants from other countries. Building upon the success of attracting international migrants is a sound policy prescription.

How can Hampton Roads address the outflow of residents and create conditions to sustain international migration? Regardless of one's political philosophy, improving the economic attractiveness of Hampton Roads would facilitate achieving both goals. Continuing to improve economic development efforts across the region, increasing access to capital and mentorship for entrepreneurs, providing immigration and transition services, and fostering leadership among different groups could all benefit Hampton Roads. These are "long-haul" efforts that will bear fruit at different times in the coming years, but if we don't start now, we risk experiencing negative migration in the next economic downturn.

What, then, is to be done? We need to take a long-term view. Reducing regulatory and legal barriers to economic activity and improving collaboration across cities and counties continues to be a step in the right direction. Reducing administrative bloat and consolidating public services not only frees up resources for productive infrastructure and education, but also signals the wise use of public resources. **We should avoid "giving away the farm" to attract firms and make Hampton Roads a place where you want to go – not just a place where you are from.**

In the end, having the discussion of how to reduce domestic out-migration and sustain international migration is a conversation worth having. International migration has not been the panacea for all our ills, but it has alleviated some of the worst of our economic malaise. As difficult as it may be to set aside partisan differences, we should be able to agree that making investments in infrastructure and education and lowering artificial barriers to competitive activity is a wise path to tread.

14 The Effects of Immigration on the United States' Economy," http://budgetmodel.wharton.upenn.edu/issues/2016/1/27/the-effects-of-immigration-on-the-united-states-economy.
15 Sari Pekkala Kerr and Stephen R. Kerr, "Immigrants Play a Disproportionate Role in American Entrepreneurship," *Harvard Business Review* (Oct. 3, 2016).

Hampton City Schools: The Next Generation Of Learning In Hampton Roads

HAMPTON CITY SCHOOLS: THE NEXT GENERATION OF LEARNING IN HAMPTON ROADS

Cautious, careful people, always casting about to preserve their reputation and social standing, never can bring about a reform. Those who are really in earnest must be willing to be anything or nothing in the world's estimation, and publicly and privately, in season and out, avow their sympathy with despised and persecuted ideas and their advocates, and bear the consequences.
– Susan B. Anthony

High school education is changing in the Commonwealth of Virginia. In the fall of 2017, the state Board of Education announced wide-ranging changes to high school graduation requirements – most notably, a reduction in standardized testing, and the adoption of a new "Profile of a Virginia Graduate" that emphasizes the "5 C's": critical thinking, creative thinking, collaboration, communication and citizenship. The changes reflect a growing consensus that "earning a diploma should be about more than passing a prescribed series of courses and tests," and that schools should equip students with a broad array of academic *and* professional skills so that they are "college- and career-ready."[1] "You cannot build an economy for 2050 with a 1950s approach to education," former Gov. Terry McAuliffe asserted in his 2016 State of the Commonwealth address, advocating for many of these changes. "We will put greater emphasis on hands-on learning, internships, early college courses and industry credentials, rather than classroom seat-time."[2]

McAuliffe's proposals and the new graduation standards reflect a growing interest in career and technical education (CTE) in Virginia and elsewhere around the country. Today's CTE programs have largely replaced the older model of "vocational and technical" education, which was often considered relevant only to non-college-bound students or stigmatized as a lesser alternative to traditional coursework. CTE programs now provide skills training for a wide variety of career pathways (including science and technology, health care, business, communications and law), and they may be just as rigorous as any other academic specialty program. They provide hands-on training and workplace experience that are beneficial to all students, regardless of whether they plan to attend college right away, or at all. School divisions in Hampton Roads offer innovative CTE programs in an array of specialized fields. Students in our region regularly earn industry credentials and college credit, or gain real-world work experience with community partners, as part of their high school education.

For Hampton Roads, the challenge is evident. The U.S. Navy, for example, has committed to expanding the current fleet of 299 ships in fiscal year 2019 to 326 ships by FY 2023 and 355 ships by FY 2048.[3] The details of the plan are important in that the Navy has not only decided to build new ships, but also extend the service life of existing ships. To achieve this end, the Navy is also creating a multiyear maintenance plan. The increased maintenance of older ships and construction of new ships could be an economic boon to our region.

1 Virginia Department of Education, Profile of a Virginia Graduate, www.doe.virginia.gov/instruction/graduation/profile-grad
2 2016 State of the Commonwealth address, https://governor.virginia.gov/newsroom/newsarticle?articleId=13920.

3 Office of the Chief of Naval Operations, United States Navy (2018), "Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2019."

Hampton Roads has natural advantages with an existing shipbuilding and maintenance industrial base, yet, without a sufficient workforce, this future work will go elsewhere. Competition for these contracts will undoubtedly be fierce. As James Geurts, assistant secretary of the Navy for research, development and acquisition, said in June 2018, Hampton Roads must "recreate something new and special because as great as the Navy demands are, quite frankly, I'm going to go where the folks who figure that out the best. ... I think you've got the opportunity, but it's not a given. I think the nation has a need, but there's a lot of folks looking at the need."[4] Without the right workforce, Hampton Roads will not only falter in the competition for these contracts but also will struggle to attract and retain other employers.

The focus of this chapter is the most ambitious initiative in our region yet to integrate career and technical education into the high school learning experience – the Academies of Hampton. **Beginning this fall, all 10th-graders who attend Hampton City Schools will be enrolled in one of 16 college and career academies that are now housed in the city's four high schools.** As stated in the Academies of Hampton master plan, their goal is to "prepare students for postsecondary education and employment in high-demand, high-wage, 21st-century careers. Hampton City Schools' graduates will leave with transferable skills, including the ability to think critically and creatively, collaborate well with others, engage in their community through responsible citizenship, and communicate with a sense of purpose."

We'll introduce you to the Academies of Hampton and discuss how the initiative aims to enhance our regional workforce in close cooperation with many different community partners. We'll also look at the outcomes of other school divisions that have adopted the career academy model.

4 *The Virginian-Pilot*, June 8, 2018, "Navy leader says if Hampton Roads wants to benefit from military expansion it has to step up."

The Career Academy Approach: How It Evolved

The College & Career Academy Support Network (CCASN), housed at the University of California at Berkeley, defines a career academy as "a type of school-within-a-school or small learning community (SLC) that provides a college-preparatory curriculum with a career related theme."[5] This learning model has existed in one form or another for nearly 50 years, but it has attracted more attention and a growing number of converts within the past decade.

The first career academy was established in 1969 at Philadelphia's Thomas Edison High School, where school leaders were seeking an innovative way to lower the dropout rate in one of the city's poorest communities. They partnered with the Philadelphia Electric Co. to provide students with vocational training that would lead to skilled jobs directly after graduation, and to incorporate aspects of this training within the rest of the general studies curriculum. The academic and vocational sides of the program were not separate, but mutually reinforcing. The model was a success, and it was replicated in several other Philadelphia high schools with different professional emphases in the 1970s and 1980s.

Numerous other schools around the country followed Philadelphia's lead – most notably, the California schools that became part of the state-funded California Partnership Academies network, as well as the Academy of Finance in New York City, which grew into the National Academy Foundation (NAF) that now includes more than 600 academies all over the country. More recently, Ford Next Generation Learning (NGL), an educational initiative of the Ford Motor Co. Fund, has emerged as an influential champion of the career academy approach. Hampton is one of 44 school divisions around the country that has developed or is currently developing career academies within the Ford NGL network.

5 David Stern, Charles Dayton and Marilyn Raby, "Career Academies: A Proven Strategy to Prepare High School Students for College and Careers," 4, at: https://casn.berkeley.edu/wp-content/uploads/2017/07/Proven-Strategy-2-25-10.doc. The organization changed its name from the Career Academy Support Network (CASN) to the College & Career Academy Support Network (CCASN) in 2013.

In 2010, CCASN estimated that there were approximately 7,000 career academies in the United States, "enrolling about one million high school students, mainly in grades 10 through 12" – or about 10 percent of all high school students in these grades. Today, this number is likely much higher, thanks to several reinforcing phenomena that have combined to give career academies a major boost within the past several years.

First, the changing attitudes toward career and technical education described earlier have led to some significant institutional changes. The American Vocational Association renamed itself the Association of Career and Technical Education in 1998, a change that both reflected and encouraged a broader understanding of career education at the secondary level. And in 2006, the Perkins Act (which provides federal funds to states for vocational and technical education) was expanded so that its funds were no longer restricted to non-college-preparatory programs – but could also be used to support career academies and other programs for college-bound students. The "college and career academy" label (which is favored by the Academies of Hampton) began to appear more frequently, reinforcing the distinction between the academy approach and traditional vocational training.

In 2008, a landmark study, the MDRC Career Academics Evaluation, captured the attention of the secondary education community by providing powerful statistical evidence in favor of the career academy approach. **After tracking nine career academies and their graduates for 15 years, researcher James J. Kemple found that at-risk students who participated in career academies not only had better attendance and were less likely to drop out than their peers, but also that their postgraduation earnings were significantly higher.**[6] We'll look more closely at the results of this study later in this chapter. Here, we note that it reinforced a growing wave of interest in the career academy model – including in Hampton, where the division introduced its first "school-within-a-school," or "pocket" academies in 2011 (the Aerospace and Information Technology Academy at Hampton High School, the Architecture and Applied Arts Governor's STEM Academy at Kecoughtan High School, the Governor's Health Sciences Academy at Bethel High School and the Information Design and Engineering Academy at Phoebus High School). Cheryl Carrier, the executive director of Ford NGL, tells us that Kemple's study played a key role in focusing the Ford Motor Co. Fund's longstanding support for innovative approaches in secondary education on the career academy model.

In 2014, the Obama administration established a new Youth CareerConnect program to encourage "America's school districts, institutions of higher education, the workforce investment system, and their partners to integrate rigorous educational standards with work experiences and skills in ways that enhance instruction and deliver real-world learning opportunities for students."[7] Grants totaling $107 million were disbursed to 20 different school systems across the country for the explicit purpose of establishing career academies. Former President Barack Obama himself visited McGavock High School, part of the Academies of Nashville in the Ford NGL network, in order to highlight the school's record of success. Later that year, Nashville, Tennessee, was designated the first Ford NGL Model Community and has since hosted countless visitors from all over the country – including representatives from Hampton – who have sought to learn more about establishing or expanding career academies in their own school divisions.

Ford Next Generation Learning now offers a broad menu of services to school divisions throughout the country. Hampton City Schools formally established its partnership with Ford NGL in 2015, beginning the detailed planning process outlined in the Ford NGL Roadmap to fully transform its four high schools into "wall-to-wall" college and career academies.[8] Representatives from Ford NGL have visited Hampton on several occasions, and they provide ongoing mentoring and support throughout the development process. As part of the Ford NGL network, Hampton is eligible to participate in special conferences and professional development opportunities, and also has the opportunity to learn from the experiences of other divisions in the network. The total cost of Hampton's three-year agreement with Ford NGL is $90,000 (which does not include other startup costs and program expenses).[9] At the end of three years,

6 James J. Kemple, 2008, "Career Academies: Long-Term Impacts on Labor Market Outcomes, Educational Attainment, and Transitions to Adulthood," MDRC.

