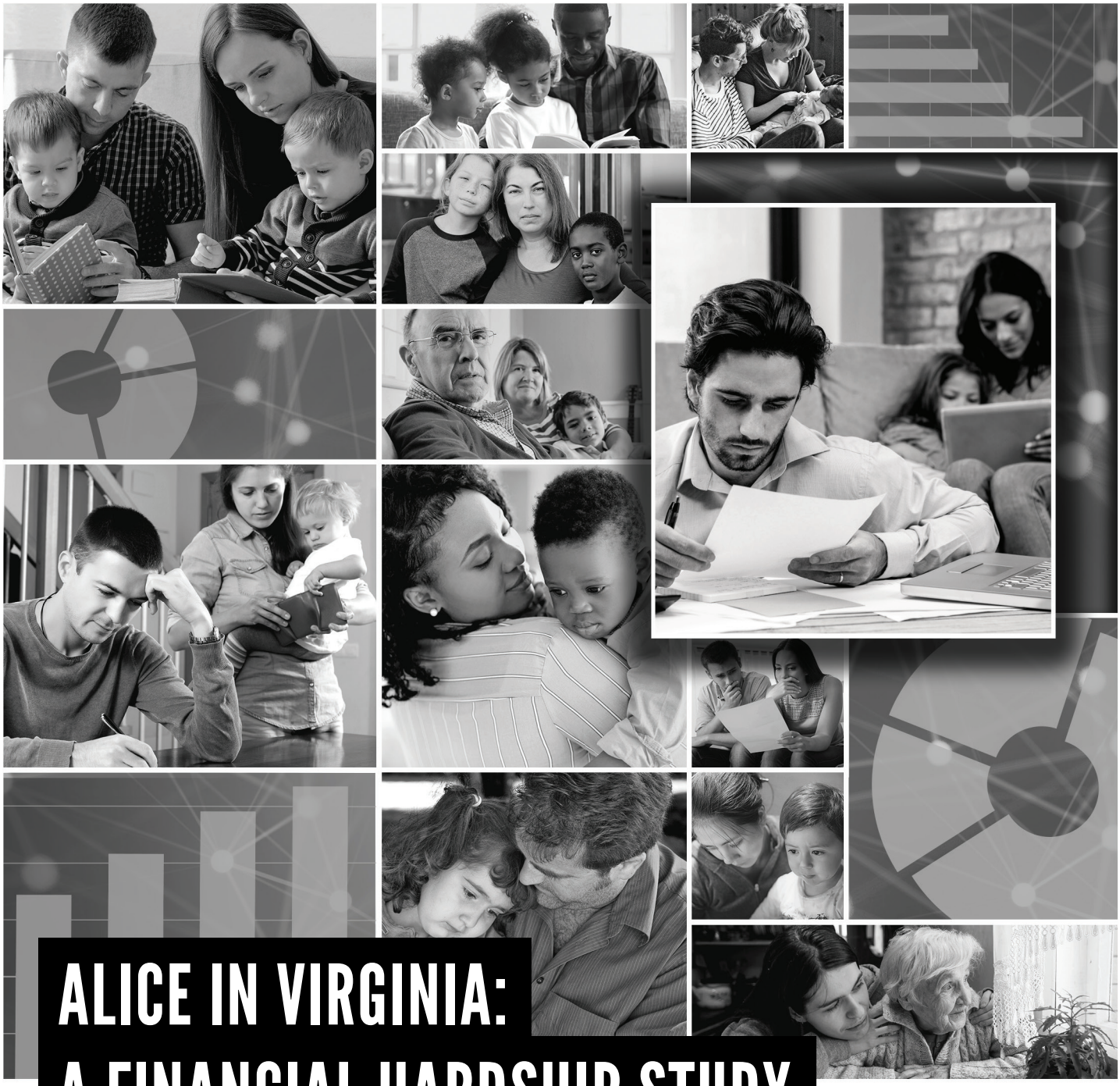


ALICE IN VIRGINIA: A FINANCIAL HARDSHIP STUDY

LIVE UNITED®

UNITED FOR ALICE®

2020 VIRGINIA REPORT

United Way®

United Ways of Virginia

ALICE IN THE TIME OF COVID-19

The release of this ALICE Report for Virginia comes during an unprecedented crisis — the COVID-19 pandemic. While our world changed significantly in March 2020 with the impact of this global, dual health and economic crisis, ALICE remains central to the story in every U.S. county and state. The pandemic has exposed exactly the issues of economic fragility and widespread hardship that United For ALICE and the ALICE data work to reveal.

That exposure makes the ALICE data and analysis more important than ever. The ALICE Report for Virginia presents the latest ALICE data available — a point-in-time snapshot of economic conditions across the state in 2018. By showing how many Virginia households were struggling then, the ALICE Research provides the backstory for why the COVID-19 crisis is having such a devastating economic impact. The ALICE data is especially important now to help stakeholders identify the most vulnerable in their communities and direct programming and resources to assist them throughout the pandemic and the recovery that follows. And as Virginia moves forward, this data can be used to estimate the impact of the crisis over time, providing an important baseline for changes to come.

This crisis is fast-moving and quickly evolving. To stay abreast of the impact of COVID-19 on ALICE households and their communities, visit our website at UnitedForALICE.org/COVID19 for updates.

THE UNITED WAYS OF VIRGINIA

Franklin-Southampton Area United Way

Rappahannock United Way

The United Way of Prince Edward County

United Way of Bristol TN/VA

United Way of Central Virginia

United Way of Danville & Pittsylvania County

United Way of Front Royal/ Warren County

United Way of Greater Augusta

United Way of Greater Charlottesville

United Way of Greater Richmond & Petersburg

United Way of Harrisonburg & Rockingham County

United Way of Henry County and Martinsville

United Way of Northern Shenandoah Valley

United Way of Roanoke Valley

United Way of Rockbridge, Lexington & Buena Vista

United Way of South Hampton Roads

United Way of Southwest Virginia

United Way of the National Capital Area

United Way of the New River Valley

United Way of the Virginia Peninsula

United Way of Virginia's Eastern Shore

Learn more about ALICE in Virginia: www.VirginiaALICE.org

Virginia State Partners

Special thanks to **Compare.com, Virginia's Community Colleges, Atlantic Union Bank, and Virginia Association of Free and Charitable Clinics**, for helping to bring the message of ALICE to the state of Virginia.

Acknowledgments

The United Ways of Virginia thank our partners and community stakeholders throughout Virginia for their support and commitment to this 2020 ALICE Highlights Report. It is our hope that this Report will help raise awareness of the 39% of households in the state who live in poverty or who are **ALICE** — **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed. Our goal is to inform and inspire policy and action to improve the lives of ALICE families.

To learn more about how you can get involved in advocating and creating change for ALICE in Virginia, contact: Sarah Walsh at swalsh@rappahannockunitedway.org

To access the ALICE data and resources for Virginia, go to UnitedForALICE.org/Virginia

ALICE RESEARCH

ALICE Reports provide high-quality, research-based information to foster a better understanding of who is struggling in our communities. To produce the ALICE Report for Virginia, our team of researchers collaborated with a Research Advisory Committee composed of experts from across the state. Research Advisory Committee members from our partner states also periodically review the ALICE Methodology. This collaborative model ensures that the ALICE Reports present unbiased data that is replicable, easily updated on a regular basis, and sensitive to local context.

Learn more about the ALICE Team on our website at UnitedForALICE.org/ALICE-team

Director and Lead Researcher: Stephanie Hoopes, Ph.D.

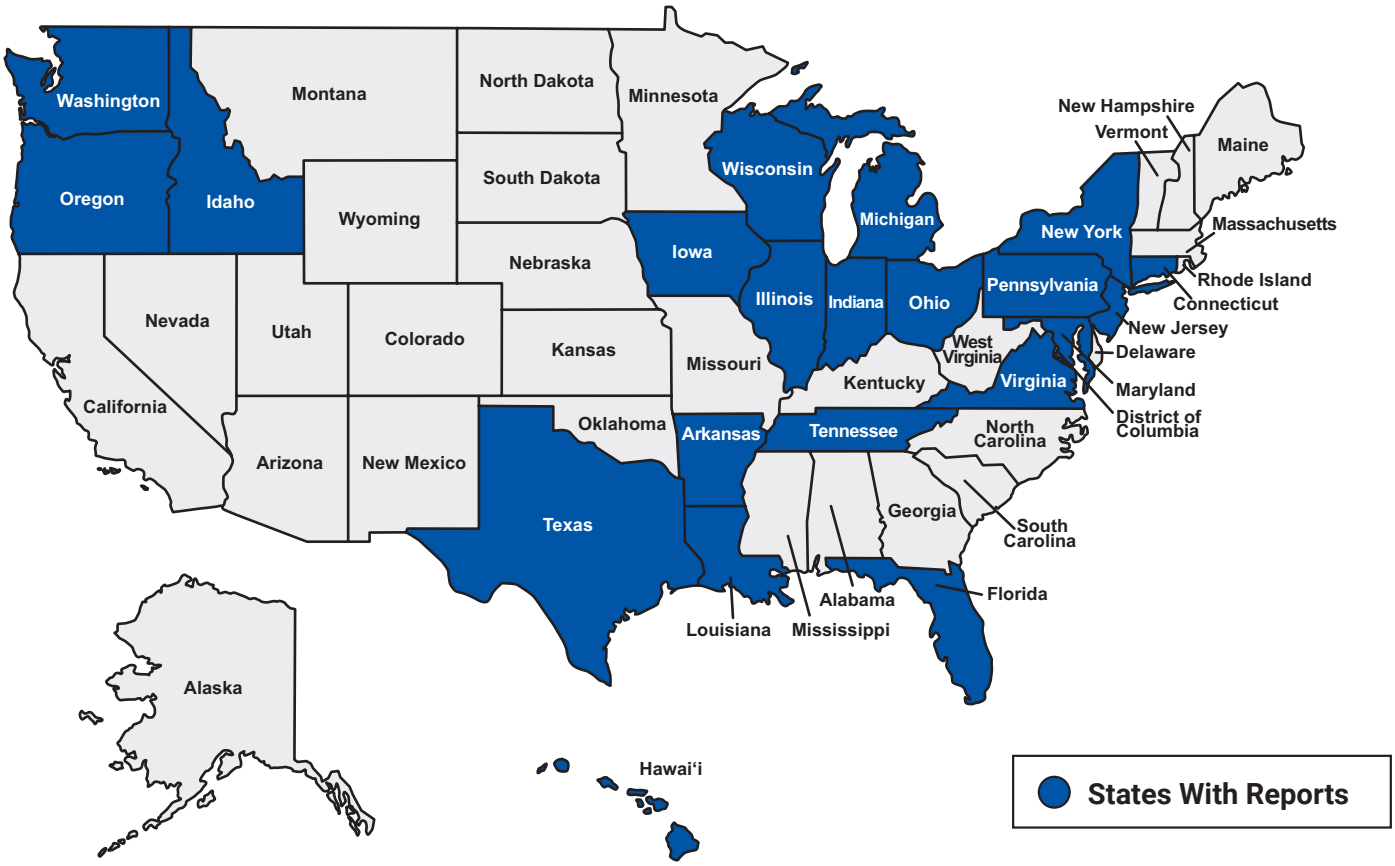
Research Support Team:
Andrew Abrahamson; Ashley Anglin, Ph.D.; Catherine Connelly, D.M.H.; Max Holdsworth, M.A.; Dan Treglia, Ph.D.

ALICE Research Advisory Committee for Virginia

ALICE: A GRASSROOTS MOVEMENT

This body of research provides a framework, language, and tools to measure and understand the struggles of a population called **ALICE** — an acronym for **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed. ALICE represents the growing number of households in our communities that do not earn enough to afford basic necessities. Partnering with United Ways, nonprofits, academic institutions, corporations, and other state organizations, this research initiative provides data to stimulate meaningful discussion, attract new partners, and ultimately inform strategies for positive change.

Based on the overwhelming success of this research in identifying and articulating the needs of this vulnerable population, this work has grown from a pilot in Morris County, New Jersey to 21 states and more than 648 United Ways. Together, United for ALICE partners can evaluate current initiatives and discover innovative approaches to improve life for ALICE and the wider community. To access Reports from all states, visit UnitedForALICE.org



NATIONAL ALICE ADVISORY COUNCIL

The following companies are major funders and supporters of this work:

Aetna Foundation ■ Allergan ■ Alliant Energy ■ AT&T ■ Atlantic Health System ■ Atlantic Union Bank
Compare.com ■ Deloitte ■ Entergy ■ Johnson & Johnson ■ JLL ■ Key Bank ■ RWJBarnabas Health
Robert Wood Johnson Foundation ■ Thrivent Financial Foundation ■ UPS ■ U.S. Venture

WHAT'S NEW IN ALICE RESEARCH

Every two years, United For ALICE undertakes a full review of the ALICE Methodology to ensure that the ALICE measures are transparent, replicable, and current in order to accurately reflect how much income families need to live and work in the modern economy. In 2019, more than 40 external experts — drawn from the Research Advisory Committees across our United For ALICE partner states — participated in the review process. A full description of the Methodology and sources is available at UnitedForALICE.org/Methodology

This Report includes the following improvements:

More local variation: The ALICE budgets for housing, food, transportation, health care, and taxes incorporate more local data. For housing, we differentiate counties within Metropolitan Statistical Areas using American Community Survey gross rent estimates. For food, the U.S. Department of Agriculture's Thrifty Food Plan is adjusted at the county level using Feeding America's cost-of-meal data. For transportation, auto insurance is added to new miles-traveled data (discussed in the next paragraph) to reflect different driving costs by state. For health care, out-of-pocket costs are provided by census region. And taxes now systematically include local income tax, using data from the Tax Foundation.

Better reflection of household composition: Transportation and health care budgets now better reflect costs for different household members. The transportation budget for driving a car uses the Federal Highway Administration's miles-traveled data, sorted by age and gender, and AAA's cost-per-mile for a small- or medium-sized car. The health care budget reflects employer-sponsored health insurance (the most common form in 2018, when it covered 49% of Americans[1]), using the employee's contribution, plus out-of-pocket expenditures by age and income, from the Agency for Healthcare Research and Quality Medical Expenditure Panel Survey.

More variations by household size: The median household size in the U.S. is three people for households headed by a person under age 65 and two people for households headed by seniors (65+).[2] Reflecting this reality, the Household Survival Budgets are presented in new variations, including a Senior Survival Budget. The website provides data to create budgets for households with any combination of adults and children. The ALICE Threshold has also been adjusted to incorporate the most common modern household compositions. These new budget variations are included in the County Profile and Household Budget pages on UnitedForALICE.org/Virginia

New ALICE measures:

- The **Senior Survival Budget** more accurately represents household costs for people age 65 and older. Housing and technology remain constant; however, some costs are lower — transportation, food, and health insurance premiums (due to Medicare) — while others are higher, especially out-of-pocket health costs. Because more than 90% of seniors have at least one chronic condition, the Senior Survival Budget includes the additional cost of treating the average of the five most common chronic diseases.
- The **ALICE Essentials Index** is a standardized measure of the change over time in the costs of essential household goods and services, calculated for both urban and rural areas. It can be used as a companion to the Bureau of Labor Statistics (BLS) Consumer Price Index, which covers all goods and services that families at all income levels buy regularly.

