

ALICE IN TENNESSEE: A FINANCIAL HARDSHIP STUDY

LIVE UNITED



2019 TENNESSEE REPORT



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ALICE: A GRASSROOTS MOVEMENT

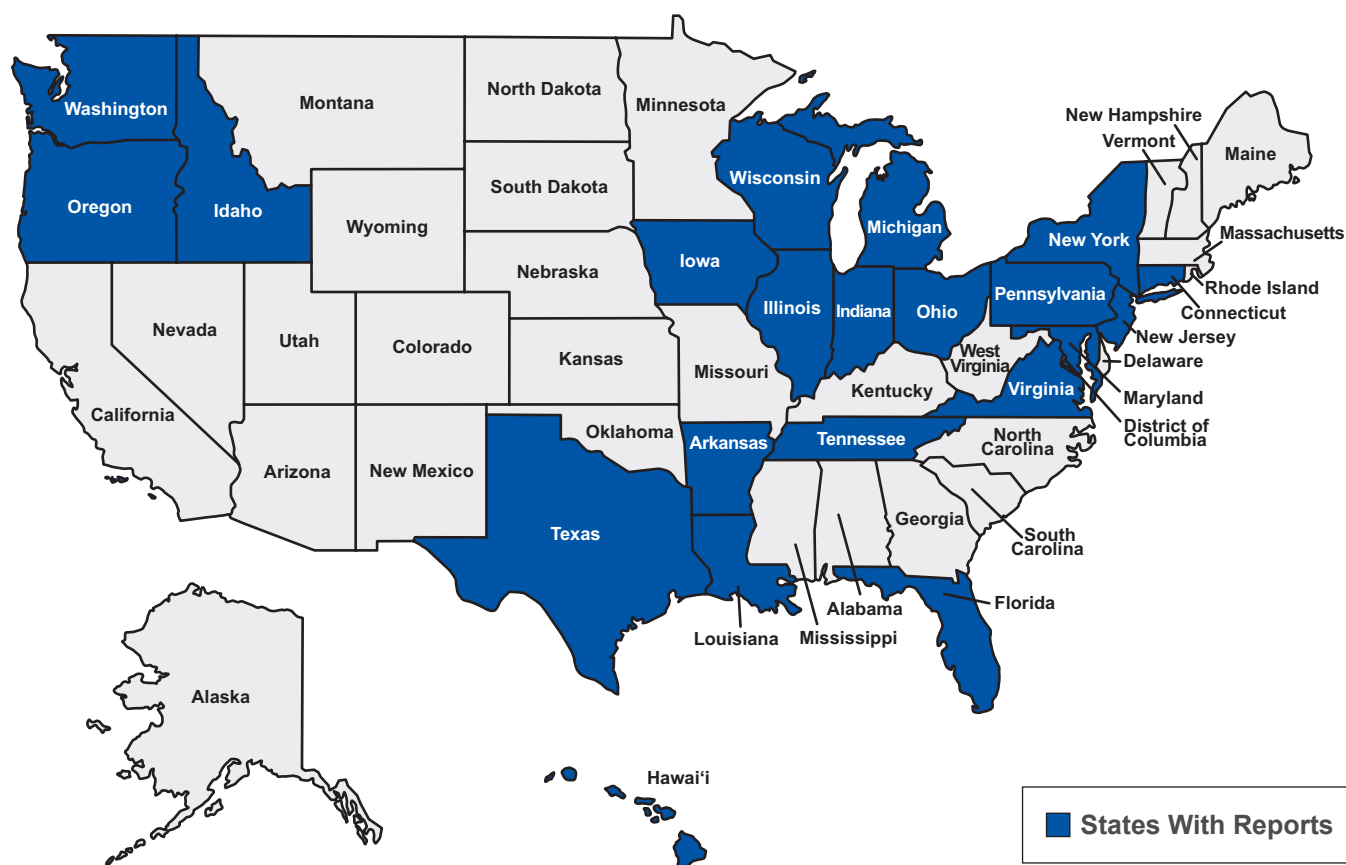
This body of research provides a framework, language, and tools to measure and understand the struggles of a population called **ALICE** — an acronym for **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed. ALICE represents the growing number of households in our communities that do not earn enough to afford basic necessities. This research initiative partners with United Ways, foundations, academic institutions, corporations, and other state organizations to present data that can 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 in 2009, to the entire state of New Jersey in 2012, and now to 21 states. United Ways in Tennessee are proud to join the more than 648 United Ways in these states, along with organizations across the country, that are working to better understand ALICE's struggles.

Together, United Ways, government agencies, nonprofits, and corporations have the opportunity to evaluate current initiatives and discover innovative approaches that give ALICE a voice, and create changes that improve life for ALICE and the wider community.

To access reports from all states, visit UnitedForALICE.org

ALICE Reports in the United States



THE ALICE RESEARCH TEAM

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, a team of researchers collaborated with a Research Advisory Committee, composed of 10 representatives from across Tennessee, who advised and contributed to the report. This collaborative model, practiced in each state, ensures each report presents unbiased data that is replicable, easily updated on a regular basis, and sensitive to local context. Working closely with United Ways, this research initiative seeks to equip communities with information to create innovative solutions.

Lead Researcher

Stephanie Hoopes, Ph.D., is the lead researcher, director, and author of the ALICE Reports. Dr. Hoopes began this effort with a pilot study of a more accurate way to measure financial hardship in Morris County, New Jersey in 2009. Since then, she has overseen its expansion into a broad-based, state-by-state research initiative now spanning 20 states across the country. Her research on the ALICE population has garnered both state and national media attention.

Before joining United Way full time in 2015, Dr. Hoopes taught at Rutgers University and Columbia University. Dr. Hoopes has a doctorate from the London School of Economics, a master's degree from the University of North Carolina at Chapel Hill, and a bachelor's degree from Wellesley College.

Dr. Hoopes is on the board of directors of the McGraw-Hill Federal Credit Union, and she received a resolution from the New Jersey General Assembly for her work on ALICE in 2016.

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LETTER TO THE COMMUNITY

Dear Tennesseans,

We know there's no better place to live than the Volunteer State! With its majestic mountains, rolling hills, fertile delta, thriving farms, charming small towns, cosmopolitan cities, musical heritage, and rich history, Tennessee is as diverse as it is beautiful. But despite all of this, so many hardworking individuals and families in our state struggle to make ends meet. They are **ALICE** — **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed.



The ALICE Report finds that 39 percent of Tennesseans cannot afford basic necessities, including housing, food, child care, health care, and transportation. The ALICE population represents individuals and families who work hard, sometimes in two or three jobs, and earn more than the official Federal Poverty Level, but less than the basic cost of living.

Every one of us knows ALICE; maybe we are ALICE — child care providers, truck drivers, home health aides, mechanics, store clerks, or office assistants. Until now, ALICE has been a hidden population. ALICE households often don't qualify for governmental aid or social service programs, so they are virtually invisible to the system, their struggles unseen and unknown. Yet this Report clearly shows us who ALICE is, where ALICE lives, and how ALICE struggles in the state of Tennessee.

We hope that the data in this Report will shine a light on ALICE — and that it will motivate more of us to take action. We must do more. And many of us have. United Ways, our partners, other nonprofits, our government, and our faith community have made strides in improving conditions for ALICE. In fact, thanks to this Report, our member United Ways are more relevant in the conversation to end poverty, including being poised to advocate for more affordable child care, to support workforce development opportunities, to expand access to health services, and to empower our citizens to greater financial stability.

Whether as individuals or as part of an organization or government agency, we all need to figure out what part we can play. There are many ways to help: engaging with your United Way, volunteering, writing letters to your legislators, or simply becoming more involved in your own neighborhood.

I hope that you'll join us as United Ways across Tennessee roll up our sleeves to improve life for the people and communities of our state.

Sincerely,

A handwritten signature in black ink that reads "Wendy Peay". The signature is fluid and cursive.

Wendy Peay, Board Chair, United Ways of Tennessee

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EXECUTIVE SUMMARY

In 2017, 1,017,504 households in Tennessee — 39 percent — could not afford basic needs such as housing, child care, food, transportation, health care, and technology.

This ALICE Report for Tennessee describes the population called **ALICE**, an acronym for **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed — families with income above the Federal Poverty Level (FPL), but not high enough to afford basic household necessities. With the cost of living higher than what most people earn, ALICE households live in every county in Tennessee — urban, suburban, and rural — and they include women and men, young and old, of all races and ethnicities.

Despite recent reports of overall improvement in employment and gains in median incomes, the economic recovery in Tennessee since the end of the Great Recession in 2010 has been uneven. Many families continue to face challenges because of low wages, little to no savings, and the increasing cost of basic household goods. The total number of Tennessee households that cannot afford basic needs increased 17 percent between 2007 and 2017, from 871,059 households to 1,017,504 households.

This Report presents the actual cost of basic needs (housing, child care, food, transportation, health care, technology, and taxes) in the **Household Survival Budget** for each county in Tennessee, and the number of households earning below the amount needed to afford that bare-minimum budget (**the ALICE Threshold**).

The Report delves into county and municipal data and looks at the demographics of ALICE and poverty-level households by race/ethnicity, age, and household type to reveal variations in hardship that are often masked by state averages. The Report asks where ALICE households work; how assets, credit, and assistance supplement their incomes; and how local conditions like affordable housing and community resources affect their financial stability and quality of life. Finally, the Report highlights emerging trends that will impact ALICE families in the future.

The data reveals an ongoing struggle for ALICE households in Tennessee, and a range of obstacles to achieving financial stability:

- **The extent of hardship:** Of Tennessee's 2,589,017 households, 15 percent lived in poverty in 2017 and another 24 percent were ALICE households. Combined, 39 percent (1,017,504 households) had income below the ALICE Threshold, an increase of 17 percent since 2007.
- **The basic cost of living:** The cost of basic household expenses in Tennessee increased steadily to \$50,796 for a family of four (two adults with one infant and one preschooler) and \$19,032 for a single adult — significantly higher than the FPL of \$24,600 for a family of four and \$12,060 for a single adult. The cost of the family budget increased by 31 percent from 2007 to 2017.
- **Jobs:** Low-wage jobs continued to dominate the landscape in Tennessee, with 67 percent of all jobs paying less than \$20 per hour. Although unemployment rates fell during this period, wages remained low for many occupations. With more contract work and on-demand jobs, job instability also increased, making it difficult for ALICE workers to meet regular monthly expenses or to save. In addition, gaps in wages varied based on the type of employer as well as the gender, education, and race/ethnicity of workers.
- **The role of public assistance:** Public and private assistance continued to provide support to many households living in poverty or earning slightly above the FPL, but it provided less support to ALICE households whose income is above eligibility levels. Spending on health care and health insurance outpaced spending in other budget areas; there remained large gaps in assistance, especially in housing and child care.

- **Emerging trends:** Several trends are changing the economic landscape for ALICE families:
 - *The changing American household* — Shifting demographics, including millennials reaching adulthood, the aging of the baby boomers, and domestic and foreign migration patterns, are having an impact on who is living together in households and where and how people work. These changes, in turn, influence the demand for goods and services, ranging from the location of housing to the provision of caregiving.
 - *Increasing vulnerability of workers* — Within a global economy, economic disruptions, natural disasters, and technological advances in other parts of the world trigger rapid change supply and demand for U.S. industries. Increasingly, this risk has been shifted from companies to workers. Combined with the often-disruptive effects of technology on jobs and the workplace, ALICE workers increasingly face income volatility in addition to low wages.
 - *Growing health inequality* — As health costs rise, disparities in health increase, especially according to income. Expensive medical and technological advances that are out of reach of lower-income households will only further this divide. The societal costs of having large numbers of U.S. residents in poor health will also grow.

Using the best available information on those who are struggling, this Report offers an enhanced set of tools for stakeholders to measure the real challenges ALICE households face in trying to make ends meet. The FPL is an outdated calculation, and inaccurate information about the number of people struggling distorts the identification of problems related to poverty, misguides policy solutions, and raises questions of equity, transparency, and fairness in the allocation of resources. United for ALICE develops these resources in order to move beyond stereotypes and judgments of “the poor,” and instead encourages the use of data to inform programmatic and policy solutions for these households and their communities. The Methodology Overview and additional data are available online at UnitedForALICE.org.

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 is the bare-minimum cost to live and work in the modern economy. It calculates the actual 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 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. Unless otherwise noted in this Report, households earning below the ALICE Threshold include both ALICE and poverty-level households.

The Household Stability Budget is greater than the basic Household Survival Budget and reflects the cost for household necessities at a modest but sustainable level. It adds a savings category and an expanded technology category (smartphone and basic home internet), and it is adjusted for different counties and household types.

The ALICE Income Assessment is the calculation of all sources of income, resources, and assistance for ALICE and poverty-level households. Even with assistance, the Assessment reveals a shortfall, or Unfilled Gap, between what these households bring in and what is needed for them to reach the ALICE Threshold.

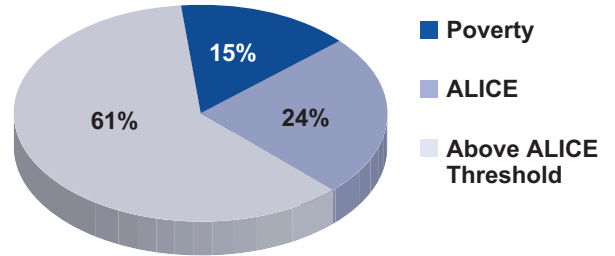
AT-A-GLANCE: TENNESSEE

2017 Point-in-Time Data

Population: 6,715,984 | Number of Counties: 95 | Number of Households: 2,589,017

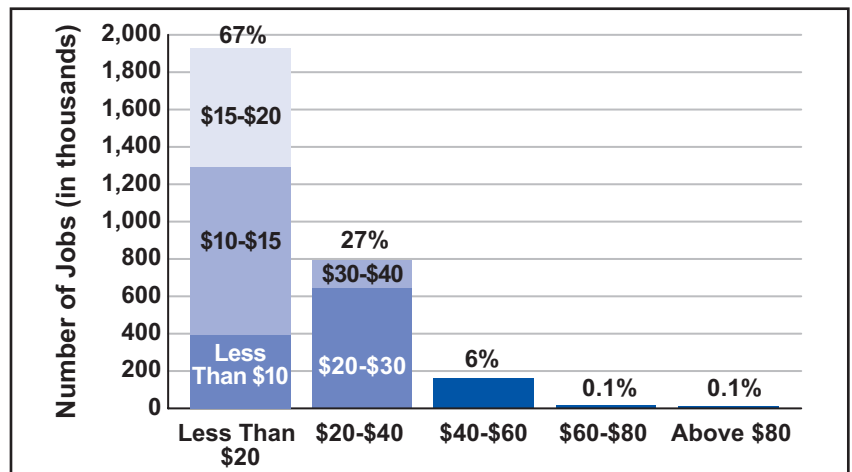
How many households are struggling?

ALICE, an acronym for **A**sset Limited, **I**ncome **C**onstrained, **E**mployed, are 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 2,589,017 households, 15 percent earn below the Federal Poverty Level and another 24 percent are ALICE households.



How much does ALICE earn?

In Tennessee, 67 percent of jobs pay less than \$20 per hour, with two-thirds of those paying less than \$15 per hour. Another 27 percent of jobs pay between \$20 and \$40 per hour. Only 6 percent of jobs pay more than \$40 per hour.



What does it cost to afford the basic necessities?

Despite low national inflation during the recovery (22 percent from 2007 to 2017), the bare-minimum Household Survival Budget in Tennessee increased by 31 percent for a family and 23 percent for a single adult. Affording only a very modest living, this budget is still significantly more than the Federal Poverty Level of \$24,600 for a family of four and \$12,060 for a single adult.

Household Survival Budget, Tennessee Average, 2017

	SINGLE ADULT	2 ADULTS, 1 INFANT, 1 PRESCHOOLER
Monthly Costs		
Housing	\$497	\$692
Child Care	\$—	\$898
Food	\$179	\$543
Transportation	\$322	\$644
Health Care	\$124	\$539
Technology	\$55	\$75
Miscellaneous	\$144	\$385
Taxes	\$265	\$457
Monthly Total	\$1,586	\$4,233
ANNUAL TOTAL	\$19,032	\$50,796
Hourly Wage*	\$9.52	\$25.40

*Full-time wage required to support this budget

Tennessee Counties, 2017		
COUNTY	TOTAL HOUSEHOLDS	PERCENT ALICE & POVERTY
Anderson	29,929	41%
Bedford	17,058	44%
Benton	6,693	53%
Bledsoe	4,664	54%
Blount	50,793	37%
Bradley	40,610	41%
Campbell	15,843	48%
Cannon	5,456	46%
Carroll	11,321	48%
Carter	23,798	49%
Cheatham	14,671	41%
Chester	5,998	45%
Claiborne	12,996	48%
Clay	3,171	53%
Cocke	14,592	51%
Coffee	21,576	39%
Crockett	5,400	46%
Cumberland	25,114	39%
Davidson	283,929	35%
Decatur	4,721	48%
DeKalb	7,362	46%
Dickson	19,032	44%
Dyer	15,327	40%
Fayette	15,084	38%
Fentress	7,385	49%
Franklin	16,325	40%
Gibson	19,280	45%
Giles	11,599	38%
Grainger	9,112	42%
Greene	27,249	50%
Grundy	4,894	59%
Hamblen	24,343	44%
Hamilton	145,071	39%
Hancock	2,704	56%
Hardeman	8,680	55%
Hardin	10,118	47%
Hawkins	23,375	42%
Haywood	7,104	52%
Henderson	10,827	44%
Henry	13,483	41%
Hickman	8,930	52%
Houston	2,999	43%
Humphreys	7,064	44%
Jackson	4,566	55%
Jefferson	20,088	40%
Johnson	6,936	56%
Knox	187,098	33%
Lake	2,164	52%

Tennessee Counties, 2017		
COUNTY	TOTAL HOUSEHOLDS	PERCENT ALICE & POVERTY
Lauderdale	9,725	53%
Lawrence	16,101	43%
Lewis	4,663	47%
Lincoln	13,653	38%
Loudon	20,090	34%
Macon	9,158	49%
Madison	36,343	41%
Marion	11,393	40%
Marshall	12,008	37%
Maury	33,900	36%
McMinn	20,352	47%
McNairy	10,095	53%
Meigs	4,818	41%
Monroe	17,416	49%
Montgomery	73,690	33%
Moore	2,613	32%
Morgan	7,384	46%
Obion	12,795	41%
Overton	8,937	46%
Perry	3,295	53%
Pickett	2,180	40%
Polk	7,023	38%
Putnam	30,679	45%
Rhea	12,607	47%
Roane	21,619	41%
Robertson	25,884	36%
Rutherford	112,519	33%
Scott	8,519	55%
Sequatchie	5,505	44%
Sevier	36,444	40%
Shelby	347,221	43%
Smith	7,535	40%
Stewart	5,315	38%
Sullivan	67,685	39%
Sumner	66,063	30%
Tipton	21,445	40%
Trousdale	2,944	51%
Unicoi	7,613	46%
Union	7,268	50%
Van Buren	2,156	43%
Warren	15,755	48%
Washington	53,071	45%
Wayne	5,860	57%
Weakley	13,607	45%
White	9,793	53%
Williamson	77,512	20%
Wilson	50,234	31%

Sources: *Point-in-Time Data:* American Community Survey, 2017. *ALICE Demographics:* ALICE Threshold, 2017; American Community Survey, 2017. *Wages:* BLS, 2017—Occupational Employment Statistics. *Budget:* BLS, 2017—Consumer Expenditure Surveys; Consumer Reports, 2017—Best Low-Cost Cell-Phone; HUD, 2017—Fair Market Rents; IRS, 2017—About Form 1040; Tax Foundation, 2017; Tennessee Department of Human Services, 2018—Fiscal Year; USDA, 2017—Official USDA Food Plans. For the Methodology Overview and additional data, visit our website: UnitedForALICE.org.

INTRODUCTION

With great natural beauty, Tennessee stretches from the Great Smokey Mountains to the coastal plains of the Mississippi, home to one thousand lakes, and mighty rivers, reservoirs, and parks. The Volunteer State is known for its musical heritage, with Memphis and Nashville the centers of blues and country music. Tennessee is home to Oak Ridge National Labs, three major car manufacturing plants and more than 900 auto suppliers, as well as some of the largest companies in the U.S., including HCA Healthcare and FedEx.

Yet despite the state's central location in the Southeast, an educated workforce, and low cost of living, Tennessee also contains sharp disparities in wealth and income. What is often overlooked is the growing number of households that earn above the Federal Poverty Level (FPL), but are unable to afford the state's cost of living.

Traditional measures hide the reality that 39 percent of households in Tennessee struggle to support themselves. Because income is distributed unequally in Tennessee, there is both great wealth and significant economic hardship. That inequality increased by 3 percent from 1979 to 2017; now, the top 20 percent of Tennessee's population earns 52 percent of all income earned in the state, while the bottom 20 percent earns only 3 percent (American Community Survey, 2017; Guzman, 2017; U.S. Census Bureau, n.d.—Table S4).

In 2017, Tennessee's poverty rate was 15 percent, well above the 10 percent U.S. average, and the median annual household income was \$51,340, well below the U.S. median of \$60,336. In addition, while unemployment is low in Tennessee, workers increasingly face a changing jobs landscape where lower-paying, part-time, and non-salaried occupations account for the majority of jobs (American Community Survey, 2017; BLS, 2017—Occupational Employment Statistics; Federal Reserve Bank of St. Louis, 2017—Total Wage and Salary Workers).

None of the economic measures traditionally used to calculate the financial status of Tennessee's households, such as the FPL, consider the actual cost of living in each county in Tennessee or the wage rate of jobs in the state. For that reason, those indices do not fully capture the number of households facing economic hardship across Tennessee's 95 counties.

The term ALICE describes a household that is Asset Limited, Income Constrained, Employed. ALICE is a household with income above the FPL but below a basic survival threshold, defined here as the ALICE Threshold. Defying many stereotypes, ALICE households are working households, composed of women and men, young and old, of all races/ethnicities, and they live in every county in Tennessee — urban, suburban, and rural.

This ALICE Report for Tennessee provides better measures and language to describe the sector of Tennessee's population that struggles to afford basic household necessities. It presents a more accurate picture of the economic reality in the state, especially regarding the number of households that are severely economically challenged.

The Report asks whether conditions have improved since the Great Recession, and whether families have been able to work their way above the ALICE Threshold. It includes a toolbox of ALICE measures that provide greater understanding of how and why so many families are still struggling financially. Some of the challenges Tennessee faces are unique, while others are trends that have been unfolding nationally for at least three decades.

This Report is about far more than poverty: It reveals profound changes in the structure of Tennessee's communities and jobs. It documents the increase in the basic cost of living, the decrease in the availability of jobs that can support household necessities, and the shortage of housing that is affordable to workers in the majority of the state's jobs. The findings are stark: The Great Recession was severe in Tennessee, and despite slow overall population growth, the number of households struggling financially has continued to grow through 2017. In 2007, 36 percent of Tennessee households had income below the ALICE Threshold; that share increased to 39 percent in 2010 and then was 41 percent from 2014 to 2016, before falling to 39 percent in 2017. In contrast, the official U.S. poverty rate in Tennessee reports that in 2017, only 15 percent were struggling. But the FPL was developed in 1965, and its methodology has remained largely unchanged despite changes in the cost of living over time (U.S. Government Accountability Office, 2009).

The ALICE measures show how many households in the state are struggling, and they provide the new language needed to discuss this segment of our community and the economic challenges that so many residents face. In Tennessee, there are 622,907 ALICE households that have income above the FPL but below the ALICE Threshold. **When combined with households below the poverty level, in total, 1,017,504 households in Tennessee — fully 39 percent — struggled to meet their basic needs in 2017.**

ALICE households are working households. They hold jobs, pay taxes, and provide services that are vital to the Tennessee economy, in a variety of positions such as retail salespeople, laborers and movers, customer service representatives, and office workers. The core issue is that these jobs do not pay enough to afford the basics of housing, child care, food, transportation, and health care. Moreover, the growth of low-skilled jobs is projected to outpace that of medium- and high-skilled jobs into the next decade (BLS, 2017—Occupational Employment Statistics; Tennessee Department of Labor and Workforce Development, 2016). Yet the cost of basic household necessities continues to rise. Given these projections, ALICE households will continue to make up a significant percentage of households in the state.

REPORT OVERVIEW

I. Who is struggling in Tennessee?

Section I presents the **ALICE Threshold**: a realistic measure for income inadequacy in Tennessee that takes into account the current cost of basic necessities and geographic variation. In Tennessee, there are 1,017,504 households — 39 percent of the state's total — with income below the realistic cost of basic necessities; 15 percent of those households are living below the FPL and another 24 percent are ALICE households. This section provides a statistical picture of ALICE household demographics, including geography, age, race/ethnicity, immigrant status, sex, and family type. Apart from a few notable exceptions, ALICE households generally reflect the demographics of the overall state population.

II. How costly is it to live in Tennessee?

Section II details the average minimum costs for households in Tennessee to simply survive — not to save or otherwise “get ahead.” The cost of living in Tennessee varies greatly across the state, but in all counties, it outpaces the wages of most jobs. The annual **Household Survival Budget** quantifies the costs of the basic essentials of housing, child care, food, transportation, health care, and a basic smartphone plan. Using the thriftiest official standards, including those used by the U.S. Department of Agriculture and the U.S. Department of Housing and Urban Development, the average annual Household Survival Budget in 2017 was \$50,796 for a Tennessee family of four (two adults with one infant and one preschooler) and \$19,032 for a single adult. These numbers vary by county, but all highlight the inadequacy of the 2017 adjusted U.S. poverty designation of \$24,600 for a family and \$12,060 for a single adult as an economic survival standard in Tennessee.

The Household Survival Budget is the basis for the ALICE Threshold, which redefines the basic economic survival standard for Tennessee households. Section II also details a **Household Stability Budget**, which reaches beyond survival to budget for savings and stability at a modest level. Even at this level, the Household Stability Budget is 74 percent higher than the Household Survival Budget for a family of four in Tennessee.

III. Where does ALICE work?

Section III examines the changing labor landscape in Tennessee, the rise of the gig economy and the impact of these changes on wages and income volatility. With 67 percent of jobs in Tennessee paying less than \$20 per hour, it is not surprising that so many households fall below the ALICE Threshold. The section details where ALICE works — the type of industries, geographic location, and size of firms. In addition, the section reviews the factors that keep ALICE workers' wages low and the barriers that prevent ALICE from working, including gender, race/ethnicity, education, sexual identity and orientation, military service, incarceration, and disability status. Finally, the section looks at what causes younger, older, and working-age Tennesseans to leave the workforce.

IV. How much do ALICE households save and borrow?

Section IV examines the impact on ALICE households that have little to no savings. In 2017, 44 percent of Tennessee's households did not have any savings for a rainy day, slightly higher than the national average of 41 percent. The section also reviews ALICE households' access to credit as well as their ability to acquire assets, including vehicles, housing, and investments.

V. How much assistance is necessary to reach the ALICE Threshold?

Section V examines the amount of public and private assistance ALICE and poverty-level households receive. The **ALICE Income Assessment** estimates that ALICE and poverty-level households in Tennessee earn 47 percent of what is required to reach the ALICE Threshold. Resources from nonprofits and federal, state, and local governments provide \$6.6 billion in goods and services, with an additional \$12.4 billion in health care spending. However, there remains an Unfilled Gap of \$2.9 billion, in order for all households to reach the ALICE Threshold, and there are even larger gaps in specific budget areas, including a 51 percent gap for child care and a 46 percent gap for housing.

VI. What are the housing and community conditions for ALICE households in Tennessee?

Section VI presents the conditions that Tennessee's ALICE households face in their local communities. It covers housing affordability and community resources in the areas of education, health, and the social environment across the state's counties. ALICE households across Tennessee are challenged to find both affordable housing and high levels of community resources in the same county where they work. The section also looks at three specific issues facing ALICE households: the opioid epidemic, problems of social isolation (particularly for seniors), and access to technology.

Conclusion and Next Steps

The Report concludes by outlining the structural issues that pose the greatest challenges to ALICE households going forward. These include changes in the age of Tennessee's population; racial and ethnic diversity and economic disparities; the evolving structure of households; migration into and out of the state; market instability resulting from economic disruptions, natural disasters, and technological advances within the global economy; and the effects of growing health inequality for ALICE workers. This section also presents some of the ideas currently being debated and piloted to improve life for households living below the ALICE Threshold — in Tennessee and across the country.

DATA & METHODOLOGY

This ALICE Report for Tennessee provides the most comprehensive look at the population called **ALICE** — an acronym for **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed. ALICE households have incomes above the Federal Poverty Level (FPL) but struggle to afford basic household necessities. The Report tracks data from before and after the Great Recession (2007 and 2010) and then during the recovery through 2017.

This Report remains focused on the county level because state averages can mask significant differences between counties. For example, the percentage of households below the ALICE Threshold in Tennessee ranges from 20 percent in Williamson County to 59 percent in Grundy County.

The Report examines issues surrounding ALICE households from different angles to draw the clearest picture with the range of data available. Sources include the American Community Survey, the U.S. Department of Housing and Urban Development, the U.S. Department of Agriculture, the Bureau of Labor Statistics at the U.S. Department of Labor, the Internal Revenue Service, and the Tax Foundation, as well as these agencies' Tennessee state counterparts and the Tennessee Department of Human Services. State, county, and municipal data is used to provide different lenses on ALICE households.

The data are estimates; some are geographic averages, others are one- or five-year averages depending on population size. The [UnitedForALICE.org](https://www.unitedforalice.org) website contains more ALICE data at the local or sub-county level, including place, county subdivision, ZIP code, Public Use Microdata Area (PUMA), and congressional district. For a breakdown of the data by county and municipality, see the County Pages and Data File on the website (under "Downloads" at [UnitedForALICE.org/Tennessee](https://www.unitedforalice.org/Tennessee)).

In this Report, many percentages are rounded to whole numbers for ease of reading. In some cases, this may result in percentages totaling 99 or 101 percent instead of 100 percent.

The data and methodology have two external checks. For each Report, the ALICE research team engages an independent Research Advisory Committee of local experts. In addition, every two years, the Research Advisory Committee scrutinizes the ALICE methodology and sources to ensure that the best local data is presented. This rigorous process results in enhancements to the methodology and new ideas for more accurately measuring and presenting data on financial hardship. For a more detailed description of the methodology and sources, see the Methodology Overview on our website, [UnitedForALICE.org/methodology](https://www.unitedforalice.org/methodology).

I. WHO IS STRUGGLING IN TENNESSEE?

Measure 1 – The ALICE Threshold

AT-A-GLANCE: SECTION I

- **ALICE** — **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed — defined: Despite being employed, many households earning more than the Federal Poverty Level (FPL) still cannot afford housing, child care, food, transportation, health care, and a basic smartphone plan.
- In Tennessee, there are 622,907 ALICE households, while another 394,597 households live below the poverty level. In total, 39 percent of Tennessee households earn below the ALICE Threshold.
- Households with income below the ALICE Threshold make up between 20 and 59 percent of households in every county in Tennessee.
- Nearly one-third — 30 percent — of senior households in Tennessee qualify as ALICE, while another 11 percent of senior households are in poverty.
- There are ALICE households in each of Tennessee’s primary racial/ethnic groups. The largest number of ALICE households are White, mirroring the state’s majority-White population. But while there are fewer Black and Hispanic households in Tennessee overall, they are disproportionately more likely to be ALICE.
- Reflecting the changing household composition across the country, “other” households — single or cohabiting households younger than 65 with no children under 18 — account for 48 percent of the state’s households with income below the ALICE Threshold.
- There are 685,568 families with children under the age of 18 in Tennessee, and 38 percent of them have income below the ALICE Threshold.
- Several demographic groups in Tennessee have lower incomes and are therefore more likely to live in ALICE households, including people of color; women; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) people; those with lower levels of education; those with a disability; recent undocumented, unskilled, or limited English-speaking immigrants; younger veterans; and formerly incarcerated people.

How many households are struggling across Tennessee? The FPL provides one view. According to the U.S. Census, the federal poverty rate in Tennessee hovered around 15 percent from 2007 to 2017, totaling 394,597 of the state's 2,589,017 households in 2017. However, the continued demand for public and private assistance over the seven years following the end of the Recession tells a very different story, suggesting that many more households struggle to support themselves.

The FPL is no longer a realistic measure of financial hardship in households across each county in the U.S. Developed in 1965, the FPL no longer reflects the actual current cost of basic household necessities. Adjustments for Alaska and Hawai'i were incorporated in 1970, but the overall methodology has not been updated since 1974 to accommodate changes over time in the cost of living or budget composition (e.g., food now takes up less of the family budget, and housing takes up more).

There have been extensive critiques of the FPL and arguments for better poverty measures (O'Brien & Pedulla, 2010; Uchitelle, 2001). The official poverty level is such a low estimate that many government and nonprofit agencies use multiples of the FPL to determine eligibility for assistance programs. For example, Tennessee's Low Income Home Energy Assistance Program uses 150 percent of the FPL to determine program eligibility, and state child care assistance used up to 160 percent of the FPL to determine eligibility in 2016. Even Medicaid and the Children's Health Insurance Program (CHIP) use multiples of the FPL to determine eligibility across the country (Kaiser Family Foundation, 2019—Where Are States; National Conference of State Legislatures, 2014; National Women's Law Center, 2017; Roberts, Povich, & Mather, 2012–2013; Tennessee Housing Development Agency, 2018—Low Income).

Recognizing the shortcomings of the FPL, the U.S. Census developed an alternative metric, the Supplemental Poverty Measure (SPM), which is based on expenditures reported in the Bureau of Labor Statistics' (BLS) Consumer Expenditure Survey (CES) and adjusted for geographic differences in the cost of housing. The SPM was meant to capture more struggling households, but in Tennessee it is virtually the same as the official FPL: The Tennessee SPM three-year average for 2015–2017 was 13.1 percent, while the FPL three-year poverty estimate during that time period was 13.7 percent (Fox, 2018). And because the SPM is not based on the actual cost of basic goods, it still does not come close to capturing the percentage of households in Tennessee that are struggling.

“The Federal Poverty Level, developed in 1965, is no longer a realistic measure of financial hardship in households across each county in the United States.”

Despite its shortcomings, the FPL has provided a standard measure over time to determine how many people in the U.S. are living in deep poverty. The needs and challenges that people living in poverty face are severe, and they require substantial community assistance. The definition of “poverty,” however, is vague, often has moral connotations, and can be inappropriately — and inaccurately — associated only with the unemployed.

To clarify the economic challenges that working households face, this Report measures what it actually costs to live in each county in Tennessee; it calculates how many households have income below that level; and it offers an enhanced set of tools to describe the impact of financial hardship on them and on their communities.

This is not merely an academic issue, but a practical one. The lack of accurate information about the number of people who are “poor” distorts the identification of problems related to poverty, misguides policy solutions, and raises questions of equality, transparency, and fairness. Using the FPL may also over-report the number of households facing financial hardship in areas with a low cost of living and under-report the number in areas with a high cost of living. For example, the majority of persistent-poverty counties are located in the South, a region of the country with a lower cost of living (USDA, 2017—Rural Poverty). By the same token, there may be just as many households struggling in other regions where the cost of living is higher, but they are often not counted in the official numbers. The ALICE Threshold, which takes into account the relative cost of living at the local level, enables more meaningful comparisons across the country.

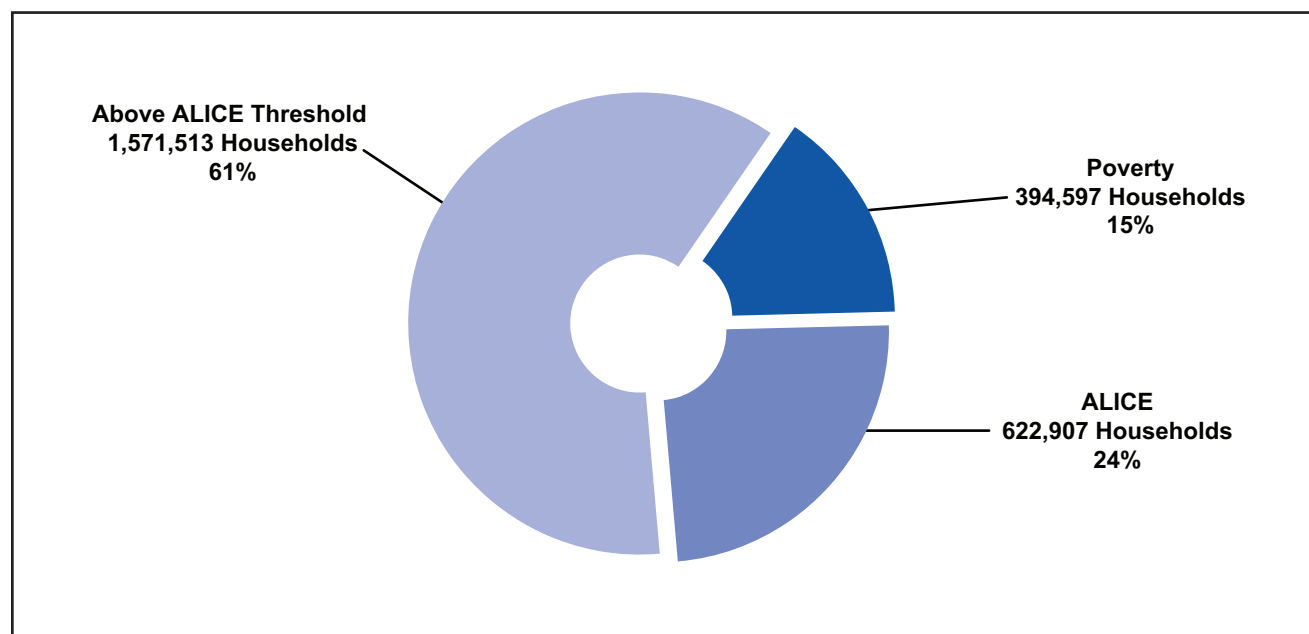
INTRODUCING ALICE

Many individuals and families in Tennessee do not earn enough to afford the basic household necessities of housing, child care, food, transportation, health care, and a basic smartphone plan. Even though many are working, their income does not cover the cost of living in the state, and they often require assistance to survive. Until recently, this group of people was loosely referred to as the working poor, or technically defined as the population in the lowest two income quintiles. The term “**ALICE**” — **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed — more clearly defines this population as households with income above the official FPL but below a newly defined basic survival income level. ALICE households are as diverse as the general population, composed of women and men, young and old, of all races and ethnicities, and living in rural, urban, and suburban areas.

THE ALICE THRESHOLD

In Tennessee, where the cost of living varies by region, it is especially important to have a current and realistic standard that reflects the true cost of economic survival and compares it to household incomes across each county. The **ALICE Threshold** is a realistic standard developed from the **Household Survival Budget**, a measure that estimates the minimal cost of the six basic household necessities — housing, child care, food, transportation, health care, and a basic smartphone plan. **Based on calculations from the American Community Survey and the ALICE Threshold, 1,017,504 households in Tennessee — 39 percent — are either in poverty or are ALICE households (Figure 1).**

Figure 1.
Household Income, Tennessee, 2017



Sources: ALICE Threshold, 2017; American Community Survey, 2017. For the Methodology Overview, visit our website: UnitedForALICE.org/methodology

ALICE OVER TIME

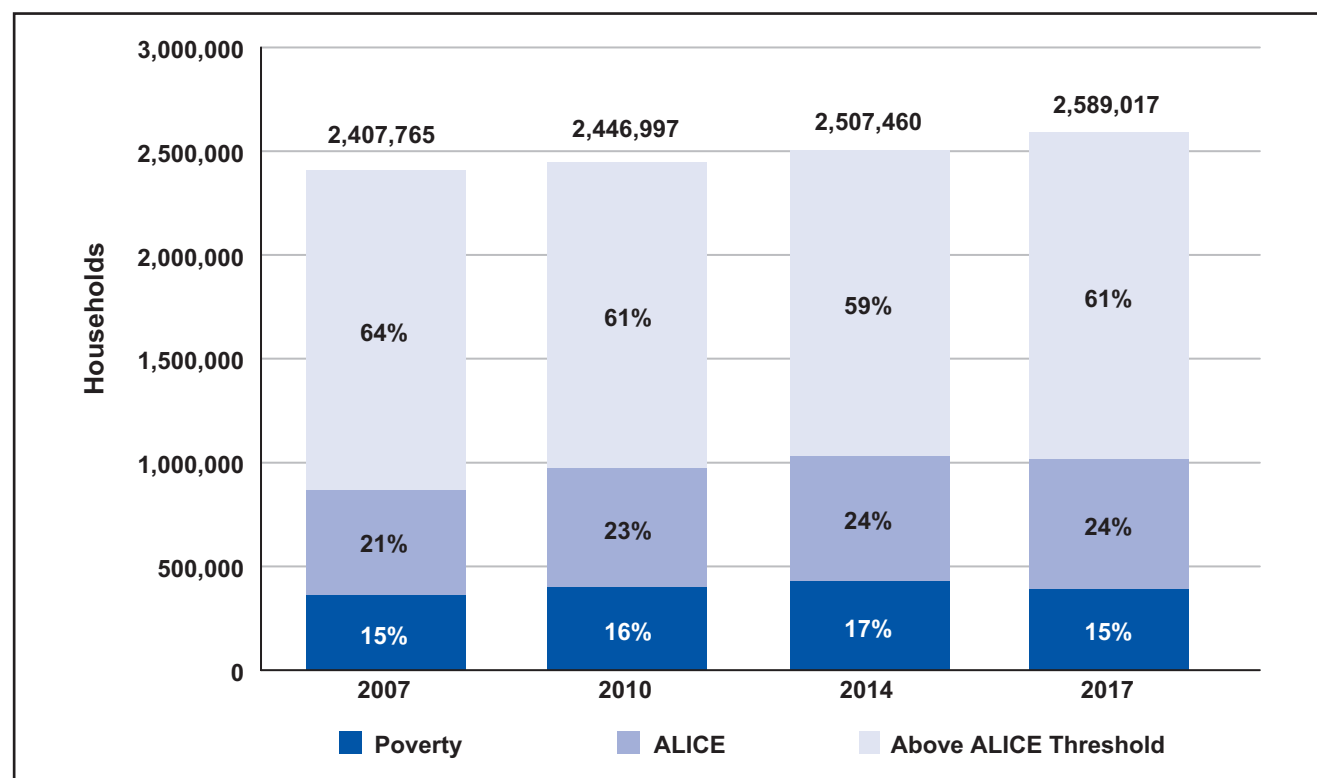
Tennessee is a diverse state, experiencing population growth in the major metro areas, yet facing a decline in population in some rural areas of the state. The total number of households in Tennessee grew from 2,407,765 in 2007 to 2,446,997 in 2010 to 2,589,017 in 2017, an 8 percent total increase. The number of those households earning below the ALICE Threshold grew at a much faster rate, increasing by 17 percent (American Community Survey, 2007-2017; Center for Economic and Community Development, 2017; George & Wright, 2017).

In 2017, seven years after the end of the Great Recession, many households in Tennessee were still struggling to find jobs with high enough wages and long enough hours to cover their basic monthly household expenses.

During the Recession, from 2007 to 2010, the number of Tennessee households with income below the ALICE Threshold increased. Households below the ALICE Threshold rose from 36 percent in 2007 to 39 percent in 2010. While the overall economic climate has improved since 2010, wages at the low end have remained flat while the cost of basic necessities continued to rise. The number of ALICE and poverty-level households rose to 41 percent of all Tennessee households in 2014, and then dropped back down to 39 percent by 2017 (Figure 2).

- **Poverty:** The number of households in poverty — defined through the FPL as those earning at or below \$12,060 for a single adult and \$24,600 for a family of four — rose from 363,923 households in 2007 to 401,086 in 2010 to 394,597 in 2017. The share of all households that were in poverty rose from 15 percent in 2007 to 17 percent by 2014 and then fell back to 15 percent in 2017.
- **ALICE:** The number of ALICE households rose from 507,136 households in 2007 to 572,172 in 2010 to 622,907 in 2017. As a percentage of total households, the share that were ALICE households rose from 21 percent in 2007 to 23 percent in 2010 to 24 percent in 2014, where it remained through 2017.

Figure 2.
Household Income, Tennessee, 2007 to 2017



Sources: ALICE Threshold, 2007–2017; American Community Survey, 2007–2017. For the Methodology Overview and additional data, visit our website: UnitedForALICE.org

Note: In 2007, the American Community Survey did not include 5-year estimates for counties with populations less than 20,000. Estimates for these smaller counties were imputed from the state average. Subsequent years use 5-year estimates for all counties.

These statistics don't capture fluidity; beneath the static numbers, households are moving above and below the ALICE Threshold over time as economic and personal circumstances change. Nationally, the U.S. Census reports that from January 2009 to December 2011, 31.6 percent of the U.S. population was in poverty for at least two months. By comparison, the national poverty rate for 2010 was 15 percent (Edwards, 2014). Household income is fluid, and ALICE households may be alternately in poverty or more financially secure at different points during the year.

WHERE DOES ALICE LIVE?

ALICE lives across Tennessee, in every county and every town. The importance of where we live — particularly while growing up — in determining the directions that our lives take has been well-demonstrated by the Harvard Equality of Opportunity Project (Chetty & Hendren, 2015). The ALICE data is developed at the county level, so it captures important differences within states and even within regions of a state.

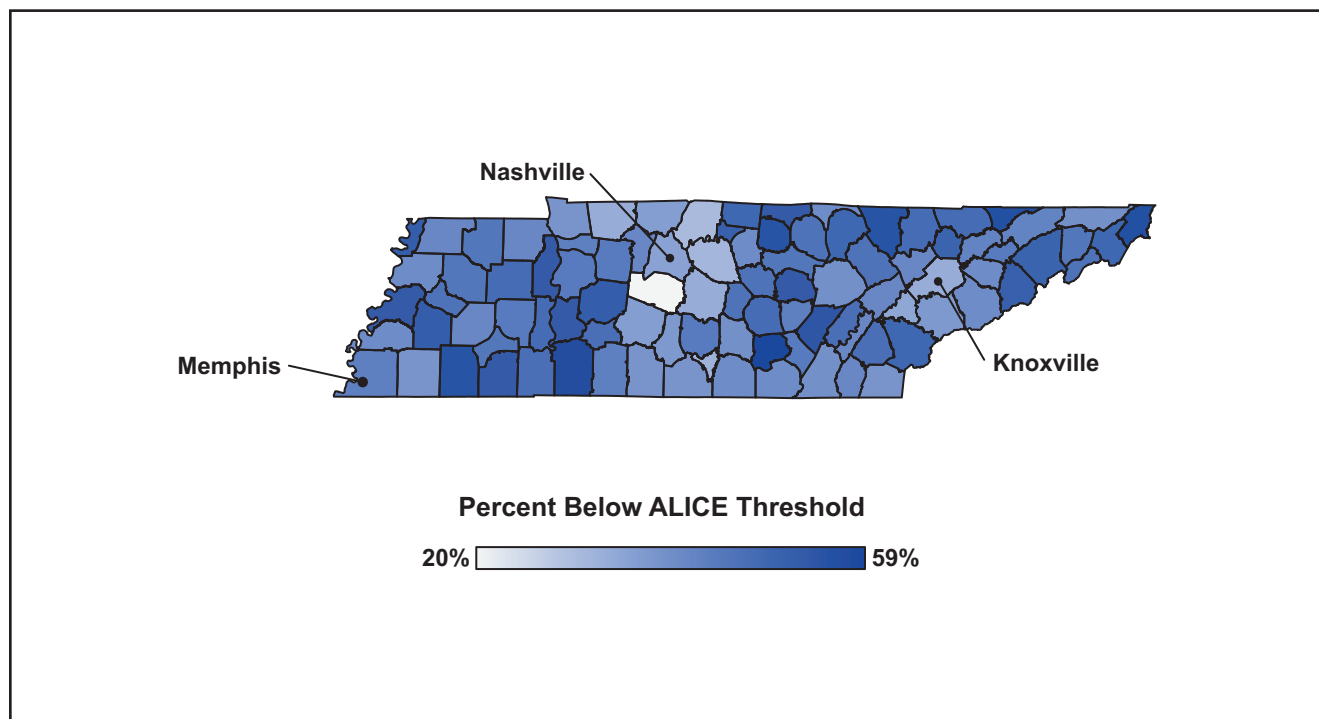
ALICE by County

Counties are small enough to reveal regional variation and large enough to provide reliable, consistent data. Behind the Tennessee state average, there is enormous variation among counties. But contrary to some stereotypes that suggest financial hardship only exists in inner cities, ALICE families live in every county in Tennessee — across rural, urban, and suburban areas (Figure 3).

