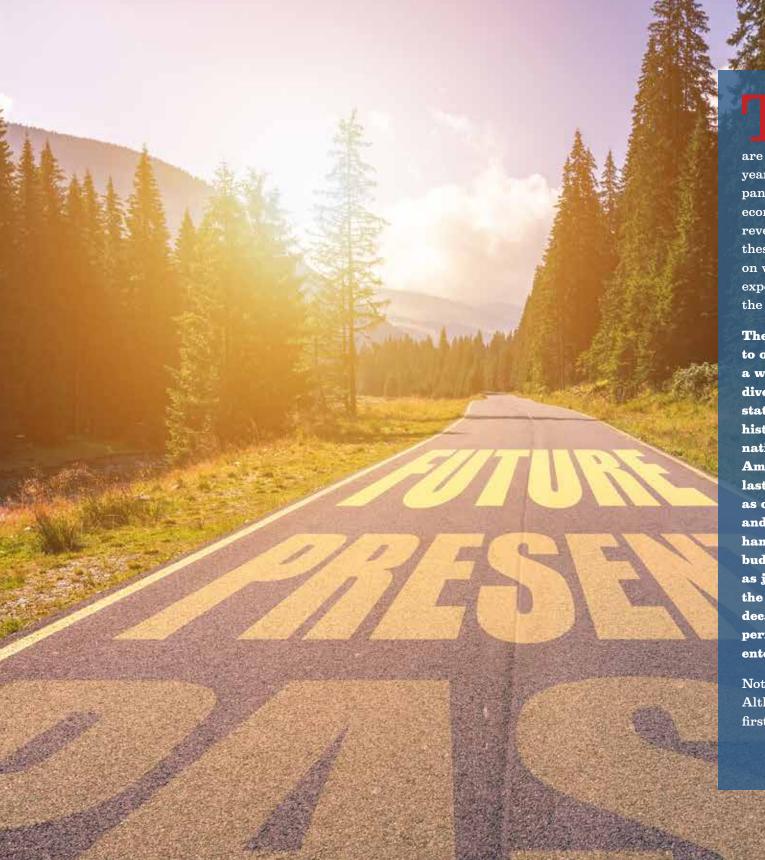
# THE WAY WE WERE: 2010-2019

If you do not change direction, you may end up where you are heading.

- Laozi, fifth-century B.C. Chinese philosopher



he immediacy of the "now" often triumphs over our ability to reflect on the past. In a 24-hour news cycle, there are constant demands on our attention. This year has been no exception. The COVID-19 pandemic has challenged us socially and economically and its impacts are likely to reverberate over the coming decade. Even amid these turbulent times, it is important to reflect on what went right, what did not turn out as expected and what lessons were learned over the previous decade.

The Commonwealth of Virginia has much to offer, including magnificent landscapes, a well-educated workforce and a culturally diverse population. The 12th-most populous state in the nation, Virginia has a rich history, plays an important role in the nation's national security and was ranked as America's top state for business in 2019. The last decade, however, might be characterized as one where the Commonwealth faltered and then picked up the pace. The twin hammers of the Great Recession and federal budget sequestration fell heavily on the state as job creation and economic growth lagged the U.S. and some neighboring states. As the decade ended, however, Virginia's economic performance improved and its prospects for entering the new decade appeared bright.

Not all who wander are lost, as the saying goes. Although Virginia may have struggled in the first half of the decade, it found its proverbial

economic footing near the end. Last year marked the state's fifth consecutive year of real economic growth. While the COVID-19 pandemic will likely lead to an economic contraction at the close of 2020, Virginia's measured and science-based approach to deal with it has resulted in lower coronavirus infections and deaths per capita than many other states. The question is now whether Virginia can continue to recover economically, building upon the experience of the previous decade.

The purpose of this chapter is simple: to reflect on the previous decade and consider what steps we can take to foster growth in the coming decade. We strive to answer two important questions: Where did Virginia fall short and what went right for the Commonwealth? While this chapter is by no means exhaustive, we do offer critical insight on how to promote growth without sacrificing the characteristics that make Virginia distinctive.

## A Slow Start, A Faster Finish

By looking back, we can assess what went right and wrong, and what defied our expectations. Our inaugural State of the Commonwealth Report in 2015 reflected on Virginia's relatively poor performance in the first half of the last decade and concluded that the Commonwealth's longterm growth prospects were imperiled by a reliance on defense spending, a lack of private-sector job creation and uneven economic growth across its metropolitan areas. These observations are as applicable today as they were then.

Virginia's entrance into the previous decade was hardly auspicious. During the Great Recession of 2008-2009, our growth in real (inflation-adjusted) gross domestic product (GDP) was -0.3% in 2008 and -0.1% in 2009. Yet, real GDP growth for the Commonwealth increased to 2.7% in 2010, signaling to some that the worst of the recession was in the rearview mirror. Reality, however, has a way of dashing wishful expectations.

As illustrated in Table 1, real GDP growth slowed in Virginia from 2011 to 2013 and the economy contracted slightly in 2014, owing to the lingering effects of the Great Recession and budget sequestration. While growth resumed in 2015, it was relatively weak when compared to previous periods of economic expansion. As discretionary federal spending, especially that by the Department of Defense (DOD), increased in the latter half of the decade, Virginia's economy began to pick up the pace.

NOMINAL AND	REAL (INFLATIO	N-ADJUSTED) GR	OSS E	OMES	STIC
	PRODUCT: VIRG	INIA, 2010-2019			
	(IN MILLIONS	OF DOLLARS)			

TABLE 1

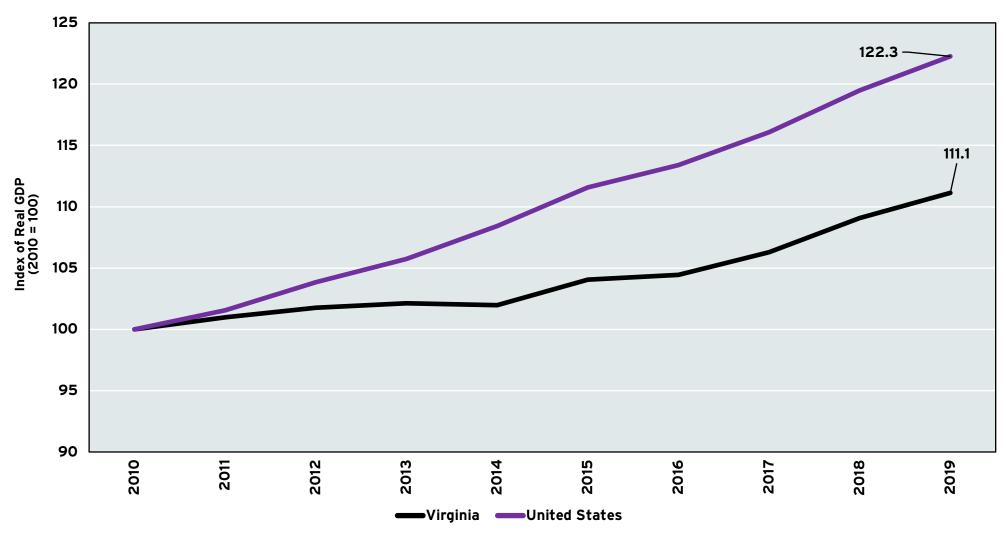
Nominal GDP	Real GDP (Base Year - 2012)	Year-Over-Year Change in Real GDP
\$422,902	\$437,268	2.7%
\$432,393	\$441,609	1.0%
\$444,950	\$444,950	0.8%
\$455,070	\$446,560	0.4%
\$463,478	\$445,869	-0.2%
\$484,217	\$454,953	2.0%
\$493,878	\$456,676	0.4%
\$509,373	\$464,793	1.8%
\$532,893	\$477,006	2.6%
\$554,211	\$485,998	1.9%
	\$422,902 \$432,393 \$444,950 \$455,070 \$463,478 \$484,217 \$493,878 \$509,373 \$532,893	Nominal GDP

