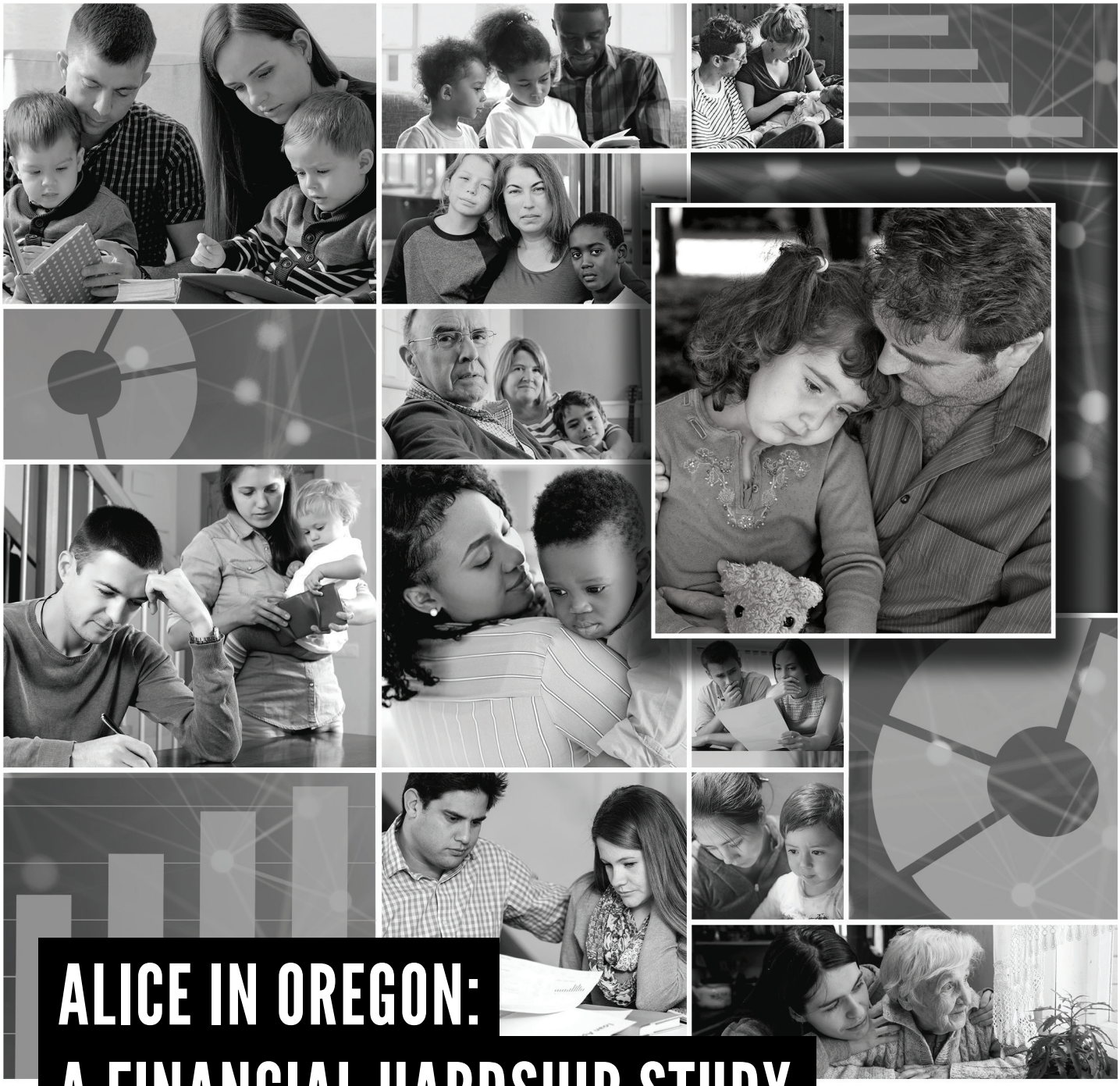
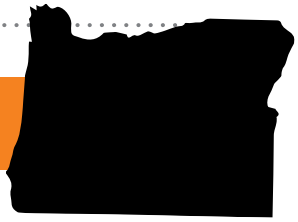


ALICE IN OREGON: A FINANCIAL HARDSHIP STUDY

LIVE UNITED

UNITED FOR ALICE



2020 OREGON REPORT

United Way

United Ways of the Pacific Northwest

ALICE IN THE TIME OF COVID-19

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

That exposure makes the ALICE data and analysis more important than ever. The ALICE Report for Oregon presents the latest ALICE data available — a point-in-time snapshot of economic conditions across the state in 2018. By showing how many Oregon 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 Oregon moves forward, this data can be used to estimate the impact of the crisis over time, providing an important baseline for changes to come.

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

THE UNITED WAYS OF OREGON

Greater Douglas United Way

Jefferson County United Way

Tillamook County United Way

United Way of Central Oregon

United Way of Clatsop County

United Way of Columbia County

United Way of Eastern Oregon

United Way of Jackson County

United Way of Lane County

United Way of Linn, Benton & Lincoln Counties

United Way of Southwestern Oregon

United Way of the Columbia Gorge

United Way of the Columbia-Willamette

United Way of the Klamath Basin

United Way of the Mid-Willamette Valley

United Way of Umatilla And Morrow Counties

Learn more about ALICE in the Pacific Northwest: www.uwpnw.org/ALICE

Pacific Northwest ALICE Sponsors

Special thanks to the following sponsors for helping to bring the message of ALICE to the Pacific Northwest states of Idaho, Oregon, and Washington.

Acknowledgements

United Ways of the Pacific Northwest thank our sponsors, partners, and community stakeholders throughout the region for their support and commitment to this 2020 ALICE Report for Oregon. 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 Oregon, contact:
Jim Cooper, jim@uwpnw.org

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

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 Oregon, 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