The total number of households and the number of households living below the ALICE Threshold vary widely across Tennessee counties. The smallest county is Van Buren County with 2,156 households in 2017, and the largest is Shelby County with 347,221 households. Figure 3 shows that households living below the ALICE Threshold constitute a significant percentage of households in all Tennessee counties. However, there is variation across counties in terms of both numbers and shares of ALICE and poverty-level households:

- **Below the ALICE Threshold (including households in poverty):** Percentages range from 20 percent in Williamson County to 59 percent in Grundy County.
- **Poverty:** Percentages range from 4 percent in Williamson County to 31 percent in Lake County.
- **ALICE:** Percentages range from 16 percent in Williamson County to 39 percent in Trousdale County.

Figure 3.
Percent of Households Below the ALICE Threshold by County, Tennessee, 2017



Sources: ALICE Threshold, 2017; American Community Survey, 2017

Counties in Tennessee with a high percentage of ALICE households are also identified as financially struggling in two other county-level measures of economic conditions. First, according to the U.S. Department of Agriculture, which tracks the persistence of economic hardship over time, nine of Tennessee's 95 counties are persistent-poverty counties, defined as 20 percent or more of the population living in poverty over the last 30 years: Campbell, Claiborne, Cocke, Fentress, Grundy, Hancock, Johnson, Lake, and Scott counties (USDA, 2017—Rural Poverty).

Second, the Appalachian Regional Commission provides a composite measure of the three-year average unemployment rate, per capita market income, and poverty rate of every county in the U.S. Counties classified as "distressed" rank among the 10 percent most economically distressed in the nation. There were 17 distressed counties in Tennessee in 2017: Bledsoe, Campbell, Claiborne, Cocke, Fentress, Grundy, Hancock, Hardeman, Haywood, Lake, Lauderdale, McNairy, Perry, Scott, Union, Van Buren, and Wayne (Transparent Tennessee, 2017).

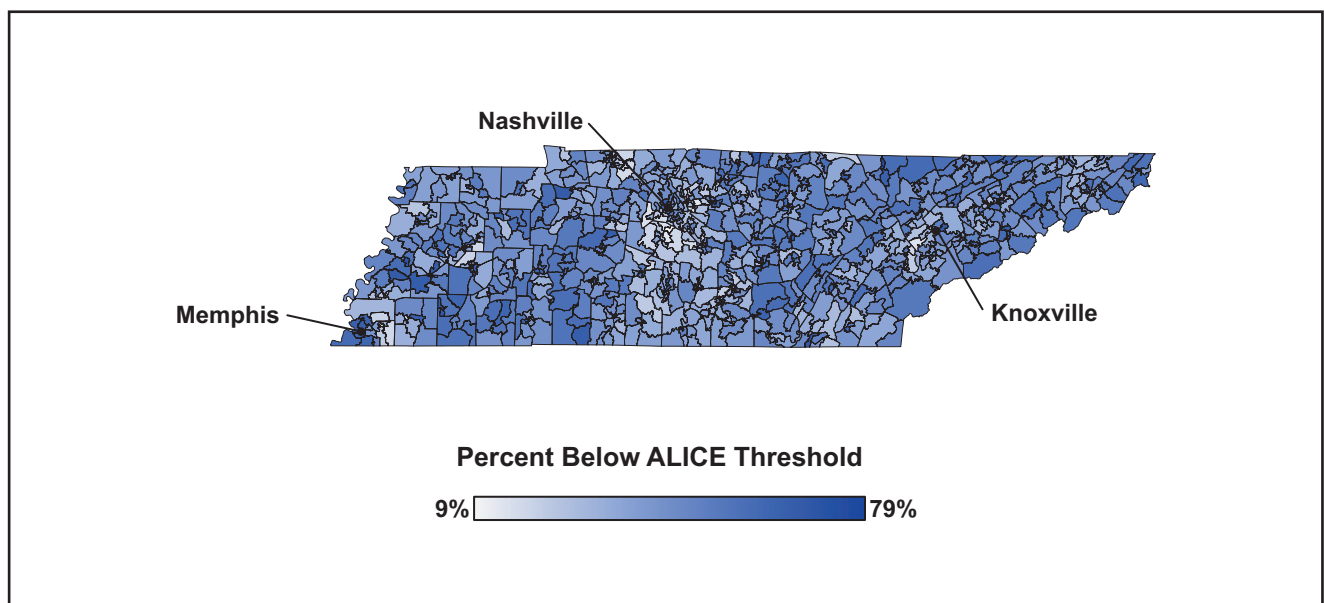
ALICE Breakdown Within Counties

ALICE and poverty-level households live in every area across the state. Because Tennessee has many geographic areas with very sparsely populated towns and cities where it can be difficult to get accurate data, the distribution of households below the ALICE Threshold in the state's towns and cities is shown instead on a map of county subdivisions (Figure 4). To provide a more complete view of local variation in household income, county subdivisions (also known as districts in Tennessee) include towns and cities as well as their surrounding areas.

County subdivisions with the lowest percentage of households below the ALICE Threshold are shaded lightest blue on the map in Figure 4; those with the highest percentage are shaded darkest blue. Full data for cities and towns is available at [UnitedForALICE.org/Tennessee](https://www.unitedforalice.org/Tennessee), as is the percentage of households below the ALICE Threshold in each municipality (included in the municipal list on each County Page).

Most (64 percent) of Tennessee's 843 county subdivisions have more than 40 percent of households living on an income below the ALICE Threshold. Only 24 county subdivisions have fewer than 20 percent of households with income below the ALICE Threshold, and one third have more than 50 percent.

Figure 4.
Percent of Households Below the ALICE Threshold by County Subdivision, Tennessee, 2017



Sources: ALICE Threshold, 2017; American Community Survey, 2017

ALICE by Towns and Cities

Another way to break down the ALICE population is by looking at cities; two-thirds of Tennessee's population live in urban areas. Tennessee's largest cities — those with more than 20,000 households — vary in their percentage of households with income below the ALICE Threshold. Bartlett and Franklin have less than 27 percent of households with income below the ALICE Threshold, while Johnson City and Memphis have more than 52 percent (Figure 5) (American Community Survey, 2017; Tennessee Department of Health, 2019).

Figure 5.
Households Below the ALICE Threshold, Largest Cities and Towns in Tennessee, 2017

Largest Cities and Towns (Above 20,000 Households)	Number of Households 2017	Percent of Households Below ALICE Threshold 2017
Nashville	273,111	35%
Memphis	246,518	54%
Knoxville	79,066	49%
Chattanooga	75,985	47%
Clarksville	56,014	36%
Murfreesboro	48,694	34%
Franklin	30,018	26%
Johnson City	27,768	53%
Jackson	24,077	48%
Kingsport	23,478	43%
Hendersonville	21,264	31%
Bartlett	20,053	19%

Sources: ALICE Threshold, 2017, American Community Survey, 2017. For additional data, visit our website: UnitedForALICE.org/Tennessee

ALICE DEMOGRAPHICS

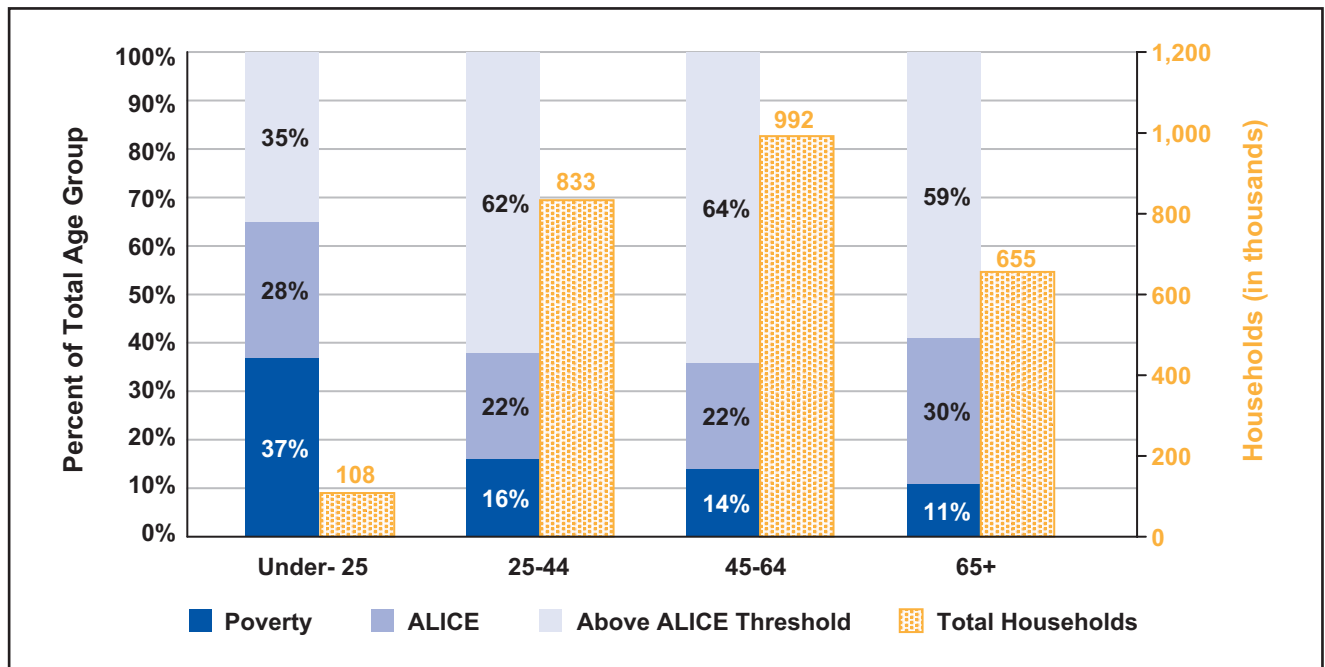
ALICE households vary in size and makeup; there is no typical configuration. Contrary to some stereotypes, ALICE households are young and old, comprised of all race/ethnicities and educational levels, may or may not have children, and live in cities, suburbs, and rural areas.

Many of these households move above and below the ALICE Threshold over time. For instance, a young ALICE household may capitalize on their education and move above the ALICE Threshold. An older ALICE household may experience a health emergency, lose a job, or suffer a disaster and slip into poverty.

Households by Age

There are ALICE households in every age bracket in Tennessee (Figure 6). Within each age bracket, the number of ALICE households and households in poverty generally reflect their proportion of the overall population. Where they differ, the youngest are overrepresented in both poverty and the ALICE population.

Figure 6.
Household Income by Age of Head of Household, Tennessee, 2017



Sources: ALICE Threshold, 2017; American Community Survey, 2017

The youngest Tennessee age group (under age 25) has the largest percentage of households below the ALICE Threshold: 37 percent are in poverty, while an additional 28 percent are ALICE households. As households get older, a smaller percentage are living in poverty. The lowest percentage of ALICE households (22 percent) are in the middle age groups (25 to 44 years and 45 to 64 years). Nevertheless, it is surprising to see so many households in their prime earning years with income below the ALICE Threshold. While seniors are less likely to be in poverty than other age groups (11 percent), they have the highest share of ALICE households (30 percent).

Two age groups are changing the overall demographics in Tennessee: the baby boomers and the millennials. The baby boomers (born between 1946 and 1964) are the largest generation in the U.S., and as they get older, their needs and preferences change. The second-largest group is the millennials (born between 1981 and 1996, according to the Pew Research Center), who are making different lifestyle and working choices than previous generations. To analyze general trends, the ALICE data on age is presented by household in more precise Census breaks: under-25, 25–44, 45–64, and 65+. Millennials are covered by the youngest two brackets and baby boomers by the oldest two (Dimock, 2019).

Millennials: Tennessee has the 16th highest number of millennials of any state, at 1.5 million, but when looking at millennials as a percentage of the total population, the state ranks lower because the populations of older generations are much larger.

In many ways, millennials differ from previous generations. First, they are more racially and ethnically diverse. Nationally, compared to previous generations, a much smaller percentage of millennials are White (56 percent), and a larger percentage (nearly 30 percent) are Black, Hispanic, Asian, or people identifying as two or more races. Memphis has one of the largest millennial populations of color in the country: 51 percent are Black, while 39 percent of the city's millennials are White. Yet the millennial population in Tennessee's other large metropolitan areas are less diverse: White millennials account for more than 70 percent of the population in the metro areas of Nashville-Davidson-Murfreesboro-Franklin, Chattanooga, and Knoxville (W. H. Frey, 2018).

Second, millennials, especially millennials of color, tend to prefer to live in urban centers. In Tennessee, millennials make up more than 22 percent of the population in its major cities (W. H. Frey, 2018).

Third, many millennials cannot afford to live on their own. Instead, they are more likely than previous generations to live with their parents or with roommates. Nationally, for the first time in more than a century, they are less likely to be living with a romantic partner (Cilluffo & Cohn, 2017; Cohn & Caumont, 2016; W. H. Frey, 2018).

“ Many senior households continue to work, and although some work by choice, others are forced to do so in order to stay out of poverty. ”

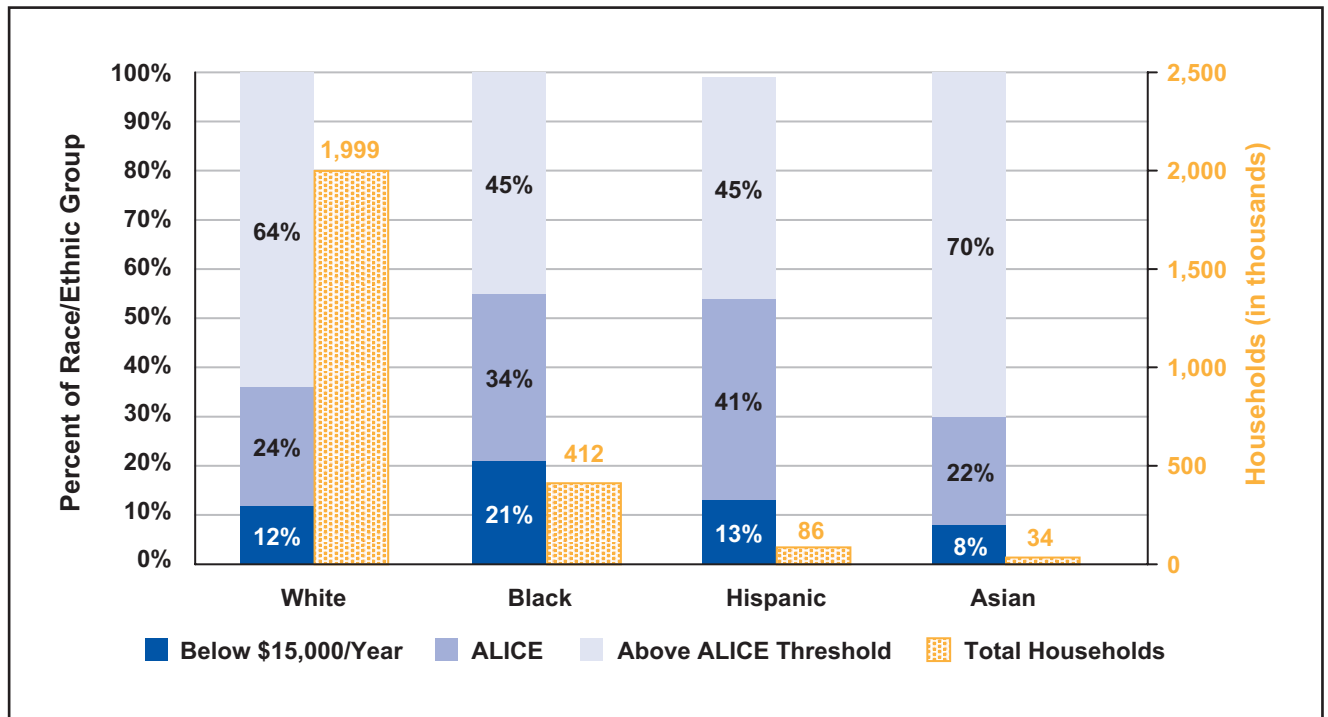
Aging Population: The comparatively low rate of senior households in poverty (11 percent) provides evidence that government benefits, including Social Security, are effective at reducing poverty among seniors (Haskins, 2011; Institute for New Economic Thinking, 2017). But with 30 percent of senior households qualifying as ALICE in Tennessee, it is clear that these same benefits do not often enable financial stability. This is reinforced by the fact that many senior households continue to work, and although some work by choice, others are forced to do so in order to stay out of poverty. In Tennessee's 65- to 74-year-old age group, 24 percent are in the labor force, as are 7 percent of those 75 years and over (American Community Survey, 2017).

Households by Race/Ethnicity

ALICE and poverty-level households exist in every racial and ethnic group in Tennessee. The ALICE Reports follow U.S. Census classifications for the largest non-White populations — Black, Asian, Hispanic, and American Indian/Alaska Native, as well as people identifying as being of “Some Other Race” or “Two or More Races.” Because people of any race, including Whites, can also be of Hispanic ethnicity, the ALICE data looks at White, Black, Asian, and American Indian/Alaska Native categories “alone” (i.e., not also Hispanic), as well as at Hispanic populations.

Tennessee has a relatively low percentage of Black or Hispanic households compared to the rest of the country. Haywood and Shelby counties are exceptions, where the percentage of those reporting Hispanic or non-White race is 45 and 67 percent, respectively. In 2017, White households were the largest racial group in Tennessee, with 1,999,229 households, compared to 411,775 Black households, 86,360 Hispanic households, and 33,683 Asian households (Figure 7). Some racial and ethnic groups in Tennessee are extremely small and the Census does not report their income, so ALICE data is not available for them. Less than 1 percent of households in Tennessee identify themselves as American Indian/Alaska Native (7,044 households); another 1.3 percent identify as being of “Two or More Races,” and less than 1 percent identify as “Some Other Race” (American Community Survey, 2017).

Figure 7.
Households by Race/Ethnicity and Income, Tennessee, 2017



Sources: ALICE Threshold, 2017; American Community Survey, 2017

Note: Data in all categories except Two or More Races is for one race alone. Because race and ethnicity are overlapping categories, the totals for each income category do not add to 100 percent exactly. This data is for households; because household size varies for different racial/ethnic groups, population percentages may differ from household percentages. 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.

Households below the ALICE Threshold in Tennessee are composed of all different races/ethnicities. Yet only 36 percent of White households have income below the ALICE Threshold, while Black and Hispanic households are more likely to be below the ALICE Threshold, at 55 and 54 percent, respectively. However, because White households are the largest group in the state, they account for 70 percent of all households below the ALICE Threshold; Black households account for 22 percent, and Hispanic households for 5 percent (Figure 8).

Within each of Tennessee's racial/ethnic groups, there is additional diversity in age, income status, national origin, and for immigrant households, length of time in the U.S.

White (non-Hispanic) households are the largest racial group in Tennessee, yet because their numbers are not growing compared to other groups, their percentage of total households has declined over the past decade, falling from 81 percent in 2007 to 77 percent in 2017. The differences appear along age lines: White households account for a larger percentage of households over 65 years, yet in younger age groups, their percentage is declining, while the number of younger Asian, Black, and Hispanic households is increasing. As the largest racial/ethnic group, White households also account for the largest portion of those below the ALICE Threshold — 70 percent. And they make up more than half (52 percent) of Tennessee's foreign-born residents by race, including a sizable number of immigrants from Eastern Europe (American Community Survey, 2007–2017; Migration Policy Institute, 2017).

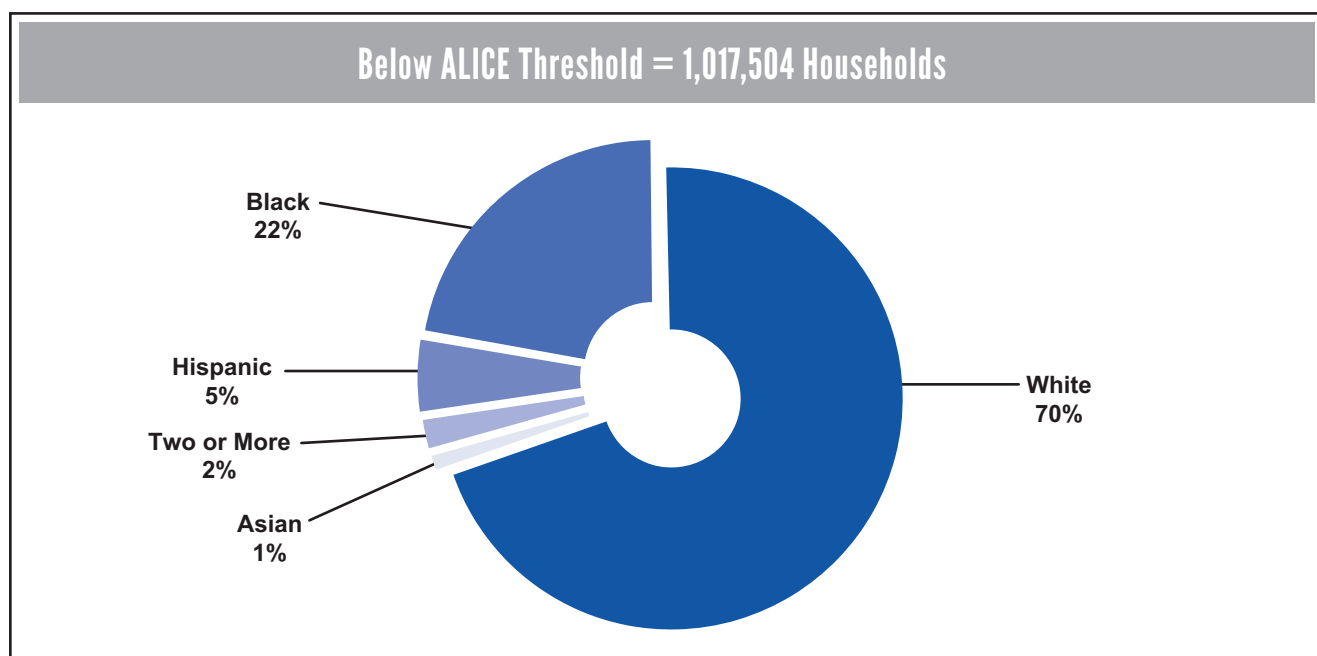
Black households make up 16 percent of all Tennessee households and 22 percent of households below the ALICE Threshold. In addition to Black families who have lived in Tennessee for generations or who migrated from other parts of the U.S., there is an increasing number of recent African immigrants. Immigrants from Africa account for 11 percent of the foreign-born population in Tennessee, up from 6 percent in 2000. Nationally, African immigrants are the most recent immigrants, with almost two-thirds having arrived in the U.S. in 2000 or later (Anderson, 2015; Migration Policy Institute, 2017).

Hispanic households (an ethnicity, which can include people of any race) now account for 3 percent of Tennessee's households and are the fastest growing race/ethnic group in the state. Hispanic households account for 5 percent of those below the ALICE Threshold. The Hispanic population in Tennessee and the U.S. is increasingly diverse due to waves of immigration over the last seven decades. Of foreign-born residents in Tennessee in 2017, 45 percent were born in Latin America. And date of entry impacts income: Hispanic immigrants who have lived in the U.S. the longest earn higher incomes than those who immigrated more recently (American Community Survey, 2007–2017; Flores, 2017; Gutiérrez, 2013; Migration Policy Institute, 2017; The Pew Charitable Trusts, 2014).

Asian households are a small population in Tennessee, accounting for 1 percent of households and 1 percent of those below the ALICE Threshold. They account for almost one-third (32 percent) of the foreign-born population. Nationally, 15 percent of the Asian population identifies as two or more races — much higher than the comparable mixed-race share of Whites (3 percent), Hispanics (6 percent), or Blacks (7 percent) (Migration Policy Institute, 2017; Pew Research Center, 2017).

Refugees: A subset of the foreign-born population in Tennessee are refugees, escaping war, persecution, or natural disaster. Since 2002, 18,655 refugees from 50 countries have resettled in Tennessee; the largest numbers came from Burma/Myanmar, Iraq, and Somalia. The number of refugees arriving peaked in 2016, at 2,051, but declined to only 556 in 2017 (Bureau of Population, Refugees, and Migration, 2018, 2019; Mathema, 2018; New American Economy Research Fund, 2017; Omaha World-Herald, 2018; Tennessee Immigration and Refugee Rights Coalition, n.d.).

Figure 8.
Households Below ALICE Threshold by Race/Ethnicity, Tennessee, 2017



Sources: ALICE Threshold, 2017; American Community Survey, 2017

THE AMERICAN HOUSEHOLD IS CHANGING

There are longstanding preconceptions about what types of households tend to be low-income — homes headed by single mothers, for example. Yet ALICE and poverty-level families exist in all configurations. There have been such dramatic changes in demographics, lifestyle choices, and living arrangements of Americans that it is important to re-evaluate old stereotypes.

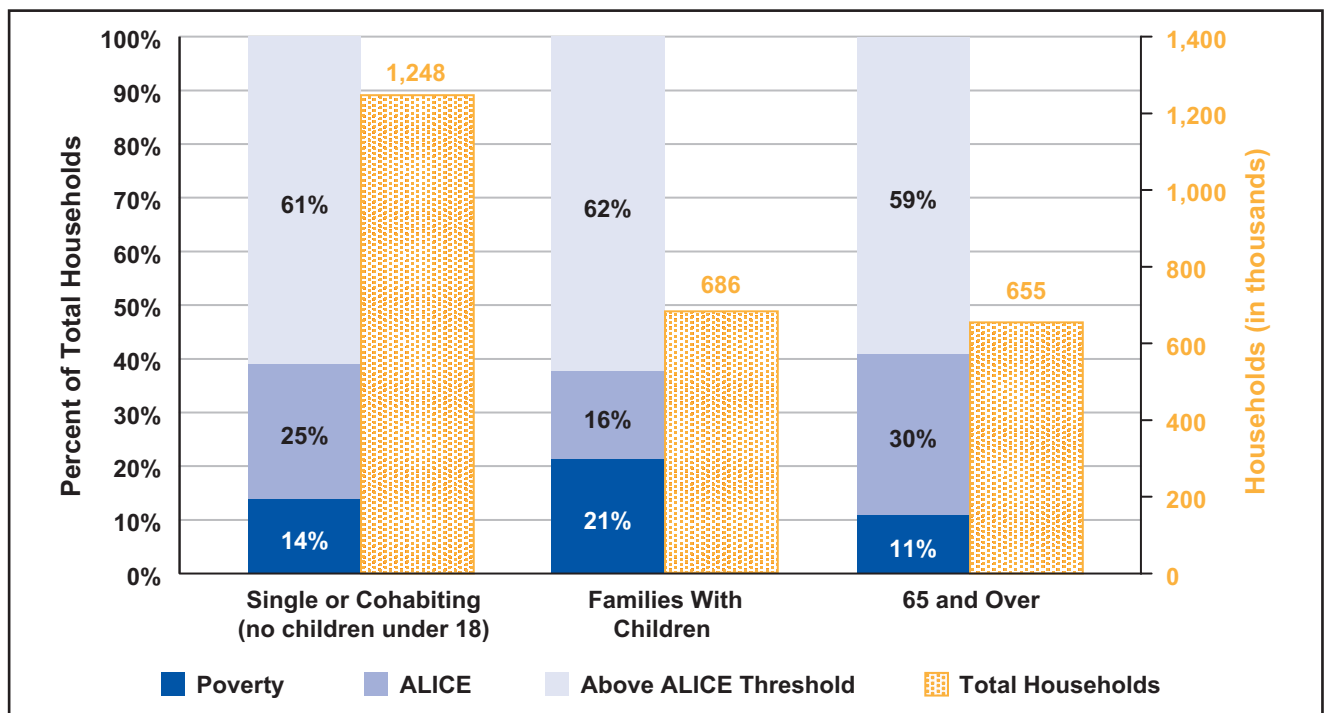
With millennials delaying marriage and having children, as well as decades of declining marriage rates and rising levels of divorce, remarriage, and cohabitation, the household made up of a married couple with two children is no longer typical. Since the 1970s, there has been a trend toward smaller households, fewer households with children, and fewer married-parent households. People are increasingly living in a wider variety of arrangements, including singles living alone or with roommates, and grown children living with parents. The share of American adults who have never been married is at a historic high. In addition, more grandparents are caring for grandchildren, partly because of a rise in parents who struggle with substance abuse or are incapacitated by mental illness. In Tennessee, almost 75,000 grandparents (5 percent of people over the age of 60) are responsible for the basic needs of grandchildren under the age of 18 (American Community Survey, 2017; Wiltz, 2016).

Single or Cohabiting Adults

Single or cohabiting adults under age 65 with no children under age 18 make up the largest household type in Tennessee, 1.2 million households in 2017. They accounted for nearly half of all households — 48 percent — and the same percentage of households below the ALICE Threshold (Figure 9).

This household type includes families (defined as having at least two members related by birth, marriage, or adoption but with no children under the age of 18), single adults younger than 65, and households of non-relatives such as boarders or roommates. Nationally from 1970 to 2012, the proportion of single-adult households increased from 17 to 27 percent, while the share of households comprised of married couples with children under 18 decreased by half, from 40 to 20 percent (Cohn & Caumont, 2016; Vespa, Lewis, & Kreider, 2013).

Figure 9.
Household Types by Income, Tennessee, 2017



Sources: ALICE Threshold, 2017; American Community Survey, 2017

Families With Children

With the rising cost of supporting a family, the increasing divorce rate, and millennials delaying marriage and children, the number of families with children is decreasing across the country. In Tennessee, the number of families with children fell by 3 percent from 2007 to 2017, yet at the same time, the number below the ALICE Threshold increased by 19 percent (Cohn & Caumont, 2016; Vespa, et al., 2013).

The structure of families with children is changing, with mothers doing more paid work outside the home as the cost of living continues to rise. Nationally, 42 percent of mothers were sole or primary breadwinners in 2015, bringing in 50 percent or more of family earnings, and another 22 percent were co-breadwinners, bringing home 25 to 49 percent of earnings. Traditional gender roles are changing as well, with fathers doing more housework and child care. Over the last 30 years, the number of stay-at-home fathers has doubled to 2.2 million, and the amount of housework fathers report doing has also doubled to an average of nine hours a week (Glynn, 2016; Livingston, 2014; Livingston & Parker, 2019).

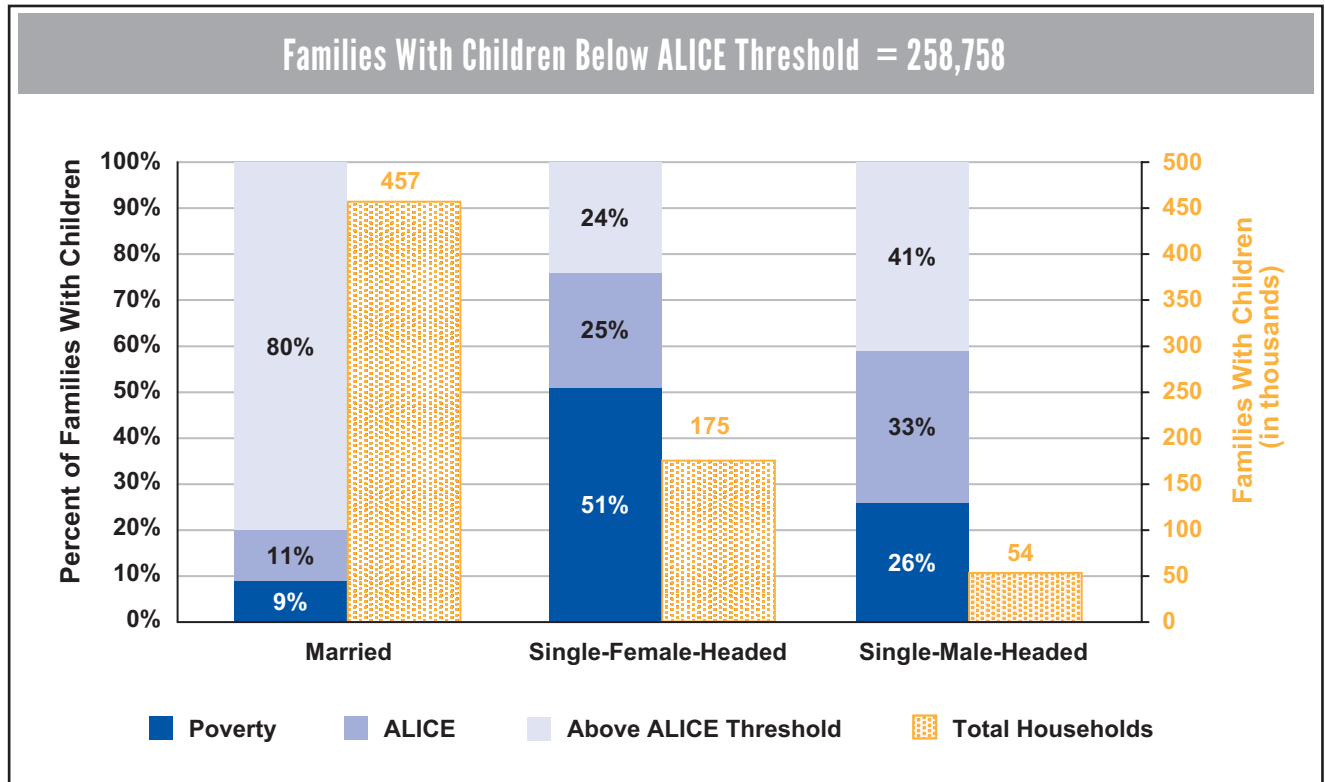
“Of Tennessee’s families with children, 38 percent had income below the ALICE Threshold in 2017.”

The composition of families with children is also changing. There is increasing variety in the structure of families, including those with several cohabiting generations and those with lesbian, gay, bisexual, transgender, and queer (LGBTQ+) parents. The fluidity of the family has increased, with more children growing up amid changes including non-marital cohabitation, divorce, and remarriage. Households with children from parents’ prior relationships are also on the rise. Almost 1 in 6 children under the age of 18 now lives in a family with parents and their children from previous relationships (Cohn & Caumont, 2016; Gates & Brown, 2015; Pew Research Center, 2015).

With these changes, the household composition of a “single parent” family as defined by the U.S. Census often has more than one adult. The Census’ category of single-parent households includes one parent as the sole adult, a parent with a cohabiting partner, or a parent with another adult age 18 or older who lives in the home, such as a grown child or grandparent. In 2017, more than half (53 percent) of children living in a Census-defined single-parent family had two adults in the household (Livingston, 2018; U.S. Census Bureau, 2017—America’s Families and Living Arrangements; Vespa, et al., 2013).

Of Tennessee’s 685,568 families with children, 258,758 (38 percent) had income below the ALICE Threshold in 2017 (Figure 9). In most (67 percent) of the state’s families with children under 18, the parents in the family are married. However, children in families with income below the ALICE Threshold are more likely to live in single-parent families (Figure 10).

Figure 10.
Families With Children by Income, Tennessee, 2017



Sources: ALICE Threshold, 2017; American Community Survey, 2017

Not surprisingly, the most expensive household budget is for a household with young children, due not only to the larger size of these households, but also to the cost of child care, preschool, and after-school care (discussed further in Section II). The biggest factors determining the economic stability of a household with children are the number of wage earners, the gender of the wage earners, the number of children, and the costs of child care for children of different ages.

Married-Parent Families

With two income earners, married parents with children have greater means to provide a higher household income than households with one adult. For this reason, 20 percent of married-parent families with children in Tennessee had income below the ALICE Threshold in 2017 (Figure 10). However, because they are such a large demographic group, married-parent families with children still accounted for 36 percent of Tennessee families with children below the ALICE Threshold.

Single-Female-Headed Families

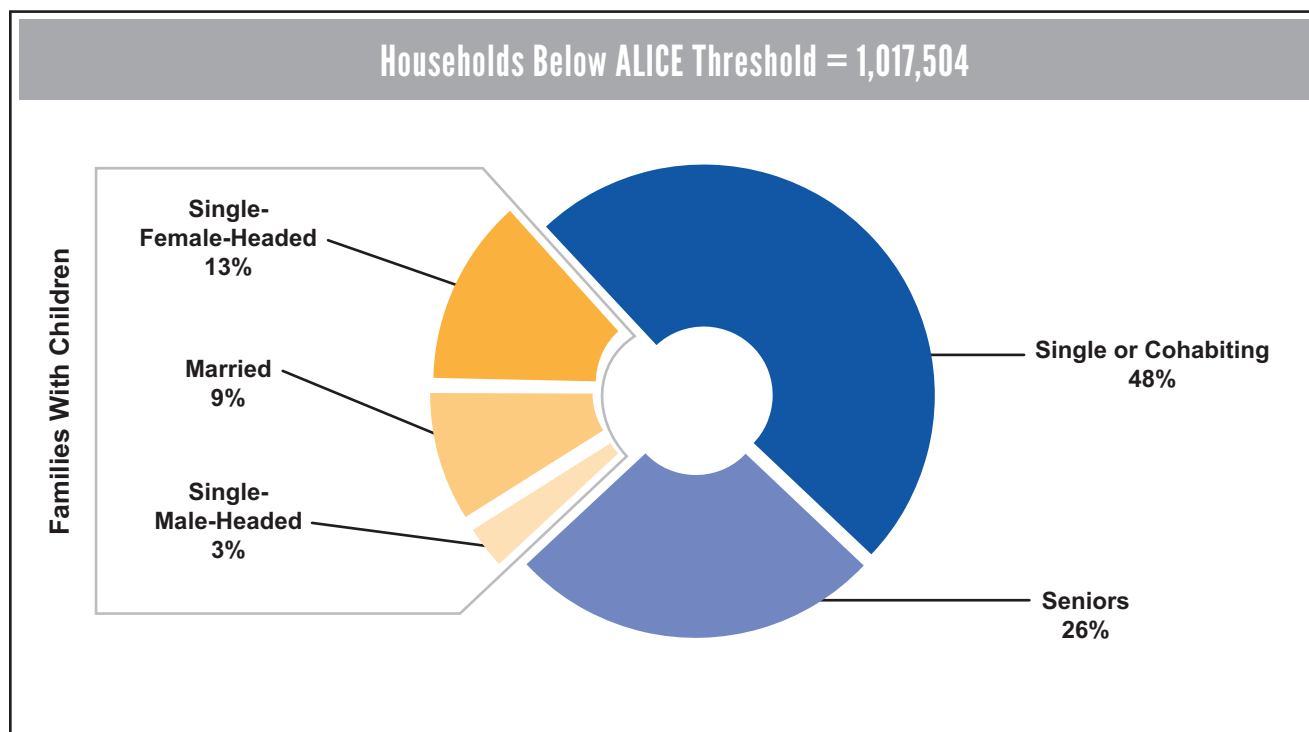
Families headed by single women with children are the second most common family type. With one income earner, they are much more likely to struggle financially. In Tennessee, more than half of these families were living in poverty, and another 25 percent were ALICE, adding to a total of 76 percent of single-female-headed families having income below the ALICE Threshold in 2017. This is compounded by the fact that in Tennessee, as in all states, women still earn significantly less than men.

Single-Male-Headed Families

The number of households headed by single men with children is growing in Tennessee and across the country. While most single-parent families are still headed by mothers, single-father families accounted for 8 percent of all Tennessee families with children in 2017. Although they are less common than single-female-headed families, single-male-headed families face similar challenges. In 2017, 59 percent of all single-male-headed families with children in Tennessee had income below the ALICE Threshold.

In summary, households below the ALICE Threshold have many different household structures. Single or cohabiting adults under age 65 with no children under age 18 make up the largest portion of households below the ALICE Threshold (48 percent), followed by seniors (26 percent), and then married and single-headed families with children (25 percent combined) (Figure 11). While single-parent households are more likely to have income below the ALICE Threshold, they represented only 16 percent of all households below the ALICE Threshold in Tennessee in 2017 because they are a small portion of the total population.

Figure 11.
Households Below ALICE Threshold by Type of Household, Tennessee, 2017



Sources: ALICE Threshold, 2017; American Community Survey, 2017

Additional Risk Factors for Being ALICE

Demographic groups that are especially vulnerable to underemployment, unemployment, and lower earning power are more likely than other groups to live in poverty or to be ALICE. In addition to the challenges faced by people of color discussed earlier in this section, a number of other groups are more likely to fall into the ALICE population: women; people with a low level of education; recent, unskilled, undocumented, or limited-English-speaking immigrants; LGBTQ+ individuals; people living with a disability; younger combat veterans; and formerly incarcerated people. The employment barriers that these households face are discussed in more detail in Section III.

II. HOW COSTLY IS IT TO LIVE IN TENNESSEE?

Measure 2 – The Household Budget: Survival vs. Stability

AT A GLANCE: SECTION II

The Household Survival Budget

- The Household Survival Budget estimates what it costs to afford the six basic household necessities: housing, child care, food, transportation, health care, and a basic smartphone plan.
- The average annual Household Survival Budget for a four-person family living in Tennessee is \$50,796, more than double the Federal Poverty Level (FPL) of \$24,600 per year for a family of that size.
- The Household Survival Budget for a family translates to an hourly wage of \$25.40 for one parent (or \$12.70 per hour each, if two parents work).
- The average annual Household Survival Budget for a single adult in Tennessee is \$19,032, which translates to an hourly wage of \$9.52.
- Child care represents a Tennessee family's greatest expense: an average of \$898 per month for two children in licensed registered home-based care; or \$1,011 per month for an accredited child care center.

The Household Stability Budget

- The Household Stability Budget measures how much income is needed to support and sustain an economically viable household, including both a 10 percent savings plan and the cost of employer-sponsored health insurance.
- The average annual Household Stability Budget is \$88,380 per year for a family of four — 74 percent higher than the Household Survival Budget.
- To afford the Household Stability Budget for a two-parent family, each parent must earn \$44.19 per hour or one parent must earn \$22.09 per hour

The cost of basic household necessities increased by more than 23 percent in Tennessee from 2007 to 2017 despite low inflation during the Great Recession. As a result, 39 percent of households in Tennessee are challenged to afford the basic necessities. This section presents the **Household Survival Budget**, a realistic measure estimating what it costs to afford the basic household necessities of housing, child care, food, transportation, health care, technology, and taxes. It also presents the **Household Stability Budget**, which reaches beyond survival to estimate the cost of maintaining a viable household in the modern economy, with a degree of future financial security.

THE HOUSEHOLD SURVIVAL BUDGET

The Household Survival Budget follows the original intent of the FPL as a standard for temporary sustainability (Blank, 2008). This budget identifies the minimum cost option for each of the basic household items needed to live and work in today's economy. Figure 12 shows a statewide average Household Survival Budget for Tennessee in two variations, one for a single adult and the other for a family with two adults, a preschooler, and an infant.

In 2017, the average Household Survival Budget in Tennessee was \$50,796 for a four-person family and \$19,032 for a single adult (Figure 12). These costs continue to outpace the national rate of inflation. The hourly wage necessary to support a family budget is \$25.40 for one parent working 40 hours per week, 50 weeks per year (or \$12.70 per hour each, if two parents work), and \$9.52 per hour, full time, for a single adult. To see a Household Survival Budget for each county in Tennessee, visit our website: UnitedForALICE.org/Tennessee.

As a frame of reference, it is worth noting that the Household Survival Budget is lower than other common cost of living budgets, which are presented for comparison later in this section (Figure 16).

Figure 12.
Household Survival Budget, Tennessee Average, 2017

Household Survival Budget, Tennessee Average, 2017		
	SINGLE ADULT	2 ADULTS, 1 INFANT, 1 PRESCHOOLER
Monthly Costs		
Housing	\$497	\$692
Child Care	\$—	\$898
Food	\$179	\$543
Transportation	\$322	\$644
Health Care	\$124	\$539
Technology	\$55	\$75
Miscellaneous	\$144	\$385
Taxes	\$265	\$457
Monthly Total	\$1,586	\$4,233
ANNUAL TOTAL	\$19,032	\$50,796
Hourly Wage*	\$9.52	\$25.40

* Full-time wage needed to support this budget

Sources: BLS, 2017—Consumer Expenditure Surveys; Consumer Reports, 2017—Best Low-Cost Cell-Phone; HUD, 2017—Fair Market Rents; IRS, 2017—About Form 1040; Tax Foundation, 2017; Tennessee Department of Human Services, 2018—Fiscal Year; USDA, 2017—Official USDA Food Plans. For the Methodology Overview and additional data, visit our website: UnitedForALICE.org

In comparison to the annual Household Survival Budget, the FPL was \$24,600 per year for a family of four and \$12,060 per year for a single adult in 2017. In that same year, the Tennessee median family income was \$62,926 per year and the median household income was \$51,340 (American Community Survey, 2017).

Overall, the cost of household basics in the Household Survival Budget — housing, child care, food, transportation, health care, technology, and taxes — increased by 23 percent for a single adult and 31 percent for a family of four in Tennessee from 2007 to 2017. These increases were driven primarily by increases in the cost of housing, health care and child care, and by the addition of a basic smartphone plan to the budget in 2016. During the same time period, median earnings increased by only 15 percent in Tennessee, putting greater strain on households. And the national inflation rate, which covers a larger number of budget items than the Household Survival Budget, was 22 percent between 2007 and 2017 (American Community Survey, 2007-2017; BLS, 2019—CPI Inflation Calculator).

SURVIVAL BUDGET COMPONENTS



Housing

The housing budget uses the U.S. Department of Housing and Urban Development's Fair Market Rent for an efficiency apartment for a single adult and a two-bedroom apartment for a family. The cost includes utilities but not telephone service, and it does not include a security deposit.



Child Care

The child care budget represents the cost of registered home-based child care for an infant and a 4-year-old. In Tennessee, home-based child care sites are defined as providing three or more hours of care to between five and seven children unrelated to the caregiver; the minimum requirements are designed to maintain adequate health, safety, and supervision of children. Licensed facility-based child care centers have additional requirements and are significantly more expensive (Tennessee Department of Human Services, 2019—Rule of Tennessee).



Food

The food budget is based on the U.S. Department of Agriculture's (USDA) Thrifty Food Plan, which is also the basis for benefits provided by the Supplemental Nutrition Assistance Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).

Like the USDA's original Economy Food Plan, the Thrifty Food Plan was designed to meet the nutritional requirements of a healthy diet, but it includes foods that need a lot of home preparation time with little waste, plus skill in both buying and preparing food. The cost of the Thrifty Food Plan takes into account broad regional variation across the country but not localized variation, which can be even greater, especially for fruits and vegetables (Hanson, 2008; Leibtag & Kumcu, 2011).



Transportation

The transportation budget is calculated using average annual expenditures for transportation by car and by public transportation from the Bureau of Labor Statistics' Consumer Expenditure Survey (CES). Since the CES is reported by metropolitan statistical areas and regions, counties are matched with the most local level possible.



Health Care

The health care budget includes out-of-pocket health care spending for insurance, medical services, prescription drugs, and medical supplies using the average annual health expenditure reported by income and region in the CES. Because most ALICE households do not qualify for Medicaid, the budget includes the amount a low-income family spends on insurance (but not what an employer pays or what they receive in government subsidies) (Healthcare.gov, 2018).