Sources: Bureau of Economic Analysis and the Dragas Center for Economic Analysis and Policy, Old **Dominion University** 

Compared to the United States, however, Virginia's economic performance over the decade could only be charitably characterized as lackluster. From 2010 to 2019, the U.S. economy grew by approximately 22.3%, double that of the Commonwealth (Graph 1). For every dollar of additional output created in Virginia, the national economy added about two dollars on average. How did this happen?

GRAPH 1

INDEX OF REAL GROSS DOMESTIC PRODUCT:
UNITED STATES AND VIRGINIA, 2010-2019



Sources: Bureau of Economic Analysis and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Data on GDP incorporate the latest BEA revisions in December 2019. Index is equal to 100 in 2010.

## Uneven Performance At The Metro Level

Virginia's economic malaise during the first half of the previous decade can be seen in the data on economic growth at the metropolitan statistical area (MSA) level (Table 2). With the exception of the Blacksburg-Christiansburg and Richmond metro areas, real GDP growth slowed across Virginia's MSAs. From 2001 to 2009, 7 out of the 10 Virginia metro areas grew faster on average than the nation. From 2010 to 2019, none of Virginia's metros grew faster than the United States.

Given that three metropolitan areas (Hampton Roads, Northern Virginia and Richmond) account for about 75% of Virginia's economic activity in a given year, the relatively slow growth rate in these metros acted as a drag on the state's economy. Other metros did not fare well either. Three metro areas (Harrisonburg, Lynchburg and Staunton) contracted slightly over the decade. Growth in the Hampton Roads and Roanoke economies could only be characterized as anemic. Only the Richmond metro area grew faster than 2% over the decade, highlighting the relatively poor performance of Virginia's metro areas over the recent decade. If there was any good news, it was that growth picked up near the end of the decade, although these gains were likely wiped out by the COVID-19 pandemic.

#### TABLE 2

#### AVERAGE ANNUAL GROWTH IN REAL GROSS DOMESTIC PRODUCT: UNITED STATES, VIRGINIA AND VIRGINIA METROPOLITAN STATISTICAL AREAS, 2001-2019

Metropolitan Statistical Area	Average Growth 2001-2009	Average Growth 2010-2019
United States	1.6%	2.3%
Virginia	2.3%	1.2%
Blacksburg- Christiansburg	1.3%	1.3%
Charlottesville	3.4%	1.5%
Harrisonburg	-0.1%	-0.4%
Lynchburg	1.9%	-0.2%
Richmond	0.5%	2.1%
Roanoke	1.1%	0.6%
Staunton-Waynesboro	1.2%	-0.4%
Virginia Beach-Norfolk- Newport News	1.9%	0.6%
Washington-Arlington- Alexandria	2.8%	1.4%
Winchester	1.9%	1.2%

Sources: Bureau of Economic Analysis and the Dragas Center for Economic Analysis and Policy, Old Dominion University, Real GDP is in 2012 chained dollars. Annual growth rate is the compound annual growth rate (CAGR).

## Per Capita Personal Income

Personal income captures individuals' earnings from wages, their own businesses, dividends, interest, rents and government benefits. Real personal income per capita provides a measure of the average, inflation-adjusted income for residents in a region. Typically, rising real income per capita is a signal of a thriving economy, where incomes are rising faster than increases in the population and inflation. On the other hand, stagnant or declining real income per capita is a sign that a region's economy is not growing fast enough. The challenge for a region is to foster economic conditions that attract new residents and businesses, spurring economic activity and increasing real income over time.

As illustrated in Graph 2, real personal income per capita in Virginia grew over the last decade, but not without some bumps along the road. Real income declined on a per capita basis from 2012 to 2013, in all likelihood due to federal budget sequestration. After this shock, real income had recovered by 2015, and ended the decade 12.7% higher than the beginning. Real personal income per capita in the Commonwealth remained higher than that of the nation, \$53,987 compared to \$44,689 in 2019. However, real income per capita rose faster in the nation (16.2%) than Virginia over the decade, illustrating how the higher rates of national growth translated into gains in personal income.

Table 3 presents real personal income per capita for Virginia's metropolitan areas. From 2010 to 2018, real personal income in the United States increased at an average annual rate of 1.7% compared to 1.3% for the Commonwealth. One metro area (Charlottesville) saw real personal income grow faster than the nation and two (Blacksburg-Christiansburg and Richmond) grew at the same rate as the nation. However, except for Richmond, these metro areas comprised a relatively small proportion of the Virginia economy when compared to Northern Virginia and Hampton Roads. The slower growth in the larger metros of Hampton Roads and Washington, D.C., acted as a brake on real income growth in Virginia.

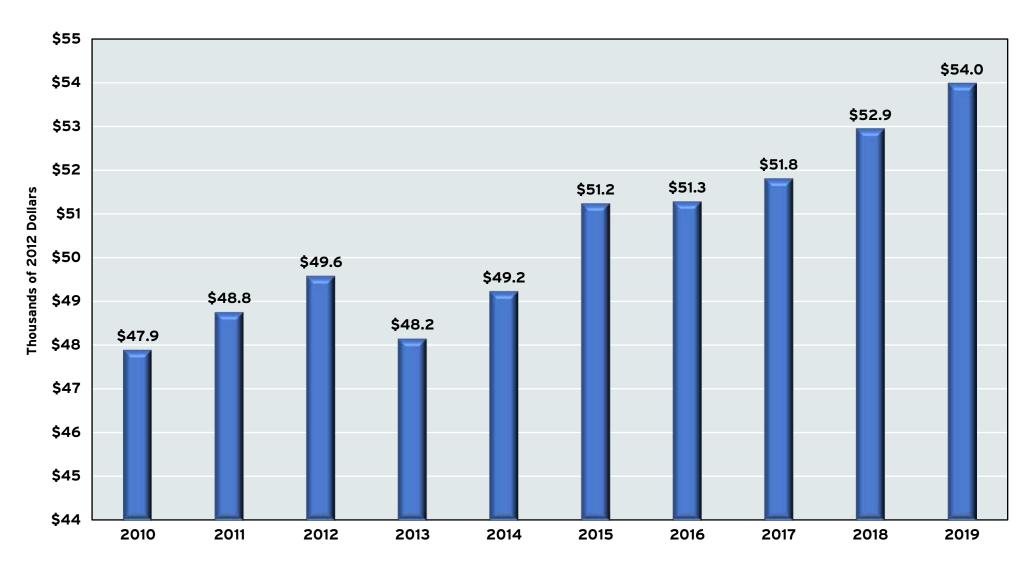
#### TABLE 3

## AVERAGE ANNUAL GROWTH IN REAL PERSONAL INCOME: UNITED STATES, VIRGINIA AND VIRGINIA METROPOLITAN STATISTICAL AREAS, 2010-2019