7 Office of the Press Secretary, The White House, 2014, Youth CareerConnect Fact Sheet.
8 Ford Next Generation Learning, 2017, "Ford NGL Executive Summary."
9 Jane Hammond, "Dozens of Hampton school, city employees made trips to check out Nashville academies," *Daily Press* (Aug. 16, 2017).

Hampton may choose to continue its association with the Ford NGL network at additional cost.

The Academies Of Hampton: A Closer Look

School divisions all over the country have introduced college and career academies in a variety of ways. Even within the Ford NGL network, there are different models – depending on the size of the school division, the proportion of participating students, the kinds of career training offered and many other factors. Authorities such as the College and Career Academy Support Network, the National Career Academy Coalition and the MDRC (the sponsor of the 2008 study) do, however, all agree that "career academies" necessarily share three essential features:

- Small learning communities (SLCs);
- A college-preparatory curriculum with a career theme; and
- Community partnerships with employers and postsecondary institutions.

These features figure prominently in the design of the Academies of Hampton. Let's look at each one in turn, and how Hampton City Schools expects each feature to transform the high school experience of its students.

SMALL LEARNING COMMUNITIES

Secondary education specialists' embrace of career academies and career and technical education in the past 10-15 years has been accompanied by a parallel enthusiasm for small learning communities (SLCs). **Recent research and anecdotal evidence suggest that students (particularly those in challenging socioeconomic circumstances) fare better in smaller, more personal learning environments where a core group of teachers and students share several classes over an extended period.** Large public high schools have lowered dropout rates and improved academic performance by creating SLCs in a variety of ways – including the "school-within-a-school" approach of traditional career academies.

SLCs figure prominently in the design of the Academies of Hampton. Beginning in the 2017-18 school year, all ninth-grade students in Hampton attended their usual neighborhood school, but they were simultaneously assigned to a Freshman Academy of around 100-120 students, five to six dedicated teachers and a common guidance counselor. Ninth-graders now take most of their required coursework with other members of their academy, including the Success 101 freshman seminar, which helps them explore their professional and academic interests. At the end of the seminar, they develop a 10-year plan for their future and decide which college and career academies they might like to attend the following year. Academies of Hampton director Veronica Hurd tells us that the freshman academies also engage in a wide range of fun, community-building activities outside the classroom. The goal is to provide every student with a personal support network so they do not feel anonymous or overwhelmed, even in a larger high school of more than 1,000 students.

A COLLEGE-PREPARATORY CURRICULUM WITH A CAREER THEME

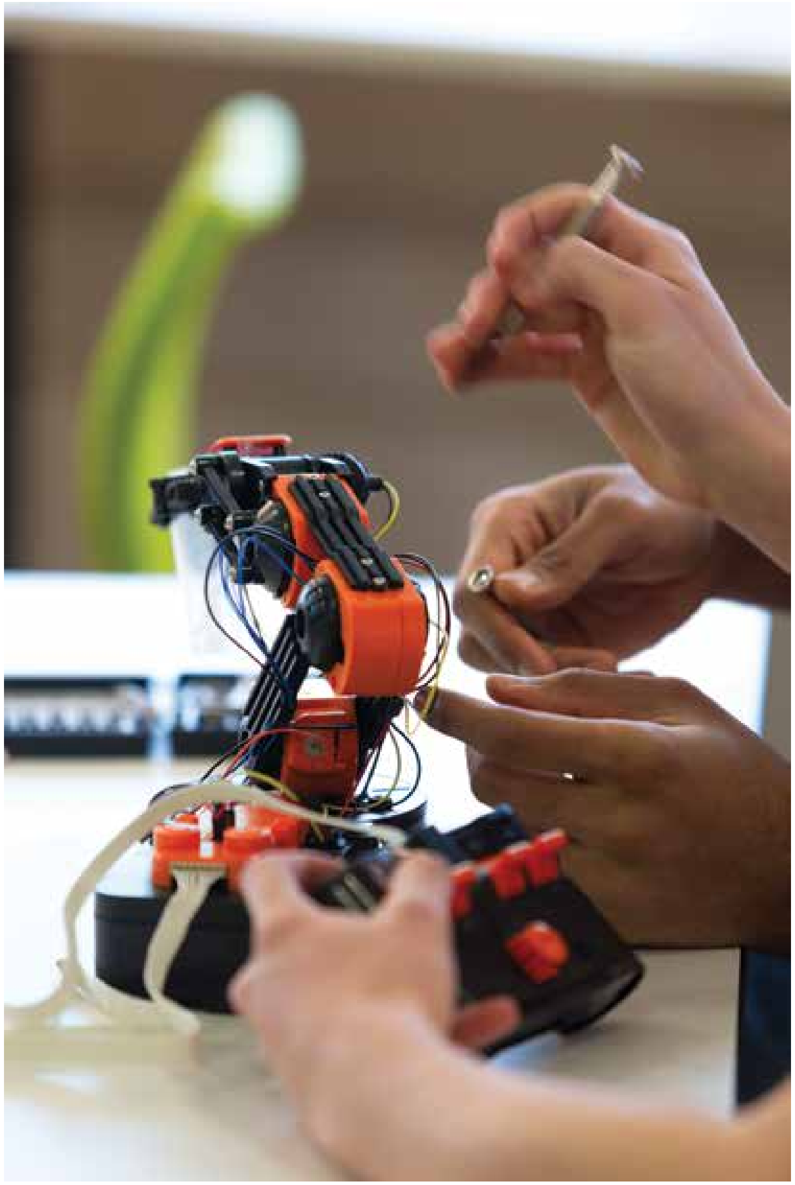
Another key aspect of the career academy experience is "a combination of academic curricula that is preparing a student for postsecondary education and a career theme that the student is interested in pursuing upon high school graduation."[10] Ideally, career academies not only offer students an opportunity to take CTE coursework in a specialized field such as business management, information technology, child development or the culinary arts, but the career theme is also reinforced through assignments and special projects in the students' core subjects. Providing college and career counseling and encouraging students to plan for their next steps after high school graduation are pivotal to the career academy experience.

Beginning this fall, the students who participated in last year's freshman academies are now commencing their studies at one of 16 different college and career academies at the city's four high schools:

10 The Academies of Hampton Master Plan, 25.

BETHEL HIGH SCHOOL	
The Governor's Health Sciences Academy	Academy of Law and Public Safety
Academy of Transportation, Analytics, Information and Logistics	Academy of Media, Arts and Design
HAMPTON HIGH SCHOOL	
Academy of Technology and Engineering	The International Baccalaureate Program
Academy of Health, Human and Financial Services	The Maritime Academy
KECOUGHTAN HIGH SCHOOL	
The Governor's STEM Academy of Architecture, Environment and Engineering	Academy of Teaching, Education and Learning
Academy of Entrepreneurship and Information Design	On Stage: Performing Arts Academy
PHOEBUS HIGH SCHOOL	
Academy of Cybersecurity, Engineering and Robotics	Academy of Hospitality and Tourism
Academy of Digital Video Production	Academy of Advanced College Experience

Most of these academies feature two or more career pathways. Students enrolled in the Governor's Health Sciences Academy at Bethel High School, for example, may follow one of four different pathways: Health Informatics and Support Services, Diagnostic Services, Therapeutic Services, and Biotechnology Research and Development. All students in the academy take their core subject courses together, but each pathway has its own distinct course sequence, suggested electives and target certification. Students following the Diagnostic Services pathway, for example, will take Intro to Health Sciences in 10th grade, Medical Terminology in 11th grade and Principles of Biomedical Sciences in 12th grade, in addition to completing a senior capstone project. They will be able to graduate with one or more specific target certifications, including Certified Nursing Assistant and Pharmacy Technician. They might begin work in one of these areas directly after high school – or with additional postsecondary education, they could eventually become a registered nurse, a medical doctor or a medical researcher.



BETHEL HIGH SCHOOL'S
Academies and Pathways

ACADEMIES

Academy of Media, Arts, and Design	Transportation, Analytics, Information, and Logistics Academy	Academy of Law and Public Safety	The Governor's Health Sciences Academy

PATHWAYS

Academy of Media, Arts, and Design	Transportation, Analytics, Information, and Logistics Academy	Academy of Law and Public Safety	The Governor's Health Sciences Academy
1. Journalism 2. Digital Media	3. Logistics, Distribution, and Transportation 4. Geographic Information Systems 5. Business Management 6. Networking 7. Programming and Software Development	8. Law and Legal Studies 9. Law Enforcement 10. Fire Fighting/EMT	11. Health Informatics and Support Services 12. Diagnostic Services 13. Therapeutic Services 14. Biotechnology Research and Development

Connect the pathway number with the pathway course sequence below.

If you would like more details, don't forget to check the back of the book for course descriptions.

PATHWAY COURSE SEQUENCES

1. 10th Journalism I; 11th Journalism II; 12th Journalism III w/Video and Media Technology; Senior Capstone

2. 10th Communication Systems; 11th Digital Visualization; 12th Video Media Production; Senior Capstone

3.1 10th Technology Foundations; 11th Global Logistics and Enterprise Systems I; 12th Global Logistics and Enterprise Systems II; Senior Capstone

3.2 10th Technology Foundations; 11th Automotive Tech I or Collision I -NHREC; 12th Automotive Tech II or Collision II -NHREC

4. 10th IT Fundamentals; 11th Geospatial Technology I; 12th Geospatial Technology II; Senior Capstone

5. 10th Computer Information Systems; 11th Accounting; 12th Business Management and Business Law; Senior Capstone

6.1 10th Information Technology Fundamentals; 11th Computer Network Software Operations; 12th Advanced Computer Network Software Operations; Senior Capstone

6.2 10th IT Fundamentals; 11th Computer Network Software Operations; 12th CISCO Networking/ Cybersecurity Academy -NHREC

7.1 10th IT Fundamentals or AP Computer Science Principles; 11th Programming I; 12th Programming II; Senior Capstone

7.2 10th IT Fundamentals; 11th AP Computer Science Principles or Design, Multimedia and Web Technologies; 12th Programming I & II - NHREC

7.3 10th IT Fundamentals; 11th Database Design and Management I; 12th Database Design and Management II; Senior Capstone

8. 10th Introduction to Law; 11th Ethics and Law, Legal Oratory, Debate; 12th Legal Research and Writing; Senior Capstone

9. 10th Public Safety I; 11th Criminal Justice I; 12th Criminal Justice II; Senior Capstone

10. 10th Public Safety I; 11th Fire Fighting - NHREC; 12th EMT -NHREC or Medical Terminology; Senior Capstone

11. 10th Introduction to Health and Medical Services; 11th Health Informatics; 12th Medical Coding and Billing; Senior Capstone

12.1 10th Introduction to Health Sciences; 11th Medical Terminology; 12th Principles of Biomedical Sciences; Senior Capstone

12.2 10th Medical Terminology; 11th Medical Specialty - NHREC; 12th Medical Specialty - NHREC; Senior Capstone

13. 10th Medical Terminology; 11th Sports Medicine I; 12th Sports Medicine II; Senior Capstone

14. 10th Principles of Biomedical Sciences; 11th Human Body Systems; 12th Medical Intervention; Senior Capstone

HAMPTON HIGH SCHOOL'S
Academies and Pathways

ACADEMIES

The International Baccalaureate Program	The Maritime Academy	Academy of Health, Human, and Financial Services	Academy of Technology and Engineering

PATHWAYS

The International Baccalaureate Program	The Maritime Academy	Academy of Health, Human, and Financial Services	Academy of Technology and Engineering
1. International Baccalaureate	2. Shipbuilding and Repair 3. Ship Design	4. Counseling, Nutrition and Wellness 5. Financial Services	6. Engineering Design and Development 7. Information Technology 8. Audio Engineering 9. Construction Technology

Connect the pathway number with the pathway course sequence below.