Technology

Because cell phones have become essential for workers, the cost of a basic smartphone plan is added to the Household Survival Budget for each adult in the household. The cost is based on the cheapest available as reported by Consumer Reports (2017—Best Low-Cost Cell-Phone). While there are government subsidies for low-income residents, the income eligibility threshold (135 percent of the Federal Poverty Level) is significantly less than the ALICE Threshold, so these subsidies are excluded.



Miscellaneous

The miscellaneous category includes 10 percent of the budget total (including taxes) to cover cost overruns. This category can also cover additional essentials such as toiletries, diapers, cleaning supplies, or work clothes.



Taxes

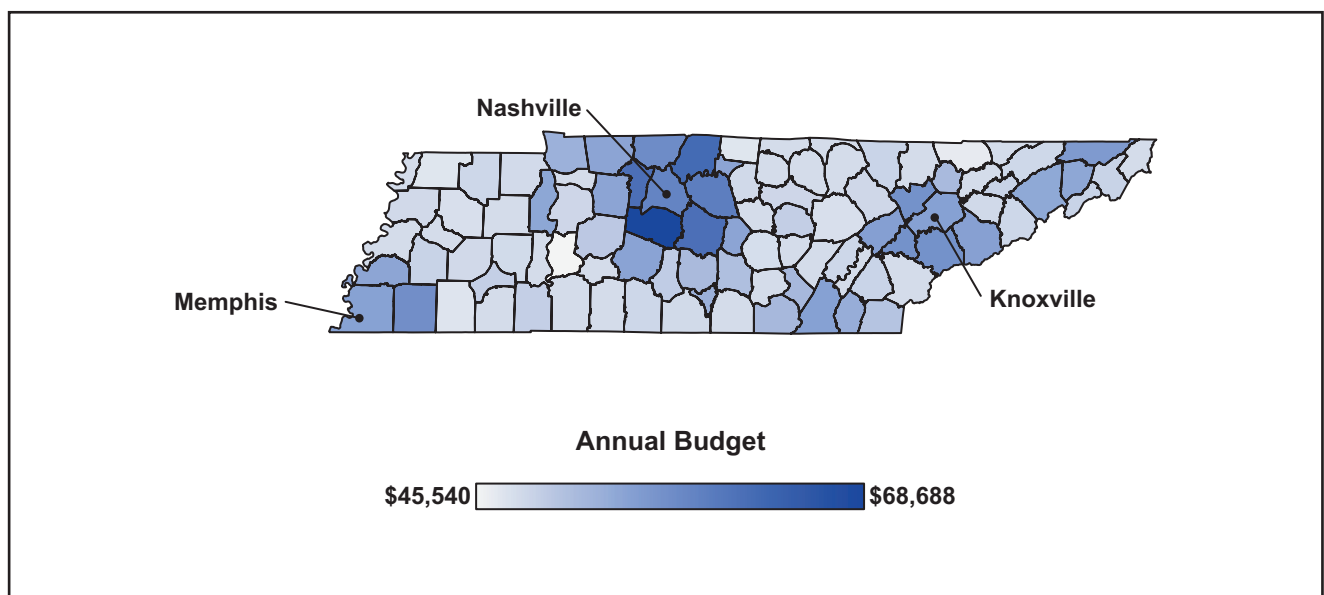
The tax budget includes both federal and state income taxes where applicable, as well as Social Security and Medicare taxes. These rates include standard federal and state deductions and exemptions, as well as the federal Child Tax Credit and the Child and Dependent Care Credit as defined in the Internal Revenue Service's Form 1040: Individual Income Tax, Forms and Instructions. They also include state tax deductions and exemptions such as the Personal Tax Credit and renter's credit as defined in each state Department of Revenue's Form 1040: Individual Income Tax, Forms and Instructions. In most cases, ALICE households do not qualify for the Earned Income Tax Credit eligibility limit.



Across the country, the cost of basic necessities, including rental housing, prescription drugs and medical equipment, and vehicle maintenance and repair, has risen faster over the last 30 years than the cost of the wider range of goods included in the Consumer Price Index. While steady increases are difficult for ALICE families, volatility presents another set of challenges, especially for budgeting. Of all expenses, food and energy costs fluctuate the most (Church, 2015; Federal Reserve Bank of St. Louis, 2019—Economic Research).

The Household Survival Budget varies across Tennessee's counties. In 2017, the basic essentials were least expensive for a Tennessee family in Perry County at \$45,540 per year, and for a single adult in Weakley County at \$17,076 per year. Essentials were most expensive in Williamson County at \$68,688 for a family per year, and \$22,656 for a single adult in Cannon, Cheatham, Davidson, Dickson, Robertson, Rutherford, Sumner, Trousdale, Williamson, and Wilson counties per year (Figure 13). A Household Survival Budget for each county in Tennessee is presented in the County Pages available on our website: UnitedForALICE.org/Tennessee.

Figure 13.
Household Survival Budget, Family of Four, Tennessee Counties, 2017



Sources: BLS, 2017—Consumer Expenditure Surveys; Consumer Reports, 2017—Best Low-Cost Cell-Phone; HUD, 2017—Fair Market Rents; IRS, 2017—About Form 1040; Tax Foundation, 2017; Tennessee Department of Human Services, 2018—Fiscal Year; USDA, 2017—Official USDA Food Plans



Housing

Housing costs vary by county in Tennessee. Rental housing is least expensive for a two-bedroom apartment in many rural counties of Tennessee at \$608 per month and for an efficiency apartment in Weakley County at \$386 per month. Rental housing is most expensive for a two-bedroom apartment in the counties including Nashville and its surrounding areas at \$959 per month and for an efficiency apartment at \$700 per month (HUD, 2017—Fair Market Rents). To put these costs in national context, the National Low Income Housing Coalition (NLIHC) reports that Tennessee was the 38th most expensive state in the country for housing in 2017 (National Low Income Housing Coalition, 2017).

In the Household Survival Budget, housing for a family accounts for 16 percent of the budget, which is well below HUD's affordability guidelines of 30 percent (HUD, n.d.—Defining Housing Affordability). For a single adult, an efficiency apartment accounts for 31 percent of the Household Survival Budget, just above the threshold at which the renter would be considered "housing burdened." (The availability of affordable housing units is addressed in Section VI.)



Child Care

In Tennessee, income inadequacy rates are higher for households with children at least in part because of the cost of child care. The Household Survival Budget includes the cost of registered home-based child care, the least expensive paid child care option. The average rate in Tennessee is \$898 per month (\$458 per month for an infant and \$440 for a 4-year-old) (Tennessee Department of Human Services, 2018—Fiscal Year).

Family Child Care Homes provide care in a caregiver's home for five to seven children unrelated to the caregiver. These homes are required to be registered with the state and have to follow educational, health, and safety regulations. The quality of care that they provide may vary between locations. Licensed child care centers are regulated to meet more detailed standards of quality care, and they are significantly more expensive, costing an average of \$1,011 per month (\$547 per month for an infant and \$464 for a 4-year-old) (Tennessee Department of Human Services, 2018—Fiscal Year; Tennessee Department of Human Services, 2019—Eligibility Information; Tennessee Department of Human Services, 2019—Rule of Tennessee).

Costs vary across counties: The least expensive home-based child care for two children, an infant and a preschooler, is found in Perry County at \$625 per month, and the most expensive home-based child care is in Williamson County at \$1,583 per month.

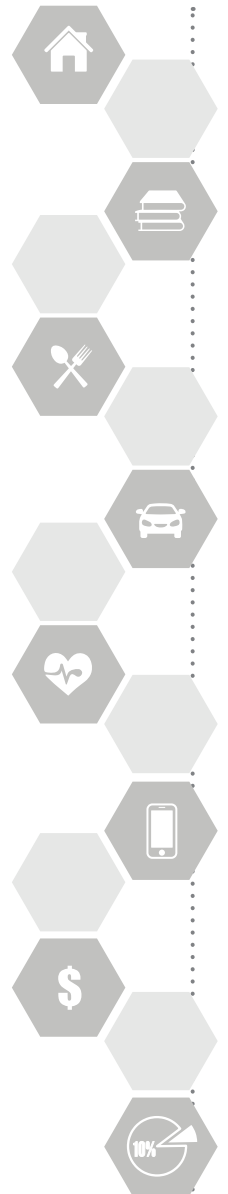
Child care for two children accounts for 21 percent of the household budget, the family's greatest expense. The cost of child care in Tennessee increased by 26 percent from 2007 to 2017. This increase has made child care costs prohibitive for many ALICE families, not just in Tennessee but nationwide. A recent study from the Oregon Child Care Research Partnership found that nationally, it was 24 percent harder (measured by increase in prices combined with decrease in income) for a two-parent family to purchase care in 2012 than in 2004, and 33 percent harder for single parents (Tennessee Department of Human Services, 2007-2017; Weber, 2015).



Food

The original U.S. poverty level was based in part on the 1962 Economy Food Plan, which recognized food as the most basic element of economic well-being. The food budget for the Household Survival Budget is instead based on the USDA's Thrifty Food Plan, showing the minimal budget amount possible for food. Within the Household Survival Budget, the cost of food in Tennessee is \$543 per month for a family of two adults and two young children and \$179 per month for a single adult (USDA, 2017—Official USDA Food Plans).

The cost of food increased in Tennessee by 19 percent from 2007 to 2017. The original FPL was based on the premise that food accounts for one-third of a household budget, so that a total household budget was the cost of food multiplied by three. Yet with the large increases in the cost of other parts of the household budget, food now accounts for only 13 percent of the Household Survival Budget for a family and 11 percent for a single adult in Tennessee. Because the methodology of the FPL has not evolved in tandem with changing lifestyles and work demands, the FPL significantly underestimates the cost of even the most minimal household budget today (USDA, 2007–2017—Official USDA Food Plans).





Transportation

The fourth item in the Household Survival Budget is transportation, a prerequisite for most employment in Tennessee. The average cost of transportation by car is several times greater than by public transportation; however, there is no public transportation regularly available in any county in Tennessee. According to the Consumer Expenditure Survey, on average, a Tennessee family pays \$644 per month for gasoline, motor oil, and other vehicle expenses, the same for all counties in the state. Because most workers in Tennessee must have a car to get to their jobs, the Household Survival Budget generally reflects the higher cost of using a car (BLS, 2017—Consumer Expenditure Surveys).

Transportation costs represent 15 percent of the average Household Survival Budget for a family and 20 percent for a single adult. These costs are lower than in other budgets for households with incomes similar to those of ALICE households. The Housing and Transportation Affordability Index finds that for low-income Tennessee households, transportation costs take up to 25 percent of the household budget in metro areas, and up to 35 percent in rural parts of the state (Center for Neighborhood Technology, 2018).



Health Care

The fifth item in the Household Survival Budget is health care costs. From 2007 to 2017, the average health care costs in Tennessee for a family increased by 64 percent and by 39 percent for a single adult, more than any other budget item, averaging \$539 per month for a family (13 percent of the budget) and \$124 per month for a single adult (8 percent of the budget in 2017 (BLS, 2007-2017—Consumer Expenditure Surveys). These are out-of-pocket costs for insurance, medical services, prescription drugs, and medical supplies for a low-income family. A low health care allotment makes a family vulnerable to financial crisis if a household member should undergo a serious illness or medical emergency.

Most ALICE households in Tennessee do not qualify for Medicaid because the eligibility threshold for a family with children is 255 percent of FPL, and only 95 percent of the FPL for adults without children, well below the Household Survival Budget. Yet many of these ALICE families cannot afford the combined cost of monthly insurance premiums, copays, and large deductibles. For example, the deductible for the Affordable Care Act (ACA) Marketplace Silver Plan with no subsidies is just over \$11,000 for a family, only slightly less than for the lowest-cost Bronze Plan. Households that can't afford these costs are forced to forgo insurance and, in 2017, had to pay the ACA penalty for not having coverage. The penalty for 2017 was the higher of the following: 2.5 percent of household income, or the cost of the penalty, which was \$695 annually for a single adult and \$2,085 for a family of four. These are both less than what the Household Survival Budget allots for health care, but they provide no actual health care coverage (Antonisse, Garfield, Rudowitz, & Artiga, 2018; Garfield, Orgera, & Damico, 2019; Healthcare.gov, 2018; Health Pocket, 2016; Kaiser Family Foundation, 2017—Health Insurance Marketplace Calculator; Kaiser Family Foundation, 2019—Status of State Action; Kaiser Family Foundation, 2019—Where Are States).



Technology

A smartphone has become an essential part of life, especially to workers, who often have to check emails and work schedules online, or use it to apply for jobs. Therefore, the cost of a basic smartphone plan for each adult in the household was added to the Household Survival Budget beginning in 2016. The average minimal monthly cost of a smartphone plan in Tennessee in 2017 was \$75 for a family and \$55 for a single adult (Consumer Reports, 2017—Best Low-Cost Cell-Phone; Pew Research Center, 2018—Mobile Fact Sheet; Smith, 2017).

Ninety-five percent of Americans own a cell phone of some kind, and 77 percent own a smartphone, according to a 2018 Pew Research Center survey. This data does not vary greatly by gender, race/ethnicity, age, education, income, or geography. There are few exceptions where usage is lower: seniors, people without a high school degree, those earning less than \$30,000, or those living in rural areas (Smith, 2017).



Taxes

Taxes are a legal requirement of earning income in Tennessee, even for low-income households. Taxes represent 17 percent of the average Household Survival Budget for a single adult, and with credits and exemptions, 11 percent for a family. In 2017, a single adult in Tennessee earning \$19,000 per year paid on average about \$3,180 in federal and state taxes, and a family earning around \$50,000 per year, benefiting from the federal Child Tax Credit (CTC) and the Child and Dependent Care Credit, paid approximately \$5,484. These rates include federal and state income taxes calculating standard federal and state deductions and exemptions; and the largest portion of the tax bill is for payroll deduction taxes for Social Security and Medicare (IRS, 2017—About Form 1040; Tax Foundation, 2017).

Federal and state income tax rates remained flat from 2007 to 2017, but the income brackets increased slightly, and payroll tax rates have remained the same except for a temporary payroll tax cut in 2011 and 2012. Taxes in the Household Survival Budget, however, increased as the earnings needed to cover the larger budget increased. The average tax for a single adult's Household Survival Budget in Tennessee increased by 26 percent from 2007 to 2017, slightly higher than the 23 percent increase in the total budget. The average tax increase for a family was much greater, 73 percent, as the amount of allowable credits and deductions became a smaller portion as the total budget increased (IRS, 2017—EITC Income Limits; IRS, 2017—EITC Participation Rate; IRS, 2017—Statistics for 2017; Tennessee Department of Revenue, 2018).

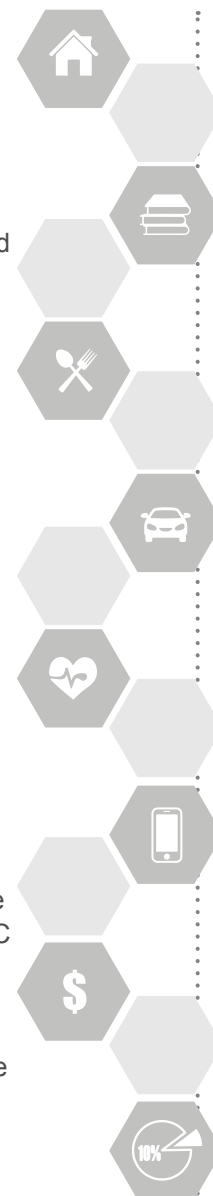
The Earned Income Tax Credit (EITC), a benefit for working individuals with low to moderate incomes, is not included in the tax calculation because it applies mainly to families with children. However, many ALICE families with children at the lower end of the income scale are eligible for the EITC (IRS, 2017—EITC Income Limits; IRS, 2017—EITC Participation Rate; IRS, 2017—Statistics for 2017). The IRS estimates that the federal EITC helped more than 620,000 families in Tennessee in 2017, with an average EITC amount of \$2,558. More than 82 percent of those eligible received the credit in 2015 (latest available data year). In addition, between 2011 and 2013, the federal EITC and the CTC lifted 197,000 Tennessee taxpayers and their households out of poverty, including 93,000 children. There is no additional state EITC in Tennessee (Center on Budget and Policy Priorities, 2018—The Earned Income and Child Tax Credits; IRS, 2017—EITC Income Limits; IRS, 2017—EITC Participation Rate; IRS, 2017—Statistics for 2017; National Conference of State Legislatures, 2018). Tax credits are captured in the ALICE Income Assessment presented in Section V.

In every state in the U.S., at least some low- or middle-income groups pay a higher share of their income in state and local taxes than wealthy families. According to the Institute on Taxation and Economic Policy's Tax Inequality Index, Tennessee has the 6th most inequitable state and local tax system in the country, with many regressive features including a comparatively high reliance on sales taxes as well as a sales tax on groceries, though at a lower rate. As a result, low- and middle-income residents pay proportionally more state and local tax than the wealthiest residents (Institute on Taxation and Economic Policy, 2018).

What is Missing From the Household Survival Budget?

The Household Survival Budget is a bare-minimum budget, not a "get-ahead" budget. The small Miscellaneous category, 10 percent of all costs, covers overflow from the six basic categories.

The Miscellaneous category is not enough to purchase cable service or cover automotive or appliance repairs. It does not allow for dinner at a restaurant, tickets to the movies, or travel. There is no room in the Household Survival Budget for a financial indulgence such as holiday gifts, or a new television — something that many financially secure



households take for granted. This budget also does not allow for any savings, leaving a family vulnerable to any unexpected expense, such as a costly car repair, natural disaster, or health issue. For this reason, those living on a Household Survival Budget are described as just surviving.

COST OF LIVING FOR SENIORS

The Household Survival Budget does not take into account different spending patterns for some seniors based on their health care needs. The budget's costs for housing, food, and transportation are on target for seniors who are healthy and working. However, many seniors face additional health-care-related expenses, including in-home health care, residential assisted living care, and residential nursing care. These expenses are compared in Figure 14.

Because seniors are the largest population by age in the U.S., it is particularly important to understand the financial challenges that they face. As people age, health issues increase along with associated costs of care. Health care expenses rise considerably for seniors; 80 percent of adults 65 and older have at least one chronic condition, and 68 percent have at least two conditions and account for three-fourths of U.S. health care spending. Costs rise sharply for seniors who need residential health care, which can become essential for those with debilitating illnesses such as diabetes, cancer, or heart disease. The most expensive conditions, however, are Alzheimer's disease and other dementias, costing more than cancer and heart disease combined. The average Medicare spending for seniors with Alzheimer's is almost three times higher than average per-person spending for all other seniors. Today, there are about 5.2 million individuals treated for this disease in the U.S., and by 2050, that number is expected to triple (Alzheimer's Association, 2017; Bradley, 2017; Centers for Disease Control and Prevention, 2017; National Council on Aging, 2017).

Even with Social Security and Medicare, many seniors struggle financially. As Figure 14 illustrates, Social Security provides, on average, sufficient funds for seniors to live above the FPL. Without Social Security benefits, 39 percent of seniors nationally would have incomes below the FPL, a figure over four times higher than the current senior poverty rate of 9 percent. Yet Social Security is not enough to cover a basic household budget, and the gap between benefits and expenses is getting wider. The purchasing power of Social Security payments dropped by 30 percent from 2000 to 2015, according to a study by the nonpartisan Senior Citizens League (Johnson, 2017; Romig, 2018).

While Medicare provides crucial health care coverage and many seniors would be far worse off without it, the benefit does not cover all health care. It notably omits most dental and foot care, eye exams and glasses, home health aides, and most health care equipment. Nor does it cover short-term custodial care or long-term care (Centers for Medicare & Medicaid Services, 2016—Monthly Medicaid & CHIP; Centers for Medicare & Medicaid Services, 2018—Medicare Enrollment Dashboard; Foster, 2016).

The Elder Economic Security Standard™ Index (the Elder Index), a budget tool from the Gerontology Institute at the University of Massachusetts Boston and the National Council on Aging, includes additional expenses that older people often incur, primarily in health care. The Elder Index is a measure of how much money seniors require in order to meet basic needs and age in place with dignity. As a basic budget, it does not include the cost of auto or home repairs, homemaker services such as cooking or cleaning, home health aide services for personal care (such as bathing and dressing), or adult day health care. Yet according to the Elder Index, the budget needed for a Tennessee senior renter in 2016 (the latest data available) was 10 percent higher than the Household Survival Budget (Genworth, 2017—Cost of Care; Mutchler, Li, & Xu, 2016; National Council on Aging, 2017).

As more health care is required, basic budget costs for seniors increase (Figure 14):

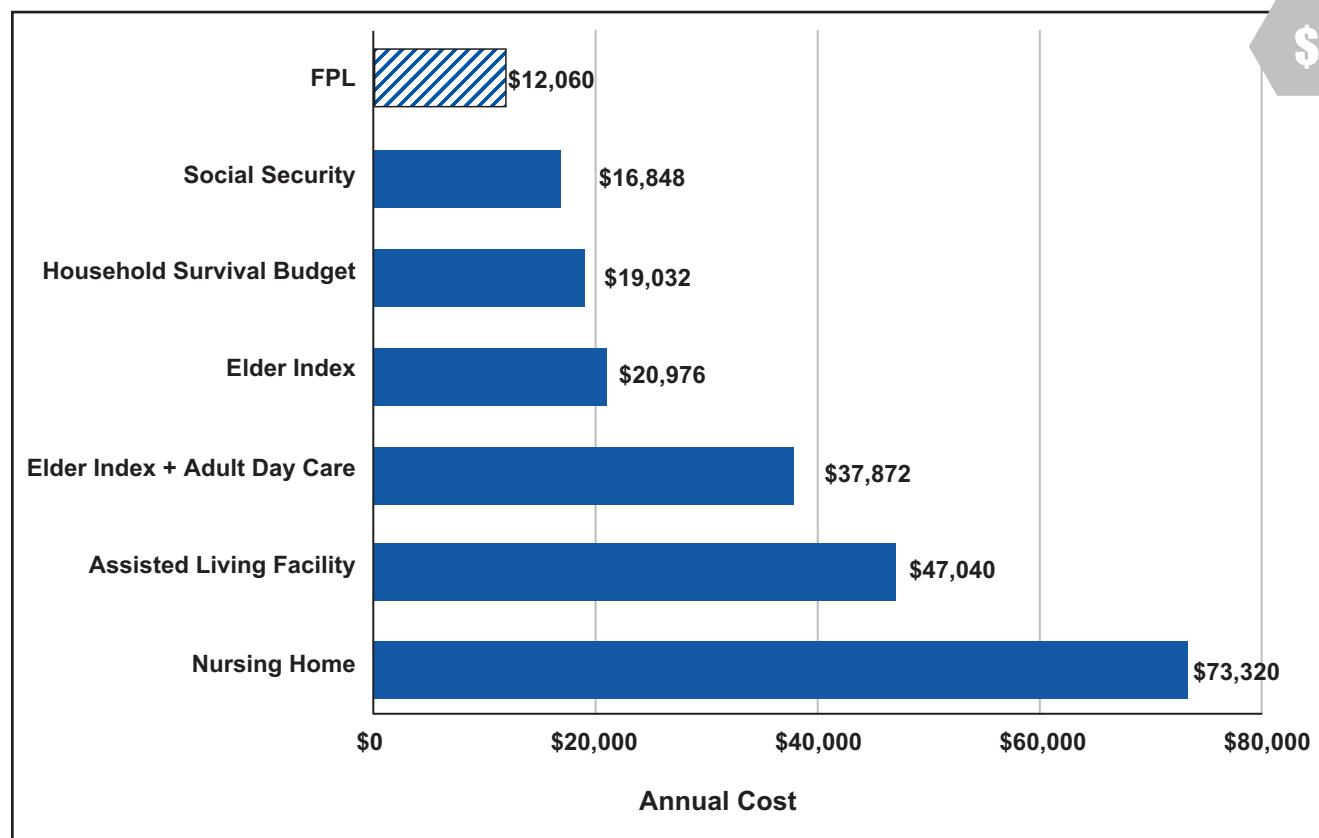
- **Adult day care:** Adding the median cost of adult day care to the Elder Index budget totals \$37,872, which is almost double the Household Survival Budget for a single adult — an additional expense almost as large as a mortgage. If a senior is injured, Medicare covers skilled nursing care necessary for recovery

— 100 percent of the cost for the first 20 days and 80 percent for up to the 100-day mark — but it does not cover care for longer-term conditions (Genworth, 2017—Cost of Care).

- **Assisted living:** The cost of assisted living arrangements adds even more expense — and the number of seniors needing these arrangements is increasing rapidly, in part due to higher rates of debilitating chronic conditions such as diabetes, cancer, high cholesterol, and high blood pressure. The median monthly rate for a semi-private room in an assisted living facility with personal care and health services in Tennessee was \$47,040 annually in 2017 — two and a half times higher than the Household Survival Budget (Genworth, 2017—Assisted Living).
- **Nursing home care:** A nursing home with 24-hour on-site nursing care is even more expensive, at \$73,320 annually for a semi-private room — almost four times greater than the Household Survival Budget. These costs have risen steadily; nationally, the cost of nursing home care increased by 20 percent from 2008 to 2017 (Federal Reserve Bank of St. Louis, 2019—Producer Price Index; Genworth, 2017—Most and Least Expensive States).

Medicare covers the cost of medically necessary care during short-term stays in a nursing facility, but it does not cover custodial care (such as help with bathing and dressing) or long-term care. Medicaid pays for an estimated half of total nursing home costs in the U.S. annually and is the largest payer of nursing home care. Yet it has strict eligibility guidelines: 100 percent of costs are covered only for those who make less than \$27,000 annually and have financial resources of less than \$2,000 (though requirements vary depending on age, marital status, veteran status, and state of residence) (American Elder Care Research Organization, 2018; Genworth, 2017—Most and Least Expensive States).

Figure 14.
Comparison of Senior Budgets for a Single Adult, Tennessee, 2017



Sources: ALICE Household Survival Budget, 2017; Genworth, 2017—Assisted Living; Genworth, 2017—Most and Least Expensive States; Mutchler, Li, & Xu, 2016; Social Security Administration, 2017; U.S. Department of Health and Human Services, 2017—Poverty Guidelines

THE HOUSEHOLD STABILITY BUDGET

Extending beyond the Household Survival Budget, the **Household Stability Budget** is a measure of how much income is needed to support and sustain an economically viable household. The Stability Budget represents the basic household items necessary for a household to participate in the modern economy in a sustainable manner over time, with a reasonable quality of life and a measure of future financial security. In Tennessee, the Household Stability Budget is moderate in what it includes, yet it still totals \$88,380 per year for a family of four — 74 percent higher than the Household Survival Budget of \$50,796, and 40 percent more than the Tennessee median family income of \$62,926 per year. To afford the Household Stability Budget for a two-parent family, each parent must earn \$22.09 per hour, or one parent must earn \$44.19 per hour.

The statewide average Household Stability Budget for a single adult totals \$34,392 per year — 81 percent more than the Household Survival Budget of \$19,032 and 22 percent more than the Tennessee median earnings for a single adult of \$28,157. To afford the Household Stability Budget, a single adult must earn \$17.20 per hour (Figure 15). The Stability Budget for various household types is available at UnitedForALICE.org/Tennessee.

Figure 15.
Household Stability Budget, Tennessee Average, 2017

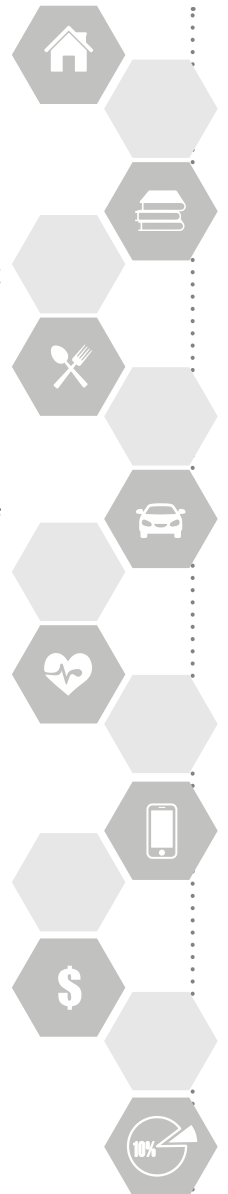
Tennessee Average, 2017		
	SINGLE ADULT	2 ADULTS, 1 INFANT, 1 PRESCHOOLER
Monthly Costs		
Housing	\$689	\$957
Child Care	\$-	\$1,011
Food	\$343	\$1,065
Transportation	\$614	\$1,228
Health Care	\$128	\$609
Technology	\$109	\$129
Savings	\$188	\$500
Miscellaneous	\$188	\$500
Taxes	\$607	\$1,366
Monthly Total	\$2,866	\$7,365
ANNUAL TOTAL	\$34,392	\$88,380
Hourly Wage*	\$17.20	\$44.19

*Full-time wage needed to support this budget

Sources: American Community Survey, 2017; BLS, 2017—Consumer Expenditure Surveys; Consumer Reports, 2017—Best Low-Cost Cell-Phone; HUD, 2017—Fair Market Rents; IRS, 2017—About Form 1040; Tax Foundation, 2017; Telogical Systems, 2016; Tennessee Department of Human Services, 2018—Fiscal Year; USDA, 2017—Official USDA Food Plans; U.S. Department of Health and Human Services, 2017—Medical Expenditure Panel Survey. For the Methodology Overview and additional data, visit our website: UnitedForALICE.org

The spending amounts in the Household Stability Budget are those that can be maintained over time and are upgraded from the Survival Budget in the following ways:

- **Housing** covers higher-quality housing that is safer and needs fewer repairs, and is represented in the median rent for single adults and single parents, and in a moderate house with a mortgage for a family of four.
- **Child care** has been upgraded to licensed and accredited care, where quality is fully regulated, but more expensive.
- **Food** is elevated to the USDA's Moderate Food Plan, which provides more variety than the Thrifty Food Plan and requires less skill and time for shopping and cooking, plus one meal out per month, which is realistic for a working family.
- **Transportation** includes leasing a car, which allows drivers to more easily maintain a basic level of safety and reliability.
- **Health Care** covers the same categories of spending — insurance, medical services, prescription drugs, and medical supplies — but is the amount that higher-income families spend. Interestingly, spending on health care does not increase as income increases from \$20,000 to \$30,000 (the difference between the single adult Survival and Stability Budgets) but increases significantly when income is above \$70,000 (as in the family Stability Budget).
- **Technology** includes the cost of basic internet access at home and a low-cost smartphone plan for each adult in the household. Most jobs now require access to the internet and a smartphone, which are necessary for accessing work schedules, changes in start time or location, work support services, and customer follow-up. The least expensive option has been selected from the Consumer Reports plan comparison and Telogical's annual survey of broadband costs (Consumer Reports, 2017—Best Low-Cost Cell-Phone; Telogical Systems, 2016).
- **Savings** has been added as a budget line. Because savings are a crucial component of self-sufficiency, the Household Stability Budget also includes a 10 percent savings category. Savings of \$500 per month for a family is probably enough to invest in education and retirement, while \$188 per month for a single adult might be enough to cover the monthly payments on a student loan or build toward a down payment on a house. However, in many cases, the reality is that savings are used for an emergency and never accumulated for further investment.
- **Miscellaneous** represents 10 percent of the basic necessities, a small reserve for cost overruns in other categories.
- **Taxes** have increased to reflect the increased income necessary to support the Stability Budget.

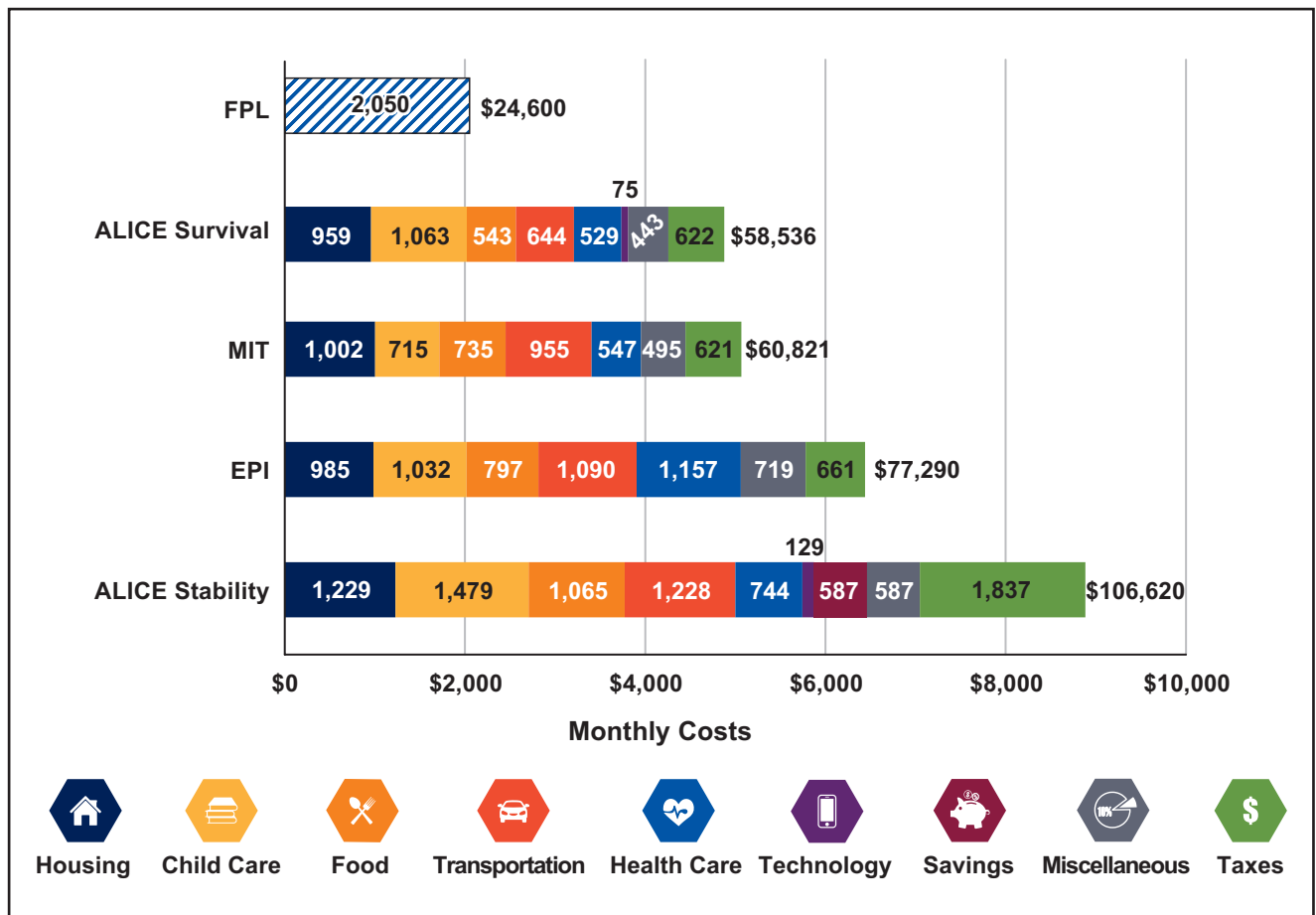


HOW DOES THE SURVIVAL BUDGET COMPARE?

The Household Survival Budget measures the bare minimum costs for a household to live and work in the modern economy, calculated for actual household expenditures. Here it is compared to less modest budgets created by other organizations, which use different sets of measures. The Massachusetts Institute of Technology's (MIT) Living Wage Calculator measures the minimum employment earnings necessary to meet a family's basic needs while also maintaining self-sufficiency. The Economic Policy Institute's (EPI) Family Budget Calculator measures the cost to provide a reasonably secure yet modest standard of living.

Comparing these budgets and the FPL for Davidson County, Tennessee, helps put these different tools in perspective (Figure 16). Using the example of Davidson County, the FPL provides the lowest measure — \$24,600 per year for a family of four (U.S. Department of Health and Human Services, 2017). After the FPL, the Household Survival Budget has the lowest costs. The MIT budget is 4 percent higher than the Household Survival Budget (using 2018 prices); the EPI budget is 32 percent higher (in 2017 prices). The Household Stability Budget is the most expensive, at 82 percent higher than the Survival Budget (Economic Policy Institute, 2018—Family Budget Calculator; MIT, 2018).









Figure 16.
Comparison of Household Budgets, Family of Four, Davidson County, Tennessee, 2017



Sources: ALICE Household Survival and Stability Budget, 2017; Economic Policy Institute, 2018—Family Budget Calculator; MIT, 2018

A detailed comparison of the budgets is outlined in Figure 17. The budgets all use similar calculations for taxes, but as each total budget increases, the income needed to cover the expenses also increases, and higher income results in a larger tax bill (Gould, Mokhiber, & Bryant, 2018; Nadeau, 2018).

Figure 17.
Comparison of Household Budgets by Category, Tennessee, 2017

Budget Category	Household Survival Budget Objective: Calculate the bare minimum needed to live and work in the modern economy Data Year: 2017	MIT Living Wage Calculator Objective: Meet a family's basic needs while also maintaining self-sufficiency Data Year: 2018	EPI Family Budget Calculator Objective: Provide a reasonably secure yet modest standard of living Data Year: 2017	Household Stability Budget Objective: Support and sustain a secure and economically viable household Data Year: 2017
 Housing	U.S. Dept. of Housing and Urban Development (HUD)'s 40 th rent percentile for a two-bedroom apartment (includes all utilities whether paid by landlord/owner or by renter)	HUD's 40 th rent percentile for a two-bedroom apartment	HUD's 40 th rent percentile for a two-bedroom apartment	Median rent for single adults and single parents, and a moderate house with a mortgage for a two-parent family
 Child Care	Home-based child care for an infant and a preschooler	Lowest-cost child care option available (family child care or child care center) for a 4-year-old and a school-age child, whose care is generally less costly than infant care	Lowest-cost child care option available (center care in metro area or family care in non-metro area) for a 4-year-old; after-school and summer care for an 8-year-old; all generally less costly than infant care	Licensed and accredited center for an infant and a preschooler
 Food	USDA's Thrifty Food Plan for a family of four "regional adjustment factor" for east, midwest, south, west	USDA's Low-Cost Food Plan for a family of four with a "regional adjustment factor" for east, midwest, south, west	USDA's Low-Cost Food Plan national average for a family of four, adjusted for county-level variation	USDA's Moderate Food Plan plus one meal out per month
 Transportation	Operating costs for a car, or public transportation where available	Operating costs for a car, vehicle expenses and financing, and public transportation	Cost of auto ownership, auto use, and transit use based on county-level data	Operating costs for a car, plus cost for leasing one car
 Health Care	Out-of-pocket expenses for health insurance, medical services and supplies, and prescription drugs	Employer-sponsored health insurance, medical services and supplies, and prescription drugs	The Affordable Care Act's least expensive plan, plus out-of-pocket health care costs	Employer-sponsored health insurance plus out-of-pocket health care costs
 Technology	Lowest-cost smartphone plan for each adult in household	None	Included in Miscellaneous	Cost of smartphone for each adult in family and basic home internet service
 Savings	None	None	None	To ensure stability over time, monthly savings set at 10 percent of budget
 Miscellaneous	Cost overruns, estimated at 10 percent of budget	Includes essential clothing and personal and household expenses	"Other Necessities" includes apparel, personal care expenses, household supplies, telephone services, and school supplies	Cost overruns contingency as well as savings; each is 10 percent of budget

Sources: ALICE Methodology Overview, 2018 (available at UnitedForALICE.org/methodology); Economic Policy Institute, 2018—Family Budget Calculator; Gould, Mokhiber, & Bryant, 2018; Nadeau, 2018

III. ALICE IN THE WORKFORCE

AT A GLANCE: SECTION III

- In 2017, the unemployment rate in Tennessee was near record low, at 4.9 percent of those in the labor force according to the American Community Survey, and 3.8 percent, according to the Bureau of Labor Statistics (BLS).
- In Tennessee, 59 percent of people 16 years and older are working, though less than half work full-time with a salary; 71 percent of households have at least one worker in the household.
- More than half of all workers (55 percent) in Tennessee are paid by the hour; only 45 percent of workers earn a regular salary.
- The proliferation of part-time jobs and contract, or gig-economy, jobs has led to gaps in employment and other employment-related drawbacks, such as a lack of health insurance benefits.
- There are almost 3 million jobs in Tennessee; 67 percent of jobs pay less than \$20 per hour, with two-thirds of those paying between \$10 and \$15 per hour (\$15 per hour grosses \$30,000 per year, which is \$20,000 less than the Household Survival Budget for a family of four).
- There are barriers to job and wage opportunities in Tennessee by employer type, geographic location, and limited transportation. These barriers are especially prohibitive for groups of workers more vulnerable to employment discrimination: women; people of color; people with low levels of education; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) people; some immigrant groups; people with disabilities; veterans; and formerly incarcerated individuals.
- In 2017, 39 percent of adults were out of the labor force; of those, more than one-third were retired. The most common reasons for being out of the labor force were retirement, health problems, business conditions, caregiving or child care responsibilities, and lack of transportation or education.

The Tennessee economy has improved steadily since the end of the Great Recession in 2010 — gross domestic product (GDP) is growing, productivity is increasing across a range of industries, and unemployment is low. Most households in Tennessee (71 percent) have at least one worker in the household, with 34 percent of households having more than one worker (American Community Survey, 2017). Yet despite these signs of improvement, it is still difficult for many ALICE workers to afford the cost of basic necessities.

ALICE workers in Tennessee and across the country are facing major shifts in the employment landscape. These trends include:

- An increase in the number of jobs that are paid by the hour, project, or contract, along with a decrease in full-time salaried jobs
- The economy's growing dependence on low-wage jobs across locations, industries, and types of companies
- Barriers to opportunity that keep wages low for specific groups of workers and prevent others from working

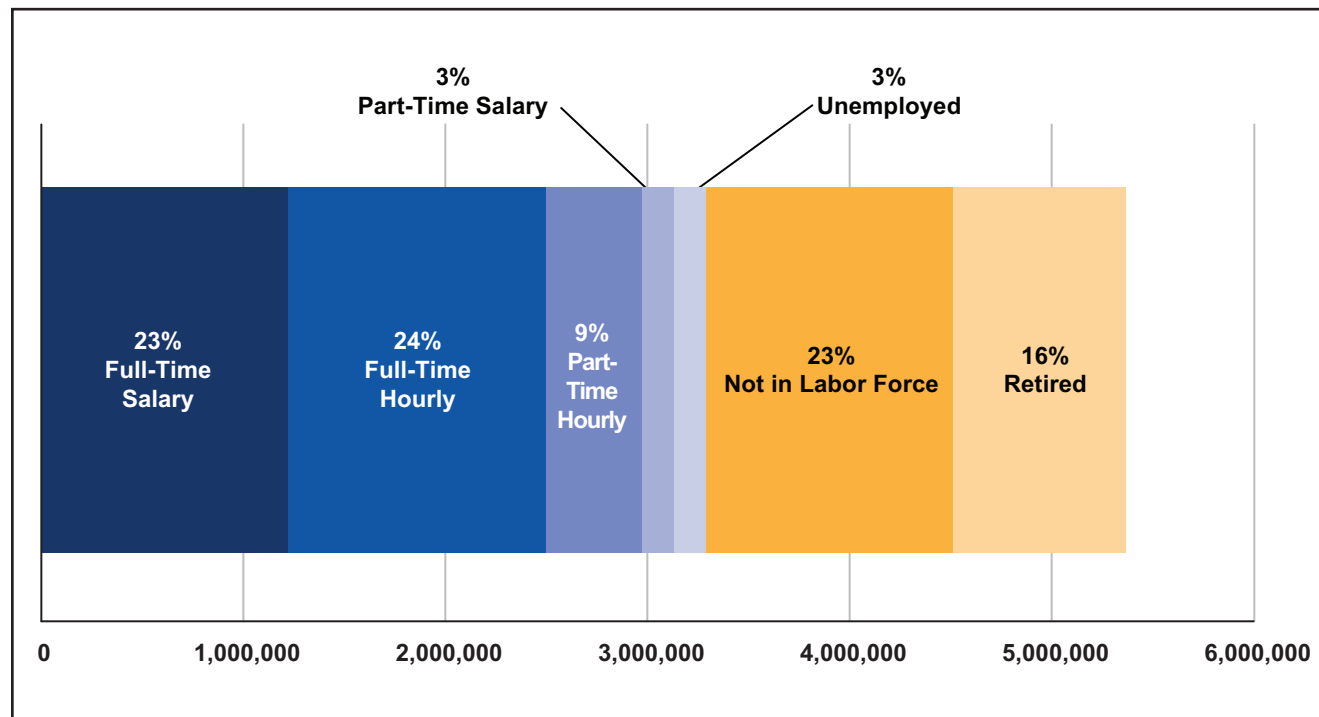
This section examines how these trends have affected the ability of workers throughout Tennessee to afford their basic household expenses (M.N. Murray, 2019; Workforce Insights, 2017).

THE EMPLOYMENT LANDSCAPE IN TENNESSEE

Based on the unemployment rate alone, it appears that economic conditions are improving in Tennessee, but this measure only tells part of the story. Tennessee's unemployment rate is at a near all-time low — 4.9 percent of those in the labor force, according to the American Community Survey, and 3.8 percent according to the BLS. Although these rates suggest that more adults are working, an increasing number of adults are considered outside the labor force (they have stopped looking for work for various reasons) — reaching 23 percent of all adults in 2017. When including adults out of the workforce, the unemployment rate drops to 3 percent, as shown in Figure 18 (American Community Survey, 2017; BLS, 2017—States: Employment Status).

What's more, over the last decade, there has been a shift away from traditional full-time jobs, usually associated with a salary and full benefits. A breakout of the 5.4 million civilian working-age adults (defined by the BLS as 16 years and older) in Tennessee in 2017 shows that while 59 percent of adults were working, only 23 percent were working full-time (more than 35 hours per week, 50 weeks per year) with a salary (Figure 18).

Figure 18.
Labor Status, Population 16 and Over, Tennessee, 2017



Sources: American Community Survey, 2017; Federal Reserve Bank of St. Louis, 2017—Total Wage and Salary Workers

Note: Data for full- and part-time jobs is only available at the national level; these national rates (51 percent of full-time workers paid hourly and 75 percent of part-time workers paid hourly) have been applied to the total Tennessee labor force to calculate the breakdown shown in this figure.

