

# ALICE IN TENNESSEE: A FINANCIAL HARDSHIP STUDY

LIVE UNITED

2020 TENNESSEE REPORT



United Ways of Tennessee

# ALICE IN THE TIME OF COVID-19



The release of this ALICE Report for Tennessee 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, widespread hardship, and growing disparities – particularly by race and ethnicity – 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 Tennessee presents the latest ALICE data available – a point-in-time snapshot of economic conditions across the state in 2018. By showing how many Tennessee 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 Tennessee 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](https://UnitedForALICE.org/COVID19) for updates.**

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United Way of West Tennessee

United Way of Wilson County and the Upper Cumberland

Learn more about ALICE in Tennessee: [www.uwtn.org](http://www.uwtn.org)

## Tennessee State Partner

Special thanks to the Tennessee Afterschool Network for helping to bring the message of ALICE to the state of Tennessee.



## Acknowledgments

United Ways of Tennessee thank our sponsors, partners, and community stakeholders throughout the state for their support and commitment to this 2020 ALICE Report for Tennessee. It is our hope that this Report will help raise awareness of the 47% 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 Tennessee, contact: **Mary Graham**, [mary.graham@uwtn.org](mailto:mary.graham@uwtn.org)

To access the ALICE data and resources for Tennessee, go to [UnitedForALICE.org/Tennessee](http://UnitedForALICE.org/Tennessee)



# 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 Tennessee, 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 Research Team on our website at [UnitedForALICE.org/ALICE-Team](https://UnitedForALICE.org/ALICE-Team)

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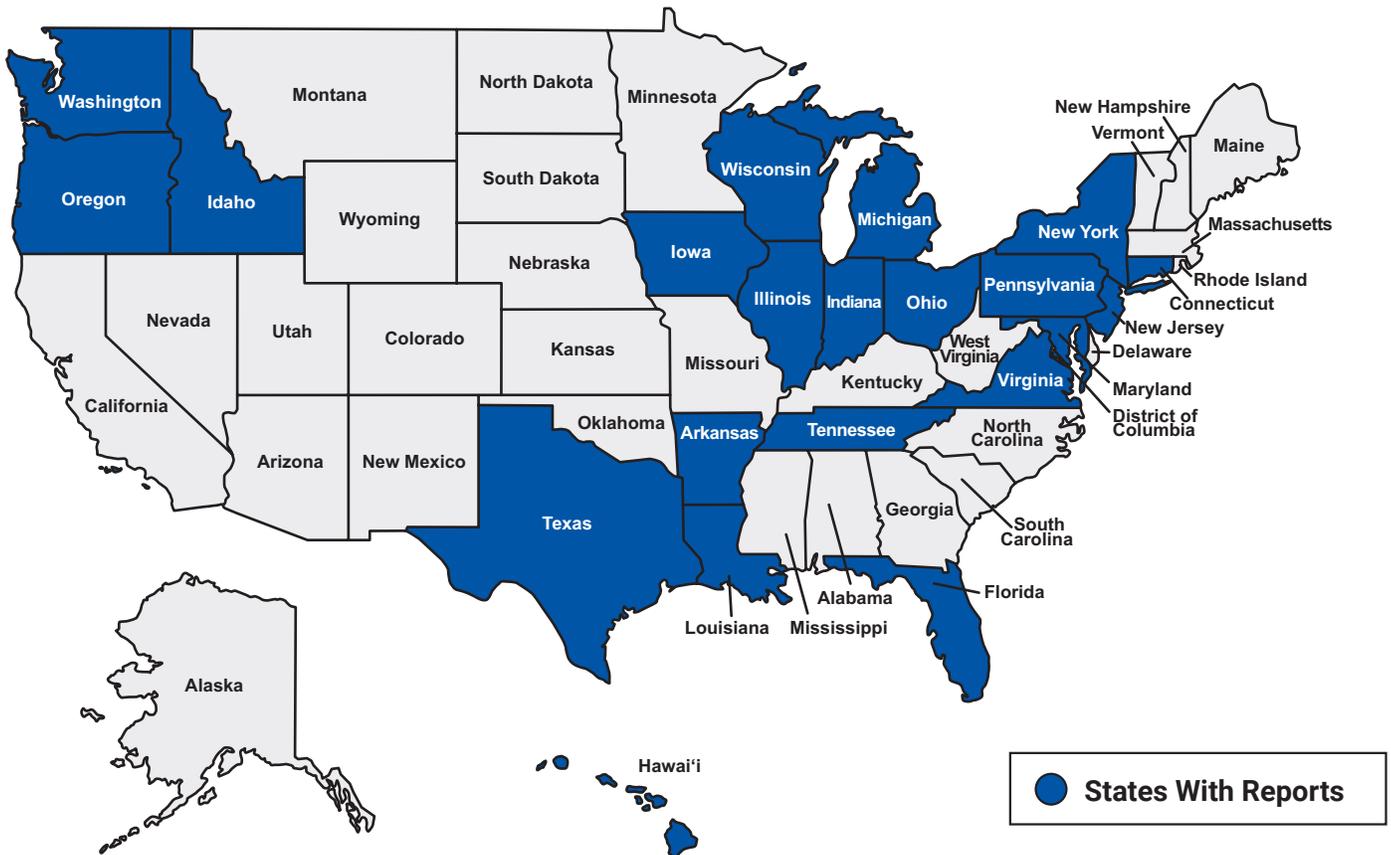
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# ALICE: A GRASSROOTS MOVEMENT

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 Limited, **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](https://UnitedForALICE.org)



## NATIONAL ALICE ADVISORY COUNCIL

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

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- 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](https://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 – where applicable – 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<sup>1</sup>), 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+).<sup>2</sup> 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/Tennessee](https://UnitedForALICE.org/Tennessee)

## New ALICE measures:

- The **Senior Survival Budget** more accurately represents household costs for people age 65 and over. 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 over 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. For example, the share of households below the ALICE Threshold in Tennessee ranges from 31% in Williamson County to 64% in Grundy County. Many percentages are rounded to whole numbers, sometimes resulting in percentages totaling 99% or 101%.

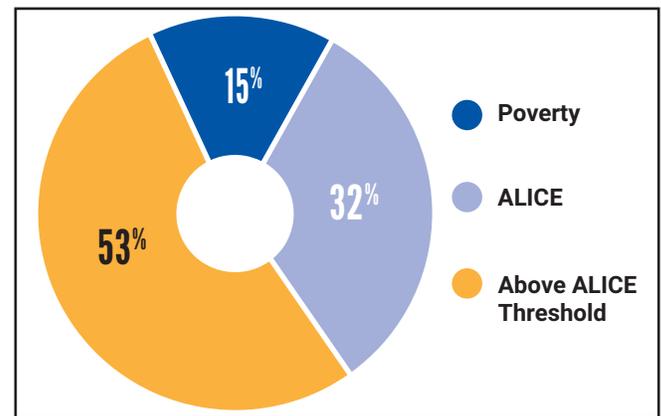
The methodological improvements included in this Report have been applied to previous years to allow for accurate year-over-year comparisons. This means that some numbers and percentages at the state and county level will not match those reported in previous ALICE Reports for Tennessee.

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# ASSET LIMITED, INCOME CONSTRAINED, EMPLOYED

From 2010 to 2018, Tennessee 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 in 2018, eight years after the end of the Great Recession, 47% of Tennessee's 2,607,078 households still struggled to make ends meet. And while 15% of these households were living below the Federal Poverty Level (FPL), another 32% – more than twice 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 Tennessee 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 at an average rate 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 record 54% of Tennessee workers were paid by the hour as opposed to salaried. And 63% of all jobs in the state paid less than \$20 per hour, with more than half paying less than \$15 hourly.
- **The number of ALICE households has increased in Tennessee** as a result of rising costs and stagnant wages. There are more ALICE households than households in poverty, and the number of ALICE households is increasing at a faster rate. 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 Tennessee, the percentage of households that were ALICE rose from 19% in 2007 to 32% in 2018. By contrast, those in poverty increased from 15% in 2007 to a high of 17% in 2012, and then returned to 15% in 2016, where it remained in 2018.

This Report provides critical measures that assess Tennessee's economy from four perspectives: They track financial hardship over time and across demographic groups; quantify the basic cost of living in Tennessee; 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 Tennessee GDP would be approximately \$78 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**mloyed – 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 Tennessee, 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 Tennessee. 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](https://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: TENNESSEE

