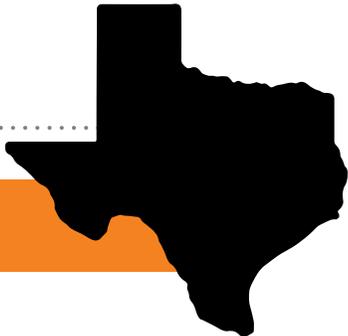


# ALICE IN TEXAS: A FINANCIAL HARDSHIP STUDY

LIVE UNITED



2020 TEXAS REPORT



United Way  
of Greater Houston



United Ways of Texas

# ALICE IN THE TIME OF COVID-19



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

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

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

# THE UNITED WAYS OF TEXAS

Aransas County United Way  
Brown County United Way  
Cooke County United Way  
Dallam-Hartley Counties United Way, Inc.  
Erath County United Way  
Forney Area United Way  
Graham Area United Way  
Greater Ennis United Way  
Greater Longview United Way, Inc.  
Guadalupe County United Way  
Harrison County United Way  
Henderson County United Way  
Hopkins County United Way  
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Kerr County United Way  
Lubbock Area United Way, Inc.  
Matagorda County United Way  
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Nolan County United Way  
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Ochiltree United Way  
Pampa United Way, Inc.  
Plainview Area United Way  
Rusk County United Way  
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Terrell/Kaufman United Way  
The United Way of Central Texas, Inc.  
The United Way of Midland, Inc.  
United Way for Greater Austin  
United Way Galveston County Mainland, Inc.  
United Way of Abilene  
United Way of Amarillo & Canyon  
United Way of Andrews County  
United Way of Angelina County  
United Way of Beaumont and  
North Jefferson County



# THE UNITED WAYS OF TEXAS (CONTINUED)

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United Way of Brazoria County

United Way of Calhoun County

United Way of Comal County

United Way of Deaf Smith County, Inc.

United Way of Denton County, Inc.

United Way of East/Central Texas

United Way of El Paso County

United Way of Franklin County, Texas

United Way of Galveston, Inc.

United Way of Grayson County, Inc.

United Way of Greater Baytown Area & Chambers County

United Way of Greater Houston

United Way of Greater Texarkana, Inc.

United Way of Hays County

United Way of Hood County

United Way of Hunt County, Inc.

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United Way of Smith County

United Way of South Texas

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United Way of Wise County

United Ways of Texas

Victoria County United Way

**United Ways of Texas and United Way of Greater Houston are proud to support this Report.** Learn more about ALICE in Texas: [UnitedForALICETX.org](https://www.unitedforalicetx.org)

## Acknowledgments

United Way of Texas thanks our sponsors, partners, and community stakeholders throughout the state for their support and commitment to this 2020 ALICE Report for Texas. It is our hope that this Report will help raise awareness of the 44% of households in the state who live in poverty or who are **ALICE** – **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed. Our goal is to inform and inspire policy and action to improve the lives of ALICE families.

To learn more about how you can get involved in advocating and creating change for ALICE in Texas, contact: **Roxanne Jones:** [roxanne.jones@uwtexas.org](mailto:roxanne.jones@uwtexas.org)

To access the ALICE data and resources for Texas, go to [UnitedForALICE.org/Texas](https://www.unitedforalice.org/Texas)



# ALICE RESEARCH

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

Learn more about the ALICE Research Team on our website at [UnitedForALICE.org/ALICE-Team](https://UnitedForALICE.org/ALICE-Team)

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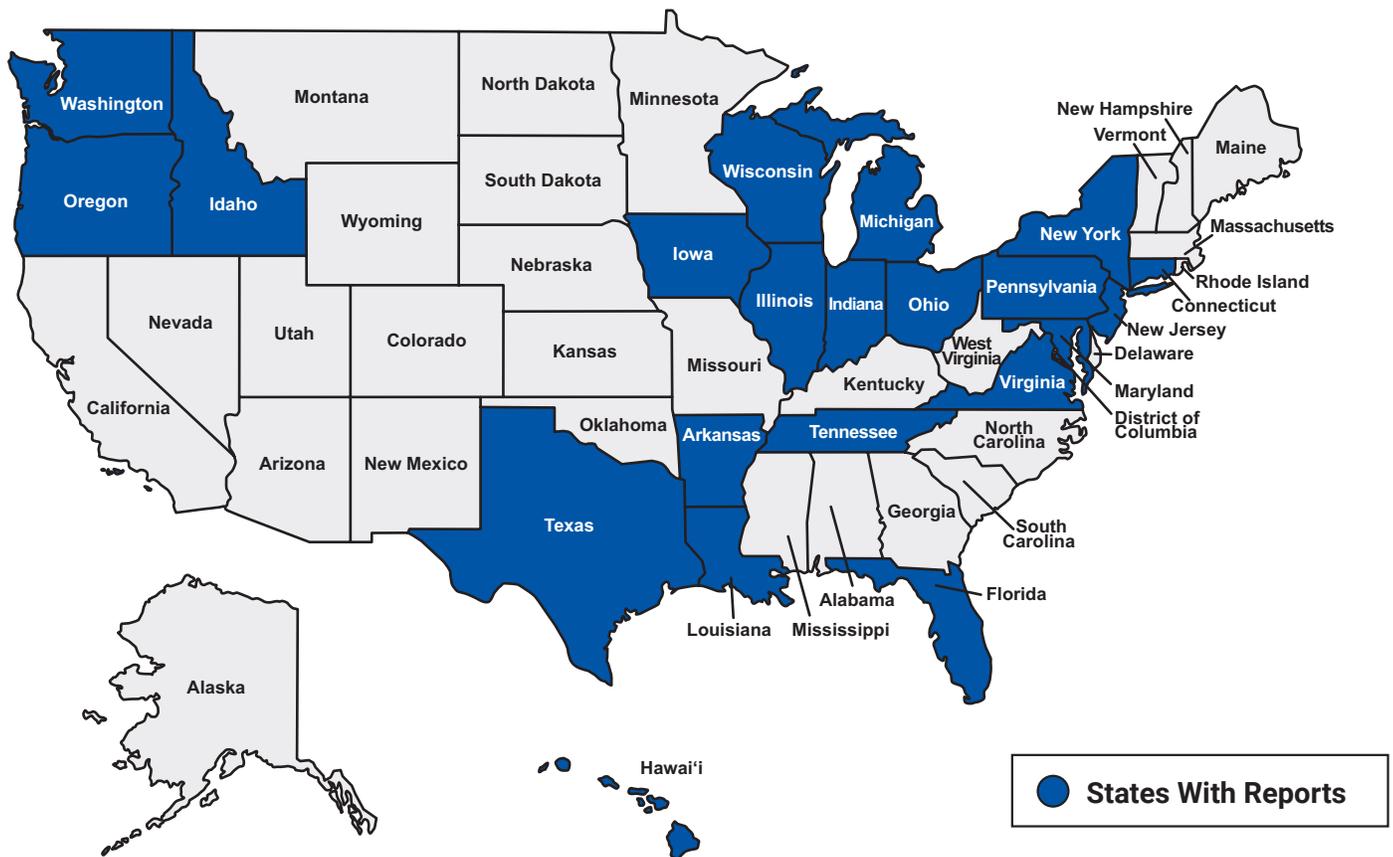
**Jie Wu**

*Kinder Institute for Urban Research,  
Rice University*

# ALICE: A GRASSROOTS MOVEMENT

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

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



## NATIONAL ALICE ADVISORY COUNCIL

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

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

# WHAT'S NEW IN ALICE RESEARCH

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

## This Report includes the following improvements:

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

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

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

## New ALICE measures:

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

**Data Notes:** The data are estimates; some are geographic averages, others are one- or five-year averages depending on population size. Change-over-time ranges start with 2007, before the Great Recession, then measure change every two years from 2010 to 2018. County-level data remains the primary focus, as state averages mask significant differences between counties. For example, the share of households below the ALICE Threshold in Texas ranges from 18% in Borden County to 78% in Hudspeth County. Many percentages are rounded to whole numbers, sometimes resulting in percentages totaling 99% or 101%.

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

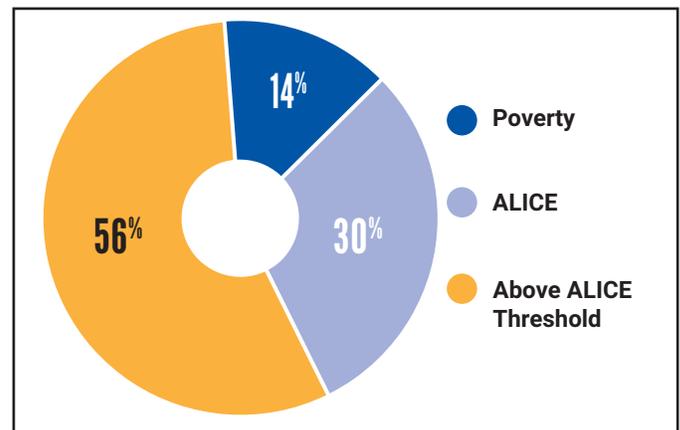


# TABLE OF CONTENTS

<b>Asset Limited, Income Constrained, Employed</b> .....	1
<b>At-A-Glance: Texas</b> .....	3
<b>Who Is ALICE?</b> .....	9
Trends: Household Demographics .....	11
<b>The Cost of Living in Texas</b> .....	14
The ALICE Household Budgets .....	14
The ALICE Essentials Index .....	16
Trends: Cost of Living .....	17
<b>The Changing Landscape of Work in Texas</b> .....	19
The New Labor Force .....	21
ALICE Jobs: Maintaining the Economy .....	23
Trends: The Landscape of Work .....	26
<b>Next Steps: Data for Action</b> .....	27
Identifying Gaps .....	27
Understanding ALICE: Health, Education, and Social Factors .....	29
The Benefits of Moving Toward Income Equity in Texas .....	30
<b>Endnotes</b> .....	35
Figure 12: Sources .....	47

# ASSET LIMITED, INCOME CONSTRAINED, EMPLOYED

From 2010 to 2018, Texas showed steady economic improvements according to traditional measures. Unemployment in the state and across the U.S. fell to historic lows, GDP grew, and wages rose slightly. Yet in 2018, eight years after the end of the Great Recession, 44% of Texas' 9,766,487 households still struggled to make ends meet. And while 14% of these households were living below the Federal Poverty Level (FPL), another 30% — more than twice as many — were **ALICE** households: **A**sset **L**imited, **I**ncome **C**onstrained, **E**mloyed. These households earned above the FPL, but not enough to afford basic household necessities.



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

- **The cost of living is increasing for ALICE households.** From 2007 to 2018, the cost of household essentials (housing, child care, food, transportation, health care, and technology) increased faster than the cost of other goods and services. The ALICE Essentials Index, a new tool that measures change over time in the cost of essentials, increased at an average rate of 3.4% annually nationwide over the past decade, while the official rate of inflation was 1.8%.
- **Worker vulnerability is increasing while wages stagnate in ALICE jobs.** By 2018, a near-record-low number of people were reported to be unemployed. However, that low unemployment concealed three trends that expose ALICE workers to greater risk: growth in the number of low-wage jobs, minimal increases in wages, and more fluctuations in job hours, schedules, and benefits that make it harder to budget and plan. These trends were clear in 2018: A record number of Texas workers — 50% — were paid by the hour, and 59% of the state's jobs paid less than \$20 per hour.
- **The number of ALICE households is increasing in Texas** as a result of rising costs and stagnant wages. There are more ALICE households than households in poverty, and the number of ALICE households is increasing at a faster rate. The FPL, with its minimal and uniform national estimate of the cost of living, far underestimates the number of households that cannot afford to live and work in the modern economy. In Texas, the percentage of households that were ALICE rose from 21% in 2007 to 30% in 2018. By contrast, those in poverty remained at around 14% throughout the period.

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

The Report concludes with an analysis of the economic benefits if all households had income above the ALICE Threshold. Not only would there be a significant positive impact on families and their communities, but the state economy would also benefit. In fact, the added value to the Texas GDP would be approximately \$305.4 billion.

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

# GLOSSARY

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

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

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

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

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

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

## ALICE ONLINE

Visit [UnitedForALICE.org](https://UnitedForALICE.org) for more details about ALICE, including:



### Interactive Maps

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



### Research Advisory Committee

Learn about the members and role of this critical group



### Additional Reports

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



### Demographic Data

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



### Data Spreadsheet

Download the ALICE data



### Jobs Graphs

Details about where ALICE works



### County Profiles

Detailed data about ALICE households in each county



### Methodology

Overview of the sources and calculations used in the ALICE research



### More About United For ALICE

See our partners, press coverage, learning communities, etc.

# AT-A-GLANCE: TEXAS

2018 Point-in-Time Data

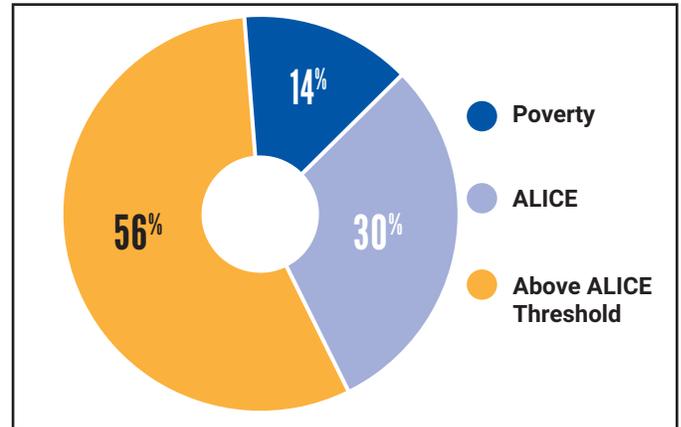
Population: 28,701,845

Number of Counties: 254

Number of Households: 9,766,487

## How many households are struggling?

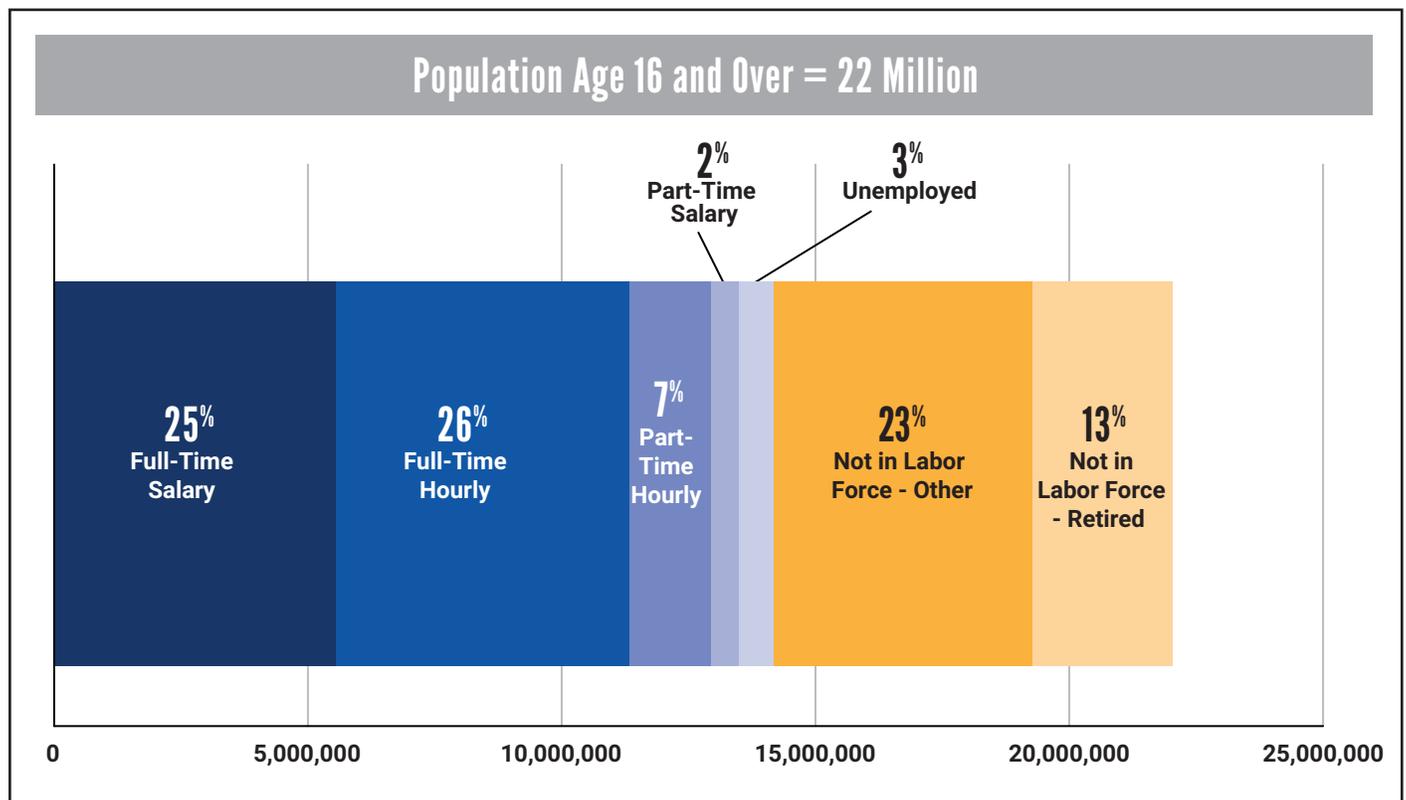
ALICE, an acronym for Asset Limited, Income Constrained, Employed, comprises households that earn more than the Federal Poverty Level but less than the basic cost of living for the state (the ALICE Threshold). Of Texas' 9,766,487 households, 1,367,458 earned below the Federal Poverty Level (14%) in 2018, and another 2,922,737 (30%) were ALICE.



## What does the Texas labor force look like?

A 2018 overview of the labor status of Texas' 22,036,809 working-age adults (people age 16 and over) shows that 64% of adults were in the labor force (blue bars), yet more than half were workers who were paid hourly. Hourly paid jobs tend to have lower wages, fewer benefits, and less stability. In addition, 36% of adults were outside the labor force (gold bars), either because they were retired or because they had stopped looking for work.

## Labor Status, Population Age 16 and Over, Texas, 2018



Note: Data for full- and part-time jobs is only available at the national level; these national rates (51% of full-time workers and 75% of part-time, hourly workers) have been applied to the total Texas workforce to calculate the breakdown shown in this figure. Full-time represents a minimum of 35 hours per week at one or more jobs for 48 weeks per year. Many percentages are rounded to whole numbers, sometimes resulting in percentages totaling 99% or 101%.

# What does it cost to afford the basic necessities?

The average ALICE Household Survival Budget in Texas was \$22,320 for a single adult, \$25,392 for a single senior, and \$64,512 for a family of four in 2018 – significantly more than the Federal Poverty Level of \$12,140 for a single adult and \$25,100 for a family of four.



Household Survival Budget, Texas, Average, 2018			
	SINGLE ADULT	SENIOR (1 ADULT)	2 ADULTS, 1 INFANT, 1 PRESCHOOLER
<b>Monthly Costs</b>			
Housing	\$608	\$608	\$837
Child Care	–	–	\$1,071
Food	\$256	\$218	\$777
Transportation	\$358	\$312	\$826
Health Care	\$194	\$511	\$809
Technology	\$55	\$55	\$75
Miscellaneous	\$169	\$192	\$489
Taxes	\$220	\$220	\$492
<b>Monthly Total</b>	<b>\$1,860</b>	<b>\$2,116</b>	<b>\$5,376</b>
<b>ANNUAL TOTAL</b>	<b>\$22,320</b>	<b>\$25,392</b>	<b>\$64,512</b>
<i>Hourly Wage*</i>	<i>\$11.16</i>	<i>\$12.70</i>	<i>\$32.26</i>

\*Full-time wage required to support this budget

Texas Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Anderson	16,459	62%
Andrews	5,508	37%
Angelina	29,898	51%
Aransas	9,432	50%
Archer	3,332	36%
Armstrong	708	29%
Atascosa	15,387	49%
Austin	11,041	36%
Bailey	2,111	55%

Texas Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Bandera	8,242	44%
Bastrop	25,345	54%
Baylor	1,474	50%
Bee	8,537	55%
Bell	123,188	39%
Bexar	644,193	52%
Blanco	4,297	32%
Borden	261	18%
Bosque	7,088	40%

Texas Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Bowie	35,228	46%
Brazoria	120,802	36%
Brazos	81,030	49%
Brewster	3,942	42%
Briscoe	632	50%
Brooks	2,052	74%
Brown	14,016	46%
Burleson	6,754	40%
Burnet	16,849	39%
Caldwell	13,225	54%
Calhoun	7,604	42%
Callahan	5,319	48%
Cameron	124,812	55%
Camp	4,692	52%
Carson	2,247	31%
Cass	11,789	47%
Castro	2,532	50%
Chambers	13,529	40%
Cherokee	17,940	50%
Childress	2,235	57%
Clay	4,045	42%
Cochran	996	52%
Coke	1,617	43%
Coleman	3,460	42%
Collin	344,824	29%
Collingsworth	1,055	54%
Colorado	7,511	48%
Comal	53,182	37%
Comanche	5,260	43%
Concho	873	64%
Cooke	15,368	39%

Texas Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Coryell	22,314	47%
Cottle	686	60%
Crane	1,422	30%
Crockett	1,388	35%
Crosby	2,044	61%
Culberson	681	72%
Dallam	2,404	46%
Dallas	937,438	40%
Dawson	4,322	54%
Deaf Smith	6,139	46%
Delta	2,015	39%
Denton	297,899	31%
DeWitt	7,088	46%
Dickens	842	52%
Dimmit	3,309	65%
Donley	1,290	49%
Duval	3,511	66%
Eastland	6,460	59%
Ector	54,326	43%
Edwards	686	51%
El Paso	270,160	54%
Ellis	58,633	34%
Erath	13,961	49%
Falls	5,237	64%
Fannin	12,231	44%
Fayette	9,067	43%
Fisher	1,649	42%
Floyd	2,328	41%
Foard	557	47%
Fort Bend	245,410	38%
Franklin	3,806	43%

## Texas Counties, 2018

COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Freestone	6,865	46%
Frio	4,624	58%
Gaines	5,737	48%
Galveston	121,976	39%
Garza	1,628	38%
Gillespie	10,717	39%
Glasscock	432	36%
Goliad	2,681	41%
Gonzales	7,214	45%
Gray	8,000	49%
Grayson	48,963	43%
Gregg	45,513	42%
Grimes	8,793	52%
Guadalupe	54,789	37%
Hale	11,146	52%
Hall	1,301	58%
Hamilton	3,108	45%
Hansford	1,855	60%
Hardeman	1,519	50%
Hardin	20,385	40%
Harris	1,600,357	48%
Harrison	23,217	45%
Hartley	1,681	32%
Haskell	2,125	48%
Hays	75,164	44%
Hemphill	1,323	45%
Henderson	30,843	54%
Hidalgo	237,323	63%
Hill	12,769	45%
Hockley	7,946	49%
Hood	21,969	40%

## Texas Counties, 2018

COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Hopkins	13,405	43%
Houston	8,209	56%
Howard	11,036	52%
Hudspeth	900	78%
Hunt	34,132	46%
Hutchinson	7,191	46%
Irion	634	42%
Jack	3,160	48%
Jackson	5,237	36%
Jasper	12,583	49%
Jeff Davis	1,050	44%
Jefferson	90,839	50%
Jim Hogg	1,710	63%
Jim Wells	13,043	52%
Johnson	59,180	35%
Jones	5,593	40%
Karnes	4,246	52%
Kaufman	39,049	41%
Kendall	14,159	30%
Kenedy	209	58%
Kent	318	45%
Kerr	20,766	44%
Kimble	1,948	47%
King	91	36%
Kinney	1,170	67%
Kleberg	10,946	53%
Knox	1,330	50%
La Salle	2,216	56%
Lamar	19,313	46%
Lamb	4,754	51%
Lampasas	7,738	33%

## Texas Counties, 2018

COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Lavaca	7,756	37%
Lee	6,104	42%
Leon	6,249	46%
Liberty	26,203	56%
Limestone	8,169	55%
Lipscomb	1,256	36%
Live Oak	3,675	46%
Llano	8,491	43%
Loving	33	27%
Lubbock	115,686	48%
Lynn	2,133	52%
Madison	4,201	44%
Marion	4,459	51%
Martin	1,626	40%
Mason	1,667	56%
Matagorda	13,636	48%
Maverick	16,307	57%
McCulloch	3,255	44%
McLennan	92,158	45%
McMullen	223	30%
Medina	15,470	41%
Menard	992	46%
Midland	57,636	34%
Milam	9,381	45%
Mills	1,750	49%
Mitchell	2,441	46%
Montague	7,995	38%
Montgomery	202,797	38%
Moore	6,626	46%
Morris	5,048	43%
Motley	465	53%

## Texas Counties, 2018

COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Nacogdoches	23,442	50%
Navarro	17,397	45%
Newton	4,978	55%
Nolan	5,469	47%
Nueces	129,987	44%
Ochiltree	3,443	46%
Oldham	527	33%
Orange	30,047	39%
Palo Pinto	10,312	50%
Panola	8,827	40%
Parker	46,238	37%
Parmer	3,318	43%
Pecos	4,557	53%
Polk	17,803	46%
Potter	45,550	52%
Presidio	2,627	73%
Rains	4,331	42%
Randall	49,457	31%
Reagan	1,147	32%
Real	1,227	62%
Red River	5,048	49%
Reeves	3,713	59%
Refugio	2,577	50%
Roberts	311	28%
Robertson	6,358	44%
Rockwall	31,649	35%
Runnels	3,749	49%
Rusk	17,960	45%
Sabine	4,099	55%
San Augustine	3,356	53%
San Jacinto	9,487	51%

Texas Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
San Patricio	23,121	42%
San Saba	2,104	50%
Schleicher	1,105	45%
Scurry	5,884	43%
Shackelford	1,234	48%
Shelby	9,292	50%
Sherman	1,055	41%
Smith	77,330	40%
Somervell	3,239	43%
Starr	16,238	71%
Stephens	3,268	51%
Sterling	462	28%
Stonewall	582	47%
Sutton	1,484	30%
Swisher	2,514	57%
Tarrant	722,473	36%
Taylor	49,811	50%
Terrell	396	53%
Terry	4,041	48%
Throckmorton	703	46%
Titus	10,694	51%
Tom Green	43,301	44%
Travis	486,548	38%
Trinity	5,918	52%
Tyler	7,020	50%
Upshur	14,036	46%
Upton	1,305	44%
Uvalde	8,683	57%
Val Verde	15,429	51%
Van Zandt	19,615	44%
Victoria	31,918	52%

Texas Counties, 2018		
COUNTY	TOTAL HOUSEHOLDS	% ALICE & POVERTY
Walker	21,636	59%
Waller	14,807	49%
Ward	3,956	38%
Washington	12,381	43%
Webb	75,300	59%
Wharton	15,256	45%
Wheeler	2,254	41%
Wichita	46,757	49%
Wilbarger	5,263	41%
Willacy	5,810	69%
Williamson	185,345	39%
Wilson	15,820	37%
Winkler	2,572	44%
Wise	22,080	44%
Wood	16,531	46%
Yoakum	2,676	32%
Young	7,105	39%
Zapata	4,405	67%
Zavala	3,509	70%