Metropolitan Statistical Area	2010 Personal Income	2019 Personal Income	Average Annual Growth Rate
United States	\$38,451	\$44,689	1.7%
Virginia	\$47,896	\$53,575	1.3%
Blacksburg- Christiansburg	\$30,379	\$35,488	1.7%
Charlottesville	\$48,529	\$61,968	2.8%
Harrisonburg	\$32,261	\$37,100	1.6%
Lynchburg	\$34,701	\$37,058	0.7%
Richmond	\$45,200	\$52,651	1.7%
Roanoke	\$39,715	\$43,442	1.0%
Staunton	\$37,887	\$41,003	0.9%
Virginia Beach- Norfolk- Newport News	\$42,602	\$46,708	1.0%
Washington- Arlington- Alexandria	\$61,491	\$66,801	0.9%
Winchester	\$38,529	\$44,582	1.6%

Sources: Bureau of Economic Analysis and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Real personal income is in 2012 dollars. Annual growth rate is the compound annual growth rate (CAGR).

**GRAPH 2 REAL PERSONAL INCOME PER CAPITA: VIRGINIA, 2010-2019** (IN THOUSANDS OF 2012 DOLLARS)



Sources: Bureau of Economic Analysis, Personal Income Per Capita by Metropolitan Area, and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Base year is 2012.

### Median Household Income

Real personal income per capita is a measure of income relative to the population of an area. Real personal income may rise because all incomes are increasing, or it may rise because the top end of the income distribution is rising rapidly while other parts remain stagnant. We can examine median household income, which estimates the income of the "middle household," if we arrange households from the poorest to the richest. If median household income is stagnant while average incomes are rising, then we may conclude that gains are limited to high-income earners rather than the entire population of a region.

According to the U.S. Census Bureau's American Community Survey (ACS) 1-year estimates, median household income was higher in the Commonwealth (\$76,456) than the United States (\$65,712) in 2019 (Table 4). While the median household in Virginia earned more income than the median household nationally, there were also sharp differences in median income by race.

In 2019, Asian households' median income was approximately 2.1 times higher than Black or African American households nationally and 2.0 times higher in the Commonwealth. White households' median income was about 1.6 times higher than Black or African American households nationally and in the state. Median income for Hispanic or Latino households was 1.2 times higher than Black or African American households nationally and in the Commonwealth.

While it is difficult to point to a single factor for these differences in median household income, it should be clear that there are substantial differences by race. Differences in education and occupational choice can explain some, but not all, of the differences. However, we are left with the realization that educational differences can produce significant disparities in lifetime incomes and that not every child has the same access to a quality education in Virginia. In other words, it is more difficult for a child that is the product of a poor-performing school to succeed than it is for a child of a high-performing school.

#### TABLE 4

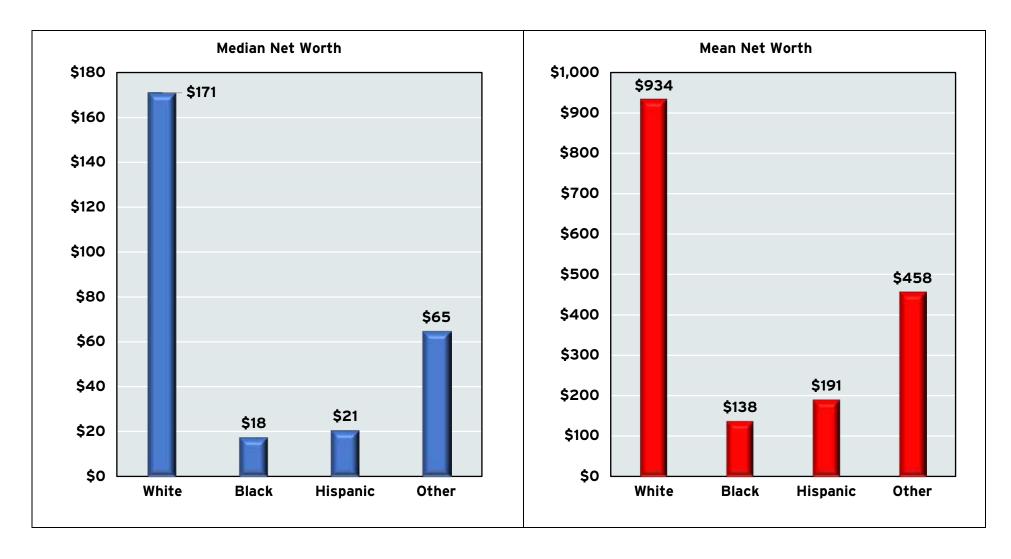
## MEDIAN HOUSEHOLD INCOME BY RACE AND ETHNICITY: UNITED STATES AND VIRGINIA, 2019

Race	United States	Virginia
Asian	\$93,759	\$109,876
Black or African American	\$43,862	\$53,896
Hispanic or Latino	\$55,658	\$69,220
Native Hawaiian and Pacific Islander	\$66,464	\$80,324
White	\$69,823	\$82,107
Overall	\$65,712	\$76,456

Sources: U.S. Census Bureau, 2019 ACS 1-year estimates subject tables, and the Dragas Center for Economic Analysis and Policy, Old Dominion University. In 2019 inflation-adjusted dollars.

National-level data also point to significant disparities in household wealth. The latest Survey of Consumer Finances from the Federal Reserve System's Board of Governors finds persistent and significant differences in household wealth among families of different racial and ethnic groups. Graph 3 illustrates median and mean net worth by race. The median wealth of white households was almost 10 times that of Black or African American households. Mean household net worth also was much lower for Black or African American households (\$138,000) relative to white households (\$934,00). Lower levels of income and wealth decrease the ability of households to weather economic shocks, in particular those that undermine the value of housing.

**GRAPH 3** MEDIAN AND MEAN HOUSEHOLD NET WORTH BY RACE AND ETHNICITY: UNITED STATES, 2016 (IN THOUSANDS OF 2016 DOLLARS)



Source: Board of Governors of the Federal Reserve System, 2016 Survey of Consumer Finances. In thousands of 2016 dollars.

These inequities were accentuated by the Federal Reserve Bank's accommodative monetary policies. To stimulate and sustain economic growth, the Federal Reserve has maintained relatively low interest rates since the onset of the Great Recession. As interest rates declined, capital flowed into equities and real estate in search of higher returns. As stock prices increased, the portfolios of Americans who held individual stocks or mutual funds rose, leading to increased household wealth. However, only about half of American households have sufficient savings to invest in the stock market, so these gains in wealth were not equally distributed across the population.

The gains in housing values increased the wealth of homeowners, but since homeownership rates are higher for whites relative to African Americans and Hispanics, these gains were not proportionally distributed by race. Furthermore, increasing housing values "priced out" many Americans, shifting their demand to rental housing, and leading in turn to increased rental prices. In other words, if you owned a house, the last decade was likely beneficial to your personal wealth. If you rented, however, you were not able to partake in these gains. The net effect of the Federal Reserve's monetary policy was to exacerbate existing inequalities in the distribution of wealth. The gains at the top of the income distribution dwarfed the gains of those in the middle or at the bottom. Hispanics and African Americans also found that, compared to whites and Asians, their gains in wealth were relatively small over the last decade.