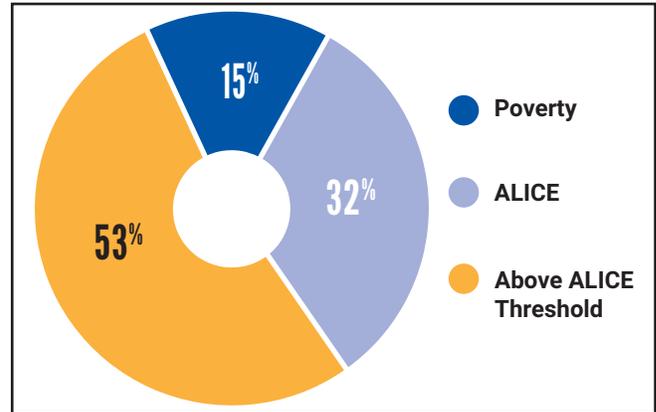
2018 Point-in-Time Data

Population: 6,770,010    Number of Counties: 95

Number of Households: 2,607,078

## How many households are struggling?

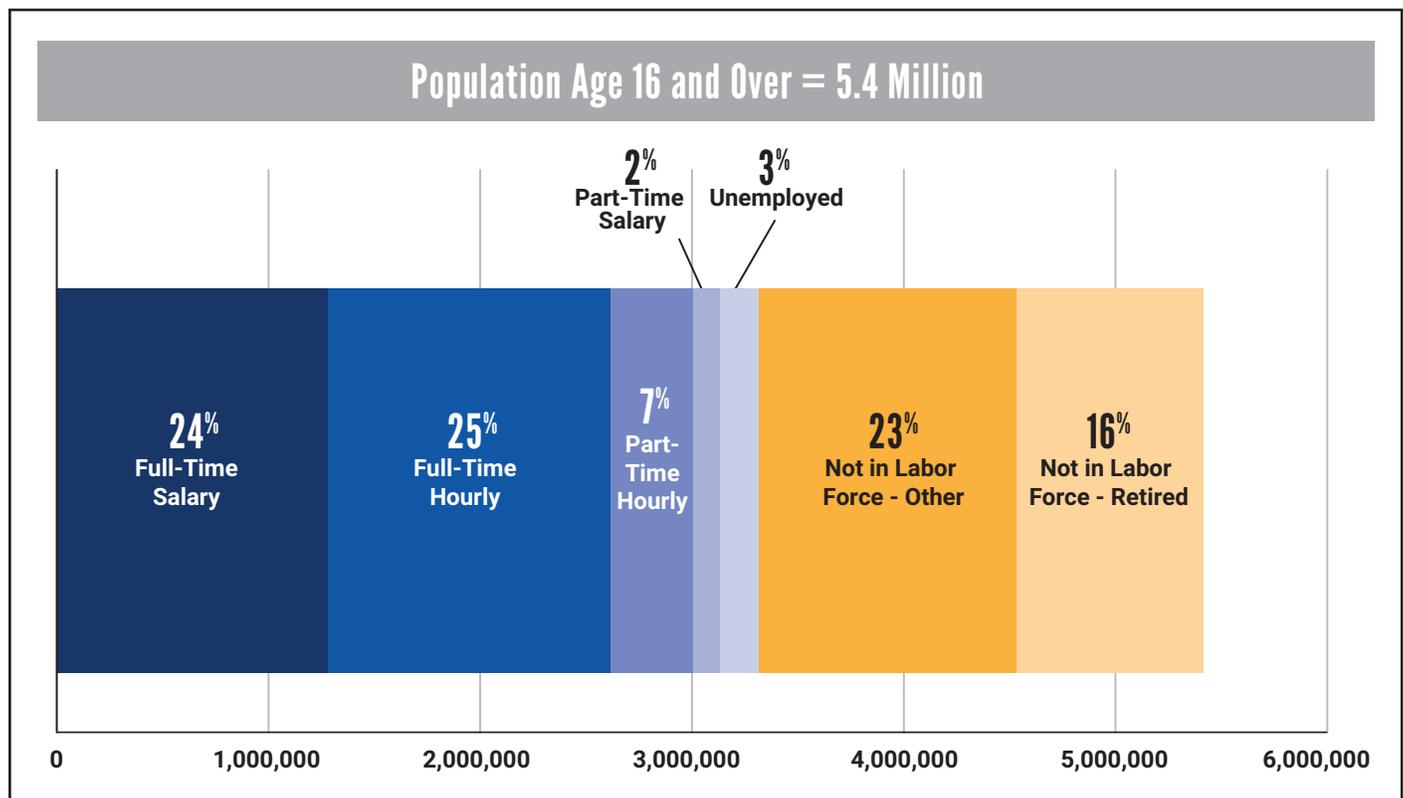
ALICE, an acronym for Asset Limited, Income Constrained, Employed, comprises households that earn more than the Federal Poverty Level but less than the basic cost of living for the state (the ALICE Threshold). Of Tennessee's 2,607,078 households, 15% earned below the Federal Poverty Level in 2018, and another 32% were ALICE.



## What does the Tennessee labor force look like?

A 2018 overview of the labor status of Tennessee's 5,415,477 working-age adults (people age 16 and over) shows that 61% 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, 39% 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, Tennessee, 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 Tennessee 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 Tennessee in 2018 was \$23,064 for a single adult, \$25,716 for a single senior, and \$65,040 for a family of four— 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, Tennessee, Average, 2018			
	SINGLE ADULT	SENIOR (1 ADULT)	2 ADULTS, 1 INFANT, 1 PRESCHOOLER
<b>Monthly Costs</b>			
Housing	\$565	\$565	\$785
Child Care	-	-	\$898
Food	\$274	\$233	\$830
Transportation	\$332	\$286	\$801
Health Care	\$193	\$468	\$760
Technology	\$55	\$55	\$75
Miscellaneous	\$175	\$195	\$493
Taxes	\$328	\$341	\$778
<b>Monthly Total</b>	<b>\$1,922</b>	<b>\$2,143</b>	<b>\$5,420</b>
<b>ANNUAL TOTAL</b>	<b>\$23,064</b>	<b>\$25,716</b>	<b>\$65,040</b>
<b>Hourly Wage*</b>	<b>\$11.53</b>	<b>\$12.86</b>	<b>\$32.52</b>

\*Full-time wage required to support this budget

Tennessee Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Anderson	29,505	49%
Bedford	16,882	48%
Benton	6,786	58%
Bledsoe	4,853	53%
Blount	51,446	42%
Bradley	39,104	45%

Tennessee Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Campbell	16,172	49%
Cannon	5,513	49%
Carroll	11,062	52%
Carter	23,594	54%
Cheatham	14,952	49%
Chester	5,958	49%

Tennessee Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Claiborne	13,238	55%
Clay	3,173	57%
Cocke	14,181	56%
Coffee	21,626	44%
Crockett	5,335	51%
Cumberland	25,347	49%
Davidson	283,445	47%
Decatur	4,623	54%
DeKalb	7,487	48%
Dickson	18,978	55%
Dyer	15,180	45%
Fayette	15,410	40%
Fentress	7,403	56%
Franklin	16,431	42%
Gibson	19,223	50%
Giles	11,496	47%
Grainger	8,948	48%
Greene	27,244	51%
Grundy	4,838	64%
Hamblen	24,411	50%
Hamilton	146,057	42%
Hancock	2,809	59%
Hardeman	8,907	58%

Tennessee Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Hardin	10,267	53%
Hawkins	23,330	53%
Haywood	7,100	53%
Henderson	10,671	50%
Henry	13,406	52%
Hickman	8,667	55%
Houston	2,943	54%
Humphreys	6,858	52%
Jackson	4,543	58%
Jefferson	19,910	46%
Johnson	6,858	62%
Knox	185,416	43%
Lake	2,203	52%
Lauderdale	9,754	54%
Lawrence	16,131	50%
Lewis	4,758	54%
Lincoln	13,636	42%
Loudon	20,215	40%
Macon	9,202	56%
Madison	39,223	49%
Marion	11,582	45%
Marshall	12,335	45%
Maury	34,361	44%

Tennessee Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
McMinn	20,427	52%
McNairy	10,022	56%
Meigs	4,790	50%
Monroe	17,694	55%
Montgomery	72,973	52%
Moore	2,602	35%
Morgan	7,517	54%
Obion	12,715	48%
Overton	8,974	54%
Perry	3,317	53%
Pickett	2,218	45%
Polk	7,096	48%
Putnam	33,388	46%
Rhea	12,342	58%
Roane	20,963	46%
Robertson	26,375	43%
Rutherford	115,376	45%
Scott	8,703	52%
Sequatchie	5,441	46%

Tennessee Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Sevier	36,861	49%
Shelby	352,648	51%
Smith	7,584	47%
Stewart	5,246	50%
Sullivan	64,504	51%
Sumner	68,439	42%
Tipton	21,325	42%
Trousdale	3,054	55%
Unicoi	7,521	51%
Union	7,126	55%
Van Buren	2,163	54%
Warren	15,655	54%
Washington	54,433	43%
Wayne	5,954	58%
Weakley	13,605	49%
White	9,951	55%
Williamson	80,601	31%
Wilson	52,489	36%

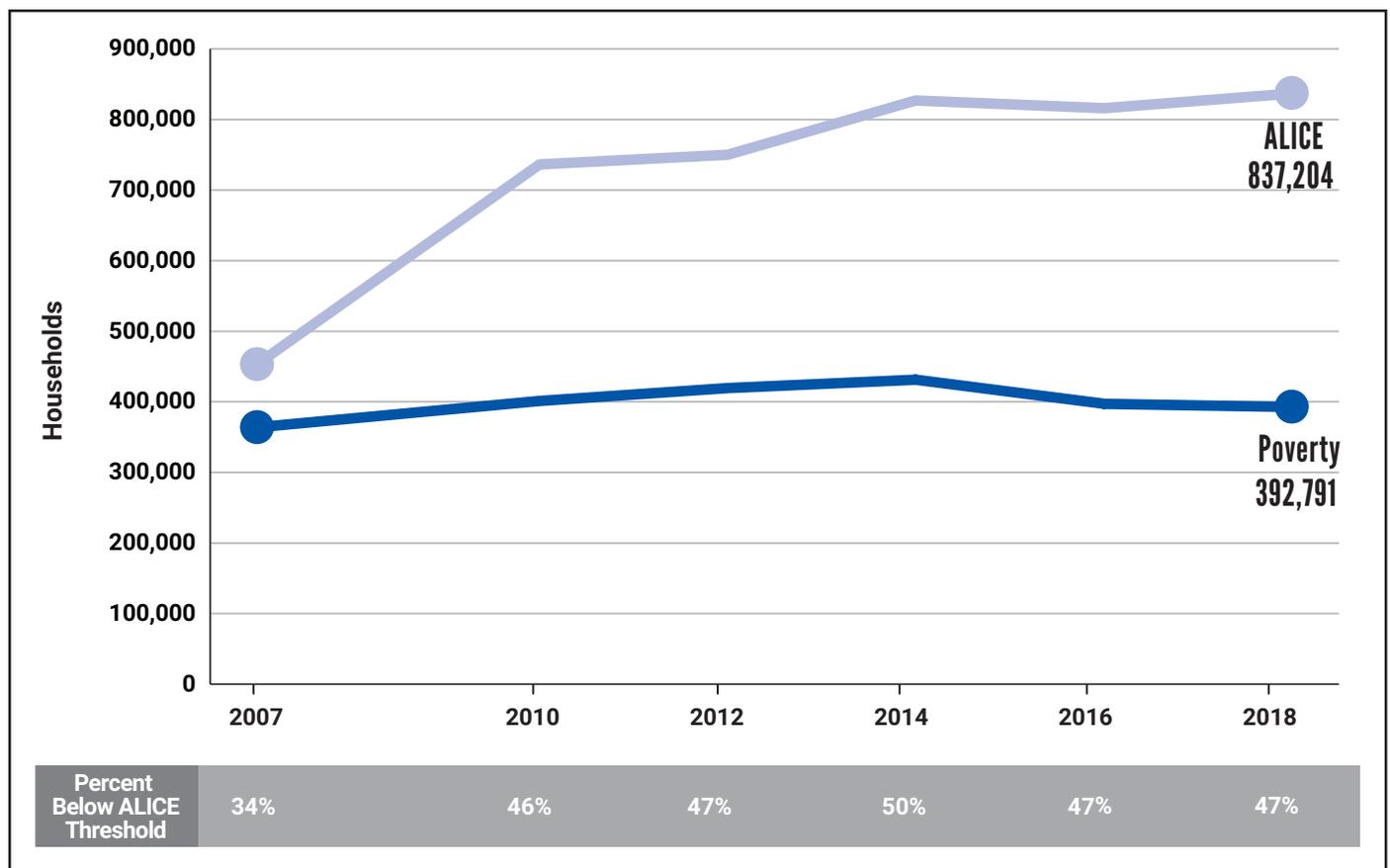
**Sources:** *Point-in-Time Data:* American Community Survey, 2018. **ALICE Demographics:** ALICE Threshold, 2018; American Community Survey, 2018. **Labor Status:** American Community Survey, 2018; Federal Reserve Bank of St. Louis, 2018. **Budget:** AAA, 2018; Agency for Healthcare Research and Quality, 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; Tennessee Department of Human Services, 2018; The Zebra, 2018; U.S. Department of Agriculture, 2018—Official USDA Food Plans; U.S. Department of Housing and Urban Development, 2018—Fair Market Rents. For more details, see the Methodology Overview at [UnitedForALICE.org/Methodology](https://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 Tennessee’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, the total number of Tennessee households increased from 2.4 to 2.6 million. During the same time, the number of households in poverty started and ended at 15% of all households. But the number of ALICE households increased significantly more (from 453,091 to 837,204, an 85% increase), with their share of all households rising from 19% in 2007 to 32% in 2018. Overall, the percentage of households living below the ALICE Threshold (ALICE and poverty-level households combined) increased from 34% in 2007 to 47% in 2018 (Figure 1).