Data Notes: The data are estimates; some are geographic averages, others are one- or five-year averages depending on population size. Change-over-time ranges start with 2007, before the Great Recession, then measure change every two years from 2010 to 2018. County-level data remains the primary focus, as state averages mask significant differences between counties (in this Report, "counties" refers to Virginia's counties and independent cities). For example, the share of households below the ALICE Threshold in Virginia ranges from 23% in Loudoun County to 67% in Lynchburg City and Radford City. Many percentages are rounded to whole numbers, sometimes resulting in percentages totaling 99% or 101%.The methodological improvements included in this Report have been applied to previous years to allow for accurate year-over-year comparisons. This means that some numbers and percentages will not match those reported in the previous ALICE Report for Virginia.

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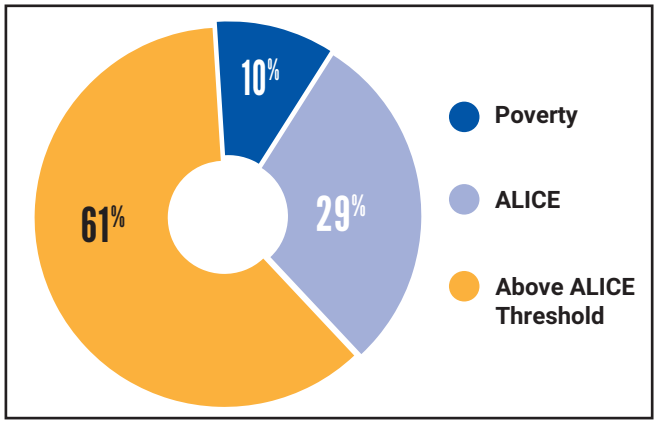
ASSET LIMITED, INCOME CONSTRAINED, EMPLOYED

From 2010 to 2018, Virginia showed steady economic improvements according to traditional measures. Unemployment in the state and across the U.S. fell to historic lows, GDP grew, and wages rose slightly. Yet despite the Commonwealth's economic strengths, sharp disparities in income and wealth exist from one region, county, or even community to the next. In 2018, eight years after the end of the Great Recession, 39% of Virginia's 3,169,804 households still struggled to make ends meet. And while 10% of these households were living below the Federal Poverty Level (FPL), another 29% — almost three times as many — were **ALICE** households: **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed. These households earned above the FPL, but not enough to afford basic household necessities.



This Report provides new data and tools that explain the persistent level of hardship faced by ALICE households, revealing aspects of the Virginia economy not tracked by traditional economic measures. The Report highlights three critical trends:

- **The cost of living is increasing for ALICE households.** From 2007 to 2018, the cost of household essentials (housing, child care, food, transportation, health care, and technology) increased faster than the cost of other goods and services. The ALICE Essentials Index, a new tool that measures change over time in the cost of essentials, increased by an average of 3.4% annually nationwide over the past decade, while the official rate of inflation was 1.8%.
- **Worker vulnerability is increasing, while wages stagnate in ALICE jobs.** By 2018, a near-record-low number of people were reported to be unemployed. However, that low unemployment concealed three trends that expose ALICE workers to greater risk: growth in the number of low-wage jobs, minimal increases in wages, and more fluctuations in job hours, schedules, and benefits that make it harder to budget and plan. These trends were clear in 2018: A high number of Virginia workers — 47% — were paid by the hour, and 53% of the state's jobs paid less than $20 per hour.
- **ALICE households have increased over time** as a result of rising costs and stagnant wages. There are almost three times as many ALICE households as there are households in poverty. The FPL, with its minimal and uniform national estimate of the cost of living, far underestimates the number of households that cannot afford to live and work in the modern economy. In Virginia, the percentage of households that were ALICE rose from 20% in 2007 to 29% in 2018. By contrast, those in poverty remained at around 10% throughout the period.

This Report provides critical measures that assess Virginia's economy from four perspectives: They track financial hardship over time and across demographic groups; quantify the basic cost of living in Virginia; assess job trends; and identify gaps in assistance and community resources. These measures also debunk assumptions and stereotypes about low-income workers and families. ALICE households are as diverse as the general population, composed of people of all ages, genders, races, and ethnicities, living in rural, urban, and suburban areas.

The Report concludes with an analysis of the economic benefits if all households had income above the ALICE Threshold. Not only would there be a significant positive impact on families and their communities, but the state economy would also benefit. In fact, the added value to the Virginia GDP would be approximately $107 billion.

This Report and its measures are tools to help stakeholders ask the right questions, reduce vulnerabilities, remove obstacles to advancement, identify gaps in community resources, build a stronger workforce, and implement programs and policies that help put financial stability within reach for ALICE households. With the magnitude of financial hardship revealed, these actions can help move all households toward a more equitable economy, and ensure that no one is left behind in harder times.

GLOSSARY

ALICE is an acronym that stands for **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed — households with income above the Federal Poverty Level but below the basic cost of living. A household consists of all the people who occupy a housing unit. In this Report, households do not include those living in group quarters such as a dorm, nursing home, or prison.

The **Household Survival Budget** estimates the actual bare-minimum costs of basic necessities (housing, child care, food, transportation, health care, and a basic smartphone plan) in Virginia, adjusted for different counties and household types.

The **Senior Survival Budget** incorporates specific cost estimates for seniors for food, transportation, and health care, reflecting key differences in household expenses by age.

The **Household Stability Budget** calculates the costs of supporting and sustaining an economically viable household over time, including a contingency for savings.

The **ALICE Threshold** is the average income that a household needs to afford the basic necessities defined by the Household Survival Budget for each county in Virginia. Households **Below the ALICE Threshold** include both ALICE and poverty-level households.

The **ALICE Essentials Index** is a measure of the average change over time in the costs of the essential goods and services that households need to live and work in the modern economy — housing, child care, food, transportation, health care, and a smartphone plan.

ALICE ONLINE

Visit UnitedForALICE.org for more details about ALICE, including:

Interactive Maps
Data at the state, county, municipal, ZIP code, and congressional district levels

Research Advisory Committee
Learn about the members and role of this critical group

Additional Reports
Explore The ALICE Essentials Index and The Consequences of Insufficient Household Income

Demographic Data
Information about ALICE households by age, race/ethnicity, and household type

Data Spreadsheet
Download the ALICE data

Jobs Graphs
Details about where ALICE works

County Profiles
Detailed data about ALICE households in each county

Methodology
Overview of the sources and calculations used in the ALICE research

More About United For ALICE
See our partners, press coverage, learning communities, etc.

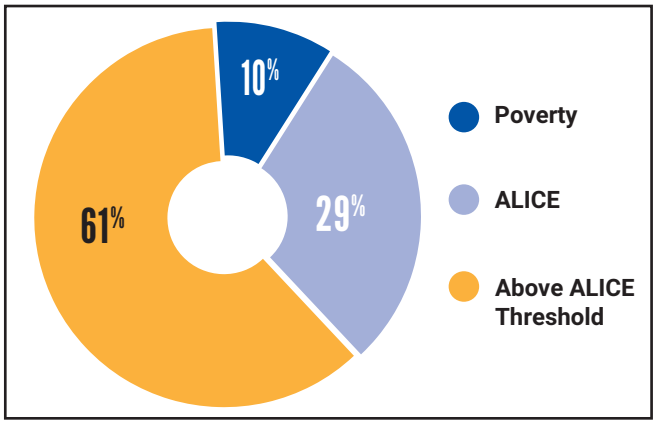
AT-A-GLANCE: VIRGINIA

2018 Point-in-Time Data

Population: 8,517,685 • **Number of Counties:** 133 • **Number of Households:** 3,169,8041

How many households are struggling?

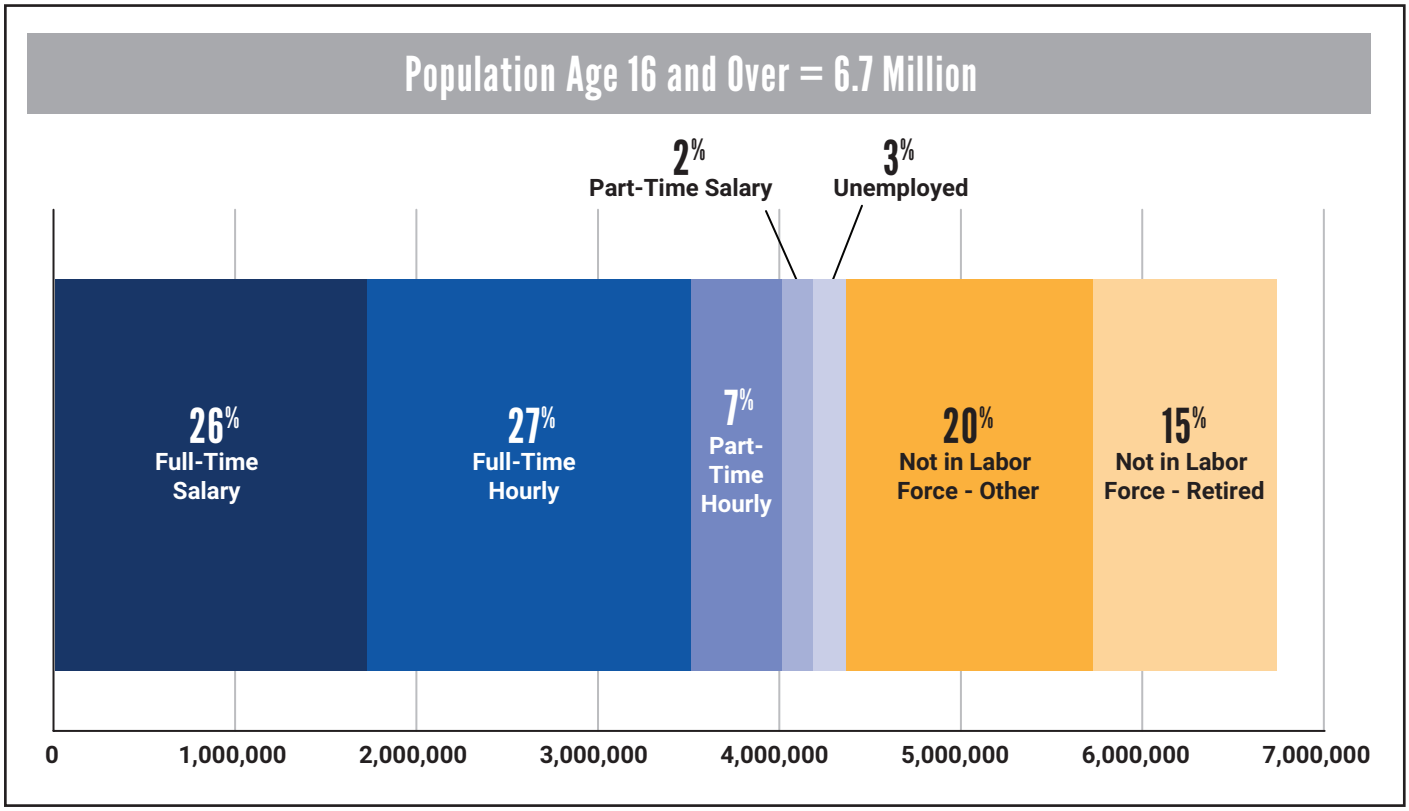
ALICE, an acronym for **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed, comprises households that earn more than the Federal Poverty Level but less than the basic cost of living for the state (the ALICE Threshold). Of Virginia's 3,169,804 households, 326,680 earned below the Federal Poverty Level (10%) in 2018, and another 934,929 (29%) were ALICE.



What does the Virginia labor force look like?

A 2018 overview of the labor status of Virginia's 6,739,925 working-age adults (people age 16 and over) shows that 65% of adults were in the labor force (blue bars), yet more than half were workers who were paid hourly. Hourly paid jobs tend to have lower wages, fewer benefits, and less stability. In addition, 35% of adults were outside the labor force (gold bars), either because they were retired or because they had stopped looking for work.

Labor Status, Population Age 16 and Over, Virginia, 2018



Note: Data for full- and part-time jobs is only available at the national level; these national rates (51% of full-time workers and 75% of part-time, hourly workers) have been applied to the total Virginia workforce to calculate the breakdown shown in this figure. Full-time represents a minimum of 35 hours per week at one or more jobs for 48 weeks per year.

What does it cost to afford the basic necessities?

The average ALICE Household Survival Budget in Virginia was $29,580 for a single adult, $31,752 for a single senior, and $78,528 for a family of four in 2018 — significantly more than the Federal Poverty Level of $12,140 for a single adult and $25,100 for a family of four.

Household Survival Budget, Virginia, Average, 2018

	SINGLE ADULT	SENIOR (1 ADULT)	2 ADULTS, 1 INFANT, 1 PRESCHOOLER
Monthly Costs			
Housing	$935	$935	$1,207
Child Care	$-	$-	$1,204
Food	$277	$236	$839
Transportation	$319	$275	$777
Health Care	$230	$470	$877
Technology	$55	$55	$75
Miscellaneous	$224	$241	$595
Taxes	$425	$434	$970
Monthly Total	$2,465	$2,646	$6,544
ANNUAL TOTAL	$29,580	$31,752	$78,528
Hourly Wage*	*$14.79*	*$15.88*	*$39.26*

**Full-time wage required to support this budget*

Virginia Counties, 2018

COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Accomack	13,401	51%
Albemarle	41,956	46%
Alexandria City	71,740	37%
Alleghany	6,741	44%
Amelia	4,789	38%
Amherst	12,044	56%
Appomattox	6,095	50%
Arlington	109,940	30%
Augusta	29,297	37%
Bath	1,999	39%
Bedford	31,206	46%

Virginia Counties, 2018

COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Bland	2,523	40%
Botetourt	13,161	36%
Bristol City	7,402	51%
Brunswick	6,048	53%
Buchanan	8,871	61%
Buckingham	5,827	56%
Buena Vista City	2,539	56%
Campbell	22,957	56%
Caroline	10,911	44%
Carroll	12,375	51%
Charles City	2,856	42%

Virginia Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Charlotte	4,543	57%
Charlottesville City	18,613	51%
Chesapeake City	86,122	37%
Chesterfield	126,748	32%
Clarke	5,639	41%
Colonial Heights City	7,054	51%
Covington City	2,409	49%
Craig	2,266	39%
Culpeper	16,903	37%
Cumberland	3,963	49%
Danville City	18,479	52%
Dickenson	5,841	65%
Dinwiddie	10,391	51%
Emporia City	2,119	64%
Essex	4,463	42%
Fairfax	396,628	28%
Fairfax City	8,553	32%
Falls Church City	5,262	24%
Fauquier	24,333	36%
Floyd	6,480	43%
Fluvanna	9,842	46%
Franklin	23,104	40%
Franklin City	3,526	53%
Frederick	30,973	36%
Fredericksburg City	10,582	54%
Galax City	2,742	60%
Giles	6,987	40%
Gloucester	14,759	32%
Goochland	8,426	29%
Grayson	6,542	57%
Greene	7,357	43%
Greensville	3,688	49%
Halifax	14,025	49%