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

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

ALICE Research Advisory Committee for the Pacific Northwest

Kasi Allen, Ph.D.
The Ford Family Foundation

LoAnn Ayers, Ph.D.
United Way of Benton & Franklin Counties

Joe Avalos, M.A.
Thurston County Public Health and Social Services

Margaret Bartholomew
Oregon Coast Community Action

Janet Bauer
Oregon Center for Public Policy

Patricia Boyce, M.S.
United Way of Whatcom County

Michael Doughty, M.S.
Oregon Employment Department

Mark Edwards, Ph.D.
Oregon State University

Drew Farmer
Bay Area Enterprises/Coos Bay City Council

Ian Galloway
Portland Branch, Federal Reserve Bank of San Francisco

Lisa Hardy
United Way North Idaho AmeriCorps VISTA

Alivia Metts
Economist/Consultant

Ali Modarres, Ph.D.
University of Washington, Tacoma

Jennifer Moore
Oregon Cascades West Council of Governments

Lindsay Morgan Tracy
Washington State Department of Social and Health Services

Audrey Muzychenko, M.P.A.
Spokane County United Way

Kathryn Tacke, M.A.
Idaho Department of Labor

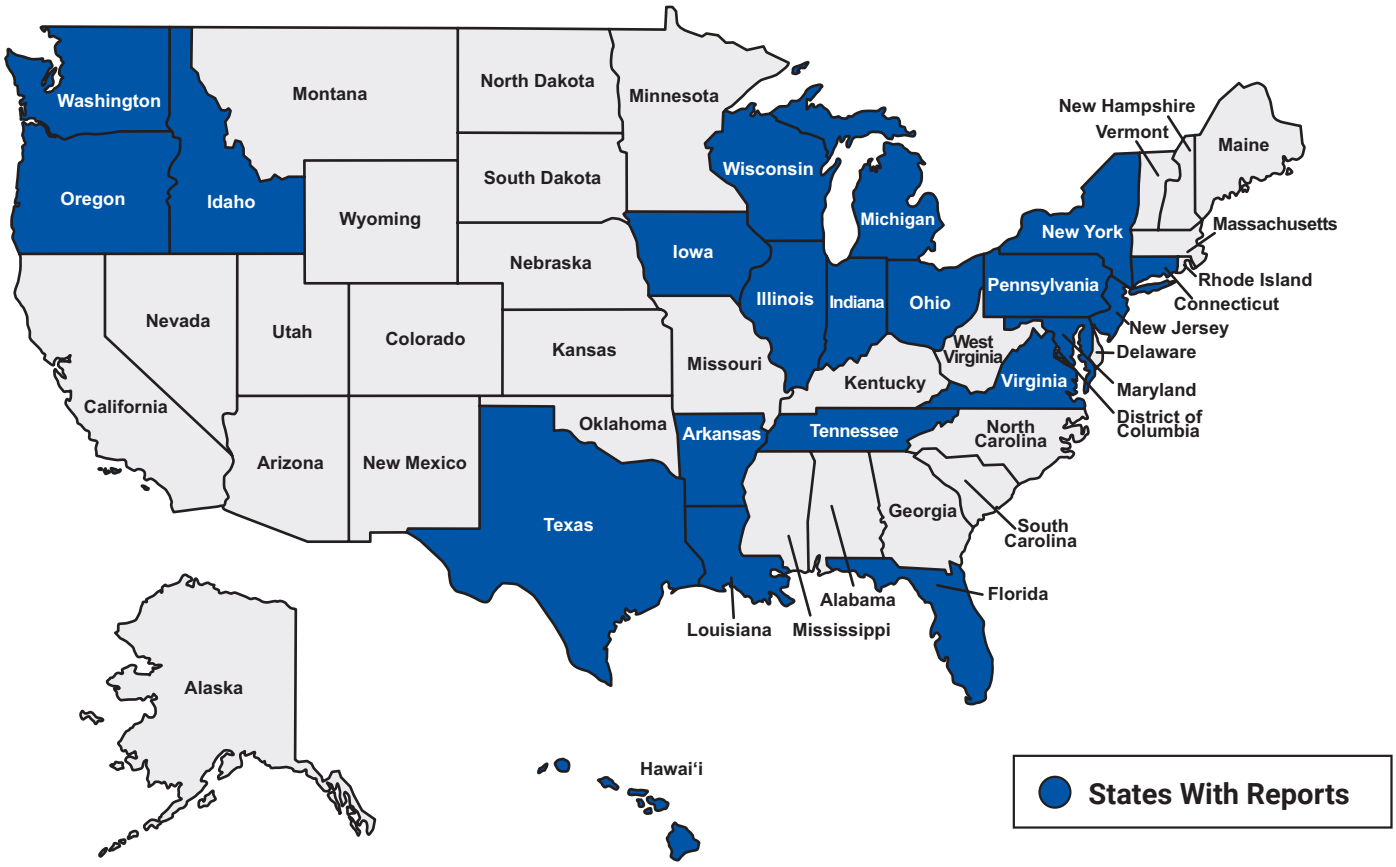
Aimee White, M.Ed.
American Evaluation Association

Sam Wolkenhauer
Idaho Department of Labor

ALICE: A GRASSROOTS MOVEMENT

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

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



NATIONAL ALICE ADVISORY COUNCIL

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

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

WHAT'S NEW IN ALICE RESEARCH

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

This Report includes the following improvements:

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

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

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

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 Oregon ranges from 35% in Deschutes County to 56% in Crook and Wheeler counties. 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 Oregon.

TABLE OF CONTENTS

Asset Limited, Income Constrained, Employed 1

Who Is ALICE? 3

Trends: Household Demographics 5

The Cost of Living in Oregon 7

The ALICE Household Budgets 7

The ALICE Essentials Index 9

Trends: Cost of Living 10

The Changing Landscape of Work in Oregon 12

The New Labor Force 14

ALICE Jobs: Maintaining the Economy 16

Trends: The Landscape of Work 18

Next Steps: Data for Action 20

Identifying Gaps 20

Understanding ALICE: Health, Education, and Social Factors 22

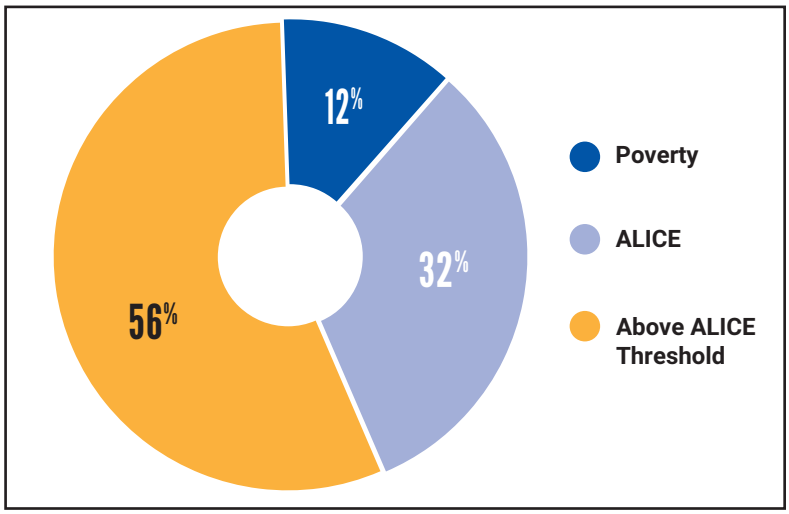
The Benefits of Moving Toward Equity in Oregon 22

Endnotes 27

Figure 12 37

ASSET LIMITED, INCOME CONSTRAINED, EMPLOYED

From 2010 to 2018, Oregon 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 Oregon's 1,636,182 households still struggled to make ends meet. And while 12% of these households were living below the Federal Poverty Level (FPL), another 32% — almost three times as many — were **ALICE** households: **A**sset **L**imited, **I**ncome **C**onstrained, **E**mployed. These households earned above the FPL, but not enough to afford basic household necessities.



This Report provides new data and tools that explain the persistent level of hardship faced by ALICE households, revealing aspects of the Oregon 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 in ALICE jobs fall short of the rising cost of living.** 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; wage increases that did not keep pace with the rising cost of living; 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 Oregon workers — 55% — were paid by the hour, and 57% of the state's jobs paid less than $20 per hour.
- **The number of ALICE households is increasing in Oregon** 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 Oregon, the percentage of households that were ALICE rose from 19% in 2007 to 32% in 2018. By contrast, those in poverty ranged from a high of 16% (in 2012) to a low of 12% (in 2018) throughout the period.

This Report provides critical measures that assess Oregon's economy from four perspectives: They track financial hardship over time and across demographic groups; quantify the basic cost of living in Oregon; 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 Oregon GDP would be $58.2 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 Oregon, 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 Oregon. Households **Below the ALICE Threshold** include both ALICE and poverty-level households.