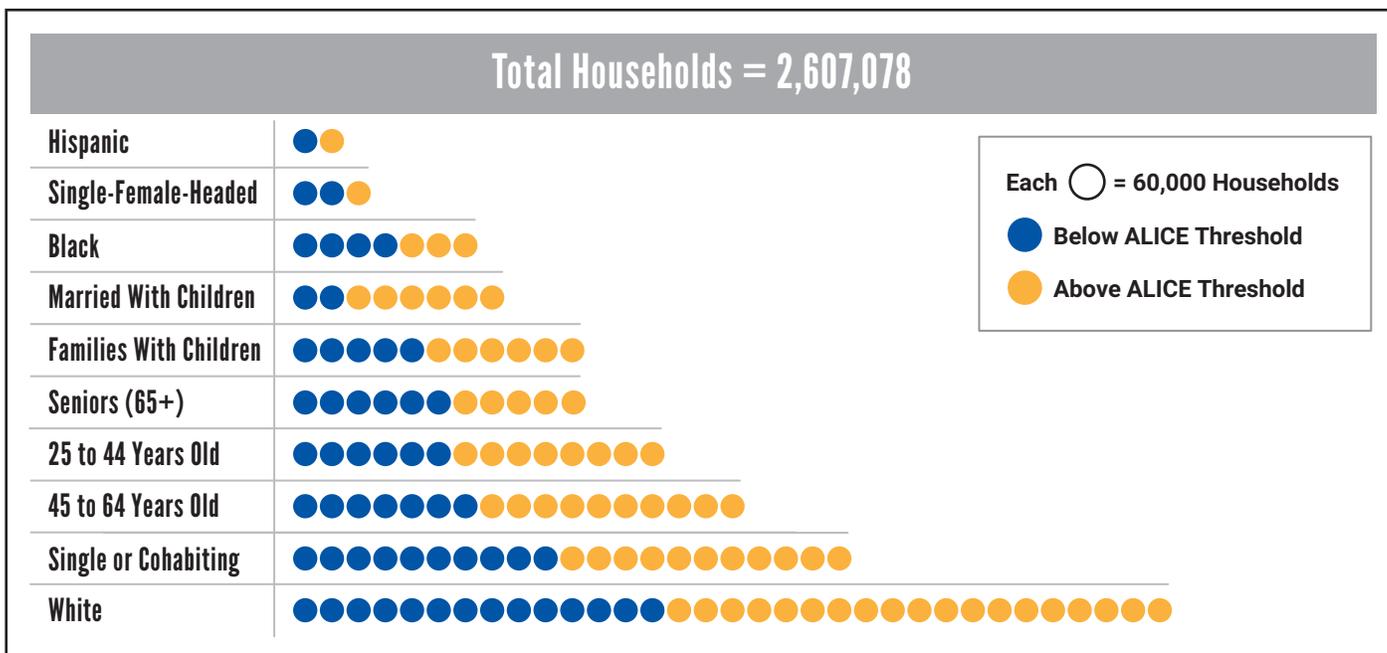
**Figure 1.**  
**Households by Income, Tennessee, 2007–2018**



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

ALICE households live in every county in Tennessee – 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 Tennessee – namely, households headed by someone in their prime working years (ages 25–64), White households, and single or cohabiting households (without children or seniors). Among families with children – another of the state’s biggest groups – married-parent families were the largest subgroup and accounted for 39% of families with children living below the ALICE Threshold.

**Figure 2.**  
**Household Types by Income, Largest Groups, Tennessee, 2018**

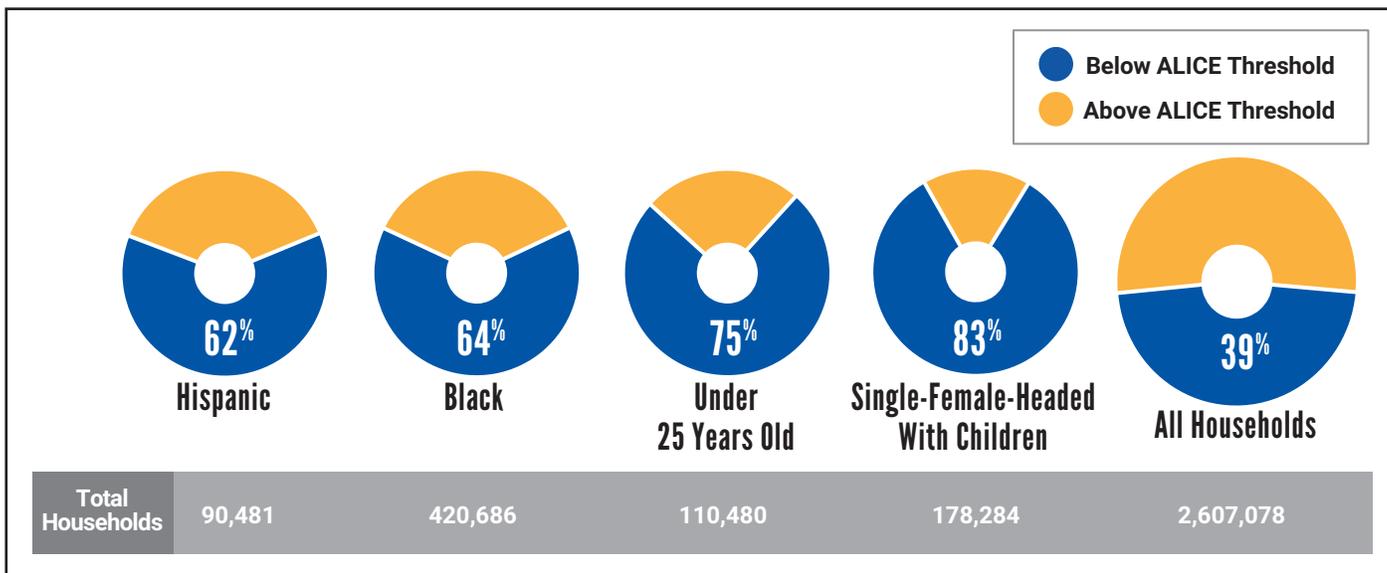


Note: The groups shown in this figure overlap across categories (age, household type, race/ethnicity).<sup>3</sup>

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, 47% of households in Tennessee had income below the ALICE Threshold in 2018. But many smaller groups had a disproportionately high percentage of families below the ALICE Threshold, including Hispanic and Black households, young households (headed by someone under age 25), and single-parent households (Figure 3). Asian households, also a small group, had a percentage of households below the ALICE Threshold (36%) that was less than the state average.

**Figure 3.**  
**Select Household Groups by Income, Tennessee, 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. **In Tennessee, 13% of households were on the cusp of the ALICE Threshold in 2018**, with 57% earning just above the threshold and 43% earning just below it.<sup>4</sup> This matters for families, but it can also impact the Tennessee economy as a whole: Even a small drop 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. Conversely, a small increase in wages or a decrease in rent or a car payment could help push families above the ALICE Threshold.

**Tennessee is becoming increasingly diverse.** From 2010 to 2018, the total number of White households in Tennessee increased by 3%, while the number of households of color increased significantly more: Black households increased by 12%, Asian households by 28%, and Hispanic households by 30%. The number of households of color earning below the ALICE Threshold increased even faster; the largest growth was among Hispanic households with workers in their prime working years (ages 45–64) and senior Asian Households (age 65 and over). By 2040, the White population in Tennessee is projected to decrease by 10%, while the Hispanic population will nearly double, and then by 2063 will surpass the Black population as the second-largest racial/ethnic group in the state. Growth in the overall Tennessee population has been concentrated in cities in the Middle Tennessee region, largely within Davidson, Rutherford, Sumner, Williamson, and Wilson counties. Clarksville and Murfreesboro were the state’s two fastest-growing cities in 2018. At the same time, the population in rural counties throughout the state has continued to decline.<sup>5</sup>

**Tennessee’s household structure continues to change.** The number of married-parent families with children decreased from 2010 to 2018, falling 2%. In 2018, single or cohabiting adults under age 65 with no children under age 18 made up the largest proportion of households in Tennessee (48%), as well as the largest share of households below the ALICE Threshold (46%). Nationally, the number of cohabiting adults 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.<sup>6</sup>

*“ In 2018, single or cohabiting adults under age 65 with no children under 18 made up the largest share of households below the ALICE Threshold (46%). ”*

**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 age 65. By 2040, one in five Tennesseans will be age 65 or over. An aging population is also reducing the proportion of both college-age students and families with children in the state, as millennials have passed traditional college age, are having fewer children, and are waiting longer than previous generations to have them.<sup>7</sup> Yet Tennessee is still attracting millennials: Nashville is an increasingly popular location, and in 2017, Clarksville was among the top ten cities in the U.S. with a net increase in the number of millennials, most coming from outside the state.<sup>8</sup>

Among seniors, there are three trends. First, the White population in Tennessee is older than other racial/ethnic groups and will continue to account for an increasing share of the senior population. Second, having lived through a decade of financial challenges since the Great Recession, more Tennessee seniors will become ALICE. While there are many policies and programs in place to help seniors financially – such as Social Security, property tax deductions or exemptions based on age, and senior discounts for both private and public purchases – many more seniors continue to experience financial hardship. And third, seniors make up a larger portion of households in rural areas, where they will continue to face additional challenges in access to transportation, health care, and caregiving. A 2020 report on the best and worst places for seniors to live ranked Tennessee 43<sup>rd</sup> out of 50 states; scores were below the national average on quality-of-life rankings, including problems with lack of access to exercise opportunities, a higher crime rate, and high prevalence of obesity and smoking. The state received higher scores for senior housing availability and costs. The cost of living is more affordable than in other states, and the fact that there is no state income tax is favorable for retirees on a fixed budget.<sup>9</sup>

*“Having lived through a decade of financial challenges through the Great Recession, more Tennessee seniors will become ALICE.”*

**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.<sup>10</sup> The gap in wealth (savings and assets) is even greater. According to a 2018 report by the Economic Policy Institute, Tennessee ranked 16<sup>th</sup> out of the 50 states in income inequality, with the top 1% earning 21 times more than the bottom 99%. Davidson County, where the top 1% earned 36 times more than the bottom 99%, had the greatest income disparity.<sup>11</sup> 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.<sup>12</sup>

# THE COST OF LIVING IN TENNESSEE

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 Tennessee, 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 Tennessee. 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.