If you would like more details, don't forget to check the back of the book for course descriptions.

PATHWAY COURSE SEQUENCES

1. International Baccalaureate

2. 10th Introduction to Maritime Studies; 11th Materials and Processes; 12th Maritime Skilled Trade -NHREC

3. 10th Introduction to Maritime Studies; 11th Technical Drawing and Design; 12th Materials and Processes; Senior Capstone

4.1 10th Introduction to Family and Human Services; 11th Individual Development; 12th Psychology; Senior Capstone

4.2 10th Introduction to Family and Human Services; 11th Nutrition and Wellness; 12th Sports Medicine I; Senior Capstone

5. 10th Computer Information Systems; 11th Accounting; 12th Advanced Accounting; Senior Capstone

6. 10th Introduction to Engineering Design - PLTW; 11th Digital Electronics - PLTW; 12th Principles of Engineering - PLTW; Senior Capstone

7.1 10th Computer Information Systems; 11th Design, Multimedia, and Web Technologies; 12th Advanced Programming -NHREC

7.2 10th IT Fundamentals; 11th Design, Multimedia, and Web Technologies; 12th Programming; Senior Capstone

8. 10th Electronic Music Production I; 11th Electronic Music Production II; 12th Electronic Music Production III; Senior Capstone

9.1 10th Construction Technology; 11th Technical Drawing and Design; 12th Production Systems; Senior Capstone

9.2 10th Construction Technology; 11th Specialized Trade I - NHREC; 12th Specialized Trade II - NHREC

KECOUGHTAN HIGH SCHOOL'S
Academies and Pathways

ACADEMIES

The On Stage: Performing Arts Academy	Academy of Entrepreneurship and Information Design	Academy of Teaching, Education, and Learning	The Architecture, Environment, and Engineering - Governor's STEM

PATHWAYS

1. Theater Design and Technology	4. Entrepreneurship and Marketing	7. Education and Training	9. Construction Design
2. Theater Performance	5. World Banking and Finance	8. Child Development	10. Architectural Engineering
3. Art of Movement	6. Information Design		11. Environmental Studies

Connect the pathway number with the pathway course sequence below.

If you would like more details, don't forget to check the back of the book for course descriptions.

PATHWAY COURSE SEQUENCES

1. 10th: 3D Design and Technical Drama; 11th: Theater Technical Drawing and Design; 12th: Entertainment Design and Technology; Senior Capstone

2. 10th: Acting and Dramatic Literature and History; 11th: Acting II and Technical Drama; 12th: Acting III and Directing; Senior Capstone

3. 10th: World Dance; 11th: Ballet I and Modern Dance I; 12th: Ballet II and Modern Dance II; Senior Capstone

4. 10th: Marketing I; 11th: Entrepreneurship; 12th: Accounting; Senior Capstone

5. 10th: Computer Information Systems; 11th: Accounting; 12th: Advanced Accounting; Senior Capstone

6. 10th: IT Fundamentals or Cybersecurity Fundamentals; 11th: Design, Multimedia, and Web Technologies; 12th: Adv. Design, Multimedia, and Web Technologies; Senior Capstone

7. 10th: Introduction to Early Childhood, Education, and Service I; 11th: Virginia Teachers for Tomorrow I; 12th: Virginia Teachers for Tomorrow II; Senior Capstone

8. 10th: Intro. to Early Childhood, Education, and Service; 11th: Early Childhood, Education, and Service I; 12th: Early Childhood, Education, and Service II; Senior Capstone

9. 10th: Construction Technology; 11th: Production Systems; 12th: Materials Processes; 12th: Engineering Studies; Senior Capstone

10. 10th: Technical Drawing; 11th: Architectural Drawing; 12th: Engineering Drawing; 12th: Advanced Architectural and Engineering Drawing and Design; Senior Capstone

11. 10th: Introduction to Natural Resources and Ecology Systems; 11th: Fisheries and Wildlife Management; 12th: Fisheries and Wildlife; Senior Capstone

PHOEBUS HIGH SCHOOL'S
Academies and Pathways

ACADEMIES

Academy of Cybersecurity, Engineering, and Robotics	Academy of Hospitality and Tourism	Academy of Digital Media Production	Academy of Advanced College Experience

PATHWAYS

1. Engineering and Robotics	5. Culinary Arts	8. Television and Media Production	10. Advanced College Experience
2. Manufacturing	6. Travel and Tourism	9. Video Media Production	
3. Cybersecurity Systems Technology	7. Event Marketing		
4. Cybersecurity Software Operations			

Connect the pathway number with the pathway course sequence below.

If you would like more details, don't forget to check the back of the book for course descriptions.

PATHWAY COURSE SEQUENCES

1. 10th: Introduction to Engineering Design - PLTW; 11th: Principles of Engineering - PLTW; 12th: Digital Electronics - PLTW; 12th: Computer Integrated Manufacturing - PLTW; Senior Capstone

2.1 10th: Manufacturing Systems I; 11th: Manufacturing II; 12th: Precision Machining - NHREC; 12th: Mechatronics - NHREC

2.2 10th: Manufacturing Systems I; 11th: Welding I -NHREC; 12th: Welding II -NHREC

3. 10th: Cybersecurity Fundamentals; 11th: Programming I; 12th: Cybersecurity Systems Technology -NHREC or Advanced, Cybersecurity Systems Technology -NHREC

4. 10th: Cybersecurity Fundamentals; 11th: Cybersecurity Network Operations; 12th: Advanced Cybersecruity Network Operations; Senior Capstone

5. 10th: Introduction to Culinary Arts; 11th: Culinary Arts I; 12th: Culinary Arts II; Senior Capstone

6. 10th: Hospitality and Tourism I; 11th: Hospitality and Tourism II; 12th: Travel and Tourism Marketing and Sales; Senior Capstone

7. 10th: Introduction to Marketing; 11th: Event Marketing; 12th: Event Management; Senior Capstone

8. 10th: Television and Media Production I; 11th: Television and Media Production II; 12th: Television and Media Production III; Senior Capstone

9. 10th: Communication Systems; 11th: Imaging Technology; 12th: Video and Media Technology; Electronic Music Production

10. Advanced College Experience

Two of the 16 academies have a more distinct academic emphasis—the International Baccalaureate Program (which was already part of the programming at Hampton High School), and the Academy of Advanced College Experience, which allows for dual enrollment at Thomas Nelson Community College. Students in this academy have an opportunity to earn an associate degree as well as a high school diploma. In addition, all 10th-graders may enroll in a Gifted Enrichment seminar that combines honors and AP coursework with any career pathway. (In the current school year, the necessary enrollment numbers for the Gifted Enrichment seminar were met only at Kecoughtan High School.)

Placement in all of the academies and pathways was determined by lottery (with an additional application required for the International Baccalaureate Program, Advanced College Experience, and Gifted Enrichment seminar), and 97 percent of this year's 10th-graders received their first choice. Table 1 shows that the best-attended academies this fall are the Governor's Health Sciences Academy (184 students) and the Academy of Technology and Engineering (179), while the fewest students are attending the Maritime Academy and the Academy of Advanced College Experience (each with an enrollment of 31).

Academies of Hampton director Veronica Hurd has noted that several of the most strongly populated pathways involve fields that are already familiar to students in their everyday lives, such as digital media, therapeutic services (which emphasizes sports medicine) and the culinary arts. The Geographic Information Systems and Manufacturing pathways, meanwhile, did not garner enough student interest to be viable this year. Thus, a goal of the Academies staff this year is to provide a more comprehensive introduction to pathways that students might initially know less about, and to dispel preconceived notions that could discourage them from exploring certain fields.

TABLE 1 ENROLLMENT STATUS OF RISING 10th-GRADERS ON MAY 29, 2018	
Academy and Pathway – Active Student Enrollments	**Total**
BHS - Academy of Law and Public Safety (ALPS)	124
Firefighter/Emergency Medical Technician (FEMT)	25
Law and Legal Services (LLS)	49
Law Enforcement (LE)	50
BHS - Academy of Media, Arts and Design (AMAD)	74
Digital Media (DM)	61
Journalism (JN)	13
BHS - Governor's Health Sciences Academy (GHSA)	184
Biotechnology Research and Development (BRD)	20
Diagnostic Services (DS)	50
Health Informatics and Support (HIS)	40
Therapeutic Services (TS)	74
BHS - Transportation, Analytics, Information and Logistics Academy (TRAIL)	55
Business Management (BM)	27
Networking (NT) - Year 1 combined with programming and software dev.	3
Programming and Software Development (PSD)	25
HHS - Academy of Health, Human and Financial Services (AHHFS)	75
Counseling, Nutrition and Wellness (CNW)	61
Financial Services (FS)	14
HHS - Academy of Technology and Engineering (ATE)	179
Audio Engineering (AE)	32
Construction Technology (CT)	18
Engineering Design and Development (EDD)	76

TABLE 1 ENROLLMENT STATUS OF RISING 10th-GRADERS ON MAY 29, 2018	
Academy and Pathway – Active Student Enrollments	**Total**
Information Technology (IT)	53
HHS - International Baccalaureate Program (IB)	80
International Baccalaureate (IB)	80
HHS - Maritime Academy (MA)	31
Ship Building and Repair (SBR)	21
Ship Design (SD)	10
KHS - Academy of Entrepreneurship and Information Design (AEID)	97
Entrepreneurship and Marketing (EM)	52
Information Design (ID)	23
World Banking and Finance (WBF)	22
KHS - Academy of Teaching, Education, and Learning (ATEL)	60
Child Development (CD)	60
KHS - Gifted Enrichment Seminar (GES)	32
Gifted Enrichment Seminar (GES)	32
KHS - Academy of Architecture, Environment and Engineering - Governor's STEM (AAEE)	118
Architectural Engineering (AE)	60
Construction Design (CD)	40
Environmental Studies (ES)	18
KHS - On Stage: Performing Arts Academy (PAA)	61
Theater Design and Technology (TDT)	20
Theater Performance (TP)	41
PHS - Academy of Advanced College Experience (ACE)	31
Advanced College Experience (ACE)	31