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

ALICE ONLINE

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

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

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

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

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

Data Spreadsheet
Download the ALICE data

Jobs Graphs
Details about where ALICE works

County Profiles
Detailed data about ALICE households in each county

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

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

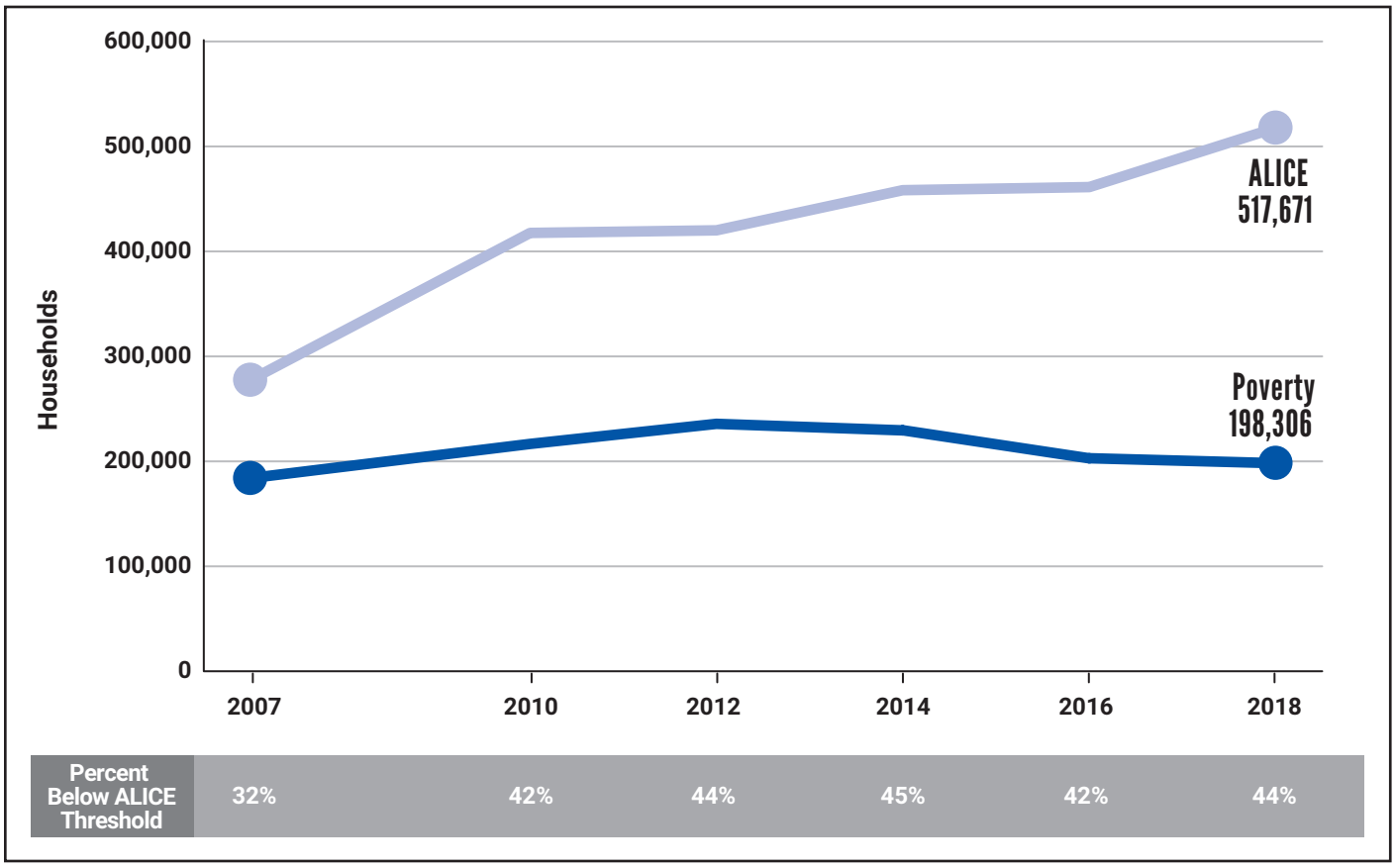
WHO IS ALICE?

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

Between 2007 and 2018, the total number of Oregon households increased from 1,471,965 to 1,636,182 (an 11% increase). The number of households in poverty increased from 184,012 in 2007 to 235,727 in 2012, then steadily decreased to 198,306 by 2018 (fluctuating between 12% and 16% of all households).[3]

While the number of households in poverty returned to near pre-Recession levels by 2018, the number of ALICE households nearly doubled between 2007 and 2018 (from 277,436 to 517,671), with their share of all households rising from 19% to 32%. Overall, the percentage of households living below the ALICE Threshold (ALICE and poverty-level households combined) increased from 32% in 2007 to 44% in 2018 (Figure 1). [4]

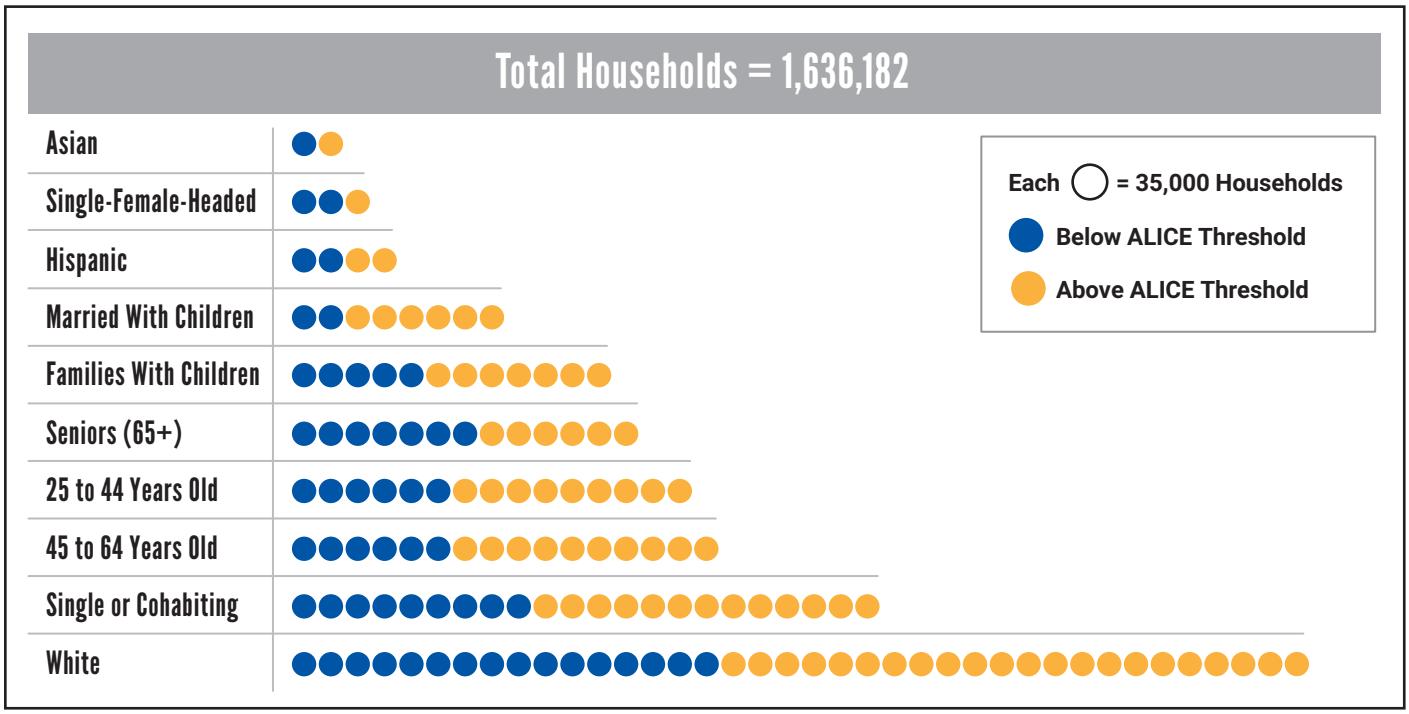
Figure 1.
Households by Income, Oregon, 2007–2018



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

ALICE households live in every county in Oregon — urban, suburban, and rural — and they include people of all genders, ages, and races/ethnicities, across all household types. Figure 2 shows that in 2018, the largest numbers of households below the ALICE Threshold were in the largest demographic groups in Oregon — 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 44% of families with children living below the ALICE Threshold.