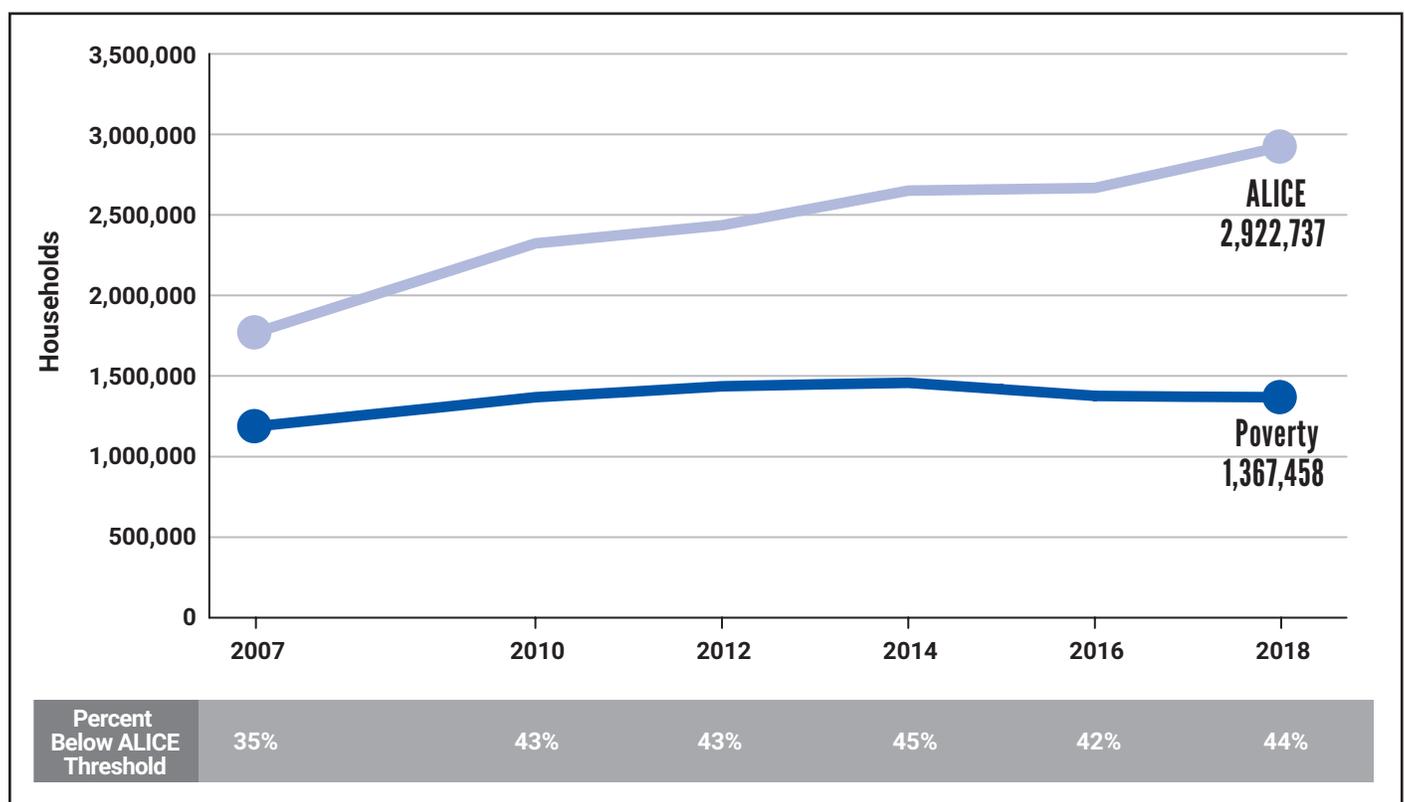
**Sources:** *Point-in-Time Data:* American Community Survey, 2018. **ALICE Demographics:** ALICE Threshold, 2018; American Community Survey, 2018. **Labor Status:** American Community Survey, 2018; Federal Reserve Bank of St. Louis, 2018. **Budget:** AAA, 2018; Agency for Healthcare Research and Quality,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

# WHO IS ALICE?

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

Between 2007 and 2018 the total number of Texas households grew by 18%, to 9,766,487 households in 2018. When households in poverty alone are considered, financial hardship remained relatively flat during this period, and even improved slightly between 2014 and 2018 (14% of all households were in poverty in 2018). However, the trajectory for ALICE households in the state presents a very different picture, one that shows a large and growing number of households that did not benefit from the “recovery” after the Great Recession, and who continue to struggle to make ends meet. The number of ALICE households increased by a substantial 65% (from 1,769,824 to 2,922,737), with their share of all households rising from 21% in 2007 to 30% in 2018. Most recently, between 2016 and 2018, there was a spike in the number of ALICE households. Overall, the percentage of households living below the ALICE Threshold (ALICE and poverty-level households combined) increased from 35% in 2007 to 44% in 2018 (Figure 1).

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

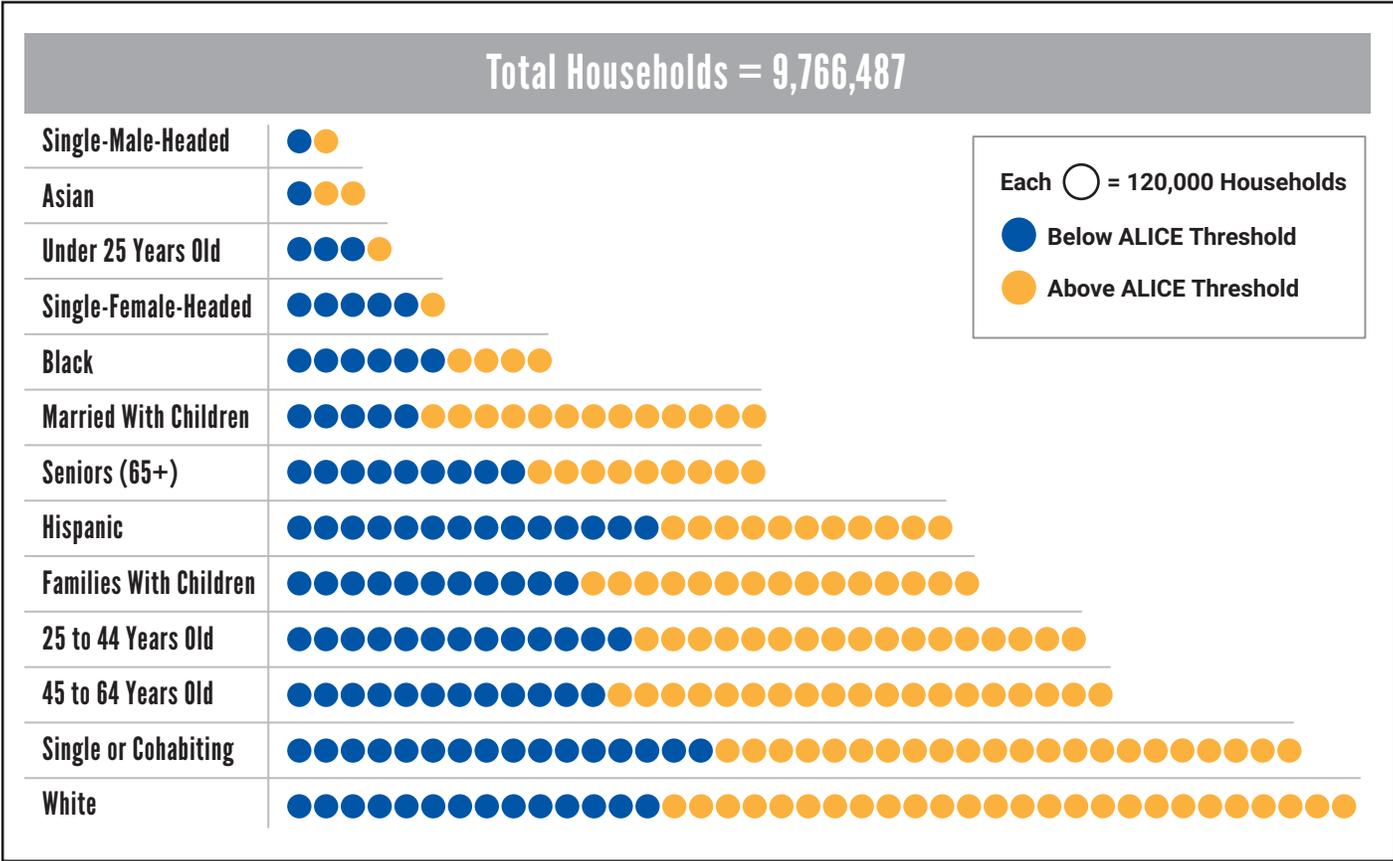


Sources: ALICE Threshold, 2007–2018; American Community Survey, 2007–2018

ALICE households live in every county in Texas – urban, suburban, and rural – and they include people of all genders, ages, and races/ethnicities, across all household types. And while there are counties with a high percentage of households below the ALICE Threshold in all regions of the states, there is a particularly high concentration of these counties along the Rio Grande River. Visit [UnitedForALICE.org/Texas](https://UnitedForALICE.org/Texas) to see an interactive map of households below the ALICE Threshold in all Texas counties.

Figure 2 shows that in 2018, the largest numbers of households below the ALICE Threshold were in the largest demographic groups in Texas – namely, households headed by someone in their prime working years (ages 25–64), single or cohabiting households (without children or seniors), and White households. Among families with children – another of the state’s biggest groups – married-parent families were the largest subgroup and accounted for 45% of families with children living below the ALICE Threshold.

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

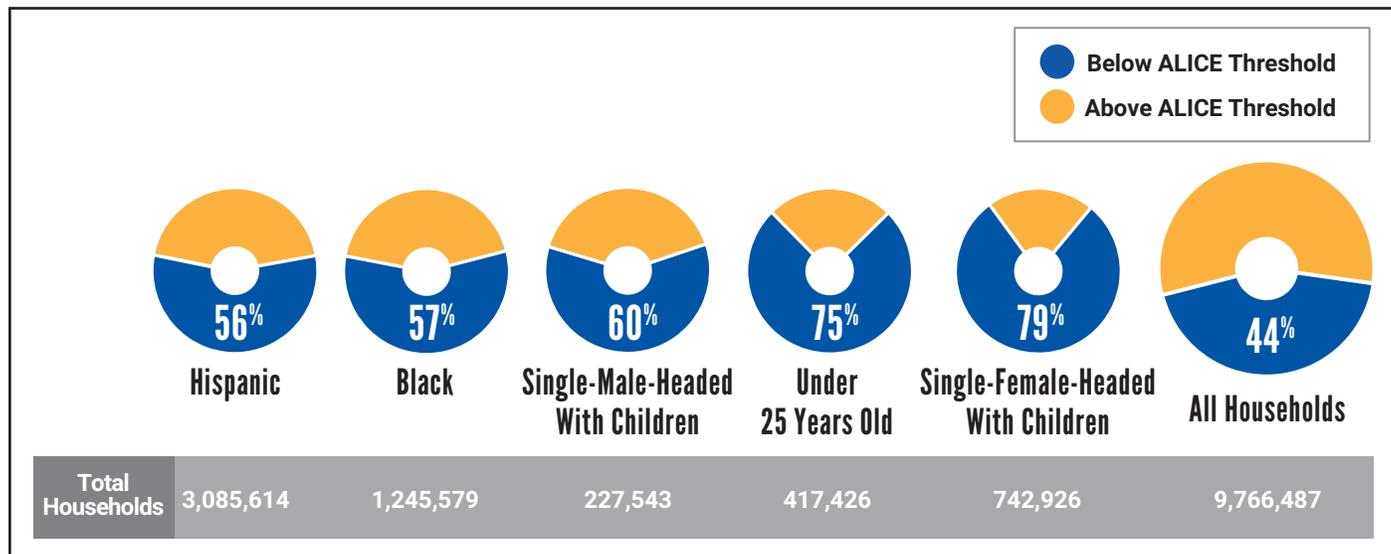


*Note: The groups shown in this figure overlap across categories (age, household type, race/ethnicity). Within the race/ethnicity category, all racial categories except Two or More Races are for one race alone. Race and ethnicity are overlapping categories; in this Report, the Asian, Black, Hawaiian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

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

Another way to examine the data is to look at the proportion of each group that is below the ALICE Threshold. Overall, 44% of households in Texas had income below the ALICE Threshold in 2018. But many groups had a disproportionately high percentage of families below the ALICE Threshold, including households headed by a single female (with children), someone under the age of 25, and a single male (with children), as well as all configurations of Black and Hispanic households (Figure 3). Seniors also faced increased financial hardship compared to other age groups, with half of these households below the ALICE Threshold.

**Figure 3.**  
**Select Household Groups by Income, Texas, 2018**



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

In addition to these demographic disparities by age, race/ethnicity, and family type — which are perpetuated by discrimination and institutionalized racism, ageism, and sexism — other factors can also make households more likely to face financial hardship. Lower incomes are associated with households headed by a recent immigrant, especially one who is undocumented or unskilled; by someone with low proficiency in English; by a lesbian, gay, bisexual, transgender, or queer (LGBTQ+) person; by someone with a low level of education; by someone who was previously incarcerated; or by someone living with a disability. Groups with more than one of these factors — recent immigrants with special needs, for example, who may have both limited English proficiency and a disability; or LGBTQ+ people of color, who face systemic racism and discrimination — are even more likely to experience financial hardship.<sup>3</sup>

## TRENDS: HOUSEHOLD DEMOGRAPHICS

**A growing number of households live on the edge of the ALICE Threshold.** For these households, even a small increase in the cost of housing or a decrease in work hours can mean the difference between being financially stable and being ALICE. **In Texas, 15% of households (1,419,817) were on the cusp of the ALICE Threshold in 2018;** of those, nearly two-thirds earned just above the ALICE Threshold and more than one-third earned just below it.<sup>4</sup> This matters for families, but it can also impact the Texas economy as a whole: Even a small drop in wages or hours worked, or an unexpected emergency — such as a factory closing, a natural disaster, or a pandemic — could destabilize a large number of households. Conversely, a small increase in wages or a decrease in rent or a car payment could help push families above the ALICE Threshold.

**Texas is increasingly diverse.** Between 2010 and 2018, the total number of White, non-Hispanic households in Texas increased only slightly (2%), while the number of households of color increased at a much faster rate (18% for Black households, 22% for Hispanic households, and 43% for Asian households). Change in financial hardship followed a similar trajectory: The number of households below the ALICE Threshold increased by 7% for White non-Hispanic households, 19% for Black households, 24% for Hispanic households, and 35% for Asian households. There were also noteworthy trends when breaking down these racial/ethnic groups by age. Growth in Asian and Hispanic households below the ALICE Threshold was largely driven by households headed by someone 45 years or older; and while Black households in poverty decreased for all age groups, the number of Black ALICE households increased for all age groups. All four of the state’s largest racial/ethnic groups saw an increase in senior households (age 65+) below the ALICE Threshold during this period.<sup>5</sup>

Racial and ethnic diversity also differs significantly by geography across the state — not just between rural and urban areas (with rural areas tending to be less diverse), but also among the state’s metropolitan areas. For example, although Houston has become slightly less diverse since 2010, it remains the most diverse large city in the state: In 2018, there was a 77% chance that two people randomly chosen were of a different race or ethnicity, with a population mix that was 62% White, 26% Black, and 8% Asian by race, and 45% Hispanic in ethnicity. Two other metropolitan areas — Fort Worth and Arlington — became more diverse between 2010 and 2018. In 2018, there was a 72% chance in Fort Worth that two people randomly chosen were of a different race or ethnicity (up 1.3% since 2010), and a 73% chance in Arlington (up 2.5%).<sup>6</sup>

**Texas’ household structure continues to change.** The number of married-parent families with children increased only slightly between 2010 and 2018, by 4%. During the same period, the number of households made up of single or cohabitating adults — under age 65 with no children under age 18 — increased by 9%, and the number of these households below the ALICE Threshold increased by 18%. In 2018, these single or cohabitating adult households made up the largest proportion of households in Texas (47%), as well as the largest share of households below the ALICE Threshold (45%). Nationally, the number of cohabitating adults more than doubled between 1996 and 2017, and these partners tend to have higher levels of education and be more racially diverse today than cohabitating adults 20 years ago.<sup>7</sup>

**The state’s senior population is growing and facing increased hardship.** The state population is aging as more boomers pass age 65 and as people live longer on average. Between 2010 and 2018, there was 33% increase in the number of Texas households headed by someone over the age of 65. In terms of total population, forecasters estimate that the total senior population in the state will increase to almost 6 million by 2040 (more than double the 2010 senior population), and the proportion of the population that is 65+ will increase from 10% in 2010 to 15% by 2040.<sup>8</sup>

Among seniors, there are three trends. First, the White, non-Hispanic population in Texas is older than other racial/ethnic groups and will continue to account for an increasing share of the senior population. White households headed by someone 65 or older grew 23% between 2010 and 2018, accounting for 28% of White households in 2018. (In comparison, 16% of Black households, 14% of Hispanic households, and 12% of Asian households were headed by someone age 65 or older.) Second, having lived through a decade of financial challenges since the Great Recession, more Texas seniors will become ALICE and more seniors will continue to work past traditional retirement age to make ends meet. (Though without the many policies and programs in place to help seniors financially — such as Social Security, property tax deductions or exemptions based on age, and senior discounts for both private and public purchases — many more seniors would fall below the ALICE Threshold.) And third, seniors make up a larger portion of households in rural areas, where they will continue to face additional challenges in access to transportation, health care, and caregiving. A 2020 report on the best and worst places for seniors to live ranked Texas 45<sup>th</sup> out of 50 states, with a low primary-care physician and mental-health provider rate, a shortage of subsidized housing, and traffic congestion (which impacts both health and mobility) driving down the ranking. However, Texas is a large state, and there is significant geographic variation in these measures.<sup>9</sup>

***“ Having lived through a decade of financial challenges since the Great Recession, more Texas seniors will become ALICE and more seniors will continue to work past traditional retirement age to make ends meet. ”***

**Texas is home to a growing number of millennials.** The number of millennials in Texas increased over the past decade, with the highest net migration rate for people age 20–34 in the country in 2017. This trend is predicted to continue, fueled largely by the influx of young adults to urban areas in the state — most notably Dallas, which had a net migration of 10,371 millennials in 2017, the highest out of the 173 largest U.S. cities. (Abilene, Fort Worth, Lubbock, and Austin also made the top 25 for this measure.) The aging and growth of this population is reducing the proportion of both

college-age students and families with children, as millennials have passed traditional college age, are having fewer children, and are waiting longer than previous generations to have them.<sup>10</sup> Millennials in Texas and nationwide are also remarkably diverse, with a much larger share of people of color than previous generations. Out of the 100 biggest metropolitan areas in 2015, McAllen, Texas had the largest share of millennials of color, at 96%. (Notably, McAllen also had the highest poverty rate for older millennials — age 25 to 34 — in the same year.)<sup>11</sup>

**Inequality in income and wealth will continue to rise** as wage growth and job stability in high-wage jobs greatly outpace growth and stability at the lower end. Nationwide, from the late 1940s to the early 1970s, incomes across the income distribution grew at nearly the same pace. Then, beginning in the 1970s, income disparities began to widen: The average income for the top 1% increased over five times more than that of the middle 60% and over three times more than that of the bottom fifth, from 1979 to 2016.<sup>12</sup> In Texas, the average income of the top 1% was 24.2 times higher than the average income of the bottom 99% by 2015. Midland had the largest gap in the state (ranking 16<sup>th</sup> out of all U.S. metropolitan areas), with the top 1% earning 35.7 times more than all other earners. Texas also has the second most regressive tax system in the country: The poorest 20% pay 13% of their income on taxes, while the wealthiest 1% pay 3% of theirs. Regressive tax systems like Texas' contribute to and perpetuate income inequality.<sup>13</sup> And although Texas performs better than other states when it comes to the income gap between White and Black workers — with the fifth smallest gap in the nation in 2018 — Black earners still made only 88% of what White earners made across all occupations.<sup>14</sup>

**“ Unable to save, ALICE families do not have the means to build assets, let alone catch up to those who already have assets (especially those who have been building assets for generations). ”**

The gap in wealth (savings and assets) is even greater than the gap in income. Unable to save, ALICE families do not have the means to build assets, let alone catch up to those who already have assets (especially those who have been building assets for generations). ALICE families also face more barriers that, when compounded, create an even bigger wealth gap. These include issues like lower pay for women, racial/ethnic discrimination in homeownership, and student loan debt.<sup>15</sup> For example, the White homeownership rate is almost double the Black homeownership rate in both Houston (57% compared to 31%) and Harris County (68% compared to 37%).<sup>16</sup>

# THE COST OF LIVING IN TEXAS

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

## THE ALICE HOUSEHOLD BUDGETS

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

- The **ALICE Household Survival Budget** is an estimate of the minimal total cost of household essentials — housing, child care, food, transportation, health care, and technology, plus taxes and a miscellaneous contingency fund equal to 10% of the budget. It does not include savings, auto repairs, cable service, travel, laundry costs, or amenities such as holiday gifts or dinner at a restaurant that many families take for granted.
- The **Senior Survival Budget**, new to this Report, adjusts the Household Survival Budget to reflect the fact that seniors have lower food costs than younger adults, travel fewer miles for work and family responsibilities, and have increasing health needs and out-of-pocket health care expenses.
- For comparison to a more sustainable budget, the **ALICE Household Stability Budget** estimates the higher costs of maintaining a viable household over time, and it is the only ALICE budget to include a savings category, equal to 10% of the budget.

The actual cost of household basics in every county in Texas is well above the Federal Poverty Level (FPL) for all household sizes and types (Figure 4). Public assistance programs are based on the FPL, but the FPL is not enough for a household to cover even the most minimal costs, as shown by the comparison to the Household Survival Budget. This means that assistance programs serve far fewer households than actually need assistance, even in a strong economy.

For a single adult, the FPL was \$12,140 per year in 2018, but the average Household Survival Budget in Texas was \$22,320 per year.<sup>17</sup> The average Senior Survival Budget totaled \$25,392 per year, primarily due to increased health costs. (Despite having Medicare, seniors have greater out-of-pocket health care costs, largely due to increased spending on chronic health issues like heart disease and diabetes.) And all budgets were significantly lower than the Household Stability Budget, which reached \$43,824 per year for a single adult.

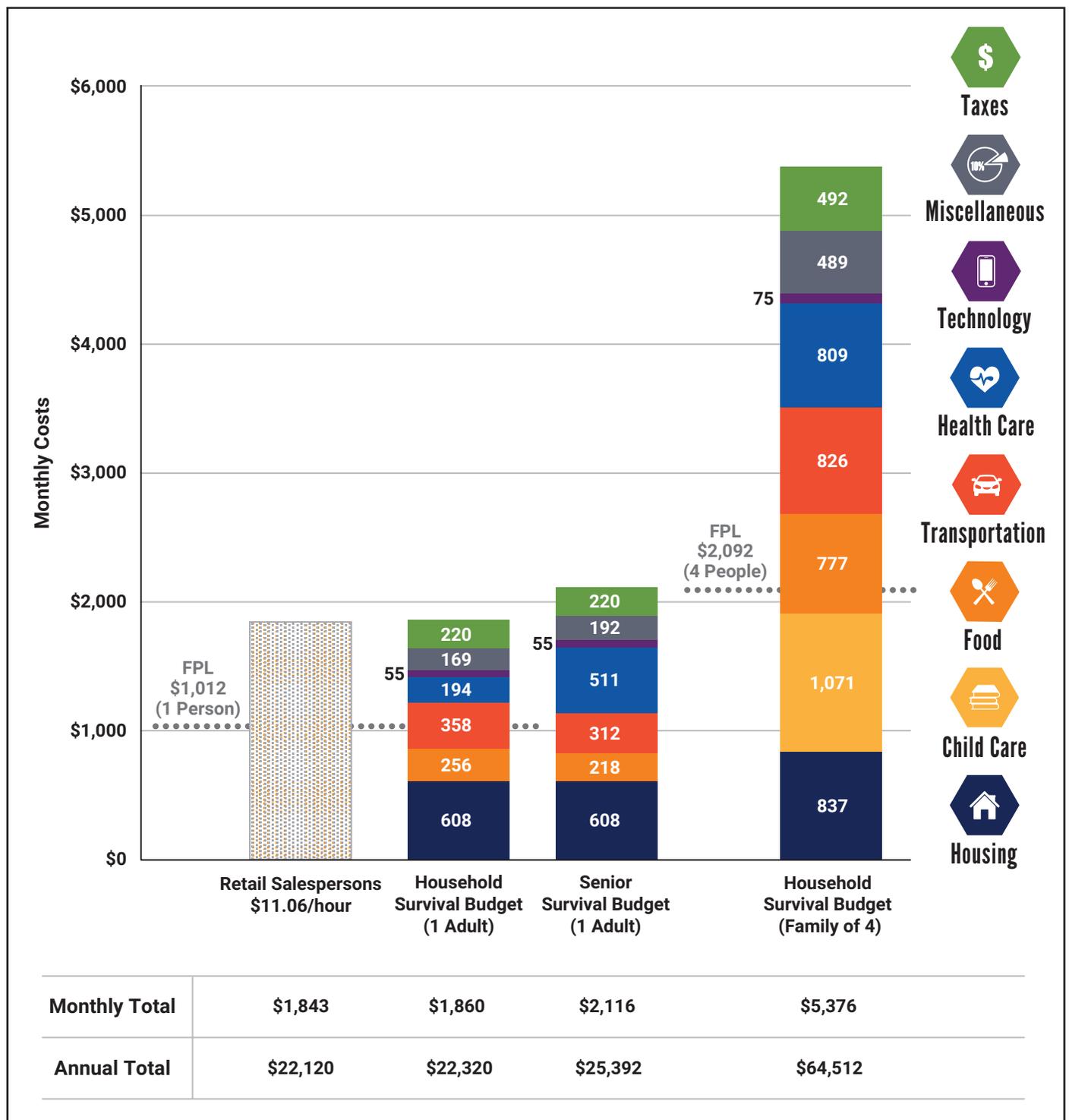
The gaps are even larger for families. The FPL for a four-person family was \$25,100 in 2018, while the Household Survival Budget for a family with two adults, an infant, and a four-year-old was \$64,512.<sup>18</sup>

The hourly wages needed to support these budgets were \$11.16 for the single adult Survival Budget; \$12.70 for the Senior Survival Budget; and \$32.26 for one worker or \$16.13 each for two workers for the family Survival Budget. To put these budgets in perspective, the median hourly wage for the most common occupation in Texas, retail sales, was \$11.06 in 2018, or \$22,120 if full time, year-round — not enough to support any of the ALICE budgets.

The cost of household basics varies significantly by geography, ranging from \$55,088 (in Maverick County) to \$88,709 per year (in Travis County) for a family of four. In general, costs are higher in the counties surrounding the state's largest cities (Austin, Dallas, Houston, and San Antonio), and lowest in the state's rural counties.