TABLE 1 ENROLLMENT STATUS OF RISING 10th-GRADERS ON MAY 29, 2018	
Academy and Pathway – Active Student Enrollments	**Total**
PHS - Academy of Cybersecurity, Engineering and Robotics (ACER)	87
Cybersecurity Software Operations (CSO)	13
Cybersecurity Systems Technology (CST)	18
Engineering and Robotics (ER)	56
PHS - Academy of Digital Video Production (ADVP)	50
Television and Media Production (TMP)	21
Video Media Production (VMP)	29
PHS - Academy of Hospitality and Tourism (AHT)	79
Culinary Arts (CA)	57
Travel and Tourism (TT)	22
Source: Academies of Hampton, Hampton City Schools, 2018	

Students in Hampton may attend any academy, although priority placement was given to those who wanted to remain within their current school attendance zone. Cynthia Cooper, Hampton City Schools' executive director of research, planning and evaluation, tells us that the majority of 10th-graders (77 percent) are attending an academy at their "home" high school – although every high school is sending at least a small group of students to each of the other three. Two different transportation options were offered to the 334 students who are now traveling to a new school – a Hampton City Schools shuttle service between students' zoned schools and academy schools (essentially, an additional school bus ride after their first school bus ride), or the use of public transportation (free to all high school students with an HRT Student Freedom Pass). The overwhelming majority (91 percent) opted to take the school shuttle, so these students always leave the last class of their day several minutes early in order to catch the shuttle that brings them to their usual school bus.

COMMUNITY PARTNERSHIPS WITH EMPLOYERS AND POSTSECONDARY INSTITUTIONS

A third important feature of career academies is community partnerships. Academies typically draw from the expertise of leaders in business and postsecondary education who can "give advice on curriculum, appear as guest speakers in classes, host field trips, supervise student internships, provide financial or in-kind support," and perhaps even serve as mentors for individual students.[11] Since the purpose of career academies is to equip students with the skills and experience that will allow them to thrive in the "real world," academies must communicate and interact closely with that world. The benefits are mutual, since employers are constantly seeking skilled, experienced workers, and career academies foster potential workers with in-demand qualifications and specialized training. In this vein, the Academies of Hampton hopes to facilitate a job-shadowing experience for all students in the summer between their 10th- and 11th- grade years.

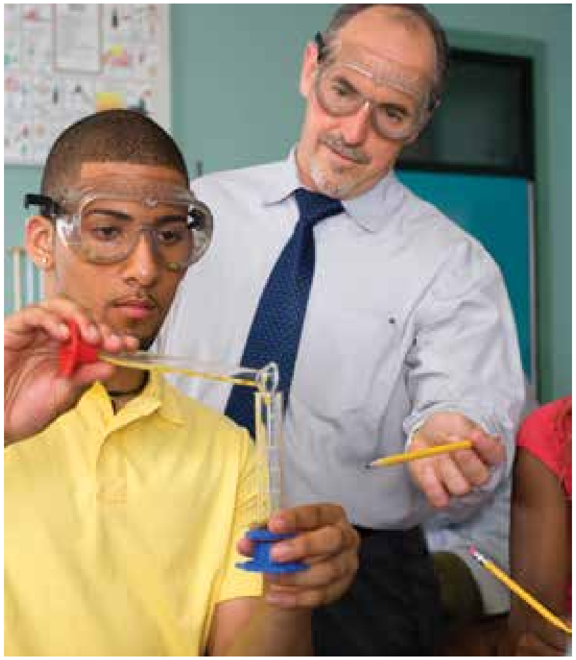
Community partnerships have been integral to the planning of the Academies of Hampton from the very beginning. In April 2015, Hampton City Schools hosted its first targeted sessions (facilitated by Ford NGL) with a wide variety of community stakeholders – including representatives from the city of Hampton, the Virginia Peninsula Chamber of Commerce and the Peninsula Council for Workforce Development, as well as other leaders in the education, business and philanthropic communities. A similar group came together the following year to develop the "Portrait of a Hampton Graduate" and to discuss the specific competencies that were deemed most essential for preparing students for high-skill, high-wage jobs in Hampton Roads.

The Academies of Hampton Steering Committee, composed of 13 leading members of the Hampton Roads business and higher education communities (including Old Dominion University Professor of Economics Robert McNab, lead author of the State of the Region report, and representatives from Hampton City Schools), was instrumental in formulating the final lineup of academies and pathways. Thus, the academies were explicitly designed to reflect needs and opportunities within the Hampton Roads job market. The Maritime Academy, with pathways in ship design and shipbuilding, is

11 David Stern, Charles Dayton and Marilyn Raby, *Career Academies*, 5.

a notable example. Feedback from the business community has allowed school administrators to identify some specialized needs within the Hampton Roads job market. Donna Woods, executive director of school leadership for Hampton City Schools, cites the high demand for emergency dispatchers, for example, as one factor that has shaped the programming of the Academy of Law and Public Safety.

Beyond merely responding to current market needs, the Academies of Hampton aspires to become a driver of economic development. Some aspects of the Academies' programming were designed less with the current job market in mind than what it might look like in five to 10 years. The Transportation, Analytics, Information and Logistics Academy and the Academy of Cybersecurity, Engineering and Robotics both seek to provide students with cutting-edge training in rapidly changing fields. Demand for workers in these fields is almost certain to grow. A regular pool of high school graduates with practical experience in cybersecurity and specialized information technologies might, for example, eventually help to attract new firms and startup companies to Hampton Roads.



The Academy Model: What Works And What Doesn't

Various studies, reports and anecdotal evidence point to the successes of career academies. Students enrolled in career academies often have lower dropout rates, better attendance and higher grades than their peers. They may be more likely to attend college, or to find meaningful employment after graduation.[12] And students themselves give the career academies high marks, often praising the "family-like" learning atmosphere or expressing appreciation for the opportunity to acquire and develop "real life" skills. The published performance indicators for the first cohort of students who graduated from one of Hampton's four "school-within-a-school" academies in 2016 are very impressive – including, most notably, a 100 percent Virginia On-Time Graduation Rate (as opposed to 89.8 percent for the division's non-academy students) (see Table 2).

With such glowing reviews, it's tempting to embrace career academies as a "miracle cure," but some words of caution are in order. As many observers have noted, some portion of the career academies' success is likely attributable to the particular cross-section of students they tend to attract (motivated, ambitious, possibly with a strong support network outside of school). These students might perform similarly well in other learning environments, but academies tend to group them together in one place. The 2016 Hampton academy graduates, for example, had a 29.4 percent eligibility rate for free and reduced-price meals, significantly lower than the 53.6 percent rate for non-academy graduates (see Table 2). Thus, the Hampton academy students came from households that were more financially secure than the student body as a whole – a disparity that may have played a role in their higher performance (see Table 3).

12 For a concise summary of these findings, see David Stern, Charles Dayton and Marilyn Raby, "Career Academies," 7-15.

TABLE 2 HAMPTON HIGH SCHOOLS' FIRST COHORT RESULTS BEFORE THE ACADEMIES OF HAMPTON "WALL-TO-WALL" TRANSITION, 2015-2016							
	Students	**Black**	**White**	**Other**	**Eligible for Free and Reduced-Price Meals**	**Virginia On-Time Graduation Rate**	**Dropout Rate**
Academy Students	**407**	**60%**	**27%**	**14%**	**29.4%**	**100%**	**0.0%**
Non-academy Students	**5,655**	**63%**	**25%**	**12%**	**53.6%**	**89.8%**	**2.8%**
Source: Academies of Hampton, Hampton City Schools, 2018							

TABLE 3 HAMPTON HIGH SCHOOLS BEFORE THE ACADEMIES OF HAMPTON "WALL-TO-WALL" TRANSITION, 2015-2016							
	Students	**Black**	**White**	**Other**	**Eligible for Free and Reduced-Price Meals**	**Virginia On-Time Graduation Rate**	**Dropout Rate**
Bethel High School	**1,750**	**68%**	**18%**	**14%**	**46.8%**	**90.4%**	**2.2%**
Hampton High School	**1,400**	**79%**	**9%**	**12%**	**62.0%**	**92.5%**	**2.9%**
Kecoughtan High School	**1,700**	**44%**	**41%**	**15%**	**41.0%**	**92.2%**	**2.5%**
Phoebus High School	**1,000**	**70%**	**19%**	**11%**	**52.1%**	**86.5%**	**3.8%**
Source: Academies of Hampton, Hampton City Schools, 2018							

The MDRC Career Academies Evaluation of 2008 was notable because – in the words of its author, James J. Kemple – "It is one of the few studies of a school reform initiative that uses the design of a randomized, controlled field trial." What this means is that Kemple did not just compare the performance of academy and non-academy students within the same high school. Instead, he formed a "control group" of students who had actively applied to the academies and were eligible to attend, but who were ultimately not selected in a random lottery for admission. (In each of the nine high schools chosen for the study, there were more applicants than space available in the academy programs.) Thus, Kemple found a useful work-around for the "comparing apples to oranges" problem that often bedevils these kinds of investigations.

The 15-year study followed the two sets of academy and non-academy students during their high school careers and for eight years post-graduation. The pool of more than 1,400 young people came from medium- and large-sized school divisions "with substantially higher percentages of African-American and Hispanic students than exist in school districts nationally, as well as higher dropout rates, higher unemployment rates, and higher percentages of low-income families."[13] In Hampton Roads, no school division precisely meets this profile, although Hampton, Newport News, Norfolk, Portsmouth and Suffolk each resemble it in certain respects.

The study's most showstopping finding was that the academies "produced positive and sustained impacts on average monthly earnings throughout the eight-year follow-up period." Academy graduates earned an additional $2,088 per year, or an additional $16,704 (in 2006 dollars) over eight years. The disparities were even more dramatic for young men in the academy programs, who earned $3,722 more each year, or nearly $30,000 more over the eight-year post-high school period.[14] In addition, academy graduates were more likely to live independently with children and a spouse or partner, and the male academy graduates, in particular, were much more likely to be married and a custodial parent. Unsurprisingly, these results caught the attention of urban school divisions all over the country, which have long struggled to place at-risk students, particularly young men, on a path to a success.