## Poverty In Virginia

Graph 4 shows that in 2010, the poverty rate in the United States was 15.3%, approximately four percentage points higher than the Commonwealth. A sustained bout of economic growth, however, lifted millions out of poverty across the nation. By 2019, the national poverty rate had fallen to 12.3%. For Virginia, the poverty rate dropped from 11.1% in 2010 to 9.9% in 2019. The poverty rate declines slowly in periods of economic expansion and rises quickly in periods of economic contraction. In other words, it is "sticky," in that once increased, the poverty rate is slow to decline. The relative "stickiness" of Virginia's poverty rate is illustrative of the limits of economic growth on lifting all households out of poverty.

The poverty rate is closely tied to employment, which, in turn, is strongly correlated with economic growth. Households that experienced either unemployment or part-time work for economic reasons were more likely to fall closer to or below the poverty line. There also appears to be a natural floor on the poverty rate. Even during the historic national economic expansion following the Great Recession, about 1 in 10 individuals nationally and in the Commonwealth were living below the poverty line.

With the poverty rate being closely tied to economic conditions, it should be no surprise that the poverty rate varies considerably across metropolitan areas in the Commonwealth and that some metros observed declines in the poverty rate while others experienced increases.

Table 5 shows how the poverty rate evolved across Virginia's metropolitan areas. Almost all of the metros reduced the poverty rate to some extent. The poverty rate increased in the Blacksburg-Christiansburg metro area from 22.2% in 2010 to 22.9% in 2019. Even though the Harrisonburg metro area saw the poverty rate decline by 5.5 percentage points, from 19.9% in 2010 to 14.4% in 2019, this still meant that approximately 1 in 7 individuals remained below the poverty line in 2019. Poverty rates were virtually unchanged in the Charlottesville, Virginia Beach-Norfolk-Newport News and Washington, D.C., MSAs. The Staunton and Harrisonburg metro areas experienced the largest declines in the poverty rate, most likely due to increases in median household incomes and lower rates of unemployment.

TABLE 5

#### **POVERTY RATE:** UNITED STATES, VIRGINIA AND VIRGINIA'S METROPOLITAN STATISTICAL AREAS, 2010 AND 2019

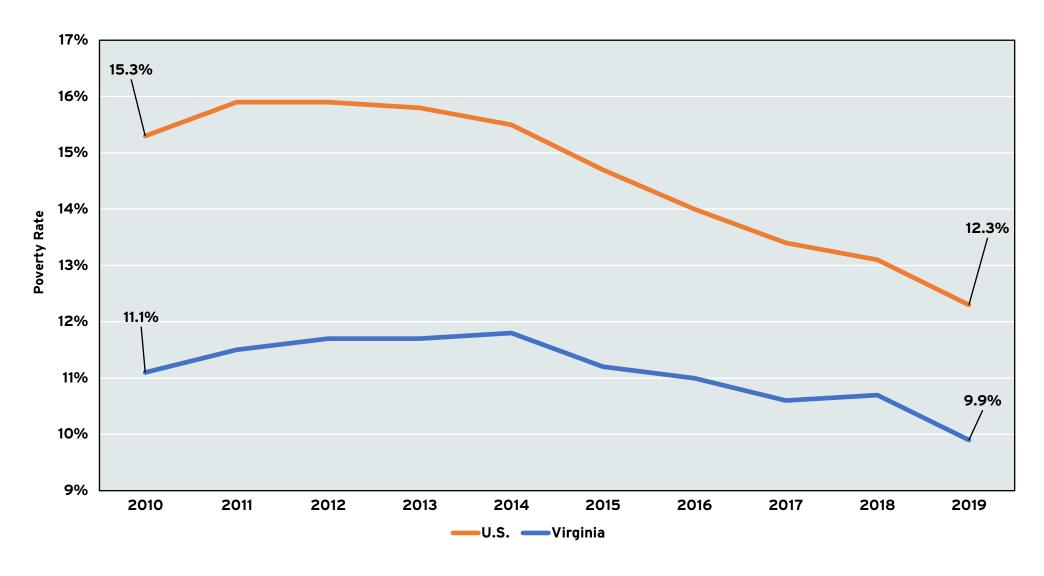
Metropolitan Statistical Area	2010 Poverty Rate	2019 Poverty Rate	Change
Blacksburg- Christiansburg	22.2%	22.9%	0.7%
Charlottesville	12.3%	11.2%	-1.1%
Harrisonburg	19.9%	14.4%	-5.5%
Lynchburg	16.2%	11.3%	-4.9%
Richmond	11.6%	10.0%	-1.6%
Roanoke	13.7%	11.8%	-1.9%
Staunton	14.5%	7.3%	-7.2%
Virginia Beach- Norfolk-Newport News	10.6%	10.6%	0.0%
Washington- Arlington- Alexandria	8.4%	7.5%	-0.9%
Winchester	12.5%	8.6%	-3.9%
Virginia	11.1%	9.9%	-1.2%
United States	15.1%	11.8%	-3.3%

Source: U.S. Census Bureau, American Community Survey (ACS) 1-year estimates, 2010-2019

Individual employment and establishment employment data attempt to measure how many people are working at a given time. These data are from two different surveys: the Current Population Survey (CPS) and the Current Establishment Survey (CES). The CPS asks individuals whether they are working, looking for work or not attached to the labor force. The CES asks employers about their employees. There is an important difference between the CPS and CES. An individual can only be employed once in the CPS; that is, he or she is either working, unemployed or not seeking to work. In the CES, an individual can show up multiple times if he or she has different jobs with different employers. For clarity, we present the CPS data as "individual employment" and the CES data as "jobs."

GRAPH 4

POVERTY RATE:
UNITED STATES AND VIRGINIA, 2010-2019



Source: U.S. Census Bureau, American Community Survey (ACS) 1-year estimates, 2010-2019

## Individual Employment Grows After A Slow Start

The civilian labor force consists of people age 16 and older who are either employed or unemployed but actively seeking work. Active-duty members of the armed forces and the institutionalized population are not included in the civilian labor force. If one is not employed and is not actively seeking or available for work in the last four weeks, he or she is not considered a part of the civilian labor force. A large gap between the civilian labor force and individual employment indicates that unemployment rates are high; conversely, a gap that narrows over time is indicative of higher employment and thus lower unemployment rates.

In Graph 5, we present civilian labor force and individual employment series for Virginia from 2010 to 2019. As one might expect, the gap between the civilian labor force and individual employment was larger at the beginning of the decade than the end. While the civilian labor force increased by 6.1% from 2010 to 2019, individual employment grew by 11.1% over the period.

As individual employment grew faster relative to the civilian labor force, Virginia's unemployment rate declined over the decade (Graph 6), reaching an annual average of 2.8% in 2019. Even though the Commonwealth's economic performance left much to be desired in the first half of the decade, by the end, if people wanted to be employed, it was almost certain that they could find a job. At the end of 2019, the challenge for employers was finding skilled employees for open positions and retaining those employees.