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

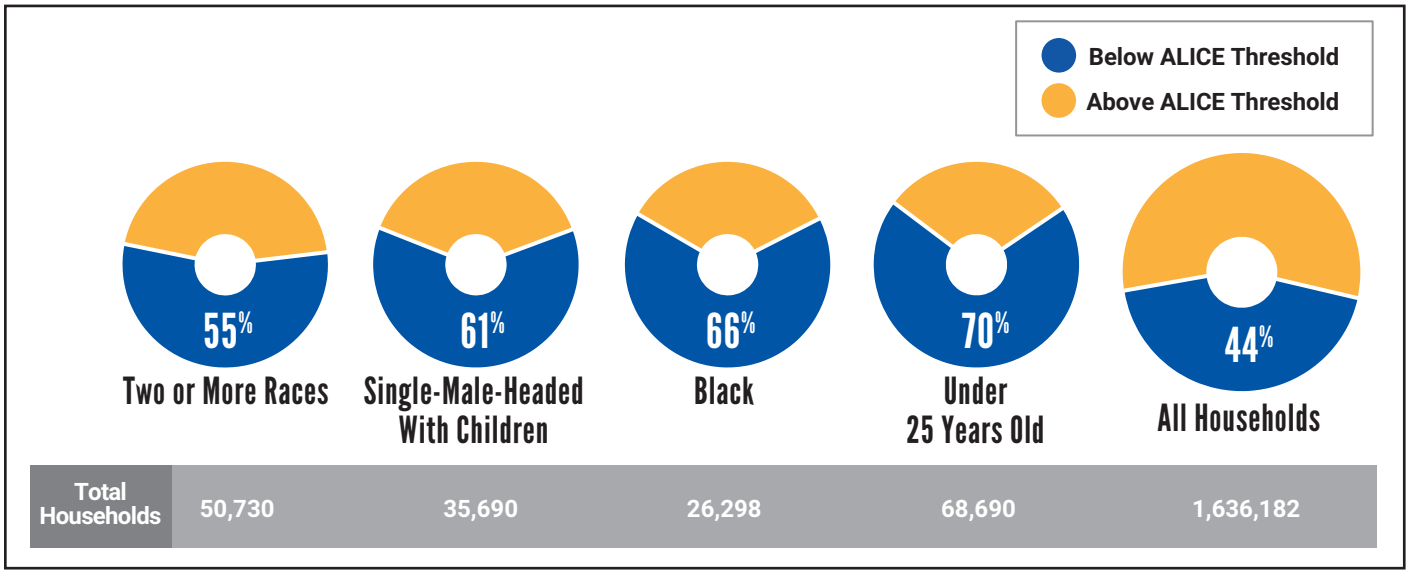


Note: Categories shown in figure are overlapping.

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 Oregon had income below the ALICE Threshold in 2018. But many smaller groups had a disproportionately high percentage of families below the ALICE Threshold. Three of these groups are shown in Figure 2: Seniors, Hispanic households, and households headed by single females, with 52%, 60%, and 78% of households below the ALICE Threshold, respectively. Additional small groups that also had a disproportionately high percentage of households below the ALICE Threshold included households headed by someone of two or more races, single-male-headed households (with children), Black households, and households headed by someone under 25 years old (Figure 3).

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



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

TRENDS: HOUSEHOLD DEMOGRAPHICS

A growing number of households live on the edge of the ALICE Threshold. For these households, even a small increase in the cost of housing or a decrease in work hours can mean the difference between being financially stable and being ALICE — or between being ALICE and falling into poverty. **In Oregon, 16% of households were on the cusp of the ALICE Threshold in 2018**, with earnings just above or below it.[5] This matters not only for families, but also for the Oregon economy: Small increases in regular bills like rent, food, or gasoline, a decrease in wages or hours worked, or an unexpected emergency — such as a factory closing or a natural disaster — could destabilize a large number of households.

Oregon is increasingly diverse. While all of the state's four largest racial and ethnic groups grew between 2010 and 2018, non-White groups grew at a faster rate. The largest group, White households, increased by only 5%, with growth driven by households headed by someone 65 years and older. (The size of all other White age groups remained flat or decreased during the same period, most notably households headed by someone age 25 and under, which decreased by 22%.) Black households — the smallest group — increased by 10%, Hispanic households by 25%, and Asian households by 27%. By 2018, people of color made up 25% of the Oregon population (up 32% in 10 years, although still 13 percentage points lower than the national average). Financial hardship also grew across all racial/ethnic groups, and at a much faster rate for non-White households. White households below the ALICE Threshold grew by 8%, while the number of Black households below the ALICE Threshold increased by 28%, Hispanic households by 38%, and Asian households by 52%. Growth in the total number of households in the state has been concentrated in the Portland metropolitan area, while the population in rural areas has grown at a slower rate.[6]

> *"In Oregon, 16% of households were on the cusp of the ALICE Threshold in 2018, with earnings just above or below it."*

Oregon's household structure continues to change. Married-parent families with children are no longer the most common household type. In 2018, single or cohabiting adults under age 65 with no children under age 18 made up the largest proportion of households in Oregon (47%), as well as the largest share of households below the ALICE Threshold (45%). Nationally, the number of cohabiting adults more than doubled between 1996 and 2017, and these partners tend to have higher levels of education and be more racially diverse today than cohabiting adults 20 years ago.[7]

Baby boomers are getting older. This natural aging of the population is increasing the number of seniors as more boomers pass age 65. Among seniors, there are three trends. First, the White population in Oregon 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 32% between 2010 and 2018, comprising approximately 95% of the senior population in 2018. Second, having lived through a decade of financial challenges since the Great Recession, more Oregon seniors will become ALICE. (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 Oregon 28th out of 50 states, with housing cost burden and availability of subsidized housing driving down the ranking. In this respect, the city of Portland came out on top, ranking 19th overall among the 300 largest cities in the country, and 1st in the nation for drinking water quality, 3rd for the rate of mental health professionals (per 100,000 people), and 8th for the rate of primary care physicians.[8]

Oregon is home to a growing number of millennials. The number of millennials in Oregon increased over the past decade, with one of the highest net migration rates for millennials in the country. This trend is predicted to continue in the coming decade. An increasingly diverse group of millennials has moved in-state to the city of Portland, fueling the growth of this population; in 2017, Portland ranked 3rd of the 50 largest cities in the U.S. for the net migration of millennials, and in the same year, 61% of the 25,405 millennials who moved to Portland came from outside Oregon. And while growing employment — especially in health care, retail, and customer service — appears to be drawing millennials to the state, homeownership rates remain relatively low: compared to other states, Oregon had the fifth-lowest millennial homeownership rate in 2018.[9]

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.[10] Between 1980 and 2015, Oregon's top 1% of earners saw their share of total state income more than double, while the bottom 80% of Oregonians saw declines in their share of total income over the same period. By 2015, the gap was the largest it has ever been in the state, with the top 1% having an average income 19.7 times higher than that of the bottom 99% (Oregon ranks 23rd-highest in the country for this measure). The gap in wealth (savings and assets) is even greater. Unable to save, ALICE families do not have the means to build assets, let alone catch up to those who already have assets (especially those who have been building assets for generations). ALICE families also face more barriers that, when compounded, create an even bigger wealth gap. These include issues like lower pay for women, racial/ethnic discrimination in homeownership, and student loan debt.[11]

THE COST OF LIVING IN OREGON

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 Oregon, 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 Oregon. 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 Oregon is well above the Federal Poverty Level (FPL) for all household sizes and types. For a single adult, the FPL was $12,140 per year in 2018, but the average Household Survival Budget in Oregon was $25,380 per year.[12] The average Senior Survival Budget totaled $28,632 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 $51,216 per year for a single adult (Figure 4).