13 Kemple, "Career Academies," 3-4.
14 Kemple, "Career Academies," 12-17.

The study did not, however, find significant distinctions in academic performance between the two groups. High school completion rates were approximately the same (only the "high-risk" academy students saw a small improvement), as were rates of enrollment in postsecondary education. Over 80 percent of the academy and non-academy students alike earned a high school diploma, and around 50 percent earned a postsecondary credential. Thus, according to Kemple's findings, the primary benefits of career academies are improved labor market outcomes and "transitions to adulthood," rather than more conventional measures of educational attainment.

One of the most important questions left unanswered by Kemple's study is whether the benefits of the classic "school-within-a-school" career academy can carry over to entire high schools – or even entire divisions, like the Academies of Hampton – that adopt the same approach. Some experts, like David Stern, director of the College and Career Academy Support Network at UC Berkeley, have suggested that a key aspect of the model's success is its voluntary nature, for teachers and students alike. The mere fact that individuals choose to teach and learn in a career academy helps to create a sense of family, or team spirit, that has made small learning communities so meaningful. "There are districts trying to push the career and college pathway to 100 percent" of their students, Stern said in a 2014 interview. "Some are going for 80 to 50 percent in districts or schools. We'll learn from these experiences what a sensible target is. I'm sure it varies from place to place."[15]

Stern's reservations are primarily concerned with the learning experience itself – but it's also important to consider the array of logistical challenges involved in establishing wall-to-wall career academies and transforming an entire division all at once. These range from concerns about student transportation, to finding the right teachers who are qualified to teach highly specialized courses, to coordinating meaningful job-shadowing experiences for an entire student body. The Academies of Hampton's success will hinge on how well the division is able to grapple with these logistical challenges.

There are also financial costs associated with the introduction and operation of an ambitious new program. The school administrators with whom we spoke were reluctant to place a discrete "price tag" on the Academies

15 Laurie Stern, "Career Academies: A New Twist on Vocational Ed," American RadioWorks (Sept. 10, 2014), at: http://www.americanradioworks.org/segments/career-academies.

initiative, as so many aspects of the program are intertwined with other aspects of the division's operations. The Hampton city budget indicates that an extra $265,000 in one-time funding was allotted to support the Academies of Hampton in FY18, followed by another $350,000 in FY19. The superintendent's proposed FY19 budget for Hampton City Schools identifies $667,200 in new "expenditure pressures" associated with the Academies of Hampton. Even so, the total proposed FY19 operating budget of $201.6 million represents an approximately $2 million decrease over the previous year, which can be attributed in part to declining enrollment.[16] The division has also received more than $525,000 in grants (not just in FY19) from the Virginia Department of Education and other community sources to implement the new program. Thus, the broad picture indicates that the Academies transformation has not created an outsized financial burden for the city of Hampton and its schools.

Cheryl Carrier, executive director of Ford NGL, was upbeat about the prospects for the Academies of Hampton – and for the wall-to-wall career academy model, more broadly – when we spoke to her by telephone. She cited the successes of the Nashville and Pinellas County, Florida, schools in transforming their entire divisions, particularly in raising their graduation rates. She emphasized that a key advantage of "scaling up" career academies division-wide is that this necessarily entails engaging and involving the entire community. Conversely, she has found that sites where the division-wide model did *not* work as well as hoped generally had not achieved the desirable level of community involvement. She told us that a great deal depends on dedicated school administrators and staff who are not only fully committed to the career academy model, but who also are proactive and successful in building and nurturing relationships with a wide range of employers and other community leaders.

Final Thoughts

This year will be a "trial by fire" with a definitive learning curve for the Academies of Hampton. The division's relationship with Ford NGL is likely to be a helpful asset as it negotiates a challenging year of transition. Although the outcome of Hampton's extreme high school makeover is yet to be known, Hampton City Schools is to be commended for its bold vision, and for the active steps it has taken toward creating a more meaningful, career-oriented learning experience for its entire student body.

Other school districts in Hampton Roads and Virginia will be closely watching how the Academies of Hampton navigates the rollout to the entire school division. Success, while not guaranteed, is certainly not obtainable if one does not try. Fortune favors the bold and, in this respect, the Academies of Hampton is a bold effort to improve the outcomes for its students and for Hampton Roads.

16 FY19 Manager's Recommended Budget, Hampton City Schools, at https://hampton.gov/DocumentCenter/View/21472/16Schools; and Hampton City Schools Superintendent's Recommended Budget (March 14, 2018) at https://www.boarddocs.com/vsba/hampton/Board.nsf/files/AWUUND7CDA49/$file/Superintendent's%20Recommended%20Budget%20FY19%203-14-18.pdf.

Hampton Roads: In Search Of A Social Media Identity

HAMPTON ROADS: IN SEARCH OF A SOCIAL MEDIA IDENTITY

You are what you share.
– Charles Leadbeater, "We Think: The Power of Mass Creativity"

Time passes quickly and there is no place where it seems to pass faster than the internet. Many companies that are an integral part of our lives did not exist 25 years ago. Amazon is 24; eBay, 22; Netflix, 21; and Google, 20. Compared to many social media companies, these internet giants are mature adults. Facebook, the current dominant force in social media, is about 14 years old. Twitter is 12, Instagram is 8 and Snapchat is a mere 7 years old. Social media undoubtedly impacts our lives, sometimes for the better by creating connections and fostering a sense of place. On the other hand, social media has led to online bullying, trolling and other malicious forms of behavior. One might say that with the good, comes the bad.

The number of social media consumers is staggering: 2.2 billion, 336 million and 191 million; these are the numbers of people, respectively, who actively used Facebook, Twitter and Snapchat in the first quarter of 2018. Eight hundred million people actively used Instagram in late 2017 and the total number of pictures posted on the platform to 40 billion. While some may find humor in restaurant patrons' pictures of their food (pizza is the most Instagrammed food, by the way), these relatively new companies are serious business, with multibillion-dollar valuations, and often serve as the primary conduit for how we receive news and entertainment.

The Norfolk Police Department is an example of how to use social media to create a positive message. On June 18, 2018, the Norfolk Police released a lip-sync challenge video to the department's Facebook page featuring a performance by officers and staff to the song, "Uptown Funk." To date, it has been watched more than 75 million times and shared on Facebook more than 1.5 million times. Within two weeks, the viral video was highlighted in news coverage from "NBC Nightly News," CNN, The Washington Post, People magazine and many other outlets. Other local police and sheriff departments followed suit with similar social media videos, raising the profile of their localities.

Most households in Hampton Roads are connected to the internet, with a growing number consuming content from their mobile devices. According

to the U.S. Census 2016 American Community Survey (ACS), 92 percent of households in Hampton Roads had one or more types of computing devices and 85.9 percent had an internet subscription. Of the 639,903 households, 514,513 had a home computer (desktop or laptop) and a mobile device (smartphone or tablet), while 74,048 households had only a mobile device. Almost all the households with internet had a broadband connection (85.6 percent); 70.8 percent had a wired connection; 12.4 percent had only a mobile connection; and 4.6 percent had satellite broadband. Given that the Pew Research Center recently found that 68 percent of Americans use Facebook and younger Americans are even more likely to also use Instagram and Snapchat, most households in Hampton Roads (for better or worse) are consuming and producing content on social media.[1]

Just as the most popular content providers on these platforms strive to create and maintain an identity to attract followers, cities and regions also compete to attract businesses and visitors through social media. Is Hampton Roads ready for this challenge? **Over the past decade, Richmond purposefully developed an identity through three simple letters: R-V-A. Other cities, such as Austin, Texas ("The Live Music Capital of the World") and Portland, Oregon ("The City of Roses"), have developed unique, quirky and nationally recognizable identities on social media. Curiously, these cities have adopted the same slogan: "Keep Austin Weird" and "Keep Portland Weird," illustrating that uniqueness is not only a characteristic, but also a marketing tool.**

Tangible evidence of the value of social media to the regional economy comes in the form of trans-Atlantic cables being constructed in Virginia Beach. Microsoft and Facebook recently funded the laying of a new cable, known as Marea, which runs along the ocean floor from the resort city to Bilbao, Spain. It features transmissions "more than 16 million times faster than the average home internet connection, with the capability to stream 71 million high-definition videos simultaneously," according to Microsoft. Marea will soon be joined by two other trans-Atlantic cables, to South Africa and South America, which will bring a number of high-tech jobs to Virginia Beach and establish the region as the mid-Atlantic destination for fiber and data. **Social media is more than pictures of cats and babies; it is providing new jobs and opportunities for Hampton Roads.**

This chapter examines the promise of social media for Hampton Roads. Setting aside the discussion (for now) of whether we should call home Coastal Virginia, Hampton Roads, Tidewater or one of the many other names that have generated numerous pages of print, we ask to what degree our region has a social media identity. We explore whether the evolution of other regions' social identities were accidents or if a similar approach might be successful for Hampton Roads. Lastly, we discuss what can be done to elevate the social media game in Hampton Roads.

1 Pew Research Center (March 2018), "Social Media Use in 2018," http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/.

Facebook: The Current Dominant Player In Social Media

Mark Zuckerberg, Chris Hughes, Dustin Moskovitz and Eduardo Saverin launched "TheFacebook" in January 2004 at Harvard University to fill the need for a directory featuring student photographs and contact information. As registrations grew quickly, the site expanded its membership to Columbia, Stanford and Yale, and eventually to most universities in the United States and Canada. "TheFacebook" became "Facebook" in 2005 and by 2006, it had relaxed its registration restrictions so that anyone age 13 or older with a valid email address could become a member of the site.

Facebook's growth has been nothing short of phenomenal, increasing from around 100 million users in 2006 to more than 1.45 billion daily active users in the first quarter of 2018. Facebook's market capitalization was $570 billion in June 2018, up from $104 billion at the time of its initial public offering in May 2012. Facebook's meteoric user growth, however, is projected to slow in the coming years – not surprising, as its base currently exceeds 2 billion users. Nevertheless, the social media giant is quite adept at generating more revenue per user, with the consensus forecast being that earnings will grow at an average annual rate of 22 percent over the next five years.[2]

According to the Pew Research Center, 68 percent of the population (62 percent of men and 74 percent of women) in the U.S. say that they regularly use Facebook. While the perception in the popular media may be that young adults view Facebook as the social network for "old people,"[3] 81 percent of

2 Estimate current as of Aug. 28, 2018, https://www.nasdaq.com/symbol/fb/earnings-growth.
3 https://www.cnbc.com/2018/02/12/facebook-is-losing-younger-users-to-snapchat-according-to-a-study.html?__source=twitter%7Cmain and https://go.forrester.com/blogs/the-data-digest-among-youth-facebook-is-falling-behind.

adults ages 18-29 use Facebook, compared to 78 percent of adults ages 30-49, and 41 percent of adults 65 and older. Teenagers, however, appear to be migrating to other platforms, primarily Instagram (owned by Facebook) and Snapchat.