While cost of living expenses vary across the state, particularly between urban and rural areas, the actual cost of household basics in every county in Tennessee is well above the Federal Poverty Level (FPL) for all household sizes and types (Figure 4). For a single adult, the FPL was \$12,140 per year in 2018, but the average Household Survival Budget in Tennessee was \$23,064 per year.<sup>13</sup> The average Senior Survival Budget totaled \$25,716 per year, primarily due to increased health costs. (Despite having Medicare, seniors have greater out-of-pocket health care costs, largely due to increased spending on chronic health issues like heart disease and diabetes.) And all budgets were significantly lower than the Household Stability Budget, which reached \$46,260 per year for a single adult.

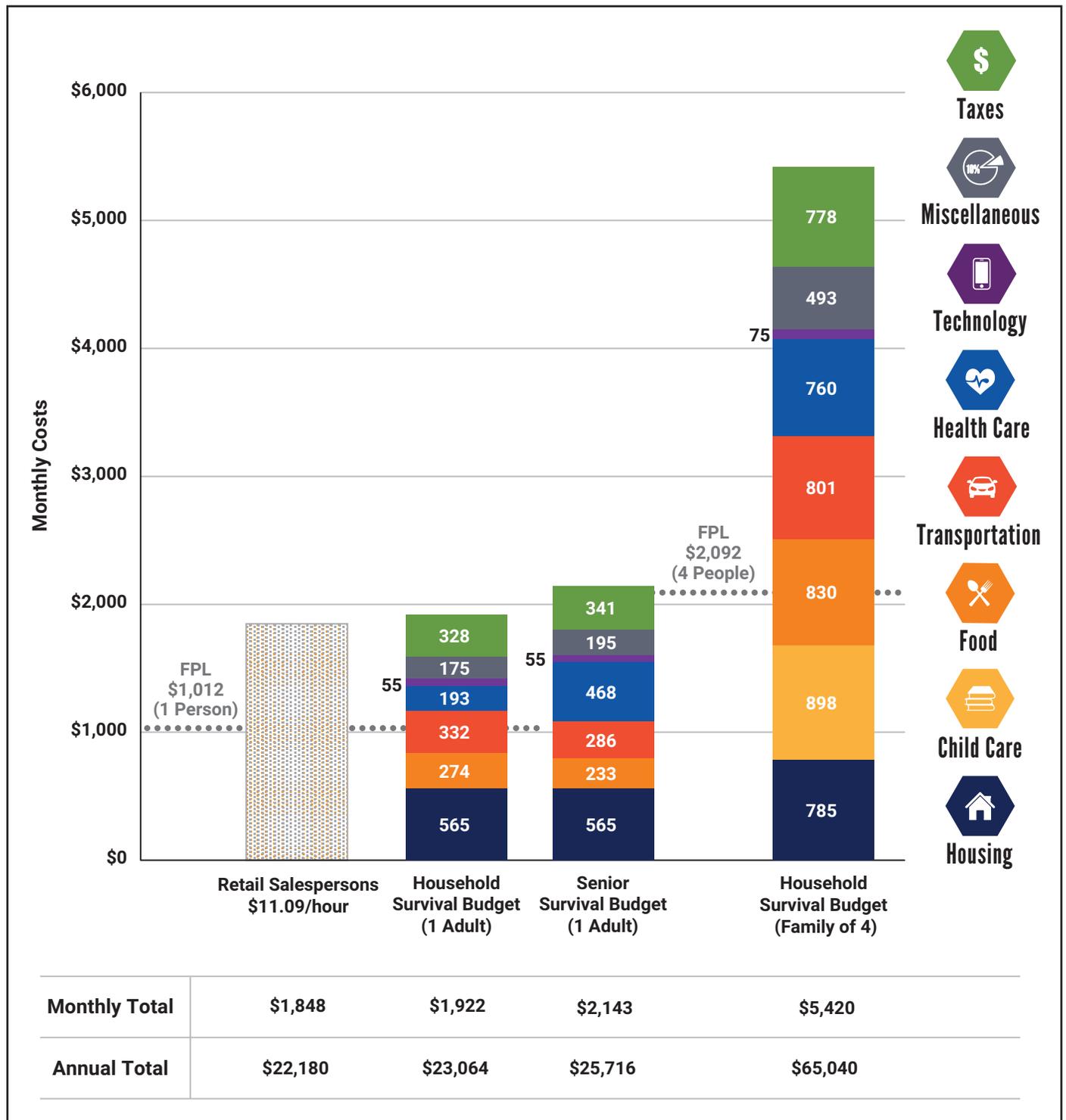
The gaps are even larger for families. The FPL for a four-person family was \$25,100 in 2018, while the Household Survival Budget for a family with two adults, an infant, and a four-year-old was \$65,040.<sup>14</sup>

The hourly wages needed to support these budgets were \$11.53 for the single adult Survival Budget; \$12.86 for the Senior Survival Budget; and \$32.52 for one worker or \$16.26 each for two workers for the Survival Budget for a family of four. To put these budgets in perspective, the median hourly wage for one of the most common occupations in Tennessee, retail sales, was \$11.09 in 2018, or \$22,180 if full time, year-round — not enough to support the single-adult, Senior, or family ALICE budgets.

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/Tennessee](https://UnitedForALICE.org/Tennessee)

**Figure 4.**  
**Budget Comparison, Tennessee, 2018**



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

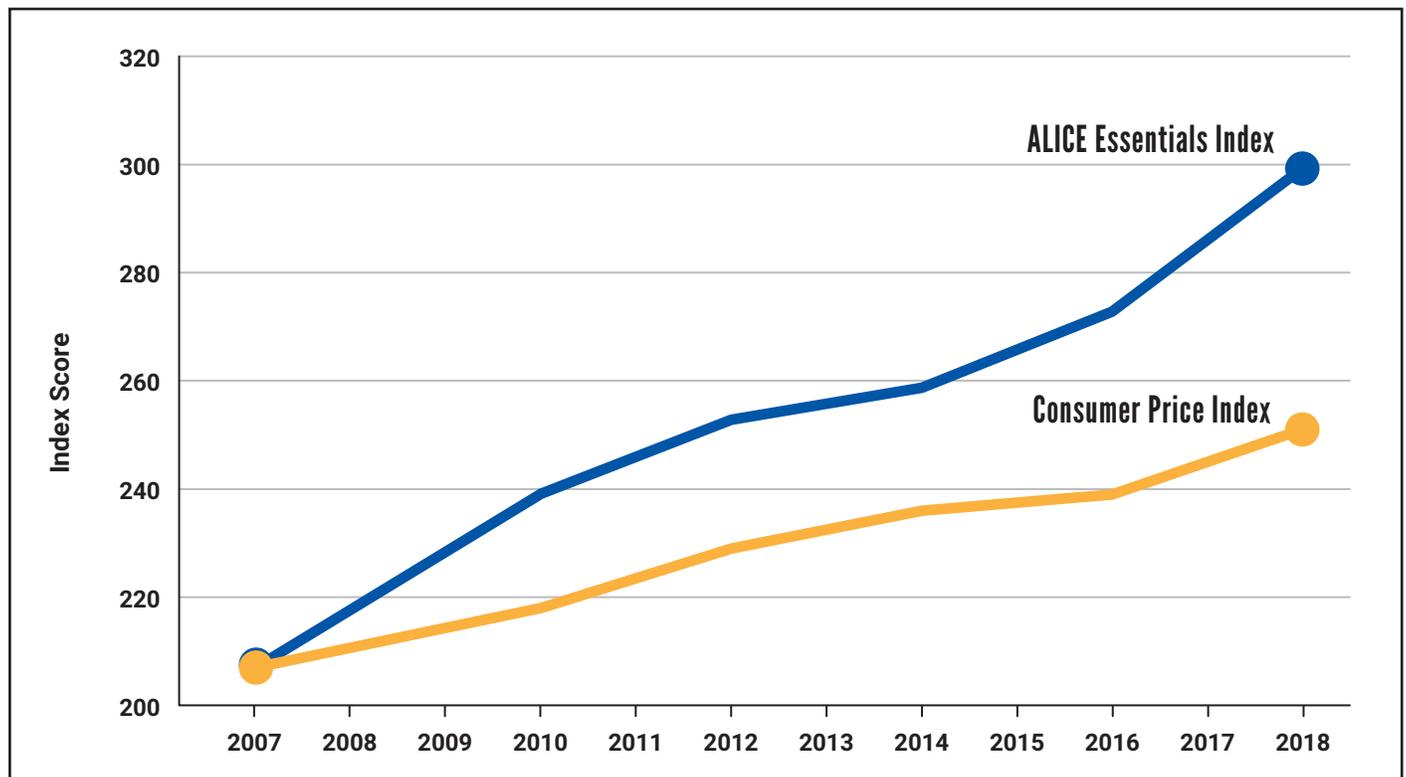
Sources: AAA, 2018; Agency for Healthcare Research and Quality, 2018; American Community Survey, 2018; Bureau of Labor Statistics, 2018—Consumer Expenditure Surveys; Bureau of Labor Statistics, 2019—Consumer Expenditure Survey; Bureau of Labor Statistics, 2018—Occupational Employment Statistics; Centers 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; The Zebra, 2018; Tennessee Department of Human Services, 2018; U.S. Department of Agriculture, 2018—Official USDA Food Plans; U.S. Department of Housing and Urban Development, 2018—Fair Market Rents; For more details, see the Methodology Overview at [UnitedForALICE.org/Methodology](https://www.unitedforalice.org/Methodology)<sup>15</sup>

# 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.<sup>16</sup> For more detailed information, see the 2020 *ALICE Essentials Index* Report.