To see the details of each ALICE budget for different household types and to view a map of cost of living in each Texas county, visit the Household Budgets page at [UnitedForALICE.org/Texas](https://UnitedForALICE.org/Texas)

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



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

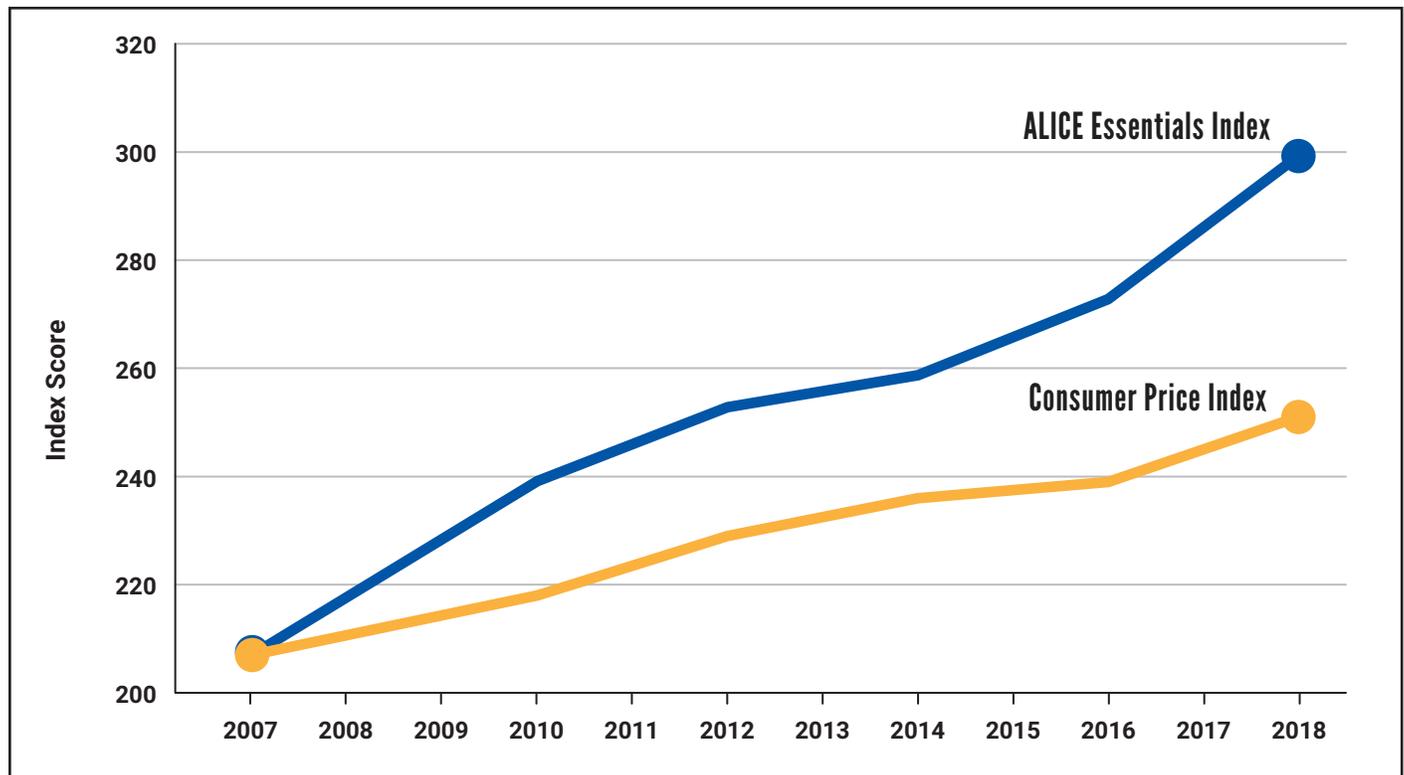
Sources: AAA, 2018; Agency for Healthcare Research and Quality, 2018; American Community Survey, 2018; Bureau of Labor Statistics, 2018—Consumer Expenditure Surveys; Bureau of Labor Statistics, 2019—Consumer Expenditure Survey; Bureau of Labor Statistics, 2018—Occupational Employment Statistics; Centers for Medicare & Medicaid Services, 2016—Medicare Current Beneficiary Survey; Centers for Medicare & Medicaid Services, 2019; Centers for Medicare & Medicaid Services, 2019—Medicare - Chronic Conditions; Federal Highway Administration, 2017; Feeding America, 2019; Fowler, 2019; Internal Revenue Service, 2020; Internal Revenue Service—FICA, 2020; Medicare.gov; Texas Institute for Child & Family Wellbeing, 2019; The Zebra, 2018; U.S. Department of Agriculture, 2018—Official USDA Food Plans; U.S. Department of Housing and Urban Development, 2018—Fair Market Rents. For more details, see the Methodology Overview at [UnitedForALICE.org/Methodology](https://www.unitedforalice.org/methodology)<sup>19</sup>

# THE ALICE ESSENTIALS INDEX

Based on items in the Household Survival Budget, the ALICE Essentials Index measures the change over time in the costs of household essentials – a much narrower definition than the more common rate of inflation based on the BLS Consumer Price Index (CPI). While the CPI covers a large group of goods and services that urban consumers buy regularly (housing, food and beverages, transportation, medical care, apparel, recreation, education, and communication services), the ALICE Essentials Index includes only essential household items (housing, child care, food, transportation, health care, and a smartphone plan). The ALICE Essentials Index is also calculated for both urban and rural areas, while the CPI only tracks inflation based on a select number of metropolitan (urban) counties.<sup>20</sup> For more detailed information, see the 2020 ALICE Essentials Index Report available at [UnitedForALICE.org/Essentials-Index](https://UnitedForALICE.org/Essentials-Index)

**Across the country, the ALICE Essentials Index has increased faster than the CPI over the last decade** (Figure 5). From 2007 to 2018, the average annual rate of increase was 3.3% in urban areas and 3.4% in rural areas, while the CPI increased by 1.8%.<sup>21</sup> This difference is primarily due to the fact that the costs of basics, especially housing and health care, have increased, while the costs of other items – notably manufactured goods, from apparel to cars – have remained relatively flat. And while basic household goods were 18% to 22% more expensive in urban areas than in rural areas, those costs increased at nearly the same rate in both areas during this period.

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



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

The difference between these two cost-of-living measures is more than an academic question. The CPI is used to measure inflation and monitor monetary policy. It also determines the rate at which a wide range of government program levels and benefits are increased, including Social Security, veterans’ and Federal Civil Service retirees’ benefits, government assistance programs, the FPL, income tax brackets, and tax credits like the Earned Income Tax Credit (EITC).<sup>22</sup> But the ALICE Essentials Index shows that from 2007 to 2018, the CPI considerably underestimated the increase in the cost of living for ALICE households across the country.

# TRENDS: COST OF LIVING

The cost of living for ALICE households is growing significantly in both urban and rural areas, often driven by the cost of housing. In Texas, since the financial and housing market crisis of 2008 and 2009, homeownership rates have decreased and demand for rental housing has increased. This shift in demand, along with a growing population — especially in urban areas — has resulted in a statistically significant increase in the number and percentage of renter households in the state (up 1.3% in non-metropolitan areas and 2.7% in metropolitan areas between 2009 and 2017). Between 2014 and 2018, the cost of rental properties increased in all of the state’s 25 metropolitan areas, and the rental vacancy rate decreased in the majority of these areas (18 out of 25). And while the overall cost of living in rural America is lower than in metro areas, expenses — especially housing — are rising at similar rates in both areas. Nationwide, households that are severely rent burdened (with rent accounting for more than 50% of their income) are projected to grow by at least 11%, to 13.1 million households, by 2025.<sup>23</sup>

**Commuting times will continue to increase, as will demand for alternative transportation options.** High housing costs and urban sprawl push workers farther from their jobs and increase commute times, which has a negative impact on health, job retention, and productivity. These pressures — along with minimal public transportation infrastructure outside of major cities and the cost of owning and maintaining a car — also increase demand for both traditional and new public transportation options (e.g., trains and buses, rideshares, and self-driving vehicles).<sup>24</sup>

**The child care industry will face new challenges, and so will parents.** In Texas, the number of families with children increased 3% between 2010 and 2018, but the supply of child care providers has not kept pace with growing demand. A 2018 analysis found that 48% of Texas residents live in a “child care desert,” with a dearth of available child care providers. This percentage is even higher for Hispanic/Latino families (55%), families in the lowest income neighborhoods (62%), and those living in rural areas (63%).<sup>25</sup> The cost of child care relative to family income also continues to increase, with higher rates for child care in urban areas and a greater reliance on family child care homes in rural areas. In 2018, the average annual costs for center-based care for an infant (\$9,864) were similar to the average annual tuition at a public four-year university in Texas (at \$10,300).<sup>26</sup> Higher costs for child care may mean ALICE families have to make sacrifices in other areas of the budget, a trend that will have a particular impact on single-parent families, who are more likely to be below the ALICE Threshold. Compounding this issue is the fact that low-paid child care workers are ALICE as well (with a median hourly wage of \$9.65 in Texas).<sup>27</sup> These issues matter for families and workers, but they also have an impact on the state economy: If the state capped family child-care expenditures at 7% of income, it would expand the Texas economy by 0.9% (totaling \$14.5 billion in new economic activity).<sup>28</sup>

**“ A 2018 analysis found that 48% of Texas residents live in a 'child care desert,' with a dearth of available child care providers. This percentage is even higher for Hispanic/Latino families (55%), families in the lowest income neighborhoods (62%), and those living in rural areas (63%). ”**

**Food insecurity, a longstanding problem for families with children, is also increasing among young adults and seniors.** In 2018, households headed by adults under the age of 25 were more likely to be below the ALICE Threshold compared to other age groups in Texas, and they often struggled to put food on the table. For example, reports consistently find higher rates of food insecurity among college students.<sup>29</sup> Nationally in 2018, 45% of college students surveyed reported that they were food insecure in the 30 days prior to taking the survey.<sup>30</sup> More locally, a 2016 survey of the Dallas County Community College District found that over half of students surveyed had been food insecure in the preceding 30 days.<sup>31</sup> There is also growing food insecurity at the other end of the age spectrum, with a projected 8 million food-insecure seniors nationwide by 2050. Compared to other seniors, food-insecure seniors are more than twice as likely to have depression, 91% more likely to have asthma, 66% more likely to have had a heart attack, and 57% more likely to have congestive heart failure. Public benefits help but do not eliminate the need for emergency assistance measures, such as food pantries.<sup>32</sup>

**College students across the country are facing greater challenges in meeting living expenses, despite the fact that increasing numbers of students are working full or part time.** Students often rely on multiple sources of financial support, including financial aid, student loans, and assistance from parents or other family members, to cover their living expenses. Yet even with these types of financial help, many students need to work while in school; in particular, more than two-thirds of students enrolled in community colleges work full or part time.<sup>33</sup> In a recent financial wellness survey, 56% of students report paying for college using money from their current employment, and 31% of students pay for college with credit cards, leading to accumulation of increased debt.<sup>34</sup> Working long hours to earn more income comes at a price, as it can interfere with academic performance and ultimately the likelihood of obtaining a degree.<sup>35</sup> Students report that two of the major obstacles to academic success are juggling work with school and other responsibilities and difficulty meeting expenses.<sup>36</sup> For more information, see the 2019 United For ALICE Report, *The Consequences of Insufficient Household Income*.

**Gaps in health based on demographic, environmental, and socioeconomic factors will continue to grow.** Volatility in health insurance availability and coverage, increasing out-of-pocket costs – even for those with employer-sponsored programs – and shortages of health care providers (especially in rural areas) make it harder for many families to get the health care they need.<sup>37</sup> Texas had the seventh-worst score in the Commonwealth Fund’s 2018 survey of state health systems, with particular issues of access and affordability, prevention and treatment, and the disparity in care between higher- and lower-income patients.<sup>38</sup>

In as large a state as Texas, health factors and outcomes can differ significantly by geography. For example, in 2018, life expectancy differed by almost 18 years across the state, ranging from 71.9 years in Menard County to 89.7 years in Jeff Davis County.<sup>39</sup> There are also significant health disparities by race/ethnicity throughout the state, driven largely by the social determinants of health, including living conditions (such as housing, transportation, environmental toxins), economic and work conditions (including wages, educational opportunities, occupational hazards), and social environment (including impacts related to racism, residential segregation, and chronic stress). For example, although there is a similar rate of cancer in Texas among non-Hispanic Black and White people, the mortality rate is almost 20% higher for non-Hispanic Black Texans. These disparities will grow with new but expensive advances in medicine, compounded exposure to environmental hazards and public health crises for many low-income households, and a persistent context of discrimination and institutionalized racism in Texas and across the country.<sup>40</sup>

**Natural and human-made disasters will continue to impact ALICE households disproportionately.** Across Texas, the increasing impact of these incidents – from floods and hurricanes to pandemics – is felt most acutely by ALICE households and their surrounding communities. With minimal job security and little or no savings, ALICE families feel the impact of an economic disruption almost immediately as hourly paid workers suffer lost wages right away. ALICE households are more vulnerable during natural disasters as they often live in communities with fewer resources, and their housing is more susceptible to flooding, wildfires, and other hazards. With no financial cushion, ALICE workers struggle to repair damage, recover from illness, and pay ongoing bills. At the same time, ALICE workers are essential to disaster recovery efforts in both infrastructure repair and health care, and they are often forced to choose between caring for their families and ensuring community recovery. All of these costs are added to the increased risk of physical harm ALICE families face if they cannot afford to flee an oncoming natural disaster or take necessary precautions during a public health crisis.<sup>41</sup>

**Financial instability will mean additional costs for ALICE households.** The costs of financial instability are cumulative and intensify over time. Skimping on essentials, from food to health care, leads to greater long-term problems (see United For ALICE’s 2019 Report, *The Consequences of Insufficient Household Income*). Failure to pay bills on time leads to fees, penalties, and low credit scores, which in turn increase interest rates, insurance rates, and costs for other financial transactions (from check-cashing fees to payday cards).<sup>42</sup> Unexpected expenses can intensify these impacts. In 2017, only 55% of Texas households had set aside any money in the prior 12 months that could be used for unexpected expenses or emergencies such as illness or the loss of a job – a rate just above the national rate of 42%. And without enough income to cover current and unexpected expenses, ALICE households cannot save for future expenses like education, retirement, or a down payment on a house.<sup>43</sup>

# THE CHANGING LANDSCAPE OF WORK IN TEXAS

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

With the nation's second-largest economy based on real GDP (in 2012 dollars) and a near-record-low unemployment rate, Texas appeared to have a robust economy in 2018, with only 3% of adults actively looking but unable to find work.<sup>44</sup> Because Texas is a large state with several major metropolitan areas and abundant natural resources, the composition of the state economy reflected growth across several major industries. The state's oil and gas extraction industry has played a pivotal role in this economic landscape: In 2018 it was the largest contributor to the state GDP and had the top employment growth of any single industry. At the same time, a reliance on these finite natural resources makes the state's economy vulnerable to fluctuations in prices, demand, and pipeline access; for example, total employment in this industry took a major dip (down 30%) between 2014 and 2017, as oil and natural gas prices fell sharply from their post-Recession peak. Financial activities, Texas' second-largest industry in terms of GDP in 2018, has seen steadily growing employment since 2010, with relatively stable sectors that tend to grow along with the general economy. Despite some ups and downs in employment over the past decade, manufacturing, the third-largest contributor to the state GDP, also saw growth in 2018. Notably, the state's large research institutions and military installations have contributed to new developments in high-tech manufacturing.<sup>45</sup>

Most of the state's population is located in urban areas, and all five of the largest cities (Houston, Dallas, Austin, Fort Worth, and San Antonio) saw job gains in 2018. Rural areas that are dependent on agriculture and ranching have a much different economy, where, in many cases, lack of employment opportunities has led to a shrinking population — even while the total state population grows.<sup>46</sup> Nevertheless, agriculture is a significant contributor to the state economy, leading the nation in the number of farms and ranches that combined sold \$24.9 billion in agricultural products in 2017.<sup>47</sup>

Despite statewide economic diversity and GDP expansion in several major industries, between 2007 and 2018, labor force participation in Texas fell to its lowest point since the 1970s, wages were fairly stagnant, income inequality was on the rise, and overall employment growth was largely driven by an increase in jobs with wages that could not keep up with the increase in the cost of the basic household budget.<sup>48</sup>

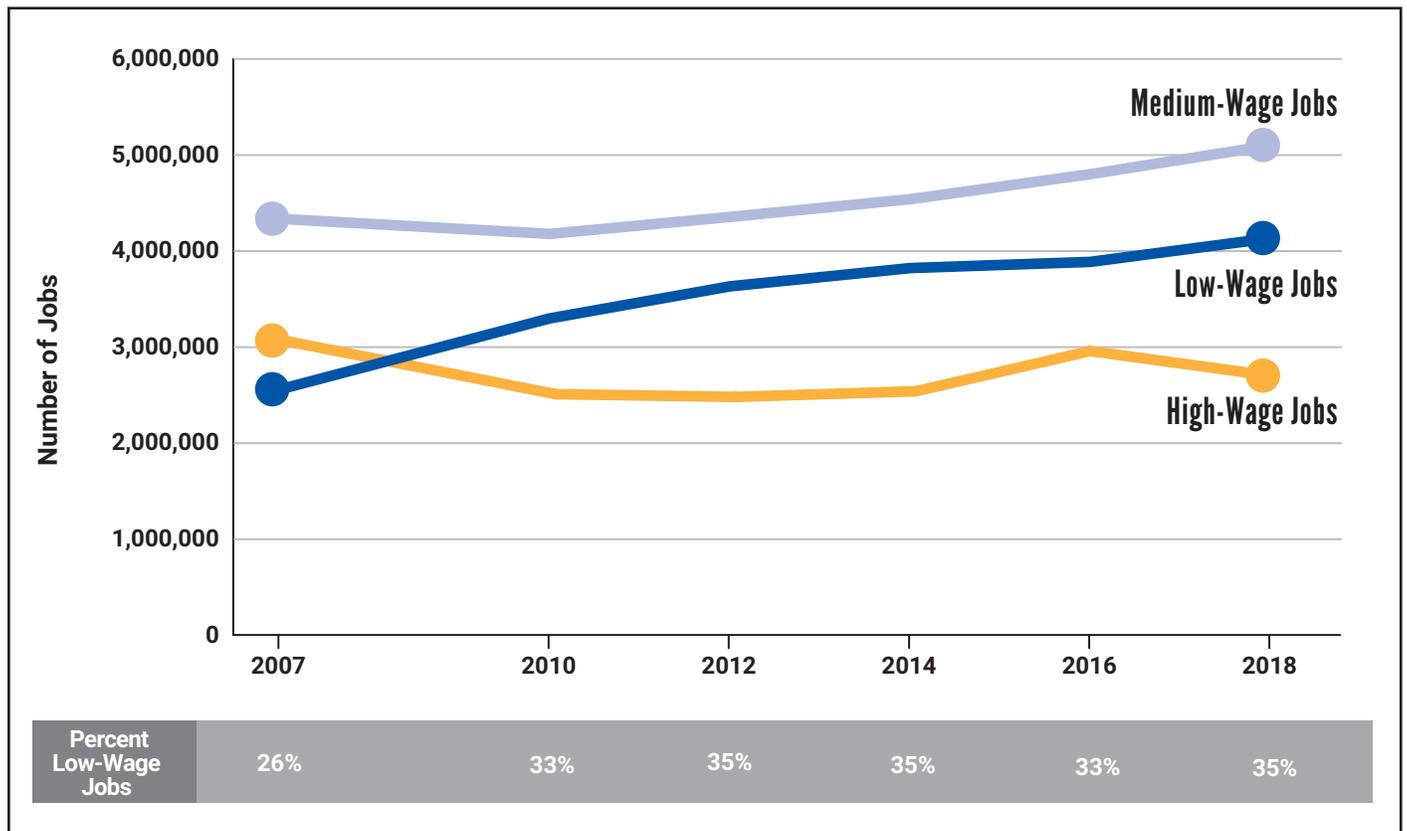
Figure 6 illustrates the following trends in wages compared to the cost of living in Texas from 2007 to 2018:

- Low-wage jobs (dark-blue line) are defined as those paying less than the wage needed for two workers to afford the family Household Survival Budget (which includes costs for two adults, an infant, and a four-year-old). In 2007, this was less than \$10.88 per hour; by 2018, it was less than \$16.12 per hour. The number of low-wage jobs increased by 62% (from 2,559,250 to 4,133,850) during that period. This shows that, even with two earners working full time, it is not only possible but common for households to fall below the ALICE Threshold.

**“ Despite statewide economic diversity and GDP expansion in several major industries...overall employment growth was largely driven by an increase in jobs with wages that could not keep up with the increase in the cost of the basic household budget. ”**

- Medium-wage jobs (light-blue line) allow two workers to afford a family Household Survival Budget. In 2007, these were jobs that paid between \$10.88 and \$21.76 per hour, per worker; by 2018, wages needed for these jobs were between \$16.12 and \$32.25 per hour, per worker. The number of medium-wage jobs increased by 18% (from 4,334,590 to 5,100,180) during that period, and continued to represent the largest proportion of jobs in the state. The large number of ALICE households in the state suggests that many of these medium-wages jobs are not full-time.
- High-wage jobs (gold line) allow one worker to afford a family Household Survival Budget. In 2007, the wage required was \$21.77 per hour or more; by 2018, the wage required had increased to \$32.26 per hour or more. The number of high-wage jobs decreased by 12% (from 3,064,810 to 2,702,510) during that period.<sup>49</sup>

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



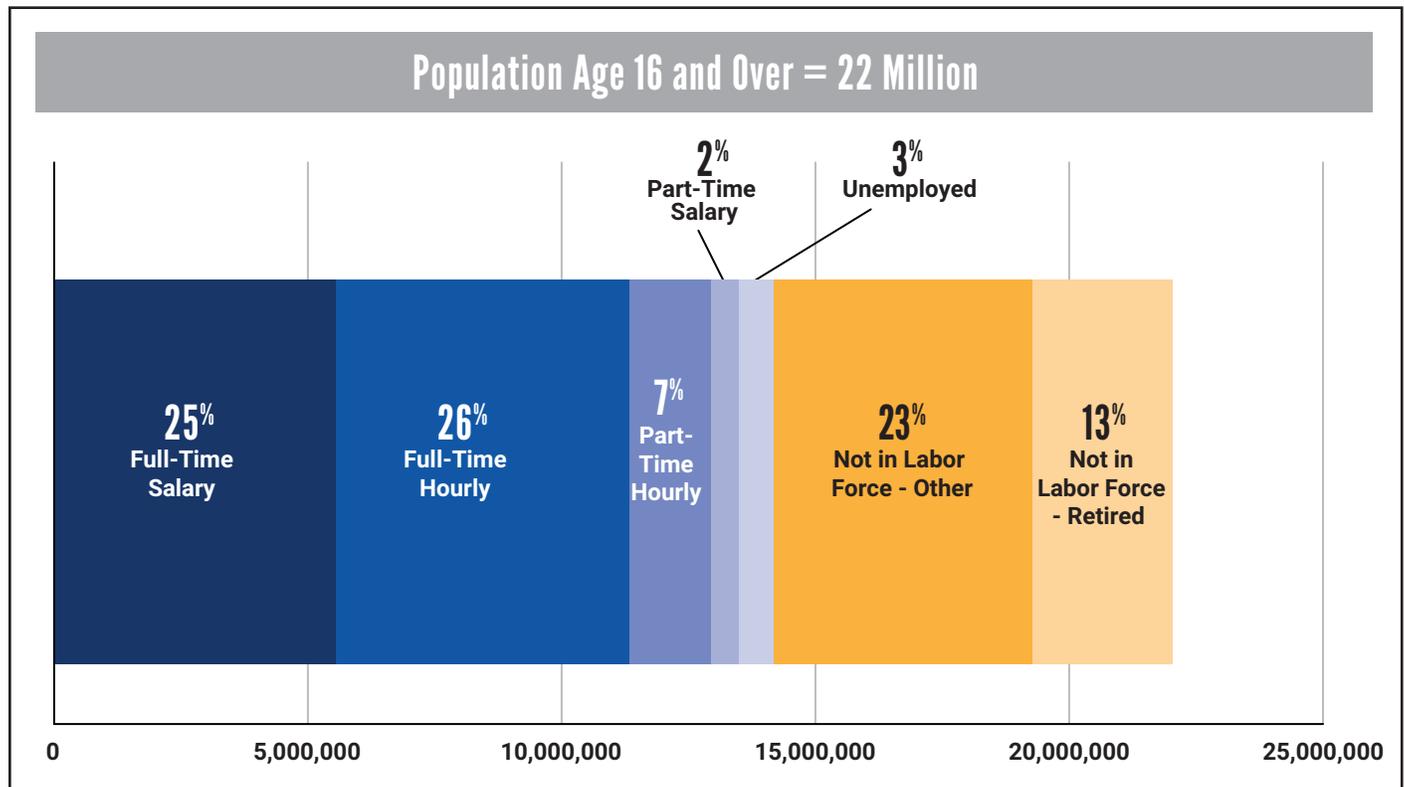
Note: Wage levels are defined by their relation to the Household Survival Budget. Dark-blue = Job cannot support family Household Survival Budget with two earners. Light-blue = Job supports family Household Survival Budget with two earners. Gold = Job supports family Household Survival Budget with one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

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

# THE NEW LABOR FORCE

A 2018 overview of the labor status of Texas' 22,036,809 working-age adults (people age 16 and over) shows that 64% of adults were in the labor force (blue bars in figure 7) — including those who were unemployed but actively looking for work — yet just over half of them were workers who were paid hourly. In addition, 36% of adults were outside the labor force (gold bars), the largest number since the 1970s (Figure 7).<sup>50</sup>

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



*Note: Data for full- and part-time jobs is only available at the national level; these national rates (51% of full-time workers and 75% of part-time workers paid hourly) have been applied to the total Texas workforce to calculate the breakdown shown in this figure. Full-time represents a minimum of 35 hours per week at one or more jobs for 48 weeks per year. Many percentages are rounded to whole numbers, sometimes resulting in percentages totaling 99% or 101%.*

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

Though the majority of adults in Texas were working in 2018 and most households had at least one worker, only 25% of working-age adults had the security of a full-time job with a salary. The rest were paid hourly and/or worked part time.<sup>51</sup>

## Hourly Work and the Gig Economy

Employers' increasing reliance on hourly workers is typically associated with freelance "gig economy" jobs (like rideshare driving or on-demand delivery), but even traditional jobs are now more likely to be paid by the hour, especially in retail, health care, food service, and construction.<sup>52</sup> In some industries, there is a gap between the demand for these hourly workers and the number of skilled workers available and willing to take these positions. For example, a 2018 survey found that 78% of Texas construction companies surveyed had difficulty filling hourly craft/trade positions.<sup>53</sup> This underscores the fact that many workers do not have access to the education and training they need, and also that many workers may not want to work on an hourly basis because of the inherent disadvantages. Hourly workers are more likely to have fluctuations in income, with frequent schedule changes and variation in the number of hours available for work

each week and/or month. They are also less likely to receive benefits such as health insurance, paid time off, family leave, or retirement benefits, especially if they work fewer than 30 hours per week at a single job.<sup>54</sup>

Non-traditional and gig workers include people of all races, ethnicities, and genders, across a wide range of ages and geographies. However, nationwide, people who engage in non-traditional work are more likely to be younger (especially temp-agency and online-platform workers), and to live in urban areas and in Western states. By gender, men working non-traditional jobs are more likely than women to participate in online platform-based work and to rely on gig work for their primary source of income; women are more likely to use gig work to supplement their income and to sell goods online. By race, the non-traditional workforce generally mirrors that of the overall workforce; however, there are differences in the type of non-traditional work different groups tend to engage in. For example, White non-traditional workers are more likely to be independent freelancers, consultants, or contractors. Black and Hispanic non-traditional workers are more likely to work with temp agencies or contract companies — non-traditional work arrangements that tend to be lower-paid and less flexible.<sup>55</sup>

Hourly workers are more likely to have multiple sources of income. Traditional measures of employment have focused on the number of jobs held by a worker; for example, the U.S. Bureau of Labor Statistics estimates that only 5% of workers held two or more jobs in 2018.<sup>56</sup> However, in the modern economy, where many workers have their own small business, are consultants, or are contingent, temporary, freelance, or contract workers, a worker may have many sources of income that are not necessarily considered a “job.” In 2019, nearly half (45%) of working adults reported having a side gig outside of their primary job.<sup>57</sup>

In comparison with hourly workers, salaried workers are paid an annual amount at regular pay periods, and usually receive benefits. Nationally, employers spent an average of 31% of compensation on benefits in 2018; not providing these represents significant savings to the employer. As a result, even traditional jobs are morphing as employers shift the financial risk of changes in supply and demand to employees.<sup>58</sup> While this is true throughout the economy, it is especially concentrated in lower-wage positions — the jobs most accessible to ALICE.