Twitter: 140 Characters In The Past, 280 Today

If Facebook is where one connects with friends and fellow classmates, Twitter is the social network that, by design, imposes character limits that focus the content of each post. Created in 2006 by Jack Dorsey, Biz Stone and Evan Williams, Twitter (whose initial project code name was "twttr") was created to replicate text messaging in a social space. Instead of texting a friend or select group of friends, the Twitter user can broadcast ("tweet") to an entire group of connected individuals ("followers"). Twitter initially limited posts to 140 characters, but recently expanded the limit to 280 characters.

Despite accusations that Facebook is becoming more like Twitter and vice versa, the two social networks are distinct. Twitter led the innovation of the hashtag, now an integral part of internet conversation, and the @ symbol for direct communication. While smaller than Facebook, Twitter has grown from 30 million active monthly users in the first quarter of 2010 to 336 million active users at the end of the first quarter of 2018. Activists and organizers have used Twitter to organize movements, sometimes to promote democracy (the "Arab Spring,"[4] protests in Iran[5]) and sometimes to promote more distasteful movements (the "Unite the Right" rally in Charlottesville, Virginia, in August 2017).

Twitter, like other social media platforms, hosts a mixture of the serious and irreverent. The most retweeted tweet as of June 2018 was "Help Me Please. A Man Needs His Nuggs."[6] Carter Wilkerson, a high school student, asked, "Yo @Wendy's, how many retweets for a year of free chicken nuggets?" To which Wendy's replied, "18 million." After 3.6 million retweets, Wendy's agreed to give Wilkerson a year's worth of free nuggets. On a more serious note, a tweet by former President Barack Obama in the aftermath of the Charlottesville neo-Nazi rally in August 2017 – where the former president tweeted the Nelson Mandela quote, "No one is born hating another person because of the color of his skin or his background or his religion," over a picture of Obama smiling at children looking out a window – has been "liked" 4.6 million times, making it the most-engaged tweet in Twitter history.

Twitter's usage is significantly lower than Facebook's, with only 24 percent of adults telling the Pew Research Center that they used Twitter as a social media platform. **Twitter usage tends to skew younger, with 40 percent of adults ages 18-29 using Twitter, compared to 8 percent of adults 65 and older.** Twitter usage also tends to spike during prominent events. This year's World Cup, for example, resulted in millions of tweets. Prominent Twitter users can use the platform in an attempt to sway the national conversation, as evidenced by the active and undoubtedly influential posts by the current president of the United States, Donald J. Trump.

Instagram: More Than Pictures Of Food

While Facebook and Twitter are based on the concept that written posts drive connections, Instagram is driven by the philosophy that visual information, specifically photographs and, over time, video, connects individuals. Founded by Kevin Systrom and Mike Krieger in 2010 and acquired by Facebook in 2012, Instagram has evolved beyond the original concept of posting static photographs. Users can now post video and create a carousel, or "story," that melds photographs and video. Posts can be geotagged, captioned and filtered to alter the appearance of the original content. The use of filters has led to the "no filter" movement on Instagram, where users post pictures without a filter (although strategic lighting and other techniques are used to enhance one's appearance).

4 http://www.journalism.org/2012/11/28/role-social-media-arab-uprisings.
5 https://www.bbc.com/news/world-middle-east-42566083
6 https://twitter.com/carterjwm/status/849813577770778624.

Instagram had 800 million active users monthly at the end of 2017 and some believe it will exceed 1 billion active users in 2018.[7] **When the Pew Research Center surveyed adults in early 2018, 35 percent responded that they used Instagram on a regular basis. Seventy-one percent of adults ages 18-24 use Instagram, followed by 54 percent of adults in the 25-29 age range.** Singer Selena Gomez had the most followers on Instagram in June 2018 (138 million), followed by professional soccer player Cristiano Ronaldo (129 million), singer Ariana Grande (122 million) and singer Beyoncé (116 million).

For those unfamiliar with Instagram and who may question the value of posting pictures online, it should be noted that Facebook was widely lauded for having purchased Instagram for only $1 billion. By 2014, Citigroup estimated that Instagram would be worth $35 billion if it was a stand-alone company.[8] By 2017, Eric Jackson, an opinion contributor for Forbes magazine, argued that Instagram would likely have a market capitalization north of $100 billion (if not $200 billion).

Why is that, you ask? Instagram skews younger, has sustained a remarkable growth rate and is the communication medium of choice for many celebrities and sports stars to connect with their fans. Instagram can also be used to build social identity for cities and regions. **The RVA hashtag (#RVA) had more than 3 million posts by the start of this summer, compared to about 385,000 for Hampton Roads. New York City (#newyork), as a matter of comparison, had over 67 million posts, so there is room for growth.**

Snapchat: It's Young, It's Hip, It's What?

The newest entrant into the social media space, Snapchat, takes a different approach to social media than Facebook, Twitter and Instagram. Founded in 2011 and relaunched in 2012, Snapchat has focused on being a conversational rather than transactional medium. Snaps (short texts and videos) are automatically deleted after viewing, while unviewed snaps are deleted after 30 days. In fact, according to Snapchat, "Delete is our default."[9] **This a conscious departure from other social media platforms, where users might find that past posts influence their current lives in unexpected ways.**

Snapchat's growth, however, mirrors that of the other social networks, expanding from 46 million daily active users in the first quarter of 2014 to 191 million daily users in the first quarter of 2018. Snapchat skews younger than the other networks, with 78 percent of adults in the 18-24 age category reporting that they used Snapchat. For teenagers, Snapchat is rated as their favorite app and typically viewed as the "most fun" to use. In September 2017, users spent an average of 34.5 minutes a day on Snapchat (2.5 minutes per day more than Instagram) and sent about 34 messages a day via the app.[10] One can also view activity through the "Snap Map," which provides a sample of snaps that are geolocated and heat mapped, so users can see the intensity of snaps at a given point in time (but be quick, since snaps disappear over time).

Given that Snapchat posts do vanish, one might surmise that the multimedia-messaging app is primarily used for private conversations – that is, posts and pictures that one likely would not want to become public. However, research suggests that the primary reason for using Snapchat is not privacy, but rather ease of use and entertainment value. A 2014 study of Snapchat users found that while 14.2 percent had sent sexually related content at some point in time, only 1.6 percent used Snapchat primarily for this reason. What was the main reason individuals gave for using Snapchat? "Funny content" was cited by almost 60 percent of respondents.[11]

While Snapchat and Instagram users skew younger than those on Facebook or Twitter, there appears to be substantial reciprocity across the platforms. As Table 1 shows, the 2018 Social Media Use Survey by the Pew Research Center found, for example, that 48 percent of Snapchat users also use Twitter, 77 percent also use Instagram and 89 percent also use Facebook. **If one**

7 http://mediakix.com/2017/11/instagrams-one-billion-users-milestone/#gs.cRsXhL0.
8 https://dealbook.nytimes.com/2014/12/19/citigroup-says-instagram-is-worth-35-billion
9 https://support.snapchat.com/en-US/a/when-are-snaps-chats-deleted.
10 https://www.cnbc.com/2018/01/09/daily-beast-snap-users-spend-more-time-on-app-than-instagram.html
11 https://homes.cs.washington.edu/~yoshi/papers/snapchat-FC2014.pdf.

desires to market a city or region, then social media needs to be part of the strategy; however, there is not one platform to rule them all.

TABLE 1

RECIPROCITY ACROSS SOCIAL MEDIA PLATFORMS, 2018

	Use Twitter	Use Snapchat	Use Instagram	Use Facebook
Twitter	--	54%	73%	90%
Snapchat	48%	--	77%	89%
Instagram	50%	60%	--	91%
Facebook	32%	35%	47%	--

Source: Pew Research Center, "Social Media Use in 2018"

Hampton Roads: One Virtual Region?

When Jared Beasley moved 10 years ago from Kansas City, Missouri, to southeastern Virginia for graduate school, he was immediately taken with the area, particularly when he viewed it through his camera lens. As the owner of Istoria, a digital marketing firm in Norfolk, Beasley sought ways to promote his nascent photography and digital design business. "I had gotten on Instagram and hated it," Beasley said. "It was just my friends posting pictures of their feet, or their food, or putting a crappy filter on a sunset. But then I started making friends who are photographers and they were like, 'You've got to get on here, there's some real quality content, and a cool community.'"

Beasley soon noticed an opening for an Instagram "hub" – a community of common interest. **He reached out to local photographers on Instagram and asked them to share their best pictures of the region through the hashtag #757collective. The initiative has blossomed, with numerous contributors sharing their best photos. In June 2018, there were more than 144,000 posts using the #757collective hashtag and more than 30,000 followers of the 757collective Instagram account.** "This area has so many unique spaces, but also the history, and all of the coastal areas," Beasley said. "I thought (#757collective) was just a way to compile it in one place."

The technological function of hashtags – which started on the social media site Twitter but have spread to every social platform – allows for the creation of an instant community, unified by a common phrase. Placing a pound sign in front of a word or phrase turns it into a clickable link, which can take users to other accounts posting content with a similar theme. Photographers wanting to feature their work through #757collective can simply tag their photos on Instagram with the hashtag. That allows Beasley to view an array of images spotlighting the region, and to select the best for the #757collective Instagram account.

#757collective grew rapidly in its first year, but growth has plateaued, as "organic" producers of Instagram content (i.e., those who do not pay the social media company money) are finding their posts featured less often in users' timelines – the rolling list of posts that users see when they log into Instagram. "I think one of the difficulties is that these are platforms that we don't own, and why should we give free exposure to people because they like my page. I'm afraid that's where Instagram is going to go," Beasley said. Beyond the evolving architecture of the sites – which has been raising the ire of social media users for several years – Beasley noticed something else when he surveyed the local social media landscape. "There don't seem to be many, if any, sites like #757collective, which reflect the region as a whole. I think it's super-problematic. It speaks to how our cities run."

It might be the lack of a unified name. In his first "State of the Start-up" presentation in 2015, Zack Miller began with an anecdote about this region's challenge in finding a collective identity. The founder of local business accelerator Hatch and author of the forthcoming book "Anomaly," Miller showed his audience which terms were being typed most often into the Google search engine. The terms "Norfolk" and "Virginia Beach" dwarfed every other locally sited search, including the regional names Hampton Roads, Coastal Virginia and Tidewater. "The event wasn't about the naming stuff, but afterwards that's all people talked about," Miller said.

Graph 1 presents weekly Google trends data for the last five years. We compared searches for Norfolk, Virginia Beach and Williamsburg with searches for Hampton Roads. A value of 100 represents the peak popularity of the term. **It should be no surprise that Virginia Beach's search popularity climbs in the spring, peaks mid-summer, declines in the fall and troughs in the winter. Norfolk's popularity appears to be more consistent over time, though less than for Virginia Beach during the summer. Williamsburg is less popular than Virginia Beach or Norfolk, and the term Hampton Roads is searched-for the least among the group.**

Jerry Davis has been working in advertising and branding for nearly 50 years, founding Davis Ad Agency in 1976. His former firm used to represent a professional hockey team based in Norfolk. At that time, the region was known as Tidewater. "Their wives couldn't even find Tidewater on a map," he said. That identity problem persisted with the rollout of the Hampton Roads moniker in the 1980s. "When I travel, and people ask where I'm from, I never say Hampton Roads. Never," he said.