Individual employment growth outpaced the growth in the civilian labor force for every Virginia metropolitan area (Graph 7). However, a closer examination of the data suggests that some metros were confronting labor market challenges. The civilian labor force shrank over the decade in Lynchburg (-2.0%) and Roanoke (-0.5%). Four metro areas (Blacksburg, Harrisonburg, Staunton and Hampton Roads) saw their civilian labor force grow slower than the Commonwealth. If these metro areas fail to attract new workers in the coming decade, it will limit their ability to

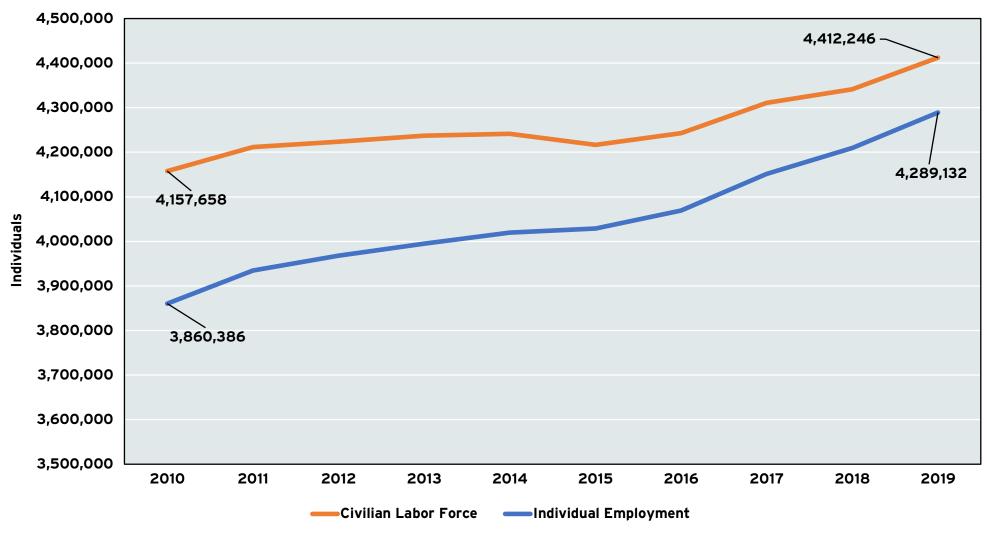
grow relative to other metros in the state. This would result in lower rates of economic growth and in turn would likely reduce the attractiveness to new migrants.



GRAPH 5

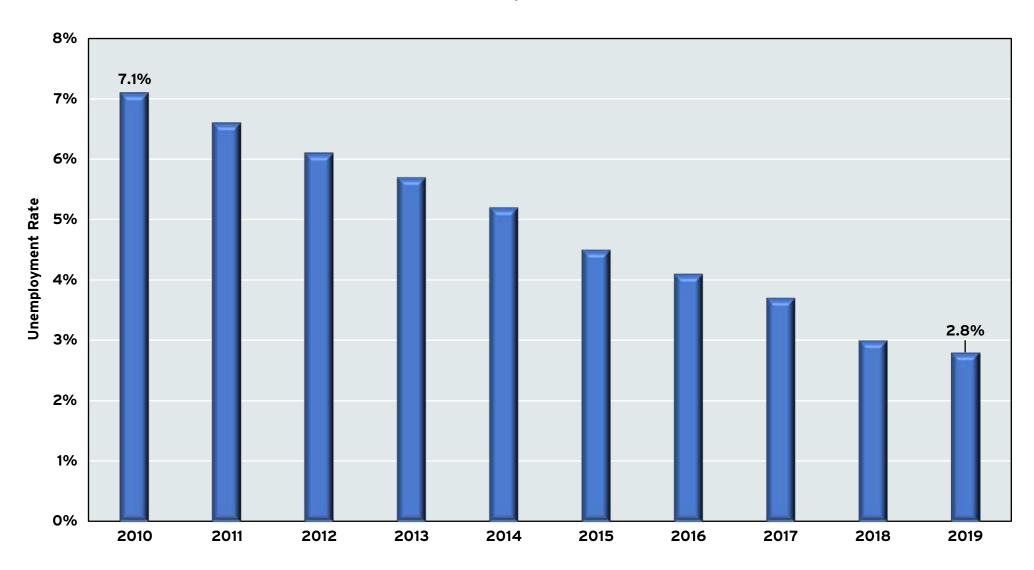
CIVILIAN LABOR FORCE AND INDIVIDUAL EMPLOYMENT:

VIRGINIA, 2010-2019



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

**GRAPH 6 AVERAGE ANNUAL UNEMPLOYMENT RATE: VIRGINIA, 2010-2019** 

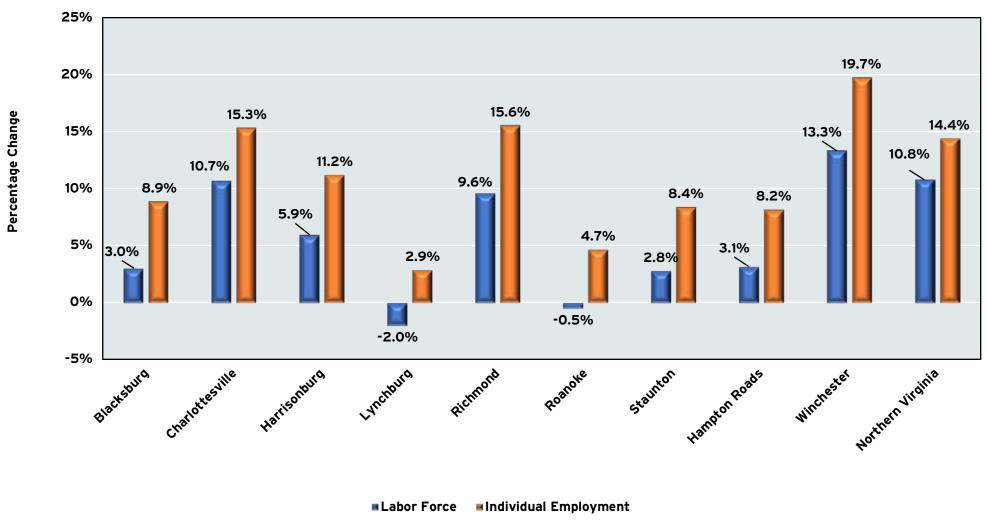


Sources: Bureau of Labor Statistics and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Annual averages are based on non-seasonally adjusted data.

GRAPH 7

PERCENT CHANGE IN INDIVIDUAL EMPLOYMENT AND CIVILIAN LABOR FORCE:

VIRGINIA'S METROPOLITAN STATISTICAL AREAS, 2010-2019



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics, non-seasonally adjusted data. Hampton Roads refers to the Virginia Beach-Norfolk-Newport News MSA. The BLS identifies Northern Virginia as Arlington, Clarke, Fairfax, Fauquier, Loudoun, Prince William, Spotsylvania, Stafford and Warren counties, and the cities of Alexandria, Fairfax, Falls Church, Fredericksburg, Manassas and Manassas Park.

## Steady Job Growth After A Slow Start

As illustrated in Graph 8, Virginia added about 413,000 jobs from 2010 to 2019. The trend in job growth over the decade closely tracks with other labor market indicators. Virginia's job growth in the first half of the decade (3.8%) was slower than the latter half (5.2%). The number of jobs in the Commonwealth did not reach prerecession levels until 2014. Graph 9 compares Virginia's job growth with that of the United States. From 2010 to 2019, the number of jobs in Virginia increased by 11.3%, compared to 15.8% for the nation.