## Who is Out of the Labor Force?

Of adults 16 years and older in Texas, 13% were out of the labor force in 2018 because they were retired and another 23% were out of the labor force for other reasons (gold bars in Figure 7). This totals 36% of adults outside the labor force.<sup>59</sup>

Retirees (age 65 and over and not working) are traditionally one of the largest groups of adults out of the labor force. In Texas in 2018, they accounted for a higher percentage than in the past, in part due to the baby boomer generation aging into retirement. However, this number did not include the increasing number of seniors who were still working; in 2018, 23% of seniors in Texas were still in the labor force, one of the highest rates in the country. In the same year, five Texas cities — Plano, Garland, Austin, Dallas, and Irving — ranked in the top 10 cities in the nation with the largest working senior populations, and Austin ranked 11<sup>th</sup> highest for the growth of this population (2014–2018) out of the 100 U.S. cities with the largest senior populations.<sup>60</sup>

Those under 65 and not working were out of the labor force for a variety of reasons, the two most common being:

- **School:** Nationally, 77% of high school students and 52% of college students did not work in 2018. At these rates, non-working students in Texas would account for just over one-third (35%) of the state’s working-age adults out of the workforce.<sup>61</sup>
- **Health:** Adults with one or more health issues — an illness or disability that makes it difficult to get to work, perform some job functions, or work long hours — accounted for almost one-fifth (18%) of those out of the labor force in Texas in 2018.<sup>62</sup>

The remainder of adults were out of the labor force for other reasons, including family caregiving responsibilities, limited access to transportation or child care, or difficulty managing unpredictable or unstable work schedules (a common issue in low-wage jobs).<sup>63</sup> For women 25 to 54 years old, the most common reason for not working in 2018 was in-home responsibilities – caring for children, but also, as the population of Texas ages, caring for an aging parent or a family member with a disability or chronic health issue.<sup>64</sup> In terms of race and ethnicity, labor force participation is similar across groups (ranging between 60% and 69% nationally for the primary Census-designated racial/ethnic groups in 2018). There is, however, greater variance by gender and race/ethnicity: Nationwide in 2018, Hispanic men were more likely to participate in the labor force than men in other racial/ethnic groups; among adult women, Black women were more likely to participate in the labor force than other racial/ethnic groups.<sup>65</sup>

These adults who were out of the workforce were not included in the state’s low unemployment rate, which only counts adults actively looking for work. In previous periods of low unemployment, employers have had to offer much higher wages to attract workers back into the labor force or away from other businesses. However, in the 2018 economy, those out of the labor force proved to be a large reserve of potential workers able to be drawn back into the labor force with only slightly higher wages – in effect, keeping wages low.<sup>66</sup>

## ALICE JOBS: MAINTAINING THE ECONOMY

While national conversations about work often focus on the economic importance of the “innovation” sector and its high-paying jobs, the reality is that the smooth functioning of the national and Texas economies relies on a much larger number of occupations that build and repair the infrastructure and educate and care for the past, current, and future workforce. The workers in these jobs are described as “Maintainers” by technology scholars Lee Vinsel and Andrew Russell, and they are primarily ALICE.<sup>67</sup> To better understand where ALICE works, we elaborate on Vinsel and Russell’s concept by breaking down all occupations in Texas into two occupational categories, each with two job types: the lower-paying Maintainer occupations, composed of Infrastructor and Nurturer jobs; and the higher-paying Innovator occupations, composed of Adaptor and Inventor jobs.

### DEFINITIONS

#### Maintainer Occupations:

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

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

#### Innovator Occupations:

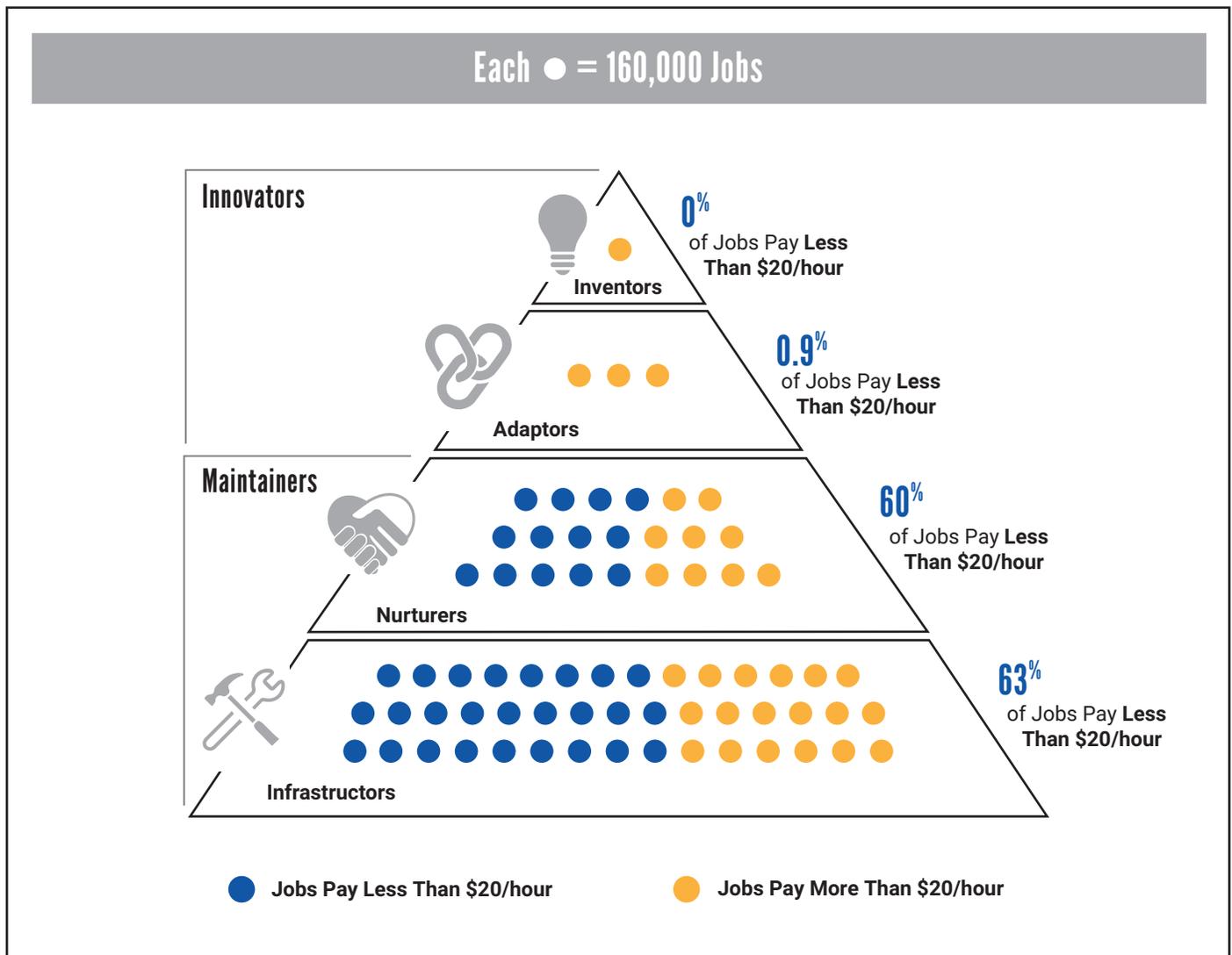
**Adaptors** implement existing tools or processes in new ways, responding to opportunities and changing circumstances (managers, industrial and organizational psychologists, analysts, designers, technicians, and even policymakers).

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

The largest employment sectors in Texas are comprised primarily of Maintainer occupations. The single largest industry group in 2018, with 2.5 million employees, was trade, transportation, and utilities, which is comprised of Infrastructor jobs. The second largest, with almost 2 million employees, was government. These jobs – including federal, state, and county government positions – are largely Nurturers (such as teachers, support staff, and public health workers) and Infrastructors (such as police officers and administrative workers). Both industries have large shares of ALICE workers.<sup>68</sup> There are far fewer jobs in Innovator occupations (Adaptors and Inventors).

When stacked together, Texas’ occupations form a pyramid that reveals the critical role of Maintainer jobs – the jobs most accessible to ALICE – in the state economy (Figure 8). The majority of Maintainer jobs (63% of Infrastructor jobs and 60% of Nurturer jobs) pay less than \$20 per hour – a wage that, if full time, year-round, provides a maximum annual salary of \$40,000, or \$24,512 less than the family Household Survival Budget of \$64,512. By comparison, almost all Adaptor and Inventor occupations pay more than \$20 per hour.

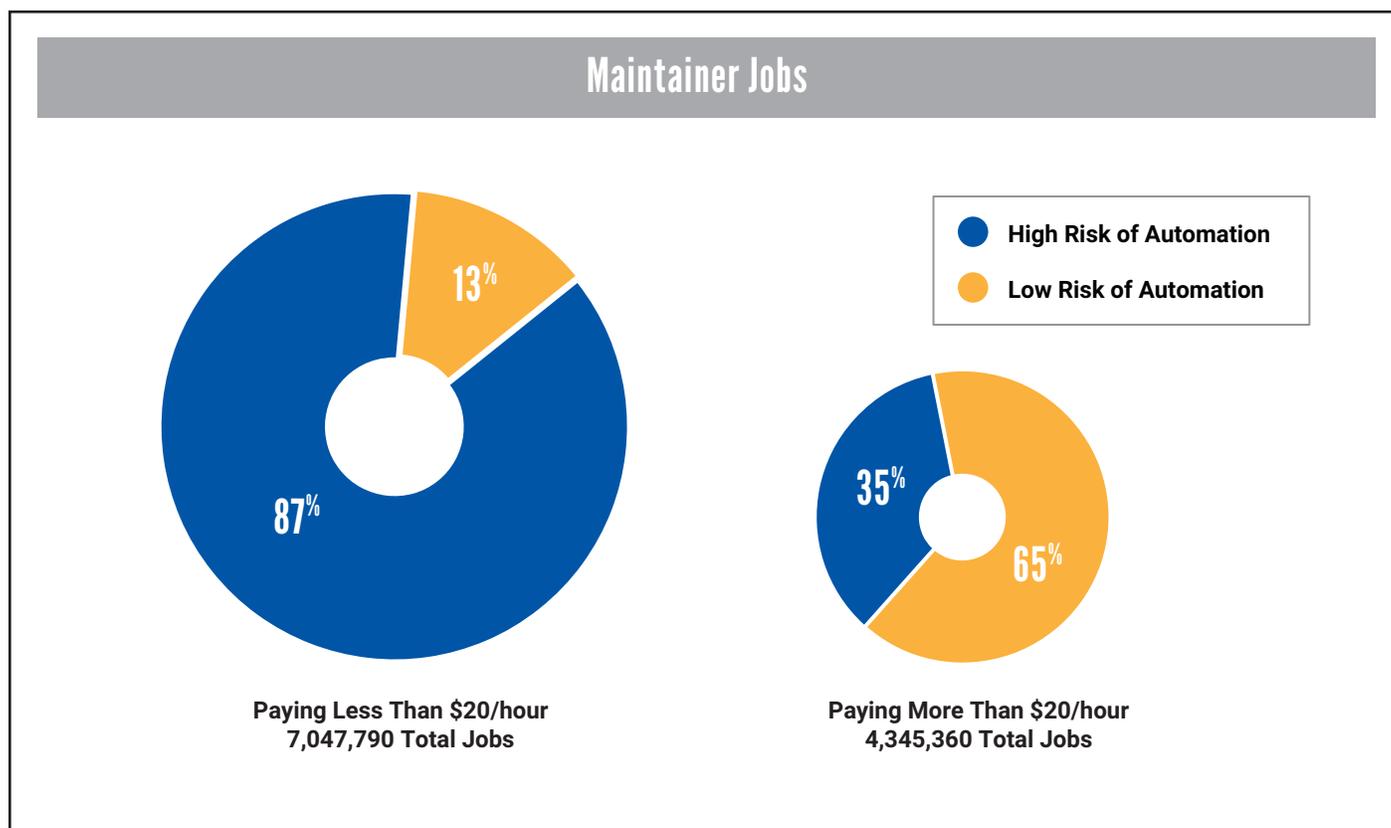
**Figure 8.**  
**Occupations by Wage and Type, Texas, 2018**



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

The precarious nature of ALICE workers' jobs is reinforced by the powerful relationship between low wages and the high risk of jobs becoming automated (defined as having a greater than 50% chance of being replaced by technology in the next decade). Jobs that pay less than \$20 per hour are more likely to be replaced by technology compared to higher-paying jobs. This is especially true for Maintainer occupations, where most jobs pay less than \$20 per hour and 87% of these low-paying jobs are at a high risk of automation. By comparison, only 35% of Maintainer jobs that pay more than \$20 per hour are at that level of risk (Figure 9). In Texas, it is estimated that almost half (46.5%) of occupational tasks performed by people can be replaced by technologies that already exist; Texas ranks in the middle of U.S. states (25<sup>th</sup>) on this measure. By metropolitan area, automation risk is highest in the Dallas-Fort Worth-Arlington, El Paso, and Houston-The Woodlands-Sugar Land metropolitan areas.<sup>69</sup>

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



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

There are also differences in salary and risk of automation based on the type of Maintainer job. Among Infrastructor jobs, 95% of jobs that pay less than \$20 per hour are at risk of automation, compared to 53% of those that pay more than \$20 per hour. Among Nurturer jobs, the discrepancy is even greater: 72% of jobs that pay less than \$20 per hour are at risk of automation, compared with 2% of those that pay more than \$20 per hour.<sup>70</sup> Education level also impacts risk of automation; nationally, the risk for jobs that require only a high school diploma (55%) is more than double the risk for jobs that require a bachelor's degree (24%).<sup>71</sup>

# TRENDS: THE LANDSCAPE OF WORK

**Economic growth will be led by the non-traditional work and small businesses of the gig economy.** As much as 94% of U.S. net employment growth in the last decade has come from alternative or contingent labor, according to a National Bureau of Economic Research report.<sup>72</sup> With an increasing number of workers who are contractors, work in small businesses, or rely on a combination of side gigs, the number of people experiencing gaps in income and going without benefits will also rise. Millennials are leading the way in this trend, with 48% nationally saying they earn income on the side (i.e., in addition to what they consider their primary employment), compared to 28% of baby boomers.<sup>73</sup> These arrangements are more volatile than traditional jobs, and workers bear the brunt of changes in demand, the price of materials, and transportation costs, as well as impacts related to cyberattacks, natural and human-made disasters, and economic downturns.<sup>74</sup>

**The rise of automation will require a workforce with more digital skills.** Rather than being replaced outright, many jobs, across all job types, will require an increasing ability to incorporate new technologies, work with data, and make data-based decisions.<sup>75</sup> ALICE workers will need to gain new skills rapidly, and that will require more on-the-job training, more flexibility to change career paths, and different kinds of education providers.<sup>76</sup> The benefits of increased technology will include improved accuracy in areas like pharmaceutical pill dispensing, and reduced risk of injury for workers such as warehouse packers and long-distance drivers.<sup>77</sup> Increased use of digital tools could have an especially strong impact on small businesses in rural areas in the state. By one projection, improved access to digital tools could lead to the addition of over 23,433 jobs, \$962.7 million in additional wages, and \$6,656.9 million in additional annual sales.<sup>78</sup> And opportunities for education and training across all areas, not just related to technology, are key for filling the skills gaps that exist in many industries, especially in southern states — growing wages and the overall economy.<sup>79</sup>

**The number of low-wage jobs will continue to increase, despite automation.** Even though most jobs will change and evolve with demand as well as technology, it may not be economical or effective to automate certain jobs. For example, low-wage Maintainer jobs in areas like education and health care require employees to be on-site and often involve relational skills that are difficult or impossible to automate (although these workers will still have to learn to work with technology). From 2016 to 2026, the occupation projected to have the largest number of new jobs in Texas is food preparation and serving workers; the median wage for these jobs in 2018 was \$9.44 per hour (including employer-reported tips), which was not enough to support the single-adult, family, or Senior Survival Budgets. Of the state's top 20 growth occupations, 69% will pay less than \$15 per hour, 52% will not require any formal educational credential at all, and 31% will require only a high school diploma.<sup>80</sup>

**Students will continue to be a significant part of the labor force.** As more families face financial hardship and the cost of college continues to rise, more students will have to work while in school. Nationally, 20% of high school students, 41% of full-time college students, and 82% of part-time college students had a job in 2017.<sup>81</sup> What's more, despite many students being employed, 45% of college students who completed the largest annual survey of basic college needs reported having experienced food insecurity in the previous month, and 56% had experienced housing insecurity in the prior year.<sup>82</sup> And even with more students working, student debt will continue to increase as more students from lower-income families attend college and costs continue to rise. In Texas, 56% of college students who graduated in 2018 were in debt, with an average loan of \$27,293, a 31% increase from 2010.<sup>83</sup>

# NEXT STEPS: DATA FOR ACTION

The ALICE data highlights significant problems in the Texas economy in 2018: stagnant wages, a rising cost of living, and 44% of the state's households unable to afford even the most basic budget. However, this data can also be used to generate solutions to these problems that help ALICE households and create equity across communities. The measures of cost of living, financial hardship, and changes in the labor force presented in this Report can help stakeholders ask the right questions and make data-driven decisions. This data can help policymakers and community organizations identify gaps in community resources, and it can guide businesses in finding additional ways to assist their workforce and increase productivity — both in times of economic growth and in periods of economic recovery.

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

## IDENTIFYING GAPS

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

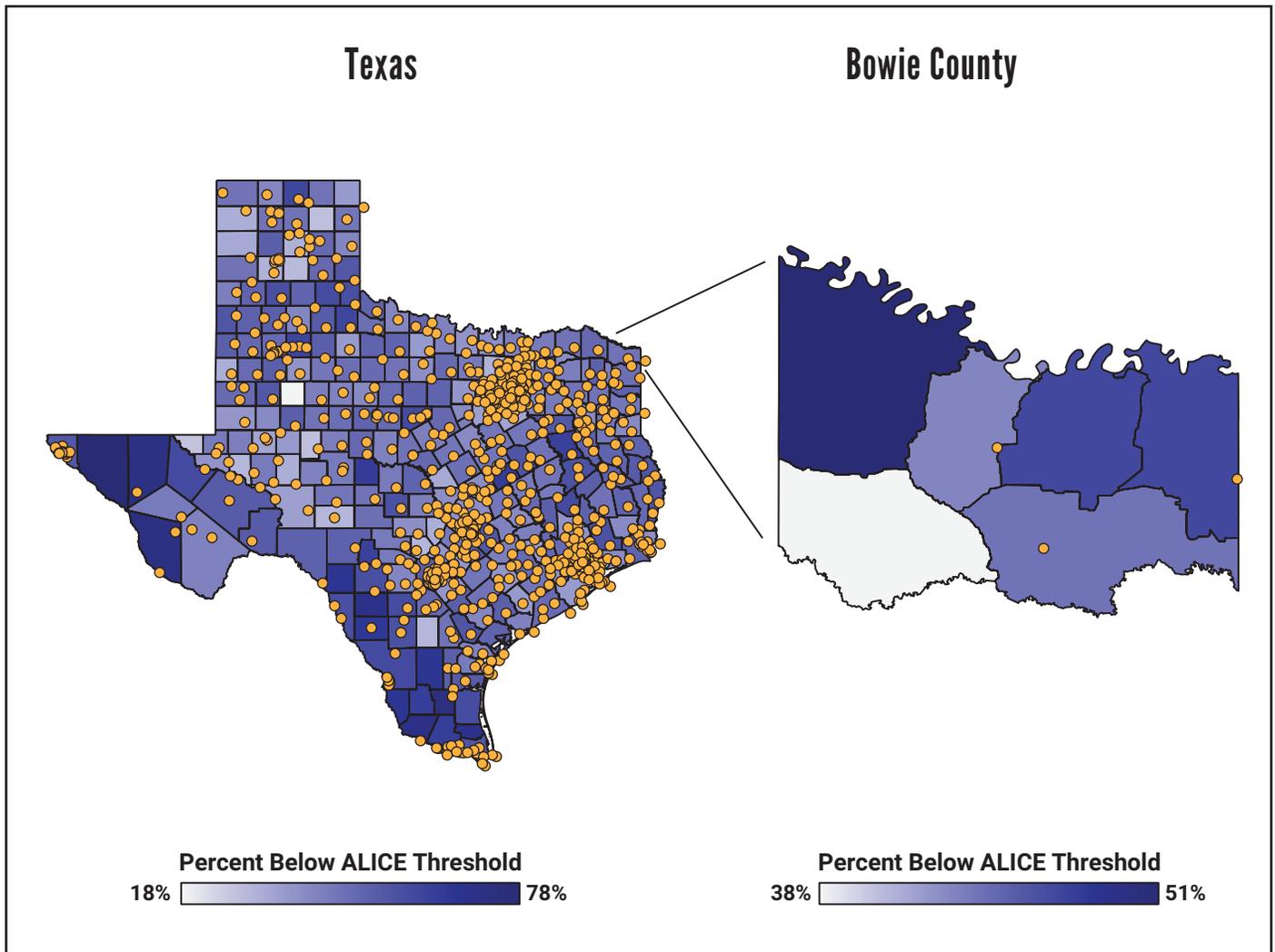
With the ALICE data tools, stakeholders can map where ALICE lives along with the location of community resources — such as public libraries or disaster-relief services — to identify gaps by town, ZIP code, or county (Figure 10). This data can help stakeholders answer targeted questions, including the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

### Do ALICE households have access to libraries?

Access to public libraries is especially important for ALICE families because libraries provide information on social services and job opportunities, free internet and computer access, and a range of free programs, community meetings, and even 3-D printers. After a natural disaster, libraries serve as second responders, providing electricity, internet access, charging stations, heat or air conditioning, and current information on recovery efforts.<sup>84</sup> In lower-income communities, the library can provide a safe and inclusive place for individuals and families. A 2019 Gallup Poll found that lower-income households (earning less than \$40,000 per year) visit the library more frequently than average- and higher-income households.<sup>85</sup> In Texas in 2017, public libraries provided \$2.6 billion in economic benefits to the state through direct services, programs, resources (including access to technology), and library employment, with a return on investment of \$4.64 for each dollar spent.<sup>86</sup>

There are 806 libraries across Texas' 254 counties, shown in gold dots in Figure 10 (and in an interactive feature on [UnitedForALICE.org/Texas](https://UnitedForALICE.org/Texas)).<sup>87</sup> This data can help stakeholders identify where there are gaps in needed services (such as in areas with a high percentage of ALICE households but few or no libraries) and what type of intervention might be most helpful. For example, areas with a small population but a high percentage of ALICE households may benefit more from mobile library services than a new brick-and-mortar building, or library services (like free computers) could be offered in other public buildings.

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



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

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

Mapping where ALICE households live in relation to the impact of natural disasters such as floods, hurricanes, or tornadoes can help first and second responders meet critical needs. Disasters directly threaten the homes of ALICE families since more affordable housing is often located in vulnerable areas. The jobs where ALICE works are also more at risk, since low-wage and hourly paid jobs are more likely to be interrupted or lost. In addition, ALICE households have few or no savings for an emergency to begin with, and their communities often have fewer resources to assist households.<sup>88</sup> These issues are of particular concern in Texas, which ranked first-highest in the nation for the frequency and variety of natural disasters in 2017, and second-highest in the nation for business losses due to natural disasters between 2004 and 2018.<sup>89</sup>

Knowing where ALICE households live can help federal, state, and local governments target preparation, response, and assistance for natural disasters, and help companies plan where to deploy their workforce and support. Because ALICE households and communities do not have the same resources as their wealthier counterparts, namely insurance or savings, they will need more assistance over a longer period of time to recover. Strategies will vary by rural or urban context, the quality of the housing stock, and the age composition of the community (with the young and the elderly more dependent on care).<sup>90</sup>

# UNDERSTANDING ALICE: HEALTH, EDUCATION, AND SOCIAL FACTORS

In most contexts, having a low income is associated with lower levels of education, higher rates of unemployment, and poorer health.<sup>91</sup> Communities that have been able to disrupt that association can provide important insights on how to change environments or policy to support ALICE households. By tracking where ALICE lives with other indicators, it is possible to identify counties that have overcome a challenge or bucked a trend. Stakeholders can then learn from these examples and adapt those solutions to their own areas.

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

**Here are two possible questions:**

## Is internet access related to income?

Access to digital technology has exploded over the last three decades: By 2018, 92% of U.S. adults owned a computing device and 85% had a broadband internet subscription; in Texas, the rates were the same.<sup>92</sup> Technology has also become more important for work, education, community participation, and, crucially, disaster response and recovery.