Why does a name matter in the social media world? The algorithms used by the sites, and the grouping functions such as hashtags, rely on a unified nomenclature. A family doing online research for a beach vacation will likely search using Virginia Beach and may miss attractions situated in other Hampton Roads cities. The net result is that each city in the region tells dozens of stories largely connected to other communities in Hampton Roads. The city names have far more recognition outside the region, but using them instead of a regional moniker robs the region of opportunity to present a unified social media identity.

To illustrate this point, we examined tweets from June 17 to June 24, 2018, to answer two questions: (1) how often did any of the Hampton Roads hashtags (#HRVA, #HamptonRoads, #COVA) appear relative to the Richmond (#RVA) hashtag and (2) what was the sentiment underlying the tweets about Hampton Roads and Richmond. Sentiment is a measure of the positivity or negativity of a piece of text. Messages with positive sentiment have scores closer to 10 and measures with negative sentiment have scores closer to 1.[12] "Rainbow," for example, is classified as one of the happiest words in sentiment analysis, while "earthquake" is noted as one of the saddest words. **Tweets using the Richmond hashtag #RVA appear almost seven times more frequently on Twitter than tweets using any of the three Hampton Roads hashtags. However, the mean and median sentiment of tweets using the Hampton Roads hashtags is slightly higher (mean - 5.99 ; median - 5.94) than the mean and median sentiment of tweets using the Richmond hashtag (mean - 5.92; median - 5.88). In other words, posts about Hampton Roads are slightly more positive than those about Richmond; however, there are many more posts about Richmond than Hampton Roads.**

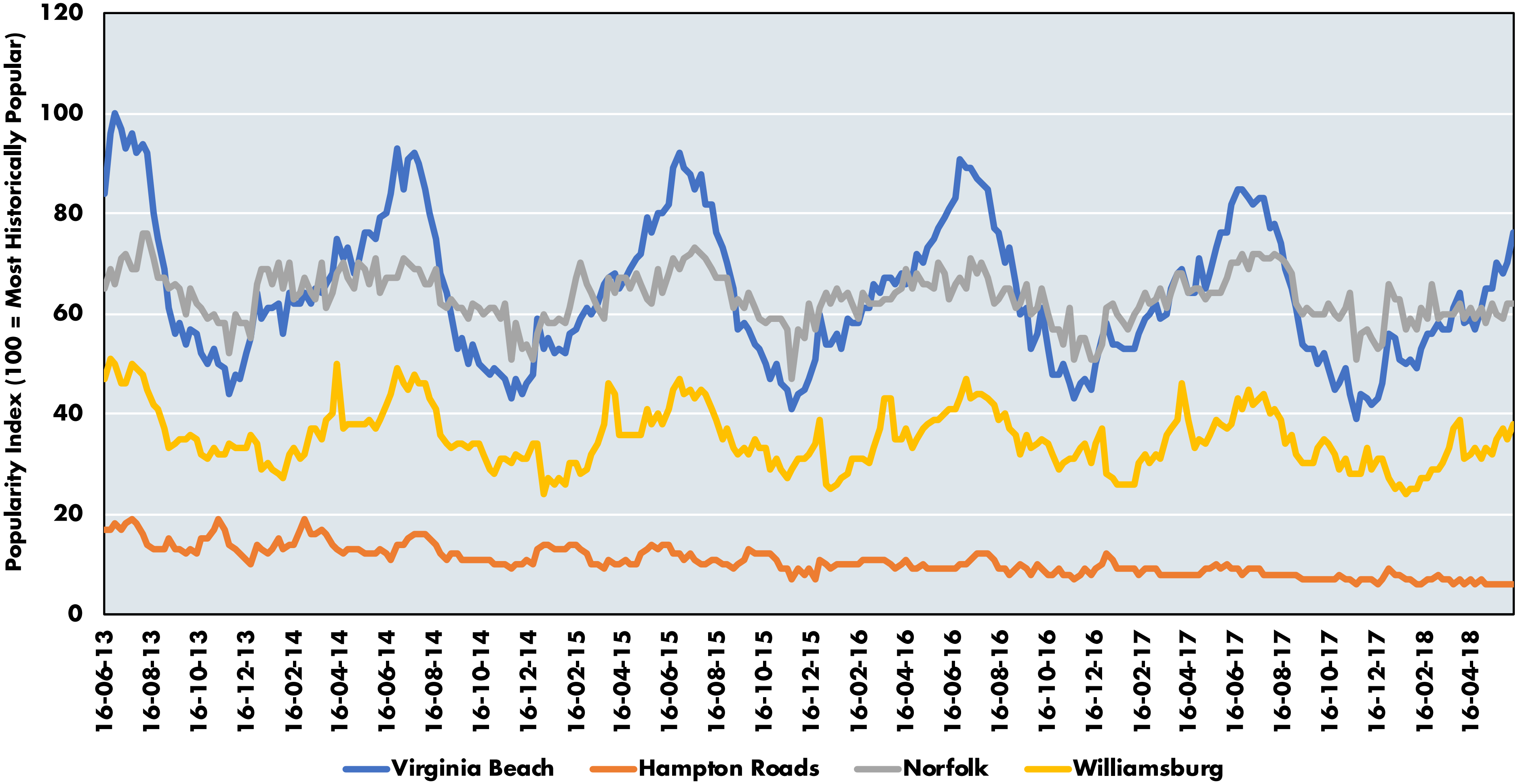
When Beasley started #757collective, none of the amalgam of names created for this area appealed to him, leading to his decision to use the region's telephone area code as an identifier. He finds it frustrating that there is no consistent voice in social media for southeastern Virginia. "I think it's super problematic," he said. "If you were an alien and you came to this region and compared it to other regions, you'd be kind of blown away about how the cities don't work together." Hatch's Miller said the habit of changing names to represent the region makes it even worse. "We constantly throw a new bowl of spaghetti against the wall. We're two or three years into COVA (Coastal Virginia), and people are already, 'Oh, we're done with this.'"

For the Hampton Roads Economic Development Alliance (HREDA), effective social media use helps sell businesses outside the region on the value proposition of relocation to Hampton Roads and local businesses on the value of expansion in the region. Chad Matheson, HREDA's director of business intelligence, says a lively social media presence could aid greatly with the brand sentiment of the region. "I think one of the strengths of social media is that it's agile and flexible. You can have micro-strategies around geographic elements of the community. I think that's a great benefit of the way social media can brand the region as a whole," Matheson said.

12 An increasing number of high-stakes decisions are now made based upon predictive models of publicly available sentiment data. The most common source for such predictions is currently Twitter, due to its public nature, large user base and high accessibility by both academic and industry researchers. For more information see: Gore, Ross Joseph, Diallo, Saikou and Padilla, Jose, "You are what you tweet: Connecting the geographic variation in America's obesity rate to Twitter content," *PloS one* 10.9 (2015): e0133505.

GRAPH 1

GOOGLE TRENDS POPULARITY, JUNE 2013 – JUNE 2018



Source: Google, June 2018

However, branding an entire region with a universal name that is recognized and resonates nationwide requires consensus. Jillian Goodwin, HREDA's director of marketing and communications, noted, "What we've discussed is, it's about brand. **In order to sell something, people have to know what you're selling. … Social media, that's going to be one of the first things that they see, the digital presence.** Having a cohesive, clear and strategic plan on how we are presenting ourselves that way, it's like baiting the hook. Get them interested, get them at least starting a conversation."

Building A Regional Identity From The Ground Up

There are efforts to speak with one voice for the region, organized by active social media participants in the community. The Hampton Roads Social Media Collective is a group of residents who work in or are active consumers of social media. Co-founder Sarah Hill said the group seeks to be of service to the region, businesses and its members. "The ultimate goal is to unite Hampton Roads residents working in the social media space, whether they're running an account for their neighborhood book club or heading up a marketing effort reaching hundreds of thousands of people," Hill said. "The collective is also designed to complement the businesses and professional organizations in the area to demonstrate adoption of new technology, job opportunities and growth, and provide support for an emerging professional workforce." The group has about 200 members, but its founders are hoping it replicates their experiences with social media coalitions in other regions – where online connection leads to in-person gatherings.

For local companies like digital ad agency Grow, social media is a conduit to the world. "We would not exist without connective technologies like social media," founder and CEO Drew Ungvarsky said. "What we need is clients to want to work with us, and we need the world's best talent, especially, to be aware of us and to want to work with us. And even move from the far reaches of the planet to Norfolk, Virginia." Ungvarsky is eager for other companies to discover that downtown Norfolk, where Grow is located, and other communities within the region are ready to shine. "This is a market of 1.7 million people. I hope the secret gets out to the Googles and the Microsofts of the world that this amazing talent base is here."

Part of the challenge is that social media is a fragmented space. "The reality is that most of the rest of the world knows Virginia Beach. A few less of them know Norfolk, and then it's a massive drop-off beyond that," Ungvarsky said. "We have to lean into our strengths, and we're talking about creating a national and international brand, and that's Virginia Beach and Norfolk." Jerry Davis of Davis Ad Agency put it more succinctly. "If I were king, I would dump the Hampton Roads name tomorrow, and I would find something that was more descriptive of this region, and I would promote the hell out of it. Social media could be invaluable for that."

Can We Learn From Others?

Skeptics about the idea of regionalism in Hampton Roads suggest coming together under a social media common moniker that everyone uses and recognizes is impossible. However, across the country, abundant evidence exists to contradict that claim. Diverse communities have formed a collective online identity that pierces through the clutter – using single terms like #Vegas, #ATX (for Austin, Texas) and #Portland.

Fewer than 100 miles away, residents of Virginia's capital have long informally referred to Richmond and its surrounding communities as RVA (an abbreviation for Richmond, Virginia). Lucy Meade, director of marketing and development with Venture Richmond (a nonprofit that links businesses and community leaders with the city of Richmond), enlisted the Brandcenter at Virginia Commonwealth University in 2010 to develop a universal brand utilizing those three letters.

At the time the brand platform was rolled out in 2011, only 19 business names started with the letters RVA, according to Virginia's State Corporation Commission statistics. Now

the prefix is used for hundreds of companies, nonprofits and public-sector organizations. RVA bumper stickers adorn cars and office doors wherever Richmond natives end up. Contributing to the success of the brand was the fact that when it was created, it was accompanied by a license for that logo to be used for personal, organizational and commercial use.