Virginia Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Hampton City	54,800	43%
Hanover	38,599	29%
Harrisonburg City	16,768	61%
Henrico	129,408	42%
Henry	21,598	52%
Highland	1,123	40%
Hopewell City	9,193	60%
Isle of Wight	14,304	35%
James City	28,766	33%
King and Queen	2,826	42%
King George	9,103	26%
King William	6,170	38%
Lancaster	5,142	44%
Lee	9,149	62%
Lexington City	1,984	53%
Loudoun	133,417	23%
Louisa	13,575	37%
Lunenburg	4,331	54%
Lynchburg City	28,500	67%
Madison	5,078	43%
Manassas City	12,749	47%
Manassas Park City	4,706	63%
Martinsville City	5,630	56%
Mathews	3,908	36%
Mecklenburg	11,815	53%
Middlesex	4,454	43%
Montgomery	34,585	54%
Nelson	6,445	40%
New Kent	7,754	33%
Newport News City	71,291	49%
Norfolk City	89,338	57%
Northampton	5,151	49%
Northumberland	5,686	37%

Virginia Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Norton City	1,819	55%
Nottoway	5,542	55%
Orange	13,453	34%
Page	9,338	48%
Patrick	7,685	49%
Petersburg City	13,274	66%
Pittsylvania	26,330	45%
Poquoson City	4,615	29%
Portsmouth City	34,578	57%
Powhatan	10,178	30%
Prince Edward	7,187	57%
Prince George	11,415	53%
Prince William	143,861	32%
Pulaski	14,525	39%
Radford City	5,438	67%
Rappahannock	2,976	35%
Richmond	3,139	52%
Richmond City	91,359	52%
Roanoke	38,343	36%
Roanoke City	41,353	57%
Rockbridge	8,979	43%
Rockingham	31,462	36%
Russell	10,965	53%
Salem City	9,881	49%
Scott	8,767	53%
Shenandoah	17,315	40%
Smyth	12,881	50%
Southampton	6,522	44%
Spotsylvania	45,223	37%
Stafford	48,418	29%
Staunton City	10,520	45%
Suffolk City	34,890	39%
Surry	2,760	35%

Virginia Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Sussex	3,814	52%
Tazewell	17,042	51%
Virginia Beach City	172,183	36%
Warren	14,379	33%
Washington	22,331	46%
Waynesboro City	9,144	48%
Westmoreland	7,612	40%
Williamsburg City	4,670	53%
Winchester City	10,554	54%
Wise	15,126	55%
Wythe	11,955	44%
York	24,617	29%

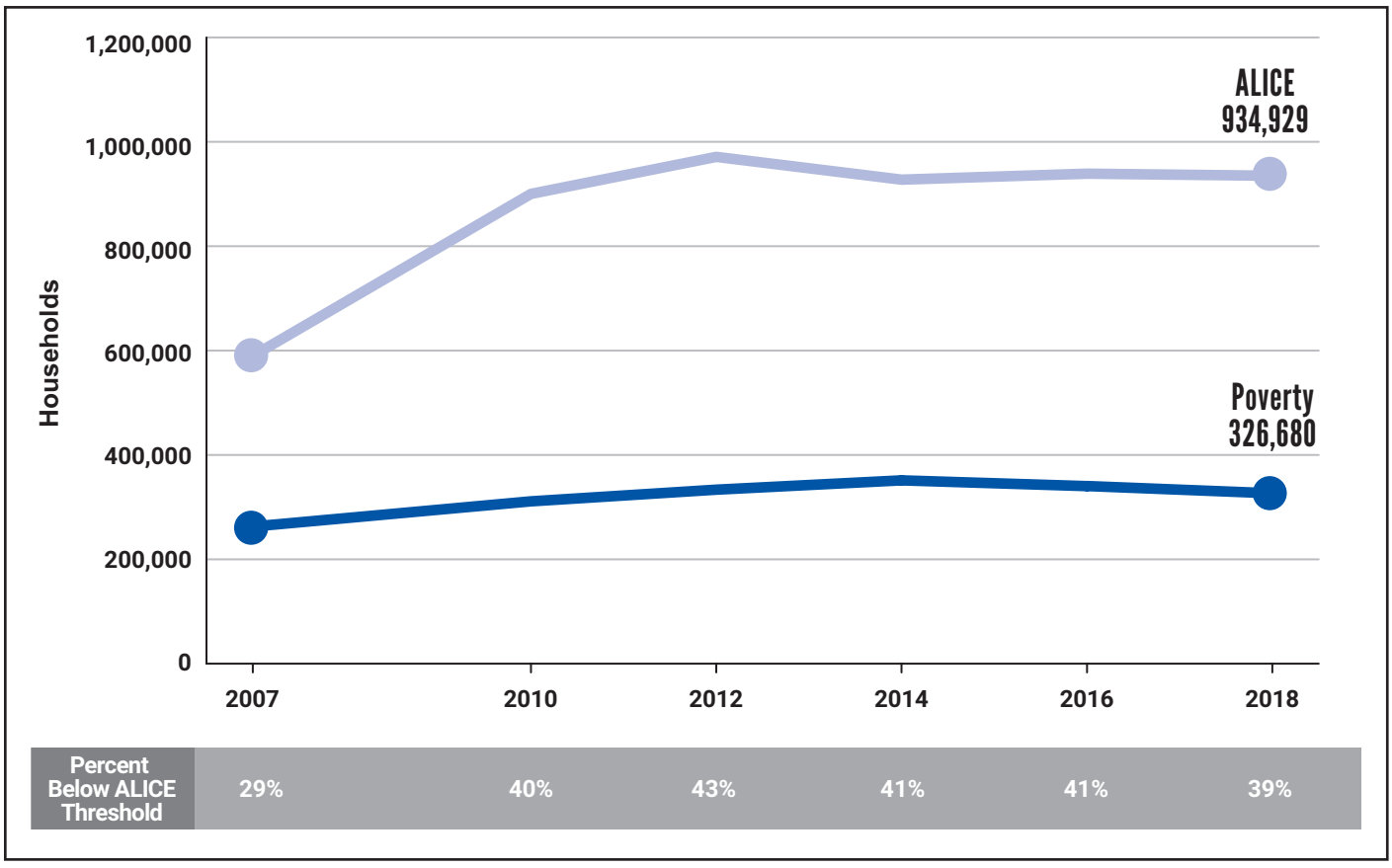
Sources: Point-in-Time Data: *American Community Survey, 2018.* ***ALICE Demographics****: ALICE Threshold, 2018; American Community Survey, 2018.* ***Labor Status****: American Community Survey, 2018; Federal Reserve Bank of St. Louis, 2018.* ***Budget:*** *AAA, 2018; Agency for Healthcare Research and Quality, 2018; American Community Survey, 2018; Bureau of Labor Statistics, 2018—Consumer Expenditure Surveys; Bureau of Labor Statistics, 2019—Consumer Expenditure Survey; Bureau of Labor Statistics, 2018—Occupational Employment Statistics; Centers for Medicare & Medicaid Services, 2016—Medicare Current Beneficiary Survey; Centers for Medicare & Medicaid Services, 2019; Centers for Medicare & Medicaid Services, 2019—Medicare - Chronic Conditions; Federal Highway Administration, 2017; Feeding America, 2019; Fowler, 2019; Internal Revenue Service, 2020; Internal Revenue Service—FICA, 2020; Medicare.gov; Scarboro, 2018; The Zebra, 2018; Theis, 2018; U.S. Department of Agriculture, 2018—Official USDA Food Plans; U.S. Department of Housing and Urban Development, 2018—Fair Market Rents; Walczak, 2019. For more details, see the Methodology Overview at www.UnitedForALICE.org/Methodology*

WHO IS ALICE?

With income above the Federal Poverty Level (FPL) but below a basic survival threshold — defined as the ALICE Threshold — ALICE households earn too much to qualify as "poor" but are still unable to make ends meet. They often work as cashiers, nursing assistants, office clerks, servers, laborers, and security guards. These types of jobs are vital to keeping Virginia's economy running smoothly, but they do not provide adequate wages to cover the basics of housing, child care, food, transportation, health care, and technology for these ALICE workers and their families.

Between 2007 and 2018 — and particularly from 2010 to 2018 — the number of Virginia households in poverty remained relatively flat, comprising approximately 10% of all households. The total number of households in the state increased 8%, from 2,932,234 in 2007 to 3,169,804 in 2018. Yet the number of ALICE households in Virginia increased significantly more (59% from 2007 to 2018), with their share of all households rising from 20% in 2007 to 29% in 2018. Overall, since 2010, the percentage of households living below the ALICE Threshold (ALICE and poverty-level households combined) has hovered around 41%, peaking in 2012 at 43%, and dropping down to 39% in 2018 (Figure 1).

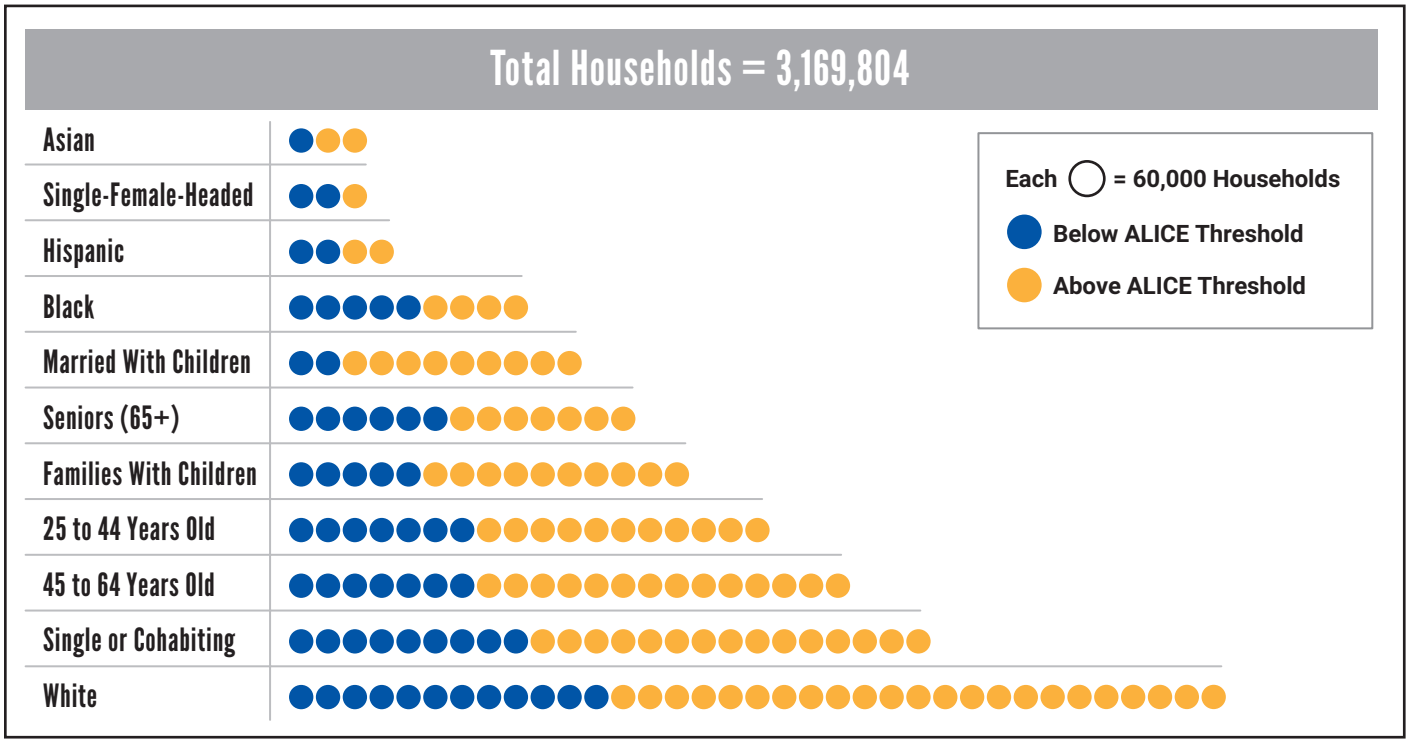
Figure 1.
Households by Income, Virginia, 2007-2018



Sources: ALICE Threshold, 2007-2018; American Community Survey, 2007-2018

ALICE households live in every county in Virginia — urban, suburban, and rural — and they include people of all genders, ages, and races/ethnicities, across all household types. Figure 2 shows that in 2018, the largest numbers of households below the ALICE Threshold were in the largest demographic groups in Virginia — namely, White households, single or cohabiting households (without children or seniors), and households headed by someone in their prime working years (ages 25-64). Among families with children — another of the state's biggest groups — married-parent families were the largest subgroup and accounted for 41% of families with children living below the ALICE Threshold.

Figure 2.
Household Types by Income, Largest Groups, Virginia, 2018

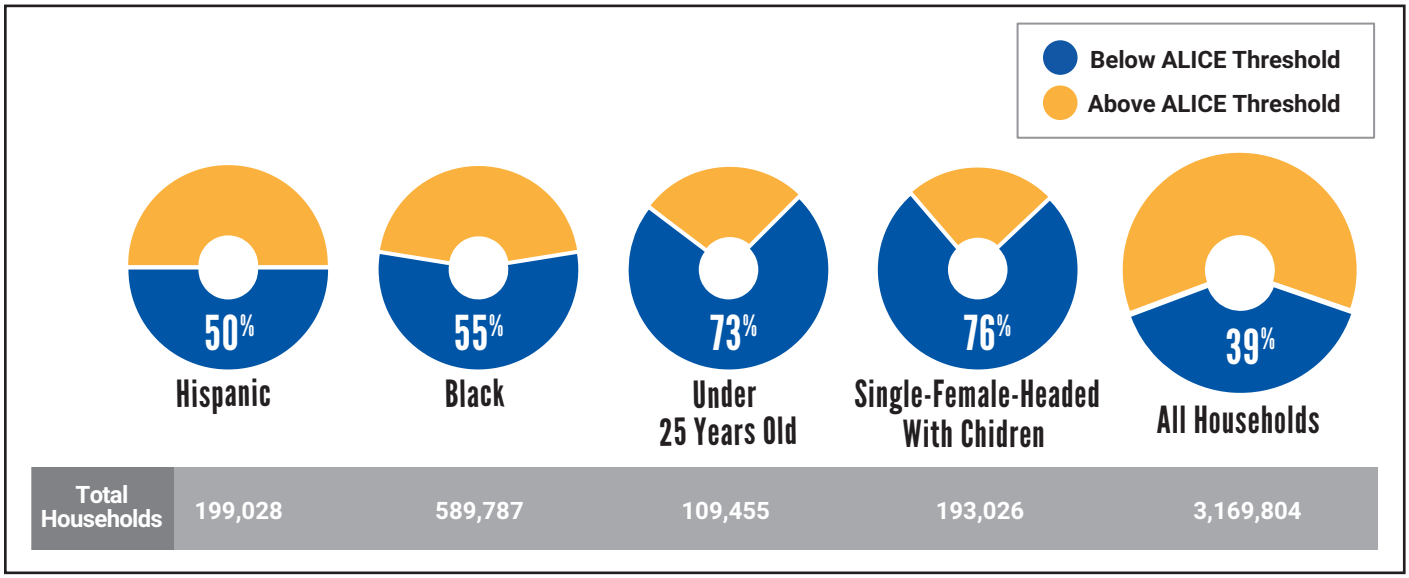


Note: The groups shown in this figure overlap across categories (age, household type, race/ethnicity). Within the race/ethnicity category, all racial categories except Two or More Races are for one race alone. Race and ethnicity are overlapping categories; in this Report, the Asian, Black, Hawaiian (includes other Pacific Islanders), and Two or More Races groups may include Hispanic households. The White group includes only White, non-Hispanic households. The Hispanic group may include households of any race. Because household poverty data is not available for the American Community Survey's race/ethnicity categories, annual income below $15,000 is used as a proxy.