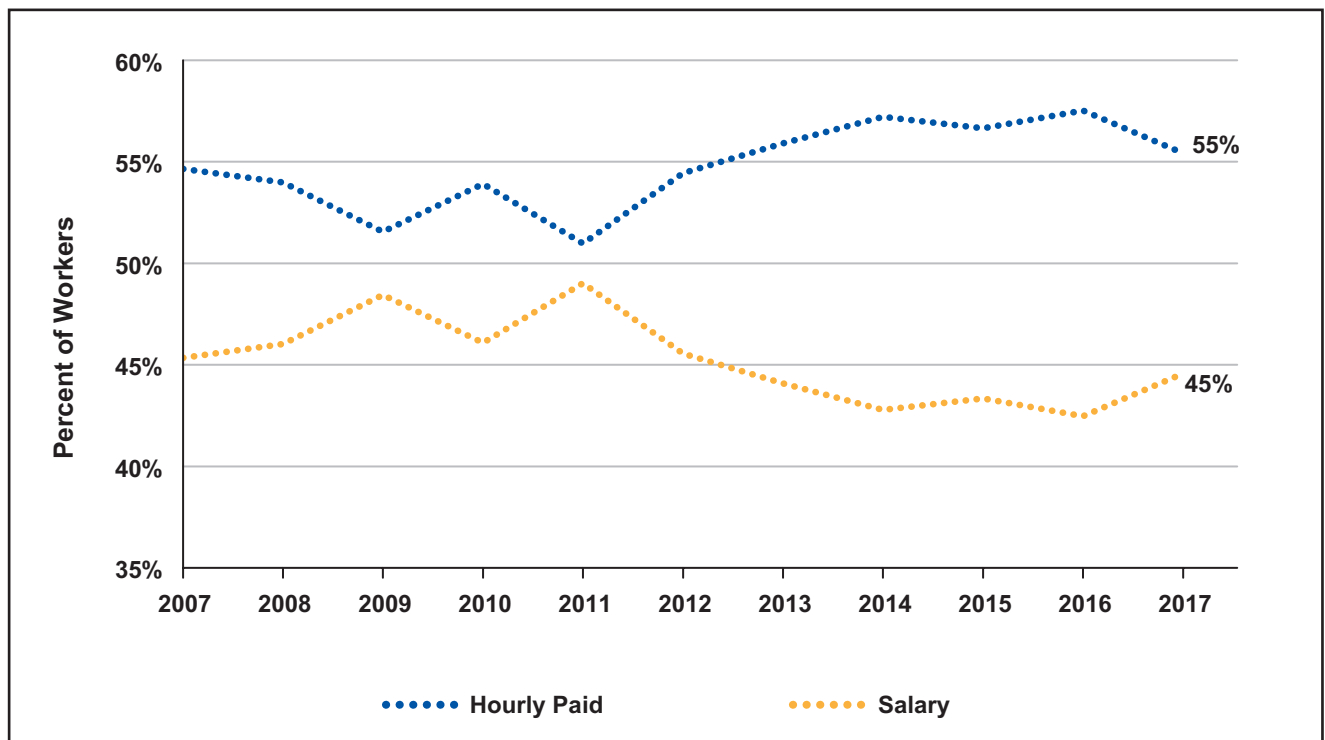
As part of this trend, the number of workers who are paid by the hour, rather than having a regular salary, is increasing. In Tennessee, more than half of all adults in the labor force (55 percent) were hourly-wage workers in 2017; only 45 percent of workers earned a salary (BLS, 2017—Labor Force Statistics; Federal Reserve Bank of St. Louis, 2017—Total Wage and Salary Workers).

Hourly-wage workers are paid only for hours worked, which can shift up or down depending on current demand. They usually do not have a contract, and if they work fewer than 30 hours per week, they are not required to receive health insurance, paid time off, retirement, or other benefits. Nationally, employers spend 30 percent of compensation on benefits for salaried workers; by hiring hourly workers instead, employers can reap significant savings (BLS, 2018—Employer Costs for Employee Compensation; U.S. Department of Labor, n.d.).

These statistics help explain why having a job, even full time, does not guarantee sufficient income to support a household. A recent workforce survey reported that more than three-quarters of U.S. workers live paycheck-to-paycheck at least some of the time, and nearly that many are in debt. Most notably, in 64 percent of families living below the Federal Poverty Level (FPL) in Tennessee, at least one family member is working (American Community Survey, 2017; Braga, Brown, & McKernan, 2019; CareerBuilder, 2017).

Because employers can reduce hours of non-salaried workers during economic downturns, hourly-wage workers bear the brunt of these slumps. Figure 19 shows that an increase in hourly-wage workers (blue line) occurs when there is a drop in salaried workers (gold line) in Tennessee, suggesting that reduced employment of salaried workers drives a shift to hourly-wage work. Over the last 10 years, the number of hourly-wage workers increased at the same time that the number of salaried workers waned, especially in 2010, and 2012 through 2016. The converse has also been true: When the number of hourly-wage workers decreased, the number of salaried workers increased, especially from 2007 to 2009, and in 2011 and 2017 (BLS, 2017—Labor Force Statistics; Federal Reserve Bank of St. Louis, 2017—Total Wage and Salary Workers).

Figure 19.
Workers Paid Hourly and Salary Wages, Tennessee, 2007 to 2017



Sources: BLS, 2017—Labor Force Statistics; Federal Reserve Bank of St. Louis, 2017—Total Wage and Salary Workers

The Gig Economy Defined

Hourly-wage workers, consultant or contingent workers, temps, freelancers, and contractors make up the rapidly expanding corps of non-traditional workers referred to as the gig economy.

There is a growing number of workers who earn hourly wages in traditional companies or work as a consultant or contingent worker, temp, freelancer, or contractor. Together, they create a rapidly expanding corps of non-traditional workers that is referred to as the gig economy. Because of the fluidity of the gig economy and the plethora of definitions, it has been difficult to measure. Traditional statistics from the BLS show gig-economy workers make up only a small portion of the national labor force — 3.8 percent of workers work in contingent and alternative employment and another 6.9 percent are independent

contractors, consultants, or freelance workers. However, the last two Freelancers Union surveys found that nationally, more than one-third of the labor force (37 percent) work as a consultant or contingent worker, temp, freelancer, or contractor. As much as 94 percent 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 (Abraham, Haltiwanger, Sandusky, & Spletzer, 2016; BLS, 2018—Contingent and Alternative Employment Arrangements; Freelancers Union & Upwork, 2017; Katz & Krueger, 2016).

Gig-economy workers are susceptible to gaps in wages and less regular schedules, making it difficult to pay ongoing monthly expenses or to qualify for loans or other financial products that require regular income. They also forgo employer-sponsored retirement plans and health insurance (Edison Research, 2018; Katz & Krueger, 2016). In addition, non-regular employees (from hourly-wage retail workers to independent contractors) are responsible for their own safety and health while on the job, according to the Occupational Safety and Health Act. Workers face injury or even death from workplace hazards such as fires, construction collapses, operating unsafe vehicles, exposure to toxic chemicals, and long hours. But unlike employees, independent contractors do not have rights to benefits such as workers' compensation. With these added risks and stress, it is not surprising that gig-economy workers are significantly more likely to report economic anxiety than regular full-time workers (Druley, 2017; Freelancers Union & Upwork, 2017; Massachusetts Coalition for Occupational Safety and Health, 2019; U.S. Government Accountability Office, 2015—Contingent Workforce).

There are additional measures that together provide insight about the changing structure of the labor force:

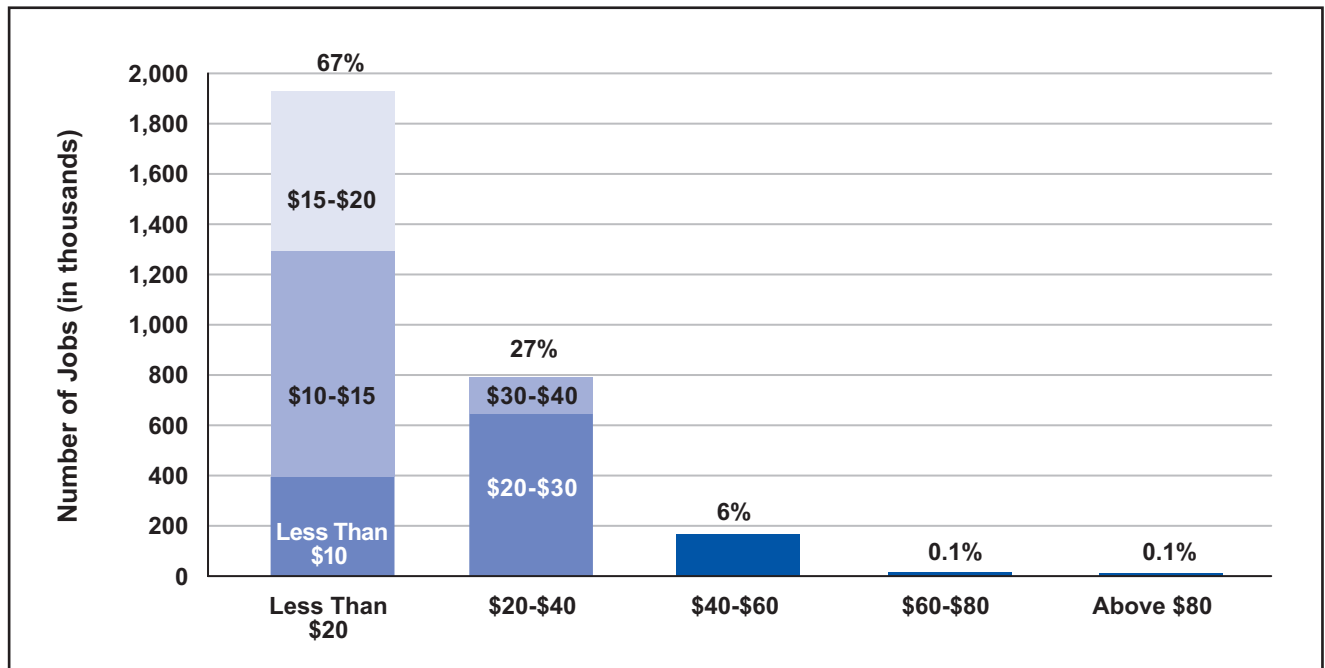
- **Underemployment:** Underemployed individuals represent a large swath of workers who want and need more work but are not captured by unemployment figures. In 2017, 7.9 percent of adults in Tennessee were employed part time for economic reasons or had stopped looking for work yet still wanted to work (BLS, 2017—Alternative Measures of Labor).
- **Self-employment:** A traditional proxy for the gig economy are self-employed workers, but while the gig economy has grown, the number of self-employed workers has actually decreased. There were 284,921 households that had self-employment income in Tennessee in 2017, or 11 percent of all households, a decrease from 17 percent in 2007 (American Community Survey, 2007–2017).
- **Non-employer firms:** These are small firms operated by self-employed individuals with no paid employees. Since they are unincorporated, they are not captured in traditional business statistics. The significant increase in the number of non-employer firms has made them another popular proxy for the new gig economy. In Tennessee, non-employer firms grew 11 percent from 2007 to 2017, but their revenue as a percentage of GDP declined from 9 to 7 percent (American Community Survey, 2007–2017; Federal Reserve Bank of St. Louis, 2018; Mishel & Wolfe, 2018).
- **Two jobs:** Many workers need to work two or more jobs to fill out their work days and to make ends meet. National statistics range from 5 percent of workers holding more than one job at the same time in 2017 (from the BLS) to 15.5 percent of workers having another full- or part-time job in addition to their primary job (from the Federal Reserve) (BLS, 2017—Multiple Jobholders; Board of Governors of the Federal Reserve System, 2017).

WHERE DOES ALICE WORK?

ALICE workers primarily hold jobs in occupations that build and repair our infrastructure and educate and care for the workforce. This range of jobs is broader than the service sector, and these occupations ensure that the economy runs smoothly. These workers were aptly described as “maintainers” by technology scholars Lee Vinsel and Andrew Russel in 2016. Yet despite ALICE workers' importance to the economy, many of these jobs are low-wage jobs and do not enable ALICE workers to afford a basic household budget (Frey & Osborne, 2013; Vinsel & Russell, 2016).

Tennessee faces an economy dominated by low-paying jobs: **67 percent of the 2.9 million jobs in the state pay less than \$20 per hour, with two-thirds of those paying less than \$15 per hour** (Figure 20). A full-time job that pays \$15 per hour grosses \$30,000 per year, which is \$20,000 short of the Household Survival Budget for a family of four in Tennessee (\$50,796). Another 27 percent of jobs pay between \$20 and \$40 per hour, with more than three-fourths of those paying between \$20 and \$30 per hour. Only 6 percent of jobs pay between \$40 and \$60 per hour, and less than 1 percent pay above \$60 per hour (BLS, 2017—Occupational Employment Statistics).

Figure 20.
Number of Jobs by Hourly Wage, Tennessee, 2017



Source: BLS, 2017—Occupational Employment Statistics

Despite record low unemployment in Tennessee, wages have only just started to increase, especially at the low end. Downward pressure continues to come from the large pool of adults out of the labor force, as well as from compositional changes, such as millennials replacing long-time earners in the labor force. In addition, employers are increasingly competing for employees through non-wage benefits, such as seasonal bonuses, increased paid leave, or additional training. The Center for Economic and Policy Research estimates that, relative to 1979, the national economy has lost about one-third of its capacity to generate good jobs — defined as jobs that paid more than the national median wage of \$37,690 in 2017 and offered employer-provided health insurance and an employer-sponsored retirement plan (Fee, Wardrip, & Nelson, 2019; King, 2018; M.N. Murray, 2019).

Service sector jobs have become an essential and dominant component of Tennessee's economy, with occupations employing the largest number of workers now concentrated in this sector. Two hallmarks of the service sector economy are that these jobs pay low wages and workers must be physically on-site; cashiers, nurses' aides, and security guards cannot telecommute or be outsourced. That means they may need to pay more for housing located near their jobs or have very long commutes — both of which add to the stressors ALICE workers face. Of the top 20 largest occupations in terms of number of jobs (Figure 21), all require the worker to be there in person, yet only 10 percent of the jobs — stemming from just 2 of the 20 occupations (Registered Nurses and General and Operations Managers) — pay enough to support the average Tennessee family's Household Survival Budget at more than \$25.40 per hour (BLS, 2017—Occupational Employment Statistics).

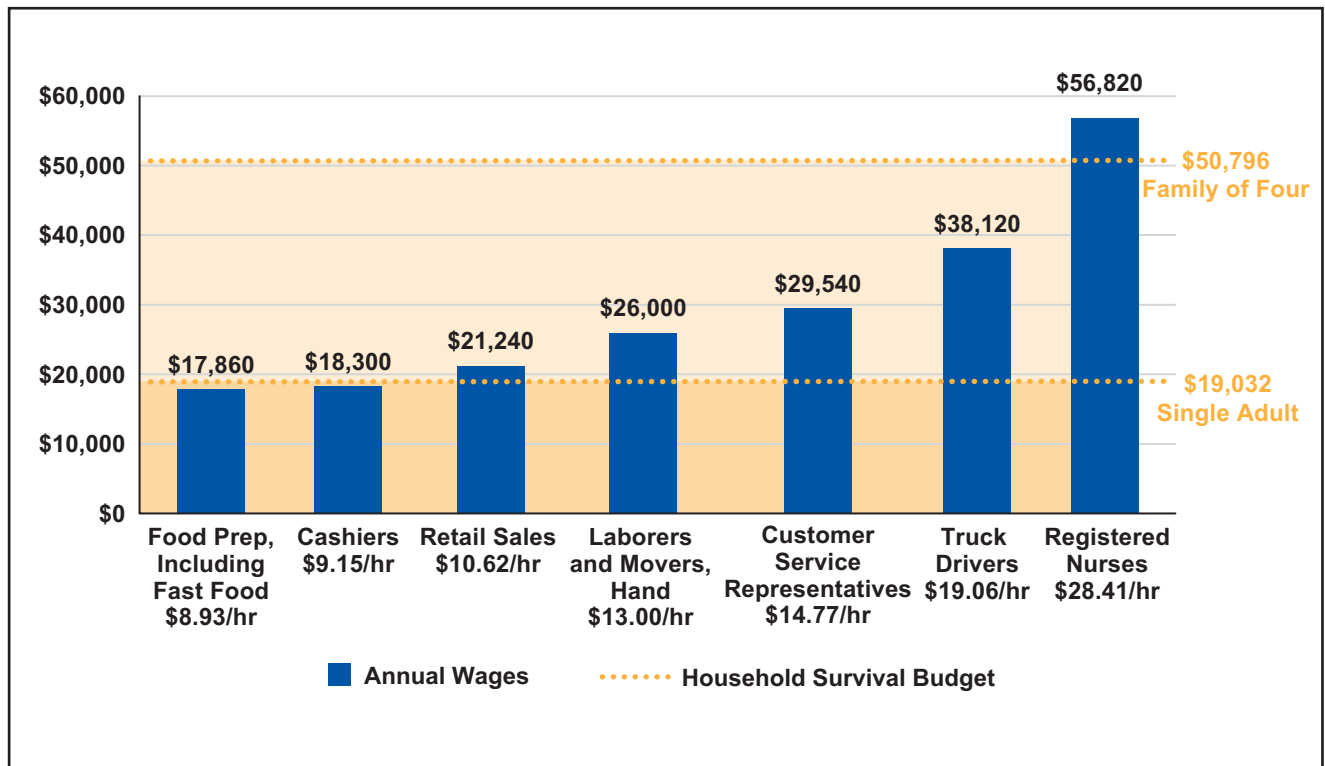
Figure 21.
Occupations by Employment and Wage, Tennessee, 2017

Occupation	Number of Jobs	Median Hourly Wage
Laborers and Movers, Hand	89,010	\$13.00
Retail Salespersons	88,970	\$10.62
Combined Food Prep, Including Fast Food	73,520	\$8.93
Cashiers	73,340	\$9.15
Customer Service Representatives	61,890	\$14.77
Heavy and Tractor-Trailer Truck Drivers	60,350	\$19.06
Registered Nurses	59,350	\$28.41
Stock Clerks and Order Fillers	56,200	\$11.55
Assemblers and Fabricators	55,090	\$15.19
Office Clerks	54,760	\$14.52
Secretaries and Administrative Assistants	53,690	\$15.46
Waiters and Waitresses	52,580	\$8.74
General and Operations Managers	41,160	\$41.53
Janitors and Cleaners	36,580	\$10.75
First-Line Supervisors of Office Workers	36,400	\$24.33
First-Line Supervisors of Retail Sales Workers	32,480	\$17.66
Nursing Assistants	29,600	\$11.74
Maintenance and Repair Workers	29,240	\$17.53
Bookkeeping and Auditing Clerks	29,060	\$17.98
Elementary School Teachers	29,030	\$23.61

Source: BLS, 2017—Occupational Employment Statistics

Comparing the most common occupations with the Household Survival Budget, most jobs do not offer an income that can support the budget (Figure 22). While five of the seven occupations in Figure 22 could support a single-adult household, only one could support a family budget with one full-time, year-round income-earner. The most common occupation in Tennessee, Hand Laborers and Material Movers (manually moving freight, stock, or other materials), with more than 89,000 jobs, pays an average of \$13 per hour, or \$26,000 if full time, year-round. **These jobs fall short of meeting the family Household Survival Budget by almost \$25,000 per year.**

Figure 22.
Household Survival Budget Compared to Salary for Top Occupations, Tennessee, 2017



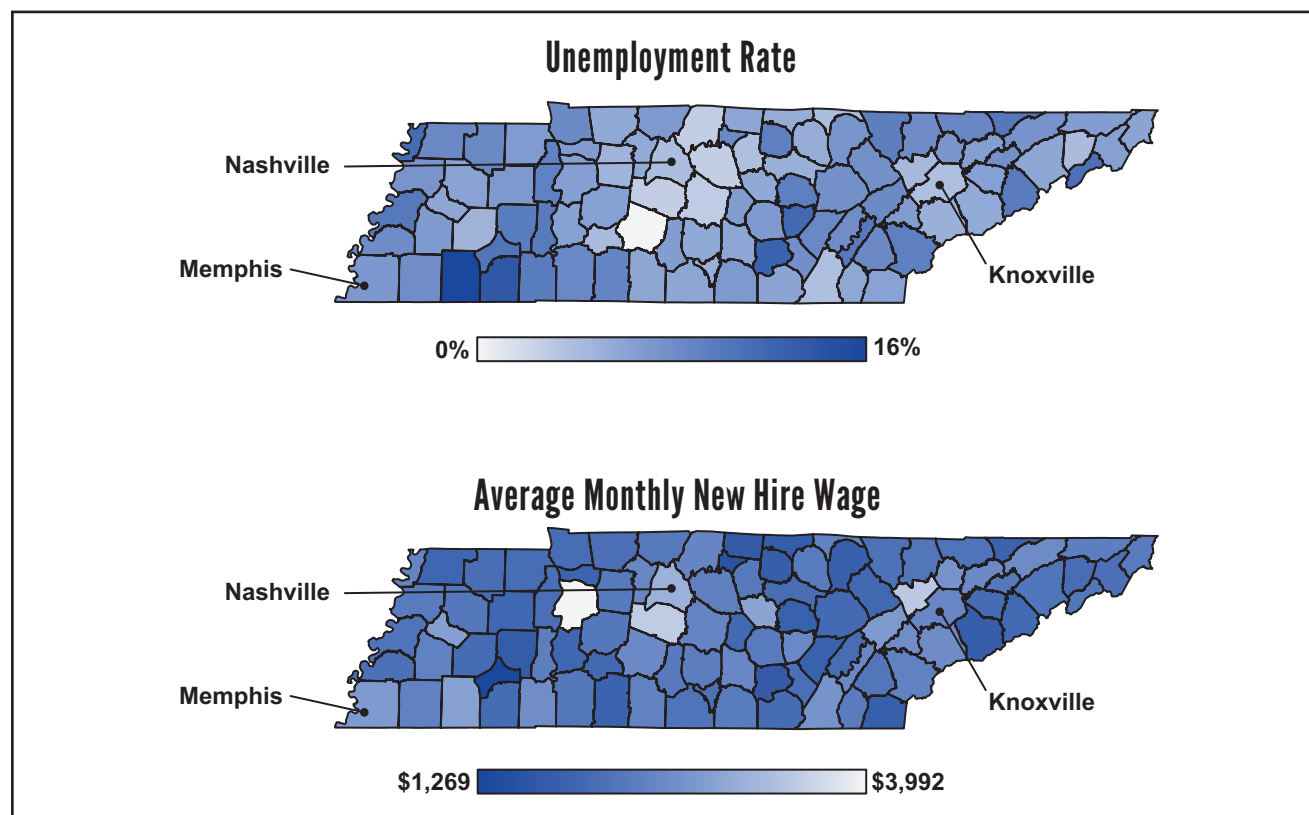
Sources: ALICE Household Survival Budget, 2017; BLS, 2017—Occupational Employment Statistics

This next section reviews different ways of assessing the economy's growing dependence on low-wage jobs. ALICE increasingly is working in low-wage jobs across geographic locations, across a range of industries and sectors, and in many different types and sizes of companies.

Job Location

Location often determines the availability of jobs and wages. Across Tennessee, there is wide variation in both unemployment rates and wages (Figure 23). Unemployment rates range from less than 1 percent in Maury County to 16 percent in Hardeman County, compared to the state average of 4.9 percent (American Community Survey, 2017). The average monthly wage for a newly hired employee ranges from \$1,269 in Chester County to \$3,992 in Humphreys County. Wages and employment rates are often inversely correlated: Workers in the areas where unemployment rates are low tend to earn more, while those in areas with higher rates of unemployment tend to earn less.

Figure 23.
Unemployment and Average New-Hire Wage by County, Tennessee, 2017



Source: American Community Survey, 2017

Range of Industries

ALICE works in a wide range of industries in Tennessee. The largest industry in terms of employment is trade, transportation, and utilities, employing 24 percent of the civilian population 16 years and older. Transportation equipment is Tennessee's top export. While often thought of as a sector with high-wage jobs, the industry also has many occupations that do not pay enough to support even the Household Survival Budget. For example, the median hourly wage in 2017 was \$13.00 for a mover and \$19.06 for Heavy and Tractor-Trailer Truck Drivers (BLS, 2017—Occupational Employment Statistics; Workforce Insights, 2017).

The next largest industry is Education and Health Services, employing 17 percent of the labor force, with the majority of this sector employed in health care (87 percent) and the rest in education (13 percent). This sector has many low-wage jobs: For example, the median hourly wage in 2017 was \$11.74 for a nursing assistant and \$10.38 for a teaching assistant. Much attention has been given to Tennessee's manufacturing sector: The state has built a strong modern automobile manufacturing industry with more than 900 auto suppliers, three major assembly plants, and automotive operations in 88 of 95 counties (BLS, 2017—Economy at a Glance; M.N. Murray, 2019; Tennessee Department of Economic and Community Development, n.d.; Workforce Insights, 2017).

Public-sector employment in Tennessee fell steeply from 2010 to 2013 but has rebounded since then. While public-sector jobs were once a guarantee of financial stability, many now offer low wages and fewer benefits. Other jobs that were once in the public sector, such as road repair, emergency services, or corrections, are now often contracted to private companies (Cohen & Gebeloff, 2018; Federal Reserve Bank of St. Louis, 2019—All Employees: Government in Tennessee; Governing, 2018).

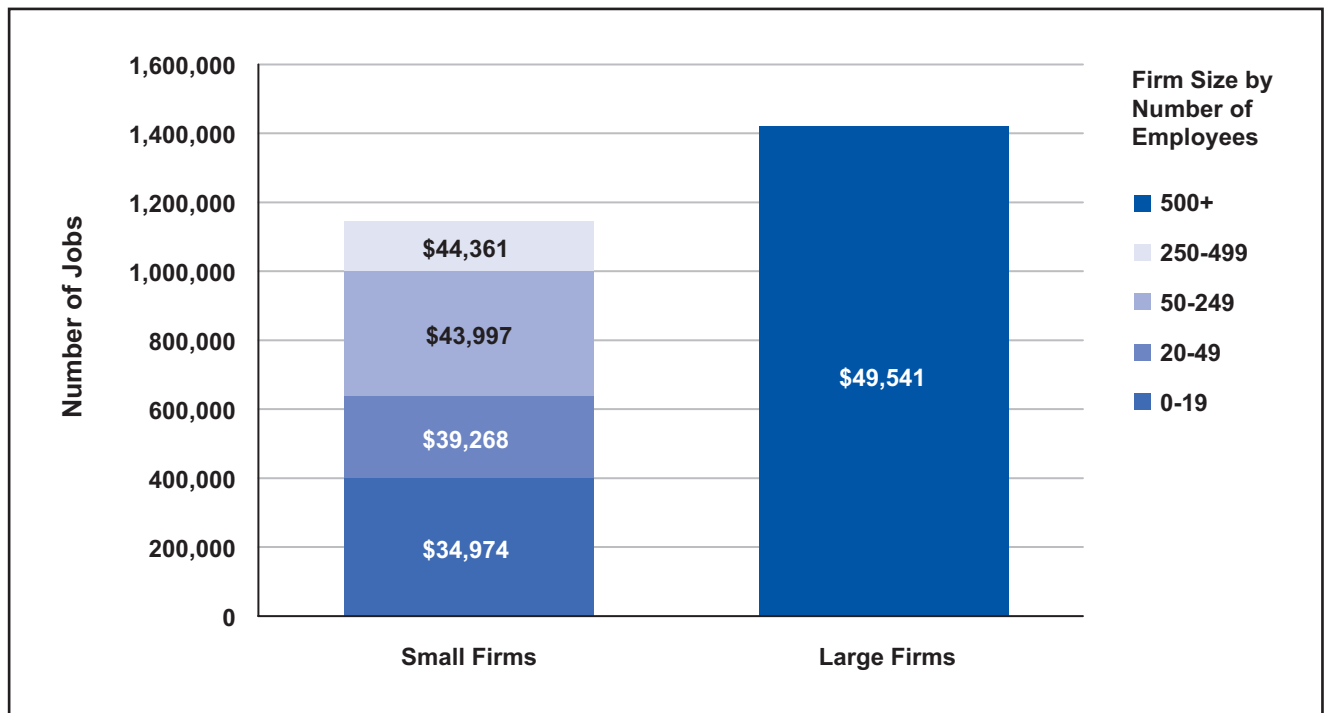
Size of Business

One of the key determinants of an ALICE worker's wages, benefits, and job stability is the size of their employer. Large companies have greater resources to offer career growth opportunities, continuous employment, and better benefits. Small businesses, defined by the BLS as firms with fewer than 500 workers nationally, have been an important engine for growth in the U.S. economy — driving job creation, innovation, and wealth — and traditionally have grown to become medium or large employers. However, small businesses are more vulnerable to changes in demand, price of materials, and transportation costs, as well as to cyberattacks and natural disasters. As a result, their employees face more instability, reduced wages, and a greater risk of job loss.

For example, 3,677 small businesses started up in Tennessee in the second quarter of 2016, creating 15,389 new jobs, but almost as many companies exited (3,163 closed, moved to another state, or merged with another company), causing 12,424 job losses. The wages of employees in small firms are generally lower than those in large firms (Figure 24). In addition, workers starting and losing their jobs in small businesses are at least 30 percent lower, on average, than wages of workers with stable employment (U.S. Small Business Administration, 2018).

Small firms employed almost half of the private-sector workforce in Tennessee in 2017 (45 percent), and recently, the state has been a national leader in small business growth (Figure 24). The very smallest firms — those with fewer than 20 people — accounted for the largest share of small-business employment (Ewing Marion Kauffman Foundation, 2017; Haltiwanger, Jarmin, Kulick, & Miranda, 2017; Paychex, 2017; U.S. Small Business Administration, 2018).

Figure 24.
Private-Sector Employment by Firm Size With Average Annual Wage, Tennessee, 2017



Source: U.S. Census Bureau, 2017—Quarterly Workforce Indicators

Firm size in Tennessee varies by location and by sector. Small businesses make up a larger proportion of employers in many rural counties, but by employment, both small and large companies are more concentrated in around the state's metro centers (U.S. Census Bureau, 2017—Quarterly Workforce Indicators; U.S. Small Business Administration, 2018; Workforce Insights, 2017).

By sector, small businesses in Tennessee were most concentrated in construction (83 percent are small businesses), utilities (76 percent), and arts, entertainment, and recreation (74 percent) in 2015. An array of other services, such as repairs and personal care, account for the largest group, 86 percent (Figure 25). In addition, Tennessee's largest sector, health care and social assistance, had 39 percent of its employees working in small businesses. Some of the largest small-business sectors — services industries, accommodation and food service, and construction — tend to have less stability in daily and weekly schedules, less job security, and a large share of low-wage jobs (U.S. Small Business Administration, 2018).

For many small businesses, there is a dual challenge when ALICE workers are both the employee and the customer. This is true in child care centers, where more than 90 percent of operators are sole proprietors. On the one hand, child care workers are ALICE; according to the BLS, there were 8,120 child care workers in Tennessee in 2017, earning an average wage of \$9.28 per hour (\$18,560 annually if full-time). Home-based care providers earn even less, with most relying on another source of income to support their family. On the other hand, ALICE families use child care so that parents can work, and it is often the most expensive item in an ALICE family budget, even more expensive than housing. The conundrum is that if these small businesses increase the wages of their employees (who are ALICE workers), those expenses are passed on to customers (who are also ALICE workers). Certain ALICE workers will earn more money, but child care will become more expensive for ALICE families overall (BLS, 2017—Occupational Employment Statistics; Committee for Economic Development, 2019; U.S. Small Business Administration, 2018).

Figure 25.
Small Business Employment by Sector, Tennessee, 2015

Sector	Small Business Employment Share of Sector	Total Employment (excluding government positions)
Other Services (except Public Administration)	86%	108,829
Construction	83%	102,872
Utilities	76%	3,232
Arts, Entertainment, and Recreation	74%	33,702
Real Estate and Rental and Leasing	67%	33,265
Mining, Quarrying, and Oil and Gas Extraction	66%	3,139
Agriculture, Forestry, and Fishing and Hunting	66%	2,019
Professional, Scientific, and Technical Services	59%	113,402
Accommodation and Food Services	55%	267,581
Wholesale Trade	53%	114,367
Educational Services	47%	58,750

Source: U.S. Small Business Administration, 2018

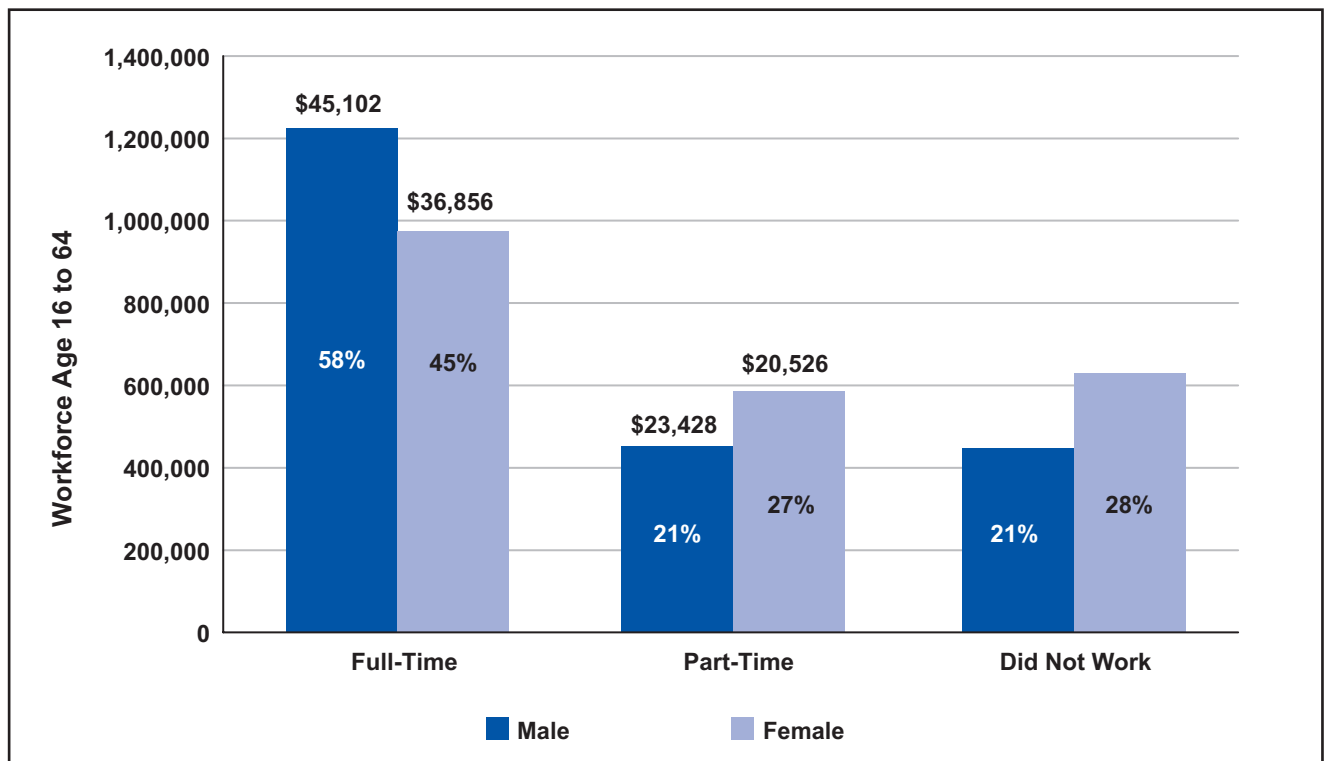
WHAT OTHER FACTORS KEEP ALICE'S WAGES LOW?

Systemic discrimination continues to play a role in keeping many workers in part-time or low-wage work. Awareness of these challenges has increased; however, these systemic trends persist in Tennessee, as they do across the country (Bui, 2016). This section outlines discrimination faced by women, people of color, people with low levels of education, LGBTQ+ individuals, those with a disability, certain immigrant populations, recent veterans, and formerly incarcerated people (Schmitt, Shierholz, & Mishel, 2013).

Gender

Although women make up nearly half of the U.S. workforce, receive more college and graduate degrees than men, and are the equal or primary breadwinner in 4 out of 10 families, they continue to earn significantly less than men in comparable jobs. In Tennessee, men earn 22 percent more in full-time jobs and 14 percent more in part-time jobs (Figure 26). Nationally, according to the BLS Current Population Survey, women's median earnings are lower than men's in nearly all occupations, and male-dominated occupations tend to pay more than female-dominated occupations at similar skill levels. In addition, women are less likely to have full-time employment or to work at all, further reducing both their immediate income and their future earning potential. However, there appears to be some slow but consistent closing of the gender wage gap for all but the highest earners. Nationally, women's median wages were 80 percent that of men's in 2017, improving from 75 percent in 2000. Unfortunately, the primary reason for this narrowing has been falling men's wages. For the bottom 70 percent of male workers, wages have stagnated or declined since 2007 (Fontenot, Semega, & Kollar, 2018; Gould, 2016; Hegewisch, 2018; Hegewisch & Ellis, 2015).

Figure 26.
Full-Time and Part-Time Employment by Gender, With Median Earnings, Tennessee, 2017



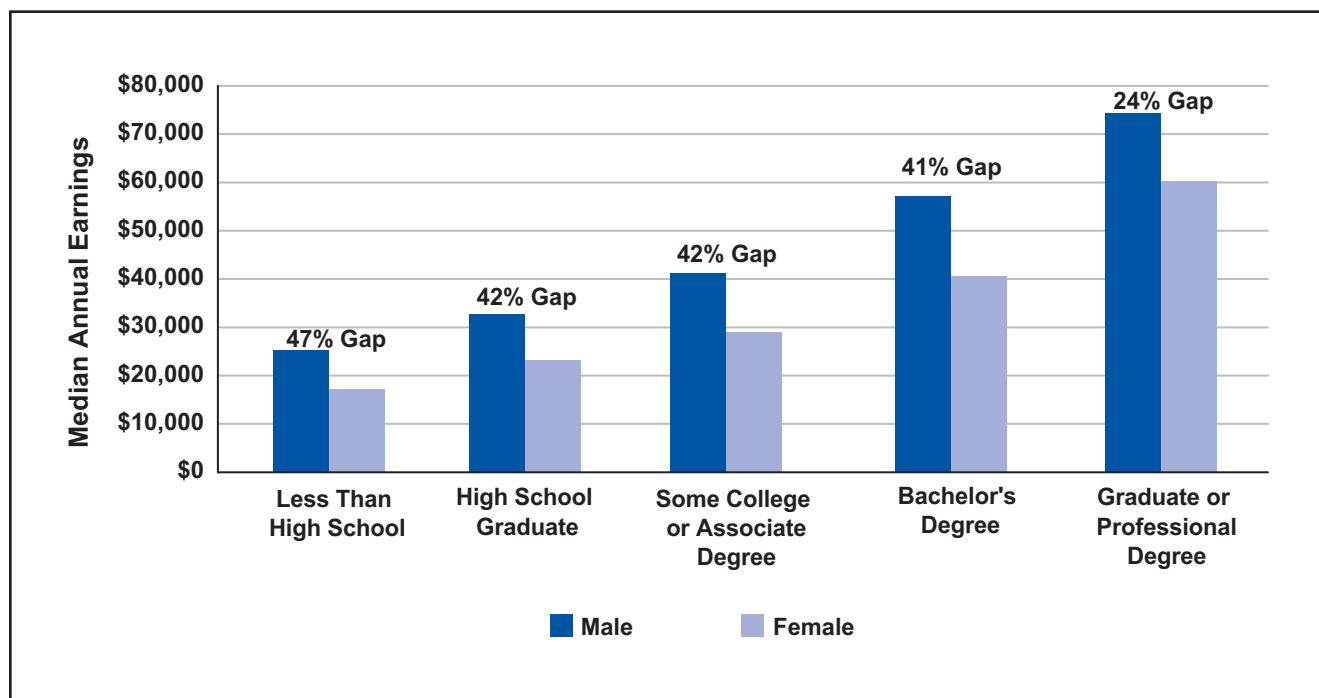
Source: American Community Survey, 2017

Lack of opportunity can be an even more stubborn barrier than lack of equal pay for equal work. According to the research website PayScale.com, men and women tend to work at similar job levels, most starting in similar entry-level positions. Over the course of their careers, both men and women move into manager- or supervisor-level roles, and eventually to director- and executive-level roles. But men tend to move into these roles more often and more quickly than women (PayScale, 2016).

In addition, older women are more likely to be less affluent than older men, as women are more likely to live longer than men but have less earning potential. In Tennessee, a higher percentage of these women were in poverty — 11 percent of women compared to 7 percent of men — in 2017 (American Community Survey, 2017).

Within Tennessee and across all states, there is also a striking difference in earnings between men and women at all educational levels (Figure 27). **Men in Tennessee earned at least 24 percent more than women across all educational levels and as much as 47 percent more for those with less than a high school diploma in 2017** (American Community Survey, 2017). This, in part, helps explain why so many of Tennessee’s single-female-headed households have incomes below the ALICE Threshold.

Figure 27.
Median Annual Earnings by Education and Gender, Tennessee, 2017

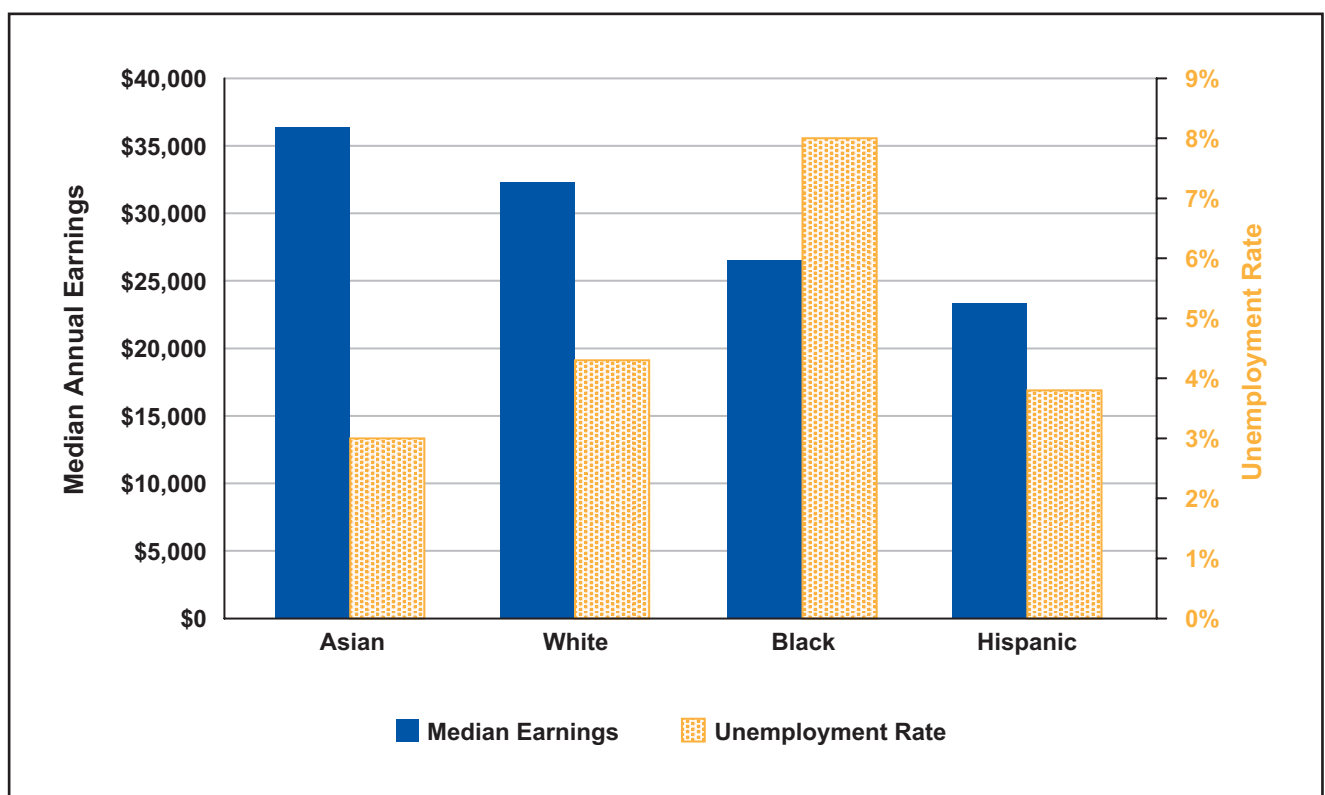


Source: American Community Survey, 2017

Race and Ethnicity

In both earnings and employment, the differences between racial and ethnic groups in Tennessee are stark (Figure 28). Asian and White workers had the highest median earnings in 2017: \$36,369 for Asian workers and \$32,341 for White workers. Earnings were much lower for Black workers at \$26,572; and lowest for Hispanic workers at \$23,384. Compounding these gaps, Black workers — both men and women — were also more likely to be unemployed (8 percent unemployment) than White (4 percent), Hispanic (4 percent), and Asian (3 percent) workers. In addition, business ownership by people of color is still low in Tennessee, accounting for only 18 percent of the state's almost 600,000 small businesses. In part, this may be due to the significant disparities by race and gender in government contracting (American Community Survey, 2017; Griffin & Strong, 2018; Hipple & Hammond, 2016; U.S. Small Business Administration, 2018).

Figure 28.
Median Earnings and Unemployment for Asian, White, Black, and Hispanic Workers, Tennessee, 2017



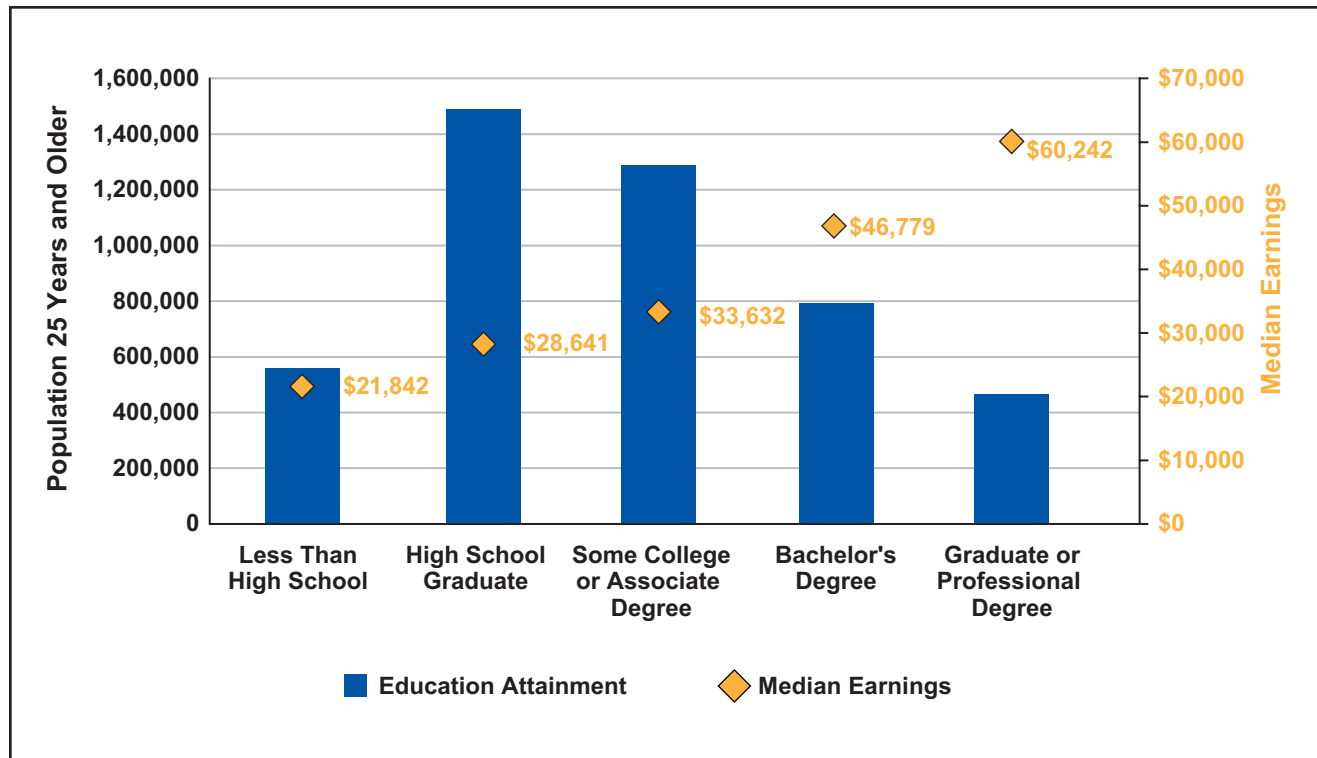
Source: American Community Survey, 2017

In addition to differences between racial and ethnic groups, there is significant and growing income variation within these groups. Income inequality in the U.S. is greatest among Asian households, recently surpassing that of Black households. This is primarily because the gains in income for lower-income Asian and Black households were small. At the same time, there was strong growth at the top of the income distribution for many Asian workers. For Hispanic workers, wages have increased slightly across all earners, so the gap between higher and lower earners has not widened (Gould, 2016; Kochhar & Cilluffo, 2018).