Turning our attention to Virginia's metropolitan areas, jobs in the Winchester MSA rose 20.7% over the decade, the largest percentage increase across Virginia's metros (Graph 9). We must caveat this statement with the recognition that Winchester is relatively small, accounting for about 2% of all the jobs in Virginia in 2019. Three of Virginia's metros (Hampton Roads, Northern Virginia and Richmond) account for more than 70% of all jobs in the state. Richmond's job growth was higher than that of the nation, and Northern Virginia's growth was slightly below that of the United States. On the other hand, job growth in Hampton Roads was markedly slower than either of these metros or the nation and contributed to slow job growth in the Commonwealth.

Taking a deeper dive into job growth in Virginia, Graph 10 shows which industries added or lost jobs over the decade. The largest gains were in the professional and business services sector, which added 115,900 jobs, followed by education and health services (92,100) and leisure and hospitality (69,300). The two largest industry sectors - professional and business services and the combined federal, state and local government sectors - accounted for roughly the same share of total nonfarm jobs in Virginia in 2019. Yet, the government sectors (24,100) added far fewer jobs over the decade. The information sector was the only major sector to lose jobs, shedding 7,800 jobs from 2010 to 2019.

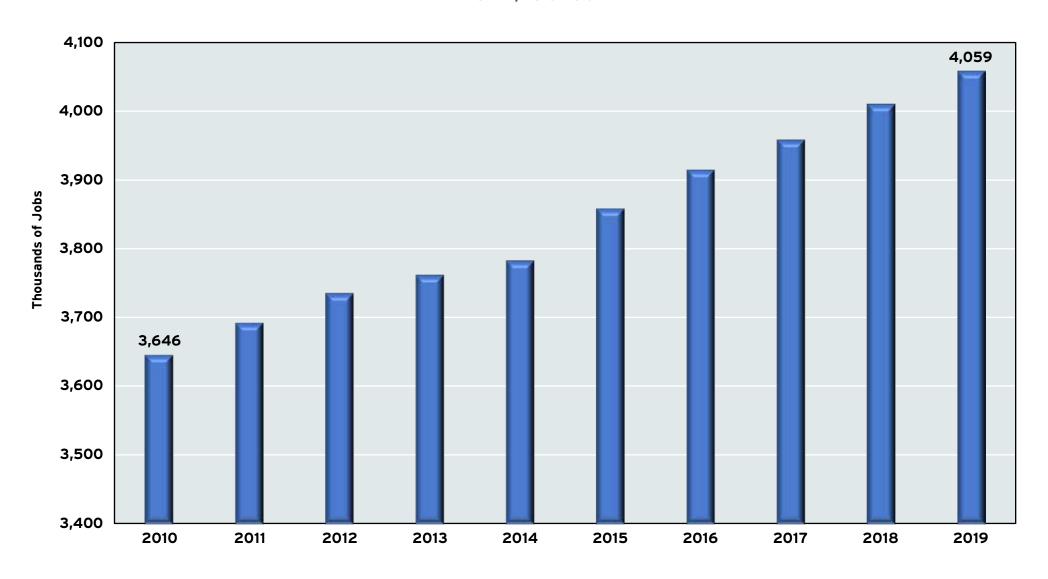
The good news on job gains over the previous decade has been tempered by the onset of the COVID-19 pandemic. Leisure and hospitality and education and health services were among the top sectors in terms of job gains over the last 10 years and the most impacted by the pandemic and its social distancing measures. The decline in government revenues is also likely to result in significant layoffs for state and local governments. Recovering these jobs will take time, especially for those jobs that require face-to-face interactions on a regular basis.



GRAPH 8

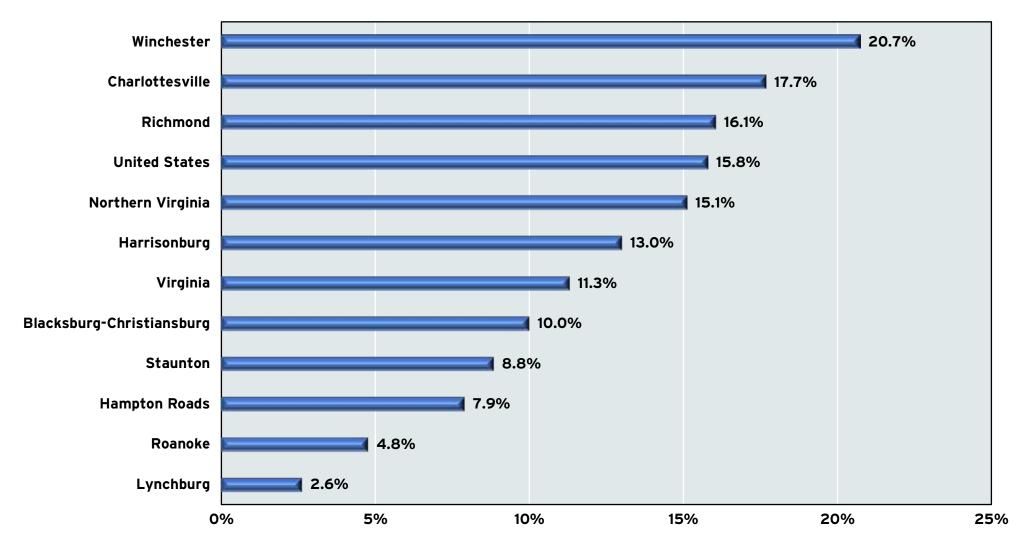
AVERAGE CIVILIAN NONFARM EMPLOYMENT (JOBS):

VIRGINIA, 2010-2019



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

**GRAPH 9** PERCENTAGE CHANGE IN NET NEW CIVILIAN JOBS: UNITED STATES, VIRGINIA AND VIRGINIA'S METROPOLITAN AREAS, 2010-2019

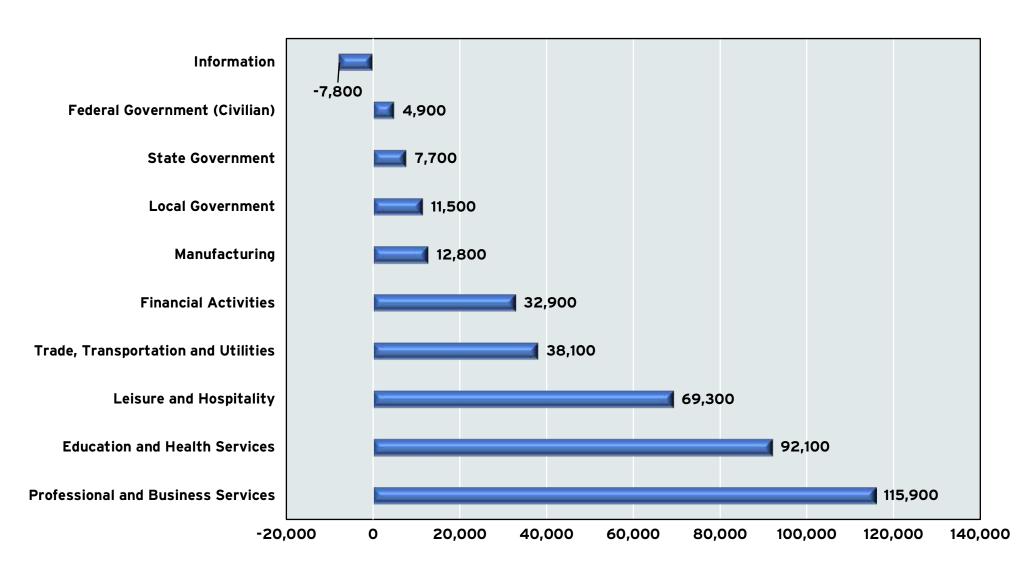


Sources: Bureau of Labor Statistics, Current Establishment Survey, non-seasonally adjusted data, and the Virginia Employment Commission. The BLS identifies Northern Virginia as Arlington, Clarke, Fairfax, Fauquier, Loudoun, Prince William, Spotsylvania, Stafford and Warren counties, and the cities of Alexandria, Fairfax, Falls Church, Fredericksburg, Manassas and Manassas Park.