Sources: ALICE Threshold, 2018; American Community Survey, 2018

Another way to examine the data is to look at the proportion of each group that is below the ALICE Threshold. Overall, 39% of households in Virginia had income below the ALICE Threshold in 2018. But many smaller groups had a disproportionately high percentage of families below the ALICE Threshold, including single-female-headed households, young households (headed by someone under age 25), and Black and Hispanic households (Figure 3).

Figure 3.
Select Household Groups by Income, Virginia, 2018



Sources: ALICE Threshold, 2018; American Community Survey, 2018

TRENDS: HOUSEHOLD DEMOGRAPHICS

A growing number of households live on the edge of the ALICE Threshold. For these households, even a small increase in the cost of housing or a decrease in work hours can mean the difference between being financially stable and being ALICE — or between being ALICE and falling into poverty. **In Virginia, 514,487 households (16%) were on the cusp of the ALICE Threshold in 2018**, with earnings just above or below it.[3] This matters not only for families, but also for the Virginia economy: Small increases in regular bills like rent, food, or gasoline, a decrease in wages or hours worked, or an unexpected emergency, such as a factory closing or a natural disaster, could destabilize a large number of households.

Virginia is increasingly diverse. While all of the state's racial/ethnic groups grew between 2010 and 2018, the trajectories for growth and financial hardship differed. Hispanic and Asian households grew at the fastest rates (30% and 23%, respectively), Black households grew by 6%, and White households only grew by 1%. Accordingly, the proportion of all households that were White decreased from 70% to 67% from 2010 to 2018.

All racial/ethnic groups saw an increase in the number of households below the ALICE Threshold from 2010 to 2018, although Hispanic households increased at a much higher rate, by 22%. The age group with the largest increase in households below the ALICE Threshold was seniors (65+ years old) across all racial/ethnic groups. Young households (under 25 years old) below the ALICE threshold decreased in all racial/ethnic groups, except for young Asian households, which increased by 10%.

The state's urban areas in the northern region saw the greatest growth in the total number of households, largely in response to the job opportunities there. In rural areas in the southern and western regions, population growth is slowing down. Counties and cities with the largest populations are expected to experience the most growth in coming years, and will grow younger and more diverse, compared to rural areas that are aging and experiencing a declining population.[4]

Virginia's household structure continues to change. Married-parent families with children are no longer the most common household type in the state. In 2018, single or cohabiting adults under age 65 with no children under age 18 made up the largest proportion of households in Virginia (47%), as well as the largest share of households below the ALICE Threshold (45%). Nationally, the number of cohabiting adults, in particular, has more than doubled between 1996 and 2017, and these partners tend to have higher levels of education and be more racially diverse today than cohabiting adults 20 years ago.[5]

Baby boomers and millennials, the two largest population bubbles, are getting older. This natural aging of the population is increasing the number of seniors (as more boomers pass the age of 65). It is also reducing the proportion of both college-age students and families with children, as millennials have passed traditional college age, are having fewer children, and waiting longer than previous generations to have them.[6]

Among seniors, there are three trends. The White population in Virginia is older than other racial/ethnic groups and will continue to account for an increasing share of the senior population. Having lived through a decade of financial challenges since the Great Recession, more seniors will become ALICE. Seniors also make up a larger portion of households in rural areas, where they will continue to face additional challenges, such as access to transportation, health care, and caregiving. A 2020 report comparing the "quality of senior living" throughout the U.S. ranked Virginia 37th out of 50 states, with low scores for higher housing costs, fewer health care providers (non-primary care), and higher preventable hospitalization rates. However, two cities in Virginia ranked among the best cities in the country for seniors: Fredericksburg ranked 2nd, just behind San Francisco, and Alexandria ranked 18th.[7]

Inequality in income and wealth will continue to rise as wage growth and job stability in high-wage jobs greatly outpace growth and stability at the lower end. Nationwide, from the late 1940s to the early 1970s, incomes across the income distribution grew at nearly the same pace. Then, beginning in the 1970s, income disparities began to widen: The average income for the top 1% increased over five times more than that of the middle 60% and over three times more than that of the bottom fifth, from 1979 to 2016.[8] The gap in wealth (savings and assets) is even greater. Unable to save, ALICE families do not have the means to build assets, let alone catch up to those who already have assets (especially those who have been building assets for generations). ALICE families also face more barriers that, when compounded, create an even bigger wealth gap. These include issues like lower pay for women, racial/ethnic discrimination in homeownership, and student loan debt.[9]

THE COST OF LIVING IN VIRGINIA

Traditional economic measures systematically underestimate the actual cost of basic needs and their rate of increase over time, concealing important aspects of the local and national economy. To better capture the reality of how much income households need to live and work in the modern economy in each county in Virginia, this Report includes the **ALICE Household Budgets**. In addition, the Report presents the **ALICE Essentials Index**, a standardized national measure that captures change over time in the cost of household essentials that ALICE households purchase. Together, these tools provide a more accurate estimate of the cost of living and a clearer way to track change over time.

THE ALICE HOUSEHOLD BUDGETS

United For ALICE provides three basic budgets for all counties in Virginia. Each budget can be calculated for various household types.

- The **ALICE Household Survival Budget** is an estimate of the minimal total cost of household essentials — housing, child care, food, transportation, health care, and technology, plus taxes and a miscellaneous contingency fund equal to 10% of the budget. It does not include savings, auto repairs, cable service, travel, laundry costs, or amenities such as holiday gifts or dinner at a restaurant that many families take for granted.

- The **Senior Survival Budget,** new to this Report, adjusts the Household Survival Budget to reflect the fact that seniors have lower food costs than younger adults, travel fewer miles for work and family responsibilities, and have increasing health needs and out-of-pocket health care expenses.

- For comparison to a more sustainable budget, the **ALICE Household Stability Budget** estimates the higher costs of maintaining a viable household over time, and it is the only ALICE budget to include a savings category, equal to 10% of the budget.

The actual cost of household basics in every county in Virginia is well above the Federal Poverty Level (FPL) for all household sizes and types. For a single adult, the FPL was $12,140 per year in 2018, but the average Household Survival Budget in Virginia was $29,580 per year.[10] For a single senior, the Senior Survival Budget was even higher at $31,752 per year, primarily due to increased health needs of seniors. (Despite having Medicare, seniors have greater out-of-pocket health care costs, largely due to chronic health issues like heart disease and diabetes.) All budgets were significantly lower than the Household Stability Budget, which reached $53,400 per year for a single adult (Figure 4).

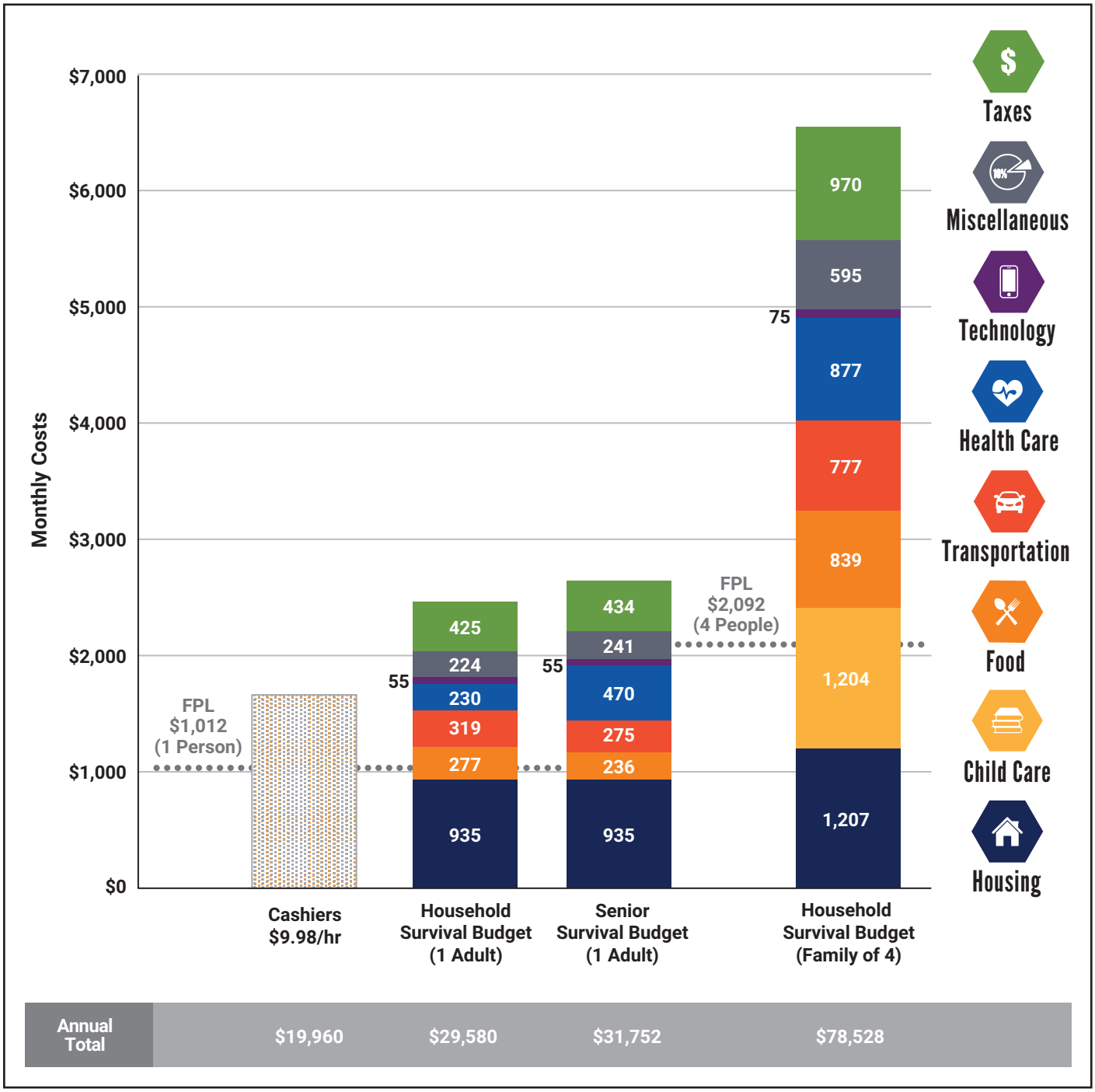
The gaps are even larger for families. The FPL for a four-person family was $25,100 in 2018, while the Household Survival Budget for a family with two adults, an infant, and a four-year-old was $78,528.[11]

The hourly wages needed to support these budgets were $14.79 for the single adult Survival Budget; $15.88 for the Senior Survival Budget; and $39.26 for one worker or $19.63 each for two workers for the Survival Budget for a family of four. To put these budgets in perspective, the median hourly wage for the most common occupation in Virginia, cashier, was $9.98 in 2018, or $19,960 per year if full time, year-round — not enough to support any of the ALICE budgets.[12]

Public assistance programs are based on the FPL, but the FPL is not enough for a household to cover even its most minimal costs, as shown by the comparison to the Household Survival Budget in Figure 4. This means that assistance programs serve far fewer households than actually need assistance, even in a strong economy.

To see the details of each ALICE budget for different household types, visit UnitedForALICE.org/Virginia

Figure 4.
Budget Comparison, Virginia, 2018



Note: The FPL is a total; there is no breakdown of how that amount is allocated by budget category.

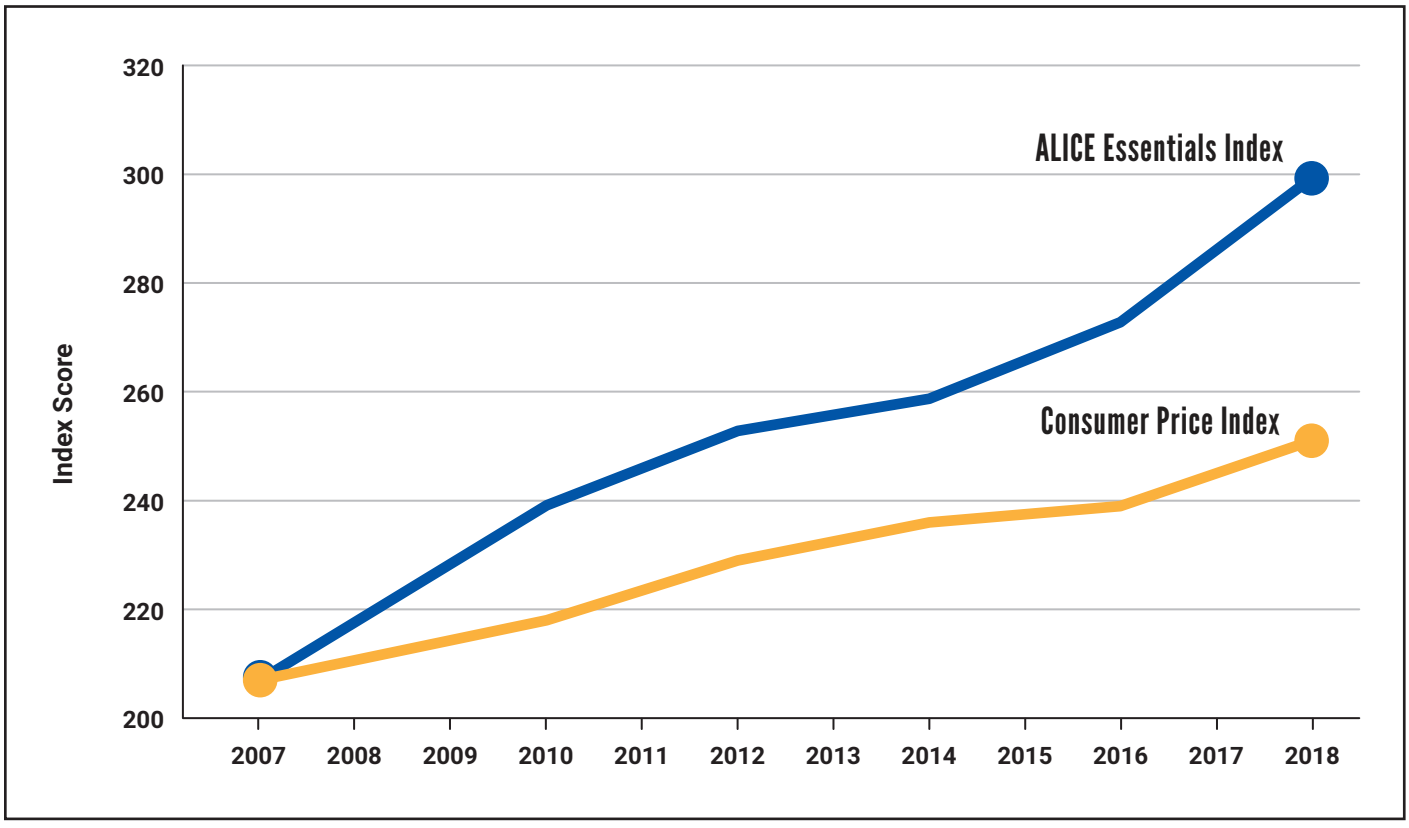
Sources: AAA, 2018; Agency for Healthcare Research and Quality, 2018; American Community Survey, 2018; Bureau of Labor Statistics, 2018—Consumer Expenditure Surveys; Bureau of Labor Statistics, 2019—Consumer Expenditure Survey; Bureau of Labor Statistics, 2018—Occupational Employment Statistics; Centers for Medicare & Medicaid Services, 2016—Medicare Current Beneficiary Survey; Centers for Medicare & Medicaid Services, 2019; Centers for Medicare & Medicaid Services, 2019—Medicare - Chronic Conditions; Federal Highway Administration, 2017; Feeding America, 2019; Fowler, 2019; Internal Revenue Service, 2020; Internal Revenue Service—FICA, 2020; Medicare.gov; Scarboro, 2018; The Zebra, 2018; Theis, 2018; U.S. Department of Agriculture, 2018—Official USDA Food Plans; U.S. Department of Housing and Urban Development, 2018—Fair Market Rents; Walczak, 2019. For more details, see the Methodology Overview at UnitedForALICE.org/Methodology[13]