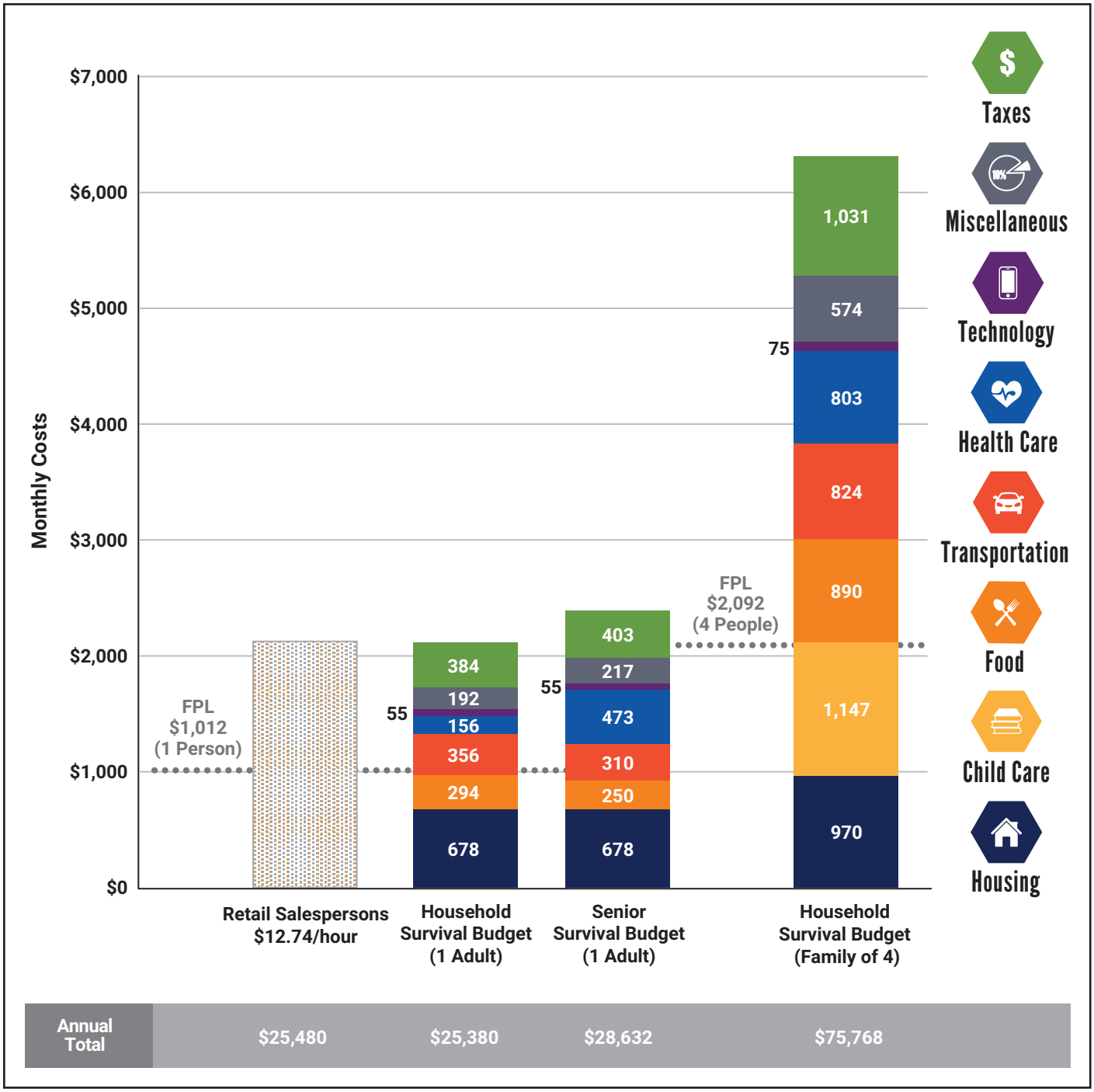
The gaps are even larger for families. The FPL for a four-person family was $25,100 in 2018, while the Household Survival Budget for a family with two adults, an infant, and a four-year-old was $75,768.[13]

The hourly wages needed to support these budgets were $12.69 for the single adult Survival Budget; $14.32 for the Senior Survival Budget; and $37.88 for one worker or $18.94 each for two workers for the Survival Budget for a family of four. To put these budgets in perspective, the median hourly wage for the most common occupation in Oregon, retail sales, was $12.74 in 2018, or $25,480 if full time, year-round — barely enough to support the single adult Survival Budget, and not enough to support the Senior or family Survival Budgets.

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

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

Figure 4.
Budget Comparison, Oregon, 2018



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

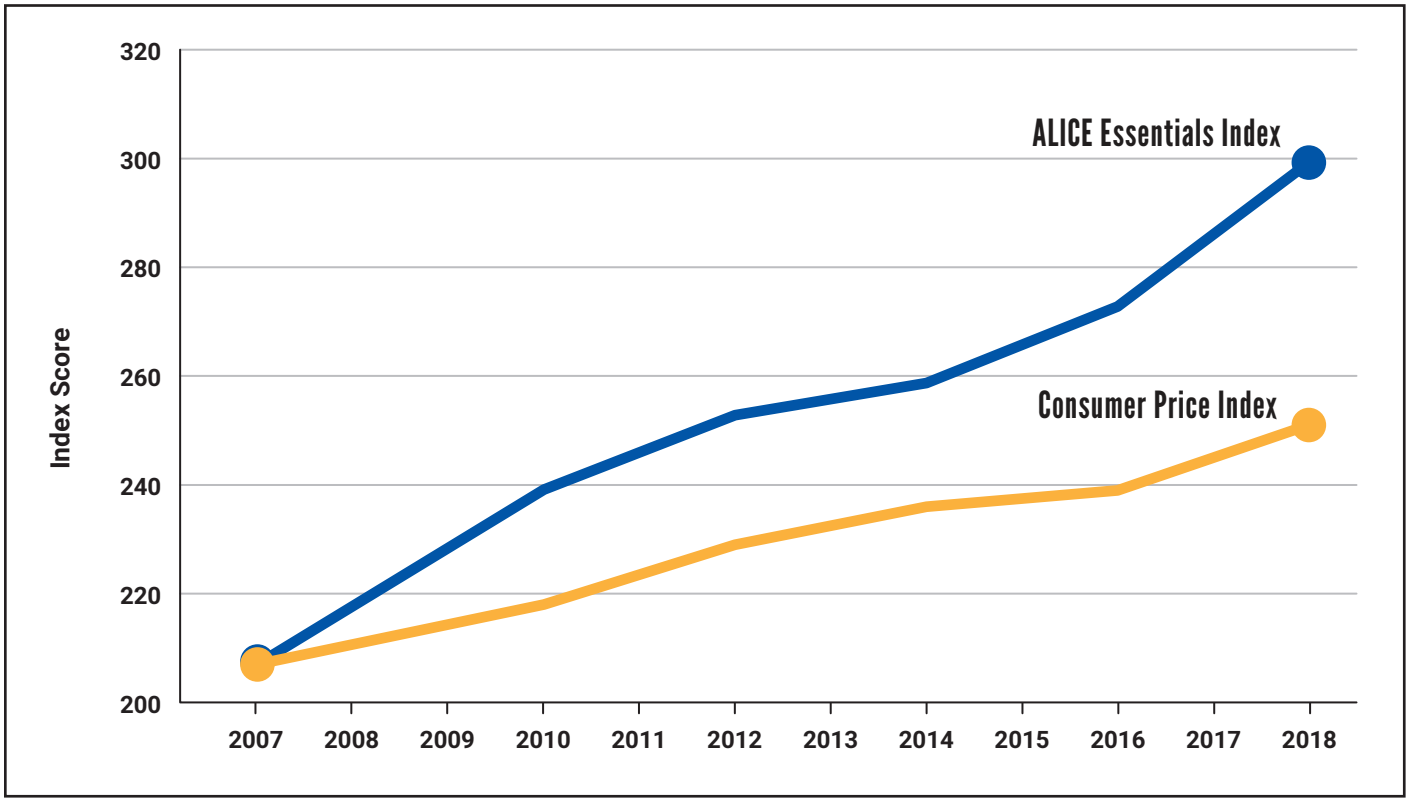
Sources: AAA, 2018; Agency for Healthcare Research and Quality, 2018; American Community Survey, 2018; Bureau of Labor Statistics, 2018—Consumer Expenditure Surveys; Bureau of Labor Statistics, 2019—Consumer Expenditure Survey; Bureau of Labor Statistics, 2018—Occupational Employment Statistics; Centers 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; Grobe & Weber, 2018; Internal Revenue Service, 2020; Internal Revenue Service—FICA, 2020; Medicare.gov; Scarboro, 2018; The Zebra, 2018; U.S. Department of Agriculture, 2018—Official USDA Food Plans; U.S. Department of Housing and Urban Development, 2018—Fair Market Rents; Walczak, 2019. For more details, see the Methodology Overview at UnitedForALICE.org/Methodology[14]

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.[15]

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%.[16] This difference is primarily due to the fact that the costs of basics, especially housing and health care, have increased, while the costs of other items — notably manufactured goods, from apparel to cars — have remained relatively flat. And while basic household goods were 18% to 22% more expensive in urban areas than in rural areas, those costs increased at nearly the same rate in both areas during this period.