Education

Income continues to be highly correlated with education. In Tennessee in 2017, 12 percent of the population age 25 years and older had less than a high school diploma, 32 percent had only a high school diploma, and 28 percent had some college education or an associate degree. Only 17 percent had a bachelor's degree and 10 percent had a graduate or professional degree. These numbers have significant implications for Tennessee because median earnings increase significantly for those with higher levels of education (Figure 29).

Figure 29.
Education Attainment and Median Annual Earnings, Tennessee, 2017



Source: American Community Survey, 2017

Generally, as the complexity of a job rises, along with the knowledge and skills required, average hourly pay also rises. In Tennessee, those with a higher level of education earn more: Those with less than a high school diploma earned an average of \$21,842 in 2017, while those with an associate degree earned \$33,632, and those with a bachelor's degree earned \$46,779. Nationally, the difference in lifetime earnings between high school graduates and those who hold a bachelor's degree is estimated to be \$830,800. The difference in lifetime earnings between high school graduates and those with an associate degree is estimated at \$259,000 (American Community Survey, 2017; BLS, 2017—Occupational Employment Statistics; Carnevale, Rose, & Cheah, 2011; Center for Labor Market Studies, 2009; Daly & Bengali, 2014; Gould, 2016; Klor de Alva & Schneider, 2013; Monaco, 2017).

Many factors can impact a person's ability to attain higher levels of education, including age, citizenship, race/ethnicity, income level, family responsibilities, English-speaking ability, health challenges (including mental health and substance abuse issues), and trauma among those who have experienced military combat or incarceration (Gee, Gardner, Hill, & Wiehe, 2017; MacLean & Kleykamp, 2016; National Academies of Sciences, Engineering, and Medicine, 2017; Pew Research Center, 2012, 2017).

Sexual Orientation and Gender Identity

The number of workers who openly identify as LGBTQ+ is increasing, reaching 3 percent of the workforce in Tennessee, and more than 4.5 percent of U.S. adults in 2017. But there are few laws that prohibit workplace discrimination against them: In Tennessee, there are no explicit statewide legal protections, meaning employees can be fired for being LGBTQ+ (Mallory & Sears, 2018). Despite having more education than the general population, U.S. workers who identify as LGBTQ+ often earn less, experience greater unemployment, are more likely to live in extreme poverty (earning \$10,000 annually or less), and experience more food insecurity than their non-LGBTQ+ counterparts (Brown, Romero, & Gates, 2016; Newport, 2018).

Financial hardship among LGBTQ+ households presents additional issues as an increasing number of these households are having children, which increases the family budget. The number of same-sex marriages more than doubled nationally — from just before the Supreme Court ruling in 2013, which required the federal government to recognize state-sanctioned same-sex marriages, to the 2015 ruling that enabled same-sex marriage nationwide — and more than a quarter of married LGBTQ+ couples are now raising children (Badgett, Durso, & Schneebaum, 2013; Catalyst, 2018; Flores, Herman, Gates, & Brown, 2016; Harris, 2015; Movement Advancement Project, 2018; Pew Research Center, 2015; The Williams Institute, 2015).

Disability

Almost 1 million Tennessee residents 16 years and older have a disability of any kind, with approximately 22 percent living in poverty, compared with 11 percent of all residents. Of those with a disability, 5 percent of adults age 18 to 64 years in Tennessee have a lasting physical, mental, or emotional disability that impedes them from being independent or able to work, as do 16 percent of seniors (65+). Tennessee workers with a disability earn less than those without a disability. The median annual earnings for a Tennessee resident with a disability are \$22,471, compared to \$31,433 for a worker without a disability (American Community Survey, 2017; Cornell Disability Statistics, 2018).

The Integrated Benefits Institute estimates that each year, 5.6 percent of working Americans will experience a short-term disability, and the Social Security Administration finds that 27 percent of current 20-year-olds can expect to miss at least one year of work due to a disabling condition before they reach typical retirement age. The economic consequences of disability are profound: 61 percent of Americans with a disability experience a decline in earnings, 46 percent have lower after-tax income, and 25 percent have a lower housing value. In addition, those with a disability are more likely to live in severely substandard conditions and pay more than one-half of their household income for rent (Maleh & Bosley, 2017; Meyer & Mok, 2018; U.S. Department of Housing and Urban Development, 2011).

Groups Facing a Combination of Factors

Some groups face challenges from a combination of factors that limit wages. These workers are even more likely to fall below the ALICE Threshold:

Recent, Unskilled, Undocumented, or Limited-English-Speaking Immigrants

Immigrant groups vary widely in language, education, age, and skills. Nationally, immigrants are only slightly more likely to be in ALICE or poverty-level households than non-immigrants. However, some subsets of immigrant groups have difficulty finding higher-wage jobs.

Recent immigrants: The longer immigrants remain in the U.S., the more opportunities open up for them. Recent immigrants earn less than longer-term immigrants; the median annual income for foreign-born Tennessee residents who entered the state since 2010 is \$40,508, while the median household income for foreign-born residents who came to Tennessee before 2000 is \$51,344. The advantage for longer residency in the country is even greater for those with advanced education, and immigrants are more likely to have a graduate degree in Tennessee (14 percent) than are residents born in-state (7 percent) (American Community Survey, 2017; Mathema, 2018; New American Economy Research Fund, 2017; Singer, Suro, & Wilson, 2011).

Unskilled immigrants: Foreign-born residents living in Tennessee are less likely than residents born in-state to graduate from high school: 31 percent of foreign-born residents do not have a high school diploma, compared to 16 percent of residents born in-state. The high rate may be due to limited English proficiency, few educational opportunities in their home country, or the need to start working rather than finishing high school. For most recent immigrants, it is a combination of all three (American Community Survey, 2017; Mathema, 2018; Singer, Suro, & Wilson, 2011).

Undocumented immigrants: There were more than 120,000 undocumented immigrants living in Tennessee in 2016 with the largest numbers coming from Mexico. Undocumented immigrants accounted for less than 1 percent of the state workforce, well below the national average of 4.8 percent. Among occupations, nationally, undocumented immigrants make up a larger share of the workforce in low-skilled jobs such as farming (about 25 percent in 2016) and construction (15 percent) and service jobs (8 percent). The most significant barriers to work faced by undocumented workers include discrimination, below minimum wages, and health and safety issues. Even though they are technically protected in each of these areas under federal law, they often lack the means to seek redress if those protections are violated (Legal Aid at Work, 2019; Passel & Cohn, 2018).

“Nationally, immigrants are only slightly more likely to be in ALICE or poverty-level households than non-immigrants.”

Limited English-speaking immigrants: Research by the U.S. Census has found that English-speaking ability among immigrants influences their employment status, ability to find full-time employment, and earning levels, regardless of the particular language spoken at home. Those with the highest level of spoken English have the highest earnings, which approach the earnings of English-only speakers (Day & Shin, 2005). The American Community Survey reports more than 100 different foreign languages spoken in Tennessee; Spanish is the most common, spoken by 57 percent of foreign-language speakers. Of Tennessee households, 2 percent are limited-English-speaking households (where no one in the household age 14 or older speaks only English or speaks English “very well”) (American Community Survey, 2017).

Younger Combat Veterans

Veterans from recent deployments often have survived physical or psychological trauma and have significant, ongoing health issues or long-term disabilities that impede their ability to work. In addition, new veterans are typically younger and less educated than average workers, and deployed veterans receive combat-specific training that is often not transferable to the civilian labor market. There were 429,173 veterans in Tennessee, and 8 percent (34,498) were younger than 34 in 2015 (American Community Survey, 2017; Faberman & Foster, 2013; MacLean & Kleykamp, 2016; U.S. Department of Veterans Affairs, 2017).

Formerly Incarcerated People

People with past convictions in Tennessee and across the country are more likely to be unemployed or to work in low-wage jobs. Research has documented that formerly incarcerated people are confronted by an array of barriers that significantly impede their ability to find work and otherwise reintegrate into their communities, including low levels of education, lack of skills and experience due to time out of the labor force, employer reluctance to hire formerly incarcerated applicants, questions about past convictions on initial job applications, problems obtaining subsidized housing, and substance abuse issues. When they do find employment, it tends to be in industries including construction, food service, hotel/hospitality, landscaping/lawn care, manufacturing, telemarketing, temporary employment, and warehousing. These barriers have accounted for a loss of between \$78 and \$87 billion in annual GDP (ACLU, 2017; Bucknor & Barber, 2016; Executive Office of the President of the United States, 2016; National Employment Law Project, 2016).

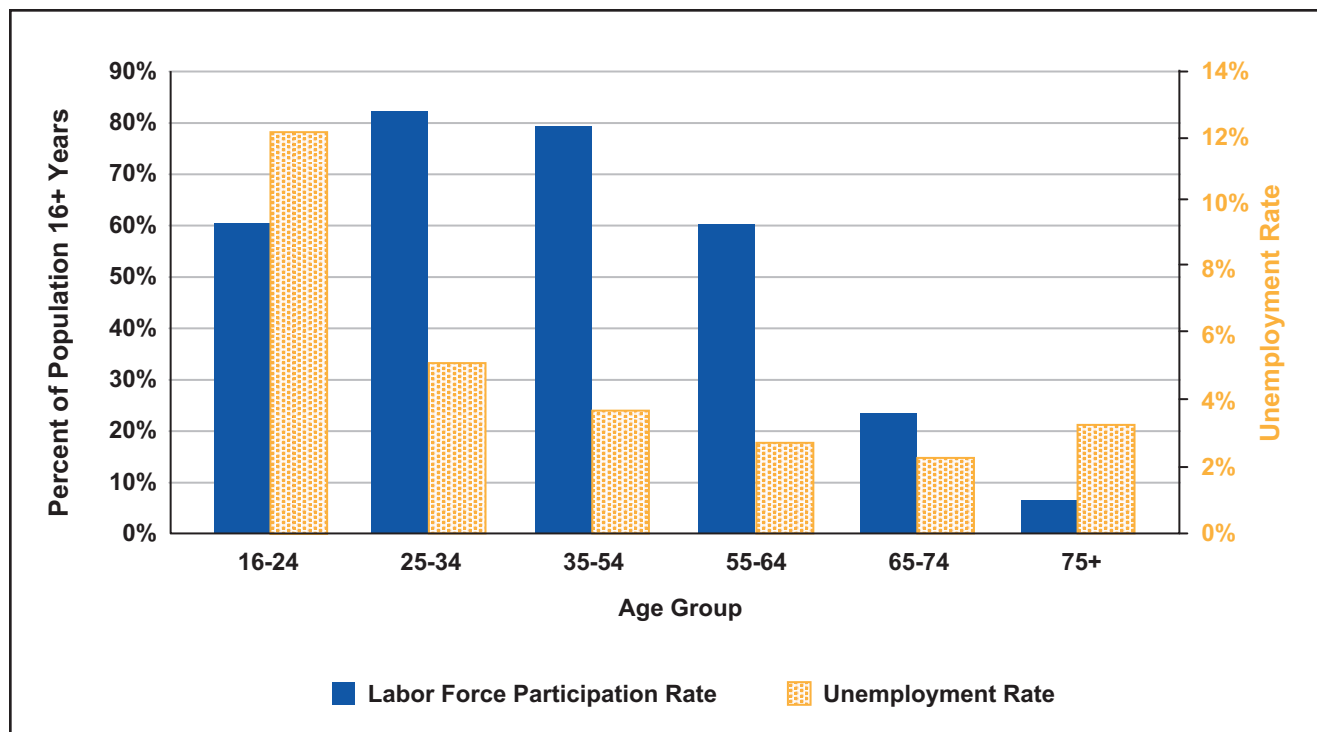
According to the Bureau of Justice Statistics, more than 55,000 people were incarcerated in Tennessee in 2016 — an imprisonment rate of 429 per 100,000 adults, below the national rate of 582 per 100,000 adults. Though the Black population is small in Tennessee, Black Tennessee residents face incarceration rates that are disproportionately higher than their percentage in the overall state population, making up only 17 percent of the state population but 44 percent of the jail population (ACLU, 2017; Bucknor & Barber, 2016; Carson, 2018; Carson & Anderson, 2016; Kaebler & Glaze, 2016; National Employment Law Project, 2016; Nellis, 2016; The Sentencing Project, 2016a, 2016b; Vera Institute of Justice, 2015).

WHAT KEEPS ALICE OUT OF THE LABOR FORCE IN TENNESSEE?

Low unemployment rates do not necessarily mean all adults are working. Of the 5.4 million people 16 years and older in Tennessee, 1.2 million were out of the labor force in 2017. These working-age people were predominately in either the youngest or the oldest groups, as shown by their low participation rates in the labor force in Figure 30. While the labor participation rate was approximately 80 percent for those aged 25 to 54, it was far lower for those younger (more likely to be in school) and older (more likely to retire).

The relationship of labor force participation to the unemployment rate suggests that as the unemployment rate goes down, young residents enter the labor force, and by the time they are in their late 20s, they find a job. For older residents, the unemployment rate is kept low because older workers who can't find a job leave the labor force (American Community Survey, 2017).

Figure 30.
Labor Force Participation vs. Unemployment, Tennessee, 2017



Source: American Community Survey, 2017

Of those outside the labor force, almost half (41 percent) were retired, defined as those 65 years and older and out of the labor force, according to the American Community Survey. This statistic does not capture those 60 to 64 years old who retire early.

There is a range of factors that keep working-age people out of the labor force, including health problems, child care or caregiving responsibilities, and lack of education. Other than retirement, the most common reasons to be out of the labor force are being a homemaker, a disabled person, or a student. Younger adults are more likely to be in school or have child care responsibilities, while older adults may encounter health problems and may have caregiving responsibilities. Since women are still disproportionately responsible for both child care and caregiving, it is not surprising that Tennessee's labor force participation rate also varies by sex, with 43 percent of women compared to 33 percent of men out of the labor force in 2017 (American Community Survey, 2017).

Some surveys include additional reasons that rank highly, such as not being able to find work, an employer's schedule, or restrictions on workers' hours. These are also often related to the three other common issues: child care, transportation, and caregiving (BLS, 2017—Labor Force Statistics; Board of Governors of the Federal Reserve System, 2017, 2018; Hipple, 2015).

Health Problems

An illness or a disability — mental or physical — can make it harder to get the education and training necessary to work, to physically get to work, to perform some job functions, and to work long hours. Only 23 percent of Tennessee residents 18 to 64 years old with a disability are employed, compared to 67 percent of those with no disability. Similarly, mental health issues are the largest diagnosis category among working-age adults who receive disability benefits. Since disability is disproportionately associated with age, it is often a reason people retire, often with insufficient savings to support their basic needs and growing health care costs. In Tennessee, 30 percent of residents 65 to 74 years old and 53 percent of those 75 years old and older are living with a disability, more than double the average for younger age groups (American Community Survey, 2016 and 2017; BLS, 2017—Employment Situation of Veterans; McAlpine & Warner, 2004; National Alliance on Mental Illness, 2014).

Health issues play a critical role in high rates of unemployment among veterans from recent deployments; both physical and psychological trauma can negatively affect the ability of new veterans to work. The 34,498 Tennessee veterans who are aged 18 to 34 years are the most likely to be unemployed or in struggling ALICE households. While state-level data on unemployed veterans is not available, at the national level, veterans 18 to 34 years old are more than twice as likely as their older counterparts to be unemployed, with 7 percent unemployed in 2017 (American Community Survey, 2017; BLS, 2017—Employment Situation of Veterans; Faberman & Foster, 2013; MacLean & Kleykamp, 2016).

Business Conditions

Common obstacles to work arise from low pay, restrictions on workers' hours, or the constraints of an employer's schedule. Most strikingly, 68 percent of respondents to a 2018 Harris survey reported that they do not apply for minimum wage jobs because the income would not cover their bills. An employer's schedule can also create obstacles, for example, when work hours do not match public transportation or child care schedules. Many workers in these situations are unable to get to work on time or don't earn enough to cover the additional expense that would be needed to get them there on time.

These issues are exacerbated when jobs have variable work hours. And because some employer or government benefits — including paid and unpaid time off, health insurance, unemployment insurance, public assistance, and work supports — are tied to number of hours worked, unpredictable scheduling can put those benefits in jeopardy. For example, low-wage workers are two and a half times more likely to be out of work than other workers, but only half as likely to receive unemployment insurance (Express Employment Professionals, 2018; Garfield, Orgera, & Damico, 2019; Watson, Frohlich, & Johnston, 2014).

Caregiving

As the population of Tennessee ages, more families require caregiving to improve the well-being and recovery of aging parents, and siblings and children with severe illnesses or disability. For women 25 to 54 years old, the most common reason for not working in 2017 was in-home responsibilities. According to a 2016 survey by the Brookings Institution and The Hamilton Project, the primary reason for women not working was caregiving for a relative or friend (36 percent of respondents). Men were far less likely to be caregivers (only 3 percent of respondents) (Board of Governors of the Federal Reserve System, 2017; Hipple, 2015; McCarthy, 2017).

Child Care

With more than 66 percent of families (with children under six years old) having all available parents in the workforce in Tennessee, high-quality child care is a necessity. Yet the cost, availability, and scheduling of child care are often barriers to employment. In fact, 52,896 parents of children age five and younger in Tennessee had to quit a job, not take a job, or greatly change their job because of problems with child care, according to a 2016 National Survey of Children's Health. In addition, mothers who live in child care deserts (areas with an undersupply of child care) have lower rates of workforce participation than mothers in non-desert areas, according to a study by the Center for American Progress (Malik & Hamm, 2017; Schochet & Malik, 2017). The sharp increase in the number of women entering the workforce since the 1970s has been the main driver of increased household income. But the rate of women in the labor force peaked in 2000 and has been declining since, weakening economic growth (Shambaugh, Nunn, & Portman, 2017).

Transportation

For many workers — especially low-income workers and those with a disability — transportation can be an impediment to work. The cost of purchasing and maintaining a car can be beyond the wages of many jobs, and the time to travel to work may add prohibitive burdens on child care and school pick-ups, caregiving, and health care (da Costa, 2018; Rall, 2015; Tyndall, 2015).

College

More college students are struggling financially today than students did in the past. This is due to a number of factors, including an increasing number of students attending college, rising tuition costs, families facing greater financial strain, and changing demographics. Among college students today:

- **More undergraduates are working:** More students from low-income households are attending college. In 2016, 39 percent of U.S. undergraduates had a household income at or below 130 percent of the FPL, an increase from 28 percent in 1996. In addition, more than half of undergraduates are financially independent from their parents. As a result, more students are working outside of their studies: Nationally, two-thirds of undergraduates are holding down a job, and more than half of those are working full-time (Carnevale, Smith, Melton, & Price, 2015; U.S. Government Accountability Office, 2018—Food Insecurity).
- **Tennessee students are taking on significant debt:** Almost two-thirds (60 percent) of Tennessee's Class of 2017 graduated with an average of \$26,981 in student debt. This debt occurred despite Tennessee colleges and universities receiving more than \$518 million in Federal Pell Grants for students applying for financial aid. In the state's college towns with the largest numbers of off-campus students, at least 43 percent of students received financial aid in 2017 and in some towns, the rate was as high as 68 percent (Figure 31) (Project on Student Debt, 2018; U.S. Department of Education, 2018).
- **Students experience food and housing insecurity:** According to a recent national survey, more than 40 percent of college students experienced food insecurity in the previous month, and one-quarter experienced housing insecurity, even though the majority of these students were employed. Low-income college students are eligible for the Supplemental Nutrition Assistance Program (SNAP), but the eligibility requirements are difficult to navigate, and as a result more than half (57 percent) of eligible students do not receive SNAP benefits. Another strong indicator of need is the emergence of at least 217 campus food pantries currently operating in 40 states (Goldrick-Rab, Baker-Smith, Coca, Looker, & Williams, 2019; Goldrick-Rab, Cady, & Coca, 2018; U.S. Government Accountability Office, 2018—Food Insecurity).

- **Graduating students face the challenge of future hardship:** Despite improvements in the economy, nationally, 47 percent of recent female college graduates and 37 percent of recent male graduates are initially underemployed, working in jobs that don't require a college degree and earning, on average, \$10,000 less annually than graduates working in traditional jobs requiring a college degree. Facing student debt and lack of savings as well, many recent college graduates remain or become ALICE and find it difficult to get ahead even with a college degree (Burning Glass Technologies and Strada Institute for the Future of Work, 2018).

Because Tennessee has a large number of colleges and universities, student financial hardship is a significant challenge. The towns with the largest numbers of off-campus students are listed in Figure 31. (The ALICE data does not include Tennessee residents living in group quarters, such as college dorms.) In all of these towns, the share of under-25-year-old households with income below the ALICE Threshold is at least 62 percent, and in most, it is above 70 percent.

Under-25-year-old households are generally a small portion of the population, but there are a few towns where this age group accounts for more than one-quarter of all households below the ALICE Threshold: Cookeville, Martin, and Murfreesboro (American Community Survey, 2018; National Center for Education Statistics, 2018; The College Board, 2019; U.S. News & World Report, 2019).

Figure 31.
Off-Campus College Students, by Municipality, Tennessee, 2017

City	Fall 2017 Enrollment	Percent Living Off-Campus	Percent of City Population	Percent Financial Aid	Percent Under-25 Households Below ALICE Threshold (BAT)	Percent of Total BAT Households Under 25 Years Old
Bristol	2,162	79%	5%	65%	73%	6%
Clarksville	10,463	83%	5%	54%	62%	16%
Cleveland	5,370	53%	6%	67%	85%	15%
Cookeville	10,504	74%	21%	43%	89%	29%
Greeneville	1,767	52%	5%	68%	73%	4%
Harrogate	4,770	57%	25%	65%	86%	8%
Jefferson City	2,514	51%	10%	63%	91%	9%
Knoxville*	29,474	67%	8%	43%	77%	19%
Martin	6,772	70%	41%	51%	82%	33%
McKenzie	5,779	74%	66%	66%	95%	13%
Murfreesboro	21,913	84%	12%	50%	66%	24%
Pulaski	988	57%	7%	57%	69%	12%

* Knoxville is home to two colleges: University of Tennessee–Knoxville and Johnson University

Sources: American Community Survey, 2018; National Center for Education Statistics, 2018; The College Board, 2019; U.S. News & World Report, 2019

IV. BEYOND INCOME: SAVINGS, ASSETS, AND ACCESS TO CREDIT

AT A GLANCE: SECTION IV

- In 2017, 44 percent of Tennessee's households did not have any savings for a rainy day.
- 94 percent of Tennessee residents own a vehicle because owning a car is essential for work, but many ALICE households need to borrow money in order to buy a vehicle. From 2003 to 2017, per capita auto debt in Tennessee increased 55 percent to \$4,440.
- In 2017, two-thirds of all Tennessee households owned their homes (more than half of homeowners had a mortgage), while 49 percent of the state's households with income below the ALICE Threshold owned their homes.
- Only 17 percent of Tennessee households had investments that produced income, such as stocks or rental properties, in 2017.
- The most common reason residents in the South (state data is not available) had for being unbanked in 2017 was that households did not have enough money to keep in their accounts.
- 8 percent of households in Tennessee were unbanked in 2017, an additional 21 percent were underbanked, and 25 percent had used an alternative financial product (AFP); all of these households are vulnerable to higher lending rates and transaction fees.

More than any demographic feature, ALICE households are defined by their jobs and their savings accounts. As discussed in Section III, the ability to afford household needs is a function of income, but ALICE workers have low-paying jobs. Similarly, the ability to be financially stable is a function of savings, but ALICE households have few or no assets and little opportunity to amass liquid assets. This section looks at savings trends, assets, and access to credit for ALICE households in Tennessee.

When families do not have enough income to cover current expenses, they cannot save, and without savings, they cannot generate returns that improve their household's well-being and economic stability over time. The lack of savings limits an ALICE family's ability to make a down payment on a house, for example, even if the monthly mortgage payments would be cheaper than renting. It limits their ability to invest in the future, such as in higher education or retirement savings. The lack of savings also leaves ALICE households vulnerable to unexpected economic events and emergencies. Savings and other assets are at least as powerful as income in reducing material hardship after an involuntary job loss or other negative event. Without them, many families with income below the ALICE Threshold find themselves in a vicious cycle of financial instability that often includes high-cost, high-interest financing or credit options (Barr & Blank, 2008; Hendey, McKernan, & Woo, 2012; Karlan, Ratan, & Zinman, 2014; The Pew Charitable Trusts, 2015).

While savings and assets are a crucial aspect of an ALICE family's financial status, little information on household savings, assets, income, and wealth is collected at the state or local level. For this reason, this Report relies largely on national data for overall trends but includes state-level data points when available. The national information available suggests that Tennessee fits within national trends of a decline in wealth for low-income households over the last three decades.

Overall, American household wealth has not fully recovered from the Great Recession. The median net worth (assets minus liabilities) of all U.S. households was \$97,300 in 2016, well below median wealth levels from before the Recession began in late 2007 — \$139,700 in 2016 dollars. Wealth is much more concentrated than income, and as a result, disparities in wealth are even greater than those in income. The recovery has been uneven for different income groups, and despite gains in wealth in recent years for lower- and middle-income families, differences in wealth have actually grown. Nationally, the average wealth of the lower-income half of American households was \$10,800 in 2016, 42 percent lower than in 2007. The wealth of middle-income families was \$110,100 in 2016, 33 percent lower than in 2007. But the wealth of upper-income families was \$810,800 in 2016, 10 percent higher than in 2007 (Kochhar & Cilluffo, 2017; Yun, 2017).

The racial wealth gap is even larger, explaining why some racial and ethnic groups are more likely to be part of the ALICE population. Black and Hispanic households have substantially less wealth than White households, a gap that exists across all income levels. According to the Pew Research Center, the median net worth of low-income households was \$5,000 for Black households; \$7,900 for Hispanic households, and \$22,900 for White households in 2016. The gap widened in higher income groups. The median net worth for middle-income households was \$38,300 for Black households, \$46,000 for Hispanic households, and \$154,400 for White households (Asante-Muhammed, Collins, Hoxie, & Nieves, 2017; Kochhar & Cilluffo, 2017; McKernan, Ratcliffe, Steuerle, & Zhang, 2013; Pfeffer, Danziger, & Schoeni, 2013; Thompson & Suarez, 2015).

ASSETS

Given the mismatch between the cost of living and the preponderance of low-wage jobs, accumulating assets is difficult in Tennessee. Having savings can help families buy a home, start a business, or work toward a secure retirement, as well as sustain a household during times of unemployment, pay unexpected bills, or cope with other financial setbacks. Nationally in 2016, the most common financial hardships individuals reported having in the last year were caused by:

- A family member with a significant health problem (13 percent)
- Their own health problem (12 percent)
- Reduced work hours or pay (8 percent)
- Job loss (7 percent)
- Spouse/partner had reduced work hours or pay (5 percent) (Board of Governors of the Federal Reserve System, 2018)

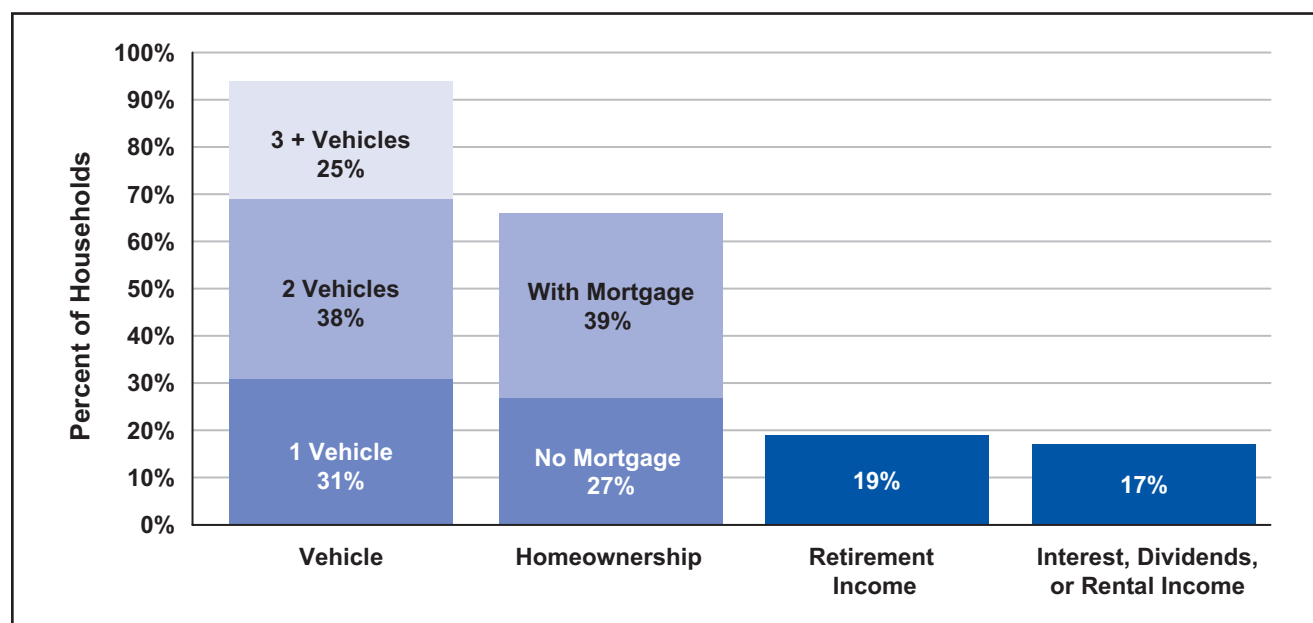
Yet according to a 2017 FDIC survey, 44 percent of Tennessee adults had not set aside any money in the past 12 months that could be used for unexpected expenses or emergencies such as illness or the loss of a job; this is just above the national rate of 42 percent. Nationally, according to the Federal Reserve's 2017 Economic Well-Being Survey, 41 percent of respondents could not easily cover an emergency expense costing \$400; 24 percent of those respondents would have to sell something or use a payday loan, deposit advance, or overdraft (Board of Governors of the Federal Reserve System, 2018; FDIC, 2018—National Survey; FDIC, 2018—National Survey Appendix).

Types of Assets

Almost by definition, those with lower incomes have fewer assets, but they also have different types of assets. Households in the lowest income quintile are less likely than households in the highest-income quintile to have assets of any kind, to have a regular checking account, or to own a vehicle. They are only half as likely to have interest-earning assets at financial institutions or to own a business or a home, and they are far less likely to own stocks or mutual funds, or to have an IRA or a 401(k) retirement savings plan. Households with income in the bottom half have seen their small amount of wealth drop while higher income groups have seen small increases in wealth (Buchholz, Larrimore, & Thompson, 2016; Urban Institute, 2017; U.S. Census Bureau, 2014—Wealth, Asset Ownership).

After a bank account, the most common assets are vehicles, homes, and investments (Figure 32). Data on wealth and assets at the state level is limited, but the American Community Survey provides some basic figures.

Figure 32.
Household Assets, Tennessee, 2017



Source: American Community Survey, 2017

Vehicle Ownership

In 2017, 94 percent of households in Tennessee owned a vehicle, above the national average of 91 percent; most households owned two or more (Figure 32). “Vehicle” is a very broad category in the American Community Survey that includes cars, vans, sport utility vehicles, and trucks below one-ton capacity that are kept at home and used for non-business purposes; dismantled or immobile vehicles are not included. Nationally, the most commonly held type of non-financial asset in 2016 was a vehicle (Bricker, et al., 2017). While cars offer benefits beyond their cash value, they are not an effective means of accumulating wealth because the value of a car normally depreciates over time.

Most households in Tennessee own a vehicle because owning a car is essential for work, but many ALICE households need to borrow money in order to buy a vehicle. From 2003 to 2017, the auto debt per capita in Tennessee increased by 55 percent to \$4,440, though this is just below the national per

capita auto debt of \$4,520. At the same time, the delinquency rate on auto loans in Tennessee rose from 2.75 percent to 4.16 percent. Nationally, the number of auto loans has also increased; in 2017, there were 110 million auto loan accounts, which is approximately equivalent to 44 percent of the population 18 years and older. With more people borrowing, the number with subprime credit increased as well. The squeeze on ALICE families is evident from the nationwide increase in delinquencies (of more than 60 days) among those with subprime auto loans, growing steadily since 2011 to more than 5 percent by 2018 — a rate higher than during the Great Recession and the highest since 1996 (Bricker, et al., 2017; Federal Reserve Bank of New York, 2018; Hoffman, 2018; Richter, 2018).

Nationally, low-income families are twice as likely to have a vehicle loan compared to the average for all families. For these families who are more often renters, a vehicle loan is usually their largest debt obligation. Since many low-wage workers do not have strong credit ratings and cannot qualify for traditional low-cost loans, they are forced to use non-traditional high-cost financing such as “buy-here, pay-here” loans. As a result, buyers with fair or poor credit spend many times more to finance a vehicle than someone with excellent credit (Kiernan, 2018; National Consumer Law Center, 2016).

“ Since many low-wage workers do not have strong credit ratings and cannot qualify for traditional low-cost loans, they are forced to use non-traditional high-cost financing. ”

The use of auto loan products for those with subprime credit is growing. The subprime market is dominated by auto finance companies that persistently have higher delinquency rates compared to banks and credit unions, even after controlling for borrowers’ credit scores. In 2017, 26 percent of new car loans and 28 percent of used car loans were subprime. In the current low-interest banking market, the average rate for a prime new car loan in 2017 was 3.8 percent, while the average subprime rate was much higher, at 11 percent (for used cars the average rate was 5.3 percent for prime loans and 16.5 percent for subprime loans). That difference means that customers with fair credit spend about six times more to finance a vehicle than those with excellent credit, which equates to more than \$4,000 in additional interest payments over the life of a \$20,000, five-year loan. In addition, “buy-here, pay-here” loans are proliferating among used car dealerships and account for 14 percent of the used-car loan market nationally. Yet, a quarter of these customers default on their payments, largely due to high interest rates and predatory practices (Cross, Dutzik, Mierzewski, & Casale, 2019; Haughwout, Lee, Scally & van der Klaauw, 2019; Schmall & Wolkowitz, 2016; Zabritski, 2018).

In addition to bearing the cost of purchasing a car, low-income households are more likely to have higher vehicle running costs. Older cars require more maintenance and are less likely to be covered by warranty. Low-income households also face higher insurance costs based on their neighborhood, their credit score, and the type of vehicle. While regulations across the country prohibit using race as a factor in vehicle insurance pricing, more than 30 companies have been found in violation since 2007. Recent findings from Consumer Reports showed that on average, premiums were 30 percent higher in ZIP codes where most residents were people of color than in predominantly White neighborhoods with similar insurance losses (Angwin, Larson, Kirchner, & Mattu, 2017; Consumer Reports, 2017—The Cost of Car Ownership; National Association of Insurance Commissioners, 2019; Tennessee Department of Commerce and Insurance, 2011; The Zebra, 2019).

Cash-strapped car owners can resort to car title loans, a secured loan with the vehicle title as collateral. These are high-cost loans that are difficult for borrowers to pay off, and borrowers often resort to rolling over their loan again and again. About half of title loans are in sequences of 10 loans or more for the same vehicle (Center for Responsible Lending, 2015; Consumer Financial Protection Bureau, 2016—Single-Payment Vehicle).

Homeownership

The next most common asset in Tennessee is a home, an asset that has traditionally provided financial stability and the primary means for low-income families to accumulate wealth. Homeownership can increase both financial and social stability for families. For example, children whose parents own their home tend to have higher educational attainment and lower rates of teen pregnancy. In 2017, 66 percent of all Tennessee households owned their homes, and more than half of those had a mortgage (Figure 32). Since homeownership is highly correlated with income, it is not surprising that the rate of homeownership for households earning \$75,000 or more was 85 percent (compared to 81 percent nationally), while the rate for those earning less than \$20,000 was 46 percent (above the national rate of 41 percent). Similarly, 49 percent of the state's households with income below the ALICE Threshold owned their homes in 2017 (American Community Survey, 2017; Federal Reserve Bank of St. Louis, 2017—Homeownership Rate; National Association of Realtors, 2012).

Overall, the homeownership rate in Tennessee has fallen over the last decade from 72 percent in 2007 to 66 percent in 2017. Many who sold their homes lost money, with some owing more than the sale price. The mortgage delinquency rate reached 4.35 percent in 2009, before falling to 0.87 percent in 2017 (Federal Reserve Bank of New York, 2018; U.S. Census Bureau, 2018—New Current Population Survey).

Nationally, 2017 marked the smallest number of foreclosure filings since 2005, 0.51 percent of all U.S. housing units, down from the peak of 2.23 percent in 2010. Tennessee has followed this pattern with foreclosures falling in all counties by more than 60 percent since 2011. Similarly, delinquency rates have also fallen in most counties by more than 50 percent (ATTOM Data Solutions, 2018, 2019; Federal Reserve Bank of St. Louis, 2016—All-Transactions; Tennessee Housing Development Agency, 2018—Foreclosure).

Homeownership is often the most important means for families to accumulate wealth, but it is highly correlated to both race/ethnicity and income. Black and Hispanic households are less likely than White households to own their own home in Tennessee. In 2017, 43 percent of Black Tennessee households and 40 percent of Hispanic households owned their home, according to the American Community Survey, while 71 percent of White households were homeowners. Some of this can be explained by age: Black and Hispanic households tend to be younger, and homeownership increases with age. But even when controlling for other demographic factors, the imbalance persists. Nationally, Black homeownership rates in 2016 were similar to those before the passage of the Fair Housing Act in 1968, which provided equal housing opportunities regardless of race/ethnicity, religion, or national origin. Yet for every other group, homeownership rates have improved (American Community Survey, 2015; Goodman, McCargo, & Zhu, 2018).

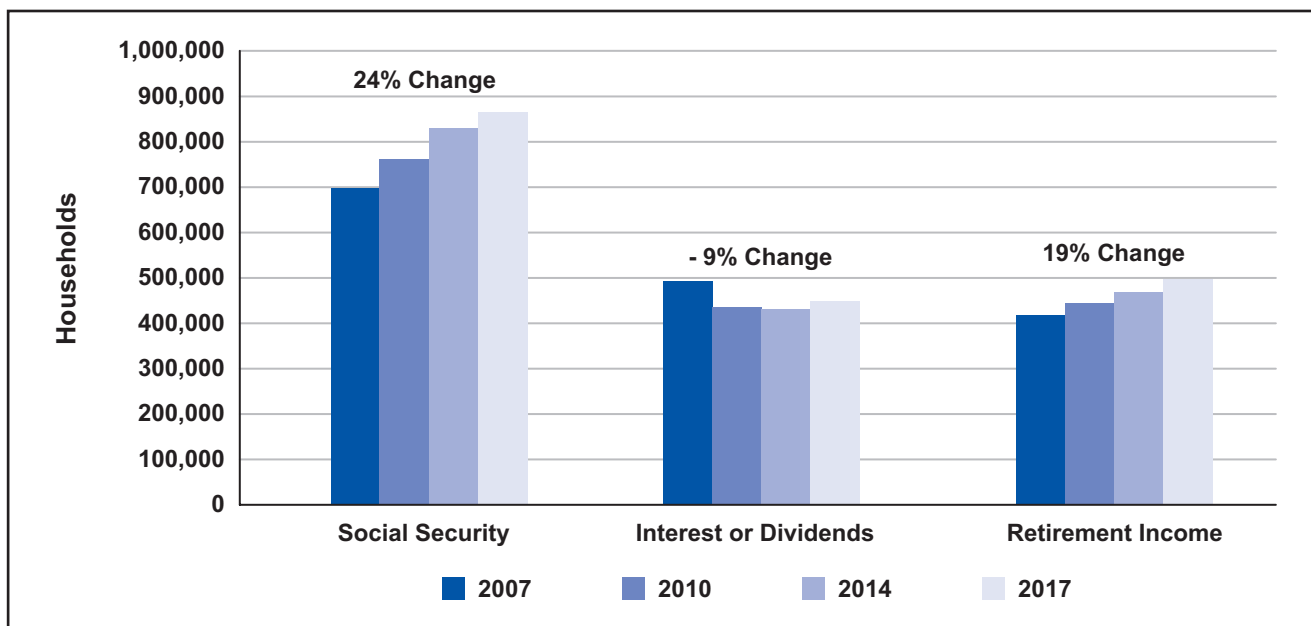
“ALICE households often cannot save enough for a down payment and cannot qualify for a traditional low-rate mortgage.”

In many locations, it would be more economical for ALICE households to buy a home rather than rent, but they often cannot save enough for a down payment and cannot qualify for a traditional low-rate mortgage. Many ALICE families have chosen non-traditional, high-risk and high-cost mortgage products, as the availability and outreach of such products has expanded. But the higher borrowing costs of these products reduce the borrower's overall investment opportunity and increase financial risks (Acolin, Bostic, An, & Wachter, 2017; FINRA Investor Education Foundation, 2016; Goodman, Kaul, & Zhu, 2017).

Investment and Retirement Assets

Investments that produce income, such as stocks or rental properties, provide families with an effective resource to weather an emergency. Yet they are a less common asset than vehicles or homes. In 2017, only 17 percent of Tennessee households had this type of investment, which can range from a checking account to a rental property to a stock or bond. In addition, there is likely large overlap between households receiving investment income and those receiving retirement income. In 2017, 19 percent of Tennessee households received retirement, survivor, or disability income from a former employer, a labor union, the government, or the U.S. military, or regular income from IRA and Keogh plans (Figure 32) (American Community Survey, 2017; FINRA Investor Education Foundation, 2016).

Figure 33.
Retirement and Investment Income, Tennessee, 2007 to 2017



Source: American Community Survey, 2017

Investment assets also provide the means to accumulate more assets. For example, by investing money in a small business or by owning a home, families can increase their resources over time. Assets also enable families to improve their social and economic situation through education and new technology, and they can allow families to finance a secure retirement (McKernan, Ratcliffe, & Shanks, 2011).

While the American Community Survey does not report the value of investments, nationally, the bottom 60 percent of households by wealth owned only 1.8 percent of the country's stocks in 2016. The number of Tennessee households receiving interest, dividend income, or net rental income decreased by 12 percent from 2007 to 2014, as the assets lost value in the stock market crash or were used to cover emergencies and periods of unemployment and underemployment (Figure 33). These events led many households to become part of the ALICE population and made things harder for those who were already struggling. This large reduction fits with the national trend of reduced assets for households of all income types (Wolff, 2017).

The recovery has not helped investment income: In the seven years following the end of the Recession, the number of households in Tennessee receiving interest, dividend income, or net rental income only increased by 4 percent from 2014 to 2017, still lower than in 2007. When taking population growth into account, the percentage of the state's households with investment income fell from 27 percent in 2007 to 17 percent in 2017. Nationally, during that time period, the percentage of households with retirement, survivor, or disability income increased from 20 to 21 percent (though a recent U.S. Census report suggests that retirement income is underreported) (American Community Survey, 2007–2017; Bee & Mitchell, 2017; Board of Governors of the Federal Reserve System, 2014; Bricker, et al., 2014; Yellen, 2014).

Several indicators show that Americans are not financially prepared to maintain their standard of living in retirement:

- According to the 2016 National Retirement Risk Index, 50 percent of American households are at risk of being unable to maintain their standard of living in retirement, even if households work to age 65 and annuitize all their financial assets, including the receipts from reverse mortgages on their homes (Board of Governors of the Federal Reserve System, 2017; Munnell, Hou, & Sanzenbacher, 2017).
- So few workers in the U.S. have any retirement savings at all that the National Institute on Retirement Security has found that the median retirement account balance for all working-age individuals is \$0, and for the subgroup of those with a retirement account, the average balance is a modest \$40,000 (Brown, Saad-Lessler, & Oakley, 2018).

The makeup of retirement plans has shifted since the 1970s, from defined benefit plans — traditional pensions that provide benefits for the lifespan of the participant — to defined contribution plans, such as a 401(k). By 2000, defined contribution plans accounted for more than 90 percent of retirement plans nationally. In 2016, 34 percent of private-sector workers had no employer-sponsored plan, 44 percent had employee-managed defined contribution plans, and 15 percent had employer-funded defined benefit plans (U.S. Government Accountability Office, 2017).

The most common source of income for retirement, however, is Social Security. The aging of the U.S. population is evident in the 24 percent increase in the number of Tennessee households receiving Social Security between 2007 and 2017 — larger than the 19 percent increase in the number of Tennessee households receiving retirement income. In contrast, the number receiving investment income fell by 9 percent (Figure 33) (American Community Survey, 2007 and 2017).

The assets of an ALICE household are especially vulnerable when workers lose their jobs. A common strategy during unemployment is to draw down retirement accounts. Penalties are charged for early withdrawals, and retirement savings are diminished, putting future financial stability at risk (Boguslaw, et al., 2013). This will have an impact on those who retire before their assets can be replenished, as discussed in the Conclusion of this Report.

A drop in wealth is also the reason many households fall below the ALICE Threshold. Drawing on financial assets that can be liquidated or leveraged, such as savings accounts, retirement accounts, home equity, and stocks, is often the first step households take to cope with unemployment. When these reserves are used up, financial instability increases (Asante-Muhammad, et al., 2017; Boguslaw, et al., 2013).

ACCESS TO CREDIT

Once assets have been depleted, the cost of staying financially afloat increases for ALICE households. Generally, access to credit can provide a valuable source of financial stability, and in some cases does as much to reduce hardship as tripling family income (Barr & Blank, 2008; Mayer & Jencks, 1989). The ability to borrow varies greatly by income and assets: The higher the income and greater the assets, the more borrowing options a family has, and at better rates. Families with low incomes and no assets are often unable to borrow; as a result, in the face of an emergency, they buy less, and household hardship increases.

For those who are able to borrow, they typically pay higher rates, incur fees, and are more likely to be delinquent or default on their loans. The problem has been increasing nationally. Delinquency rates among subprime borrowers rose from 12 percent in 2015 to 16 percent in 2018. Over the same period, the average delinquency rates of prime borrowers, who account for the bulk of outstanding auto debt, were essentially unchanged, fluctuating between 0.3 and 0.4 percent (Board of Governors of the Federal Reserve System, 2018; Braga, McKernan, & Hassani, 2019; Ranney & Lamoureux, 2017).