THE ALICE ESSENTIALS INDEX

Based on items in the Household Survival Budget, the ALICE Essentials Index measures the change over time in the costs of household essentials — a much narrower definition than the more common rate of inflation based on the BLS Consumer Price Index (CPI). While the CPI covers a large group of goods and services that urban consumers buy regularly (housing, food and beverages, transportation, medical care, apparel, recreation, education, and communication services), the ALICE Essentials Index includes only essential household items (housing, child care, food, transportation, health care, and a smartphone plan). The ALICE Essentials Index is also calculated for both urban and rural areas, while the CPI only tracks inflation based on a select number of metropolitan (urban) counties.[14]

Across the country, the ALICE Essentials Index has increased faster than the CPI over the last decade (Figure 5). From 2007 to 2018, the average annual rate of increase was 3.3% annually in urban areas and 3.4% in rural areas, while the CPI reported an annual inflation rate of 1.8%.[15] This difference is primarily due to the fact that the costs of basics, especially housing and health care, have increased, while the costs of other items — notably manufactured goods, from apparel to cars — have remained relatively flat. And while basic household goods were 18% to 22% more expensive in urban areas than in rural areas, those costs increased at nearly the same rate in both areas during this period.

Figure 5.
Consumer Price Index and ALICE Essentials Index, United States, 2007-2018



Sources: ALICE Essentials Index, 2007- 2018; Bureau of Labor Statistics—Consumer Price Index, 2007-2018. For more information, visit UnitedForALICE.org/Essentials-Index

The difference between these two cost-of-living measures is more than an academic question. The CPI is used to measure inflation and monitor monetary policy. It also determines the rate at which a wide range of government program levels and benefits are increased, including Social Security, veterans' and Federal Civil Service retirees' benefits, government assistance programs, the FPL, income tax brackets, and tax credits like the Earned Income Tax Credit (EITC).[16] But the ALICE Essentials Index shows that from 2007 to 2018, the CPI considerably underestimated the increase in the cost of living across the country.

TRENDS: COST OF LIVING

The cost of living for ALICE is growing significantly in both urban and rural areas, often driven by the cost of housing. In Virginia, rising costs in urban areas — notably, the metropolitan areas of Alexandria and Arlington — are due to rapid population growth and increasing demand for low-cost, urban rental units (especially among millennials and seniors). For example, between 2000 and 2018, there was an 88% decline in affordable rental units in Alexandria. This trend will continue as long as incomes do not keep pace with the increase in housing costs. And while the overall cost of living in rural America is lower than in metro areas, expenses — especially housing — are rising at similar rates in both areas. Nationwide, households that are severely rent burdened (with rent accounting for more than 50% of their income) are projected to grow by at least 11%, to 13.1 million households, by 2025.[17]

Commuting times will continue to increase, as will demand for alternative transportation options. In metro areas, high housing costs and urban sprawl push workers farther from their jobs, while living in rural areas often requires traveling a greater distance for better employment opportunities. Long commute times have a negative impact on health, job retention, and productivity. These pressures — along with the cost of owning and maintaining a car — also increase demand for both traditional and new public transportation options (e.g., trains and buses, rideshares, and self-driving vehicles).[18]

The child care industry will face new challenges, and so will parents. The number of Virginia families with children has not decreased by much so far, but it is projected to fall further in the near future. As that happens, it will be more difficult for child care centers to stay in business, making child care harder to find and more expensive, especially in less populated areas. Since single-parent families are still more likely to be below the ALICE Threshold, they will also struggle to afford quality child care. Compounding this issue is the fact that low-paid child care workers are ALICE as well (with a median hourly wage of $10.68 in Virginia).[19] The overall trend, then, is toward fewer families with children but more who are struggling.

> *"In 2018, households headed by adults under the age of 25 were more likely to be below the ALICE Threshold compared to other age groups in Virginia, and they often struggled to put food on the table."*

Food insecurity is increasing among young adults and seniors. In 2018, households headed by adults under the age of 25 were more likely to be below the ALICE Threshold compared to other age groups in Virginia, and they often struggled to put food on the table. For example, reports consistently find higher rates of food insecurity among college students. There is also growing food insecurity at the other end of the age spectrum, with a projected 8 million food-insecure seniors nationwide by 2050. Compared to other seniors, food-insecure seniors are more than twice as likely to have depression, 91% more likely to have asthma, 66% more likely to have had a heart attack, and 57% more likely to have congestive heart failure. Public benefits help but do not eliminate the need for emergency assistance measures, such as food pantries.[20]

College students across the country are facing greater challenges in meeting living expenses, despite the fact that increasing numbers of students are working full or part time. Students often rely on multiple sources of financial support, including financial aid, student loans, and assistance from parents or other family members to cover their living expenses. Yet even with these types of financial help, many students need to work while in school; in particular, more than two-thirds of students enrolled in community colleges work full or part time.[21] In a recent financial wellness survey, 56% of students report paying for college using money from their current employment, and 31% of students pay for college with credit cards, leading to accumulation of increased debt.[22] Working long hours

to earn more income comes at a price, as it can interfere with academic performance and ultimately the likelihood of obtaining a degree.[23] Students report that two of the major obstacles to academic success are juggling work with school and other responsibilities and difficulty meeting expenses.[24] For more information, see the 2019 United For ALICE Report, *The Consequences of Insufficient Household Income*.

Gaps in health based on demographic, environmental, and socioeconomic factors will continue to grow. Volatility in health insurance availability and coverage, increasing out-of-pocket costs — even for those with employer-sponsored programs — and shortages of health care providers (especially in rural areas) make it harder for many families to get the health care they need.[25] According to the Commonwealth Fund's 2018 survey of state health systems, Virginia ranked 28th based on factors such as access and affordability, prevention and treatment, and the disparity in care between low-income and higher-income patients.[26] These disparities will grow with new but expensive advances in medicine, compounded exposure to environmental hazards and public health crises for many low-income households, and a persistent context of discrimination and institutionalized racism in Virginia and across the country.[27]

Natural and human-made disasters will continue to impact ALICE households disproportionately. Across Virginia, the increasing impact of these incidents – from floods and wildfires to pandemics – is felt most acutely by ALICE households and their surrounding communities. With minimal job security and little or no savings, ALICE families feel the impact of an economic disruption almost immediately as hourly paid workers suffer lost wages right away. ALICE households are more vulnerable during natural disasters as they often live in communities with fewer resources, and housing that is more susceptible to flooding, fire, and other hazards. With no financial cushion, ALICE workers struggle to repair damage, recover from illness, and pay ongoing bills. At the same time, ALICE workers are essential to disaster recovery efforts in both infrastructure repair and health care, and they are often forced to choose between caring for their families and ensuring community recovery. All of these costs are added to the increased risk of physical harm ALICE families face if they cannot afford to flee an oncoming natural disaster or take necessary precautions during a public health crisis.[28]

Financial instability will mean additional costs for ALICE households. The costs of financial instability are cumulative and intensify over time. Skimping on essentials, from food to health care, leads to greater long-term problems (see United For ALICE's 2019 Report *The Consequences of Insufficient Household Income*). Failure to pay bills on time leads to fees, penalties, and low credit scores, which in turn increase interest rates, insurance rates, and costs for other financial transactions (from check-cashing fees to payday cards).[29] Unexpected expenses can intensify these impacts. In 2017, only 66% of Virginia households had set aside money in the prior 12 months that could be used for unexpected expenses or emergencies such as illness or the loss of a job. Though this was well above the national rate of 42%, it still leaves more than one third of Virginians without any financial cushion. Without enough income to cover current and unexpected expenses, ALICE households cannot save for future expenses like education, retirement, or a down payment on a house.[30]

THE CHANGING LANDSCAPE OF WORK IN VIRGINIA

ALICE workers play an essential role in Virginia's economy but have not benefited from many of the state's recent economic gains — a reality that is not captured by traditional economic measures. This section breaks down labor force data in new ways, and in so doing highlights the challenges ALICE workers face: the declining power of wages to keep up with the cost of living, greater dependence on hourly wages, the high number of adults out of the labor force, and increased economic risk for workers.

With a rising GDP and the lowest unemployment since 2010, Virginia appeared to have a robust economic profile in 2018, with only 3% of adults actively looking but unable to find work. Like much of the rest of the country, the Commonwealth is moving from a manufacturing-based economy to a service-based economy. In addition, Virginia's increased diversification and growth in other sectors, such as professional and technical sectors, and decreasing dependence on the government sector, helped improve economic conditions overall.[31]

Opportunities for work and better wages varied considerably throughout the different regions of the state in 2018. Jobs were concentrated in Arlington and Alexandria, Hampton Roads, and the Capital Region, which accounted for more than 60% of the state's total employment and almost 70% of total wages. The economic strength of this part of the state was attributed to a highly educated and skilled workforce and growth in the professional and business services industry, which surpassed the government sector in 2017. Central parts of the state also benefited from investment and job gains in manufacturing, leisure and hospitality, and construction. In contrast, job growth was sluggish in rural areas of the state due to an aging workforce and a decline in local industries.[32]

Despite the improved overall economic landscape in 2018, economic disparities existed within regions. Virginia was one of nine states in the U.S. that experienced a widening of income inequality in 2018.[33] And while growth in jobs and wages was gaining, there was still a preponderance of low-wage jobs that could not keep up with the increase in the cost of the basic household budget (Figure 6).

> *"Virginia was one of nine states in the U.S. that experienced a widening of income inequality in 2018."*

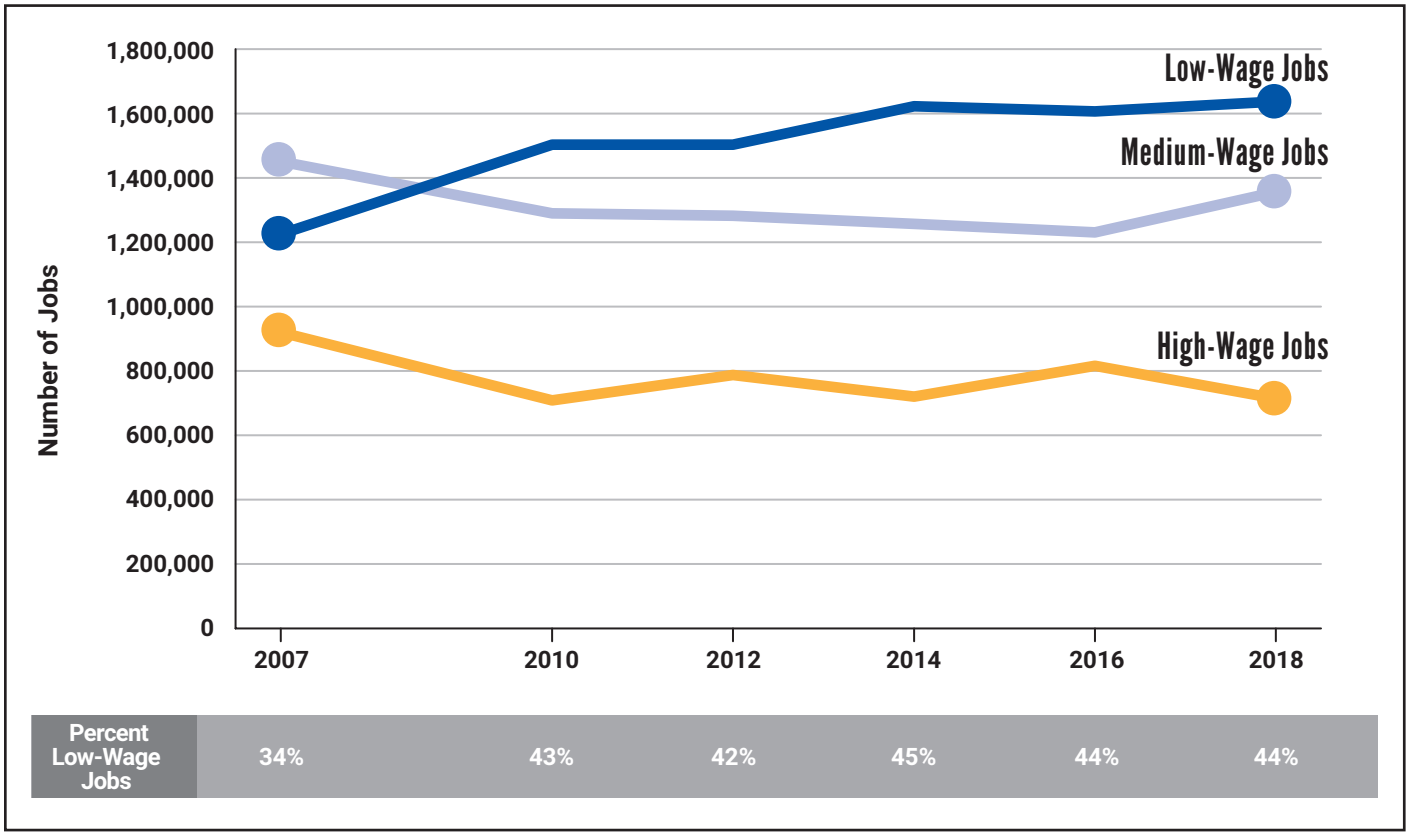
Figure 6 illustrates the following trends in wages compared to the cost of living in Virginia from 2007 to 2018:

- Low-wage jobs (dark-blue line) are defined as those paying less than the wage needed for two workers to afford the family Household Survival Budget (which includes costs for two adults, an infant, and a four-year-old). In 2007, this was less than $13.68 per hour, per worker; by 2018, the wage required had increased to $19.63 per hour, per worker. The number of low-wage jobs increased by 34% during that period, and accounted for the largest number of jobs in Virginia in 2018. This shows that, even with two earners working full time, it is not only possible but common for households to fall below the ALICE Threshold.

- Medium-wage jobs (light-blue line) allow two workers to afford a family Household Survival Budget. In 2007, these were jobs that paid between $13.68 and $27.35 per hour per worker; by 2018, wages for these jobs were between $19.63 and $39.26 per hour. The number of medium-wage jobs decreased by 7% from 2007 to 2018.