**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% in urban areas and 3.4% in rural areas, while the CPI increased by 1.8%.<sup>17</sup> 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](https://www.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).<sup>18</sup> But the ALICE Essentials Index shows that from 2007 to 2018, the CPI considerably underestimated the increase in the cost of living for ALICE households 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 Tennessee, rising costs in urban areas — notably Chattanooga and Nashville — are largely due to population and job growth, and increasing demand for low-cost, urban rental units. In Nashville, where approximately half of the residents earn less than \$30,000 a year, skyrocketing housing costs for both homeowners and renters are outpacing wage growth, forcing local residents — many of whom work in the booming hotel industry — to move out of the city.<sup>19</sup> This trend will continue in Nashville and other urban areas as affordable housing becomes harder to find. 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.<sup>20</sup>

**Commuting times will continue to increase, as will demand for alternative transportation options.** High housing costs and urban sprawl push workers farther from employment opportunities and increase commute times and transit costs, which have a negative impact on family budgets, health, job retention, and productivity. With these pressures, along with minimal public transportation infrastructure and the cost of owning and maintaining a car, there will be increased demand in Tennessee to explore new public transportation options (e.g., trains and buses, rideshares, and self-driving vehicles).<sup>21</sup>

**The child care industry will face new challenges, and so will parents.** As the number of families with children decreases (it fell 2% in Tennessee from 2010 to 2018), 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. In Tennessee, 48% of families live in a child care desert, defined as having no child care providers at all, or so few options that there are three times as many children for each available licensed child care slot. Some groups have less access to child care than others: Nearly two-thirds (62%) of families in rural areas, and 52% of all Hispanic families, live in areas without enough licensed child care providers.<sup>22</sup> 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 \$9.50 in Tennessee).<sup>23</sup> The overall trend, then, is toward fewer families with children but more who are struggling.

*“A survey of first-year college students found that out of eight universities across the U.S., the University of Tennessee had the highest prevalence of food insecurity at 25%.”*

**Food insecurity, a longstanding problem for families with children, is also 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 Tennessee, and they often struggled to put food on the table. A survey of first-year college students found that out of eight universities across the U.S., the University of Tennessee had the highest prevalence of food insecurity at 25%.<sup>24</sup> Faculty members at colleges across East Tennessee state that many students rely on food pantries at their schools. One community college in Knoxville estimates that at least 60% of their students would qualify for free and reduced-price lunch, if it were available to college students.<sup>25</sup> 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. America’s Health Rankings found that in Tennessee in 2018, 16.4% of adults age 60 and older had experienced food insecurity in the prior 12 months.<sup>26</sup> 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.<sup>27</sup>

**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.<sup>28</sup> 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.<sup>29</sup> 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.<sup>30</sup> Students report that two of the major obstacles to academic success are juggling work with school and other responsibilities and difficulty meeting expenses.<sup>31</sup> Community colleges in Tennessee recognize the need for flexibility among working students, particularly adult learners, and are actively taking steps to add supports via increased financial assistance, mentorship, and innovative career training.<sup>32</sup> For more information on financial insecurity among college students, 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.<sup>33</sup> In Tennessee, 10% of the population was uninsured in 2017–2018, just above the national average of 9%.<sup>34</sup> The percentage of the population under age 65 without health insurance ranged from a low of 6% in Williamson County to a high of 17% in Sevier County in 2017.<sup>35</sup> Those without insurance lack access to preventive services and quality care, leading to poorer health outcomes. In the Commonwealth Fund’s 2018 survey of state health systems, Tennessee ranked 40<sup>th</sup> among 50 states, with lower scores for healthy living (including measures related to premature death, health status, and health risk behaviors), access and affordability (insurance coverage and cost-related barriers to care) and the disparity in care between higher- and lower-income patients.<sup>36</sup> 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 Tennessee and across the country.<sup>37</sup>

**“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.”**

**Natural and human-made disasters will continue to impact ALICE households disproportionately.** Across Tennessee, the increasing impact of these incidents – from floods and tornadoes 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 their housing 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.<sup>38</sup>

**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).<sup>39</sup> Unexpected expenses can intensify these impacts. In 2017, only 56% of Tennessee households had set aside any 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 above the national rate of 42%, it still left more than 40% of Tennessee households without any financial cushion. And 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.<sup>40</sup>

# THE CHANGING LANDSCAPE OF WORK IN TENNESSEE

ALICE workers play an essential role in Tennessee'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, a historically high number of adults out of the labor force, and increased economic risk for workers.

With a rising GDP, and record-low unemployment, Tennessee appeared to have a robust economy in 2018, with only 3% of adults actively looking but unable to find work. However, while the overall economic landscape improved, significant disparities persist between urban and rural areas, where the more densely populated counties and those in the Middle Region of the state continue to experience higher median income levels and lower rates of poverty as compared to rural counties.<sup>41</sup>

Most major sectors of the economy experienced job growth in 2018, and there were almost 3.1 million workers in the state labor force. As in the rest of the nation, the labor force composition in Tennessee has shifted from manufacturing to service industries. The service sector had healthy job gains in 2018, adding jobs in financial activities, leisure and hospitality, and professional and business services. Employment growth has been largely concentrated in urban areas in the Middle Tennessee region, while rural communities experienced population decline and job losses.<sup>42</sup>

Despite overall job growth, growth in wages has been slow and uneven, with those at the lower end of the spectrum experiencing little to no increase in wages. Tennessee's minimum wage is \$7.25 an hour, the same as the federal minimum wage, which has gone unchanged since 2009. While some private employers are paying well above the minimum wage, 41% of jobs in the state paid less than \$15 an hour in 2018.<sup>43</sup> Over the past decade, the number of medium-wage and high-wage jobs in Tennessee has decreased. The number of low-wage jobs has increased significantly, yet these earnings have not been able to keep up with the increase in the cost of the basic household budget (Figure 6).

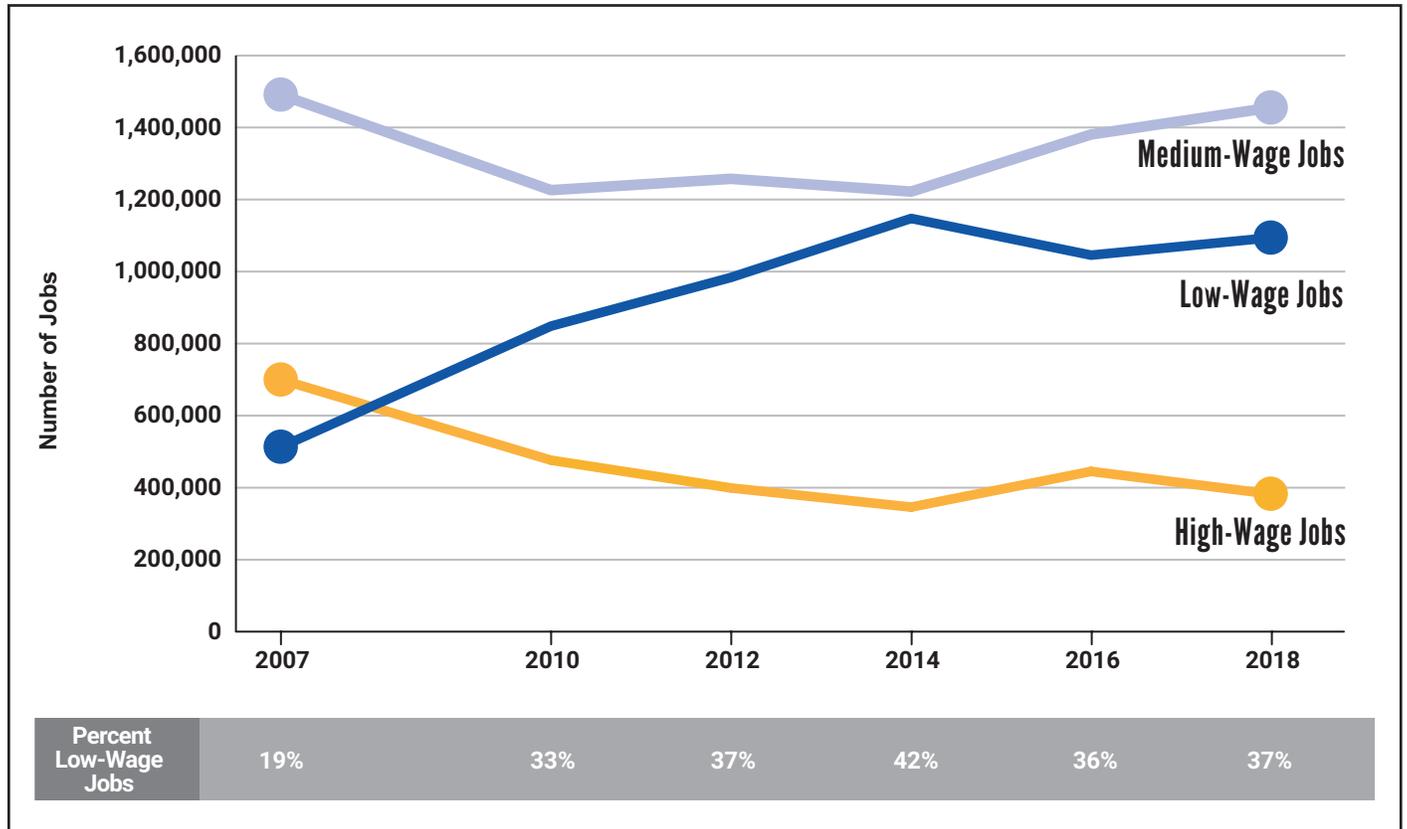
Figure 6 illustrates the following trends in wages compared to the cost of living in Tennessee from 2007 to 2018:

- 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 \$10.53 per hour; by 2018, it was less than \$16.26 per hour. The number of low-wage jobs increased by 113% during that period, and accounted for 37% of jobs in Tennessee in 2018 — nearly double the share that were low-wage in 2007. 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.