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



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

The difference between these two cost-of-living measures is more than an academic question. The CPI is used to measure inflation and monitor monetary policy. It also determines the rate at which a wide range of government program levels and benefits are increased, including Social Security, veterans' and Federal Civil Service retirees' benefits, government assistance programs, the FPL, income tax brackets, and tax credits like the Earned Income Tax Credit (EITC).[17] But the ALICE Essentials Index shows that from 2007 to 2018, the CPI considerably underestimated the increase in the cost of living for ALICE households across the country.

TRENDS: COST OF LIVING

The cost of living for ALICE is growing significantly in both urban and rural areas, often driven by the cost of housing. In Oregon, rising costs in urban areas — notably the Portland metropolitan area — are due to rapid population growth and increasing demand for low-cost, urban rental units (especially among millennials and seniors). Housing costs have outpaced new supply, and average home prices and rents have grown faster than income for middle- and low-income families and households of color. Between 2000 and 2015, 155,156 additional housing units would have been needed to meet the growing demand across the state.[18] This trend will continue as the population grows and affordable housing becomes harder to find. And while the overall cost of living in rural America is lower than in metro areas, expenses — especially housing — are rising at similar rates in both areas. Nationwide, households that are severely rent burdened (with rent accounting for more than 50% of their income) are projected to grow by at least 11%, to 13.1 million households, by 2025.[19]

The child care industry will face new challenges, and so will parents. In Oregon, the number of families with children decreased slightly between 2010 and 2018 (down 2%), while the number of these households living below the ALICE Threshold increased slightly (up 2%). Despite the decrease in families with children during this period, the supply of child care providers is not sufficient. In 2018, there were eight infants and toddlers for each child care slot in Oregon. This issue is pervasive across the state, in rural, urban, and suburban areas; in 2018, Oregon State University designated all 36 counties in the state as "child care deserts" (defined as communities with three or more children per child care slot).[20] Public child care is limited across the state, and in 2018 there was only enough private care to cover approximately one out of five children under age 6. Child care costs are also on the rise in Oregon, with the annual cost of center-based care increasing over 10% in just one year (2017 to 2018). In 2018, the average annual costs for home-based care ($9,153) and center-based care ($13,518) for an infant were similar to the average annual tuition at a public four-year university in Oregon (at $10,610). Across income groups, single parents pay 53% of their income for center-based infant care, and married parents living at the poverty line pay 94% of their income for center-based care for an infant and a preschooler. 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 $11.86 in Oregon).[21] The overall trend, then, is toward fewer families with children but more who are struggling.

> *"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."*

Food insecurity is increasing among young adults and seniors. In 2018, households headed by adults under the age of 25 were more likely to be below the ALICE Threshold compared to other age groups in Oregon, and they often struggled to put food on the table. For example, reports consistently find higher rates of food insecurity among college students. In 2017, surveys conducted at Oregon State University, the University of Oregon, and Portland State University found that almost half of students at all three schools were food insecure (defined by the USDA as "the economic and social condition of limited or uncertain access to adequate food"). The director of Oregon State University's Human Services Resource Center reported that during the 2018–19 school year, 2,515 different students received food boxes, subsidized meals, or other food-related supports through the Center. This is about one in ten students on campus. Fifty-two percent of these were first-generation college students and 47% were students of color.[22] 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.[23]

In Oregon, about 6% of households headed by people age 65 and older are food insecure.[24] 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.[25]

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.[26] 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.[27] 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.[28] Students report that two of the major obstacles to academic success are juggling work with school and other responsibilities and difficulty meeting expenses.[29] 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.[30] Oregon ranked 11th in the Commonwealth Fund's 2018 survey of state health systems, with a commendable 4th place ranking for avoidable hospital use and cost, but a rank of 36th for prevention and treatment driving down the overall score.[31] 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 Oregon and across the country.[32]

Natural and human-made disasters will continue to impact ALICE households disproportionately. Across Oregon, the increasing impact of these incidents — from floods and wildfires to pandemics — is felt most acutely by ALICE households and their surrounding communities. With minimal job security and little or no savings, ALICE families feel the impact of an economic disruption almost immediately as hourly paid workers suffer lost wages right away. ALICE households are more vulnerable during natural disasters as they often live in communities with fewer resources, and their housing is more susceptible to flooding, fire, and other hazards. With no financial cushion, ALICE workers struggle to repair damage, recover from illness, and pay ongoing bills. At the same time, ALICE workers are essential to disaster recovery efforts in both infrastructure repair and health care, and they are often forced to choose between caring for their families and ensuring community recovery. All of these costs are added to the increased risk of physical harm ALICE families face if they cannot afford to flee an oncoming natural disaster or take necessary precautions during a public health crisis.[33]

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).[34] Unexpected expenses can intensify these impacts. In 2017, only 69% of Oregon households had set aside any money in the prior 12 months that could be used for unexpected expenses or emergencies such as illness or the loss of a job. Though this was well above the national rate of 42%, it still left almost one-third of Oregonians without any financial cushion. And without enough income to cover current and unexpected expenses, ALICE households cannot save for future expenses like education, retirement, or a down payment on a house.[35]

THE CHANGING LANDSCAPE OF WORK IN OREGON

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

With one of the nation's fastest-growing economies and a record-low unemployment rate, Oregon appeared to have a robust economic profile in 2018, with only 3% of adults actively looking but unable to find work. Senate Bill 1532 (enacted in 2016), established a series of annual minimum-wage increases, which brought the state minimum wage up to $10.50 in non-urban counties, $12.00 in the Portland metropolitan area, and $10.75 in all other counties. All of the ten largest industries in the state were at all-time highs in 2018. Yet employment growth over the last 10 years was almost exclusively comprised of low-wage jobs that could not keep up with the increased cost of the basic household budget (Figure 6). This trend is driven largely by the rapid growth of service-sector industries in the state. In just one year, (between 2017 and 2018), these industries — which include health services, leisure and hospitality, and professional and business services — added 13,400 new jobs, accounting for 39% of job gains. While this growth has contributed to the state GDP and lowered the unemployment rate, the low wages provided by a majority of service-industry jobs (in occupations such as home health, food service, and administrative support) meant that many households continued to struggle, despite working.[36]