- High-wage jobs (gold line) allow one worker to afford a family Household Survival Budget. In 2007, the wage required was $27.35 per hour or more; by 2018, the wage required had increased to $39.26 per hour. The number of high-wage jobs decreased by 22% between 2007 and 2018.[34]

Figure 6.
Number of Jobs by Wage Level, Virginia, 2007-2018



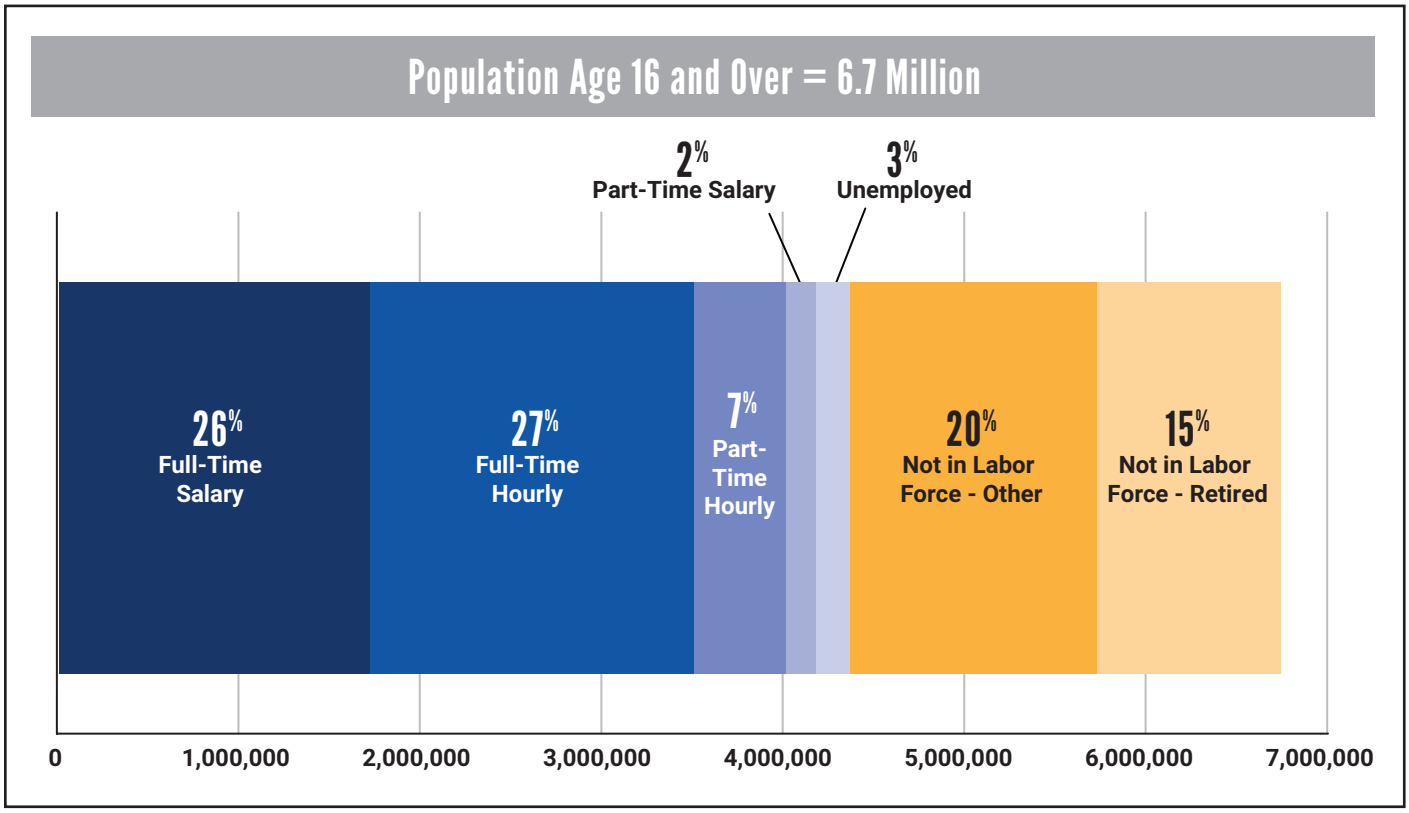
Note: Wage levels are defined by their relation to the Household Survival Budget. Dark blue = Job cannot support family Household Survival Budget with two earners. Light blue = Job supports family Household Survival Budget with one earner.

Sources: ALICE Household Survival Budget, 2007-2018 ; Bureau of Labor Statistics, Labor Force Statistics, 2007-2018—Occupational Employment Statistics

THE NEW LABOR FORCE

A 2018 overview of the labor status of Virginia's 6.7 million working-age adults (people age 16 and over) shows that 65% of adults were in the labor force (blue bars in Figure 7), yet more than half of them were workers who are paid hourly. In addition, 35% of adults were outside the labor force (gold bars in Figure 7).[35]

Figure 7.
Labor Status, Population Age 16 and Over, Virginia, 2018



Note: Data for full- and part-time jobs is only available at the national level; these national rates (51% of full-time workers and 75% of part-time workers paid hourly) have been applied to the total Virginia workforce to calculate the breakdown shown in this figure. Full-time represents a minimum of 35 hours per week at one or more jobs for 48 weeks per year.

Sources: American Community Survey, 2018; Federal Reserve Bank of St. Louis, 2018

Though the majority of adults in Virginia were working in 2018 and most households had at least one worker, only 26% of working-age adults had the security of a full-time job with a salary. The rest were paid hourly and/or worked part time.[36]

Hourly Work and the Gig Economy

Employers' increasing reliance on hourly workers is typically associated with freelance "gig economy" jobs (like rideshare driving or on-demand delivery), but even traditional jobs are now more likely to be paid by the hour, especially in retail, health care, food service, and construction.[37] These workers are more likely to have fluctuations in income, with frequent schedule changes and variation in the number of hours available for work each week/month. They are also less likely to receive benefits, such as health insurance, paid time off, family leave, or retirement benefits, especially if they work fewer than 30 hours per week at a single job.[38]

Hourly workers are more likely to have multiple sources of income. Traditional measures of employment have focused on the number of jobs held by a worker; for example, BLS estimates that only 5% of workers held two or more jobs in 2018.[39] However, in the modern economy, where many workers have their own small business, are consultants, or are contingent, temporary, freelance, or contract workers, a worker may have many sources of income that are not necessarily considered a "job." In 2019, nearly half (45%) of working adults reported having a side gig outside of their primary job.[40]

In comparison with hourly workers, salaried workers are paid an annual amount at regular pay periods, and usually receive benefits. Nationally, employers spent an average of 31% of compensation on benefits in 2018; not providing these represents significant savings to the employer. As a result, even traditional jobs are morphing as employers shift the financial risk of changes in supply and demand to employees.[41] While this is true throughout the economy, it is especially concentrated in lower-wage positions — the jobs most accessible to ALICE.

Who is Out of the Labor Force?

Of adults 16 years and older in Virginia, 15% were out of the labor force in 2018 because they were retired and another 20% were out of the labor force for other reasons (gold bars in Figure 7). This totals 35% of adults outside the labor force, a number that remained relatively consistent since 2014. Prior to 2014, the percentage of adults outside the workforce had not been this high since the late 1970s.[42] Labor force participation varied widely throughout the state, ranging from 40% in counties in Southwestern Virginia to as high as 80% in some counties in Northern Virginia.[43]

Many of those out of the labor force had stopped looking for work for a variety of reasons, such as scheduling, transportation, or child care issues. They were not included in the state's low unemployment rate, which only counts adults actively looking for work. In the 2018 economy, those out of the labor force had proven to be a large reserve of potential workers able to be drawn back into the labor force with only slightly higher wages — in effect, keeping wages low. In previous periods of low unemployment, employers have had to offer much higher wages to attract workers back into the labor force or away from other businesses.[44]

One of the largest groups of adults traditionally out of the labor force is retirees (age 65 and over and not working). In Virginia in 2018, they accounted for 15% of the population over age 16 — an unusually high percentage, in part due to the baby boomer generation aging into retirement. This number does not include the increasing number of seniors who are still working; in 2018, 23% of seniors in Virginia were still in the labor force.[45]

Those under 65 and not working accounted for another 20% of the population over age 16, and they were out of the labor force for a variety of reasons, the two most common being:

- **School:** Nationally, 77% of high school students and 52% of college students did not work in 2018. At these rates, non-working students in Virginia would account for more than one-third (38%) of the state's working-age adults out of the workforce.[46]

- **Health:** Adults with one or more health issues — an illness or disability that makes it difficult to get to work, perform some job functions, or work long hours — accounted for 20% of those out of the labor force in Virginia in 2018.[47]

The remainder of adults were out of the labor force for other reasons, including family caregiving responsibilities or limited access to transportation or child care.[48] For women 25 to 54 years old, the most common reason for not working in 2018 was in-home responsibilities — caring for children, but also, as the population of Virginia ages, caring for an aging parent or a family member with a disability or chronic health issue.[49]

ALICE JOBS: MAINTAINING THE ECONOMY

While national conversations about work often focus on the economic importance of the "innovation" sector and its high-paying jobs, the reality is that the smooth functioning of the national and Virginia economies relies on a much larger number of occupations that build and repair the infrastructure and educate and care for the past, current, and future workforce. These jobs are described as "Maintainers" by technology scholars Lee Vinsel and Andrew Russell, and they are primarily held by ALICE workers.[50] To better understand where ALICE works, we elaborate on Vinsel and Russell's concept by breaking down all occupations in Virginia into two occupational categories, each with two job types: the lower-paying Maintainer occupations, composed of Infrastructor and Nurturer jobs; and the higher-paying Innovator occupations, composed of Adaptor and Inventor jobs.

DEFINITIONS

Maintainer Occupations:

Infrastructors build and maintain the physical economy (construction, maintenance, management, administration, manufacturing, agriculture, mining, transportation, and retail).

Nurturers care for and educate the workforce (health and education, food service, arts, tourism, hospitality).

Innovator Occupations:

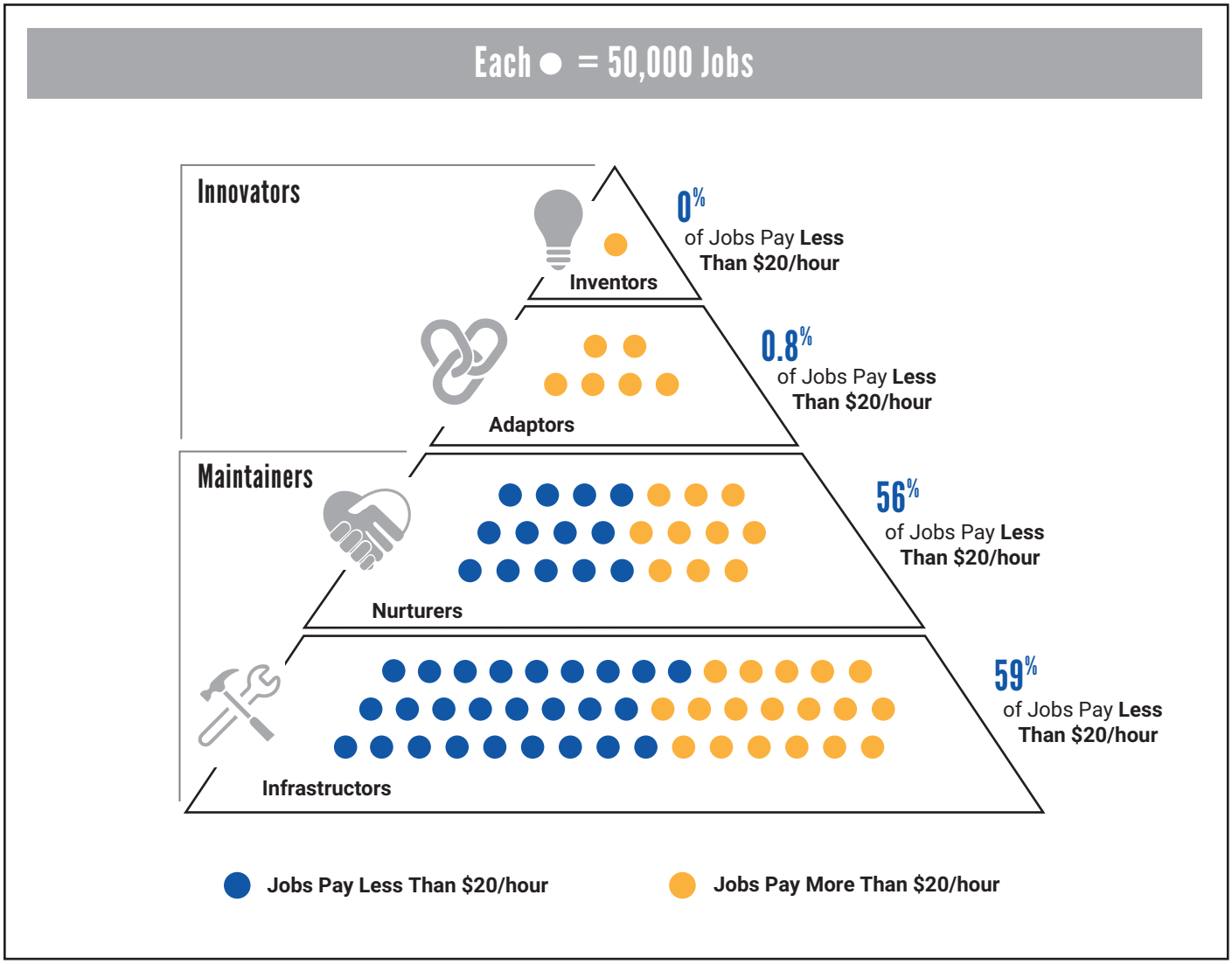
Adaptors implement existing tools or processes in new ways, responding to opportunities and changing circumstances (managers, industrial and organizational psychologists, analysts, designers, technicians, and even policymakers).

Inventors devise new processes, appliances, machines, or ideas. Before World War II, most inventors were independent entrepreneurs. Today, they are most likely engineers and scientists working in research & development, and, in some cases, higher education.

The largest employment sectors in Virginia are Maintainer occupations. The single largest industry in 2018, with 749,500 employees, was professional and business services, which is comprised largely of Infrastructor jobs. The second largest, with 722,300 employees, was government, which is comprised of both Infrastructor and Nurturer jobs. Both sectors have large shares of ALICE workers.[51] There are far fewer jobs in Innovator occupations (Adaptors and Inventors) in Virginia.

When stacked together, Virginia's occupations form a pyramid that reveals the critical role of Maintainer jobs — the jobs most accessible to ALICE — in the state economy (Figure 8). The majority of Maintainer jobs (59% of Infrastructor jobs and 56% of Nurturer jobs) pay less than $20 per hour — a wage that, if full time, year-round, provides an annual salary of $40,000, or $38,528 less than the family Household Survival Budget of $78,528. By comparison, almost all Adaptor and Inventor occupations pay more than $20 per hour.