**“ The number of low-wage jobs increased by 113% from 2007 to 2018, and accounted for 37% of jobs in Tennessee in 2018 — nearly double the share that were low-wage in 2007. ”**

- Medium-wage jobs (light-blue line) allow two workers to afford a family Household Survival Budget. In 2007, these were jobs that paid between \$10.53 and \$21.06 per hour, per worker; by 2018, wages needed for these jobs were between \$16.26 and \$32.52 per hour, per worker. The number of medium-wage jobs stayed fairly flat, decreasing by 2% during that period.
- High-wage jobs (gold line) allow one worker to afford a family Household Survival Budget. In 2007, the wage required was \$21.06 per hour or more; by 2018, the wage required had increased to \$32.52 per hour or more. The number of high-wage jobs decreased by 45% during that period.<sup>44</sup>

**Figure 6.**  
**Number of Jobs by Wage Level, Tennessee, 2007–2018**



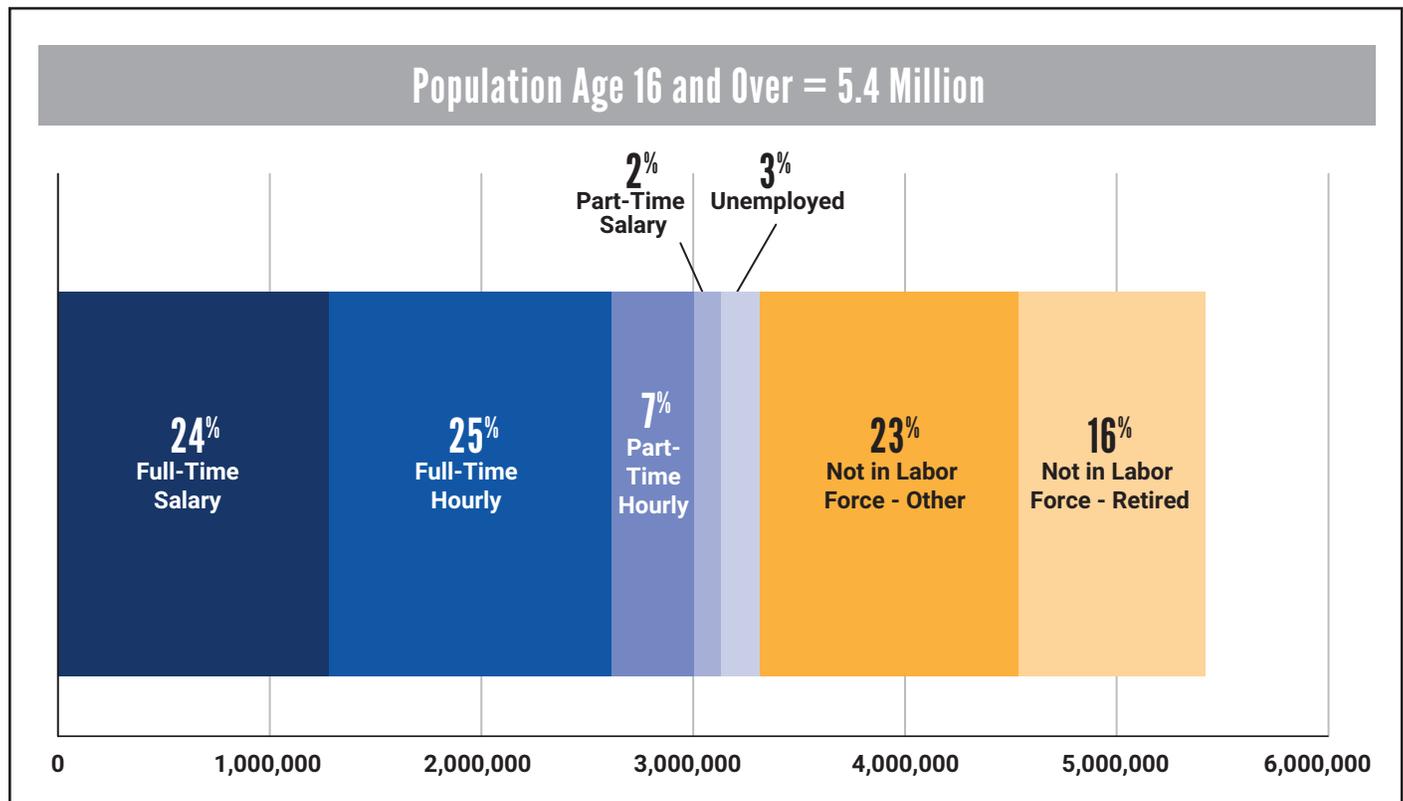
Note: Wage levels are defined by their relation to the Household Survival Budget. Dark blue = Job cannot support family Household Survival Budget with two earners. Light blue = Job supports family Household Survival Budget with two earners. Gold = Job supports family Household Survival Budget with one 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 Tennessee’s 5,415,477 working-age adults (people age 16 and over) shows that 61% of adults were in the labor force (blue bars in Figure 7), yet more than half of them were workers who were paid hourly. In addition, 39% of adults were outside the labor force (gold bars), the largest number since 2012 (Figure 7).<sup>45</sup>

**Figure 7.**  
**Labor Status, Population Age 16 and Over, Tennessee, 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 Tennessee 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 Tennessee were working in 2018 and most households had at least one worker, only 24% 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.<sup>46</sup>

## 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.<sup>47</sup> 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.<sup>48</sup>

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.<sup>49</sup> 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.<sup>50</sup>

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.<sup>51</sup> 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 Tennessee, 16% were out of the labor force in 2018 because they were retired and another 23% were out of the labor force for other reasons (gold bars in Figure 7). This totals 39% of adults outside the labor force, which is still higher than the national average, but Tennessee’s rate has been decreasing in recent years.<sup>52</sup>

Retirees (age 65 and over and not working) are traditionally one of the largest groups of adults out of the labor force, most recently due to the baby boomer generation aging into retirement. However, seniors in Tennessee are more likely than seniors in other states to leave the labor force before retirement age (starting around age 50), largely due to chronic health issues and declining health status. At the same time, there is an increasing number of seniors working beyond age 65; in 2018, 20% of seniors in Tennessee were still in the labor force.<sup>53</sup>

Those under 65 and not working 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 Tennessee would account for more than one-quarter (29%) of the state’s working-age adults out of the workforce.<sup>54</sup>
- **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 more than one-quarter (28%) of those out of the labor force in Tennessee in 2018.<sup>55</sup>

The remainder of adults were out of the labor force for other reasons, including scheduling conflicts, family caregiving responsibilities, or limited access to transportation or child care.<sup>56</sup> 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 Tennessee ages, caring for an aging parent or a family member with a disability or chronic health issue.<sup>57</sup>

These adults who were out of the labor force were not included in the state’s low unemployment rate, which only counts adults actively looking for work. 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. In the 2018 economy, however, those out of the labor force proved 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.<sup>58</sup>

# 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 Tennessee 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. The workers in these jobs — child care workers, supermarket cashiers, home health aides, office clerks — are described as “Maintainers” by technology scholars Lee Vinsel and Andrew Russell, and they are primarily ALICE.<sup>59</sup> To better understand where ALICE works, we elaborate on Vinsel and Russell’s concept by breaking down all occupations in Tennessee 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, retail).

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

### Innovator Occupations:

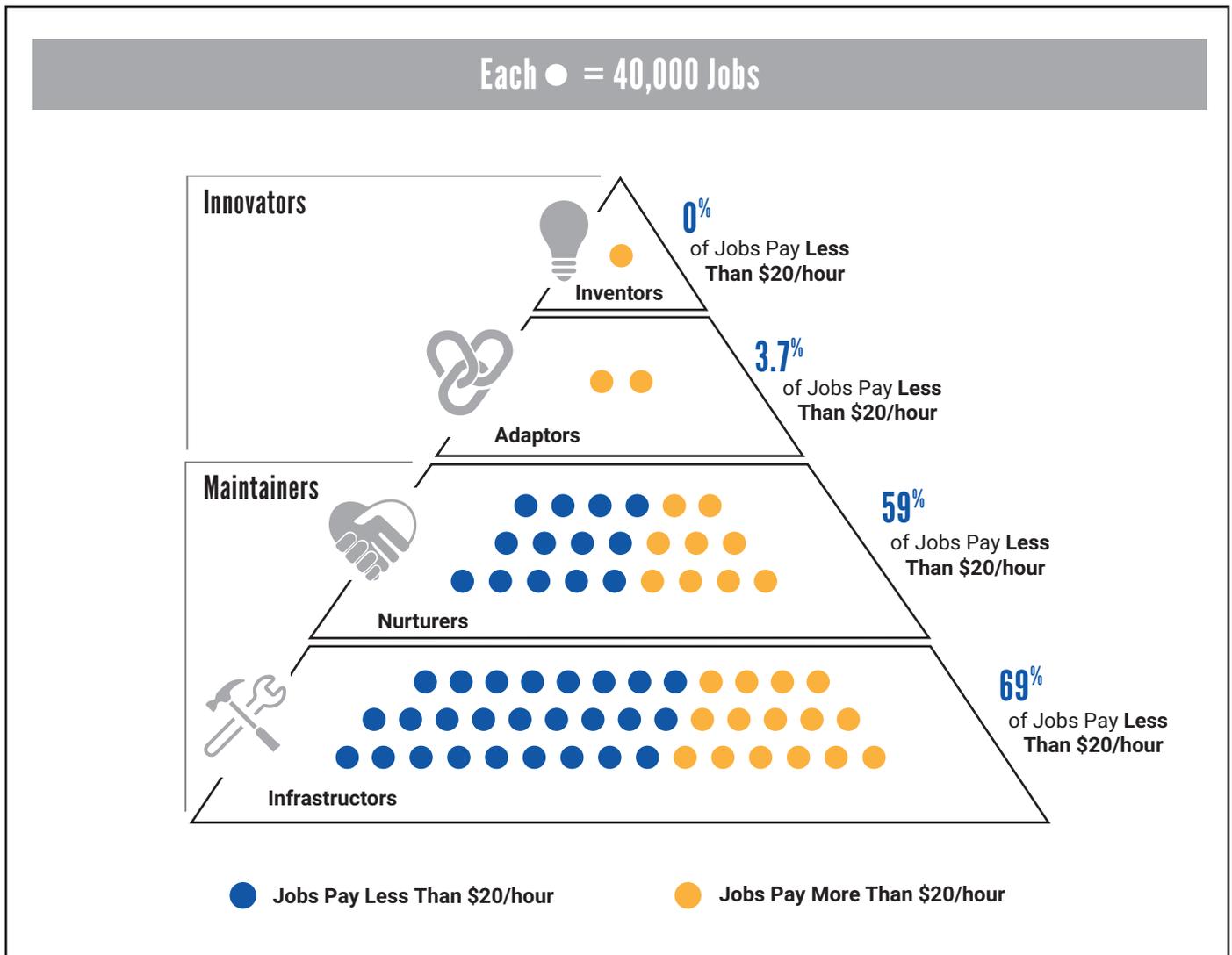
**Adaptors** implement existing tools or processes in new ways, responding to opportunities and changing circumstances (managers, industrial and organizational psychologists, analysts, designers, technicians, and even policymakers).