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

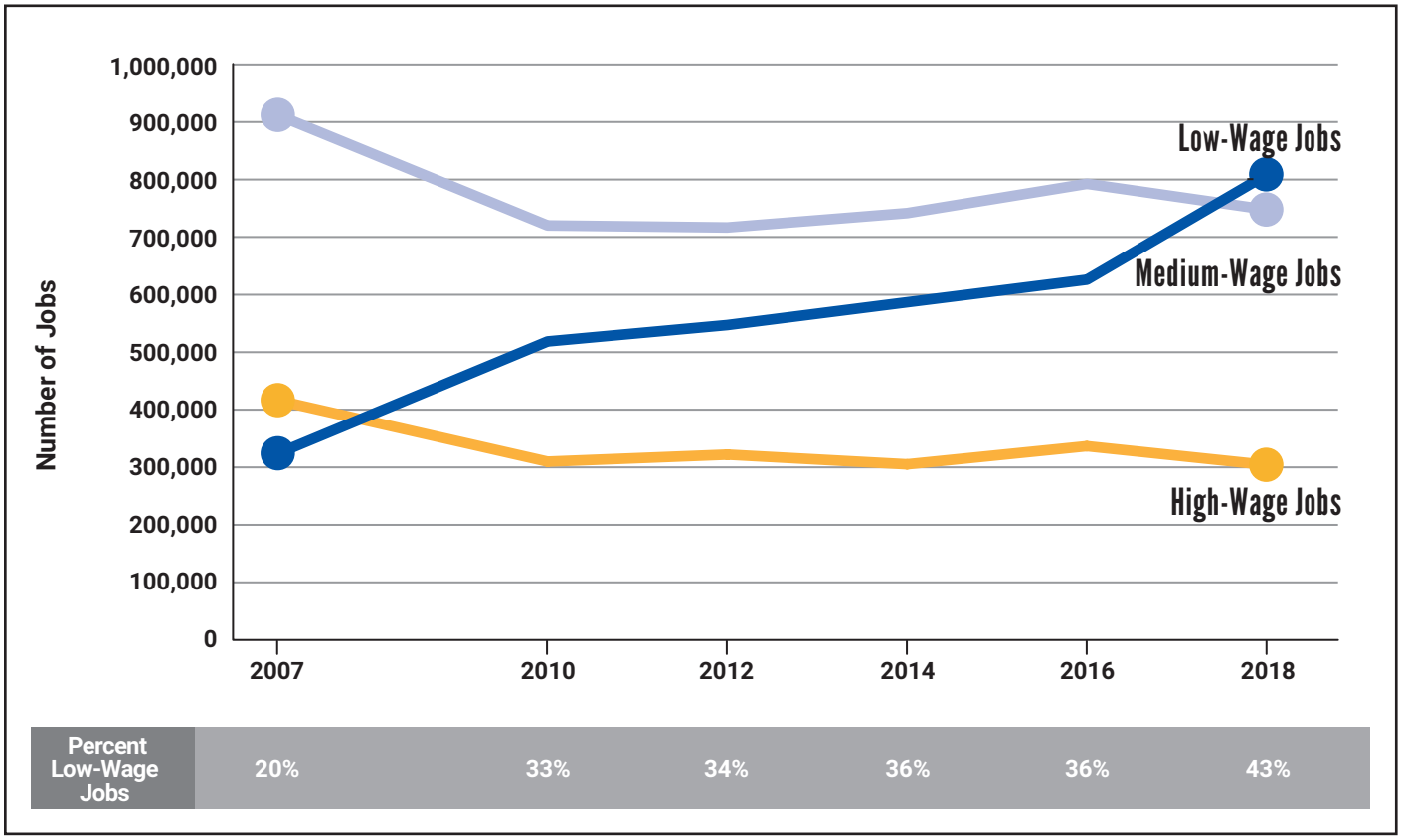
- Low-wage jobs (dark-blue line) are defined as those paying less than the wage needed for two workers to afford the family Household Survival Budget (which includes costs for two adults, an infant, and a four-year-old). In 2007, this was less than $12.13 per hour; by 2018, the wage required had increased to $18.94 per hour. The number of low-wage jobs increased by a staggering 150% during that period and accounted for the largest number of jobs in Oregon by 2018. This shows that, even with two earners working full time, it is not only possible but common for households to fall below the ALICE Threshold.

> *"ALICE workers play an essential role in Oregon's economy but have not benefited from many of the state's recent economic gains – a reality that is not captured by traditional economic measures."*

- Medium-wage jobs (light-blue line) allow two workers to afford a family Household Survival Budget. In 2007, these were jobs that paid between $12.13 and $24.26 per hour, per worker; by 2018, wages needed for these jobs were between $18.94 and $37.88 per hour, per worker. The number of medium-wage jobs decreased by 18% during that period.

- High-wage jobs (gold line) allow one worker to afford a family Household Survival Budget. In 2007, the wage required was $24.26 per hour or more; by 2018, the wage required had increased to $37.88 per hour. The number of high-wage jobs decreased by 27% during that period.[37]

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



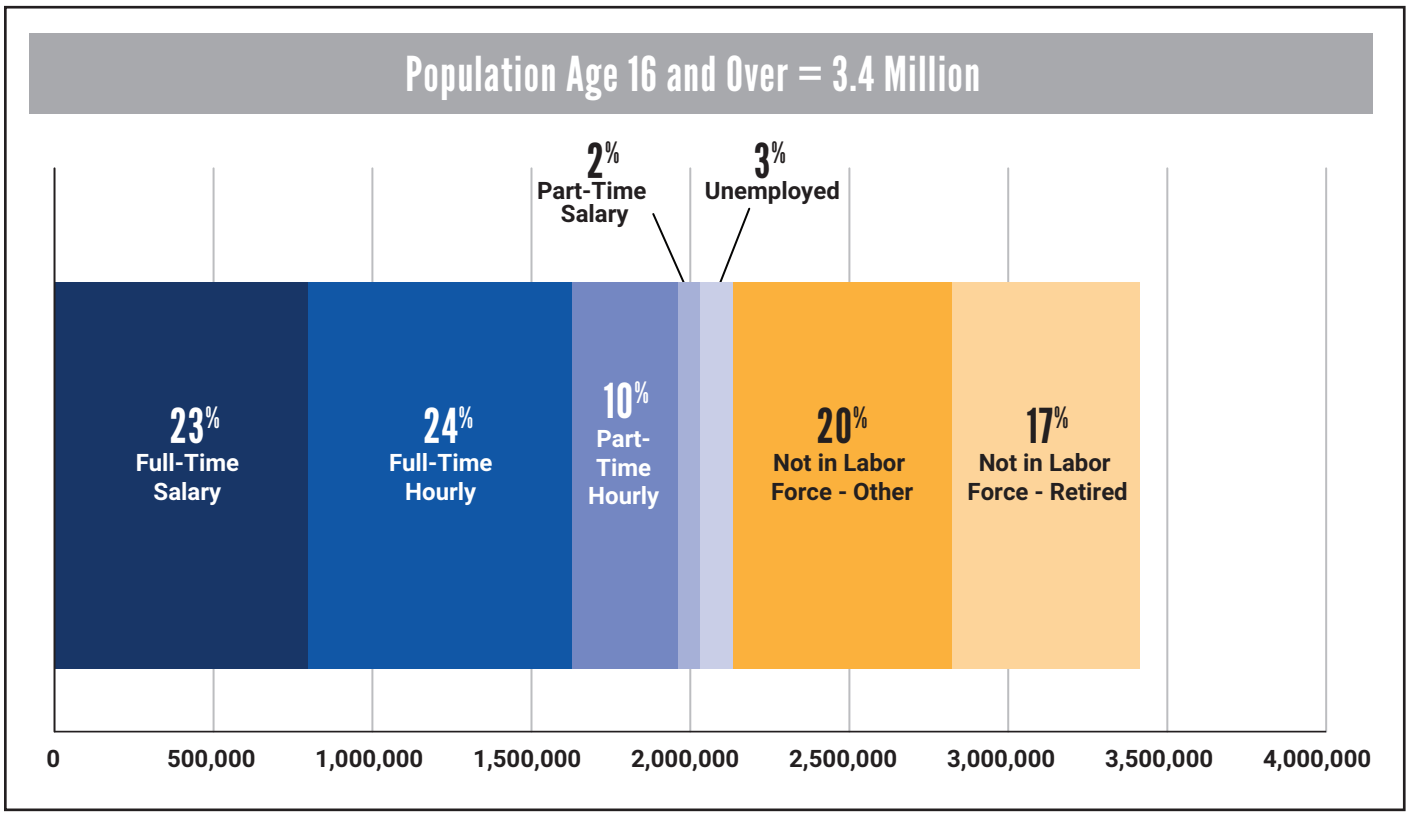
Note: Wage levels are defined by their relation to the Household Survival Budget. Dark-blue = Job cannot support family Household Survival Budget with two earners. Light-blue = Job supports family Household Survival Budget with one earner.