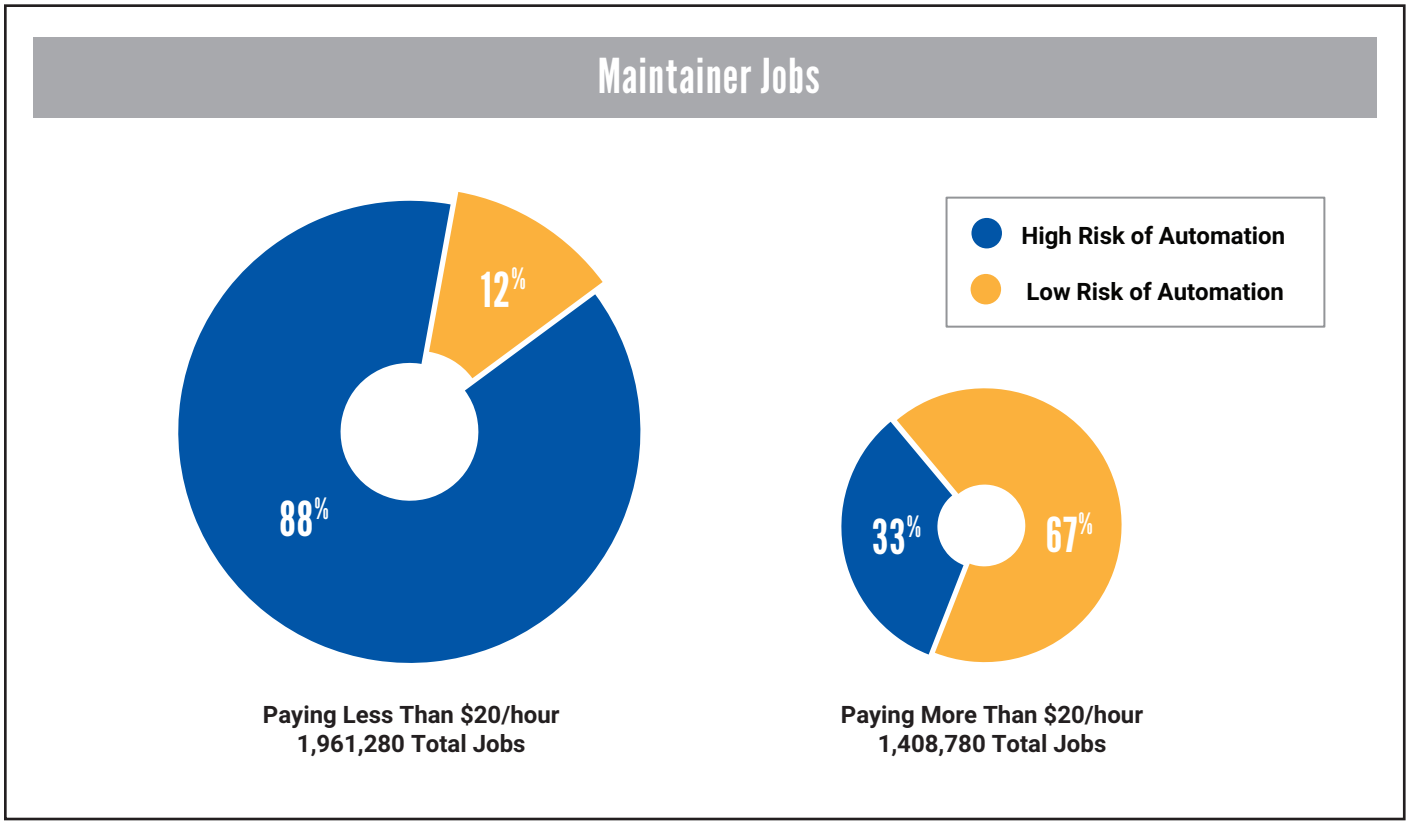
Figure 8.
Occupations by Wage and Type, Virginia, 2018



Source: Bureau of Labor Statistics, Labor Force Statistics, 2018—Occupational Employment Statistics

The precarious nature of ALICE workers' jobs is reinforced by the powerful relationship between low wages and the high risk of jobs becoming automated (defined as having a greater than 50% chance of being replaced by technology in the next decade). Jobs that pay less than $20 per hour are more likely to be replaced by technology compared to higher-paying jobs. This is especially true for Maintainer occupations, where most jobs pay less than $20 per hour and 88% of these low-paying jobs are at a high risk of automation. In comparison, only 33% of Maintainer jobs that pay more than $20 per hour are at a high risk of automation (Figure 9).

Figure 9.
Occupations by Type and Risk of Automation, Virginia, 2018



Sources: Bureau of Labor Statistics, 2018—Occupational Employment Statistics; Frey & Osborne, 2013

There are also differences in salary and risk of automation based on the type of Maintainer job. Among Infrastructor jobs, 97% of jobs that pay less than $20 per hour are at risk of automation, compared with 48% of those that pay more than $20 per hour. Among Nurturer jobs, the discrepancy is even greater: 69% of jobs paying less than $20 per hour are at risk of automation, compared with 5% of those paying more than $20 per hour.[52] Education level also impacts risk of automation; nationally, the risk for jobs that require only a high school diploma (55%) is more than double the risk for jobs that require a bachelor's degree (24%).[53]

TRENDS: THE LANDSCAPE OF WORK

Economic growth will be led by the non-traditional work and small businesses of the gig economy. As much as 94% of U.S. net employment growth in the last decade has come from alternative or contingent labor, according to a National Bureau of Economic Research report.[54] In Virginia, non-employer establishments (self-employed small businesses), which are an indicator of gig employment, increased by 13% from 2010 to 2015, and small businesses employed 1.5 million people — 47% of the private workforce — in 2015.[55] With an increasing number of workers who are contractors, work in small businesses, or rely on a combination of side gigs, the number of people experiencing gaps in income and going without benefits will also rise. Millennials are leading the way in this trend, with 48% nationally saying they earn income on the side (i.e., in addition to what they consider their primary employment), compared to 28% of baby boomers.[56] These arrangements are more volatile than traditional jobs, and workers bear the brunt of changes in demand, the price of materials, and transportation costs, as well as impacts related to cyberattacks, natural and human-made disasters, and economic downturns.[57]

The rise of automation will require a workforce with more digital skills. Rather than being replaced outright, many jobs, across all job types, will require an increasing ability to incorporate new technologies, work with data, and make data-based decisions.[58] This is particularly relevant in Northern Virginia, a primary hub for tech companies and home to many data centers; the thriving technology infrastructure here is one of the most prosperous outside of Silicon Valley.[59] ALICE workers will need to gain new skills rapidly, and that will require more on-the-job training, more flexibility to change career paths, and different kinds of education providers.[60]

The number of low-wage jobs will continue to increase, despite automation. Even though most jobs will change and evolve, a large portion will remain low-wage. For example, the wages in many Maintainer jobs are so low that it would be more expensive to automate them. Other low-wage jobs in areas like education and health care require employees to be on-site and are difficult to fully automate (although these workers will still have to learn to work with technology). From 2016 to 2026, the occupation projected to have the largest number of new jobs in Virginia is cashiers; the median wage for these jobs in 2018 was $9.98 per hour, which was not enough to support the single-adult or family Survival Budgets. Of the state's top 20 growth occupations, 73% will pay less than $15 per hour, 63% will not require any formal educational credential at all, and 13% will require only a high school diploma.[61]

Students will continue to be a significant part of the labor force. As more families face financial hardship and the cost of college continues to rise, more students will have to work while in school. Nationally, 20% of high school students, 41% of full-time college students, and 82% of part-time college students had a job in 2017.[62] What's more, despite many students being employed, 45% of college students who completed the largest annual survey of basic college needs reported having experienced food insecurity in the previous month, and 56% had experienced housing insecurity in the prior year.[63] Even with more students working, student debt will continue to increase as more students from lower-income families attend college and costs continue to rise. In Virginia, 57% of college students who graduated in 2018 were in debt with an average loan of $30,363, a 30% increase from 2010.[64]

NEXT STEPS: DATA FOR ACTION

The ALICE data highlights significant problems in the Virginia economy: stagnant wages, a rising cost of living, and 39% of the state's households still struggling to get by in 2018. However, this data can also be used to generate solutions to these problems that help ALICE households and create equity across communities. The measures of cost of living, financial hardship, and changes in the labor force presented in this Report can help stakeholders ask the right questions and make data-driven decisions. This data can help policymakers and community organizations identify gaps in community resources, and it can guide businesses in finding additional ways to assist their workforce and increase productivity both in times of economic growth and in periods of economic recovery.

This section of the Report maps the 2018 ALICE data, showing gaps in resources to help direct assistance and fill immediate needs. When analyzed in relation to broader data on health, education, and social factors, these maps help focus solutions on underlying causes of hardship, and they also highlight areas of success.

IDENTIFYING GAPS

ALICE households often live in areas with limited community resources, making it even more difficult to make ends meet. The lack of some resources has immediate and direct costs. For example, without public transportation or nearby publicly funded preschools, ALICE families pay more for transportation and child care. Other costs, such as the consequences of limited access to health care providers, open space, or libraries, accumulate over time.

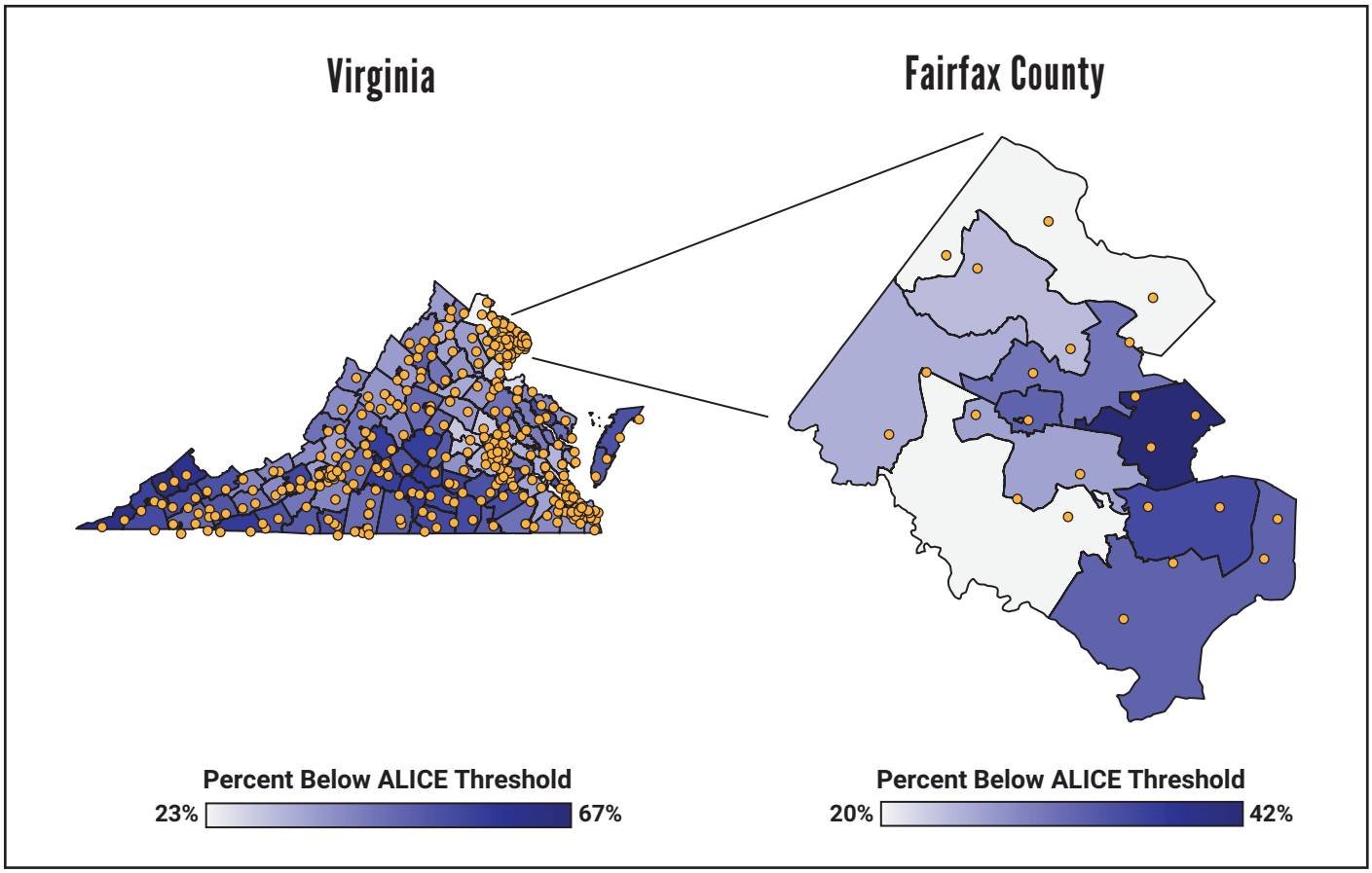
With the ALICE data tools, stakeholders can map where ALICE lives along with the location of community resources — such as public libraries or disaster-relief services — to identify gaps by town, ZIP code, or county (Figure 10). This data can help stakeholders answer targeted questions, including the following:

Do ALICE households have access to libraries?

Access to public libraries is especially important for ALICE families, because libraries provide information on social services and job opportunities, free internet and computer access, and a range of free programs, community meetings, and even 3-D printers. After a natural disaster, libraries can also serve as second responders, providing electricity, internet access, charging stations, heat or air conditioning, and current information on recovery efforts.[65] In lower-income communities, the library can provide a safe and inclusive place for individuals and families.[66] A 2019 Gallup Poll found that lower-income households (less than $40,000) visit the library more frequently than average- and higher-income households.[67]

There are 368 libraries across Virginia's 133 counties and independent cities, identified with gold dots in Figure 10 (and in an interactive feature on UnitedForALICE.org/Virginia).[68] This data can help stakeholders identify where there are gaps in needed services (such as in areas with a high percentage of ALICE households but few or no libraries) and what type of intervention might be most helpful. For example, areas with a small population but a high percentage of ALICE households may benefit more from mobile library services than a new brick-and-mortar building, or library services (like free computers) could be offered in other public buildings.

Figure 10.
Library Locations and Households Below ALICE Threshold, Virginia, 2018



Sources: ALICE Threshold, 2018; American Community Survey, 2018; The Institute of Museum and Library Services, 2019

Are the needs of ALICE households met after a natural disaster?

Mapping where ALICE households live in relation to the impact of natural disasters such as floods, hurricanes, or wildfires can help first and second responders meet critical needs. Disasters directly threaten the homes of ALICE families since more affordable housing is often located in vulnerable areas. The jobs where ALICE works are also more at risk, since low-wage and hourly paid jobs are more likely to be interrupted or lost. In addition, ALICE households have few or no savings for an emergency to begin with, and their communities often have fewer resources to assist households.[69]

Knowing where ALICE households live can help federal, state, and local governments target preparation, response, and assistance for natural disasters, and help companies plan where to deploy their workforce and support. Because ALICE households and communities do not have the same resources as their wealthier counterparts, namely insurance or savings, they will need more assistance over a longer period of time to recover. Strategies will vary by rural or urban context, the quality of the housing stock, and the age composition of the community (with the young and the elderly more dependent on care).[70]

UNDERSTANDING ALICE: HEALTH, EDUCATION, AND SOCIAL FACTORS

In most contexts, having a low income is associated with lower levels of education, higher rates of unemployment, and poorer health.[71] Communities that have been able to disrupt that association can provide important insights on how to change environments or policy to support ALICE households. By tracking where ALICE lives with other indicators, it is possible to identify counties that have overcome a challenge or bucked a trend. Stakeholders can then learn from these examples and adapt those solutions to their own areas.