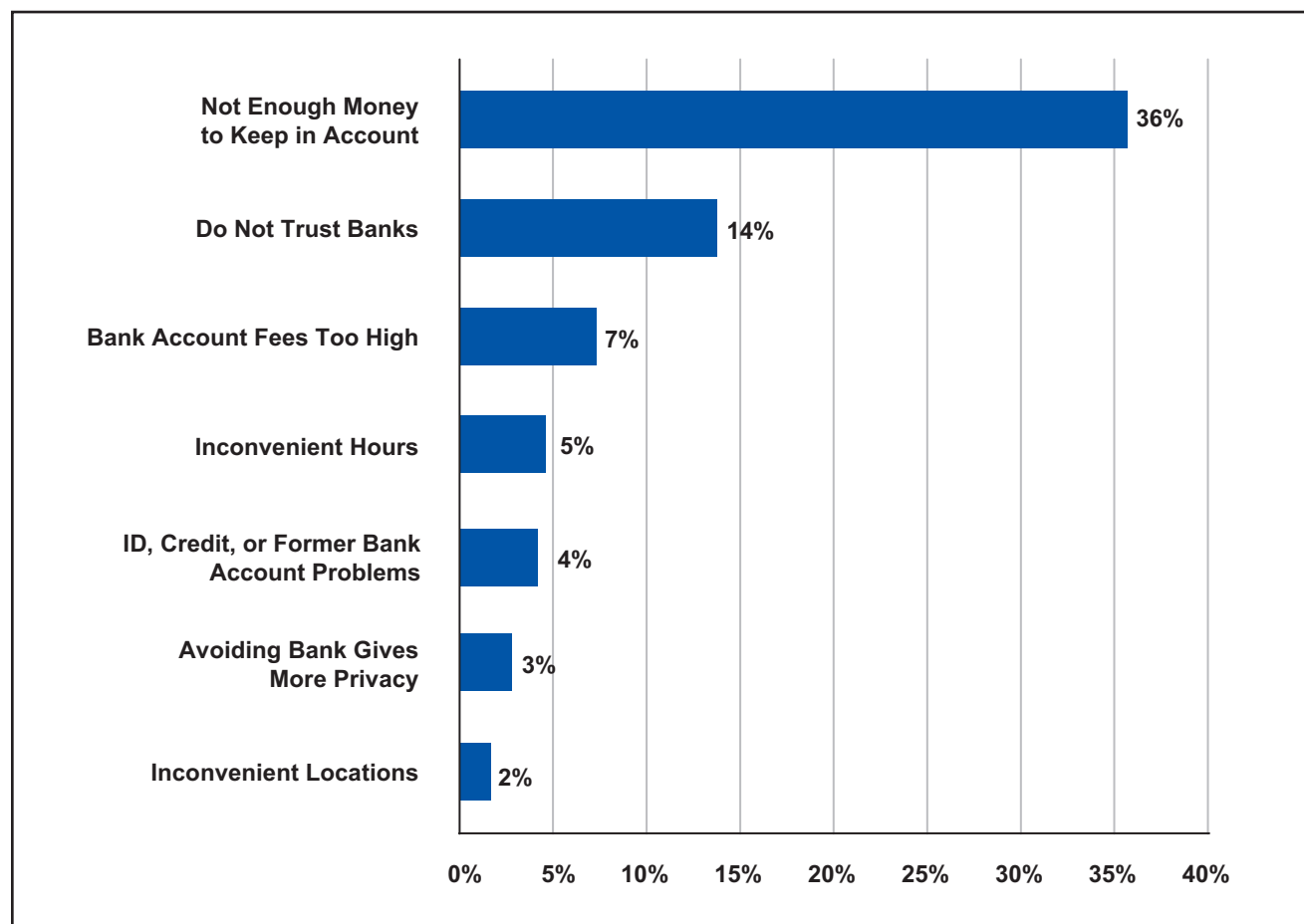
The fact that families borrow at high interest rates and at an increased risk of predatory lending practices shows that in some cases, the need for these loans outweighs the risks they pose. It may cost more to forgo heat or necessary medical care, for example, than to pay the higher rates of predatory loans. The continued use of high-risk lending, despite these higher costs, underlines the degree of hardship that these families are experiencing. Predatory loans, such as payday loans and auto title loans, offer quick loan options to vulnerable families that mostly face chronic financial troubles (Abrams, 2017; Consumer Financial Protection Bureau, n.d.—PayDay Loan; Valenti & Schultz, 2016).

The most common way to access credit is by borrowing from a bank. Just having a bank account lowers financial delinquency and increases credit scores. But many Tennessee households do not use basic banking services, often because access to banks is limited in many low-income neighborhoods. Because the banking needs of low- to moderate-income individuals and small businesses are often not filled by community banks and credit unions, they frequently use local networks and establishments that offer Alternative Financial Products (AFP), also referred to as Alternative Financial Services (AFS) — non-traditional financial products such as payday, auto title, and other loans that charge higher interest rates (Abello, 2017; FDIC, 2017—Custom Data Table, 2017; FDIC, 2018—National Survey Appendix; Servon & Castro-Cosio, 2015; Shtaubert, 2013).

According to the Federal Deposit Insurance Corporation (FDIC), 8 percent of households in Tennessee were unbanked in 2017, meaning they did not have a checking, savings, or money market account. An additional 21 percent were under-banked (these households did not have a mainstream account but used alternative and often costly financial services for basic transaction and credit needs). The most common reason households in the South (state data is not available) had for being unbanked in 2017 was not having enough money to keep in their accounts (Figure 34). In addition, with the rise of financial technology products, more customers — especially younger workers — have access to non-bank products such as the peer-to-peer payment service Venmo, reducing the need for bank intermediaries (FDIC, 2018—National Survey; Hetrick, 2018).

“Families with low incomes and no assets are often unable to borrow; as a result, in the face of an emergency, they buy less, and household hardship increases.”

Figure 34.
Top Reasons Households Report for Being Unbanked, South Region, 2017



Source: FDIC, 2018—National Survey Appendix

Because the banking needs of low- to moderate-income individuals and small businesses are often not filled by community banks and credit unions, they frequently borrow from local networks. Nationally, more than 1 in 3 people (38 percent) borrowed from friends and family in 2017 — most commonly to pay utilities and bills (46 percent), followed by rent (23 percent) and medical emergencies (17 percent). Informal lending groups range from loans from friends and family to rotating savings and credit associations to loan sharks (Braverman, Holkar, & Evans, 2018; Chow, 2017; Morduch, Ogden, & Schneider, 2014; Servon & Castro-Cosio, 2015).

In Tennessee, 25 percent of households used some form of AFP in 2017. The largest share of Tennessee households, 22 percent, used a transaction service, which includes “nonbank products and services such as money orders, check cashing, and international remittances.” A smaller proportion, 11 percent, used a credit service, which includes “nonbank products and services that may be used in lieu of bank credit: payday loans, refund anticipation loans, rent-to-own services, pawn shop loans, and auto title loans” (FDIC, 2018—National Survey Appendix).

The most commonly used AFPs are check cashing and money orders; other products include “buy-here, pay-here” auto loans, payday loans, prepaid cards, refund anticipation loans, and rent-to-own products. In Tennessee, there were 1,208 payday lenders and 260 rent-to-own stores in 2017, by comparison, there are 285 McDonald’s restaurants. With 24 payday stores per 100,000 residents, Tennessee has the 5th highest rate in the nation. With current regulations, the maximum interest rate on a 14-day \$100 loan is 459 percent annualized (Andrews, 2018; APRO, 2019; Consumer Financial Protection Bureau, n.d.; Howarth, Davis, & Wolff, 2017; U.S. Census Bureau, 2016—County Business Patterns).

Tax-related AFPs have evolved over time as regulation has increased. Refund Anticipation Loans, for example, were popular until 2012, when banks were either forced by federal regulators to shut down these high-cost loans or voluntarily nixed them. The loans have been largely replaced by Refund Anticipation Checks (RACs), which charge fees for advancing funds against tax returns and tax preparation. According to IRS data, about 21.4 million taxpayers obtained RACs in 2016, and 80 percent of them had adjusted gross incomes under \$50,000 (Wu & Best, 2018).

A newly emerging AFP is the payroll card, a debit card used to pay wages to an estimated 5.9 million workers in 2017 (with \$42 billion in value), and expected to reach 8.4 million workers nationally (with \$60 billion in value) by 2022. Payroll cards are permitted in Tennessee; they deliver wages electronically with cost savings for employers and, in some cases, convenience and lower expenses for workers. However, virtually all payroll card programs charge fees; in Tennessee, employers are only required to provide one withdrawal per pay period without cost. In many cases these fees have been excessive, reducing take-home pay for the lowest-paid workers and those without internet access — who, for example, can be charged a fee just for calling to learn their account balance (Asrow & Dunn, 2018; Morrison & Baker, 2017; Saunders, 2015; Thomson Reuters, 2018; Voltmer, 2016; Young, 2016).

Another common way to access credit, especially in the short term, is with a credit card. Nationally, there is wide variation in credit card usage by income level. For example, the share of families with at least one credit card was 60 percent for families with income below \$40,000 in 2017 but more than 90 percent for families with income above that level. And location matters: Families living in low-income neighborhoods often find only high-cost lending options are available to them. In these neighborhoods, there is less saving and borrowing (Barr, 2012; Board of Governors of the Federal Reserve System, 2017).

The repeated use of payday loans and credit cards greatly increases fees and interest charges, decreases the chance that the debts can be repaid, and is linked to a higher rate of moving out of one’s home, delaying medical care or prescription drug purchases, and even filing for Chapter 13 bankruptcy. For military personnel, payday loans are associated with declines in overall job performance and lower levels of retention. To discourage payday loans to military personnel, the 2007 National Defense Authorization Act capped rates on payday loans to service members at 36 percent annually (Consumer Financial Protection Bureau, 2016—What Are My Rights; Montezemolo, 2013; Peterson, 2018).

Low-income families (including many Black and Hispanic families, who are disproportionately low-income) are also more likely to use high-interest AFPs. The impact is cumulative, with high rates leading to greater need of more high-risk borrowing and a vicious cycle of debt. Conversely, access to lower rates leads to greater savings and a better chance to pay off a loan. Such savings make an enormous difference in a family’s budget and can also help them build equity and wealth (Board of Governors of the Federal Reserve System, 2017; Hendey, McKernan, & Woo, 2012; Lerman & Hendey, 2011).

When families do not have savings or access to affordable credit, they are forced to make trade-offs and difficult decisions. These consequences are thoroughly detailed on our website:

UnitedForALICE.org/consequences.

V. THE IMPACT OF PUBLIC AND PRIVATE ASSISTANCE

Measure 3 – The ALICE Income Assessment

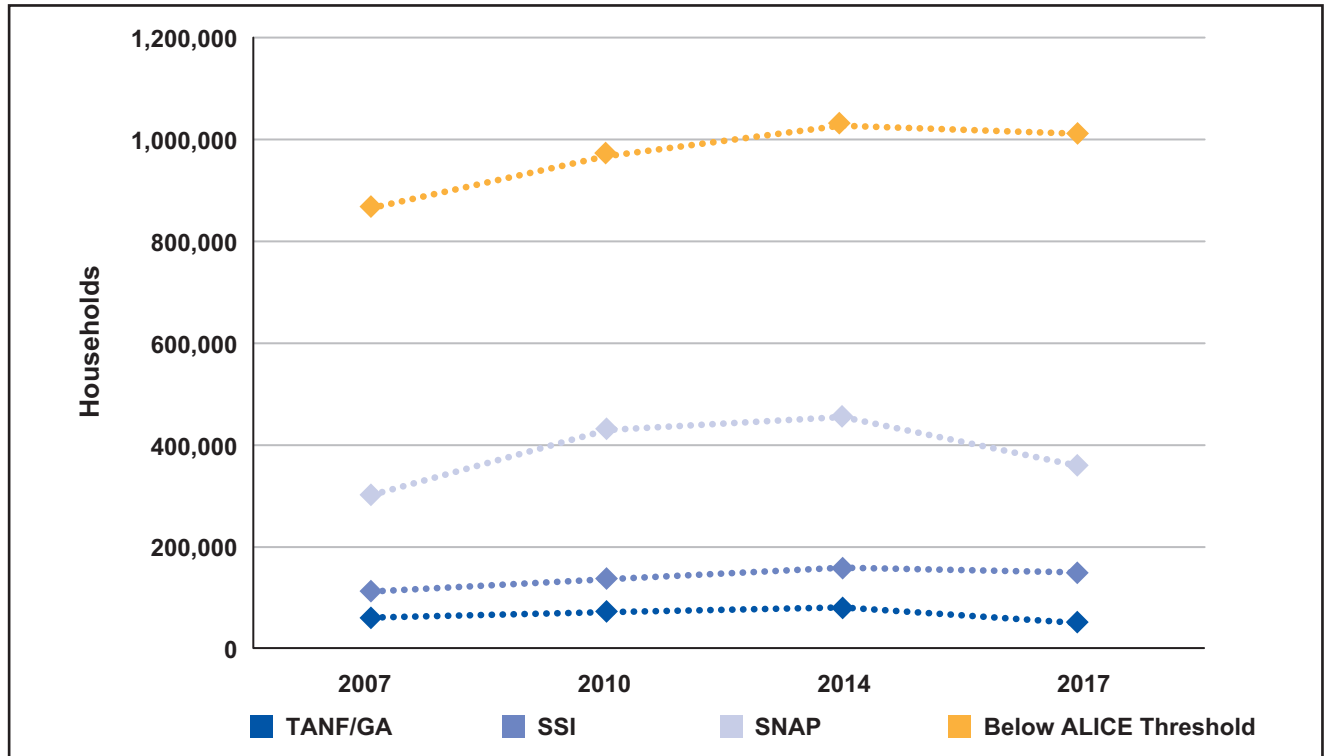
AT A GLANCE: SECTION V

- In Tennessee in 2017, the total needed to ensure that all ALICE and poverty-level households had income at the ALICE Threshold was \$41 billion.
- The income of all Tennessee households below the ALICE Threshold was \$19 billion — just 47 percent of the total needed to reach the ALICE Threshold.
- In 2017, public and private spending on Tennessee households below the ALICE Threshold, which includes families in poverty, provided an additional \$19 billion.
- Even after adding all household income and public and private spending on Tennessee households below the ALICE Threshold, there was still an Unfilled Gap of \$2.9 billion.
- For households living below the ALICE Threshold in Tennessee, the average benefit from federal, state, and local government and nonprofit sources in 2017 was \$6,298 per household, plus another \$12,178 in health care spending.
- Working households in Tennessee received an aggregate \$1.6 billion in refunds and credits through the federal Earned Income Tax Credit (EITC) in 2017, for an average of \$2,558 per eligible household.
- Without the support of public and nonprofit spending, ALICE households in Tennessee would face greater hardship, with many more living below the Federal Poverty Level (FPL).

When 39 percent of Tennessee households do not have enough income to reach the ALICE Threshold for financial security, it is clear that even those who are working face financial challenges. ALICE households receive income from a range of sources — most from earnings but also from federal, state, and local government and nonprofit sources. But how much does this additional income enable families to reach financial stability? Recent national studies have found that more than half of government spending on assistance for low-income households goes to working families. But even with this assistance added to their income, many working families cannot cobble enough together to make ends meet (Anderson & Butcher, 2016; Brown & Braga, 2019; Floyd, Burnside, & Schott, 2018; Jacobs, Perry, & MacGillvary, 2015; Nchako & Cai, 2018). This section looks at how much government and nonprofit assistance contributes to the economic well-being of ALICE and poverty-level households.

While the number of households below the ALICE Threshold in Tennessee grew by 17 percent in the 10 years between 2007 and 2017, Figure 35 suggests a lack of responsiveness from much of the U.S. social safety net. For example, although enrollment in the Supplemental Nutrition Assistance Program (SNAP, formerly food stamps) increased during the Great Recession from 2007 to 2010, enrollment in Supplemental Security Income (SSI), Temporary Assistance to Needy Families (TANF) and General Assistance (GA) programs either remained constant or barely budged, and none have responded to increases in economic insecurity from 2010 to 2017.

Figure 35.
Households With Benefits Compared With ALICE Threshold, Tennessee, 2007 to 2017



Sources: ALICE Threshold; American Community Survey, 2018

THE ALICE INCOME ASSESSMENT

The ALICE Income Assessment measures the extent to which government and nonprofit assistance — including and beyond the programs listed earlier — help to keep struggling families afloat. The Income Assessment quantifies the total need of all households below the ALICE Threshold and then compares it to their income and to the amount of public and nonprofit assistance directed toward low-income households. Even though assistance makes a significant contribution to financial stability for many families, there has not been enough assistance to fill the need for all families with income below the ALICE Threshold in any state where the Income Assessment has been applied.

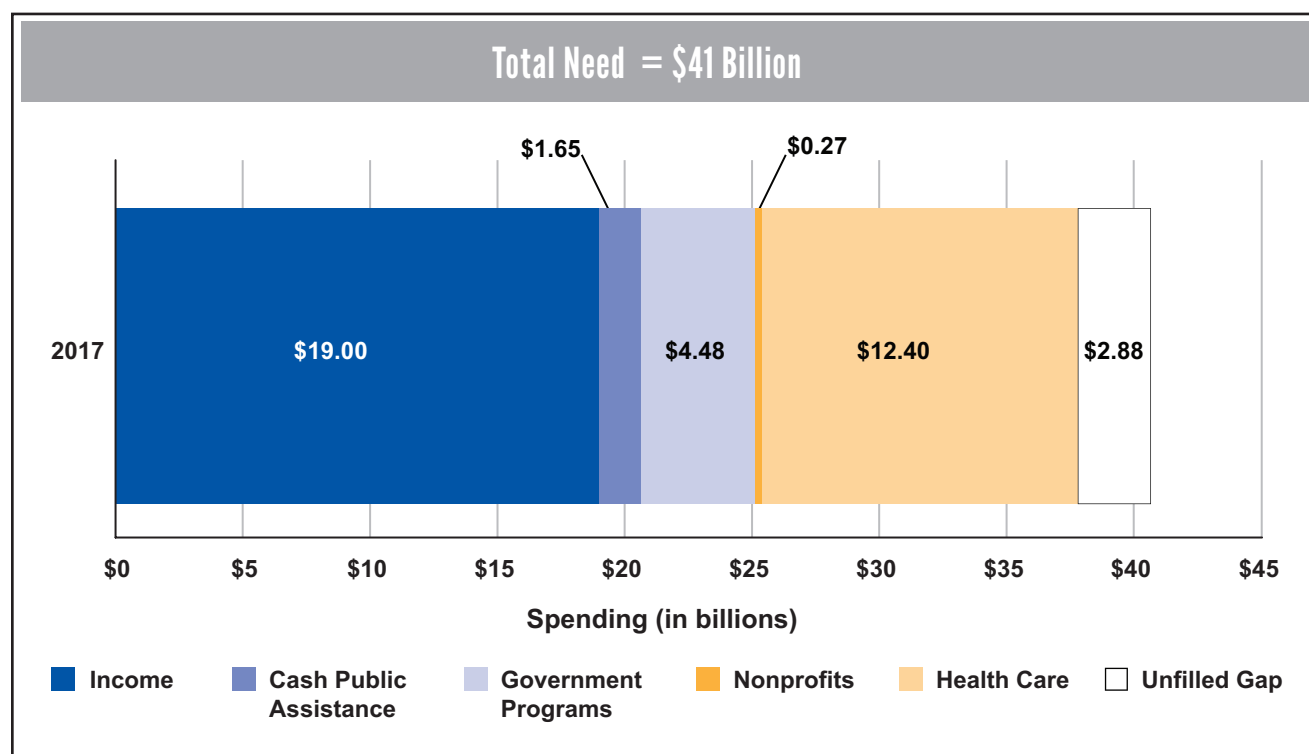
In Tennessee, the total income of ALICE and poverty-level households in 2017 was \$19 billion, which included wages and Social Security. This was only 47 percent of the amount needed to reach the ALICE Threshold of \$41 billion statewide. Government and nonprofit assistance to Tennessee households below the ALICE Threshold, which includes households in poverty, provided \$19 billion, or 5 percent of the state's GDP (Federal Reserve Bank of St. Louis, 2018). This assistance made up an additional 46 percent, but that still left an Unfilled Gap of \$3 billion (Figure 36).

In other words, it would require nearly \$3 billion in additional wages or public resources for all Tennessee households to have income at the ALICE Threshold. The consequences of the Unfilled Gap for ALICE households are discussed at [UnitedforALICE.org/consequences](https://unitedforalice.org/consequences).

In 2017, annual public and private spending on Tennessee households below the ALICE Threshold included several types of assistance (Figure 36):

- Cash Public Assistance delivered \$1.7 billion, or 4 percent of the total required for ALICE and poverty-level families to reach the ALICE Threshold
- Government Programs spent \$4.5 billion, adding another 11 percent
- Nonprofits in the human services area provided \$273 million, or 1 percent
- Health Care assistance, the largest single category, provided \$12.4 billion, or 30 percent

Figure 36.
Categories of Income and Assistance for Households Below the ALICE Threshold, Tennessee, 2017



Sources: American Community Survey, 2017; National Association of State Budget Officers, 2018; Office of Management and Budget, 2018; Urban Institute, 2012; USDA, 2017—Characteristics. For more details, see the Methodology Overview on our website: [UnitedForALICE.org/methodology](https://www.unitedforalice.org/methodology)

Note: Because funds are allocated differently for different programs, it is not possible to separate spending on ALICE from spending on those in poverty and, in fact, some programs that are focused on those in poverty, such as Medicaid, end up supporting other low-income individuals as well (Finkelstein, Hendren, & Luttmer, 2015).

DEFINITIONS

- **Earned Income** = Wages, dividends, Social Security
- **Health Care** = Medicaid, Children's Health Insurance Program (CHIP), community health benefits
- **Cash Public Assistance** = Supplemental Security Income (SSI) and Temporary Assistance for Needy Families (TANF)
- **Government Programs** = Head Start; Supplemental Nutrition Assistance Program (SNAP, formerly food stamps); Special Supplemental Nutrition Program for Women, Infants and Children (WIC); the Earned Income Tax Credit (EITC); housing and human services, federal and state
- **Nonprofits** = Human services revenue not from the government or user fees
- **Unfilled Gap** = Shortfall to ALICE Threshold

Of the \$19 billion in total assistance to Tennessee households earning below the ALICE Threshold in 2017, health care assistance made up two-thirds. Without health care spending, the Unfilled Gap rises to 38 percent. In other words, it would take an additional \$15 billion in income or assistance to ensure that all Tennessee households met the ALICE Threshold. Health care spending narrows the gap, but as discussed later, there are several reasons why additional health care spending cannot provide financial stability for ALICE and poverty-level households.

Public assistance used in this analysis includes only programs that are directed specifically at low-income families and individuals; the Assessment does not include programs such as neighborhood policing, which are provided to all households regardless of income. In addition, the Assessment includes only programs that directly help ALICE families meet the basic Household Survival Budget, such as TANF and Medicaid; it does not include programs that assist low-income families in broader ways, such as college subsidies. The analysis is only of funds spent, not an evaluation of the efficiency of the programs or their efficacy in meeting household needs.

Challenges of Public and Private Assistance

Without public assistance, ALICE households would face even greater hardship and many more would be in poverty, especially in the wake of the Great Recession. Programs like SNAP, the EITC and Child Tax Credit (CTC), Medicaid, and, increasingly, food banks and other community supports provide a critical safety net for basic household well-being and enable many families to work (Coleman-Jensen, Rabbitt, Gregory, & Singh, 2016; Dowd & Horowitz, 2011; Feeding America, 2014; Rosenbaum, 2013; Sherman, Trisi, & Parrott, 2013).

As stated earlier, this analysis is not an evaluation of the efficiency of the programs in delivering good or services. However, research has shown that assistance is not always well-targeted, effective, and timely. There are four significant barriers to public and private assistance meeting basic needs:

- 1. Duration of benefits:** The majority of government programs are intended to fill short-term needs, such as basic housing, food, clothing, health care, and education. By design, their goal is not to help households achieve long-term financial stability (Haskins, 2011; McKernan, Ratcliffe, & Iceland, 2018; Shaefer & Edin, 2013).
- 2. Eligibility thresholds:** Crucial resources are often targeted to households near or below the FPL, meaning that many struggling ALICE households are not eligible for assistance. Federal public assistance programs do not have enough resources to reach all those in need. SNAP, the government's largest program, reached 359,236 households in Tennessee in 2017, covering families in poverty but falling short of meeting the needs of almost all ALICE households that needed assistance in covering the cost of food. Other programs cover even fewer households: TANF, which provides payments from state or local welfare offices, reached about 51,000 households in 2017, just 5 percent of those below the ALICE Threshold. And SSI, which includes welfare payments to low-income people who are 65 and older and to people of any age who are blind or disabled, supported 150,000 households — only 15 percent of households below the ALICE Threshold (American Community Survey, 2017; Kaiser Family Foundation, 2015).
- 3. Uneven funding or distribution of assistance:** Resources may not be available where they are needed, either because there are geographic disparities in distribution across Tennessee — such as food pantries in some locations but not all — or because there is not enough funding for a program.

4. Targeted assistance and services: Because public and nonprofit assistance is allocated for specific purposes and often delivered as services, it can only be used for specific parts of the household budget. Only 9 percent of the assistance provided in Tennessee is done through cash transfers, which households can use toward any of their most pressing needs. The remainder is earmarked for specific items, like food assistance or health care, for which the need varies across households below the ALICE threshold. This means that not all households benefit equally from assistance.

The Special Case of Health Care

Health care resources are separated from other government and nonprofit spending because they account for the largest single source of assistance to low-income Tennessee households: \$12.4 billion, or 66 percent of all public and private spending on these households in 2017. Health care spending includes federal grants for Medicaid, CHIP, and hospital charity care; state matching grants for Medicaid, CHIP, and Medicare Part D clawback payments; and the cost of unreimbursed or unpaid services provided by Tennessee hospitals (National Association of State Budget Officers, 2018; Office of Management and Budget, 2018; Urban Institute, 2012).

In Tennessee, on average, health care spending per household in 2017 was \$12,178, while the average spending per household through other types of assistance was \$6,298. Combining the two categories, the average spending on each Tennessee household below the ALICE Threshold was \$18,476 in cash and services, shared by all members of the household and spread throughout the year (Figure 37).

Since health care resources are not distributed equally, averages conceal significant variation in the amount of money different families need. The biggest medical costs are concentrated among a small number of people: those with one or more chronic illnesses, and victims of accidents or violent crime. Nationally, an estimated 5 percent of the population accounts for 50 percent of total medical costs (Gil, et al., 2018; Kaiser Family Foundation, 2012; Mitchell & Machlin, 2017; Reid, 2017).

Figure 37.
Public and Nonprofit Assistance Per Household Below the ALICE Threshold, Tennessee, 2017

Spending Per Household Below the ALICE Threshold, Tennessee		
HEALTH CARE ASSISTANCE ONLY	ASSISTANCE EXCLUDING HEALTH CARE	TOTAL ASSISTANCE
\$12,178	\$6,298	\$18,476

Sources: ALICE Threshold, 2017; American Community Survey, 2017; National Association of State Budget Officers, 2018; Office of Management and Budget, 2018; Urban Institute, 2012

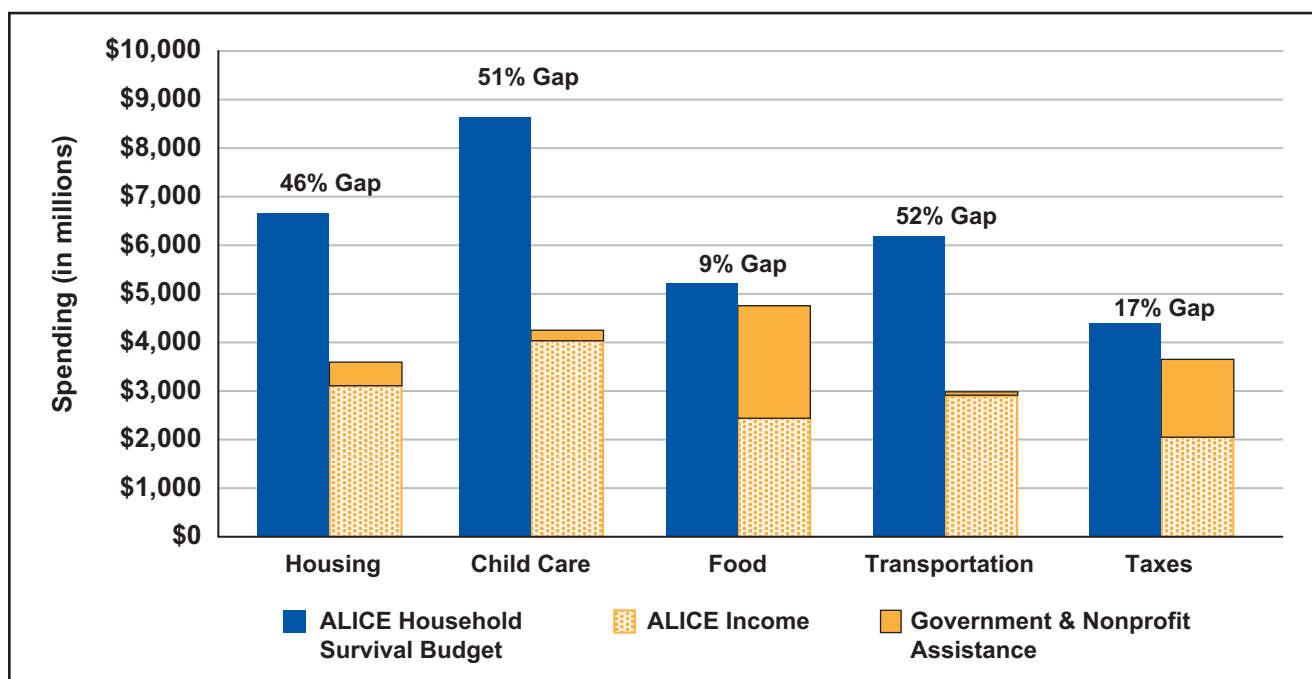
Health care spending has increased significantly over the last decade as health care costs outpace growth in most areas of the U.S. economy. Across the U.S., federal spending increased from \$198 billion in 2007 to \$371 billion in 2017, an 87 percent increase, compared with 22 percent rate of inflation (Centers for Medicare & Medicaid Services, 2019—FY 2016). With such growth it is not surprising that public spending on health care has almost filled the overall gap between earnings and the ALICE Threshold in some states. However, health care spending cannot be used for other household needs such as housing or child care.

Gaps by Budget Category

A breakdown of public and nonprofit spending in Tennessee by category reveals that there are large gaps in each budget category. Figure 38 compares the budget amounts for each category of the Household Survival Budget (excluding health care, technology, and miscellaneous expenses) for a family of four with income from households below the ALICE Threshold, plus the public and nonprofit spending in each category, to show the gap in each budget area. Earned income is appropriated based on its proportion of the Household Survival Budget; specific government programs are directed to their targeted budget areas, and nonprofit and cash assistance are evenly distributed across categories.

Figure 38.

Comparing Basic Need With Assistance, by Category, for Households Below the ALICE Threshold, Tennessee, 2017



Sources: ALICE Household Survival Budget, 2017; ALICE Threshold, 2016; American Community Survey, 2016; National Association of State Budget Officers, 2018; Office of Management and Budget, 2018; Urban Institute, 2012; USDA, 2017—Characteristics

Note: Excludes health care, technology, and miscellaneous expense categories.



Housing

In the Household Survival Budget for a Tennessee family of four, housing accounts for 16 percent of the family budget. Yet if ALICE households spend 16 percent of their income on housing, they are still far short of what is needed to afford rent at HUD's 40th percentile. To make up the gap, federal housing programs — including Section 8 Housing Vouchers, the Low Income Home Energy Assistance Program, the Public Housing Operating Fund, and Community Development Block Grant Program — provide \$430 million in assistance. In addition, nonprofits spend an estimated \$54 million on housing assistance statewide. (Because nonprofit spending is not available by category, the estimate for each category here is one-fifth of the total nonprofit budget.) Even still, when income and government and nonprofit assistance for housing are combined, **Tennessee households below the ALICE Threshold fell 46 percent shy of their total housing need in 2017.** Given that gap, it is not surprising that most families spend more of their income on housing, which leaves less for other items.



Child Care

In the Household Survival Budget for a Tennessee family of four, child care accounts for 21 percent of the family budget, well above the 10 percent affordability threshold established by the U.S. Department of Health and Human Services. Yet for many ALICE households, 21 percent of what they actually earn is not enough to pay for even home-based child care, the least expensive organized care option with the fewest quality regulations (U.S. Government Accountability Office, 2016). Additional child care resources available to Tennessee families include \$163 million in federal education spending for Head Start, the program that helps children from low-income families meet their basic needs or that is necessary to enable their parents to work. Though advanced education is vital to future economic success, it is not a component of the basic Household Survival Budget, so programs such as Pell grants are not included in the education spending figure. Nonprofits provide additional child care assistance, including vouchers and child care services estimated at \$54 million. Yet when income and government and nonprofit assistance are combined, **there was still a 51 percent gap, meaning that Tennessee's households below the ALICE Threshold still had about half of what they needed to afford basic child care in 2017.**



Food

In the Household Survival Budget for a Tennessee family of four, food accounts for 13 percent of the family budget, yet for many ALICE households, 13 percent of what they actually earn is insufficient to afford even the USDA Thrifty Food Plan. Food assistance for Tennessee households include \$2.3 billion of federal spending on food programs, primarily SNAP, school breakfast and lunch programs, and WIC. Nonprofits also provide approximately \$54 million in food assistance, including food pantries, food banks, and soup kitchens, based on the Urban Institute's nonprofit database (Urban Institute, 2012). Yet when income and government and nonprofit food assistance are combined, **Tennessee's households below the ALICE Threshold still fell 9 percent short of what they required to meet their most basic food needs in 2017.**



Transportation

In the Household Survival Budget for a Tennessee family of four, transportation accounts for 15 percent of the family budget. Yet for many ALICE households, 15 percent of what they actually earn is not enough to afford even the running costs of a car. While Tennessee's public transportation systems are state-funded, there is no government spending on transportation specifically for ALICE and poverty-level families. However, nonprofits provide additional programs, spending an estimated \$54 million. When income and nonprofit assistance are combined, **there was still a 52 percent gap in resources to meet the basic cost for transportation for all Tennessee households below the ALICE Threshold in 2017.**



Taxes

In the Household Survival Budget for a Tennessee family of four, taxes account for 11 percent of the family budget, so this analysis assumes that 11 percent of income is allocated toward taxes. Tennessee residents received \$1.6 billion in refunds and credits from the federal EITC in 2017. Tennessee does not have its own state EITC (IRS, 2017—Statistics for 2017 Tax Return; Tax Credits for Workers and Their Families, 2018). Though earning enough to afford the Household Survival Budget would put some ALICE households above the eligibility level for the federal EITC, many households below the ALICE Threshold benefit from the EITC. In 2017, eligible households collected an average federal tax refund of \$2,588. From 2011 to 2013, the federal EITC and the CTC lifted 197,000 Tennesseans and their households out of poverty, including 93,000 children on average each year (Center on Budget and Policy Priorities, 2016). The per-household tax burden depends on a recipient's income and the number of children they have. When income and government credits and refunds are combined, **there was still a 17 percent gap in resources for all Tennessee households below the ALICE Threshold to meet the basic cost of taxes in 2017.**

Assistance for Seniors

Seniors — those age 65 and over — are particularly reliant on government sources of income. But unlike the assistance programs discussed earlier, Social Security and Medicare are not means-tested programs targeted to households with little or no income (with some exceptions for people under 65 with disabilities). Medicare is available to all people over the age of 65 as a primary health insurance provider, and Social Security income, is available to those who have a work history that includes having paid the Social Security payroll tax (Centers for Medicare & Medicaid Services, 2019—Eligibility and Premium Calculator; Social Security Administration, 2019). Ninety percent of Americans 65 and older receive income through Social Security, which represents about one-third of the total aggregated income of America's seniors, and nearly 50 million people were enrolled in Medicare as a result of their age in 2017 (Center for Medicare & Medicaid Services, 2018—Medicare Enrollment Dashboard; Social Security Administration, 2018).

While these two programs are collectively the largest federal expenditures outside of defense spending, it is worth noting that they are not enough to keep many seniors from falling through the cracks. The average retired worker and their dependents receive an average monthly benefit of approximately \$1,400 — rarely enough to sustain a household without other sources of income. More than 7 million seniors have incomes low enough to also qualify for Medicaid, and nearly 5 million also receive SNAP benefits (Center on Budget and Policy Priorities, 2017—SNAP Helps Millions; Centers for Medicare & Medicaid Services, 2019—Seniors & Medicare and Medicaid; Social Security Administration, 2018).

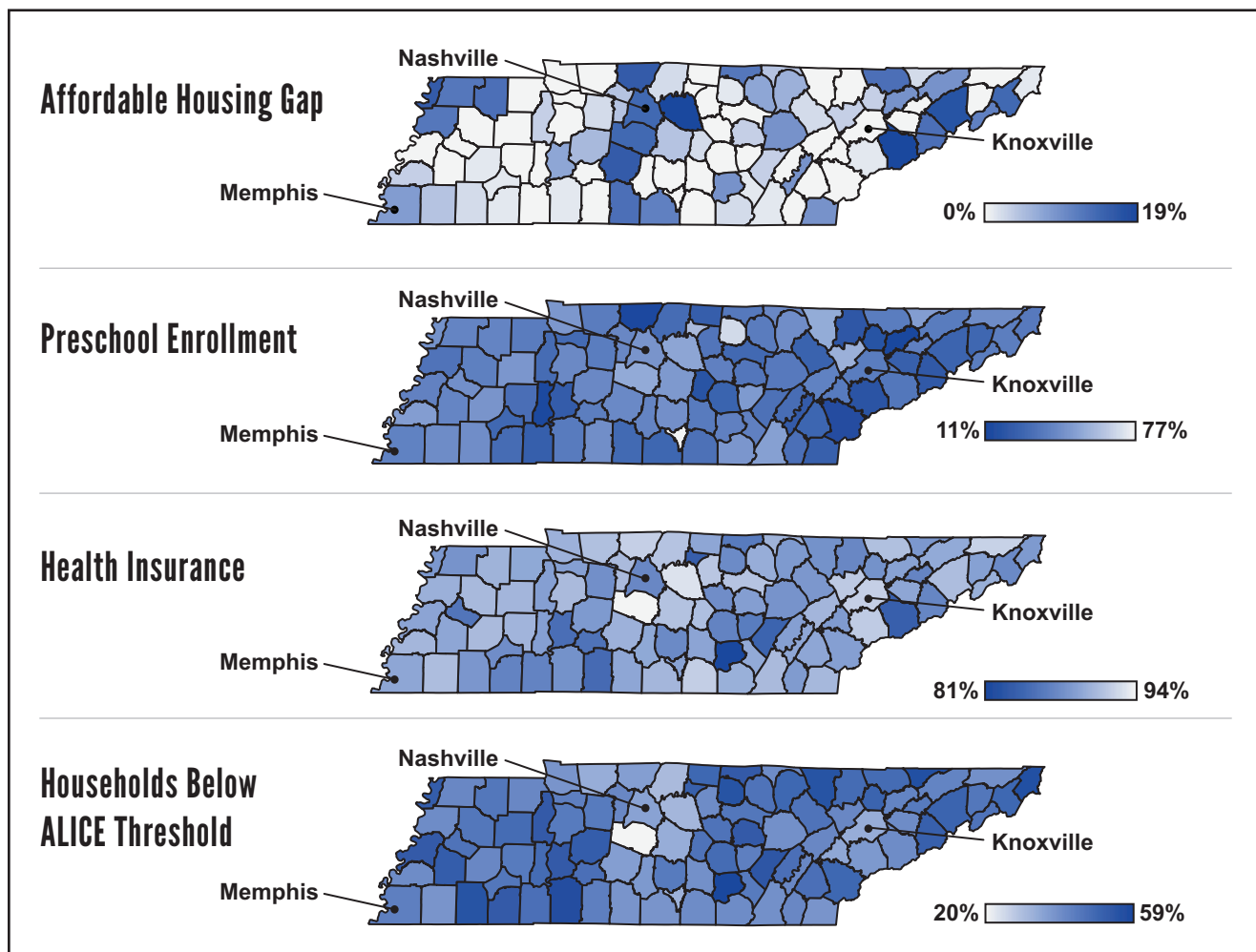
VI. LOCAL CONDITIONS: HOUSING AND COMMUNITY RESOURCES

Our lives are profoundly influenced by where we live, and especially where we grow up (Chetty & Hendren, 2015). This is particularly true for ALICE households: Local economic conditions largely determine how many households in a county struggle financially. Along with job opportunities, local wages, and public and private assistance, local conditions that matter most to ALICE households include:

- Housing affordability, represented in this Report by the affordable housing gap, housing burden, and real estate taxes
- Community resources for education (represented by preschool enrollment) and health (represented by insurance coverage), with an added focus on the opioid epidemic and health professional shortage areas
- The social environment, with a focus on social isolation, access to technology, and voter participation

This section focuses on the recovery years after the Great Recession, from 2010 to 2017. It looks at the indicators that help explain why households struggle more in some parts of the state than in others. The ways in which these indicators are related is apparent in Figure 39, where the darker shades of blue represent the counties that are worse off on each indicator.

Figure 39.
Local Indicators Compared With Households Below ALICE Threshold, Tennessee, 2017



Sources: ALICE Threshold, 2017; American Community Survey, 2017

HOUSING AFFORDABILITY

The more affordable housing there is in a county, the easier it is for a household in that county to be financially stable. In Tennessee, housing is generally less expensive than in most other states, and it became easier to find affordable housing in many counties in the years following the end of the Recession. Yet there is variation in housing affordability between counties and also between metro areas across Tennessee. And a common challenge is to find job opportunities in the same counties where there are affordable places for ALICE households to live.

The three key indicators of housing affordability for ALICE households in a given county are the affordable housing gap, the housing burden, and real estate taxes. These indicators, described below, show which counties offer an adequate supply of units that ALICE households can afford, a relatively low percentage of households that are “housing burdened,” and low real estate taxes.

The Affordable Housing Gap

In Tennessee, housing is generally affordable for owners, and owning can be more affordable than renting in many parts of the state. But owning is still difficult for those at the low end of the market, since it requires a down payment, the ability to pay real estate taxes and insurance, and a credit rating that qualifies for a mortgage.

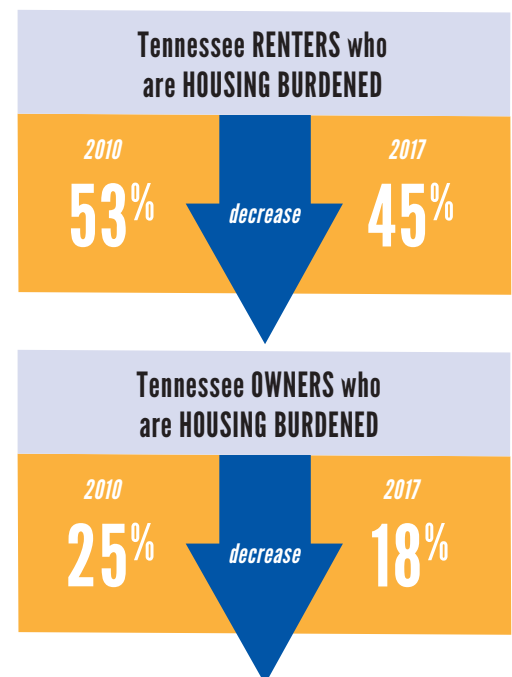
While rental housing can be more expensive than home ownership, it became more affordable across Tennessee from 2010 to 2017. This is apparent from the affordable housing gap measure — an estimate of the difference between the total number of households below the ALICE Threshold (renters and owners) in a county and the number of available housing units that those households can afford while spending no more than one-third of their income on housing. This measure assesses the total housing stock in a county and includes subsidized as well as market-rate units that are affordable to ALICE and poverty-level households. The larger the gap, the harder it is for households below the ALICE Threshold to find affordable housing (Figure 39).

The housing gap for affordable units ranged from no gap in 40 Tennessee counties to a gap of greater than 15 percent in Greene, Lake, Maury, Robertson, Sevier, Williamson, and Wilson counties. There are also differences between renters and owners. For Tennessee renters, the average gap in affordable units was 20 percent across the state in 2017, but for homeowners, there was no gap in most counties. The largest gaps were in counties surrounding Nashville and Knoxville.

Housing Burden

The second key indicator of housing affordability in a county is housing burden — housing costs that exceed 30 percent of household income, as defined by the U.S. Department of Housing and Urban Development. That standard evolved from the United States Housing Act of 1937. While rent thresholds shifted over the ensuing decades, since 1981 the standard has been that 30 percent of income is the most a family can spend on housing and still afford other household necessities (Schwartz & Wilson, 2008).

Figure 40.
Housing Burden, Renters and Owners, Tennessee, 2017



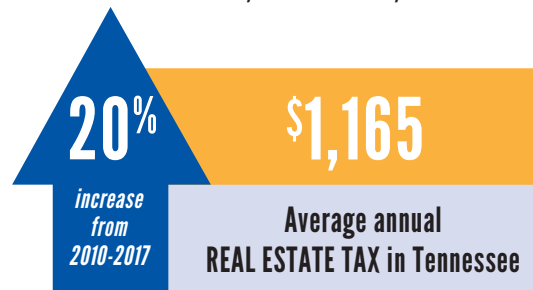
The rate of housing burden in Tennessee is generally low for owners but remains much higher for renters. In 2017, 45 percent of Tennessee renters paid more than 30 percent of their household income on rent, down from 53 percent in 2010. In comparison, among homeowners, only 18 percent paid more than 30 percent of their income on monthly owner costs (which included their mortgage) in 2017, down from 25 percent in 2010 (Figure 40) (American Community Survey, 2010 and 2017).

Rates vary across the state. In 2017, the highest rate of housing burden (renters and owners combined) was 33 percent in Shelby County, while the lowest rate was 17 percent in Pickett County (American Community Survey, 2017).

Real Estate Taxes

While related to housing cost, real estate taxes also reflect a county's standard of living. Even for renters, real estate taxes raise the cost of housing. The average annual real estate tax in Tennessee was \$1,165 in 2017 (a 20 percent increase from \$972 in 2010) (Figure 41). There is wide variation across counties, ranging from \$423 in Grundy County to over five times that in Williamson County, at \$2,385. From 2010 to 2017, taxes increased by more than 40 percent in Bledsoe, Chester, Decatur, Grainger, Marion, and Wayne counties (American Community Survey, 2007 and 2017).

Figure 41.
Real Estate Taxes, Tennessee, 2017



COMMUNITY RESOURCES

Community resources — in the areas of education, health, and the social environment — provide a fundamental support structure for working families. These resources can make a difference to the financial stability of ALICE households in both the short and long term. Yet it is a challenge across many Tennessee counties to find adequate key community resources, such as access to quality schools, affordable health care, and supportive social environments. While some community resources are fairly evenly spread across Tennessee, others vary widely by county, suggesting that availability of these resources is determined by a combination of state-level factors and local policies.

Education Resources

The provision of public education has long been a fundamental American value, and education is widely regarded as a means to achieve economic success. Quality learning experiences have social and economic benefits for children, parents, employers, and society as a whole.

Education is also important for the health of communities: People with lower levels of education are often less able to be engaged in their communities and less able to improve conditions for their families. Over half of people without a high school diploma report not understanding political issues, while 89 percent of those with a bachelor's degree have at least some understanding of political issues. Similarly, having a college degree significantly increases the likelihood of volunteering, even controlling for other demographic characteristics (Baum, Ma, & Payea, 2013; Campbell, 2006).

Early learning, in particular, enables young children to gain skills necessary for kindergarten and beyond. Positive early learning experiences are critical from birth to five years old, when the brain is developing rapidly and laying the foundation for all learning and behavior to come (Harvard University Center on the Developing Child, 2007). Early education also enables parents to work, which enhances the family's current and future earning potential. For these reasons, the quality of education available to low-income children could be one of the most important determinants of their future success. In our analysis, the percentage of 3- and 4-year-olds enrolled in preschool is a proxy for the level of education resources in a county. The average share of 3- and 4-year-olds enrolled in preschool in Tennessee was 37 percent in 2017 (Figure 42). According to the National Institute for Early Education Research, Tennessee's state preschools offer high-quality education. Over the past decade, state preschools have consistently met 9 out of 10 benchmarks for quality standards, on average, though spending-per-child decreased from \$5,082 in 2010 to \$4,624 in 2017. Yet 4-year-old enrollment in these state programs remained relatively low over this period, at 22 percent of the state's 4-year-olds (American Community Survey, 2017; Friedman-Krauss, et al., 2017).

Figure 42.
Preschool Enrollment, 3- and 4-Year-Olds,
Tennessee, 2017



Within Tennessee, preschool enrollment varies widely between counties. In 2017, 77 percent of 3- and 4-year-olds were enrolled in preschool in Moore County, while only 11 percent were enrolled in Grainger County. This indicates that policies and resources devoted to early childhood education differ across the state according to population size, resource availability, and priorities (see Figure 39).

From early learning through postsecondary studies, ALICE households are challenged to find quality, affordable education and training at all levels in Tennessee. Secondary and higher education resources — including high school, two- and four-year colleges, and career and technical education — are important to the functioning of the state economy. Ultimately, basic secondary education remains essential for any job. According to the Alliance for Excellent Education, if the graduation rate across all Tennessee's metropolitan areas increased by 2 percent (from 88 to 90 percent), it could mean \$1 million in additional state and local tax revenue, and annual earnings for that graduating class would increase by \$16.2 million. At the national level, an increase to a 90 percent graduation rate would amount to an additional \$13.8 million in federal tax revenue and a \$140 million contribution to the GDP (Alliance for Excellent Education, 2018).