But access to technology still varies by income and geography. For many families, that lack of access translates directly to reduced job opportunities, educational opportunities, health care access, and financial tools. For example, low-income adults are more likely to use their phones to search and apply for jobs; nationally, 32% of smartphone users with income below \$30,000 have applied for a job on their phone, compared with 7% of smartphone users with income above \$75,000. Although smartphone technology is constantly improving, many tasks are still more difficult to complete on the small screen of a smartphone as opposed to a computer (e.g., word processing, filling out applications, editing spreadsheets), and many websites still do not have a mobile version, making navigation time-consuming and difficult, or sometimes impossible. Households without internet access are also at greater risk of being undercounted in the 2020 Census, when they may need government programs and services the most.<sup>93</sup>

This high usage of smartphones for a critical task indicates that many low-income households have limited access to the internet at home. In Texas, 31% of households with income below the ALICE Threshold do not have an internet subscription, compared with only 8% for households above the ALICE Threshold. Rates also vary widely by location: The counties with the lowest access rates and lowest income are in rural areas, where 40% of households below the ALICE Threshold do not have an internet subscription.<sup>94</sup> In 2017, Laredo and Brownsville ranked first and second on a list of the nation's worst-connected cities, with 32% and 31% of households lacking internet access, respectively.<sup>95</sup> In the age of distance learning, this digital divide by geography and income has a particularly negative impact on the state's youngest residents. In 2018, Texas had the largest population in the nation of K-12 students without adequate internet connection — approximately 1,829,000 students in total. Identifying these gaps can help businesses, governments, and local communities direct resources and establish strategies to improve equity in internet access.<sup>96</sup>

## Are drug overdoses driven by income?

Texas, like many states across the country, has experienced an increase in drug overdose deaths over the last decade. In 2018, the age-adjusted rate of drug overdose deaths in Texas was 10.4 per 100,000 population, well below the U.S. rate of 20.7, yet with a 16% increase between 2014 and 2018 (from 2,601 deaths in 2014 to 3,005 in 2018). Nationally, heroin and other opioids are involved in the majority of drug overdose deaths (nearly 70% in 2018); by contrast, in Texas, opioids were involved in less than half of drug-overdose deaths in 2018, and the number of opioid-related deaths

actually decreased between 2017 and 2018 (for the first time since 2013). Deaths due to methamphetamine and cocaine overtook opioid-involved deaths in 2016 to become the leading cause of drug-overdose deaths in the state. Deaths involving these drugs more than doubled between 2014 and 2018 (cocaine-involved deaths increased 111% and deaths involving methamphetamine increased 152%).<sup>97</sup>

Several national studies have suggested that counties with the worst economic prospects have the highest rates of substance use disorders and drug overdose hospitalizations and deaths. Yet that relationship varies across states, as people of all incomes, geographies, ages, and races/ethnicities suffer from substance use disorders.<sup>98</sup> In Texas, overdose deaths have been reported in the majority of counties. In 2017, while some of the highest numbers of overdose deaths occurred in counties that also had a high percentage of households below the ALICE Threshold, overall there was not a significant relationship between income (defined by the percentage of households below the ALICE Threshold) and drug overdose deaths across Texas' counties.<sup>99</sup>

Understanding which communities have been hardest hit by substance use disorders can help planners and stakeholders see the complex ways in which addiction and financial hardship interact. Although economic standing is not always a risk factor for drug addiction in Texas, the consequences of addiction hit low-income families harder. The impact of addiction and substance use disorders on families often means a decline in their financial position, causing many families to become or remain ALICE. A family's income may be reduced if addiction reduces an adult's ability to work, and these families often have substantial health care costs. For example, methadone treatment for opioid users costs about \$500 per month, and inpatient rehabilitation facilities for substance use treatment can range from \$6,000 to \$20,000 per month. Lower-income families may not have access to such treatment programs, which only prolongs and compounds the outcomes of addiction. Substance use disorders take a toll on the stability of families and marriages, on parenting, and on the physical and mental health of family members.<sup>100</sup> For all of these reasons, there can be huge value for community stakeholders in mapping where ALICE lives with drug-overdose deaths to identify communities that have the greatest need but the fewest resources to address addiction-related problems.<sup>101</sup>

**“ The impact of addiction and substance use disorders on families often means a decline in their financial position, causing many families to become or remain ALICE. ”**

## THE BENEFITS OF MOVING TOWARD INCOME EQUITY IN TEXAS

The strength of the Texas economy is inextricably tied to the financial stability of its residents. The more people who participate in a state's economy, the stronger it will be. In 2018, when the national economy was often described as “strong,” the reality was that 4,290,195 Texas households – more than two out of five households in the state – struggled to support themselves. If all households earned enough to meet their basic needs, not only would each family's hardship be eased, but the Texas economy would also benefit substantially. This is true in times of economic growth, and it becomes even more important during a period of crisis and recovery.

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

**Based on 2018 data, the economic benefit to Texas of bringing all households to the ALICE Threshold would be approximately \$305.4 billion, meaning that the state GDP would grow by 17% (Figure 11).** This is based on two categories of economic enhancement:

**Earnings:** Texas' 2018 GDP reflected earnings of \$106.6 billion by the state's households below the ALICE Threshold. Bringing all households to the ALICE Threshold would have a two-fold impact:

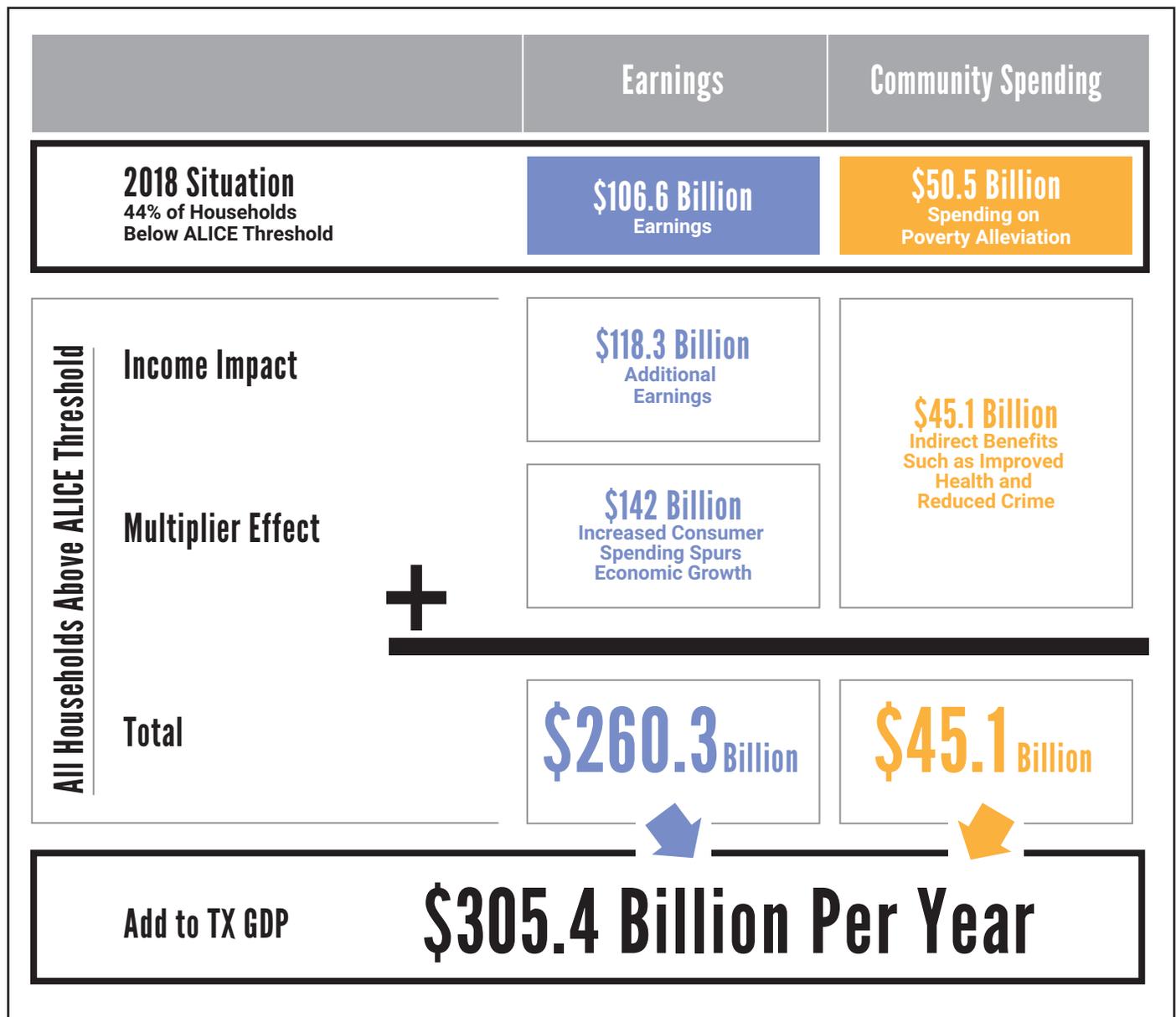
- **Additional earnings:** \$118.3 billion statewide.
- **Multiplier effect:** Studies show that almost all additional wages earned by low-wage workers are put back into the economy through increased consumer spending, which in turn spurs business growth.<sup>102</sup> Building on economic calculations used by Moody's Analytics, this estimate assumes an economic multiplier of 1.2, meaning that a \$1 increase in compensation to low-wage workers leads to a \$1.20 increase in economic activity. In Texas, this increased economic activity would be valued at \$142 billion.<sup>103</sup>

**Community spending:** Texas' 2018 GDP reflected community spending of \$50.5 billion on assistance to the state's households below the ALICE Threshold.<sup>104</sup> When all households can meet their basic needs, this spending can be reallocated to projects and programs that help families and communities *thrive*, not just survive.

- **Indirect benefits:** Added value to the state GDP would come in the form of indirect benefits associated with increased financial stability. These benefits include improved health (and reduced health care expenditures), reduced crime and homelessness, and greater community engagement. Figure 11 uses the very conservative estimate of an added \$45.1 billion (or 2.5% of the state GDP, which is the estimated cost of childhood poverty alone).<sup>105</sup> This is still far short of the total indirect benefits of bringing all households to the ALICE Threshold, as it does not include benefits for adults or factor in the direct impact of redeploying private and nonprofit spending currently used to alleviate poverty.<sup>106</sup>

Figure 11.

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



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

Sources: ALICE Threshold, 2018; American Community Survey, 2018; McKeever, 2018; National Association of State Budget Officers, 2019; Office of Management and Budget, 2019; U.S. Department of Agriculture—SNAP, 2019; Urban Institute, 2012<sup>107</sup>

## Benefits for Households and Local Communities

In addition to the economic benefits to the state if all households had income above the ALICE Threshold, there would be a significant number of positive changes for families and their communities. Our 2019 companion Report, *The Consequences of Insufficient Household Income*, outlines the tough choices ALICE and poverty-level families make when they do not have enough income to afford basic necessities, and how those decisions affect their broader communities. By contrast, Figure 12 outlines the improvements that all Texas families and their communities would experience if policies were implemented that moved all households above the ALICE Threshold.<sup>108</sup>

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

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

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

In addition to the benefits listed above, greater financial stability and having basic needs met can reduce the anxiety that comes from struggling to survive, or not having a cushion for emergencies. It also leaves more time to spend with loved ones and to give back to the community – all of which contribute to happiness and improved life satisfaction.<sup>109</sup>

Having money saves money: Having enough income means that households can build their credit scores and avoid late fees, predatory lending, and higher interest rates.<sup>110</sup> That, in turn, means that ALICE families have more resources to use to reduce risks (e.g., by purchasing insurance), stay healthy (e.g., by getting preventative health care), or save and invest in education or assets that could grow over time (e.g., buying a home or opening a small business). Instead of a downward cycle of accumulating fees, debt, and stress, families can have an upward cycle of savings and health that makes them even better able to be engaged in their communities and, in turn, enjoy a reasonable quality of life.

For communities, this leads to greater economic activity, greater tax revenue, lower levels of crime, and fewer demands on the social safety net, allowing more investment in vital infrastructure, schools, and health care.<sup>111</sup> Strengthening communities by strengthening ALICE families means a higher quality of life for all.

# ENDNOTES

1 Kaiser Family Foundation. (n.d.). Health insurance coverage of the total population. Retrieved from <https://www.kff.org/other/state-indicator/total-population/>

2 American Community Survey. (2018). *1-year estimates*. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>

3 Note: Collectively, LGBTQ+ people are more likely to live in poverty compared to straight cis-gender people. However, there are important within-group differences. For example, transgender people and bisexual cisgender women experience the highest rates of poverty, while gay cisgender men — particularly those in married couples — are less likely to have low-incomes than other LGBTQ+ groups.

Badgett, M. V. L., Choi, S. K., & Wilson, B. D. M. (2019 October). *LGBT poverty in the United States: A study of differences between sexual orientation and gender identity groups*. University of California Los Angeles School of Law, Williams Institute. Retrieved from <https://williamsinstitute.law.ucla.edu/wp-content/uploads/National-LGBT-Poverty-Oct-2019.pdf>

Ballard, J., Wieling, E., Solheim, C., & Dwanyen, L. (2016). *Immigrant and Refugee Families, 2nd Edition*. University of Minnesota Libraries Publishing. Retrieved from <https://open.lib.umn.edu/immigrantfamilies/>

Goodman, N., Morris, M., & Boston, K. (2017, February 8). *Financial inequality: Disability, race, and poverty in America*. National Disability Institute. Retrieved from <https://www.nationaldisabilityinstitute.org/wp-content/uploads/2019/02/disability-race-poverty-in-america.pdf>

Pettit, B., Sykes, B. (2017). *State of the union 2017: Incarceration*. The Stanford Center on Poverty and Inequality. Retrieved from [https://inequality.stanford.edu/sites/default/files/Pathways\\_SOTU\\_2017\\_incarceration.pdf](https://inequality.stanford.edu/sites/default/files/Pathways_SOTU_2017_incarceration.pdf)

University of Wisconsin Institute for Research on Poverty. (2020, May). Connections among poverty, incarceration, and inequality. *Fast Focus Research/Policy Brief No. 48-2020*. Retrieved from <https://www.irp.wisc.edu/resource/connections-among-poverty-incarceration-and-inequality/>

Wolla, S. A., & Sullivan, J. (2017, January). Education, income, and wealth. *Page One Economics, Federal Reserve Bank of St. Louis*. Retrieved from <https://research.stlouisfed.org/publications/page1-econ/2017/01/03/education-income-and-wealth/>

4 Households on the cusp are defined as those with income in the Census income bracket above and below the ALICE Threshold. Income brackets begin with less than \$10,000/year; they increase in \$5,000 intervals from \$10,000–\$50,000/year; then they extend to \$50,000–\$60,000/year, \$60,000–\$75,000/year, \$75,000–\$100,000/year, \$100,000–\$125,000/year, and \$125,000–\$150,000/year.

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

American Community Survey. (2018). *1-year and 5-year estimates*. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>

6 American Community Survey. (2018). *1-year estimates*. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>

McPhillips, D. (2020, January 22). A new analysis finds growing diversity in U.S. cities. *U.S. News and World Report*. Retrieved from <https://www.usnews.com/news/cities/articles/2020-01-22/americas-cities-are-becoming-more-diverse-new-analysis-shows>

Newman, K. (2020, January 22). America's most racially diverse big cities. *U.S. News and World Report*. Retrieved from <https://www.usnews.com/news/cities/slideshows/the-10-most-racially-diverse-big-cities-in-the-the-us?slide=5>

7 Gurrentz, B. (2019, April 12). *Cohabitation over the last 20 years: Measuring and understanding the changing demographics of unmarried partners, 1996-2017*. U.S. Census Bureau. Retrieved from <https://www.census.gov/library/working-papers/2019/demo/SEHSD-WP2019-10.html>

8 American Community Survey. (2018). *1-year estimates*. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>

University of Virginia Weldon Cooper Center, Demographics Research Group. (2018). *National Population Projections*. Retrieved from <https://demographics.coopercenter.org/national-population-projections>

Vespa, J. (2018, March 13). *The U.S. joins other countries with large aging populations*. U.S. Census Bureau. Retrieved from <https://www.census.gov/library/stories/2018/03/graying-america.html>

9 *2020 senior living report: Senior living in Texas*. (n.d.). Retrieved from <https://www.caring.com/senior-living/texas>

AARP Public Policy Institute and the National Alliance for Caregiving. (2015, June). *Caregiving in the U.S.* National Alliance for Caregiving. Retrieved from [http://www.caregiving.org/wp-content/uploads/2015/05/2015\\_CaregivingintheUS\\_Final-Report-June-4\\_WEB.pdf](http://www.caregiving.org/wp-content/uploads/2015/05/2015_CaregivingintheUS_Final-Report-June-4_WEB.pdf)

Hartman, R. M., & Weierbach, F. M. (2013, February). *Elder health in rural America*. National Rural Health Association. Retrieved from <https://www.ruralhealthweb.org/getattachment/Advocate/Policy-Documents/ElderHealthinRuralAmericaFeb2013.pdf.aspx?lang=en-US>

Schaeffer, K. (2019, July 30). *The most common age among whites in U.S. is 58 – more than double that of racial and ethnic minorities*. Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2019/07/30/most-common-age-among-us-racial-ethnic-groups/>

Vespa, J. (2018, March 13). *The U.S. joins other countries with large aging populations*. U.S. Census Bureau. Retrieved from <https://www.census.gov/library/stories/2018/03/graying-america.html>

10 Geier, B. (2019, July 17). Where millennials are moving — 2019 edition. SmartAsset. Retrieved from <https://smartasset.com/mortgage/where-millennials-are-moving-2019>

Maciag, M. (2017, June 22). States where each generation of Americans is growing, declining. *Governing: The Future of States and Localities*. Retrieved from <https://www.governing.com/topics/urban/gov-state-population-changes-by-generation-census.html>

Rubenstein, E. S. (2017). *How millennials are slowing U.S. population growth and enhancing sustainability*. Negative Population Growth. Retrieved from <https://npg.org/wp-content/uploads/2017/11/MillennialsEnhancingSustainability-FP-2017.pdf>

11 Frey, W. H. (2018, January). *The millennial generation: A demographic bridge to America's diverse future*. Metropolitan Policy Program at Brookings. Retrieved from [https://www.brookings.edu/wp-content/uploads/2018/01/2018-jan\\_brookings-metro\\_millennials-a-demographic-bridge-to-americas-diverse-future.pdf](https://www.brookings.edu/wp-content/uploads/2018/01/2018-jan_brookings-metro_millennials-a-demographic-bridge-to-americas-diverse-future.pdf)

12 Desilver, D. (2018, August 7). *For most U.S. workers, real wages have barely budged in decades*. Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2018/08/07/for-most-us-workers-real-wages-have-barely-budged-for-decades/>

Economic Policy Institute. (2020). *The unequal states of America: Income inequality in the United States*. Retrieved from <https://www.epi.org/multimedia/unequal-states-of-america/>

Stone, C., Trisi, D., Sherman, A., & Taylor, R. (2019, August 21). *A guide to statistics on historical trends in income inequality*. Center on Budget and Policy Priorities. Retrieved from [https://www.cbpp.org/research/poverty-and-inequality/a-guide-to-statistics-on-historical-trends-in-income-inequality#\\_ftnref1](https://www.cbpp.org/research/poverty-and-inequality/a-guide-to-statistics-on-historical-trends-in-income-inequality#_ftnref1)

13 Institute on Taxation and Economic Policy. (2018, October). *Who pays? A distributional analysis of the tax system in all 50 states, 6th edition*. Retrieved from <https://itep.org/wp-content/uploads/whopays-ITFP-2018.pdf>

Sommeiller, E. & Price, M. (2018, July 19). *The new gilded age: Income inequality in the U.S. by state, metropolitan area, and county*. Economic Policy Institute. Retrieved from <https://www.epi.org/publication/the-new-gilded-age-income-inequality-in-the-u-s-by-state-metropolitan-area-and-county/>

14 Morris, K., & Kolmar, C. (n.d.). Breaking down the race pay gap. Zippia. Retrieved from <https://www.zippia.com/research/race-pay-gap/>

15 Clemens, A. (2019, October 24). *GDP 2.0: Measuring who prospers when the U.S. economy grows*. Washington Center for Equitable Growth. Retrieved from <https://equitablegrowth.org/gdp-2-0-measuring-who-prospers-when-the-u-s-economy-grows/>

Urban Institute. (2017, October 5). *Nine charts about wealth inequality in America (updated)*. Retrieved from <http://apps.urban.org/features/wealth-inequality-charts/>

16 Shelton, K., Park, J., Villegas C., Guajardo, L., Servidio, C., & Zhang, Z. (2020, June). *The 2020 state of housing in Harris County and Houston*. Kinder Institute for Urban Research, Rice University. Retrieved from <https://kinder.rice.edu/sites/g/files/bxs1676/ff/documents/KI%20Research%20Report-State%20of%20Housing%205.pdf>

17 U.S. Department of Health and Human Services. (2018). 2018 poverty guidelines. Retrieved from <https://aspe.hhs.gov/2018-poverty-guidelines>

18 U.S. Department of Health and Human Services. (2018). 2018 poverty guidelines. Retrieved from <https://aspe.hhs.gov/2018-poverty-guidelines>

19 AAA. (2018). *Your driving costs: How much are you really paying to drive?* Retrieved from [https://exchange.aaa.com/wp-content/uploads/2018/09/18-0090\\_2018-Your-Driving-Costs-Brochure\\_FNL-L-o-5-2.pdf](https://exchange.aaa.com/wp-content/uploads/2018/09/18-0090_2018-Your-Driving-Costs-Brochure_FNL-L-o-5-2.pdf)

Agency for Healthcare Research and Quality. (2018). *2018 Medical Expenditure Panel Survey-insurance component* [Table VII.C.2; Table VII.D.2; Table VII.E.2]. U.S. Department of Health and Human Services. Retrieved from [https://meps.ahrq.gov/data\\_stats/summ\\_tables/insr/state/series\\_7/2018/tviic2.pdf](https://meps.ahrq.gov/data_stats/summ_tables/insr/state/series_7/2018/tviic2.pdf); [https://meps.ahrq.gov/data\\_stats/summ\\_tables/insr/state/series\\_7/2018/tviid2.pdf](https://meps.ahrq.gov/data_stats/summ_tables/insr/state/series_7/2018/tviid2.pdf); [https://meps.ahrq.gov/data\\_stats/summ\\_tables/insr/state/series\\_7/2018/tviie2.pdf](https://meps.ahrq.gov/data_stats/summ_tables/insr/state/series_7/2018/tviie2.pdf)

Note: 2007 data not available; average of 2006 and 2008 used instead

American Community Survey. (2018). *1-year and 5-year estimates*. [Table B25064: Median gross rent (dollars)]; [Table B08301: Means of transportation to work]. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>

Bureau of Labor Statistics. (2018). *Consumer expenditure surveys (CES) [2017-18 MSA tables]*. U.S. Department of Labor. Retrieved from <http://www.bls.gov/cex/csxmsa.htm#y1112>

Bureau of Labor Statistics. (2019). *Table 3234. Consumer units with reference person age 45 to 54 by income before taxes: Average annual expenditures and characteristics, Consumer Expenditure Survey, 2017–2018. Consumer Expenditure Survey, 2019*. U.S. Department of Labor. Retrieved from <https://www.bls.gov/cex/2018/CrossTabs/agebyinc/x45to54.PDF>

Bureau of Labor Statistics. (2019, April 2). *Occupational employment statistics: May 2018 state occupational employment and wage estimates–Texas*. U.S. Department of Labor. Retrieved from [https://www.bls.gov/oes/2018/may/oes\\_tx.htm](https://www.bls.gov/oes/2018/may/oes_tx.htm)

Centers for Medicare & Medicaid Services. (2016). *2016 Medicare Current Beneficiary Survey annual chartbook and slides* [Table 5.1a - Total Expenditures Among All Medicare Beneficiaries by Source of Payment, 2016]. Retrieved from <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/MCBS/Data-Tables-Items/2016Chartbook>

Centers for Medicare & Medicaid Services. (2019, December 5). *Medicare utilization and payment section*. Retrieved from [https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/CMSPProgramStatistics/2017/2017\\_Utilization.html#Medicare%20Part%20A%20and%20Part%20B%20Summary](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/CMSPProgramStatistics/2017/2017_Utilization.html#Medicare%20Part%20A%20and%20Part%20B%20Summary)

Note: Data are only available up to 2017, therefore there is a lag of one year; for example, 2018 ALICE data uses the 2017 data

Centers for Medicare & Medicaid Services. (2019, November 27). *Chronic conditions [Spending county level: All beneficiaries, 2007–2017]*. Retrieved from [https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/CC\\_Main.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/CC_Main.html)

Note: Data are only available up to 2017, therefore there is a lag of one year; for example, 2018 ALICE data uses the 2017 data

- Federal Highway Administration. (2017). Summary of travel trends: 2017 National Household Travel Survey. U.S. Department of Transportation. Retrieved from [https://nhts.ornl.gov/assets/2017\\_nhts\\_summary\\_travel\\_trends.pdf](https://nhts.ornl.gov/assets/2017_nhts_summary_travel_trends.pdf)
- Feeding America. (2019). *Map the Meal Gap 2019: A report on county and congressional district food insecurity and county food cost in the United States in 2017*. Retrieved from <https://www.feedingamerica.org/sites/default/files/2019-05/2017-map-the-meal-gap-full.pdf>
- Fowler, B. (2019, May 23). *Best low-cost cell-phone plans*. Consumer Reports.
- Internal Revenue Service. (2020, January 8). *1040 and 1040-SR: Instructions*. Retrieved from <https://www.irs.gov/pub/irs-pdf/i1040gi.pdf>
- Internal Revenue Service. (2020, January 3). Topic no. 751 Social Security and Medicare withholding rates. Retrieved from <https://www.irs.gov/taxtopics/tc751>
- Medicare.gov. (n.d). *Part B costs*. Centers for Medicare & Medicaid Services. Retrieved from <https://www.medicare.gov/your-medicare-costs/part-b-costs>
- Texas Institute for Child & Family Wellbeing. (2019, September 24). *2018 Texas child care market rate survey*. University of Texas. Retrieved from <https://txicfw.socialwork.utexas.edu/2018-texas-child-care-market-rate-survey/>
- The Zebra. (2018). *The state of auto insurance 2018*. Retrieved from <https://www.thezebra.com/state-of-insurance/auto/2018/>
- U.S. Department of Agriculture. (2018). *Official USDA food plans*. Retrieved from <https://fns-prod.azureedge.net/sites/default/files/CostofFoodJun2018.pdf>
- U.S. Department of Housing and Urban Development. (2018). *Fair market rents*. Office of Policy Development and Research. Retrieved from [https://www.huduser.gov/portal/datasets/fmr.html#2018\\_data](https://www.huduser.gov/portal/datasets/fmr.html#2018_data)
- 20 Bureau of Labor Statistics. (2019, April 25). Consumer Price Index frequently asked questions. U.S. Department of Labor. Retrieved from <https://www.bls.gov/cpi/questions-and-answers.htm>
- Bureau of Labor Statistics. (2018). The Consumer Price Index. In *Handbook of Methods*. U.S. Department of Labor. Retrieved from <https://www.bls.gov/opub/hom/pdf/cpihom.pdf>
- Bureau of Labor Statistics. (n.d.). *Consumer Price Index historical tables for U.S. city average*. U.S. Department of Labor. Retrieved from [https://www.bls.gov/regions/mid-atlantic/data/consumerpriceindexhistorical\\_us\\_table.htm](https://www.bls.gov/regions/mid-atlantic/data/consumerpriceindexhistorical_us_table.htm)
- 21 Bureau of Labor Statistics. (n.d.) CPI inflation calculator. U.S. Department of Labor. Retrieved from [https://www.bls.gov/data/inflation\\_calculator.htm](https://www.bls.gov/data/inflation_calculator.htm)
- 22 Bureau of Labor Statistics. (2019, April 25). Consumer Price Index frequently asked questions. U.S. Department of Labor. Retrieved from <https://www.bls.gov/cpi/questions-and-answers.htm>
- Ng, M., & Wessel, D. (2017, December 7). *The Hutchins Center explains: The chained CPI*. Brookings Institution. Retrieved from <https://www.brookings.edu/blog/up-front/2017/12/07/the-hutchins-center-explains-the-chained-cpi/>
- U.S. Department of Veterans Affairs. (2019, November 26). Compensation: Benefit rates. Retrieved from <https://www.benefits.va.gov/compensation/rates-index.asp#cola>
- 23 Charette, A., Herbert, C., Jakabovics, A., Marya, E. T., & McCue, D. T. (2015). *Projecting trends in severely cost-burdened renters: 2015–2025*. Joint Center for Housing Studies of Harvard University. Retrieved from [https://www.jchs.harvard.edu/sites/default/files/projecting\\_trends\\_in\\_severely\\_cost-burdened\\_renters\\_final.pdf](https://www.jchs.harvard.edu/sites/default/files/projecting_trends_in_severely_cost-burdened_renters_final.pdf)
- Dumont, A., Ryder Perlmeter, E., & Gunter, J. (2019, August). *Affordable rental housing in rural Texas*. Federal Reserve Bank of Dallas. Retrieved from <https://www.dallasfed.org/cd/pubs/rural.aspx>
- Federal Reserve Bank of St. Louis. (n.d.). Homeownership rate for Texas. Retrieved from <https://fred.stlouisfed.org/series/TXHOWN>
- Federal Reserve Bank of St. Louis. (n.d.). Rental vacancy rate for Texas. Retrieved from <https://fred.stlouisfed.org/series/TXRVAC>
- Joint Center for Housing Studies of Harvard University. (2014). *Housing America's older adults: Meeting the needs of an aging population*. Retrieved from [http://www.jchs.harvard.edu/sites/default/files/jchs-housing\\_americas\\_older\\_adults\\_2014\\_1.pdf](http://www.jchs.harvard.edu/sites/default/files/jchs-housing_americas_older_adults_2014_1.pdf)
- Scally, C. P., & Gilbert, B. (2018, October 1). Rural communities need more affordable rental housing. *Urban Wire: Housing and Housing Finance, the blog of the Urban Institute*. Retrieved from <https://www.urban.org/urban-wire/rural-communities-need-more-affordable-rental-housing>
- Texas Realtors. (n.d). *Real estate year in review 2018*. Retrieved from <https://www.texasrealestate.com/wp-content/uploads/2018TexasRealEstateYearinReview.pdf>
- 24 Duranton, G., & Puga, D. (2014). The growth of cities. *Handbook of Economic Growth*, 2, 771–853. Retrieved from <https://www.sciencedirect.com/science/article/pii/B9780444535405000057>
- Jiao, J., Miró, J., & McGrath, N. (2017, November 3). Why the “Uberization” of public transit is good for cities. *Houston Chronicle*. Retrieved from <http://www.houstonchronicle.com/local/gray-matters/article/Why-the-Uberization-of-public-transit-is-good-12329605.php>
- Robert Wood Johnson Foundation. (2012, October 25). How does transportation impact health? *Health Policy Snapshot Series*. Retrieved from <https://www.rwjf.org/en/library/research/2012/10/how-does-transportation-impact-health.html>
- Stiglic, M., Agatz, N., Savelsbergh, M., & Gradisar, M. (2018, February). Enhancing urban mobility: Integrating ride-sharing and public transit. *Computers and Operations Research*, 90(no. C), 12–21. Retrieved from <https://dl.acm.org/citation.cfm?id=3165324.3165603>
- van Ommeren, J., & Gutiérrez-i-Puigarnau, E. (2011, January 11). Are workers with a long commute less productive? An empirical analysis of absenteeism. *Regional Science and Urban Economics*, 41(1), 1–8. Retrieved from <http://www.sciencedirect.com/science/article/pii/S0166046210000633>
- 25 Note: A child care desert is any census tract with more than 50 children under age 5 that contains either no child care providers or so few options that there are more than three times as many children as licensed child care slots.