**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 Tennessee are Maintainer occupations. The single largest industry in 2018, with 630,700 employees, was trade, transportation, and utilities, which is comprised of Infrastructor jobs. The second largest, with 437,500 employees, was government, which includes both Infrastructor and Nurturer jobs. The education and health services industry, comprised of Nurturer positions, followed closely behind, with 437,400 employees. All three industries have large shares of ALICE workers. There are far fewer jobs in Innovator occupations (Adaptors and Inventors). In 2018, 96% of Tennessee jobs were in Maintainer occupations.<sup>60</sup>

When stacked together, Tennessee’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 (69% of Infrastructor jobs and 59% of Nurturer jobs) pay less than \$20 per hour — a wage that, if full time, year-round, provides a maximum annual salary of \$40,000, or \$25,040 less than the family Household Survival Budget of \$65,040. By comparison, almost all Adaptor and Inventor occupations pay more than \$20 per hour.

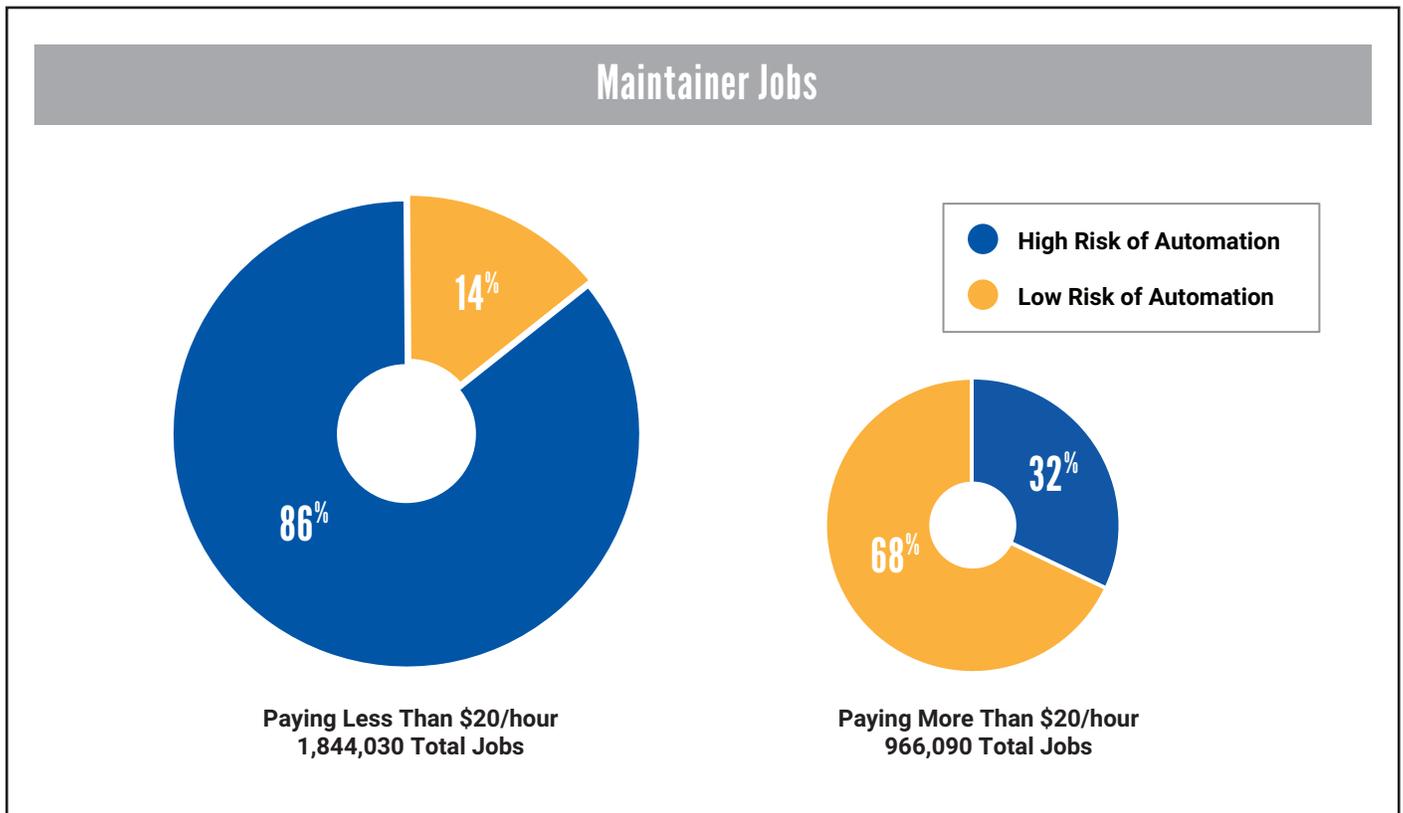
**Figure 8.**  
**Occupations by Wage and Type, Tennessee, 2018**



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 86% of these low-paying jobs are at a high risk of automation. By comparison, only 32% of Maintainer jobs that pay more than \$20 per hour are at that level of risk (Figure 9).

**Figure 9.**  
**Occupations by Type and Risk of Automation, Tennessee, 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 Infrastructure jobs in Tennessee, 93% of jobs that pay less than \$20 per hour are at risk of automation, compared to 49% of those that pay more than \$20 per hour. Among Nurturer jobs, the discrepancy is even greater: 68% of jobs that pay less than \$20 per hour are at risk of automation, compared with 2% of those that pay more than \$20 per hour.<sup>61</sup> 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%).<sup>62</sup>

## 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.<sup>63</sup> Between 2012 and 2016, more than 80% of the growth in gig-economy jobs took place in major metropolitan areas — including Nashville, one of the early adopters of gig-economy work in the U.S.<sup>64</sup> 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.<sup>65</sup> 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. There has also been increasing

conversation in the last few years about how to balance employers' needs with protections for contract workers. Tennessee is one of several states that have implemented a new flexible classification test to determine whether a worker is an employee or a contractor. The goal is to give employers the flexibility needed to meet their interests while ensuring that employees are accurately classified and compensated.<sup>66</sup>

**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.<sup>67</sup> 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.<sup>68</sup> Tennessee offers two programs – Tennessee Promise and Tennessee Reconnect – as part of an effort to increase the skills and credentials of the workforce in the short term, and prepare workers for career growth in the changing work landscape in the long term.<sup>69</sup> The benefits of increased technology will include improved accuracy in areas like pharmaceutical pill dispensing, and reduced risk of injury for workers such as warehouse packers and long-distance drivers.<sup>70</sup>

**The number of low-wage jobs will continue to increase, despite automation.** Even though most jobs will change and evolve with demand as well as technology, it may not be economical or effective to automate certain jobs. For example, low-wage Maintainer jobs in areas like education and health care require employees to be on-site and often involve relational skills that are difficult or impossible to 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 Tennessee is food preparation and serving workers; the median wage for these jobs in 2018 was \$9.09 per hour, which was not enough to support the single-adult, family, or senior Survival Budgets. Of the state's top 20 growth occupations, 53% will pay less than \$15 per hour, 46% will require only a high school diploma, and 30% will not require any formal educational credential at all.<sup>71</sup>

**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.<sup>72</sup> 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.<sup>73</sup> And 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 Tennessee, 55% of college students who graduated in 2018 were in debt with an average loan of \$26,838, a 35% increase from 2010.<sup>74</sup>

# NEXT STEPS: DATA FOR ACTION

The ALICE data highlights significant problems in the Tennessee economy in 2018: stagnant wages, a rising cost of living, and 47% of the state's households unable to afford even the most basic budget. 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?

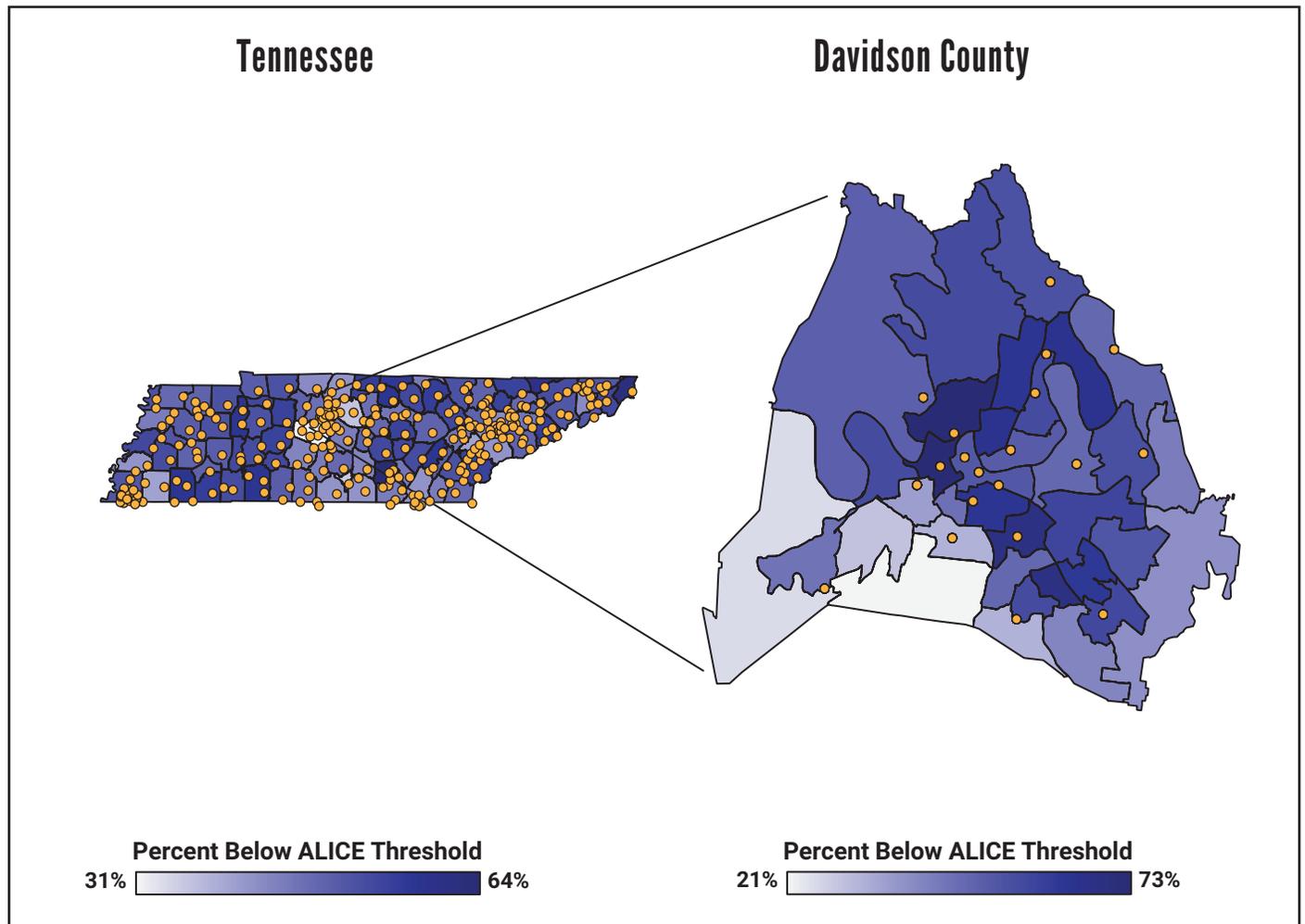
Access to public libraries is especially important for ALICE families because libraries provide information on social services and job opportunities, free internet and computer access, and a range of free programs, community meetings, and even 3-D printers. In a recent survey, three million Tennesseans – almost half of all residents – reported using a public library in the prior year, and more than two million attended library programs related to early literacy, career counseling, technology trainings, health care resources, and government services.<sup>75</sup>