GRAPH 10

CHANGE IN ANNUAL COVERED EMPLOYMENT (JOBS) IN SELECTED INDUSTRIES:

VIRGINIA, 2010-2019



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

## Single-Family Housing: Recovery And Growth

As with other parts of the Virginia economy, the impacts of the Great Recession and defense sequestration lingered in the housing market. Single-family residential building permits peaked in the Commonwealth at 49,959 in 2005 and fell to 15,625 by 2011. The decline in single-family permits from the prerecession peak was not unique to Virginia. Developers have appeared to shift construction away from single-family to multifamily units in many of the country's metropolitan areas. While the number of permits in Virginia increased in the later years of the decade, the levels did not return to those observed prior to the Great Recession (Graph 11). On the other hand, nominal value of building permits increased from \$2.9 billion in 2010 to \$4.7 billion in 2019.

Zillow, the online database for real estate listings, publishes a variety of measures to estimate home values over time for a given region. The Zillow Home Value Index (ZHVI) measures the typical home value and market changes over time. The typical value of a single-family residential home in Virginia rose from \$240,717 in January 2010 to \$288,513 in December 2019, an increase of 19.9% (Graph 12). This increase, however, pales in comparison to the increase in value for the nation. The national average rose from \$176,231 in January 2010 to \$246,107 in December 2019, an increase of 39.7%. Faster growth nationally coupled with lower interest rates and constrained supply in some states accounted for the faster rise in typical home values nationally relative to the Commonwealth.

The growth in median home values among Virginia's metropolitan areas is largely a reflection of the labor market and economic activity trends discussed previously. The areas able to attract more jobs and people over the decade saw home values increase as a result. As illustrated in Table 6, Washington-Arlington-Alexandria had the largest increase in median home values (29.5%), followed by Winchester (28.4%). In Virginia Beach-Norfolk-Newport News, a typical home's value increased only 5.4% over the 10-year period.

When compared to the previous decade, the twin impacts of the Great Recession and sequestration are apparent. Graph 13 shows the percentage change in single-family residential home values over the last two decades for Virginia's metropolitan areas, Virginia and the nation. One story is consistent across all of the Commonwealth's metro areas: the appreciation in median housing values in the 2000-2009 decade exceeded that of the most recent decade. The difference is most stark in Hampton Roads, where the typical home value increased 93.8% from 2000 to 2009 but only 5.4% from 2010 to 2019.

#### TABLE 6

ZILLOW HOME VALUE INDEX OF SINGLE-FAMILY RESIDENTIAL HOMES: UNITED STATES, VIRGINIA AND VIRGINIA METROPOLITAN **AREAS, JANUARY 2010 AND DECEMBER 2019** 

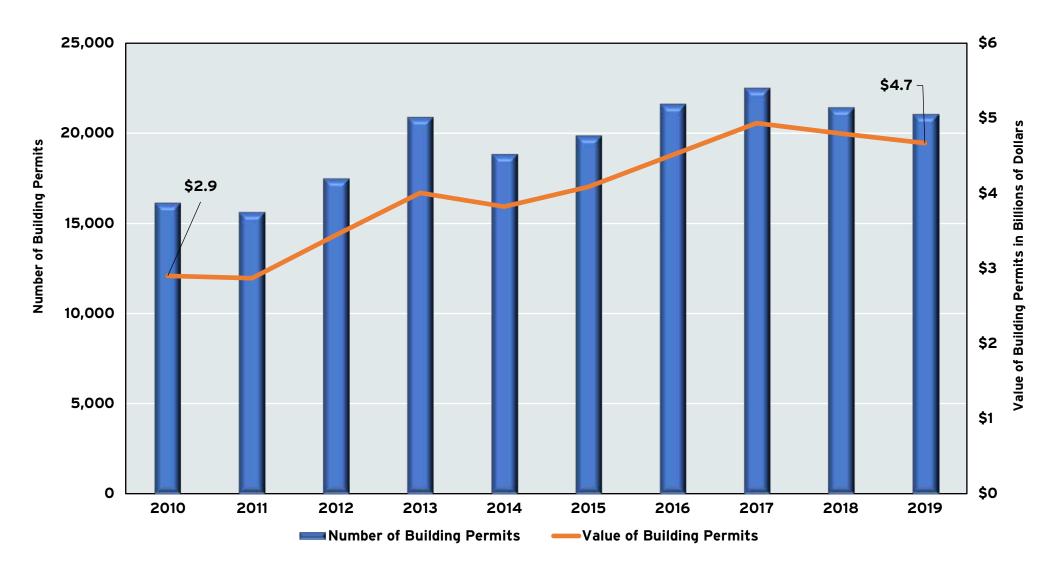
	Median Home Value January 2010	Median Home Value December 2019	Percentage Change
Blacksburg- Christiansburg	\$159,133	\$193,345	21.5%
Charlottesville	\$275,474	\$323,547	17.5%
Harrisonburg	\$185,189	\$223,845	20.9%
Lynchburg	\$151,086	\$182,339	20.7%
Richmond	\$210,590	\$250,688	19.0%
Roanoke	\$151,456	\$184,112	21.6%
Staunton	\$170,388	\$202,054	18.6%
Virginia Beach- Norfolk- Newport News	\$237,319	\$250,078	5.4%
Washington- Arlington-Alexandria	\$345,684	\$447,829	29.5%
Winchester	\$187,833	\$241,099	28.4%
Virginia	\$240,717	\$288,513	19.9%
United States	\$176,231	\$246,107	39.7%

Sources: Zillow (2020) and the Dragas Center for Economic Analysis and Policy, Old Dominion University