Tracking relationships between ALICE households and other variables at the county level — in areas such as technology or health — can also help stakeholders ask important questions and target resources where they can have the greatest impact. To see interactive maps of socioeconomic indicators in Virginia, visit our website: UnitedForALICE.org/Virginia

Here are two possible questions:

Is internet access related to income?

Access to digital technology has exploded over the last three decades: By 2017, 91% of U.S. adults owned a computing device and 81% had a broadband internet subscription. In Virginia, 82% of households had access to the internet at home.[72] Technology has also become more important for work, community participation, and, crucially, disaster response and recovery.

But access to technology still varies by income and geography. For many families, that lack of access translates directly to reduced job opportunities, educational opportunities, health care access, and financial tools. For example, low-income adults are more likely to use their phones to search and apply for jobs; nationally, 32% of smartphone users with income below $30,000 have applied for a job on their phone, compared with 7% of smartphone users with income above $75,000. Although smartphone technology is constantly improving, many tasks are still more difficult to complete on the small screen of a smartphone as opposed to a computer (e.g., word processing, filling out applications, editing spreadsheets), and many websites still do not have a mobile version, making navigation time-consuming and difficult, or sometimes impossible.[73]

This high usage of smartphones for a critical task indicates that many low-income households have limited access to the internet at home. In Virginia, 30% of households with income below the ALICE Threshold do not have an internet subscription, compared with only 7% for households above the ALICE Threshold. Rates also vary widely by location, with limited to no access in more rural areas. The counties with both the lowest access rates and lowest income are in rural areas, where 43% of households below the ALICE Threshold do not have an internet subscription.[74] Identifying these gaps can help businesses and government provide more resources to libraries, establish training centers, or target low-cost internet plans.[75] The Governor's Commonwealth Connect plan is working to address barriers related to access, speed, and affordability of services, with the goal of providing all Virginians, including the 660,000 homes and businesses currently without access, broadband connectivity by 2028.[76]

Are drug overdoses driven by income?

Virginia, like many states across the country, experienced an increase in drug overdose deaths over the last decade, largely due to an increase in deaths due to opioid use. The total number of drug overdose deaths in Virginia more than doubled from 2007 to 2017, increasing from 721 to 1,537. Drug overdose deaths were declared a public health emergency in 2016, when the rate of fatal overdoses grew by 38% in one year. In 2018, for the first time since 2012, the number of fatal drug overdoses declined, to 1,486.[77]

Several national studies have suggested that counties with the worst economic prospects have the highest rates of substance use disorders and drug overdose hospitalizations and deaths (including but not limited to those related to opioid use). Yet people of all incomes, geographies, ages, and races/ethnicities suffer from substance use disorders.[78] In Virginia, overdose deaths have been reported in the majority of counties and cities — 92 out of 133 across the state. While some of the highest number of overdose deaths occurred in counties that also had a high percentage of households below the ALICE Threshold, overall there was not a significant relationship between income (defined by the percentage of households below the ALICE Threshold) and drug overdose deaths across Virginia counties.[79]

Understanding which communities have been hardest hit can help planners and stakeholders see the complex ways in which addiction and financial hardship interact. Although economic standing is not always a risk factor for drug addiction in Virginia, the consequences of addiction hit low-income families harder. The impact of addiction and

substance use disorders on families often means a decline in their financial position, causing many families to become or remain ALICE. A family's income may be reduced if addiction reduces an adult's ability to work, and these families often have substantial health care costs. For example, addiction treatment ranges from $1,176 to $6,552 per month nationally. And lower-income families may not have access to such treatment programs, which only prolongs and compounds the outcomes of addiction. Substance use disorders take a toll on the stability of families and marriages, on parenting, and on the physical and mental health of family members.[80] For all of these reasons, there can be huge value for community stakeholders in mapping where ALICE lives with drug overdose deaths to identify communities that have the greatest need but the fewest resources to address addiction-related problems.[81]

THE BENEFITS OF MOVING TOWARD EQUITY IN VIRGINIA

The strength of the Virginia economy is inextricably tied to the financial stability of its residents. The more people participate in a state's economy, the stronger it will be. In 2018, when the national economy was often described as "strong," the reality was that 1,257,711 households — more than one-third of all households in the state — struggled to support themselves. If all households earned enough to meet their basic needs, not only would each family's hardship be eased, but the Virginia economy would also benefit substantially. This is true in times of economic growth, and it becomes even more important during a period of crisis and recovery.

To better understand the extent to which financial hardship is a drain on a state's economy, this section provides an estimate of the benefits of raising the income of all households to the ALICE Threshold. While lifting family income would be an enormous undertaking, the statewide benefits of doing so make a compelling case for pointing both policy and investment toward that goal.

Based on 2018 data, the economic benefit to Virginia of bringing all households to the ALICE Threshold would be approximately $107 billion, meaning that the state GDP would grow by 20% (Figure 11). This is based on three categories of economic enhancement:

Earnings: Virginia's 2018 GDP reflected earnings of $34 billion by the state's households below the ALICE Threshold. Bringing all households to the ALICE Threshold would have a two-fold impact:

- **Additional earnings:** $39 billion statewide.
- **Multiplier effect:** Studies show that almost all additional wages earned by low-wage workers are put back into the economy through increased consumer spending, which in turn spurs business growth.[82] Building on economic calculations used by Moody's Analytics, this estimate assumes an economic multiplier of 1.2, meaning that a $1 increase in compensation to low-wage workers leads to a $1.20 increase in economic activity. In Virginia, this increased economic activity would be valued at $47 billion.[83]

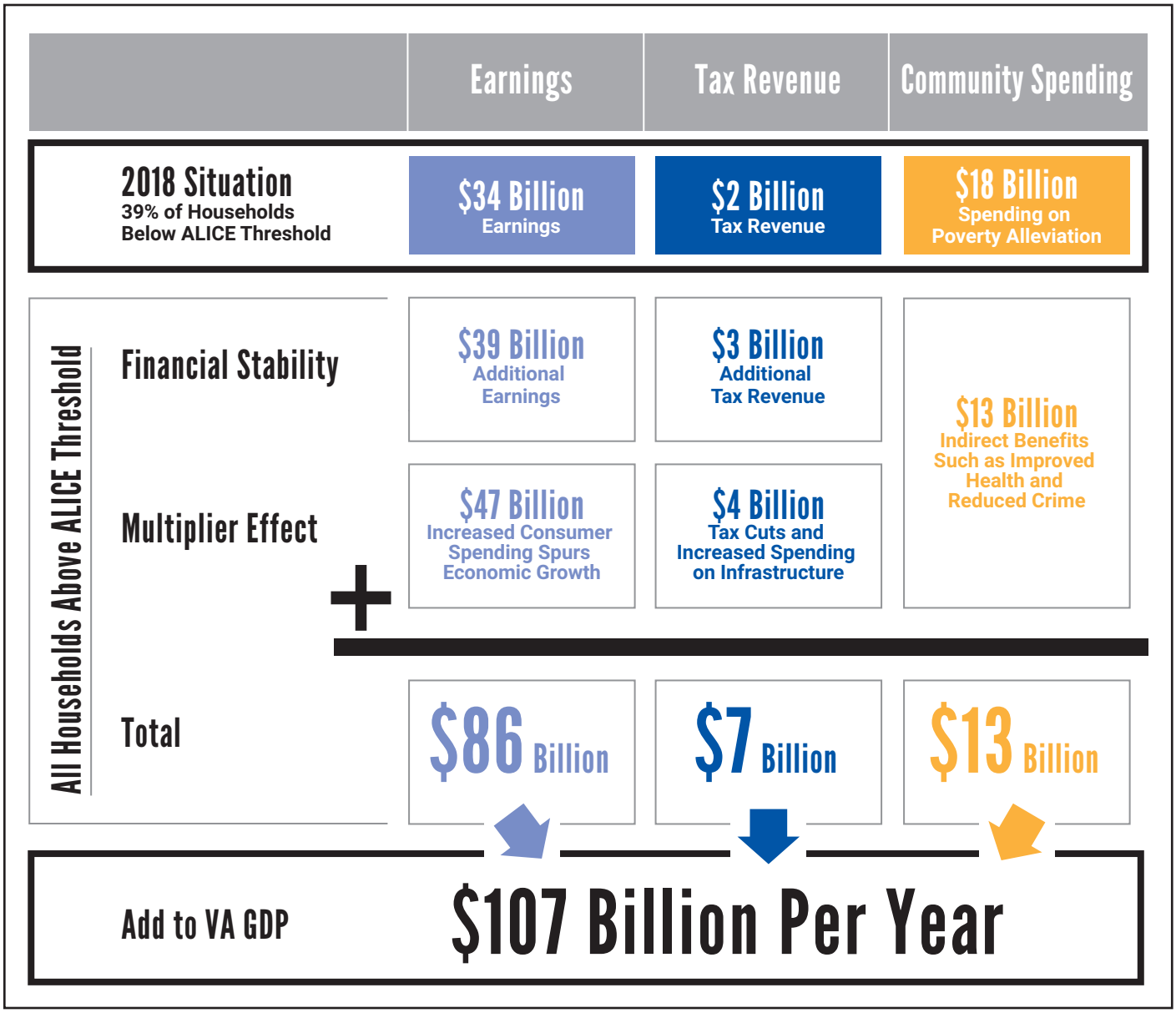
Tax revenue: Virginia's 2018 GDP reflected tax revenue of $2 billion from the state's households below the ALICE Threshold. Bringing all households to the ALICE Threshold would have a two-fold impact:

- **Additional tax revenue:** With additional earnings, there would also be additional taxes paid and reduced usage of tax credits such as EITC for low-income earners, totaling an additional $3 billion in tax revenue for Virginia.
- **Multiplier effect:** Additional state tax revenue gives state and local governments the opportunity to make investments that matter most to the well-being of residents and businesses — from tax cuts for small businesses to improvements in infrastructure, including health care and education — that can yield a high return on investment. Based on work by the Congressional Budget Office and Moody's Analytics, the estimated multiplier is 1.44, which would mean an added $4 billion in economic activity in Virginia.[84]

Community spending: Virginia's 2018 GDP reflected community spending of $18 billion on assistance to the state's households below the ALICE Threshold.[85] When all households can meet their basic needs, this spending can be reallocated to projects and programs that help families and communities thrive, not just survive.

- **Indirect benefits:** Added value to the state GDP would come in the form of indirect benefits associated with increased financial stability. These benefits include improved health (and reduced health care expenditures), reduced crime and homelessness, and greater community engagement. Figure 11 uses the very conservative estimate of an added $13 billion (or 2.5% of the state GDP, which is the estimated cost of childhood poverty alone).[86] This is still far short of the total indirect benefits of bringing all households to the ALICE Threshold, as it does not include benefits for adults or the direct impact of redeploying private and nonprofit spending currently used to alleviate poverty.[87]

Figure 11.
Economic Benefits of Raising All Households to the ALICE Threshold, Virginia, 2018



Sources: ALICE Threshold, 2018; American Community Survey, 2018; Internal Revenue Service—1040, 2018; Internal Revenue Service—EITC, 2018: Internal Revenue Service—FICA, 2019; McKeever, 2018; National Association of State Budget Officers, 2019; Office of Management and Budget, 2019; Scarboro, 2018; U.S. Department of Agriculture—SNAP, 2019; Urban Institute, 2012; Walczak, 2019[88]

Benefits for Households and Local Communities

In addition to the economic benefits to the state if all households had income above the ALICE Threshold, there would be a significant number of positive changes for families and their communities. Our 2019 companion Report, *The Consequences of Insufficient Household Income*, outlines the tough choices ALICE and poverty-level families make when they do not have enough income to afford basic necessities, and how those decisions affect their broader communities. By contrast, Figure 12 outlines the improvements that all Virginia families and their communities would experience if policies were implemented that moved all households above the ALICE Threshold.[89]

Figure 12.
The Benefits of Sufficient Income

If households have sufficient income for...	Impact on ALICE	Impact on the Community
Safe, Affordable Housing	Improved health through safer environments and decreased stress, improved educational performance and outcomes for children, greater stability for household members, a means to build wealth for homeowners	Less traffic, lower health care costs, better maintained housing stock, lower crime rates, less spending on homelessness/social services
Quality Child Care and Education	Improved academic performance, higher lifetime earnings, higher graduation rates, improved job stability/access for parents, better health	Decreased racial/ethnic and socioeconomic performance gaps, decreased income disparities, high return on investment (especially for early childhood education)
Adequate Food	Decreased food insecurity, improved health (especially for children and seniors), decreased likelihood of developmental delays and behavioral problems in school	Lower health care costs, improved workplace productivity, less spending on emergency food services
Reliable Transportation	Improved access to job opportunities, school and child care, health care, retail markets, social services, and support systems (friends, family, faith communities)	Fewer high-emissions vehicles on the road, more diverse labor market, decreased income disparities
Quality Health Care	Better mental and physical health (including increased life expectancy), improved access to preventative care, fewer missed days of work/school, decreased need for emergency services	Decreased health care spending, fewer communicable diseases, improved workplace productivity, decreased wealth-health gap
Reliable Technology	Improved access to job opportunities, expanded access to health information and tele-health services, increased job and academic performance	Decreased "digital divide" in access to technology by income, increased opportunities for civic participation
Savings	Ability to withstand emergencies without impacting long-term financial stability and greater asset accumulation over time (e.g., interest on savings; ability to invest in education, property, or finance a secure retirement)	Greater charitable contributions; less spending on emergency health, food, and senior services

Note: For sources, see Figure 12: Sources, following the Endnotes for this Report

In addition to the benefits listed above, greater financial stability and having basic needs met can reduce the anxiety that comes from struggling to survive, or not having a cushion for emergencies. It also leaves more time to spend with loved ones and to give back to the community — all of which contribute to happiness and improved life satisfaction.[90]

Having money saves money: Having enough income means that households can build their credit scores and avoid late fees, predatory lending, and higher interest rates.[91] That, in turn, means that ALICE families have more resources to use to reduce risks (e.g., by purchasing insurance), stay healthy (e.g., by getting preventative health care), or save and invest in education or assets that could grow over time (e.g., buying a home or opening a small business). Instead of a downward cycle of accumulating fees, debt, and stress, families can have an upward cycle of savings and health that makes them even better able to be engaged in their communities and, in turn, enjoy a reasonable quality of life.

For communities, this leads to greater economic activity, greater tax revenue, lower levels of crime, and fewer demands on the social safety net, allowing more investment in vital infrastructure, schools, and health care.[92] Strengthening communities by strengthening ALICE families means a higher quality of life for all.

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4 *Note:* All racial categories except Two or More Races are for one race alone. Race and ethnicity are overlapping categories; in this report, the Asian, Black, Hawaiian (includes other Pacific Islanders), and Two or More Races groups may include Hispanic households. The White group includes only White, non-Hispanic households. The Hispanic group may include households of any race. Because household poverty data is not available for the American Community Survey's race/ethnicity categories, annual income below $15,000 is used as a proxy.

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FIGURE 12: SOURCES

HOUSING

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