After a natural disaster, libraries serve as second responders, providing electricity, internet access, charging stations, heat or air conditioning, and current information on recovery efforts.<sup>76</sup> In lower-income communities, the library can provide a safe and inclusive place for individuals and families. A 2019 Gallup Poll found that lower-income households (earning less than \$40,000 per year) visit the library more frequently than average- and higher-income households.<sup>77</sup>

There are 282 libraries across Tennessee's 95 counties, shown in gold dots in Figure 10 (and in an interactive feature on [UnitedForALICE.org/Tennessee](https://UnitedForALICE.org/Tennessee)).<sup>78</sup> 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, rural areas with a small population but high percentage of ALICE households may benefit from mobile library services or through shared services with other public libraries.

**Figure 10.**

**Library Locations and Households Below ALICE Threshold, Tennessee, 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?

Tennessee has its fair share of extreme weather. Most recently, the string of ten tornadoes that touched down just west of Nashville in March 2020 left a path of destruction across the state to Cookeville, devastating homes, schools, and businesses and taking the lives of 25 residents.<sup>79</sup> Mapping where ALICE households live in relation to the impact of natural disasters such as floods, hurricanes, or tornadoes 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 little or no savings for an emergency to begin with, and their communities often have fewer resources to assist households.<sup>80</sup>

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).<sup>81</sup>

# 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.<sup>82</sup> 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 Tennessee, visit our website: [UnitedForALICE.org/Tennessee](https://UnitedForALICE.org/Tennessee)

Here is one example:

## Is internet access related to income?

Access to digital technology has exploded over the last three decades: By 2018, 92% of U.S. adults owned a computing device and 85% had a broadband internet subscription. In Tennessee, the rates were slightly lower, 89% of households owned a computing device and 82% had a broadband internet subscription in 2018.<sup>83</sup> Technology has also become more important for work, education, 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. Households without internet access are also at greater risk of being undercounted in the 2020 Census, when they may need government programs and services the most.<sup>84</sup>

This high usage of smartphones for a critical task indicates that many low-income households have limited access to the internet at home. For many lower-income households, cost is a major barrier; 81% of Tennesseans earning below \$30,000 cite the cost of internet subscription as a primary concern.<sup>85</sup> In Tennessee, 36% of households with income below the ALICE Threshold do not have an internet subscription, compared with only 10% for households above the ALICE Threshold. Rates also vary widely by location: The counties with the lowest access rates and lowest income are in rural areas, where 43% of households below the ALICE Threshold did not have an internet subscription in 2018.<sup>86</sup> Identifying these gaps can help businesses and government provide more resources to libraries, establish training centers, or target low-cost internet plans.<sup>87</sup>

# THE BENEFITS OF MOVING TOWARD EQUITY IN TENNESSEE

The strength of the Tennessee economy is inextricably tied to the financial stability of its residents. The more people who 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 1,229,995 Tennessee households — nearly one-half 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 Tennessee 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 Tennessee of bringing all households to the ALICE Threshold would be approximately \$78 billion, meaning that the state GDP would grow by 21% (Figure 11).** This is based on two categories of economic enhancement:

**Earnings:** Tennessee's 2018 GDP reflected earnings of \$28.3 billion by the state's households below the ALICE Threshold. Bringing all households to the ALICE Threshold would have a two-fold impact:

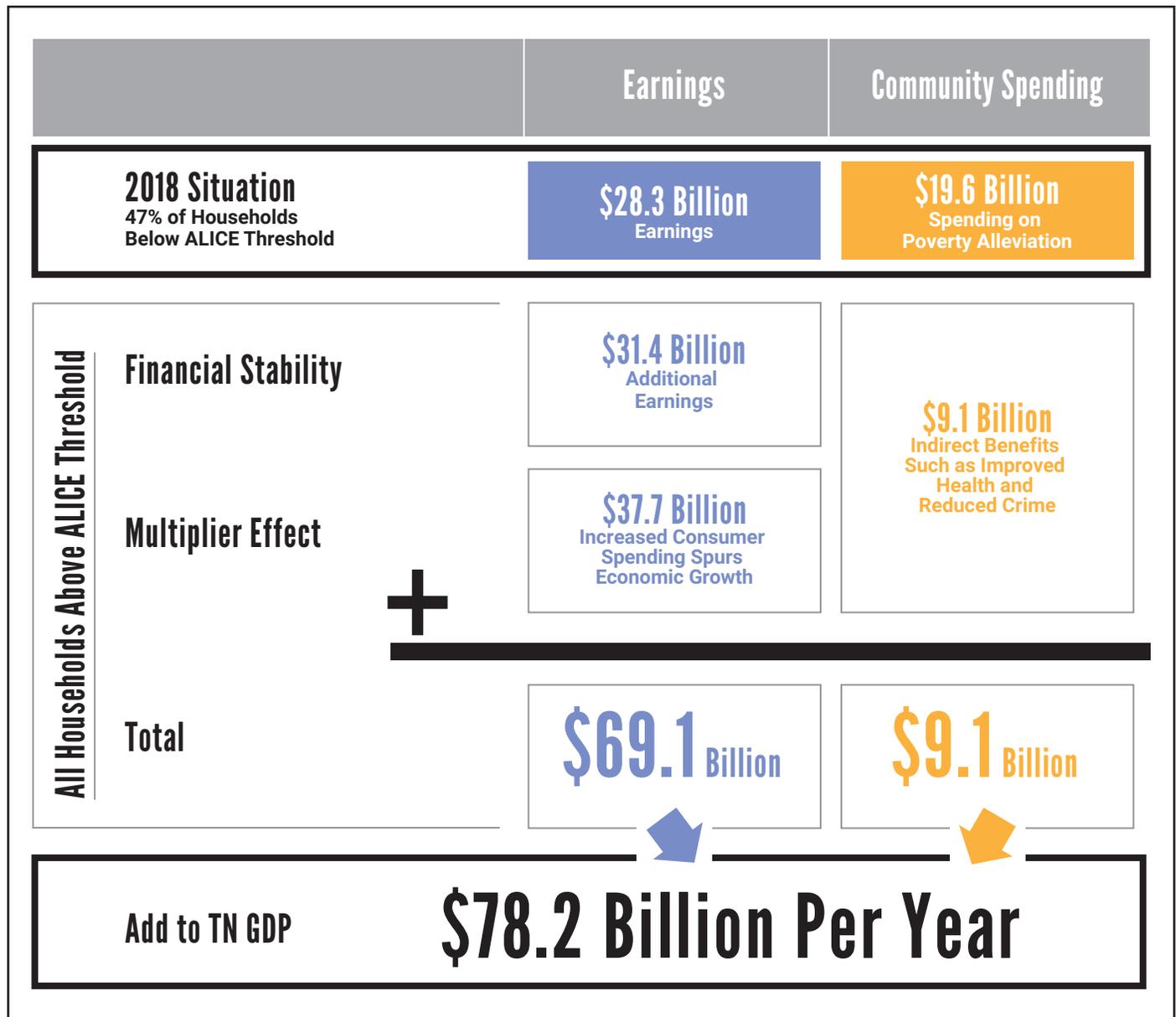
- **Additional earnings:** \$31.4 billion statewide.
- **Multiplier effect:** Studies show that almost all additional wages earned by low-wage workers are put back into the economy through increased consumer spending, which in turn spurs business growth.<sup>88</sup> Building on economic calculations 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 Tennessee, this increased economic activity would be valued at \$37.7 billion.<sup>89</sup>

**Community spending:** Tennessee's 2018 GDP reflected community spending of \$19.6 billion on assistance to the state's households below the ALICE Threshold.<sup>90</sup> 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 \$9.1 billion (or 2.5% of the state GDP, which is the estimated cost of childhood poverty alone).<sup>91</sup> 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 factor in the direct impact of redeploying private and nonprofit spending currently used to alleviate poverty.<sup>92</sup>

Figure 11.

## Economic Benefits of Raising All Households to the ALICE Threshold, Tennessee, 2018



Note: In states with income tax, additional tax revenues are included in this analysis. Tennessee does not have a state income tax and the items in the ALICE Household Survival Budget are not subject to sales tax.

Sources: ALICE Threshold, 2018; American Community Survey, 2018; McKeever, 2018; National Association of State Budget Officers, 2019; Office of Management and Budget, 2019; U.S. Department of Agriculture—SNAP, 2019; Urban Institute, 2012<sup>93</sup>

## 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 Tennessee families and their communities could experience if policies were implemented that moved all households above the ALICE Threshold.<sup>94</sup>

**Figure 12.**  
**The Benefits of Sufficient Income**

If households have sufficient income for...	Impact on ALICE	Impact on the Community
 <b>Safe, Affordable Housing</b>	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
 <b>Quality Child Care and Education</b>	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)
 <b>Adequate Food</b>	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
 <b>Reliable Transportation</b>	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
 <b>Quality Health Care</b>	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
 <b>Reliable Technology</b>	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
 <b>Savings</b>	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.<sup>95</sup>

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.<sup>96</sup> 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.<sup>97</sup> Strengthening communities by strengthening ALICE families means a higher quality of life for all.

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