- Malik, R., Hamm, K., Schochet, L., Nova, C., Workman, S., & Jessen-Howard, S. (2018, December 6). *America's child care deserts in 2018*. Center for American Progress. Retrieved from <https://www.americanprogress.org/issues/early-childhood/reports/2018/12/06/461643/americas-child-care-deserts-2018/>
- 26 Child Care Aware of America. (2019). *The U.S. and the high price of child care: An examination of a broken system*. Retrieved from <https://www.childcareaware.org/our-issues/research/the-us-and-the-high-price-of-child-care-2019/>
- 27 Bureau of Labor Statistics. (2019, April 2). Occupational employment statistics: May 2018 state occupational employment and wage estimates—Texas. U.S. Department of Labor. Retrieved from [https://www.bls.gov/oes/2018/may/oes\\_tx.htm](https://www.bls.gov/oes/2018/may/oes_tx.htm)
- Vespa, J., Lewis, J. M., & Kreider, R. M. (2013, August). *America's families and living arrangements: 2012: Population characteristics*. U.S. Census Bureau. Retrieved from <https://www.census.gov/prod/2013pubs/p20-570.pdf>
- 28 Economic Policy Institute. (2019, July). The cost of child care in Texas. Retrieved from <https://www.epi.org/child-care-costs-in-the-united-states/#/TX>
- 29 Baker-Smith, C., Coca, V., Goldrick-Rab, S., Looker, E., Richardson, B., & Williams, T. (2020, February). *#RealCollege 2020: Five years of evidence on campus basic needs insecurity*. The Hope Center. Retrieved from [https://hope4college.com/wp-content/uploads/2020/02/2019\\_RealCollege\\_Survey\\_Report.pdf](https://hope4college.com/wp-content/uploads/2020/02/2019_RealCollege_Survey_Report.pdf)
- 30 Goldrick-Rab, S., Baker-Smith, C., Coca, V., Looker, E., & Williams, T. (2019, April). *College and university basic needs insecurity: A national #RealCollege survey report*. Retrieved from [https://hope4college.com/wp-content/uploads/2019/04/HOPE\\_realcollege\\_National\\_report\\_digital.pdf](https://hope4college.com/wp-content/uploads/2019/04/HOPE_realcollege_National_report_digital.pdf)
- Bron, K. M., & Goldrick-Rab, S. (2017, December 7). Going without: An exploration of food and housing insecurity among undergraduates. *Educational Researcher*, 47(2), 121-133. Retrieved from <https://doi.org/10.3102/0013189X17741303>
- 31 Wisconsin Hope Lab. (n.d.). *Dallas County Community College District: District report from Fall 2016 survey of student basic needs*. Retrieved from <https://hope4college.com/wp-content/uploads/2018/09/Wisconsin-HOPE-Lab-Dallas-CC-District-Report-Survey-Student-Needs.pdf>
- 32 Bron, K. M., & Goldrick-Rab, S. (2017, December 7). Going without: An exploration of food and housing insecurity among undergraduates. *Educational Researcher*, 47(2), 121–133. Retrieved from <https://doi.org/10.3102/0013189X17741303>
- Feeding America. (2020). Senior hunger poses unique challenges. Retrieved from <https://www.feedingamerica.org/hunger-in-america/senior-hunger-facts>
- Worthington, J., & Mabl, J. (2017). *Emergency food pantry use among SNAP households with children*. Mathematica Policy Research. Retrieved from <https://www.mathematica-mpr.com/our-publications-and-findings/publications/emergency-food-pantry-use-among-snap-households-with-children>
- Ziliak, J. P., & Gundersen, C. (2019, May). *State of senior hunger in America in 2017*. Feeding America. Retrieved from [https://www.feedingamerica.org/sites/default/files/2019-06/The%20State%20of%20Senior%20Hunger%20in%202017\\_F2.pdf](https://www.feedingamerica.org/sites/default/files/2019-06/The%20State%20of%20Senior%20Hunger%20in%202017_F2.pdf)
- Ziliak, J. P., & Gundersen, C. (2017, August). *The health consequences of senior hunger in the United states: Evidence from the 1999–2014 NHANES*. Feeding America. Retrieved from <https://www.feedingamerica.org/sites/default/files/research/senior-hunger-research/senior-health-consequences-2014.pdf>
- 33 Beer, A. & Bray, J. B. (2019). *The college-work balancing act*. Washington, D.C. Association of Community College Trustees. Retrieved from: <https://www.acct.org/product/college-work-balancing-act-2019>
- 34 Klepfer, K. Cornett, C, Flethcher, C., & Webster, J. (2019). *Student financial wellness survey: Fall 2018 semester results*. Trellis Company. Retrieved from <https://www.trelliscompany.org/wp-content/uploads/2019/06/Fall-2018-SFWS-Report.pdf>
- 35 Beer, A. & Bray, J. B. (2019). *The college-work balancing act*. Washington, D.C. Association of Community College Trustees. Retrieved from: <https://www.acct.org/product/college-work-balancing-act-2019>
- 36 Porter, S.R. & Umbach, P.D. (2019). *What challenges to success do community college students face?* Percontor, LLC. Retrieved from: [https://www.risc.college/sites/default/files/2019-01/RISC\\_2019\\_report\\_natl.pdf](https://www.risc.college/sites/default/files/2019-01/RISC_2019_report_natl.pdf)
- 37 Association of American Medical Colleges. (2019, April). *2019 update: The complexities of physician supply and demand: Projections from 2017–2032*. Retrieved from [https://www.aamc.org/system/files/c/2/31-2019\\_update\\_-\\_the\\_complexities\\_of\\_physician\\_supply\\_and\\_demand\\_-\\_projections\\_from\\_2017-2032.pdf](https://www.aamc.org/system/files/c/2/31-2019_update_-_the_complexities_of_physician_supply_and_demand_-_projections_from_2017-2032.pdf)
- Farrell, D., & Greig, F. (2017, September). *Paying out-of-pocket: The healthcare spending of 2 million US families*. JPMorgan Chase Institute. Retrieved from <https://institute.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/institute/pdf/institute-healthcare.pdf>
- Inserro, A. (2018, August 9). Enrollment in high-deductible health plans continues to grow. *The American Journal of Managed Care*. Retrieved from <https://www.ajmc.com/newsroom/enrollment-in-highdeductible-health-plans-continues-to-grow>
- 38 Radley, D. C., McCarthy, D. & Hayes, S. L. (2018, May). *2018 scorecard on state health system performance*. The Commonwealth Fund. Retrieved from [https://interactives.commonwealthfund.org/2018/state-scorecard/files/Radley\\_State\\_Scorecard\\_2018.pdf](https://interactives.commonwealthfund.org/2018/state-scorecard/files/Radley_State_Scorecard_2018.pdf)
- 39 Note: Data for life expectancy is not available for all counties.
- University of Wisconsin Population Health Institute. (n.d.). Life expectancy Texas. County Health Rankings and Roadmaps. Retrieved from <https://www.countyhealthrankings.org/app/texas/2020/measure/outcomes/147/data?sort=sc-2>
- 40 Anderson, K. F. (2013, January 16). Diagnosing discrimination: Stress from perceived racism and the mental and physical health effects. *Sociological Inquiry*, 83(1). Retrieved from <https://doi.org/10.1111/j.1475-682X.2012.00433.x>
- Houston Health Department. (2019, April 2). *Health disparity and health inequity: 2019 trends and data report, Houston/Harris County*. Retrieved from <https://www.houstontx.gov/health/chs/documents/Health-Disparities-Data-Report-I-2019-Root-Causes.pdf>
- NAACP. (2017, November). *Fumes across the fence-line*. Clean Air Task Force. Retrieved from [http://www.catf.us/wp-content/uploads/2017/11/CATF\\_Pub\\_FumesAcrossTheFenceLine.pdf](http://www.catf.us/wp-content/uploads/2017/11/CATF_Pub_FumesAcrossTheFenceLine.pdf)

- Peter G. Peterson Foundation. (2019, March 19). *Why are Americans paying more for health care?* Retrieved from <https://www.pgpf.org/blog/2019/03/why-are-americans-paying-more-for-healthcare>
- Ross, T. (2013, August). *A disaster in the making addressing the vulnerability of low-income communities to extreme weather*. Center for American Progress. Retrieved from <https://www.americanprogress.org/wp-content/uploads/2013/08/LowIncomeResilience-3.pdf>
- Texas Cancer Registry. (2018, May). *Cancer health disparities in Texas by race/ethnicity, 2011–2015*. [Powerpoint presentation] Texas Department of State Health Services. Retrieved from <https://www.dshs.state.tx.us/tcr/data/cancer-health-disparities.aspx>
- 41 Boustan, L. P., Yanguas, M. L., Kahn, M., & Rhode, P. W. (2017, July 1). As the rich move away from disaster zones, the poor are left behind. *Grist*. Retrieved from <https://grist.org/article/as-the-rich-move-away-from-disaster-zones-the-poor-are-left-behind/>
- California Institute of Technology. (2018). *Scientific consensus: Earth's climate is warming*. Retrieved from <https://climate.nasa.gov/scientific-consensus/>
- Krause, E., & Reeves R. V. (2017, September 18). *Hurricanes hit the poor the hardest*. Brookings Institution. <https://www.brookings.edu/blog/social-mobility-memos/2017/09/18/hurricanes-hit-the-poor-the-hardest/>
- Lavizzo-Mourey, R. (2015). *In it together – building a culture of health: 2015 president's message*. Robert Wood Johnson Foundation. Retrieved from <https://www.rwjf.org/en/library/annual-reports/presidents-message-2015.html>
- Mutter, J. C. (2015). *The disaster profiteers: How natural disasters make the rich richer and the poor even poorer*. New York, NY: St. Martin's Press.
- Oxfam America. (2009). *Exposed: Social vulnerability and climate change in the U.S. Southeast*. Retrieved from <https://www.oxfamamerica.org/explore/research-publications/exposed-social-vulnerability-and-climate-change-in-the-us-southeast/>
- 42 Federal Reserve System. (2019, May). *Report on the economic well-being of U.S. households in 2018*. Retrieved from <https://www.federalreserve.gov/publications/files/2018-report-economic-well-being-us-households-201905.pdf>
- 43 Federal Deposit Insurance Corporation. (2018, October). Table E.2 rates of saving for unexpected expenses or emergencies by State, 2015–2017. In *FDIC National Survey of Unbanked and Underbanked Households, Appendix Tables*. Retrieved from <https://www.fdic.gov/householdsurvey/2017/2017appendix.pdf>
- Karlan, D., Ratan, A. L., & Zinman, J. (2014, March). Savings by and for the poor. *The Review of Income and Wealth*, 60(1), 36–78. Retrieved from <https://onlinelibrary.wiley.com/doi/full/10.1111/roiw.12101>
- The Pew Charitable Trusts. (2015, October). *The role of emergency savings in family financial security: How do families cope with financial shocks?* Retrieved from [https://www.pewtrusts.org/~media/assets/2015/10/emergency-savings-report-1\\_artfinal.pdf](https://www.pewtrusts.org/~media/assets/2015/10/emergency-savings-report-1_artfinal.pdf)
- 44 Bureau of Economic Analysis. (n.d.). Regional economic accounts – Real GDP by state: All industry total (millions of chained 2012 dollars). Retrieved from [https://apps.bea.gov/iTable/drilldown.cfm?reqid=70&stepnum=40&Major\\_Area=3&State=0&Area=XX&TableId=512&Statistic=1&Year=2018&YearBegin=-1&Year\\_End=1&Unit\\_Of\\_Measure=Levels&Rank=1&Drill=1&nRange=5](https://apps.bea.gov/iTable/drilldown.cfm?reqid=70&stepnum=40&Major_Area=3&State=0&Area=XX&TableId=512&Statistic=1&Year=2018&YearBegin=-1&Year_End=1&Unit_Of_Measure=Levels&Rank=1&Drill=1&nRange=5)
- Federal Reserve Bank of St. Louis. (n.d.). All employees: Total nonfarm in Texas. Retrieved from <https://fred.stlouisfed.org/series/TXNA>
- Federal Reserve Bank of St. Louis. (n.d.). Unemployment rate in Texas. Retrieved from <https://fred.stlouisfed.org/series/TXURN>
- 45 Bureau of Labor Statistics. (n.d.). Economy at a glance: Texas. U.S. Department of Labor. Retrieved from <https://www.bls.gov/eag/eag.tx.htm>
- Federal Reserve Bank of Dallas. (n.d.). Texas employment by industry. Retrieved from <https://www.dallasfed.org/research/econdata/tx-emp-ind.aspx>
- Federal Reserve Bank of Dallas. (2020, July 22). *Your Texas economy*. Retrieved from <https://www.dallasfed.org/-/media/Documents/research/econdata/texasconomy.pdf>
- Federal Reserve Bank of St. Louis. (n.d.). All employees: Construction in Texas. Retrieved from <https://fred.stlouisfed.org/series/TXCONS>
- Federal Reserve Bank of St. Louis. (n.d.). All employees: Manufacturing in Texas. Retrieved from <https://fred.stlouisfed.org/series/TXMFG>
- Federal Reserve Bank of St. Louis. (n.d.). All employees: Mining: Oil and gas extraction in Texas. Retrieved from <https://fred.stlouisfed.org/series/SMU4800001021100001>
- Federal Reserve Bank of St. Louis. (n.d.). Total gross domestic product by industry for Texas. Retrieved from <https://fred.stlouisfed.org/series/TXNOGSP>
- Szeto, D., Slijk, C., & Saving, J. (2018, November 14). Texas economy continues expansion but shows signs of cooling. Federal Reserve Bank of Dallas. Retrieved from <https://www.dallasfed.org/research/update/reg/2018/1807>
- Teng, J., & Phillips, K. R. (2018, December 26). Healthy Texas expansion beginning to slow. Federal Reserve Bank of Dallas. Retrieved from <https://www.dallasfed.org/research/update/reg/2018/1808>
- Texas Workforce Commission. (n.d.). *Texas workforce report: 2018 to 2019*. Retrieved from [https://lmci.state.tx.us/shared/PDFs/Workforce\\_Report.pdf](https://lmci.state.tx.us/shared/PDFs/Workforce_Report.pdf)
- 46 Federal Reserve Bank of Dallas. (2020, July 22). *Your Texas economy*. Retrieved from <https://www.dallasfed.org/-/media/Documents/research/econdata/texasconomy.pdf>
- Office of the Governor, The State of Texas. (n.d.). *Texas industry concentrations: Where the state's key sectors cluster*. Retrieved from <https://gov.texas.gov/uploads/files/business/concentrations.pdf>
- 47 Texas Department of Agriculture. (n.d.). Texas ag stats. Retrieved from <https://www.texasagriculture.gov/About/TexasAgStats.aspx>
- 48 Bureau of Labor Statistics. (n.d.). Economy at a glance: Texas. U.S. Department of Labor. Retrieved from <https://www.bls.gov/eag/eag.tx.htm>

Bureau of Labor Statistics. (n.d.). States and selected areas: Employment status of the civilian noninstitutional population, 1976 to 2018 annual averages. U.S. Department of Labor. Retrieved from <https://www.bls.gov/lau/staadata.txt>

Federal Reserve Bank of St. Louis. (n.d.). Current wages and benefits; Percentage reporting increases for Texas. Retrieved from <https://fred.stlouisfed.org/series/WGSISAMFRBDAL>

Sommeiller, E. & Price, M. (2018, July 19). *The new gilded age: Income inequality in the U.S. by state, metropolitan area, and county*. Economic Policy Institute. Retrieved from <https://www.epi.org/publication/the-new-gilded-age-income-inequality-in-the-u-s-by-state-metropolitan-area-and-county/>

49 Bureau of Labor Statistics. (2019, April 2). Occupational employment statistics: May 2018 state occupational employment and wage estimates—Texas. U.S. Department of Labor. Retrieved from [https://www.bls.gov/oes/2018/may/oes\\_tx.htm](https://www.bls.gov/oes/2018/may/oes_tx.htm)

50 American Community Survey. (2018). *1-year estimates*. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>

Bureau of Labor Statistics. (n.d.). States and selected areas: Employment status of the civilian noninstitutional population, 1976 to 2018 annual averages. U.S. Department of Labor. Retrieved from <https://www.bls.gov/lau/staadata.txt>

51 Bureau of Labor Statistics. (2019, January 18). Wage and salary workers paid hourly rates with earnings at or below the prevailing Federal minimum wage by selected characteristics. In *Labor Force Statistics from the Current Population Survey*. U.S. Department of Labor. Retrieved from <https://www.bls.gov/cps/cpsaat44.htm>

Federal Reserve Bank of St. Louis. (2018). *Employed full time: Workers paid hourly rates: Wage and salary workers: 16 years and over*. Retrieved from <https://fred.stlouisfed.org/series/LEU0253126800A>

52 Goldren, L. (2016, December 5). *Still falling short on hours and pay*. Economic Policy Institute. Retrieved from <https://www.epi.org/publication/still-falling-short-on-hours-and-pay-part-time-work-becoming-new-normal/>

Gould, E. (2020, February 20). *State of Working America Wages 2019*. Economic Policy Institute. Retrieved from <https://www.epi.org/publication/swa-wages-2019/>

Kossek, E. E. & Lautsch, B. A. (2018, May 7). Hourly workers need flexibility the most, but are often the least likely to get it. *Harvard Business Review*. Retrieved from <https://hbr.org/2018/05/hourly-workers-need-flexibility-the-most-but-are-often-the-least-likely-to-get-it>

53 Associated General Contractors of America and Autodesk. (n.d.). 2018 workforce survey results: Texas results. Retrieved from [https://www.agc.org/sites/default/files/Files/Communications/2018\\_Workforce\\_Survey\\_Texas.pdf](https://www.agc.org/sites/default/files/Files/Communications/2018_Workforce_Survey_Texas.pdf)

54 Eisenberg, R. (2019, February 18). How well is the gig economy working for gig workers? *Forbes*. Retrieved from <https://www.forbes.com/sites/nextavenue/2019/02/18/how-well-is-the-gig-economy-working-for-gig-workers/#4255bb9b3f0a>

Katz, L. F., & Krueger, A. B. (2018, November 13). The rise and nature of alternative work arrangements in the United States, 1995–2015. *ILR Review*, 72(2), 382–416. Retrieved from <https://scholar.harvard.edu/lkatz/publications/rise-and-nature-alternative-work-arrangements-united-states-1995-2015>

Manyika, J., Lund, S., Bughin, J., Robinson, K., Mischke, J., & Mahajan, D. (2016, October). *Independent work: Choice, necessity, and the gig economy*. McKinsey Global Institute. Retrieved from <http://www.mckinsey.com/global-themes/employment-and-growth/independent-work-choice-necessity-and-the-gig-economy>

U.S. Government Accountability Office. (2015, April 20). *Contingent workforce: Size, characteristics, earnings, and benefits*. Retrieved from <http://www.gao.gov/assets/670/669766.pdf>

55 Bureau of Labor Statistics. (2018, June 7). *Contingent and alternative employment arrangements—May 2017* [News release]. Retrieved from <https://www.bls.gov/news.release/pdf/conemp.pdf>

Gig Economy Data Hub. (n.d.). Who participates in the gig economy? Cornell University ILR School and the Aspen Institute. Retrieved from <https://www.gigeconomydata.org/basics/who-participates-gig-economy>

Gitis, B., Holtz-Eakin, D., & Rinehart, W. (2017, January 10). *The gig economy: Research and policy implications of regional, economic, and demographic trends*. American Action Forum and the Aspen Institute's Future of Work Initiative. Retrieved from <https://www.americanactionforum.org/research/gig-economy-research-policy-implications-regional-economic-demographic-trends/>

Farrell, D., Greig, F., & Hamoudi, A. (2018, September). *The online platform economy in 2018: Drivers, workers, sellers, and lessors*. JP Morgan Chase & Co. Institute. Retrieved from <https://www.jpmorganchase.com/corporate/institute/document/institute-ope-2018.pdf>

Freelancers Union & Upwork. (2017). *Freelancing in America: 2017*. Retrieved from <https://s3.amazonaws.com/fuwt-prod-storage/content/FreelancingInAmericaReport-2017.pdf>

Manyika, J., Lund, S., Bughin, J., Robinson, K., Mischke, J., & Mahajan, D. (2016, October 10). *Independent work: Choice, necessity, and the gig economy*. McKinsey & Company. Retrieved from <https://www.mckinsey.com/featured-insights/employment-and-growth/independent-work-choice-necessity-and-the-gig-economy#>

MBO Partners. (2019). *The state of independence in America: 2019: The changing nature of the American workforce*. Retrieved from <https://s29814.pcdn.co/wp-content/uploads/2019/06/MBO-SOI-2019.pdf>

Robels, B., & McGee, M. (2016). *Exploring online and offline informal work: Findings from the Enterprising and Informal Work Activities (EIWA) Survey, Finance and Economics Discussion Series 2016-089*. Federal Reserve Board Divisions of Research & Statistics and Monetary Affairs. Retrieved from <https://www.federalreserve.gov/econresdata/feds/2016/files/2016089pap.pdf>

56 Bureau of Labor Statistics. (2019, January 18). *Multiple jobholders by selected characteristics*. U.S. Department of Labor. Retrieved from <https://www.bls.gov/cps/cpsaat36.htm>

57 Board of Governors of the Federal Reserve System. (2019, May). *Report on the economic well-being of U.S. households in 2018*. Retrieved from <https://www.federalreserve.gov/publications/files/2018-report-economic-well-being-us-households-201905.pdf>