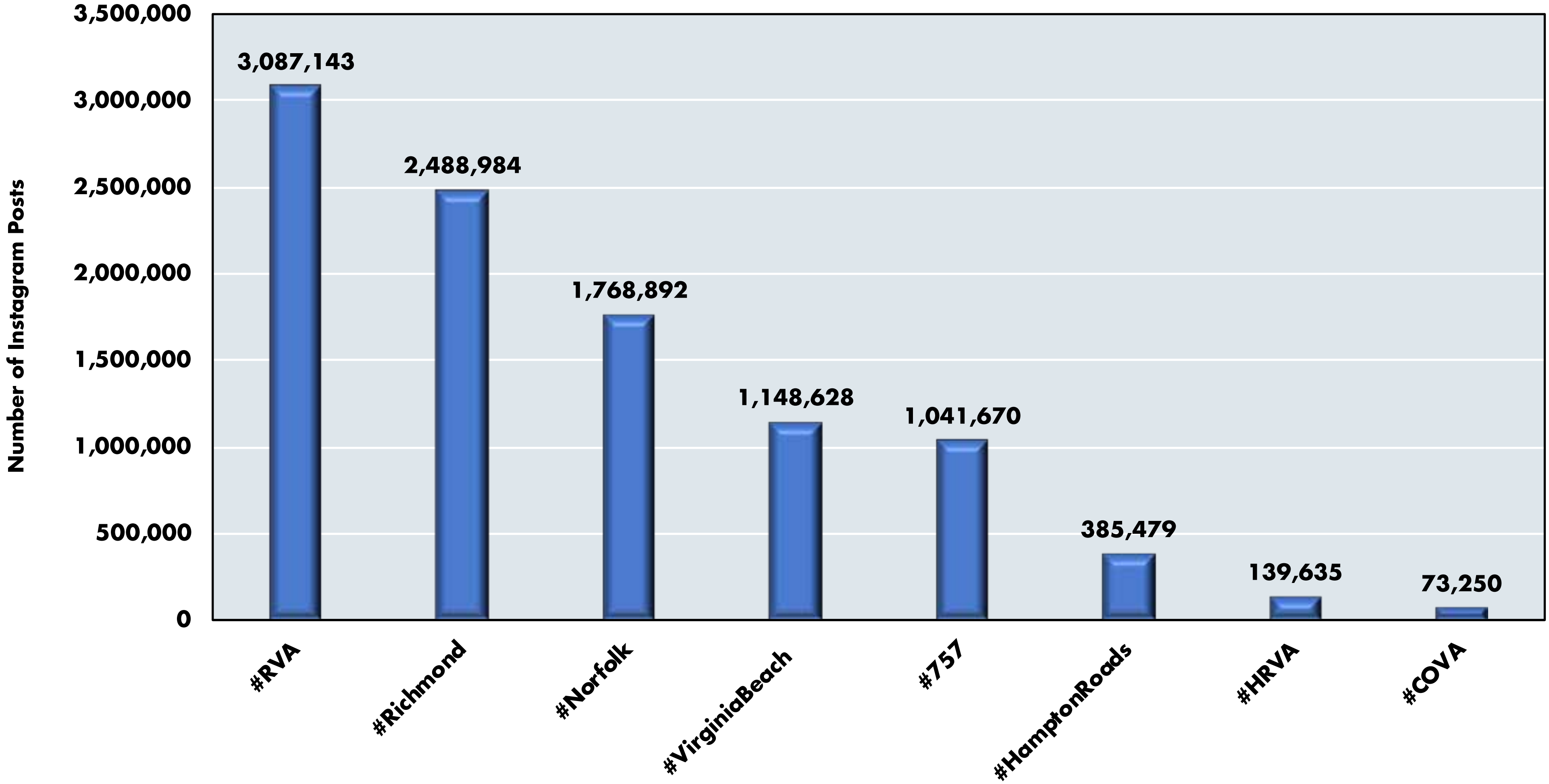
On social media, the hashtag #RVA is used across social media platforms. Since it contains only three letters, #RVA can easily be broken into subcommunities by simply tacking a phrase onto the hashtag – like #RVATraffic or #RVASchools. "I think the reason RVA works is it is just an abbreviated version of Richmond, Virginia. It's not really a moniker. It's just a couple of letters," said Zack Miller of Hatch.

The proof is in the data of just how powerful the brand has become. On Instagram, a running tally of the number of times a hashtag has been used is available publicly at a single click. In Graph 2, we illustrate the number of posts with specific hashtags on Instagram. Since hashtags began to be used on Instagram in 2011, #RVA has passed 3 million uses in public posts, nearly double the amount of times the hashtags #HamptonRoads, #HRVA, #NFK and #757 have been used combined. Usage of the hashtags #Norfolk and #VirginiaBeach nearly equals that of #RVA. In a demonstration of the appeal of the state capital brand, #RVA has also been used more than #Richmond as a hashtag. Also, it must be noted that Norfolk and Richmond are city names that exist in other geographic locales, which would increase the number of hashtag mentions, and 757 can also be used as a hashtag for an airplane.

Grow's Ungvarsky yearns for Hampton Roads to come up with its own version of #RVA. "It would really help if we could come up with a better way to describe this place. Richmond and the RVA movement synthesized both the great change that's happening in that city and gave people a way to talk about it. We've got a lot of great change happening here in this city, and the others in the region, and we don't have a great way to talk about it yet."

GRAPH 2

TOTAL POSTS ON INSTAGRAM WITH AT LEAST ONE HASHTAG (#), AS OF JUNE 14, 2018



Source: Instagram, 2018

Leading By Example: How Organizations In Hampton Roads "Win" On Social Media

Despite not having the synergy that exists with a unified brand across social media platforms, there are many examples of local companies and organizations that are increasing in exposure, profile and business on social media. Here are four examples of local entities that are "killing the game" on social media. (There are dozens of other Hampton Roads social media stars that could easily be featured in this space.)

VIRGINIA AQUARIUM & MARINE SCIENCE CENTER (MORE THAN 117,000 FACEBOOK FOLLOWERS)

Whether it's video of an octopus exhibit yet to be opened, or a nest of sea turtles hatching near the Virginia Beach facility and struggling to reach the sea, the interactive video programming produced by the aquarium has attracted a worldwide following. Public relations manager Matt Klepeisz said they receive check-ins from around the world for their virtual exhibits. "Social media is absolutely integral to the planning and execution of our public relations and marketing efforts," he said. Klepeisz added that the aquarium can track the success of its social media promotions directly via click-throughs on social media advertisements. But indirectly, the benefits of social media outreach have been realized as well. "We had hundreds of visitors inquiring about our octopus exhibit after we posted a video on our Facebook page. That exhibit hadn't even opened yet," he said.

WILDERNESS CULTURE (MORE THAN 2 MILLION FOLLOWERS ON INSTAGRAM)

Alex Martin founded Wilderness Culture after relocating to his Virginia Beach hometown from New York City, where he had opened an advertising business.

A community of outdoor enthusiasts committed to exploring, sharing and preserving wilderness, Wilderness Culture attracts supporters who provide striking photographs from scenic hot spots around the world. It has an avid following on Instagram, and has branched into branded merchandise, outdoor equipment and expeditions.

NORTH END BAG CO. (INSTAGRAM-BASED BUSINESS)

The hotly competitive fashion industry is difficult to break into for a small, family-run business. However, the North End Bag Co., which has a small store at the north end of the Virginia Beach oceanfront, has built a loyal following and a customer base that reaches across the United States by marketing its canvas and leather beach bags on Instagram. Selling craftsmanship, sustainability, fashion and a beach lifestyle, the company has utilized Instagram to identify and cultivate a market since opening in 2012.

SALVATION ARMY HAMPTON ROADS AREA COMMAND (FACEBOOK CAMPAIGN)

The Salvation Army Hampton Roads Area Command developed a program in 2016 using social media to raise awareness of its red kettles among millennials. The marketing department, overseen by Jamila Walker, created

#RedKettleReason757. When area residents would come across a red kettle and make a donation, they were encouraged to take a selfie next to the kettle (or a bell ringer) and post it on social media using #RedKettleReason757. The social media campaign garnered attention in the local media and has continued since its inception. **Not only does the hashtag promote awareness of the Salvation Army's red kettles, it also localizes the social media campaign with the "757" area code, and engages participants by encouraging them to actively post a campaign to their network.**

Where Do We Go From Here?

Social media is not going away, even if some platforms may fall out of favor (Myspace, anyone?). Global social media revenue for 2016 was $26.9 billion, a figure poised to rise to $39 billion by 2019. The economic social media spinoffs are exponentially larger. A forthcoming study in the Journal of Intercollegiate Sport surveyed football fans in the Southeastern Conference who posted tailgate food pictures on their Instagram pages. The researchers uncovered a tremendous vein of nostalgia that ran through these social media users – one that football programs can mine to increase engagement and fan spending. **Hampton Roads high schools, colleges and universities offer local examples of how institutions successfully engage with alumni and fans on social media. Leveraging this experience to engage and attract visitors to our region will be an important part of a future campaign to promote regional identity.**

Clearly, there are many success stories in the social media world from which we, as a region, can benefit. What, then, should we do?

- **Come up with an identity and stick with it** – Social media is a platform for storytellers, and this region has a vibrant story. Many local entities are creating rich, impactful social media content, but it is less likely to show up on the radar of an outsider unfamiliar with the names used to identify the region. We would be well served to find our own unified content aggregator. **If something does not work, discard it and try again.**

- **Optimize the platforms** – There are best-case examples in every sector of individuals and organizations using social media to its full extent. Social media should be dynamic and represent the contributions of the residents, businesses and governments of Hampton Roads. **Instead of spending years to develop the "right" strategy, start now and course correct over time.**

- **Put someone in charge** – If volunteer organizations like #757collective and the Hampton Roads Social Media Collective don't have the reach or clout required to create a cohesive local social media voice, task an organization with community-wide reach to lead the initiative. "You have to have somebody assigned the duty of doing that," said Davis Ad Agency's Jerry Davis. "It's just hard for any individual company or organization to assign responsibility and invest the money in the effort when you have your own personal self-interest to take care of." If everyone is responsible, no one is responsible.

- **When we agree on a strategy, get the community on board** – Sites like Facebook and Instagram allow for themed filters to advocate causes such as autism awareness or cancer care. Local organizations and companies can use their own network of friends and followers to organically create a local social media community, using the tools that the platforms currently possess. Matt Klepeisz of the Virginia Aquarium & Marine Science Center said his organization would love to partner with a "social local" initiative. "If someone is coming here to go to the beach, or Colonial Williamsburg, we all stand to benefit." **Collaboration unifies the message and allows each community to remain unique within Hampton Roads.**

The opportunity is there; now it's time to get social. We have a story to tell.

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Page 1: Steve Daniel

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Page 51: Shara Weber

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Page 101: https://commons.wikimedia.org/wiki/File:JiminyPicketVinylFence.jpg

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