Tennessee's public education system still does not produce equal results for all residents, as demonstrated by the educational achievement gap affecting students from low-income families and families of color. According to the 2017 National Assessment of Educational Progress, Tennessee students generally performed worse than other states on 4th and 8th grade assessments, performing significantly lower than 35 other states on the 8th grade mathematics test. According to the Tennessee Department of Education, there are achievement gaps across subject areas based on socioeconomic status and race/ethnicity. For example, for the 2017–2018 school year, 40 percent of White students achieved proficiency in mathematics (3rd through 12th grade combined), compared to 17 percent of Black students and 25 percent of Hispanic students (National Assessment of Educational Progress, 2017—Data Tools).

These systemic differences affect school performance and graduation rates. Among public high schoolers in Tennessee in 2017, 85 percent of economically disadvantaged students (defined as qualifying for free or reduced-price lunch), 84 percent of Black and Hispanic students, 74 percent of students with limited English proficiency, and 73 percent of students with disabilities graduated from high school, compared with over 90 percent of White and Asian/Pacific Islander students. As a result, their chances of going to college differ as

well. Nationally, college enrollment following high school in 2017 was 61 percent for Hispanic teens and 59 percent for Black teens, compared with 70 percent for White teens. At Tennessee's public colleges, 46 percent of Black students completed a bachelor's degree within six years of starting college, compared with 52 percent of White students (National Center for Education Statistics, 2017; The Chronicle of Higher Education, 2013).

Health Resources

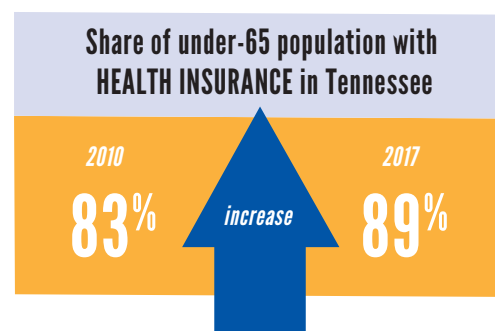
Overall, Tennessee was ranked as the 37th healthiest state in the country in 2017, as measured by America's Health Rankings. Rankings are based on measures of health behaviors, community and environmental factors, policy, clinical care, and health outcomes. Tennessee's primary strengths were a low prevalence of excessive drinking, a small disparity in health status by educational attainment, and a low incidence of pertussis (whooping cough). The state still struggled, however, with a high prevalence of smoking, a high violent crime rate, and a high premature death rate. Within the state, there is also geographic diversity when it comes to the factors that contribute to good health. According to the 2018 County Health Rankings and Roadmaps report (which ranked counties based on health behaviors, clinical care, social and environmental factors, and the physical environment), the top-five healthiest counties in Tennessee were Moore, Rutherford, Sumner, Williamson, and Wilson. The bottom five counties were Campbell, Clay, Cocke, Grundy, and Hancock (United Health Foundation, 2018; University of Wisconsin Population Health Institute, 2018—State Health Reports).

For people living below the ALICE Threshold, poor mental and physical health are both a cause and a consequence of being low-income. The stress of financial hardship can have a range of effects, from fatigue and depression to increased risk of heart disease — and those health problems, in turn, can further compromise work attendance, earnings, and income. In Tennessee, as across the country, there is a correlation between mental health and income. The number of poor mental health days per month increases as income decreases (Egertter, Braveman, & Barclay, 2011; University of Wisconsin Population Health Institute, 2018—Poor Mental Health Days).

In addition to driving health outcomes, socioeconomic status also impacts access to resources: With greater income, wealth, and social status comes greater access to community resources that promote health. Within communities, access to quality, affordable health care is essential, and a strong predictor of receiving good care is having health insurance. Many ALICE families fall into a critical gap in health insurance coverage: They often earn more than Medicaid eligibility levels but not enough to afford the high deductibles of the lowest-cost Affordable Care Act (ACA) plans (Braverman, et al., 2018).

The percentage of uninsured people in Tennessee has decreased since 2010 — from 17 percent down to 11 percent in 2017. With the introduction of the ACA in 2014, low-income households have had more access to health insurance, though they are still slightly less likely to have coverage than higher-income households. Of Tennessee residents under age 65 with annual income below 200 percent of the FPL, 83 percent had health insurance in 2017, while for residents under age 65 at all income levels, the rate was 89 percent (Figure 43) (Kaiser Family Foundation, 2017—Health Insurance Coverage; Melton, 2018).

Figure 43.
Health Insurance Coverage,
Tennessee, 2017



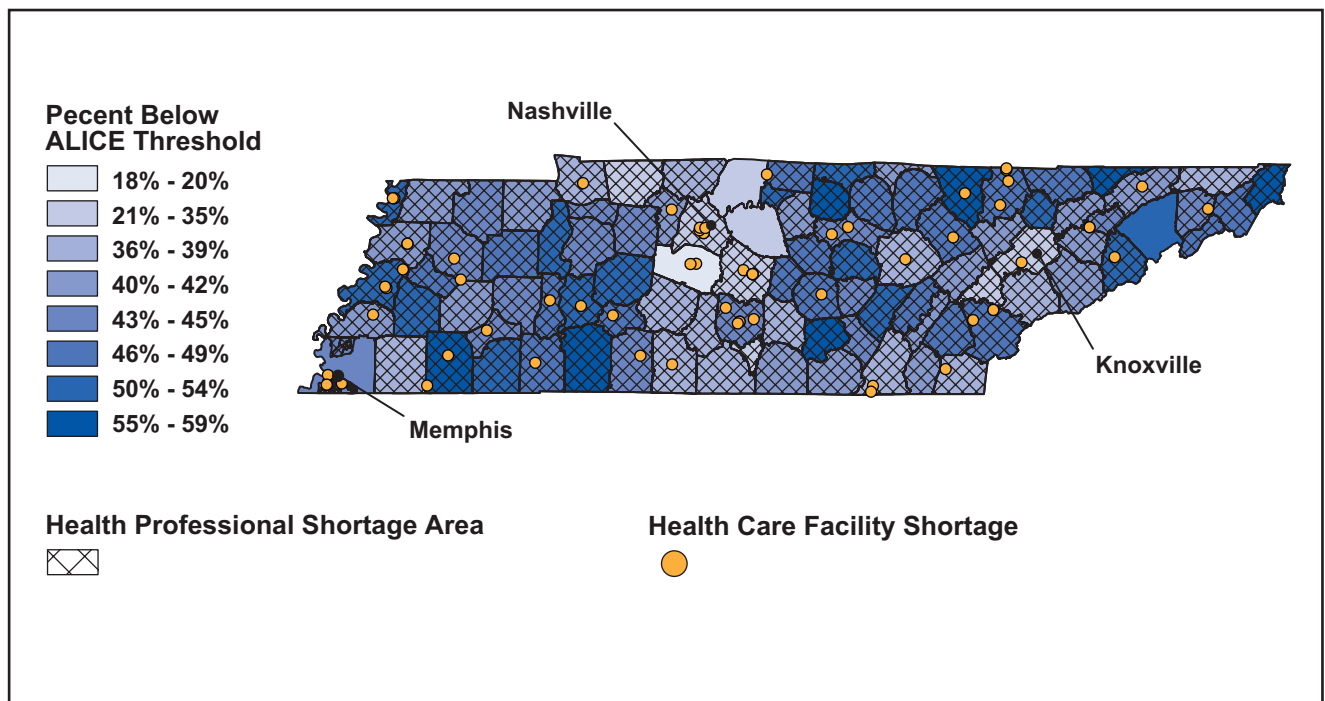
Coverage rates vary across Tennessee, and as rates have improved, differences across counties have decreased. The lowest rate of insured households in 2017 was 81 percent in Grundy County, and the highest was 94 percent in Williamson County (see Figure 39) (American Community Survey, 2017).

Another important factor for ALICE families is access to health care providers. Many areas of Tennessee do not have enough providers as seen in the number of Health Professional Shortage Areas (HPSAs) designated by the U.S. Health Resources and Services Administration. Across Tennessee, there are more than 360 HPSAs — 141 in primary care, 150 in dental care, and 71 in mental health care. In addition, many facilities (such as federally qualified health centers, state mental hospitals, and rural health clinics) also have a shortage of health care providers.

Figure 44 shows primary care HPSAs (cross-hatched areas) and their overlap with the percentage of households earning below the ALICE Threshold (shades of blue). It also shows health care facilities with provider shortages (gold dots) (U.S. Department of Health & Human Services, 2017—HPSA).

This is an issue across the state, but especially in rural areas: 84 of Tennessee's 95 counties are rural and have been designated as HPSAs. In rural areas, hospitals are often the primary means of delivering health care — an inefficient and expensive method of service that is not economically sustainable. Since 2012, there have been nine hospital closures in rural areas, the second highest number in the U.S. (American Hospital Association, 2019; Mosley & DeBehnke, 2019; Pellegrin & Melton, 2019; Tennessee Department of Health, 2016; Tennessee Hospital Association, 2019; U.S. Department of Health & Human Services, 2017—HPSA).

Figure 44.
Health Professional Shortage Areas Compared With Households Below the ALICE Threshold, Tennessee, 2017



Sources: ALICE Threshold, 2017; U.S. Department of Health and Human Services, 2017—HPSA

THE OPIOID CRISIS IN TENNESSEE

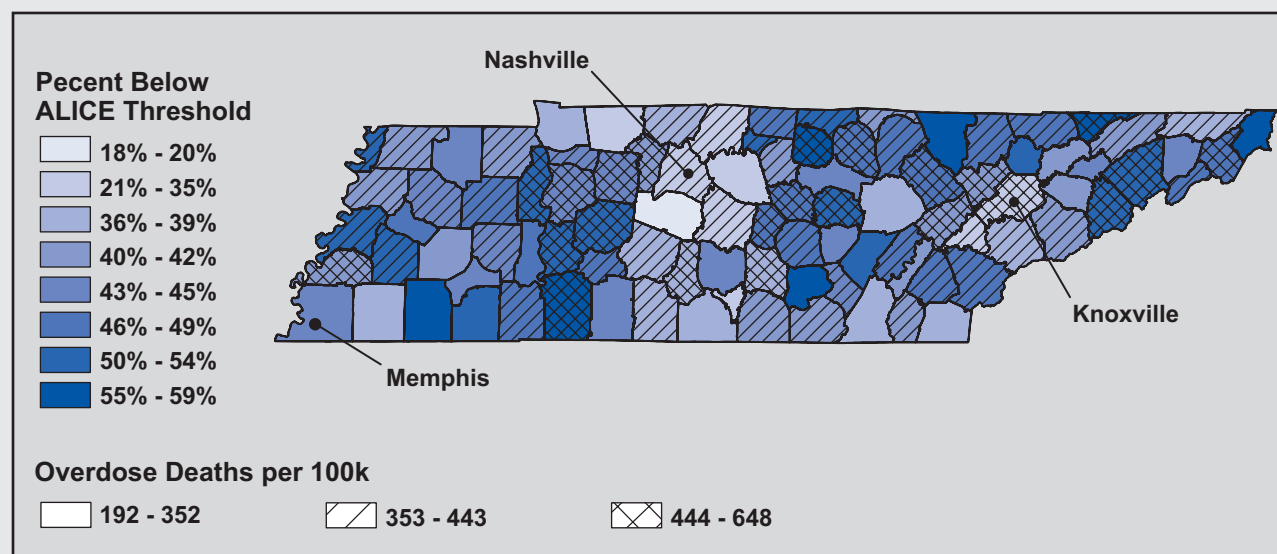
The opioid epidemic that has ravaged the country has hit Tennessee particularly hard. In 2017, there were 1,776 fatal drug overdoses in the state (1,268 were opioid overdoses), the 14th highest number of overdose fatalities in the U.S. Tennessee's rate of 26.6 drug overdose deaths per 100,000 people exceeds the national rate of 22 per 100,000 (Centers for Disease Control and Prevention, 2019; Cox & Farr, 2018; Kaiser Family Foundation, 2019—Opioid; Pellegrin, 2018; Tennessee Department of Health, n.d.).

As response rates to overdoses have improved in Tennessee, hospitals admissions and out-patient care rates have increased. In 2017, there were 7,708 non-fatal in-patient hospital stays (longer than 24 hours) due to drug overdose and 15,949 non-fatal outpatient visits to Tennessee hospitals (Reagan, 2017; Tennessee Department of Health, n.d.).

Addiction crosses all socioeconomic groups: People of all incomes, geographies, ages, and races/ethnicities can become addicted to drugs in general and opioids in particular (Office of the Governor, 2018). While the more densely populated counties of Davidson, Knox, and Shelby have an especially high number of non-fatal and fatal drug overdoses, together accounting for more than 10 percent of fatal drug overdoses in 2017, there have been overdoses in almost every county in the state — urban and rural, wealthy and low-income. Tennessee counties with the highest rates of overdoses are: Benton, Hickman, and Jackson (Figure 45).

In Tennessee, there is a weak relationship between economic hardship (blue shading in Figure 45) and rates of hospitalizations and death due to drug overdose (represented by crosshatch). While several national studies have shown that counties with worse economic prospects typically have the highest rates of opioid prescriptions, opioid-related hospitalizations, and overdose deaths, the data does not show a strong correlation in Tennessee (Dasgupta, Beletsky, & Ciccarone, 2018; Ghertner & Groves, 2018; Oquendo & Volkow, 2018; Rossen, Bastian, Warner, Khan, & Chong, 2019; Ruhm, 2018; Tennessee Department of Health, n.d.).

Figure 45.
Percent Below the ALICE Threshold and Drug Overdose Hospitalizations/Deaths, Tennessee Counties, 2017



Sources: ALICE Threshold, 2017; Tennessee Department of Health, 2019

The impact of addiction and substance use disorders on families most often is a decline in their financial position — causing many families to become or remain ALICE. A family's income may be reduced if the addiction reduces an adult's ability to work, and families often have substantial health care costs. Nationally, for example, addiction treatment ranges from \$1,176 to \$6,552 per month. In addition, substance use disorders take a toll on the stability of families and marriages, parenting, and the physical and mental health of family members (Daley, Smith, Balogh, & Toscaloni, 2018; National Institute on Drug Abuse, 2018 and 2019—Medications; Scholl, Seth, Kariisa, Wilson, & Baldwin, 2019).

People dealing with opioid addiction and their families experience the brunt of the emotional and financial strain of this epidemic, but the consequences of the opioid crisis have also drained resources for communities and strained the social fabric. Nationally, estimates of the cost of the opioid epidemic range from \$54 to \$78 billion, including up to \$40 billion in lost productivity, \$28 billion in health costs, and \$8 billion in criminal justice costs (amfAR, 2018; Florence, Zhou, Luo, & Xu, 2016; Kneebone & Allard, 2017; Krueger, 2017).

Because the causes of addiction and substance use disorders are complex, there are no easy solutions. The factors fueling the opioid epidemic range from the rise in prescriptions and an influx of synthetic opioids (mainly fentanyl) to declining economic prospects and an array of individual risk factors including heredity, chronic pain, and traumatic events, especially in childhood. A range of solutions, from monitoring prescription drug use to connecting individuals to treatment, can make a difference. But addressing additional root causes will take improvements in the economy as well as clinical interventions, such as improved management of chronic pain patients and early intervention for children at increased risk of trauma or abuse (Centers for Disease Control and Prevention, 2018; Ghertner & Groves, 2018; Kneebone & Allard, 2017; Ruhm, 2018).

The Social Environment

The social environment in which we live has a significant impact on life satisfaction and physical and mental well-being. Social environments include the culture, people, and institutions with which we interact. These environments can be supportive and act as protective factors, buffering negative health impacts, providing contacts and resources, and improving quality of life. Conversely, when they are negative or lacking, such as in neighborhoods with high levels of poverty, violence, and social turmoil, they can contribute to hardship.

Being engaged in a community enables families to make the most of their surrounding resources. Civic engagement is facilitated by local nonprofits, interest groups, libraries, an active local government, and faith communities, all supported by infrastructure (everything from indoor and outdoor community spaces to sewer and water services to broadband, as well as the housing and education resources mentioned earlier in this section). Civic engagement is associated with increased belonging and commitment to one's community, more social support, and better physical and mental health (e.g., lower stress and fewer illnesses). However, being engaged also takes time and resources, and is especially hard for those working multiple jobs, juggling child care and errands, or dealing with chronic health issues (Chetty & Hendren, 2018; Chetty, Stepner, Abraham, et al., 2016; Nabatchi, Gastil, Weiksner, & Leighninger, 2012; Pancer, 2015; Woolf & Aron, 2013).

Although the social environment is difficult to measure and map, there are three indicators that provide some insight: social isolation, access to technology, and voter participation.

Social Isolation

Feelings of loneliness and isolation have been associated with poor health outcomes, cognitive decline, and an increased risk of mortality. Having a positive social environment is especially important for seniors, yet loneliness is pervasive in the American senior population. In a nationally representative sample of older people, 43 percent reported feeling lonely. Contributing to this issue is the number of seniors who live alone. In Tennessee in 2017, 25 percent of seniors lived alone, the majority of whom were female (68 percent). Nationally, about one third of people over the age of 65 live alone and there is variation in living arrangements by gender and race/ethnicity. Senior women are more likely than senior men to live alone, and non-Hispanic White and Black women are more likely to live alone (39 percent) compared with women of other races/ethnicities (21 percent of senior Asian women and 23 percent of senior Hispanic women) (Alcaraz, et al., 2018; Institute on Aging, 2018; Perissinotto, Cenzer, & Covinsky, 2012; Theurer, et al., 2015; Tramuto, 2019; Xia & Li, 2018).

“ In Tennessee in 2017, 25 percent of seniors lived alone, the majority of whom were female (68 percent). ”

Some seniors live in group facilities, including assisted living facilities, long-term nursing care, and rehabilitation centers. In Tennessee, 3 percent of seniors live in group facilities. Group living quarters can provide additional opportunities for social support and connection, but also the potential for interpersonal conflict if the conditions don't promote positive social interaction or meet individuals' unique needs. Other community resources targeted at older adults, such as senior centers, can also reduce a sense of isolation; 59 percent of Tennessee seniors age 60 and older said these centers worked well to support older adults (American Community Survey, 2017; Tennessee Commission on Aging and Disability, 2017).

Access to Technology

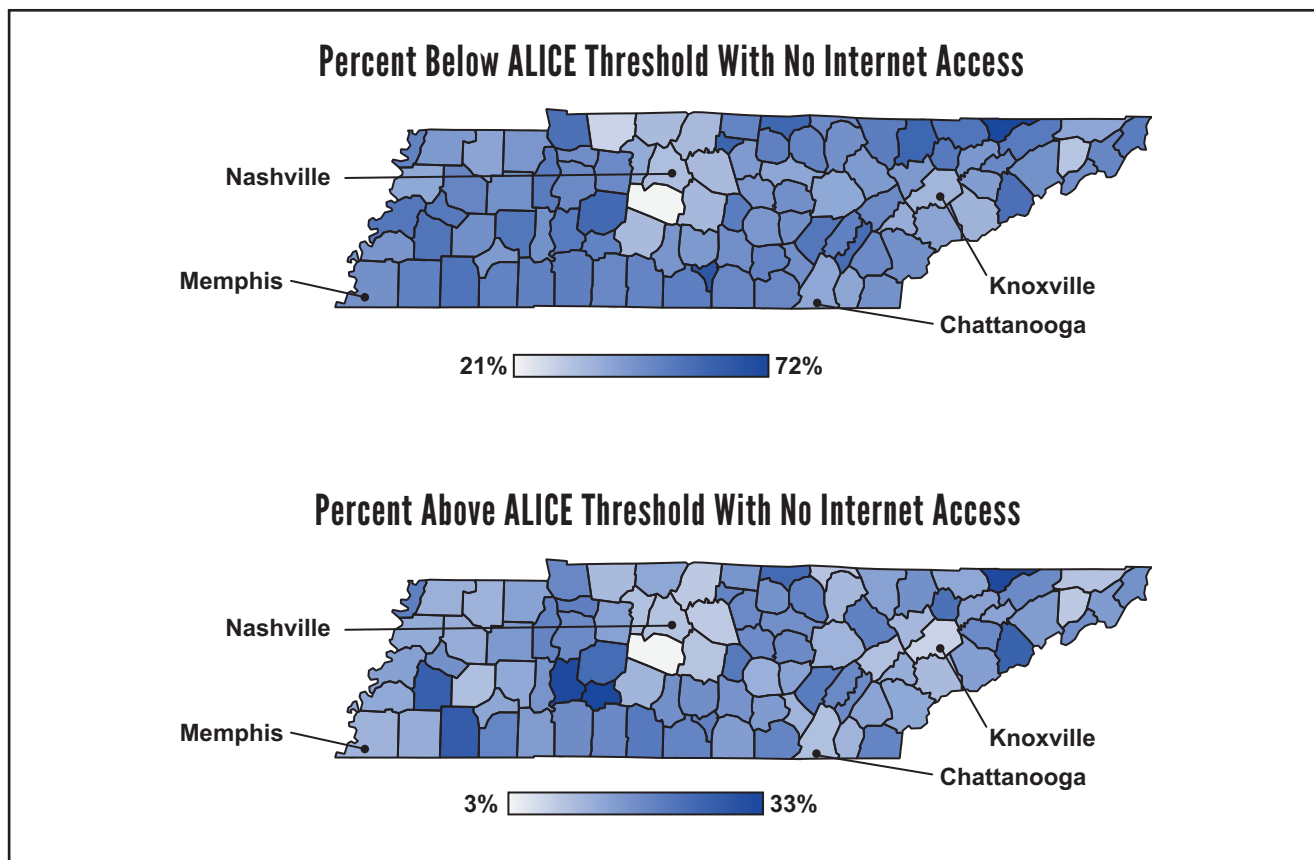
Access to digital technology exploded over the last three decades; by 2017, 91 percent of adults owned a computing device. But access to technology still varies by income and geography. Low income adults are more likely to own smartphones (64 percent of those with household income below \$30,000) than to have broadband internet access (53 percent), while more than 90 percent of those earning more than \$100,000 have both. Access to high-quality technology also varies significantly by income. Only 13 percent of Americans have the highest quality fiber-optic internet connection (American Community Survey, 2017; Anderson, 2017).

For many families, this gap 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; 32 percent of smart phones users with income below \$30,000 have applied for a job on their phone compared with 7 percent of smartphone users with income above \$75,000. This high usage of smartphones for a critical task indicates that low-income households have limited access to broadband, either at home or through libraries or government job and training centers (Becker, et al., 2010; Horrigan, 2016, 2018; Smith, 2015).

In Tennessee, 79 percent of households have a broadband internet subscription, just below the national average of 81 percent. But there is still significant variation by income: **41 percent of households with income below the ALICE Threshold do not have a broadband internet subscription compared with only 12 percent for households above the ALICE Threshold** (Figure 46). Rates vary even more by location. The lowest rates are among low-income households in rural areas. In rural areas of Tennessee, as many as two-thirds of households below the ALICE Threshold do not have an internet subscription (American Community Survey, 2017; Perrin, 2017—Digital Gap; Ryan, 2018; ThinkTennessee, 2018).

Gaps in the use of technology also exist by race/ethnicity, age, and disability, with Black and Hispanic adults as well as adults 65 and over and those with a disability less likely to go online. The growing use of smartphones among Black and Hispanic adults has helped close the gap, though they still lag in owning a computer or subscribing to broadband. Disability alone is a factor in reduced use of smartphones and broadband adoption; and when it is combined with age, rates of usage decline even further (Anderson & Perrin, 2017; Perrin, 2017—Smartphones).

Figure 46.
Internet Access by Income, Tennessee, 2017

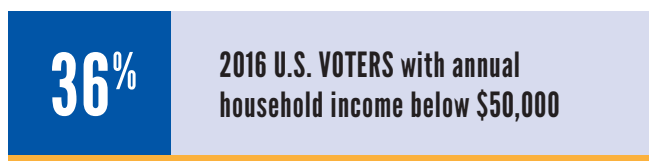


Source: American Community Survey, 2017

Voter Participation

Voter turnout is another indicator of civic engagement in a county. The share of voting-age Tennessee residents who voted in the 2016 presidential election was 52 percent, below the national average of 60 percent. According to national exit polls (data not available for Tennessee), ALICE accounted for roughly one-third of the voting electorate: 36 percent of voters had household income below \$50,000, 30 percent had income between \$50,000 and \$100,000, and 34 percent had income above \$100,000 (Figure 47) (CNN Politics, 2016; U.S. Census Bureau, 2016—Table 4a).

Figure 47.
Voter Turnout, Presidential Election, U.S., 2016



CONCLUSION

This Report on **Asset Limited, Income Constrained, Employed (ALICE)** households across Tennessee offers a new set of tools — on both the state and county level — that policymakers and stakeholders can use to understand financial hardship in the state. Using the **Household Survival Budget**, the Report explains how much it costs to live at the most basic level in the local economy. The Report reveals that a full 39 percent of households in Tennessee earn below the **ALICE Threshold** for economic survival.

In order to address the state's economic challenges, it is important to recognize that ALICE families are forced to take risks in order to get by. Whether forgoing health insurance, car repairs, or even just a meal, these compromises affect not only the families involved but also their wider communities.

ALICE households range from young families with children to senior citizens. They face an array of challenges: low-wage jobs located far from their homes, high-cost yet insufficient housing, poor access to high quality child care, financial barriers that limit access to low-cost banking services, and few or no assets to cushion the cost of an unexpected repair or health emergency. Some households become ALICE after an emergency, while others have been struggling near the poverty line since the Great Recession. Effective policy solutions will need to reflect this reality.

What will it take to make a difference for ALICE families and expand the options they have? By surveying housing and community conditions, Tennessee policymakers and other stakeholders can better identify where there are job opportunities, where housing is affordable relative to local wages, where strong community resources exist for ALICE households — and where there are gaps.

The **ALICE Income Assessment** documents that despite aggregate ALICE household earnings of more than \$19 billion and another \$19 billion in spending by government, nonprofits, and health care, there are still over 1 million households in Tennessee that struggle financially.

Without public assistance, ALICE households would face even greater hardship, and many more would slide into poverty. Because they struggle to satisfy their basic needs, it's almost impossible for them to gain enough traction to improve their overall circumstances. And so far, government assistance does little to address this predicament. The majority of programs aim to alleviate poverty and help the poor obtain basic housing, food, clothing, health care, and education — not to enable long-term economic stability (Haskins, 2011; Shaefer & Edin, 2013).

Economic insecurity is pervasive among ALICE households. This is clearest in Social Security spending: Most senior households have incomes that are above the Federal Poverty Level (FPL) but often still below the ALICE Threshold for economic survival. Quantifying the problem can help stakeholders best decide whether to fill that gap by increasing income for ALICE households or by decreasing the cost of basic household necessities.

While ALICE families differ in their composition, obstacles, and magnitude of need, there are three broad trends that will influence who becomes ALICE in Tennessee and what the implications will be for the wider community:

- The changing American household
- Increasing vulnerability of workers
- Growing inequality of health

These trends will have significant implications for both local communities and Tennessee as a whole.

THE CHANGING AMERICAN HOUSEHOLD

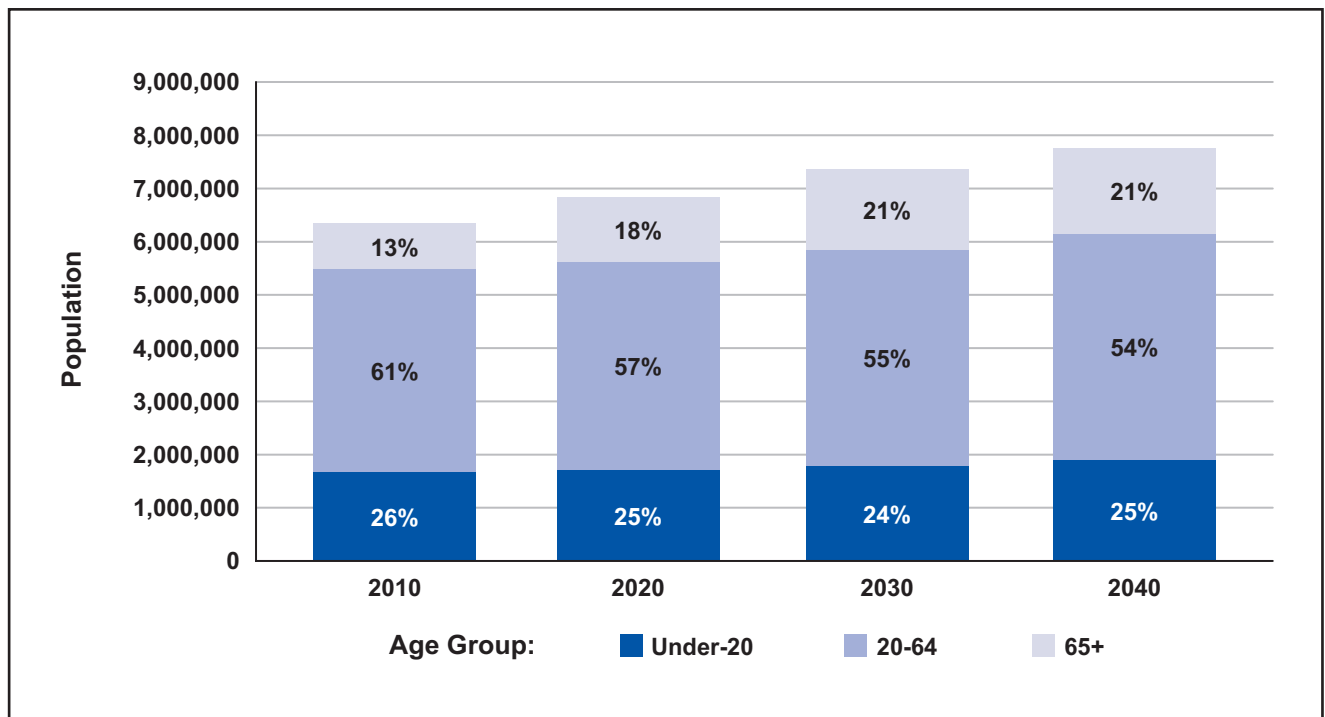
Tennessee's rate of population growth, at almost 1 percent, ranks 23rd in the country. Yet demographics within the state are shifting, creating new household configurations, many of them in ALICE families. Baby boomers are aging, millennials are driving economic and social change, and immigration trends are changing the racial and ethnic composition of communities. These changes impact the demand for housing, health care, transportation, and community services. The resulting households are creating different kinds of communities, with many implications for who becomes ALICE and where ALICE households live and work (World Population Review, 2018).

Growing Populations: Millennials and Baby Boomers

The growth of certain age groups is changing the landscape in Tennessee and across the country. Both millennials and baby boomers are powerful demographic forces. Unlike previous generations, millennials are more often choosing to live in urban areas and delaying both marriage and having children. The large boomer cohort encompasses a group that is working longer, remains involved in a wide array of activities, and is generally healthier than previous generations.

In terms of population, seniors (65 years and over) are currently Tennessee's smallest population cohort by age, but the elderly population is projected to grow from 853,462 (13 percent) in 2010 to 1.6 million (21 percent) by 2040, an 88 percent increase (Figure 48). In contrast, demographers predict that the number of 0- to 19-year-olds will grow slowly from 1.7 million to 1.9 million in 2040, and their share of the state population will decline from 26 to 25 percent. And the number of 20- to 64-year-olds will grow from 3.8 million to 4.3 million, and their share will decline from 61 to 54 percent (Boyd Center for Business and Economic Research, 2017; George & Wright, 2017; Weldon Cooper Center for Public Service, 2016).

Figure 48.
Population Projection, Tennessee, 2010 to 2040



Source: Weldon Cooper Center for Public Service, 2016

Tennessee's overall growth in population also masks differences across the state. Most growth is expected to continue in the metro areas. Smaller rural counties with a history of low and decreasing net migration are predicted to steadily decline in population over the next 15 years, even where there has not been a decline before (Boyd Center for Business and Economic Research, 2017).

Millennials

Millennials are the most racially diverse generation in American history. Nationally, 43 percent of millennials are non-White, the highest share of any generation. And with diversity increasing in younger age cohorts, future generations (like Gen Z, the oldest of whom are now graduating college) will be even more diverse. In Tennessee, the composition of the millennial population varies by geography. In Memphis, the majority of millennials are populations of color, while in the Chattanooga, Knoxville, and Nashville metro areas, millennials are more than 70 percent White (W. H. Frey, 2018; George & Wright, 2017).

With more millennials having gone to college, they are also on track to be the nation's most educated generation. Yet they are also more likely than previous generations to be in debt and living in their parents' homes (Cilluffo & Cohn, 2017; Cohn & Caumont, 2016; W. H. Frey, 2018).

“College debt, low wages, and underemployment limit millennials' economic contribution and may cause them to become part of the ALICE population.”

Young workers are a state's future economic growth. With an aging population, there will be a greater burden on young workers to support those who have aged out of the labor force. By 2025, millennials are expected to comprise 75 percent of the entire U.S. workforce. This will mean Tennessee will go from 1.7 workers supporting one non-worker in 2000 to 1.3 workers supporting one non-worker by 2050 (Fry, 2018; George & Wright, 2017).

But college debt, low wages, and underemployment limit millennials' economic contribution and may cause them to become part of the ALICE population. The financial constraints on this population have a ripple effect on the wider economy as well: Housing construction slows, as do furniture and appliance manufacturing, and there are indirect effects on retail and utilities, all of which dampen economic growth (Cilluffo & Cohn, 2017; Keely, van Ark, Levanon, & Burbank, 2012; U.S. Department of Education, 2017).

Baby Boomers

On the other end of the population spectrum, the senior population (older baby boomers who are 65 and over) is growing even faster than the millennials. This senior generation also faces increased financial challenges — the added expenses of living longer, the increasing cost of health care, and minimal retirement savings. Because of these age-specific issues and the difficulties of working and saving as we age, the situation of the baby boomers raises well-founded concerns that extend beyond the impact on individual seniors to the potential slowing of the entire economy (Bloom, Canning, & Fink, 2011).

Workforce challenges have been especially severe for baby boomers. Because the demands of the labor market have changed — with job losses, lower-wage jobs, and less available work overall — many seniors do not have the retirement savings that they had planned on. According to the Employee Benefit Research Institute's latest survey, 41 percent of U.S. households headed by someone between the ages of 35 and 64 are projected to run short of money in retirement (Greenwald & Fronstin, 2019; VanDerhei, 2019).

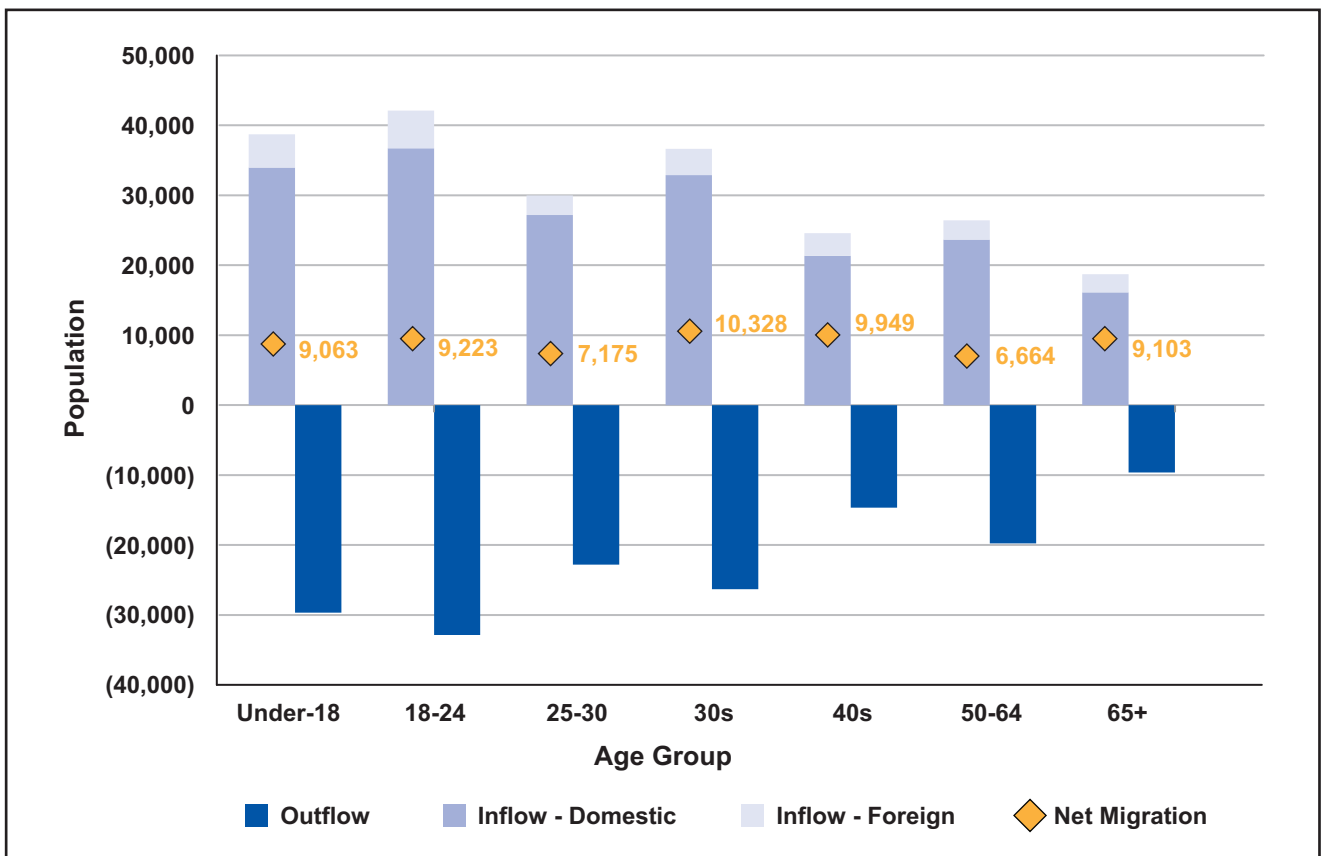
As a result, those on the brink of retirement are finding that they often cannot afford to fully leave the workforce. Even younger baby boomers feel these pressures: Nationally, those aged 55 and over are expected to make up a larger share of the labor force in the next decade. The over-55 age group steadily increased its share of the U.S. labor force from 12 percent in 1992 to 14 percent in 2002 and further to 21 percent in 2012; it is projected to increase to 26 percent by 2022. In Tennessee, 24 percent of 65- to 74-year-olds were still in the workforce in 2017 as were 7 percent of those 75 years and older (American Community Survey, 2017; BLS, 2014—Share of Labor Force; Bricker, et al., 2014).

More baby boomers are also living in multigenerational households — those that include two or more adult generations or those with grandparents and grandchildren. Growing racial and ethnic diversity in the U.S. helps explain some of the rise in multigenerational living. The Asian and Hispanic populations overall are growing more rapidly than the White population, and these groups are more likely than Whites to live in multigenerational family households (Cilluffo & Cohn, 2017).

Growing Populations: Migration and Immigration

In addition to internal growth and aging, Tennessee's population is changing through migration, both domestic (primarily from Mississippi and other southern states) and foreign. In Tennessee, there was significant migration into the state in all age groups in 2017. The largest movement was among college-aged students, 18 to 24 years old, with the largest net gain among those in their 30s. Blacks, Hispanics, Asians, and foreign-born migrants are more common in the younger age groups (Figure 49) (Aisch, Gebeloff, & Quealy, 2014; George & Wright, 2017).

Figure 49.
Population Inflows and Outflows, Tennessee, 2017



Source: American Community Survey, 2017

Immigration

Immigration plays a small but increasing role in Tennessee's racial and ethnic composition. The number of immigrants has more than doubled since 2000, increasing from almost 160,000 (3 percent of the population) to almost 350,000 (5 percent) in 2017. More than one-third of immigrants in the state (37 percent) have become citizens, 25 percent are legal permanent residents, and 37 percent are undocumented. The majority of current immigrants in Tennessee have come from Latin America (45 percent) including Mexico and Central America, followed by Asia (32 percent, with the largest group coming from India), Africa (11 percent), and Eastern Europe (4 percent) (Aisch, et al., 2014; American Community Survey, 2016; Migration Policy Institute, 2017).

“As both workers and entrepreneurs, foreign-born residents are an important source of economic growth in Tennessee, making up 6.6 percent of the state’s workforce (211,557 workers) in 2015.”

Immigrants and their children will account for the vast majority of current and future U.S.

workforce and economic growth. In Tennessee, the growth in the number of immigrants and minorities will offset the aging population. Nationally, the portion of the labor force that is foreign-born has risen from about 11 percent to just over 16 percent in the last 20 years. Without immigrants, there would be an estimated 18 million fewer working-age adults in the country in 2035, and U.S. population growth would be less than 1 percent annually, slow by historical standards (George & Wright, 2017; National Academies of Sciences, Engineering, and Medicine, 2017).

As both workers and entrepreneurs, foreign-born residents are an important source of economic growth in Tennessee, making up 6.6 percent of the state’s workforce (211,557 workers) in 2015. Across the state, there were 20,861 immigrant businesses accounting for 7 percent of all self-employed Tennessee residents and generating \$450 million in business income in 2015, according to the U.S. Census Survey of Business Owners. In 2016, immigrant-owned firms employed 81,810 people across Tennessee. As consumers, the state’s immigrants had a combined purchasing power of about \$5.9 billion in 2014. Immigrants are largely concentrated in and around Nashville, making up 11.4 percent of the metro area’s business owners (American Immigration Council, 2017; New American Economy Research Fund, 2019).

Overall, immigrants have a positive impact on long-term Tennessee and U.S. economic growth. Immigrant workers run businesses and pay taxes, contribute to a range of fields from engineering and science to the service sector, and are more likely to start their own businesses than native-born residents. Forty-four percent of Fortune 500 companies were founded by immigrants or their children, including Google, Intel, and eBay. In Tennessee, 18 percent of Fortune 500 companies were founded by immigrants or their children; these firms, including International Paper and Tractor Supply, generated \$29 billion in revenue in 2017 and employed over 74,000 people globally. At the other end of the occupational spectrum, in service jobs, lower-skilled immigrant workers such as child care providers form the foundation that enables higher-income parents to pursue full-time careers while having children. All of these factors contribute to economic growth and the tax base (Center for American Entrepreneurship, 2017; Furman & Gray, 2012; Najarro, 2018; National Academies of Sciences, Engineering, and Medicine, 2017; New American Economy Research Fund, 2017).

The fiscal impact of immigrants also shifts as the children of immigrants become adults. At working ages, children of immigrants are among the strongest economic and fiscal contributors within the U.S. (National Academies of Sciences, Engineering, and Medicine, 2017; Pereira, et al., 2012; Perryman Group, 2008; The Pew Charitable Trusts, 2014; U.S. Chamber of Commerce, 2013).

Implications of Demographic Trends

The growth of Tennessee's millennial, baby boomer, and immigrant populations will have an impact both on the wider economy and on the communities where ALICE lives and works. As these changes unfold, there will be opportunities to improve financial stability for ALICE families in Tennessee, but there will also be additional pressures, particularly in two areas — infrastructure and elder care.

Infrastructure

There will be greater pressure on the state's infrastructure, especially within the housing market, with demands for smaller, affordable rental units. Different groups prioritize different amenities for these units: Many young millennials prefer housing near urban centers with shopping, restaurants, and public transportation. Seniors generally want housing that is accessible to family, health care, and other services. And many immigrants want locations close to schools, jobs, and public transportation. However, unless changes are made to Tennessee's infrastructure or housing stock, the current shortage of affordable housing units will increase, pushing up prices for low-cost units and making it harder for ALICE households to find and afford basic housing (Joint Center for Housing Studies of Harvard University, 2018; Tennessee Advisory Commission on Intergovernmental Relations, 2016; Vespa, 2017).

Changes in modes of transportation may offer Tennessee residents more options in the future. With the rise of new forms of transportation, from ride-sharing companies like Uber and Lyft to self-driving cars, there are more ways to be mobile than owning a car or using public transportation. With many millennials preferring not to own cars and many older adults no longer driving, these services will be desirable. While we have yet to see the definitive shift toward automation predicted to happen in the next decade, self-driving technology is already being used in the long-haul trucking industry, enabling more goods to be transferred to and from rural areas. Ride-sharing companies have already altered the urban transportation landscape, providing new options for passengers but also impinging on the traditional taxi and livery industries, where many drivers are ALICE workers (Formby, 2017; Schmidt, 2017).

The changing transportation dynamic could also impact social service and health care delivery. For example, Uber is currently working with Meals on Wheels to provide rides to volunteers delivering food. In the future, fleets of publicly owned self-driving cars could provide transportation for seniors and those with a disability to doctor's offices and social service providers at a fraction of the cost of building a new and easily accessible public transportation system (Arcadis, HR&A Advisors, and Sam Schwartz, 2017; Cakebread, 2017; United Way, 2018; Zimmer, 2016).

Housing could also be impacted by the evolution of self-driving cars. If they can offer lower-cost transportation and more productive commuting time, the proximity of housing to work and amenities might become less important, thereby increasing the range of locations for affordable housing. In addition, a reduced need for car ownership will change the demand for houses with garages, and for on-street parking (Jiao, Miró, & McGrath, 2017).

Elder Care

The aging population will increase demand for geriatric health services, including assisted-living and nursing facilities, and home health care. Seniors will face a number of challenges in getting the care they need, including not having enough savings and fewer available caregivers.

Numbers of available caregivers: In Tennessee, the caregiver support ratio — the number of potential caregivers aged 45 to 64 for each person aged 80 and older — was 7 to 1 in 2010 and is projected to fall to 5 to 1 by 2030, and then to 3 to 1 in 2050. Out of the 50 states, the Long-Term Services and Supports State Scorecard ranked Tennessee 49th in 2017 in its support for family caregivers and 47th overall in its long-term support and services for older adults on a scale that measures affordability, access, and quality of life (AARP Foundation, AARP Public Policy Institute, The Commonwealth Fund, and The Scan Foundation, 2017; AARP Public Policy Institute, 2015; Redfoot, Feinberg, & Houser, 2013; Reinhard, et al., 2017; Tennessee Commission on Aging and Disability, 2018).

With the increased demand for caregivers, there is a growing need for more paid direct care workers (home health aides, personal care aides, and nursing assistants), who are themselves likely to be ALICE. Home health aides, one of the fastest-growing jobs in Tennessee, are paid \$10.58 per hour and require reliable transportation, which can consume a significant portion of the worker's wage. These jobs do not require extensive training and are not well regulated, yet they involve substantial responsibility for the health of vulnerable clients. Together, these factors may lead to poor-quality caregiving and the risk of physical, mental, and financial abuse and neglect — an issue that is on the rise across the country. Awareness of elder abuse is growing in Tennessee, but specific statewide data is not publicly available (MetLife Mature Market Institute, 2011a; Plough Foundation, 2017; U.S. Bureau of Justice Statistics, 2015; U.S. Department of Justice, 2019).

Immigrants in the caregiving workforce: Immigrants make up a large share of employees at the nation's nursing homes, assisted-living facilities, and home-care agencies. A recent study found that one in four direct care workers is foreign-born, and that share is probably much higher among “gray market” workers — home care workers hired directly by families and often paid under the table (Espinoza, 2017).

The immigrant direct care workforce is economically and politically vulnerable. These workers are largely women who work mostly part-time or seasonal jobs with a median annual income of \$19,000.