- Dixon, A. (2019, June 5). Survey: Nearly 1 in 3 side hustlers needs the income to stay afloat. *Bankrate*. Retrieved from <https://www.bankrate.com/personal-finance/side-hustles-survey-june-2019/>
- Freelancers Union & Upwork. (2017). *Freelancing in America: 2017*. Retrieved from <https://s3.amazonaws.com/fuwt-prod-storage/content/FreelancingInAmericaReport-2017.pdf>
- Katz, L. F., & Krueger, A. B. (2018, November 13). The rise and nature of alternative work arrangements in the United States, 1995–2015. *ILR Review*, 72(2), 382–416. Retrieved from <https://scholar.harvard.edu/lkatz/publications/rise-and-nature-alternative-work-arrangements-united-states-1995-2015>
- McFeely, S., & Pendell, R. (2018, August 16). What workplace leaders can learn from the real big economy. *Gallup*. Retrieved from <https://www.gallup.com/workplace/240929/workplace-leaders-learn-real-gig-economy.aspx>
- 58 Bureau of Labor Statistics. (December 2018). *Employer costs for employee compensation*. U.S. Department of Labor. Retrieved from [https://www.bls.gov/news.release/archives/ecec\\_03192019.pdf](https://www.bls.gov/news.release/archives/ecec_03192019.pdf)
- U.S. Department of Labor. (n.d.). *Compliance assistance – Wages and the Fair Labor Standards Act (FLSA)*. Retrieved from <https://www.dol.gov/whd/flsa/>
- 59 Bureau of Labor Statistics. (2019, April 2). Occupational employment statistics: May 2018 state occupational employment and wage estimates–Texas. U.S. Department of Labor. Retrieved from [https://www.bls.gov/oes/2018/may/oes\\_tx.htm](https://www.bls.gov/oes/2018/may/oes_tx.htm)
- 60 American Community Survey. (2018). *1-year estimates*. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>
- Bureau of Labor Statistics. (2013, December). Labor force projections to 2022: the labor force participation rate continues to fall. *Monthly Labor Review*. U.S. Department of Labor. Retrieved from <https://www.bls.gov/opub/mlr/2013/article/pdf/labor-force-projections-to-2022-the-labor-force-participation-rate-continues-to-fall.pdf>
- Geler, B. (2020, May 20). Cities where seniors are increasingly staying in the workforce – 2020 edition. *SmartAsset*. Retrieved from <https://smartasset.com/financial-advisor/cities-where-seniors-are-increasingly-staying-in-the-workforce-2020>
- Provision Living. (n.d.). Cities with the most working seniors. Retrieved from <https://www.provisionliving.com/news/cities-most-working-seniors>
- Vespa, J. (2018, March 13). *The U.S. joins other countries with large aging populations*. U.S. Census Bureau. Retrieved from <https://www.census.gov/library/stories/2018/03/graying-america.html>
- 61 Bureau of Labor Statistics. (2019, April 25). College enrollment and work activity of high school graduates news release [press release]. U.S. Department of Labor. Retrieved from <https://www.bls.gov/news.release/hsgec.htm>
- 62 American Community Survey. (2018). *1-year estimates*. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>
- Board of Governors of the Federal Reserve System. (2019, May). *Report on the economic well-being of U.S. households in 2018*. Retrieved from <https://www.federalreserve.gov/publications/files/2018-report-economic-well-being-us-households-201905.pdf>
- McAlpine, D. D., & Warner, L. (2004). *Barriers to employment among persons with mental illness: A review of the literature*. Center for Research on the Organization and Financing of Care for the Severely Mentally Ill, Institute for Health, Health Care Policy, and Aging Research, Rutgers, the State University. Retrieved from [http://dri.uiuc.edu/research/p01-04c/final\\_technical\\_report\\_p01-04c.pdf](http://dri.uiuc.edu/research/p01-04c/final_technical_report_p01-04c.pdf)
- National Alliance on Mental Illness. (2014, July). *Road to recovery: Employment and mental illness*. Retrieved from <https://www.nami.org/about-nami/publications-reports/public-policy-reports/roadtorecovery.pdf>
- 63 da Costa, P. N. (2018, January 27). There's a major hurdle to employment that many Americans don't even think about – and it's holding the economy back. *Business Insider*. Retrieved from <https://www.businessinsider.com/lack-of-transport-is-a-major-obstacle-to-employment-for-americas-poor-2018-1>
- Rall, J. (2015, May). *Getting to work: Effective state solutions to help people with transportation challenges access jobs*. National Conference of State Legislatures. Retrieved from [http://www.ncsl.org/Portals/1/Documents/transportation/Work\\_Job\\_Access\\_0515.pdf.pdf](http://www.ncsl.org/Portals/1/Documents/transportation/Work_Job_Access_0515.pdf.pdf)
- Saldivia, G. (2018, September 20). Stuck in traffic? You're not alone. New data show American commute times are longer. *NPR*. Retrieved from <https://www.npr.org/2018/09/20/650061560/stuck-in-traffic-youre-not-alone-new-data-show-american-commute-times-are-longer>
- Tyndall, J. (2015). *Waiting for the R train: Public transportation and employment*. Retrieved from Canadian Transportation Research Forum: <http://ctrf.ca/wp-content/uploads/2015/05/CTRF2015TyndallTransportationPolicyPlanning.pdf>
- Watson, L., Frohlich, L., & Johnston, E. (2014, April). *Collateral damage: Scheduling challenges for workers in low-wage jobs and their consequences*. National Women's Law Center. Retrieved from [https://nwlc.org/wp-content/uploads/2015/08/collateral\\_damage\\_scheduling\\_fact\\_sheet.pdf](https://nwlc.org/wp-content/uploads/2015/08/collateral_damage_scheduling_fact_sheet.pdf)
- 64 Board of Governors of the Federal Reserve System. (2019, May). *Report on the economic well-being of U.S. households in 2018*. Retrieved from <https://www.federalreserve.gov/publications/files/2018-report-economic-well-being-us-households-201905.pdf>
- Hipple, S. F. (2015). People who are not in the labor force: why aren't they working? *Beyond the Numbers: Employment & Unemployment*, 4(15). U.S. Bureau of Labor Statistics. Retrieved from <https://www.bls.gov/opub/btn/volume-4/pdf/people-who-are-not-in-the-labor-force-why-arent-they-working.pdf>
- McCarthy, N. (2017, August 21). Why millions of Americans stay out of the workforce. *Statista*. Retrieved from <https://www.statista.com/chart/10754/why-millions-of-americans-stay-out-of-the-workforce/>
- 65 Bureau of Labor Statistics. (2019, October). Labor force characteristics by race and ethnicity, 2018. *BLS Reports*. Retrieved from <https://www.bls.gov/opub/reports/race-and-ethnicity/2018/home.htm>
- 66 Bivins, J. (2018). *The fuzzy line between "employed" and "not in the labor force" and what it means for job creation strategies and the Federal Reserve*. Economic Policy Institute. Retrieved from <https://www.epi.org/publication/the-fuzzy-line-between-unemployed-and-not-in-the-labor-force-and-what-it-means-for-job-creation-strategies-and-the-federal-reserve/>

- Frazis, H. (2017, May). Employed workers leaving the labor force: An analysis of recent trends. *Monthly Labor Review*. U.S. Department of Labor. Retrieved from <https://doi.org/10.21916/mlr.2017.16>
- 67 Vinsel, L., & Russell, A. (2016, April 7). Hail the maintainers: Capitalism excels at innovation but is failing at maintenance, and for most lives it is maintenance that matters more. *Aeon*. Retrieved from <https://aeon.co/essays/innovation-is-overvalued-maintenance-often-matters-more>
- 68 Bureau of Labor Statistics. (n.d.). Economy at a glance: Texas. U.S. Department of Labor. Retrieved from <https://www.bls.gov/eag/eag.tx.htm>
- 69 Muro, M., Maxim, R., & Whiton, J. (2019). *Automation and artificial intelligence: How machines are affecting people and places*. Metropolitan Policy Program at Brookings. Retrieved from [https://www.brookings.edu/wp-content/uploads/2019/01/2019.01\\_BrookingsMetro\\_Automation-AI\\_Report\\_Muro-Maxim-Whiton-FINAL-version.pdf](https://www.brookings.edu/wp-content/uploads/2019/01/2019.01_BrookingsMetro_Automation-AI_Report_Muro-Maxim-Whiton-FINAL-version.pdf)
- 70 Bureau of Labor Statistics. (2019, April 2). Occupational employment statistics: May 2018 state occupational employment and wage estimates—Texas. U.S. Department of Labor. Retrieved from [https://www.bls.gov/oes/2018/may/oes\\_tx.htm](https://www.bls.gov/oes/2018/may/oes_tx.htm)
- Frey, C., & Osborne, M. (2013, September 17). *The future of employment: How susceptible are jobs to computerisation?* Oxford Martin School, University of Oxford. Retrieved from [https://www.oxfordmartin.ox.ac.uk/downloads/academic/The\\_Future\\_of\\_Employment.pdf](https://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf)
- 71 Muro, M., Maxim, R., & Whiton, J. (2019). *Automation and artificial intelligence: How machines are affecting people and places*. Metropolitan Policy Program at Brookings. Retrieved from [https://www.brookings.edu/wp-content/uploads/2019/01/2019.01\\_BrookingsMetro\\_Automation-AI\\_Report\\_Muro-Maxim-Whiton-FINAL-version.pdf](https://www.brookings.edu/wp-content/uploads/2019/01/2019.01_BrookingsMetro_Automation-AI_Report_Muro-Maxim-Whiton-FINAL-version.pdf)
- 72 Katz, L. F., & Krueger, A. B. (2018, November 13). The rise and nature of alternative work arrangements in the United States, 1995–2015. *ILR Review*, 72(2), 382–416. Retrieved from <https://scholar.harvard.edu/lkatz/publications/rise-and-nature-alternative-work-arrangements-united-states-1995-2015>
- 73 Dixon, A. (2019, June 5). Survey: Nearly 1 in 3 side hustlers needs the income to stay afloat. *Bankrate*. Retrieved from <https://www.bankrate.com/personal-finance/side-hustles-survey-june-2019/>
- 74 Board of Governors of the Federal Reserve System. (2019, May). *Report on the economic well-being of U.S. households in 2018*. Retrieved from <https://www.federalreserve.gov/publications/files/2018-report-economic-well-being-us-households-201905.pdf>
- Dokko, J., Mumford, M., & Schanzenbach, D. W. (2015, December). *Workers and the Online Gig Economy*. The Hamilton Project. Retrieved from [https://www.hamiltonproject.org/assets/files/workers\\_and\\_the\\_online\\_gig\\_economy.pdf](https://www.hamiltonproject.org/assets/files/workers_and_the_online_gig_economy.pdf)
- Eden, P., & Gaggl, M. (2015, November). *On the welfare implications of automation*. World Bank Group. Retrieved from <http://documents.worldbank.org/curated/en/2015/11/25380579/welfare-implications-automation>
- Freelancers Union & Upwork. (2017). *Freelancing in America: 2017*. Retrieved from <https://s3.amazonaws.com/fuwt-prod-storage/content/FreelancingInAmericaReport-2017.pdf>
- Katz, L. F., & Krueger, A. B. (2018, November 13). The Rise and Nature of Alternative Work Arrangements in the United States, 1995–2015. *ILR Review*, 72(2), 382–416. Retrieved from <https://scholar.harvard.edu/lkatz/publications/rise-and-nature-alternative-work-arrangements-united-states-1995-2015>
- Manyika, J., Lund, S., Bughin, J., Robinson, K., Mischke, J., & Mahajan, D. (2016, October). *Independent work: Choice, necessity, and the gig economy*. McKinsey Global Institute. Retrieved from <http://www.mckinsey.com/global-themes/employment-and-growth/independent-work-choice-necessity-and-the-gig-economy>
- Torpey, E., & Hogan, A. (2016, May). Working in a gig economy. *Career Outlook*. Bureau of Labor Statistics, U.S. Department of Labor. Retrieved from [https://www.bls.gov/careeroutlook/2016/article/what-is-the-gig-economy.htm?view\\_full](https://www.bls.gov/careeroutlook/2016/article/what-is-the-gig-economy.htm?view_full)
- Tran, M., & Sokas, R. (2017, April). The gig economy and contingent work: An occupation health assessment. *Journal of Occupation and Environmental Medicine*, 59(4), e63–e66. Retrieved from [https://journals.lww.com/joem/FullText/2017/04000/The\\_Gig\\_Economy\\_and\\_Contingent\\_Work\\_An.20.aspx](https://journals.lww.com/joem/FullText/2017/04000/The_Gig_Economy_and_Contingent_Work_An.20.aspx)
- U.S. Government Accountability Office. (2015, April 20). *Contingent workforce: Size, characteristics, earnings, and benefits*. Retrieved from <http://www.gao.gov/assets/670/669766.pdf>
- 75 Manyika, J., Chui, M., Miremadi, M., Bughin, J., George, K., Wilimott, P., & Dewhurst, M. (2017). *A future that works: Automation, employment, and productivity*. McKinsey Global Institute. Retrieved from <https://www.mckinsey.com/~media/mckinsey/featured%20insights/Digital%20Disruption/Harnessing%20automation%20for%20a%20future%20that%20works/MGI-A-future-that-works-Executive-summary.ashx>
- 76 Organisation for Economic Co-operation and Development. (2016, December). *Skills for a digital world. Policy brief on the future of work*. Retrieved from <https://www.oecd.org/els/emp/Skills-for-a-Digital-World.pdf>
- World Economic Forum. (2017). *Technology and innovation for the future of production: Accelerating value creation [white paper]*. Retrieved from [http://www3.weforum.org/docs/WEF\\_White\\_Paper\\_Technology\\_Innovation\\_Future\\_of\\_Production\\_2017.pdf](http://www3.weforum.org/docs/WEF_White_Paper_Technology_Innovation_Future_of_Production_2017.pdf)
- 77 Bond, J. (2017, January). AGVs roll into a new role. *Modern Materials Handling*. Retrieved from [https://www.mmh.com/article/agvs\\_roll\\_into\\_a\\_new\\_role/agvs](https://www.mmh.com/article/agvs_roll_into_a_new_role/agvs)
- McKinsey Global Institute. (2017). *A future that works: Automation, employment and productivity*. Retrieved from [https://www.mckinsey.com/~media/McKinsey/Global%20Themes/Digital%20Disruption/Harnessing%20automation%20for%20a%20future%20that%20works/MGI-A-future-that-works\\_Full-report.ashx](https://www.mckinsey.com/~media/McKinsey/Global%20Themes/Digital%20Disruption/Harnessing%20automation%20for%20a%20future%20that%20works/MGI-A-future-that-works_Full-report.ashx)
- 78 U.S. Chamber of Commerce and Amazon. (n.d.). *Unlocking the digital potential of rural Texas*. Technology Engagement Center. Retrieved from [https://americaninnovators.com/wp-content/uploads/2019/03/rural\\_report\\_factsheet\\_TX.pdf](https://americaninnovators.com/wp-content/uploads/2019/03/rural_report_factsheet_TX.pdf)
- 79 Andreason, S., Bozarth, A., DeRenzis, B., Johnson, M., Hirsch, R., & Pack, A. (n.d.). *Building a skilled workforce for a stronger Southern economy*. National Skills Coalition. Retrieved from <https://www.nationalskillscoalition.org/resources/publications/file/Building-a-Skilled-Workforce-for-a-Stronger-Southern-Economy.pdf>
- 80 Bureau of Labor Statistics. (2019, April 2). Occupational employment statistics: May 2018 state occupational employment and wage estimates—Texas. U.S. Department of Labor. Retrieved from [https://www.bls.gov/oes/2018/may/oes\\_tx.htm](https://www.bls.gov/oes/2018/may/oes_tx.htm)

- Bureau of Labor Statistics. (2019). *Occupational outlook handbook*. U.S. Department of Labor. Retrieved from <https://www.bls.gov/ooh/>
- Muro, M., Maxim, R., Whiton, J., & Hathaway, I. (2019). *Automation and artificial intelligence: How machines are affecting people and places*. Metropolitan Policy Program at Brookings. Retrieved from [https://www.brookings.edu/wp-content/uploads/2019/01/2019\\_01\\_BrookingsMetro\\_Automation-AI\\_Report\\_Muro-Maxim-Whiton-FINAL-version.pdf](https://www.brookings.edu/wp-content/uploads/2019/01/2019_01_BrookingsMetro_Automation-AI_Report_Muro-Maxim-Whiton-FINAL-version.pdf)
- The Texas Workforce Commission. (n.d.). Texas Labor Market Information, Projections. Retrieved from <https://texaslmi.com/LMIbyCategory/Projections>
- Vinsel, L., & Russell, A. (2016). Hail the maintainers: Capitalism excels at innovation but is failing at maintenance, and for most lives it is maintenance that matters more. *Aeon*. Retrieved from <https://aeon.co/essays/innovation-is-overvalued-maintenance-often-matters-more>
- 81 Bureau of Labor Statistics. (2019). *College enrollment and work activity of high school graduates news release* [Press release]. U.S. Department of Labor. Retrieved from <https://www.bls.gov/news.release/hsgec.htm>
- National Center for Education Statistics. (2018). Table 503.20. Percentage of college students 16 to 24 years old who were employed, selected years, October 1970 through 2017. In *Digest of Education Statistics*. Retrieved from [https://nces.ed.gov/programs/digest/d18/tables/dt18\\_503.20.asp](https://nces.ed.gov/programs/digest/d18/tables/dt18_503.20.asp)
- National Center for Education Statistics. (2018). Table 503.10. Percentage of high school students age 16 and over who were employed, selected years, 1970 through 2017. In *Digest of Education Statistics*. Retrieved from [https://nces.ed.gov/programs/digest/d18/tables/dt18\\_503.10.asp](https://nces.ed.gov/programs/digest/d18/tables/dt18_503.10.asp)
- National Center for Education Statistics. (2018). Table 303.10. Total fall enrollment in degree-granting postsecondary institutions, selected years, 1947 through 2028. In *Digest of Education Statistics*. Retrieved from [https://nces.ed.gov/programs/digest/d18/tables/dt18\\_303.10.asp](https://nces.ed.gov/programs/digest/d18/tables/dt18_303.10.asp)
- 82 Goldrick-Rab, S., Baker-Smith, C., Coca, V., Looker, E., & Williams, T. (2019). *College and university basic needs insecurity: A national #RealCollege survey report*. Retrieved from [https://hope4college.com/wp-content/uploads/2019/04/HOPE\\_realcollege\\_National\\_report\\_digital.pdf](https://hope4college.com/wp-content/uploads/2019/04/HOPE_realcollege_National_report_digital.pdf)
- 83 Project on Student Debt. (2018). *Student debt and the class of 2018*. The Institute for College Access and Success. Retrieved from <https://ticas.org/wp-content/uploads/2019/09/classof2018.pdf>
- U.S. Department of Education. (2018). *Distribution of Federal Pell Grant program funds by institution*. Retrieved from <https://www2.ed.gov/finaid/prof/resources/data/pell-institution.html>
- U.S. Department of Education. (2017). *FY 2015 cohort default rates by state/territory*. Retrieved from <http://www2.ed.gov/offices/OSFAP/defaultmanagement/staterates.pdf>
- 84 Rosa, K. (Ed.). (2015, April). *The state of America's libraries 2015 (American Libraries Digital Supplement)*. American Library Association. Retrieved from: [http://www.ala.org/news/sites/ala.org/news/files/content/0415\\_StateAmlib\\_0.pdf](http://www.ala.org/news/sites/ala.org/news/files/content/0415_StateAmlib_0.pdf)
- 85 McCarthy, J. (2020, January 24). In U.S., library visits outpaced trips to movies in 2019. *Gallup*. Retrieved from <https://news.gallup.com/poll/284009/library-visits-outpaced-trips-movies-2019.aspx>
- 86 Bureau of Business Research IC2 Institute. (2017, January). Texas public libraries: Economic benefits and return on investment. Texas State Library and Archives Commission. Retrieved from <https://repositories.lib.utexas.edu/bitstream/handle/2152/45600/bbr-2017-texas-public-libraries.pdf>
- 87 The Institute of Museum and Library Services. (2019). *Public libraries survey*. Retrieved from <https://www.ims.gov/research-evaluation/data-collection/public-libraries-survey>
- 88 Krause, E. & Reeves, R. V. (2017, September 18). *Hurricanes hit the poor the hardest*. Brookings Institution. Retrieved from <https://www.brookings.edu/blog/social-mobility-memos/2017/09/18/hurricanes-hit-the-poor-the-hardest/>
- NASA. (2018). Scientific consensus: Earth's climate is warming. Retrieved from <https://climate.nasa.gov/scientific-consensus/>
- 89 Fund Rocket. (n.d.). Financial losses to business due to disasters. Retrieved from <https://fundrocket.com/resources/financial-losses-to-businesses-due-to-disasters/>
- National Aeronautics and Space Administration. (2017). *Natural and manmade hazards in the state of Texas*. California Institute of Technology. Retrieved from [https://nisar.jpl.nasa.gov/system/documents/files/7\\_NISAR\\_Applications\\_Hazards\\_Texas.pdf](https://nisar.jpl.nasa.gov/system/documents/files/7_NISAR_Applications_Hazards_Texas.pdf)
- 90 Oxfam America. (2009). *Exposed: Social vulnerability and climate change in the U.S. Southeast*. Retrieved from <https://www.oxfamamerica.org/explore/research-publications/exposed-social-vulnerability-and-climate-change-in-the-us-southeast/>
- 91 Choi, L. (2009). Financial stress and its physical effects on individuals and communities. *Community Development Investment Review*, 5(3). Retrieved from <http://www.frbsf.org/community-development/files/choi.pdf>
- Hill, C. B. (2015, June 10). *Income inequality and higher education*. American Council on Education. Retrieved from <https://www.acenet.edu/the-presidency/columns-and-features/Pages/Income-Inequality-and-Higher-Education.aspx>
- Lynch, J., Smith, G. D., Harper, S., & Hillemeier, M. (2004). Is income inequality a determinant of population health? Part 2. U.S. national and regional trends in income inequality and age- and cause-specific mortality. *Milbank Quarterly*, 82(2), 355–400. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/15225332>
- National Conference of State Legislatures. (2018, July 17). Barriers to work: Low-income, unemployed and dislocated workers. Retrieved from <https://www.ncsl.org/research/labor-and-employment/barriers-to-work-low-income-unemployed-and-dislocated-workers.aspx>
- Sum, A., Khatiwada, I., & Palma, S. (2010, February). *Labor underutilization problems of U.S. Workers across household income groups at the end of the Great Recession*. Center for Labor Market Studies, Northeastern University. Retrieved from <http://www.uvm.edu/~fmgdoff/employment%20Jan.12.11/Labor%20Utilization%20studies.pdf>
- U.S. Department of Education. (2015). *A matter of equity: Preschool in America*. Retrieved from <https://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf>

- 92 American Community Survey. (2018). *5-year estimates* [Table S2801: Types of computers and internet subscriptions]. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>
- Anderson, M. (2017, March 22). *Digital divide persists even as lower-income Americans make gains in tech adoption*. Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2017/03/22/digital-divide-persists-even-as-lower-income-americans-make-gains-in-tech-adoption/>
- 93 American Community Survey. (2018). *5-year estimates* [Table S2801: Types of computers and internet subscriptions]. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>
- Perrin, A. (2017, June 28). *10 facts about smartphones as the iPhone turns 10*. Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2017/06/28/10-facts-about-smartphones/>
- Perrin, A. (2017, May 19). *Digital gap between rural and nonrural America persists*. Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2017/05/19/digital-gap-between-rural-and-nonrural-america-persists/>
- Ryan, C. (2018, August). *Computer and internet use in the United States: 2016*. American Community Survey Reports. Retrieved from <https://www.census.gov/content/dam/Census/library/publications/2018/acs/ACS-39.pdf>
- 94 Data calculated by applying the ALICE Threshold income levels to internet data from the American Community Survey. (2018). *5-year estimates* [Table S2801: Types of computers and internet subscriptions]. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>
- 95 National Digital Inclusion Alliance. (n.d.). *Worst connected cities, 2017*. Retrieved from <https://www.digitalinclusion.org/wp-content/uploads/2018/10/25-Worst-2017.pdf>
- Texas Comptroller of Public Accounts. (2019, October). *Texas' digital divide: The state of broadband in Texas' rural communities*. Retrieved from <https://comptroller.texas.gov/economy/fiscal-notes/2019/oct/divide.php>
- 96 Becker, S., Crandall, M. D., Fisher, K. E., Kinney, B., Landry, C., & Rocha, A. (2010). *Opportunity for all: How the American public benefits from internet access at U.S. libraries*. Institute of Museum and Library Services. Retrieved from <https://staging.community-wealth.org/sites/clone.community-wealth.org/files/downloads/report-becker-et-al.pdf>
- Chandra, S., Chang, A., Day, L., Fazlullah, A., Liu, J., McBride, L., Mudalige, T., Weiss, D. (2020). *Closing the K-12 digital divide in the age of distance learning*. Common Sense Media and Boston Consulting Group. Retrieved from [https://www.common-sense-media.org/sites/default/files/uploads/pdfs/common\\_sense\\_media\\_report\\_final\\_6\\_26\\_7.38am\\_web\\_updated.pdf](https://www.common-sense-media.org/sites/default/files/uploads/pdfs/common_sense_media_report_final_6_26_7.38am_web_updated.pdf)
- Horrigan, J. (2018, September 24). *Home internet access for low-income household helps people manage time, money, and family schedules*. Technology Policy Institute. Retrieved from <https://techpolicyinstitute.org/2018/09/24/home-internet-access-for-low-income-household-helps-people-manage-time-money-and-family-schedules/>
- Horrigan, J. B. (2016, September 9). *Library usage and engagement*. In *Libraries 2016*. Pew Research Center. Retrieved from <https://www.pewinternet.org/2016/09/09/library-usage-and-engagement/>
- Smith, A. (2015, April 1). *Usage and attitudes toward smartphones*. In *U.S. Smartphone Use in 2015*. Pew Research Center. Retrieved from <https://www.pewinternet.org/2015/04/01/chapter-two-usage-and-attitudes-toward-smartphones/#job%20seeking>
- 97 Centers for Disease Control and Prevention. (2020, March 10). *Drug overdose mortality by state*. Retrieved from [https://www.cdc.gov/nchs/pressroom/sosmap/drug\\_poisoning\\_mortality/drug\\_poisoning.htm](https://www.cdc.gov/nchs/pressroom/sosmap/drug_poisoning_mortality/drug_poisoning.htm)
- Maxwell, J. C. (n.d.). *State of Texas: Drug use patterns and trends, 2019*. Steve Hicks School of Social Work, The University of Texas at Austin. Retrieved from <https://socialwork.utexas.edu/dl/ari/texas-drug-trends-2019.pdf>
- National Center for Health Statistics. (2020, January). *Drug overdose deaths in the United States, 1999-2018*. *NCHS Data Brief No. 356*. Retrieved from <https://www.cdc.gov/nchs/products/databriefs/db356.htm>
- National Institute on Drug Abuse. (2020, April). *Texas: Opioid-involved deaths and related harms*. Retrieved from <https://www.drugabuse.gov/drugs-abuse/opioids/opioid-summaries-by-state/texas-opioid-summary>
- 98 Dasgupta, N., Beletsky, L., & Ciccarone, D. (2018, February). *Opioid crisis: No easy fix to its social and economic determinants*. *AJPH Perspectives*, 108(2), 182–186. Retrieved from <https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.2017.304187>
- Ghertner, R., & Groves, L. (2018, September). *The opioid crisis and economic opportunity: Geographic trends and economic opportunity*. U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Retrieved from <https://aspe.hhs.gov/system/files/pdf/259261/ASPEconomicOpportunityOpioidCrisis.pdf>
- Oquendo, M. A., & Volkow, N. D. (2018, April 26). *Suicide: A silent contributor to opioid-overdose deaths*. *New England Journal of Medicine*, 378, 1567–1569. Retrieved from <https://www.nejm.org/doi/full/10.1056/NEJMp1801417>
- Rossen, L. M., Bastian, B., Warner, M., Khan, D., & Chong, Y. (2019). *Drug poisoning mortality: United States, 1999–2017*. National Center for Health Statistics. Retrieved from <https://www.cdc.gov/nchs/data-visualization/drug-poisoning-mortality/index.htm>
- Ruhm, C. J. (2018, January). *Deaths of despair or drug problems?* National Bureau of Economic Research. Retrieved from <https://www.nber.org/papers/w24188.pdf>
- 99 Centers for Disease Control and Prevention. (2019). *Multiple cause of death, 1999–2017*. National Center for Health Statistics. Retrieved from <https://wonder.cdc.gov/>
- 100 Daley, D. C., Smith, E., Balogh, D., & Toscaloni, J. (2018). *Forgotten but not gone: The impact of the opioid epidemic and other substance use disorders on families and children*. *Commonwealth, A Journal of Pennsylvania Politics and Policy*, 20, (2–3). Retrieved from <https://tupjournals.temple.edu/index.php/commonwealth/article/view/189>
- Juergens, J. (2020). *Cost of drug and alcohol rehab*. Addiction Center. Retrieved from <https://www.addictioncenter.com/rehab-questions/cost-of-drug-and-alcohol-treatment/>

National Institute on Drug Abuse. (2018). *Medications to treat opioid use disorder: How much does opioid treatment cost?* Retrieved from <https://www.drugabuse.gov/publications/research-reports/medications-to-treat-opioid-addiction/how-much-does-opioid-treatment-cost>

Scholl, L., Seth, P., Kariisa, M., Wilson, N., & Baldwin, G. (2019). Drug and opioid-involved overdose deaths – United States, 2013–2017. *Morbidity and Mortality Weekly Report*, 67, 1419–1427. Retrieved from <https://www.cdc.gov/mmwr/volumes/67/wr/mm675152e1.htm>

101 amFAR. (2018). Opioid & health indicators database: Texas opioid epidemic. Retrieved from <https://opioid.amfar.org/TX>

Florence, C. S., Zhou, C., Luo, F., & Xu, L. (2016, October). The economic burden of prescription opioid overdose, abuse, and dependence in the United States, 2013. *Medical Care*, 54(10), 901–906. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/27623005>

Kneebone, E., & Allard, S. W. (2017, September 25). *A nation in overdose peril: Pinpointing the most impacted communities and the local gaps in care*. Brookings Institution. Retrieved from <https://www.brookings.edu/research/pinpointing-opioid-in-most-impacted-communities/>

Krueger, A. B. (2017). Where have all the workers gone? An inquiry into the decline of the U.S. labor force participation rate (BPEA Conference Drafts, September 7–8, 2017). *Brookings Papers on Economic Activity*. Retrieved from [https://www.brookings.edu/wp-content/uploads/2017/09/1\\_krueger.pdf](https://www.brookings.edu/wp-content/uploads/2017/09/1_krueger.pdf)

102 Congressional Budget Office. (2019, July 8). *The effects on employment and family income of increasing the federal minimum wage*. Retrieved from <https://www.cbo.gov/publication/55410>

Cooper, D., & Hall, D. (2013, March 13). *Raising the federal minimum wage to \$10.10 would give working families, and the overall economy, a much-needed boost*. Economic Policy Institute. Retrieved from <https://www.epi.org/publication/bp357-federal-minimum-wage-increase/>

From poverty to opportunity: How a fair minimum wage will help working families succeed. Hearings before the U.S. Senate Committee on Health, Education, Labor, and Pensions. (Testimony of Heather Boushey, *Understanding how raising the federal minimum wage affects income inequality and economic growth*). Retrieved from <https://www.help.senate.gov/imo/media/doc/Boushey3.pdf>

Zandi, M. (2011, April 14). At last, the U.S. begins a serious fiscal debate. *Moody's Analytics*. Retrieved from <https://www.economy.com/dismal/analysis/free/198972>

103 Note: While there are increased costs to employers for paying higher wages – which may be passed on to consumers – these impacts primarily occur when wages are increased for jobs with wages well above the Household Survival Budget (See Congressional Budget Office, 2019).