GRAPH 11

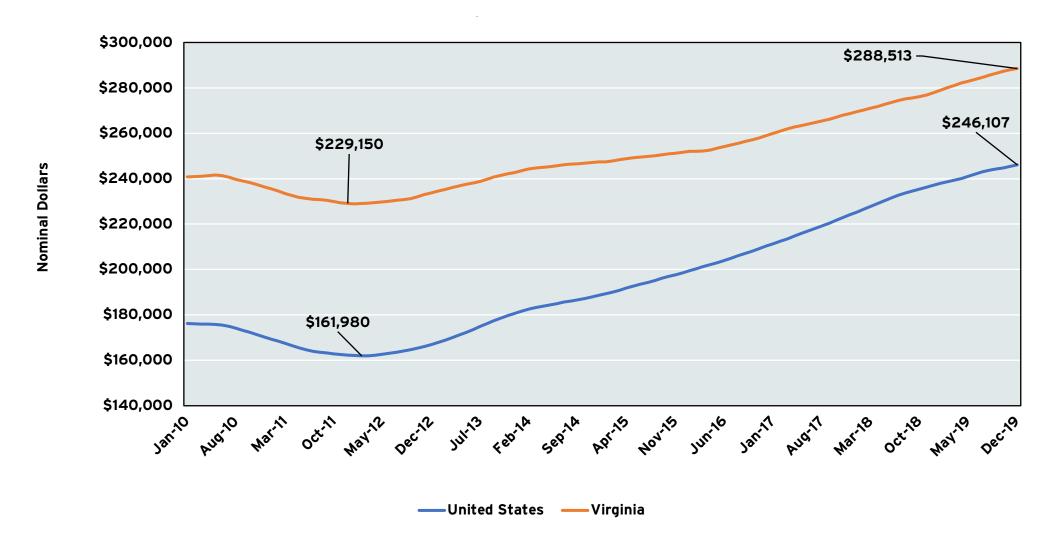
NUMBER AND NOMINAL VALUE OF ONE-UNIT, SINGLE-FAMILY RESIDENTIAL BUILDING PERMITS:

VIRGINIA, 2010-2019



Source: U.S. Census Bureau, Building Permits Survey by State (2019)

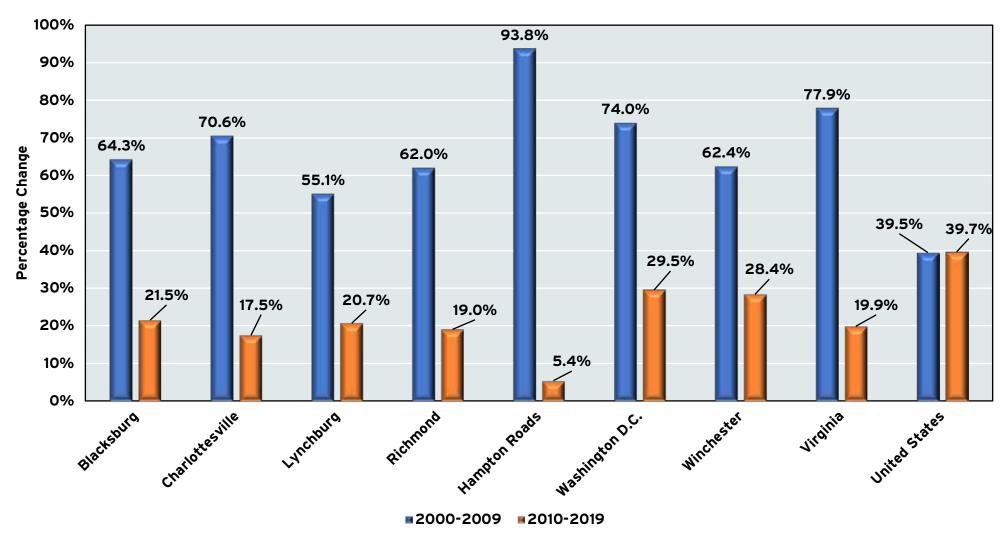
**GRAPH 12 ZILLOW HOME VALUE INDEX OF SINGLE-FAMILY RESIDENTIAL HOMES: UNITED STATES AND VIRGINIA, JANUARY 2010 TO DECEMBER 2019** 



Sources: Zillow (2020) and the Dragas Center for Economic Analysis and Policy, Old Dominion University

GRAPH 13

PERCENTAGE CHANGE IN ZILLOW MEDIAN SINGLE-FAMILY HOUSING VALUE:
UNITED STATES, VIRGINIA AND SELECTED VIRGINIA METROPOLITAN AREAS,
JANUARY 2000 TO DECEMBER 2009 AND JANUARY 2010 TO DECEMBER 2019



Sources: Zillow (2020) and the Dragas Center for Economic Analysis and Policy, Old Dominion University. Zillow Home Value Index (ZHVI) for single-family residence. Hampton Roads refers to the Virginia Beach-Norfolk-Newport News MSA. Washington, D.C., refers to the Washington, D.C.-Arlington-Alexandria MSA.

## Closing Thoughts

The oft-repeated cliché, "It's not how you start, but how you finish," rang true for Virginia's economy in the last decade. The Commonwealth ended the decade with five consecutive years of reasonable economic growth, low rates of unemployment across its metropolitan areas, a reputation for a place to "do business" and strong state finances. Although there were clouds on the horizon, especially with regard to ongoing federal deficits and debt, these threats to Virginia's growth seemed far away.

While COVID-19 has demanded our attention over most of this year, the challenges of the past decade have not been swept aside. Virginia's relatively poor performance in the first half of the decade can be, in part, attributed to federal budget sequestration and lingering effects of the Great Recession. When discretionary spending increased, Virginia's economic growth, especially in Hampton Roads, accelerated accordingly. The surge in spending due to COVID-19 will raise the federal debt to \$25 trillion (if not more) by the end of 2021. At some point, the bill will come due. Whether it is the result of a change in national security priorities, a shift in domestic policies or bond markets requiring greater yields on U.S. government debt, at some point federal discretionary spending will either shift in composition, stagnate or be reduced. Virginia's efforts to improve its business climate are laudable in light of these futuristic scenarios and new policy proposals should be carefully weighed with regard to their impact on the business community.

Virginia must also proactively address the legacy of systemic racism, as there is no economic justification for the disparate treatment of individuals based on race. We observe differences in median incomes and wealth that are attributable, in part, to public policy decisions made in the past. Zoning decisions after World War II, for example, inhibited the accumulation of wealth by Black or African American households. Disparities in the quality of public education, which continue today, reduce the opportunities available for minority households and, when coupled with the increasing cost of higher education, lower our economic potential. Addressing these challenges will require clear, frank and objective discussions on how inequities in the past result in inequalities in the present. We believe that improving K-12 education for

all Virginians is a good starting point because such investments create a more capable workforce that in turn increases the Commonwealth's attractiveness to employers.

The rural-urban divide in Virginia is a topic we have discussed in previous State of the Commonwealth Reports. The divide continues to grow along economic and political lines. Urban areas accounted for more than 80% of Virginia's economic output and jobs at the end of the decade. The concentration of population, income and wealth in urban areas is likely to continue over the coming decade. Employers are less likely to invest where broadband access is poor, transportation infrastructure is limited or schools are not of sufficient quality for their employees. Ignoring this divide is to the state's peril. It is time for the Commonwealth to act as such - as a shared "common wealth" rather than an urban crescent and everyone else.

What, then, can be done? In 2016, we promoted increasing access to rural broadband, a call that is now widely adopted throughout the state. New advances in satellite broadband and 5G mobile networks have the promise of improving service in the future. The need for reliable broadband has only increased due to the COVID-19 pandemic. School districts found themselves supplying mobile hotspots and providing Wi-Fi on school buses. These gaps need to be addressed through public resources and by allowing cities and counties to establish their own broadband authorities to serve their constituents.

These, and other challenges, will test Virginia's mettle in the coming years. We cannot ignore the past and its impact on the present and future. Learning these hard lessons and acting on them may seem daunting, but it is necessary. Together, we can find that we have much more in common than what sets us apart.