This is despite the fact that immigrant direct care workers are more likely to have higher-education degrees than U.S.-born direct care workers. Fewer immigrant direct care workers are nursing assistants, who earn a higher income and more often have employer-sponsored health insurance. A large majority of immigrant direct care workers come from Central American, Caribbean, and Southeast Asian countries, all regions targeted by recent immigration restrictions. Losing foreign-born direct care workers at a time when the U.S. senior population is growing would both increase the cost and reduce the quality of care, adding pressure to families to provide their own care and increasing the burden on systems such as Adult Protective Services, which protect vulnerable adults (Espinoza, 2017).

“Losing foreign-born direct care workers at a time when the U.S. senior population is growing would both increase the cost and reduce the quality of care.”

Unpaid family caregivers: Family caregiving has significant value. The presence of an informal caregiver can improve well-being and recovery and defray medical care and institutionalization costs. Yet caregiving is also costly for families in several ways beyond the direct costs, including mental and physical strain on the caregiver, and lost income due to decreased hours or job loss, which also impact future earnings. Many family caregivers are ALICE workers, with almost half (47 percent) reporting household income of less than \$50,000 per year. A recent report by AARP found that family caregivers earning less than \$32,500 annually spent on average 44 percent of their income (\$5,114) on caregiving in 2016 (AARP Public Policy Institute, 2015; Dixon, 2017; MetLife Mature Market Institute, 2011b; Rainville, Skufca, & Mehegan, 2016; Ramchand, et al., 2014; Tanielian, et al., 2013).

INCREASING VULNERABILITY OF WORKERS

There are a few trends converging to destabilize markets and reshape the American, if not global, workforce: the ripple effects of natural and human-made disasters through a connected global economy, the shifting of risk from companies to workers and from high- to low-wage jobs, and the often-disruptive effects of technology on jobs and workplaces. Each of these trends is likely to become more prevalent going forward — and because ALICE families have the fewest resources to weather instability and risk, these changes will impact them disproportionately.

With the U.S. fully participating in the global economy, our economic reality is a complex, integrated system that both benefits from technological advances and can be derailed by disruptions in any part of the world. Technology has expanded international connections and increased the speed of these interactions, but that connectedness can function for better and for worse. When an earthquake and tsunami pummeled Japan in 2011, the global supply chain of semiconductor equipment and materials was disrupted. With Japan responsible for 20 percent of the global semiconductor market, the cost of the world's semiconductor products increased, including those made for Apple's iPad. And there is no global governing body to help moderate the effects of cycles of disaster, inflation, or industry bubbles (Amadeo, 2011; Morgenstern, 2011; Van Paasschen, 2017; World Economic Forum, 2017).

Exposure to Environmental Hazards

The impact of natural and human-made disasters is often felt more by ALICE workers and low-income communities. More affordable homes are often located in vulnerable areas. Droughts, floods, crop failures, violent weather, rising sea levels, and ocean acidification directly threaten the homes of ALICE families and the jobs where ALICE works. For example, ALICE families who live in flood-prone areas may suffer the financial cost of flood damage, and an ALICE worker suffers lost wages when crops fail and there is less work (NASA, 2018; Van Paasschen, 2017).

Tennessee has a long history of tornadoes, earthquakes, wildfires, and floods. With over 1,062 miles of major rivers and streams, more than 1,000 lakes comprising over 540,000 acres, and a series of Tennessee Valley Authority dams and locks, controlling drought and floods is the state's most common challenge. RealtyTrac's 2015 Natural Disaster Housing Risk Report ranked Tennessee near the top in three types of disasters — wild fires, tornadoes, and hurricanes — with Shelby County in the Very High Risk category. The largest impact, however, could come from an earthquake. In 2008, FEMA warned that there is potential for a serious earthquake causing “widespread and catastrophic” damage across the middle of the country, and particularly the Memphis, Tennessee, area (RealtyTrac, 2015; Tennessee Emergency Management Agency, 2018; Tennessee State Library and Archives, 2011).

“With environmental disasters almost a regular part of life in Tennessee, ALICE families are often the hardest hit.”

With environmental disasters almost a regular part of life in Tennessee, ALICE families are often the hardest hit. ALICE workers, especially those in maintainer jobs, are also critical to rebuilding communities after a disaster. When they can't work during these periods of recovery — because of relocation, injury, or caregiving responsibilities (e.g., due to closed schools or senior centers) — community resilience is negatively impacted overall, and ALICE households suffer lost wages.

A report by Oxfam America and the Hazards and Vulnerability Research Institute outlines the factors that contribute to lack of resilience to natural disasters (Oxfam America, 2009):

- **Economic standing:** This is the most important factor contributing to vulnerability to disaster. Households without their own resources — most importantly, ongoing income from a salaried job, as well as savings and insurance — are forced to rely on assistance. In addition, lower-income households can have difficulty getting to disaster assistance centers (due to transportation and child care issues) and may have a lack of knowledge of and comfort with governmental procedures (Fothergill & Peek, 2004).
- **Age extremes:** The young and the elderly are more dependent on care and less able to evacuate in times of disaster.
- **Rural and urban communities:** Extremes in population density — both sparse and very dense — compound risks.
- **Special needs populations:** Households with a member with special needs have a more difficult time preparing for, responding to, and recovering from disasters.
- **Housing quality:** Poor quality in housing construction makes homes vulnerable to damage.

Risks from environmental hazards, natural and human-made, are often shifted to workers and low-income communities. Lower-income workers are particularly likely to be exposed to hazards such as pollutants in factory work, chemicals and pesticides in farming and manufacturing, and work-related injuries in nursing and construction. Since these costs are often cumulative, risks intensify with the increasing volume. ALICE is more likely to live in areas with exposure to hazardous materials. The Tennessee Emergency Management Agency reports that the state is particularly vulnerable to man-made hazards including communicable diseases, levee failure, hazardous materials release, infrastructure incidences, and terrorism (NASA, 2018; Tennessee Emergency Management Agency, 2018; Van Paasschen, 2017; Watson, et al., 2014).

Future Jobs

Many are predicting the demise of ALICE workers' maintainer jobs due to automation. Recent research and media coverage often focus on innovations that automate jobs, such as self-checkout lines at the grocery store. Yet jobs that repair the physical infrastructure and care for the workforce are actually predicted to grow faster than all other types of occupations in the coming decades. And many innovations, like online customer service, have created new maintainer jobs rather than replacing them with automation (Frey & Osborne, 2013; Vinsel & Russell, 2016).

Tennessee's workforce faces a future dominated by low-paying jobs requiring few advanced educational credentials. From 2016 to 2026, two-thirds of the fastest-growing jobs in Tennessee will pay less than \$15 per hour. Only 22 percent will require a bachelor's degree and 16 percent will require some college or postsecondary non-degree award; 38 percent of new jobs will not require any formal educational credential at all and 24 percent will require only a high school diploma (Figure 50) (BLS, 2017—Occupational Employment Statistics; BLS, 2017—Occupational Outlook Handbook; Tennessee Department of Labor and Workforce Development, 2016).

Figure 50.
New Job Growth by Occupation, Tennessee, 2016 to 2026

Occupation	2016 Employment	Annual New Growth	2017 Hourly Wage	Education or Training	Likelihood of Being Replaced by Technology
Food Prep, Including Fast Food	74,890	1,315	\$8.93	None	92%
Registered Nurses	58,245	1,105	\$28.41	Bachelor's degree	1%
Customer Service Representatives	59,760	1,005	\$14.77	High school diploma	55%
Personal Care Aides	20,200	770	\$9.44	High school diploma	74%
General and Operations Managers	45,595	765	\$41.53	Bachelor's degree	16%
Laborers and Movers, Hand	97,525	760	\$13.00	None	85%
Helpers—Production Workers	21,030	740	\$11.93	None	66%
Janitors and Cleaners	42,030	680	\$10.75	None	66%
Nursing Aides	31,360	645	\$11.74	Postsecondary nondegree award	1%
Heavy and Tractor-Trailer Truck Drivers	63,985	505	\$19.06	Postsecondary non-degree award	79%
Accountants and Auditors	18,595	460	\$29.06	Bachelor's degree	94%
Stock Clerks and Order Fillers	53,870	440	\$11.55	High school diploma	64%
Medical Assistants	14,465	440	\$14.59	Postsecondary non-degree award	30%
Licensed Practical and Vocational Nurses	23,900	425	\$18.30	Postsecondary non-degree award	6%
Retail Salespersons	95,350	410	\$10.62	None	92%
Waiters and Waitresses	51,330	405	\$8.74	None	94%
Security Guards	23,780	400	\$11.68	High school diploma	84%
Financial Managers	14,490	400	\$46.18	Bachelor's degree	7%
Maintenance and Repair Workers	31,310	390	\$17.53	High school diploma	64%
Construction Laborers	23,940	370	\$14.15	None	88%

Sources: BLS, 2017—Occupational Employment Statistics; BLS, 2017—Occupational Outlook Handbook; Frey & Osborne, 2013; Tennessee Department of Labor and Workforce Development, 2016

Many of these jobs are also at the greatest risk of being replaced by technology, though estimates vary. Oxford economists Frey and Osborne estimate that over the next two decades in Tennessee, 70 percent of jobs in the top-20 fastest-growing occupations could be replaced by technology. A recent Brookings report estimates that 47 percent of all jobs in Tennessee are at risk of automation, the 12th highest percentage in the country. In addition to automating existing jobs, technology is creating new on-demand jobs and services, with the most attention going to gig economy jobs such as TaskRabbit work and Uber and Lyft driving (Frey & Osborne, 2013; Muro, Maxim, & Whiton, 2019).

Predicting new occupations: There is a wide array of new jobs predicted to arise in the next 20 to 30 years, including augmented reality architects, alternative currency bankers, waste data managers, 3-D printing engineers, privacy managers, wind-turbine repair techs, nano-medics, drone dispatchers, robotic earthworm drivers, body part and limb makers, memory augmentation therapists, mass energy storage developers, and self-driving car mechanics (T. Frey, 2011; Hagan, 2017; Mejia, 2017; World Economic Forum, 2016).

While these jobs seem a long way from today's mechanics and personal-care providers, most are still maintainer jobs — largely filled by ALICE workers who care for the infrastructure and the workforce, in occupations that ensure the economy runs smoothly. In other words, our physical infrastructure may change, but it will still need maintenance, and the maintainer workforce will still need to be educated and cared for (Vinsel & Russell, 2016).

The new jobs, however, will not necessarily be filled by the same workers who held the jobs that these new titles replace. For example, a cashier does not necessarily have the skills to repair digital checkout kiosks. Jobs that remain, especially those that require lower levels of education, will be service jobs that cannot be automated — such as health aides, janitors, sales representatives, and movers — and will continue to be the lowest-paid. Yet even these jobs will increasingly require digital skills (Brynjolfsson & McAfee, 2014; Frey & Osborne, 2013).

“The ability to work with technology will be increasingly important for jobs at all levels, from retail assistants to more senior positions.”

Ability to work with technology: In the face of rapidly rising computing power, an ability to work with data and make data-based decisions will become an increasingly vital skill even within maintainer jobs, so ALICE workers will need new skill sets. The ability to work with technology will be increasingly important for jobs at all levels, from retail assistants to more senior positions. With the increasing amount of digital information being generated and stored, there will be more value placed on utilizing data to improve business productivity.

With increased mechanization, many jobs will require working alongside machines as well as building and repairing them. In Tennessee, it is common to find robots working alongside people in large automotive plants. And in the e-commerce sector, FedEx, UPS, and Amazon are making big investments in automation. The McKinsey Global Institute estimates that in 60 percent of all occupations, an average of 30 percent of work activities are automatable (Black, 2019; Evanoff, 2018; Manyika, 2017; Sichko, 2017). For example, at Ford's Chicago assembly plant, operators used to spend 70 percent of their time scanning and 30 percent repairing defects. Now they spend 10 percent of their time scanning and 90 percent of their time finessing the final assembly of a vehicle (Hagan, 2017; Pete, 2013).

In addition, the pace of these changes may have to be faster than anticipated. By one estimate, 50 percent of subject knowledge acquired during the first year of a four-year technical degree in 2016 will be outdated by the time students graduate (Organisation for Economic Co-operation and Development, 2016; World Economic Forum, 2016).

There may be some safety benefits to ALICE workers with advances in technology, which can reduce the risk of injury for workers such as warehouse packers. For the public, increasing quality control through automation can improve safety, such as in pharmaceutical dispensing. The regularity of these processes reduces human error and will continue to improve public safety through real-time monitoring and reaction in occupations such as long-distance driving and emergency response (Bond, 2017; McKinsey Global Institute, 2017).

More consultants, more income variation: Initially, the gig economy was seen as a way for many ALICE households to fill short-term gaps in standard employment, with work that might be more lucrative than jobs in the traditional employment market. However, the size of the contingent workforce has increased to up to one-third of the overall workforce, with estimates that it could reach 40 to 50 percent by 2020. With more and more workers solely reliant on contract work, the number of people experiencing gaps in income and going without benefits is also rising, and this trend is expected to increase (Abraham, et al., 2016; Eden & Gaggl, 2015; Edison Research, 2018; Freelancers Union & Upwork, 2017; Intuit, 2017; Katz & Krueger, 2016; Manyika, et al., 2016; Smith, 2016; U.S. Government Accountability Office, 2015).

Disruptive Technologies and Job Turnover

The cost of disruption is often borne disproportionately by ALICE workers. For example, when a business invests in a technological innovation, it increases productivity, eliminates some jobs, and creates new ones. The business increases profits and the economy benefits from greater productivity. The employee with the new job benefits only if wages are high enough to cover the cost of training to gain the skills needed for the job and the transaction costs of getting a new job (job search, relocation, new clothes, etc.). The employee in the old job, who may have been excellent in that role, may not have the skills for the new job and/or may be unable to relocate and therefore becomes unemployed, imposing huge and immediate costs on his or her family.

One of the clearest examples of the cost of job turnover comes from the North American Free Trade Agreement (NAFTA). Included in the agreement were funds to help workers whose manufacturing jobs move abroad. In 2014, this involved over 62,000 workers, and the cost of their job training, job search and relocation allowances, income support, and assistance with health care premium costs was just above \$300 million, or more than \$4,800 per worker. Unemployed workers who aren't covered by NAFTA aren't offered such aid and must pay these costs themselves, but ALICE workers can't afford them (U.S. Department of Labor, 2014).

Employee turnover is also costly for businesses. From a human resources perspective, experts estimate that turnover costs account for 20 to 30 percent of the annual salary of workers making less than \$50,000, a cost that includes recruiting, interviewing, hiring, orientation and training, lost productivity, potential customer dissatisfaction, reduced or lost business, administrative costs, and lost expertise (Bersin, 2013; Bolden-Barrett, 2017; Boushey & Glynn, 2012; Merhar, 2016).

Finally, while new technologies ostensibly make everyday life easier, there are also costs for consumers, including the time it takes to learn about a new product or process, the actual cost of the item, cancellation fees, and psychological effort and time to implement and incorporate it into their lives. ALICE families especially do not have the time or funds to adapt, and the disruption can add to the ongoing stress of insufficient income (Klemperer, 1987; Zhang, Chen, Zhao, & Yao, 2014).

GROWING INEQUALITY OF HEALTH

The third trend that will affect ALICE households throughout Tennessee is an increasing level of inequality in health. The cost burden of health care is increasing for all but the healthiest Tennessee residents. That cost burden is also increasing for government and businesses — a trend that is not sustainable, and that will most likely result in less access to quality health care for ALICE families, more costly health emergencies, and poorer health overall.

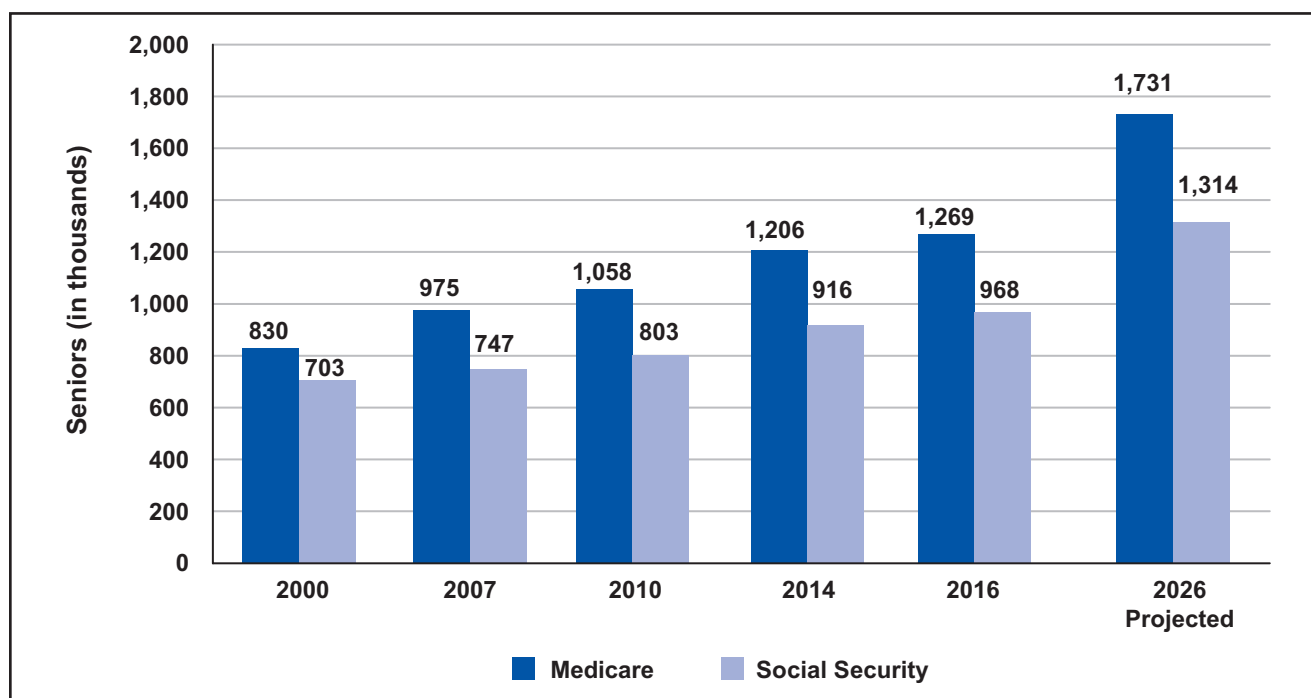
Cost of and Access to Health Insurance

The dwindling power of Medicare and Medicaid: Tennessee Medicaid, TennCare, primarily serves low-income children, pregnant women, parents or caregiver relatives, seniors, and individuals with disabilities. Tennessee did not expand Medicaid, meaning that non-disabled adults without children with income below the FPL are not covered in Tennessee (Norris, 2019; Tennessee Division of TennCare, 2019). With more people needing coverage and a falling ratio of workers to both Medicaid recipients and seniors, there will be growing demand for care and shrinking sources of revenue.

While many seniors are active and healthy, as they live longer, they require more health care than their younger counterparts. The prevalence of chronic conditions such as cancer, dementia, and diabetes increases with age, and older bodies are more prone to injury. As a result, health care costs for seniors are higher than for other age groups. For example, nationally in 2010, health care spending amounted to \$18,424 per person for people aged 65 and older, tripling the \$6,125 that was spent on working-age individuals. And that spending gap only widens as seniors reach 80 and 90 years old (Leatherby, 2016; Nardi, French, Jones, & McCauley, 2015; Neuman, Cubanski, Huang, & Damico, 2015).

An aging population and increasing health care costs will impact the effectiveness of Medicare and the demands on health care providers, beneficiaries, and taxpayers. As the Tennessee population has aged, enrollment in Medicare and Social Security has increased steadily and is projected to increase even more. Medicare enrollment increased from 829,880 Tennessee residents in 2000 to 1.3 million in 2016 and is projected to rise to 1.7 million in 2026 (a 36 percent increase from 2016 to 2026). The number of Tennessee residents collecting Social Security increased from 703,000 in 2000 to 967,579 in 2016 and is projected to reach 1.3 million in 2026 (a 36 percent increase from 2016 to 2026). With more people covered and a falling ratio of workers to both Medicaid recipients and seniors, there will be growing demand for care and shrinking sources of revenue (Figure 51).

Figure 51.
Enrollment in Medicare and Social Security, Tennessee, 2000 to 2026



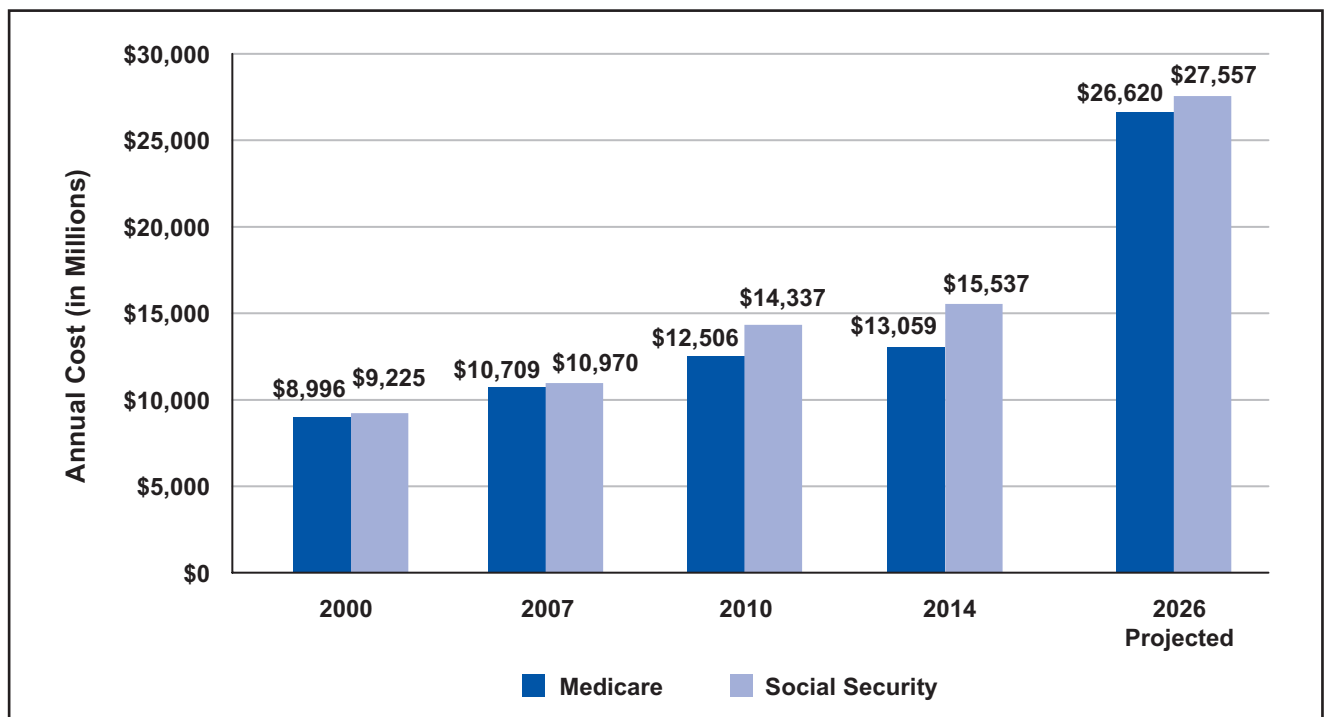
Sources: Centers for Medicare & Medicaid Services, 2000, 2007, 2010, 2014, 2017; Centers for Medicare & Medicaid Services, 2018—Medicare Enrollment Dashboard; Cubanski & Neuman, 2018; Social Security Administration, 2000, 2007, 2010, 2014, 2016

Medicare provides health care coverage primarily to adults ages 65 and over, but also to younger adults with permanent disabilities. It has different sources of funding for different services, such as hospital care, physician care, and prescription drugs. Medicaid, which provides health coverage for low-income Americans, is often used by seniors to cover the long-term cost of nursing home facilities (Centers for Medicare & Medicaid Services, 2017—Annual Report).

Medicare spending is growing at a faster rate than the growth in the senior population, Social Security, or the overall economy. In Tennessee, spending on both Medicare and Social Security is growing faster than their rates of enrollment and outpaces the growth of the state economy. From 2000 to 2014, Medicare spending increased by 45 percent, while Social Security increased by 68 percent. They are projected to continue to grow, with Medicare doubling by 2026 and Social Security increasing by 77 percent from 2014 (Figure 52).

Nationally, Medicare expenditures are expected to grow at an average rate of 7.1 percent from 2016 to 2025, higher than the 5.4 percent rate of economic growth overall. As a percentage of the GDP, the cost of Medicare will increase from 3.6 percent in 2016 to 5.9 percent by 2091. Medicaid spending, which slowed in its growth from 2016 to 2017, is expected to quicken and to average nearly 6 percent each year through 2025 — a direct result of the increasing elderly and disabled U.S. population (Centers for Medicare & Medicaid Services, 2017—Annual Report; Cubanski & Neuman, 2018; Van de Water, 2017).

Figure 52.
Cost of Medicare and Social Security, Tennessee, 2000 to 2026



Sources: Centers for Medicare & Medicaid Services, 2000, 2007, 2010, 2014, 2017; Social Security Administration, 2000, 2007, 2010, 2014, 2016

Seniors will bear additional costs because Medicare does not cover all of their health care. Excluded are long-term services and supports as well as dental care, premiums, deductibles, and cost-sharing for Medicare-covered services. These costs are increasing to the point at which out-of-pocket health care costs are likely to use up half of a Medicare beneficiary's average Social Security income by 2030 (Cubanski, Neuman, Damico, & Smith, 2018).

Decreased availability of employer-sponsored health insurance: ALICE households also face the challenge of declining rates of employer-sponsored health insurance. Insurance through large employers has remained steady or even grown in some places, but some small employers have dropped insurance benefits. Nationally, while 96 percent of employers with 50+ employees offered health benefits in 2016 (up from 95 percent in 2014), the share of businesses with fewer than 50 employees offering coverage dropped from 32 percent in 2014 to 29 percent in 2016. These struggles are exacerbated by the increasing proportion of workers who rely on contingent work, which typically offers no insurance coverage (Noguchi, 2017). In addition, the repeal of the Affordable Care Act's individual mandate in the 2017 tax bill means that younger, healthier people will be more likely to forgo health insurance going forward, making insurance more expensive for those remaining in the market (Pear, 2017; Stearns, 2017).

THE WEALTH-HEALTH GAP

Socioeconomic status has long been a powerful determinant of health. The National Academies of Sciences, Engineering, and Medicine project that of people born in 1960, those in the lowest-income quintile have a shorter life expectancy than those in the highest-income quintile: 13 years shorter for men (76 years compared to 89 years) and 14 years shorter for women (78 years compared to 92 years) (National Center for Biotechnology Information, 2015).

The wealth-health divide is exacerbated by differences, depending on income, in the safety of both living and working environments. Those with the fewest resources live and often work in areas with unhealthy conditions, such as contaminated water and polluted air, because those areas are less expensive. The impact of pollution, toxic exposure, and disease compounds over time, and without resources, these families cannot afford to move to safer areas, mitigate these hazards, or avoid risky workplaces (Harari, 2014; Komlos & Kelly, 2016; Regalado, 2015).

Race and ethnicity are also tied to the level of adverse environmental exposure people face in their neighborhoods and at their jobs. Several large studies have revealed an association between low socioeconomic status and greater harm from air pollution. A comprehensive review from Harvard University researchers revealed that compared to the rest of the population, Black, Asian, Hispanic, and Medicaid-eligible individuals had a higher likelihood of death from any pollution-related cause, with Black people almost three times as likely to die from exposure to air pollutants than other groups (Di, et al., 2017). Moreover, a 30-year analysis of 319 commercial hazardous waste treatment and storage sites in the U.S. found a consistent pattern of placing hazardous waste facilities in low-income and primarily Black and Hispanic neighborhoods (Mohai & Saha, 2015).

These differences are projected to grow wider as the compound impact of unsafe living and working environments produces even poorer health outcomes for those with the fewest resources, while technical advances in medical care offer even better health outcomes to those with the most (Chetty, Stepner, Abraham, et al., 2016; Komlos & Kelly, 2016; National Academies of Sciences, Engineering, and Medicine, 2015).

The health care gap could increase in two ways. First, precision medicine — the ability to personalize medical treatments, products, and intervention — is increasingly effective, but costly and therefore out of reach for many patients. This is especially the case when it comes to treatments for cancer and rare diseases. Second, biotechnology and genetic engineering have made it possible to go beyond treatment of a specific injury or disease and upgrade preventative health care. Researchers are, for example, experimenting with procedures that could enable families to correct genes that cause illnesses like cystic fibrosis, or add genes that protect against infection or dementia, and pass those improvements on to future generations. Yet these types of innovations will be extremely expensive if and when they reach the marketplace (Harari, 2014; Komlos & Kelly, 2016; Regalado, 2015).

THE DENTAL HEALTH DIVIDE

Nowhere are wealth-health disparities starker than in the divide in dental care. Higher-income Americans have dental insurance (most often separate from health insurance) and access to care that provides resistance to tooth decay and breakage, and promotes jaw comfort, clear speech, and easier maintenance; all of which contribute to better overall health. The wealthiest families spend thousands of dollars on supplemental dental care to achieve whiter, straighter, stronger smiles, which leads to more social and job opportunities.

Nationally, there are gaps in access to dental care by income and age. The breakdown of the percentage of those who had visited a dentist in the past 12 months is as follows:

Children

- 38 percent of those below FPL
- 56 percent of those above 400 percent of the FPL

19-64 years old

- 19 percent of those below FPL
- 49 percent of those above 400 percent of the FPL

Seniors

- 22 percent of those below FPL
- 60 percent of those above 400 percent of the FPL

Those with the lowest incomes have the least dental care and are the most likely to have poor dental health and appearance. These families often forgo preventative care, because they cannot afford private insurance and Medicaid's dental coverage varies from state to state. As a result, they are far more likely to suffer from tooth decay and gum infection, which then increases the risk of cancer and cardiovascular diseases and can affect speech, nutrition, sleeping, learning, playing, and overall quality of life. In addition, crooked or yellow teeth can stigmatize people in social settings and reduce job prospects, as they are associated with low educational achievement and social mobility. According to a 2015 American Dental Association survey, 29 percent of low-income respondents reported that the appearance of their mouth and teeth affected their ability to interview for a job.

Tennessee's state Medicaid program, known as TennCare Medicaid, primarily covers dental care for low-income children, pregnant women, parents or caregiver relatives, seniors, and individuals with disabilities based on income eligibility. Dental services that are covered are those categorized as medically necessary, such as preventative, diagnostic, and treatment services, through DentaQuest, a private dental benefits manager (DBM) subcontracted by TennCare. Annual dental check-ups are covered, as well as non-cosmetic orthodontic services, such as braces, after approval by DentaQuest.

The dental health gap is the most drastic in seniors. For adults 65 years and older in Tennessee and across the country, Medicare does not cover routine oral health and dental care. Those with dental needs that increase with age must purchase an insurance plan or pay out of pocket. Many seniors with severe needs, such as root canals and crowns, who are unable to afford additional expenses may have their teeth pulled. As a result, nearly 1 in 5 Americans older than 65 do not have a single real tooth.

Even low-income Tennesseans with dental coverage have difficulty accessing dental care because of the limited number of dentists in the state and a shortage of those who accept the Medicaid and CHIP. As of 2018, Tennessee had 151 Dental Care Health Professional Shortage Areas (HPSAs). Only 29 percent of Tennessee's dental health needs are met with the current number of dentists. In 2015, 30 percent of Tennessee dentists accepted payment from Medicaid or CHIP, lower than the U.S. average of 38 percent.

In addition, there are many ALICE households that can still not afford the dental care they need. Nationally, the Health Reform Monitoring Survey of the Urban Institute and the Robert Wood Johnson Foundation found that in 2015, 24 percent of adults with income above 138 percent but below 400 percent of the FPL still had an unmet need for dental care due to unaffordability.

Finally, there are also environmental impacts that need to be considered. Tennessee is doing well compared to the national average when it comes to the percentage of the population served by fluoridated water (which has been shown to improve dental health). In 2014, 88 percent of Tennessee residents had access to fluoridated water, higher than the national average of 75 percent.

Sources: American Dental Association, n.d.—Dentist Participation; American Dental Association, n.d.—Oral Health; American Dental Association, 2016; DentaQuest, 2019; Dye, Thornton-Evans, Xianfen, & Iafolla, 2015; Kaiser Family Foundation, 2018; Kaiser Family Foundation, 2019—Where Are States; National KIDS COUNT, 2019; Shartzler & Kenney, 2015; TennCare, 2018; Tennessee Department of Finance and Administration, 2016; Tennessee Division of TennCare, n.d., 2018, 2019; U.S. Department of Health and Human Services, 2019—Oral Health

NEXT STEPS

There is a basic belief in America that if you work hard, you can support your family. Yet the data presented in this Report shows that for over 1 million households in Tennessee, this is not the case: Working families are still struggling due to the mismatch between the basic cost of living and the wages of many jobs across the state, exacerbated by systemic inequities in opportunity and wealth. By making this clear, the ALICE data challenges persistent assumptions and stereotypes about people who can't afford to pay their bills or are forced to use public or social services — that they are primarily people of color, live only in cities, are unemployed, or are struggling as the result of some moral failing. The data on ALICE households shows that hardship in Tennessee exists across boundaries of race/ethnicity, age, and geography.

With projected demographic changes and persistent barriers to stability, many ALICE and poverty-level families will continue to face hardship. In particular:

- At least 44 percent of Tennessee households do not have money set aside for an unexpected emergency.
- The majority of adults under 25 across the country are unable to afford to live on their own, and for both economic and cultural reasons are delaying getting married, having children, or moving for new job opportunities.
- More seniors are aging without saving for retirement.
- There are fewer workers to meet the growing demand for senior caregiving.
- Income and wealth disparities persist by race/ethnicity, gender, and sexual orientation.

OVERCOMING THE OBSTACLES: IDEAS BEING DEBATED, CONSIDERED, AND PILOTED

Economic change will continue, and these changes will both provide opportunity and inflict costs. Yet the distribution of opportunity and cost is not usually even or equitable. To have a positive impact on ALICE families, communities need to consider a range of system changes that would help ALICE to weather downturns in the short term and become more financially secure in the long term. Policymakers, academics, and advocates have proposed a range of broad ideas that could be adapted on a local, statewide, or national front. The following are four of the biggest obstacles to financial stability for ALICE families, and a sample of ideas and pilot programs being debated and considered across the country.

1

Widening Skills Gap

Going forward, most jobs, and especially higher-paying jobs, will require digital skills. Since 2004, the share of occupations that require high levels of digital skills has more than doubled, from 10 to 22 percent (Liu, 2017). For ALICE to maintain employment over time, workers will need accessible, high-quality technology training throughout their lifetime. Public K–12 schools can incorporate digital skills into all aspects of the curriculum for students, higher education can offer more focused programs, and companies can invest in training for their employees.

Lack of Stable and Viable Employment

For ALICE, finding well-paying jobs with security and financial stability is becoming harder as low-wage and gig-economy jobs continue to dominate the landscape. Fluctuating income — through unpredictable schedules and on-demand work — is one of the biggest problems ALICE workers face. At the same time, employers are also trying to navigate a changing business environment, remain competitive, and offer comprehensive benefit packages. The following are several possible solutions that address these challenges that ALICE workers and businesses face:

- **Fewer barriers to employment:** ALICE's barriers can include lack of job skills, family care responsibilities, physical and mental health problems (including substance use disorders), limited English proficiency, and lack of reliable transportation. There are several evidence-based solutions such as work programs that provide direct connections to employment (including apprenticeships); an individualized approach (to address a wide range of challenges, from soft skills to housing); and the development of career pathways over time through work and education. Successful outcomes require employers, government agencies, and nonprofits to weave together larger webs of connected programs and resources (Tessler, 2013; U.S. Department of Health and Human Services, 2012—Career Pathways; Van Horn, Edwards, & Greene, n.d.; Yellen, 2017).
- **Portable benefits:** Benefits such as health insurance, retirement plans like a 401(k), or paid leave, could move with the worker from job to job, and across multiple jobs at once. These can be delivered in multiple forms — through programs that are not connected to work or the employer at all, or through programs that involve employers but establish benefits that can be provided across employers. Some examples of this approach already exist in the construction industry and business associations: Legislators in New York and Washington are considering benefit management systems that would allow employers to pay into workers' benefit funds (Foster, Nelson, & Reder, 2016; Guillot, 2017; Maxim & Muro, 2018; Quinton, 2017; Small Business Majority, 2017a; Strom & Schmitt, 2016).
- **Small business support:** Because of the less stable nature of many small businesses, their employees would benefit from measures that helped them weather fluctuations in their schedule and long-term employment, which include establishing portable benefits as mentioned earlier. In addition, small business entrepreneurs and their employees need more support to help them overcome common barriers, including limited resources to invest in skill development; student debt, which limits an owner's ability to invest in their businesses; and lack of access to affordable child care, which increases absenteeism and decreases their productivity (Beesley, 2016; Small Business Majority, 2016, 2017b).
- **Employee participation:** Gains in productivity have traditionally been shared across the economy with workers, management, and even communities. In the last few decades, there has been a shift away from this shared prosperity. Compensation for most workers, especially in maintainer jobs, has not increased with the cost of living, even in cases where there have been significant gains in productivity. Instead of sharing gains with employees, companies have chosen to spend more on capital, and more recently on profits and dividends to increase stock prices. Since most corporate leaders' compensation is directly linked to stock prices, they have benefited hugely from this practice. The compensation of top U.S. executives has doubled or tripled since the first half of the 1990s, while workers' wages have remained flat. Investment in capital can have long-term benefits, but the shift in strategy to focus on short-term stock prices reduces prosperity — for wages and stock prices alike — in the long term (Economic Policy Institute, 2018—The Productivity Pay-Gap; Lazonick, 2014; Sprague & Giandrea, 2017).

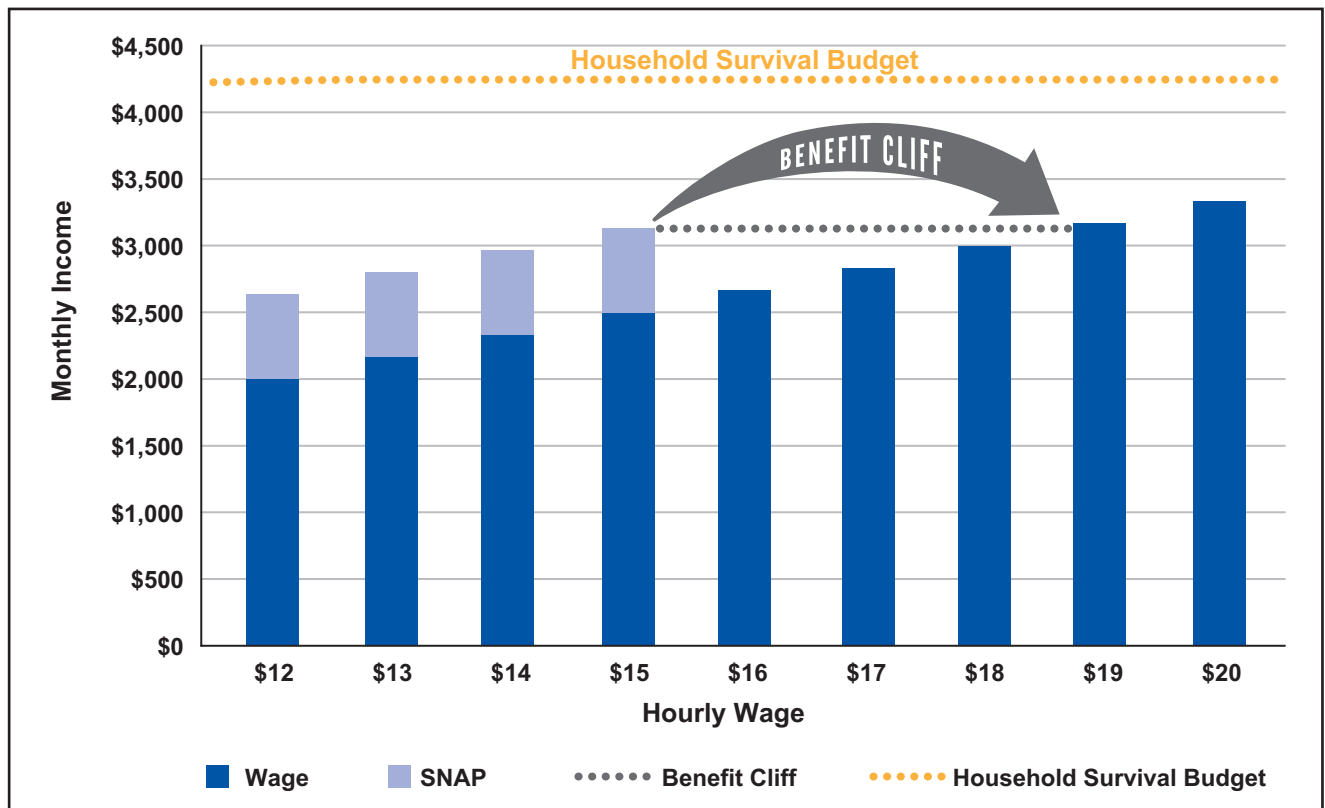
- **Lifetime employment:** Considering examples from other countries can expand thinking on this topic. For example, guaranteed employment is an innovative policy that has been utilized in Germany and Japan. Companies guarantee employment for large numbers of workers. To avoid layoffs, the practice allows for transfers and defined reductions in hours and wages in lean times (Noorderhaven, Koen, & Sorge, 2015).

3

Gap Between Wages and Benefits

As more companies and states consider raising wages, there can be an unintended consequence on benefits. When wages of workers who receive public assistance increase above the eligibility threshold, they are no longer eligible for the benefit, resulting in a net loss. Figure 53 provides an example of a family of four's eligibility for the Supplemental Nutrition Assistance Program (SNAP, formerly food stamps) in Tennessee. To be eligible, adults must earn less than 130 percent of the FPL, or \$2,633 a month in 2017, which equates to a full-time hourly wage of \$15.80 (Tennessee Department of Human Services, 2019—Eligibility Information). The eligible adult would then receive about \$632 per month in SNAP benefits. These benefits, combined with a full-time job earning \$15 an hour, would total \$3,132 per month. If the family's wages increased to \$16 per hour, the family would no longer be eligible for SNAP benefits, essentially lowering their total monthly income to \$2,667, which is \$465 less than they'd receive if earning \$15 per hour. Assistance programs where the benefit cliff is most pronounced are SNAP and Medicaid, but the cliff also affects CHIP, TANF, WIC, and SSI, as well as unemployment and housing, heat, and child care subsidies. It is important to note that even with these benefits, families making low wages are still well below the monthly Household Survival Budget of \$4,233 (Center on Budget and Policy Priorities, 2018—A Quick Guide to SNAP; Perez, 2018; Tennessee Department of Human Services, 2019—Eligibility Information).

Figure 53.
Benefit Cliff for SNAP, Family of Four, Tennessee, 2017



Sources: ALICE Household Survival Budget; American Community Survey, 2017

States across the country are examining ways to address these issues:

- **Increase benefits:** Current benefits bring some families above the poverty level but are not sufficient to bring a family to financial stability. For example, Head Start early education for 3- to 5-year-olds reaches less than half of eligible preschool-age children, and Early Head Start reaches less than 5 percent of eligible infants and toddlers. Efforts to increase benefits range from adjusting income eligibility limits or provider reimbursement rates to improving access through more accessible and efficient enrollment and renewal administration (Isaacs, Katz, & Kassabian, 2016; National Women’s Law Center, 2015; Wilke, 2018).
- **Sliding scale as wages rise:** Several states are considering altering public assistance eligibility requirements to allow families to stay on longer while gradually reducing their assistance as wages rise to incentivize advancing employment opportunities (Albelda & Carr, 2017; Carey, 2018; Crandall, 2017—An Overview of Cliff Effects; Vermont Legislative Research Service, 2017; Wright, Carey, Bingulac, & Crandall, 2018).
- **Making affordable quality child care available:** Access to child care is important for families with children, enabling children to be ready for kindergarten and parents to work. To make more quality child care available, a range of options is being tried across the country from universal pre-K to adjusting child care assistance eligibility cut-offs to asset building. To address the benefits cliff in child care assistance, some states have implemented a sliding scale payment program. In Tennessee, families pay more as their income increases to a limit of 85 percent of the Area Median Income, or \$4,934 for a family of four. For example, a family of four earning less than \$1,000 a week pays less than \$15 a day for one child in care, while a family earning \$3,000 a week pays about \$35 (Crandall, 2017—A Whole Family Approach; Tennessee Department of Human Services, 2018—Child Care Assistance; Tennessee Department of Human Services, 2018—Child Care Certificate Program; U.S. Department of Health and Human Services, 2019—FY 2016; Vermont Legislative Research Service, 2017).

In addition, some states are packaging child care with other supports that help parents work and increase their well-being and stability. Some programs include uniform paid family leave, some focus on streamlining and integrating eligibility systems with technology, and others have applied innovative business processes to improve administrative efficiency (Gould, Austin, & Whitebook, 2017; Hahn, Rohacek, & Isaacs, 2018).

4

Lack of Savings and Assets

Without enough money for their current expenses, ALICE families find it nearly impossible to save for emergencies or invest in future goals like education or retirement. A lack of savings is one of the biggest problems facing low-income families. Expansion in programs and infrastructure are needed to help them weather emergencies and periods of low income. Here are two approaches for policymakers to consider:

Access to credit: For those with low incomes, saving for emergencies is nearly impossible. Access to credit at low rates has proven to be effective to help ALICE workers and employers — especially small businesses — weather an emergency. However, ALICE families still need to have enough income to repay the loan, or they risk greater long-term financial crises (Collins & Gjertson, 2013; Mayer & Jencks, 1989).

Private and public financial instruments: These range from new types of financial products to a guaranteed income or allowance. Employers could make wages more immediately available (rather than wait two weeks until payday), and banks could do the same for deposited funds. Financial institutions and the government could offer insurance or credit, as well as tax credits and savings incentives, to protect workers against dips in income. Going even further, for centuries economists, theologians, and policy makers have proposed a minimum guaranteed income for all families, though proposals run the gamut of approaches. The idea has received more bipartisan attention recently as more workers face periods of low-wages or unemployment (C. Murray, 2016; Schiller, 2017; Shaefer & Edin, 2013; Van Parijs & Vanderborght, 2017).

5

Systemic Bias

Bias against marginalized groups persists in the workplace, the housing market, education, health care, and the law, despite positive shifts in public opinion and attitudes regarding differences in race and ethnicity, age, sex, gender identity, sexual orientation, and disability.

The most prevalent gaps in education, income, and wealth are those that exist along racial lines, and they reflect systemic policies and institutional practices that are inequitable across people of different races/ethnicities. Discriminatory practices have been embedded in our social structures and legal system, especially in terms of housing policies, immigration practices, voting rights, school funding, and health care programs. To make a difference for ALICE households, changes need to be made within institutions that impede equity in the legal system, health care, housing, education, and jobs (Agency for Healthcare Research and Quality, 2015; Cramer, 2012; Goldrick-Rab, Kelchen, & Houle, 2014; Shapiro, Meschede, & Osoro, 2013; The Sentencing Project, 2018).

For solutions to be effective, they must be as comprehensive and as interconnected as the problems are. Siloed solutions do not work. Because conditions vary across counties and states, the solutions to the challenges that ALICE and poverty-level households face will vary as well. Stakeholders — family, friends, nonprofits, businesses, policymakers, academics, and the government — will need to work together with innovation and vision and be willing to change the structure of the local and national economy and even the fabric of their communities.

Every Tennessean should have the opportunity to thrive. Ultimately, if ALICE households can become financially stable, Tennessee's economy will be stronger and its communities more vibrant — improving life not just for ALICE, but for everyone. The data detailed in this Report can be a jumping-off point to create new and better ideas that can help working families move toward this goal. There is no one solution: A range of strategies will be needed to ensure that working people and their families aren't left behind.

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