Blinder, A., & Zandi, M. (2010, July 27). *How the Great Recession was brought to an end*. Retrieved from <https://www.economy.com/mark-zandi/documents/End-of-Great-Recession.pdf>

Congressional Budget Office. (2019, July 8). *The effects on employment and family income of increasing the federal minimum wage*. Retrieved from <https://www.cbo.gov/publication/55410>

Cooper, D., & Hall, D. (2013, March 13). *Raising the federal minimum wage to \$10.10 would give working families, and the overall economy, a much-needed boost*. Economic Policy Institute. Retrieved from <https://www.epi.org/publication/bp357-federal-minimum-wage-increase/>

Cooper, D., & Hall, D. (2012, August 14). *How raising the federal minimum wage would help working families and give the economy a boost*. Economic Policy Institute. Retrieved from <https://www.epi.org/publication/ib341-raising-federal-minimum-wage/>

Zandi, M. (2011, April 14). At last, the U.S. begins a serious fiscal debate. *Moody's Analytics*. Retrieved from <https://www.economy.com/dismal/analysis/free/198972>

Zandi, M. (2010, December 8). U.S. macro outlook: Compromise boosts stimulus. *Moody's Analytics*. Retrieved from <https://economy.com/dismal/analysis/free/195470>

104 American Community Survey. (2018). *1-year estimates*. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>

National Association of State Budget Officers. (2019). *State expenditure report: Fiscal years 2017–2019*. Retrieved from <http://www.nasbo.org/mainsite/reports-data/state-expenditure-report>

Office of Management and Budget. (2017). *Analytical perspectives: Budget of the U.S. government: Fiscal year 2018*. Retrieved from <https://www.gpo.gov/fdsys/pkg/BUDGET-2018-PER/pdf/BUDGET-2018-PER.pdf>

U.S. Department of Agriculture. (n.d.). SNAP data tables [State level participation and benefits]. Retrieved from <http://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap>

U.S. Office of Management and Budget. (2019). Aid to State & Local Governments. In *Fiscal Year 2018 Analytical Perspectives Budget of the U.S. Government*. Retrieved from <https://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET>

105 The National Academies of Sciences, Engineering, and Medicine analyzes the cost of childhood poverty and estimates that reversing it would add 5.4% to the state GDP. To be conservative, this analysis uses Holzer's estimate that childhood poverty costs 2.5% of GDP in related health and criminal justice expenses.

Holzer, H. J., Schanzenbach, D. W., Duncan, J. D., & Ludwig, J. (2007, January 24). *The economic costs of poverty in the United States: Subsequent effects of children growing up poor*. Center for American Progress. Retrieved from [https://cdn.americanprogress.org/wp-content/uploads/issues/2007/01/pdf/poverty\\_report.pdf](https://cdn.americanprogress.org/wp-content/uploads/issues/2007/01/pdf/poverty_report.pdf)

McLaughlin, M., & Rank, M. R. (2018). Estimating the economic cost of childhood poverty in the United States. *Social Work Research*, 42(2), 73–83. Retrieved from <doi:10.1093/swr/svy007>

National Academies of Sciences, Engineering, and Medicine. (2019). Consequences of child poverty. In G. Duncan & S. Le Menestrel (Eds.), *A Roadmap to Reducing Child Poverty* (pp. 67–96). Washington, DC: The National Academies Press. Retrieved from <https://www.nap.edu/read/25246/chapter/5#89>

Federal Reserve Bank of St. Louis. (2018). Total gross domestic product for Texas. Retrieved from <https://research.stlouisfed.org/fred2/series/TXNGSP>

- 106 Carroll, S. J., & Erkut, E. (2009). *The benefits to taxpayers from increases in students' educational attainment*. RAND Corporation. Retrieved from [https://www.rand.org/content/dam/rand/pubs/monographs/2009/RAND\\_MG686.pdf](https://www.rand.org/content/dam/rand/pubs/monographs/2009/RAND_MG686.pdf)
- Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A., & Singh, A. (2019). *Household food security in the United States in 2018*. U.S. Department of Agriculture. Retrieved from <https://www.ers.usda.gov/webdocs/publications/94849/err-270.pdf?v=963.1>
- Furman, J., & Ruffini, K. (2015, May 11). *Six examples of the long-term benefits of anti-poverty programs*. The White House, President Barack Obama Archives. Retrieved from <https://obamawhitehouse.archives.gov/blog/2015/05/11/six-examples-long-term-benefits-anti-poverty-programs>
- Office of Disease Prevention and Health Promotion. (2020). *Social determinants of health*. Healthy People 2020. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>
- Virginia Commonwealth University, Center on Society and Health. (2015, February 13). *Education: It matters more to health than ever before*. Retrieved from <https://societyhealth.vcu.edu/work/the-projects/education-it-matters-more-to-health-than-ever-before.html>
- Woolf, A., Aron, L., Dubay, L., Simon, S. M., Zimmerman, E., & Luk, K. X. (2015, April). *How are income and wealth linked to health and longevity?* Urban Institute and Center of Society and Health at Virginia Commonwealth University. Retrieved from <https://www.urban.org/sites/default/files/publication/49116/2000178-How-are-Income-and-Wealth-Linked-to-Health-and-Longevity.pdf>
- 107 McKeever, B. S. (2018, December 13). *The nonprofit sector in brief 2018*. Urban Institute, National Center for Charitable Statistics. Retrieved from <https://nccs.urban.org/publication/nonprofit-sector-brief-2018#finances>
- National Association of State Budget Officers. (2019). *State expenditure report: Fiscal years 2017–2019*. Retrieved from <http://www.nasbo.org/mainsite/reports-data/state-expenditure-report>
- Office of Management and Budget. (2017). *Analytical perspectives: Budget of the U.S. government: Fiscal year 2018*. Retrieved from <https://www.gpo.gov/fdsys/pkg/BUDGET-2018-PER/pdf/BUDGET-2018-PER.pdf>
- U.S. Department of Agriculture. (n.d.). SNAP data tables, state level participation and benefits. Food and Nutrition Service. Retrieved from <http://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap>
- Urban Institute. (2012). NCCS Data Web Report Builder, Statistics of Income 990EZc3 Report and 990C3 Report. Data procured from National Center for Charitable Statistics.
- 108 Chapman, J. & Thompson, J. (2006). *The economic impact of local living wages*. Economic Policy Institute. Retrieved from <https://www.epi.org/publication/bp170/>
- Reeves, R. V. (2015). *Two anti-poverty strategies*. Brookings Institution. Retrieved from <https://www.brookings.edu/opinions/two-anti-poverty-strategies/>
- 109 Kahneman, D., & Deaton, A. (2010, September 21). High income improves evaluation of life but not emotional well-being. *Proceedings of the National Academy of Sciences of America*, 107(38), 16489–16493. Retrieved from <https://doi.org/10.1073/pnas.1011492107>
- Jebb, A.T., Tay, L., Diener, E., & Shigehiro, O. (2018). Happiness, income satiation and turning points around the world. *Nature Human Behavior*, 2, 33–38. Retrieved from <https://www.nature.com/articles/s41562-017-0277-0>
- American Psychological Association. (2017). *Stress and health disparities: Contexts, mechanisms, and interventions among racial/ethnic minority and low-socioeconomic status populations*. APA Working Group on Stress and Health Disparities. Retrieved from <https://www.apa.org/pi/health-disparities/resources/stress-report.pdf>
- 110 Beard, M. P. (2010). *In-depth: Reaching the unbanked and underbanked*. Federal Reserve Bank of St. Louis. Retrieved from <https://www.stlouisfed.org/publications/central-banker/winter-2010/reaching-the-unbanked-and-underbanked>
- Hahn, R. A., Barnett W. S., Knopf J. A., Truman B. I., Johnson R. L., Fielding J. E., et al. (2016). Early childhood education to promote health equity: A community guide systematic review. *Journal of Public Health Management Practice*, 22(5), E1–8. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/26672406>
- McKernan, S.-M., Ratcliffe, C., & Shanks, T. W. (2011). *Is poverty incompatible with asset accumulation?* Urban Institute. Retrieved from <https://www.urban.org/research/publication/poverty-incompatible-asset-accumulation>
- 111 Amadeo, K. (2019, July). Consumer spending and its impact on the economy. *The Balance*. Retrieved from <https://www.thebalance.com/consumer-spending-definition-and-determinants-3305917>
- Chapman, J., & Thompson, J. (2006). *The economic impact of local living wages*. Economic Policy Institute. Retrieved from <https://www.epi.org/publication/bp170/>
- Office of Policy Development and Research. (2016, Summer). *Neighborhoods and violent crime*. Evidence matters: Transforming knowledge into housing and community development policy. U.S. Department of Housing and Urban Development. Retrieved from <https://www.huduser.gov/portal/periodicals/em/summer16/highlight2.html>
- McKenzie, T. L., Moody, J. S., Carlson, J. A., Lopez, N. V., Elder, J. P. (2014). Neighborhood income matters: Disparities in community recreation facilities, amenities, and programs. *Journal of Park and Recreation Administration*, 31(4), 12–22. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4082954/>

# FIGURE 12: SOURCES

## HOUSING

Chetty, R., Hendren, N., & Katz, L. F. (2016, April). The effects of exposure to better neighborhoods on children: New evidence from the Moving to Opportunity Experiment. *American Economic Review*, 106(4), 855–902. Retrieved from <https://www.aeaweb.org/articles?id=10.1257/aer.20150572>

Cunningham, M. K. (2016, June 26). *Reduce poverty by improving housing stability*. Urban Institute. Retrieved from <https://www.urban.org/urban-wire/reduce-poverty-improving-housing-stability>

Enterprise Community Partners, Inc. (2014). *Impact of affordable housing on families and communities: A review of the evidence base*. Retrieved from <https://homeforallsmc.org/wp-content/uploads/2017/05/Impact-of-Affordable-Housing-on-Families-and-Communities.pdf>

Goodman, L. (2018, February 21). *Homeownership is still financially better than renting*. Urban Institute. Retrieved from <https://www.urban.org/urban-wire/homeownership-still-financially-better-renting>

Joint Center for Housing Studies. (2020). *The state of the nation's housing 2019*. Harvard University. Retrieved from [https://www.jchs.harvard.edu/sites/default/files/Harvard\\_JCHS\\_State\\_of\\_the\\_Nations\\_Housing\\_2019.pdf](https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_State_of_the_Nations_Housing_2019.pdf)

Litman, T. (2015, March). *Analysis of public policies that unintentionally encourage and subsidize sprawl*. The New Climate Economy and the Victoria Transport Policy Institute. Retrieved from <https://newclimateeconomy.report/workingpapers/wp-content/uploads/sites/5/2016/04/public-policies-encourage-sprawl-nce-report.pdf>

Maqbool, N., Viveiros, J., & Ault, M. (2015, April). *The impacts of affordable housing on health: A research summary*. Center for Housing Policy. Retrieved from <https://www.rupco.org/wp-content/uploads/pdfs/The-Impacts-of-Affordable-Housing-on-Health-CenterforHousingPolicy-Maqbool.etal.pdf>

National Alliance to End Homelessness. (2015, June 30). *Permanent supportive housing cost study map*. Retrieved from <https://endhomelessness.org/resource/permanent-supportive-housing-cost-study-map/>

Office of Development and Research. (2014). How housing mobility affects education outcomes for low-income children. *Evidence Matters*. U.S. Department of Housing and Urban Development. Retrieved from <https://www.huduser.gov/portal/periodicals/em/fall14/highlight2.html>

Rohe, W. M., & Lindblad, M. (2013, August). *Reexamining the social benefits of homeownership after the housing crisis*. Joint Center for Housing Studies, Harvard University. Retrieved from <https://www.jchs.harvard.edu/sites/default/files/hbti-04.pdf>

Sullivan, J. (2015, April 21). *How commute issues can dramatically impact employee retention*. TLNT. Retrieved from <https://www.tlnt.com/how-commute-issues-can-dramatically-impact-employee-retention/>

Taylor, L. (2018, June 7). Housing and health: An overview of the literature. *Health Affairs Health Policy Brief*. Retrieved from <https://www.healthaffairs.org/doi/10.1377/hpb20180313.396577/full/>

The Economist. (2018, June 7). *The stark relationship between income inequality and crime*. Retrieved from <https://www.economist.com/graphic-detail/2018/06/07/the-stark-relationship-between-income-inequality-and-crime>

Wright, B., Li, G., Weller, M., & Vartanian, K. (2016, February). *Housing and health: Exploring the intersection between housing and health care*. Enterprise Community Partners and Center for Outcomes Research and Education. Retrieved from <https://www.enterprisecommunity.org/download?fid=5703&nid=4247>

United States Interagency Council on Homelessness. (2017). *Ending chronic homelessness in 2017*. Retrieved from [https://www.usich.gov/resources/uploads/asset\\_library/Ending\\_Chronic\\_Homelessness\\_in\\_2017.pdf](https://www.usich.gov/resources/uploads/asset_library/Ending_Chronic_Homelessness_in_2017.pdf)

## CHILD CARE

Alliance for Excellent Education. (2019). *The graduation effect*. Retrieved from <http://impact.all4ed.org/>

American Psychological Association. (2019). *Education and socioeconomic status*. Retrieved from <https://www.apa.org/pi/ses/resources/publications/education>

Auguste, B.G., Hancock, B., & Laboissiere, M. (2009). *The economic cost of the U.S. education gap*. McKinsey & Company. Retrieved from <https://www.mckinsey.com/industries/social-sector/our-insights/the-economic-cost-of-the-us-education-gap>

Child Care Aware of America. (2019). *The US and the high cost of child care: An examination of a broken system*. Retrieved from <https://usa.childcareaware.org/advocacy-public-policy/resources/research/costofcare/>

Garcia, E. & Weiss, E. (2017, September 27). *Education inequalities at the school starting gate*. Economic Policy Institute. Retrieved from <https://www.epi.org/publication/education-inequalities-at-the-school-starting-gate/>

Garcia, J. L., Heckman, J. J., Leaf, D. E., & Prados, M. J. (2016, December). *The life-cycle benefits of an influential early childhood program*. National Bureau of Economic Research. Retrieved from <https://www.nber.org/papers/w22993>

Virginia Commonwealth University, Center on Society and Health. (2015, February 13). *Why education matters to health: Exploring the causes*. Retrieved from <https://www.aecf.org/resources/overstressed-kids/>

# FOOD

- Berkowitz, S. A., Basu, S., Meigs, J. B., & Selgman, H. K. (2018). Food insecurity and health care expenditures in the United States, 2011–2013. *Health Services Research*, 53(3), 1600–1602. Retrieved from <https://onlinelibrary.wiley.com/doi/full/10.1111/1475-6773.12730>
- Bhargava, V., & Lee, J. S. (2016). Food insecurity and health care utilization among older adults in the United States. *Journal of Nutrition in Gerontology and Geriatrics*, 35(3), 177–192. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/27559853>
- Feeding America & Oxfam America. (2014). *From paycheck to pantry: Hunger in working America*. Retrieved from <https://www.feedingamerica.org/sites/default/files/research/hunger-in-working-america/from-paycheck-to-pantry.pdf>
- Food Research and Action Center. (2017). *The impact of poverty, food insecurity, and poor nutrition on health and well-being*. Retrieved from <http://frac.org/wp-content/uploads/hunger-health-impact-poverty-food-insecurity-health-well-being.pdf>
- French, S.A., Tangney, C.C., Crane, M.M. et al. (2019). Nutrition quality of food purchases varies by household income: the SHoPPER study. *BMC Public Health*, 19(231). <https://doi.org/10.1186/s12889-019-6546-2>
- Johnson, A. D., & Markowitz, A. J. (2017, March 21). Association between household food insecurity in early childhood and children's kindergarten skills. *Child Development*, 89(2). Retrieved from <https://doi.org/10.1111/cdev.12764>
- Loopstra, R., & Lalor, D. (2017). *Financial insecurity, food insecurity, and disability: The profile of people receiving emergency food assistance from The Trussell Trust Foodbank Network in Britain*. The Trussell Trust. Retrieved from [https://www.trusselltrust.org/wp-content/uploads/sites/2/2017/06/UO\\_exec\\_summary\\_final\\_02\\_04\\_online.pdf](https://www.trusselltrust.org/wp-content/uploads/sites/2/2017/06/UO_exec_summary_final_02_04_online.pdf)
- McLaughlin, K. A. Green, J. G, Alegria, M., & Costello, E. J. (2012, December). Food insecurity and mental disorders in a national sample of U.S. adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 51(12), 1293–1303. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S0890856712007265>
- RTI International. (2014). *Current and prospective scope of hunger and food security in America*. Retrieved from [http://www.rti.org/sites/default/files/resources/full\\_hunger\\_report\\_final\\_07-24-14.pdf](http://www.rti.org/sites/default/files/resources/full_hunger_report_final_07-24-14.pdf)

# TRANSPORTATION

- Beiler, M. O., & Mohammed, M. (2016). Exploring transportation equity: Development and application of a transportation justice framework. *Transportation research part D: transport and environment*, 47, 285–298. Retrieved from <https://doi.org/10.1016/j.trd.2016.06.007>
- Dawkins, C., Jeon, J. S., & Pendall, R. (2015). Transportation access, rental vouchers, and neighborhood satisfaction: Evidence from the moving to opportunity experiment. *Housing Policy Debate*, 25(3), 497–530. Retrieved from <https://doi.org/10.1080/10511482.2014.986662>
- Institute for Transportation and Development Policy. (2019, May 23). The high cost of transportation in the United States. *Transportation Matters*. Retrieved from <https://www.itdp.org/2019/05/23/high-cost-transportation-united-states/>
- Martens, K. (2016). *Transport justice: Designing fair transportation systems*. New York: Routledge.
- Robert Wood Johnson Foundation. (2012, October 25). *How does transportation impact health?* Retrieved from <https://www.rwjf.org/en/library/research/2012/10/how-does-transportation-impact-health-.html>
- Sullivan, J. (2015, April 21). *How commute issues can dramatically impact employee retention*. TLNT. Retrieved from: <https://www.tlnt.com/how-commute-issues-can-dramatically-impact-employee-retention/>
- Young, L., Irvin, E., & Shankar, P. (2019, September). *Equity and smart mobility*. Institute for Sustainable Communities and the Center for Neighborhood Technology. Retrieved from <https://www.cnt.org/sites/default/files/publications/Equity-and-Smart-Mobility-Report.pdf>
- Zhao, F., & Gustafson, T. (2013, February). Transportation needs of disadvantaged populations: Where, when, and how? *FTA Report No. 0030*. Federal Transit Administration. Retrieved from [https://www.transit.dot.gov/sites/fta.dot.gov/files/FTA\\_Report\\_No.\\_0030.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/FTA_Report_No._0030.pdf)

# HEALTH CARE

- Centers for Disease Control and Prevention. (2016). *Emergency department visits*. Retrieved from <https://www.cdc.gov/nchs/fastats/emergency-department.htm>
- Claxton, G., Sawyer, B., & Cox, C. (2019, April 14). How affordability of health care varies by income among people with employer coverage. *Access & Affordability, Peterson-KFF Health System Tracker*. Retrieved from <https://www.healthsystemtracker.org/brief/how-affordability-of-health-care-varies-by-income-among-people-with-employer-coverage/>
- DeLia, D., & Lloyd, K. (2014, July). *Sources of variation in avoidable hospital use and cost across low-income communities in New Jersey*. Rutgers Center for State Health Policy. Retrieved from <http://www.cshp.rutgers.edu/downloads/10470.pdf>
- Dickman, S. L., Himmelstein, D. U., & Woolhandler, S. (2017). Inequality and the health-care system in the USA. *The Lancet*, 389(10077), 1431–1441.
- Golberstein E. (2015). The effects of income on mental health: evidence from the social security notch. *The Journal of Mental Health Policy and Economics*, 18(1), 27–37. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4494112/>

McMorrow, S., Kenney, G. M., & Goin, D. (2014). Determinants of receipt of recommended preventive services: implications for the Affordable Care Act. *American Journal of Public Health*, 104(12), 2392–2399. <https://doi.org/10.2105/AJPH.2013.301569>

Powell, A. (2016, February 22). The costs of inequality: Money = quality healthcare = longer life. *Harvard Gazette*. Retrieved from <https://news.harvard.edu/gazette/story/2016/02/money-quality-health-care-longer-life/>

Robert Wood Johnson Foundation. (2011, December 1). *Health care's blind side: The overlooked connection between social needs and good health: Summary of findings from a survey of America's physicians*. Retrieved from <http://www.rwjf.org/files/research/RWJPhysiciansSurveyExecutiveSummary.pdf>

Witters, D., & Liu, D. (2013, May 7). In U.S., poor health tied to big losses for all job types. *Gallup*. Retrieved from <http://www.gallup.com/poll/162344/poor-health-tied-big-losses-jobtypes.aspx>

Woolf, S.H., Aron, L., Dubay, L., Simon, S.M., Zimmerman, E., & Luk, K.X. (2015, April). *How are income and wealth linked to health and longevity?* Urban Institute. Retrieved from <https://www.urban.org/sites/default/files/publication/49116/2000178-How-are-Income-and-Wealth-Linked-to-Health-and-Longevity.pdf>

## TECHNOLOGY

Anderson, M., & Perrin, A. (2018, October 26). *Nearly one-in-five teens can't always finish their homework because of the digital divide*. Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2018/10/26/nearly-one-in-five-teens-cant-always-finish-their-homework-because-of-the-digital-divide/>

Anderson, M. (2019, May 7). *Digital divide persists even as lower-income Americans make gains in tech adoption*. Pew Research Center. Retrieved from <https://www.pewresearch.org/fact-tank/2017/03/22/digital-divide-persists-even-as-lower-income-americans-make-gains-in-tech-adoption/>

Children's Hospital of Los Angeles. (2019). *mHealth*. Retrieved from <https://www.himss.org/library/mhealth>

Office of Policy Development and Research. (2016). *Community development and the digital divide*. U.S. Department of Housing and Urban Development. Retrieved from <https://www.huduser.gov/portal/periodicals/em/fall16/highlight1.html>

Pew Research Center. (2019, June 12). *Mobile fact sheet*. Retrieved from <https://www.pewinternet.org/fact-sheet/mobile/>

Rideout, V., & Katz, V. (2016, Winter). *Opportunity for all? Technology and learning in lower-income families. A report of the families and media project*. The Joan Ganz Cooney Center at Sesame Workshop. Retrieved from [http://joanganzcooneycenter.org/wp-content/uploads/2016/01/jqcc\\_opportunityforall.pdf](http://joanganzcooneycenter.org/wp-content/uploads/2016/01/jqcc_opportunityforall.pdf)

Smith, A. (2013, April 25). *Civic engagement in the digital age*. Pew Research Center. Retrieved from <https://www.pewinternet.org/2013/04/25/civic-engagement-in-the-digital-age/>

Smith, A. (2015, April 1). Usage and attitudes toward smartphones. In *U.S. smartphone use in 2015*. Pew Research Center. Retrieved from <https://www.pewinternet.org/2015/04/01/chapter-two-usage-and-attitudes-toward-smartphones/#job%20seeking>

## SAVINGS

Blank, R. M., & Barr, M. S. (Eds.). (2009). *Insufficient funds: Savings, assets, credit, and banking among low-income households*. New York: Russell Sage Foundation.

Collins, J. M., & Gjertson, L. (2013). Emergency savings for low-income consumers. *Focus*, 30(1), 12–17. Retrieved from <https://www.irp.wisc.edu/publications/focus/pdfs/foc301c.pdf>

Econsult Solutions, Inc. (ESI). (2018, January 18). *ESI examines the impact of insufficient retirement savings on Pennsylvania*. Pennsylvania Treasury. Retrieved from <https://patreasury.gov/pdf/Impact-Insufficient-Retirement-Savings.pdf>

Helm, S., Serido, J., Ahn, S.Y., Ligon, V., & Shim, S. (2019, November). Materialist values, financial and pro-environmental behaviors, and well-being. *Emerald Insight*. Retrieved from <https://www.emerald.com/insight/content/doi/10.1108/YC-10-2018-0867/full/html>

Krieger, J., Carter, G., Burr, M., & Collins, J.M. (2017, January). *The case for reducing poverty among seniors: Encouraging savings for retirement by people in Wisconsin: Projected reductions in Wisconsin state expenditures*. La Follette School of Public Affairs, the University of Wisconsin–Madison, and AARP. Retrieved from <https://lafollette.wisc.edu/images/publications/otherpublications/AARP-The-Case-for-Reducing-Poverty-Among-Seniors.pdf>

Levins, N. (2016, April). *Why cities should care about family financial security*. Urban Institute; Retrieved from <https://www.urban.org/features/why-cities-should-care-about-family-financial-security>

Mutchler, J., Li, Y., & Roldán, N.V. (2019). *Living below the line: Economic insecurity and older Americans, insecurity in the states 2019*. Center for Social and Demographic Research on Aging at the University of Massachusetts Boston. Retrieved from <https://scholarworks.umb.edu/demographyofaging/40/>

Poterba, J. M., & Venti, S. F. (2001). Preretirement cashouts and foregone retirement saving: Implications for 401(k) asset accumulation. In D. A. Wise (Ed.), *Themes in the Economics of Aging* (pp. 23–58). Chicago: University of Chicago Press. Retrieved from <https://www.nber.org/chapters/c10320>

Rhee, N. & Boivie, I. (2015, March). *The continuing retirement savings crisis*. National Institute on Retirement Savings. Retrieved from [https://www.nirsonline.org/wp-content/uploads/2017/07/final\\_rsc\\_2015.pdf](https://www.nirsonline.org/wp-content/uploads/2017/07/final_rsc_2015.pdf)

Wang, L., & Graddy, E. (2008). Social capital, volunteering, and charitable giving. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 19(1), 23. Retrieved from [https://www.researchgate.net/publication/226255124\\_Social\\_Capital\\_Volunteering\\_and\\_Charitable\\_Giving](https://www.researchgate.net/publication/226255124_Social_Capital_Volunteering_and_Charitable_Giving)

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