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

THE NEW LABOR FORCE

A 2018 overview of the labor status of Oregon's 3.4 million working-age adults (people age 16 and over) shows that 62% of adults were in the labor force (blue bars in Figure 7), yet more than half of them were workers who were paid hourly. In addition, 37% of adults were outside the labor force (gold bars), a number that has been growing since the late 1990s.[38] (Figure 7).

Figure 7.
Labor Status, Population Age 16 and Over, Oregon, 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 Oregon workforce to calculate the breakdown shown in this figure. Full-time represents a minimum of 35 hours per week at one or more jobs for 48 weeks per year.

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

Though the majority of adults in Oregon were working in 2018 and most households had at least one worker, just under one in four (23%) working-age adults had the security of a full-time job with a salary. The rest were paid hourly and/or worked part time.[39]

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 many traditional jobs are now more likely to be paid by the hour, particularly in retail, health care, food service, and construction.[40] These workers are more likely to have fluctuations in income, with frequent schedule changes and variation in the number of hours available for work each week/month. They are also less likely to receive benefits, such as health insurance, paid time off, family leave, or retirement benefits, especially if they work fewer than 30 hours per week at a single job.[41]

Hourly workers are more likely to have multiple sources of income. Traditional measures of employment have focused on the number of jobs held by a worker; for example, BLS estimates that only 5% of workers held two or more jobs in 2018.[42] 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.[43]

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.[44] 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 Oregon, 17% were out of the labor force in 2018 because they were retired, and another 20% were out of the labor force for other reasons (gold bars in Figure 7). This totals 37% of adults outside the labor force.[45]

Retirees (age 65 and over and not working) are traditionally one of the largest groups of adults out of the labor force. In Oregon in 2018, they accounted for 17% of the population age 16 years or older — a percentage higher than the national average, in part due to the baby boomer generation aging into retirement. However, this number did not include the increasing number of older adults who were still working; in 2018, 20% of people 65 and over in Oregon were still in the labor force. The number of jobs held by people age 55 and over more than tripled from 1992 to 2018.[46]

Those under age 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 Oregon would account for nearly one-third (32%) of the state's working-age adults out of the workforce.[47]

- **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-quarter (23%) of those out of the labor force in Oregon in 2018.[48]

The remainder of adults were out of the labor force for other reasons, including scheduling conflicts, family caregiving responsibilities or limited access to transportation or child care.[49] 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 Oregon ages, caring for an aging parent or a family member with a disability or chronic health issue.[50]

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. In the 2018 economy, those out of the labor force had proven to be a large reserve of potential workers able to be drawn back into the labor force with only slightly higher wages — in effect, keeping wages low.[51]

ALICE JOBS: MAINTAINING THE ECONOMY

While national conversations about work often focus on the economic importance of "innovation" and its associated high-paying jobs, the reality is that the smooth functioning of the national and Oregon 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.[52] To better understand where ALICE works, we elaborate on Vinsel and Russell's concept by breaking down all occupations in Oregon 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:

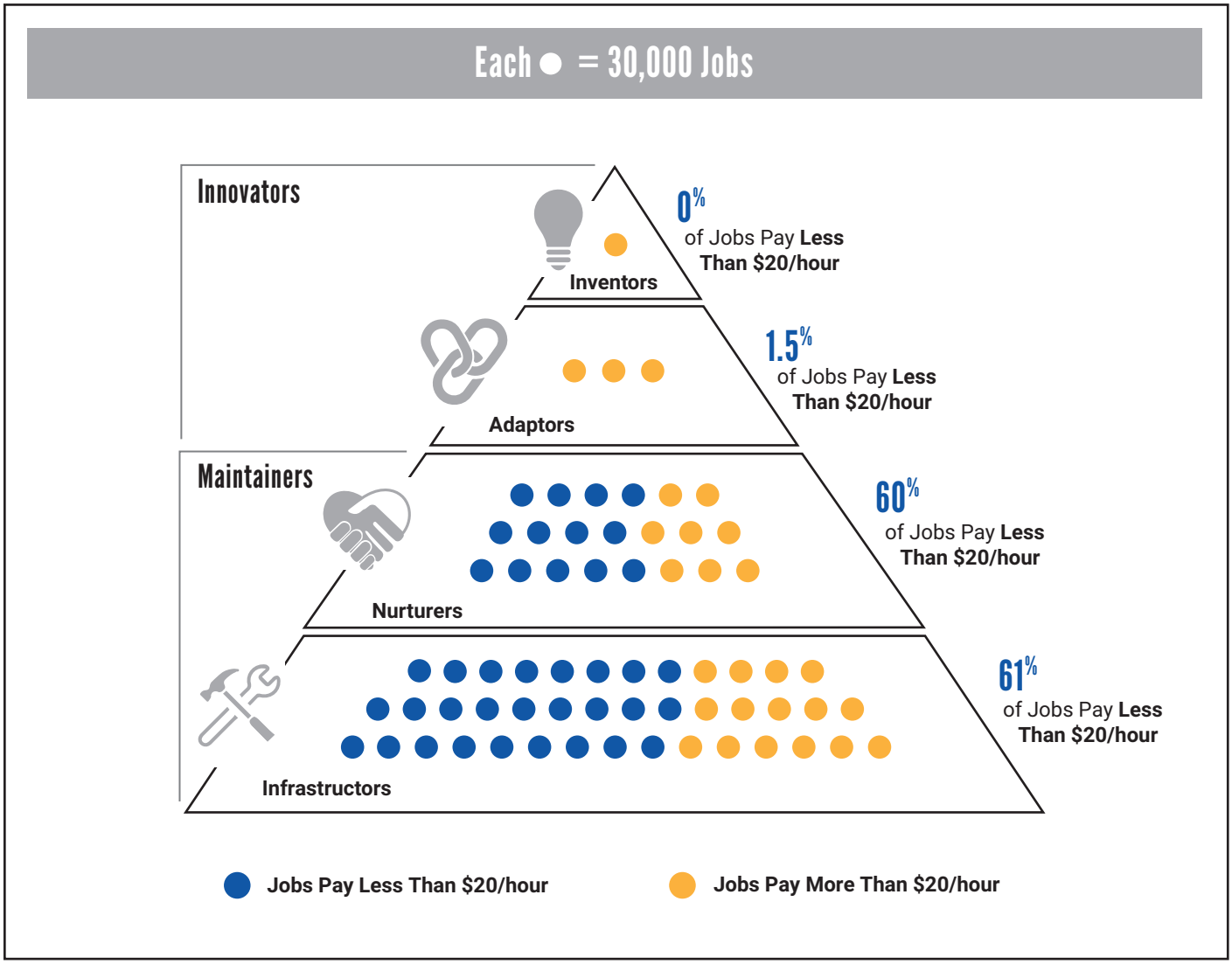
Adaptors implement existing tools or processes in new ways, responding to opportunities and changing circumstances (managers, industrial and organizational psychologists, analysts, designers, technicians, and even policymakers).

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 Oregon are comprised primarily of Maintainer occupations. The largest industry group in 2018, with 352,000 employees total, was trade, transportation, and utilities, which includes mostly Infrastructor jobs. The second largest industry group, with 295,000 employees, was education and health services, which is comprised largely of Nurturer jobs. Both industries have large shares of ALICE workers.[53] There are far fewer jobs in Innovator occupations (Adaptors and Inventors).

When stacked together, Oregon's occupations form a pyramid that reveals the critical role of Maintainer jobs — the jobs most accessible to ALICE — in the state economy (Figure 8). The majority of Maintainer jobs (61% 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 $35,768 less than the family Household Survival Budget of $75,768. By comparison, almost all Adaptor and Inventor occupations pay more than $20 per hour. Compared to other states, Oregon's occupation pyramid is especially skewed toward jobs paying less than $20 per hour.

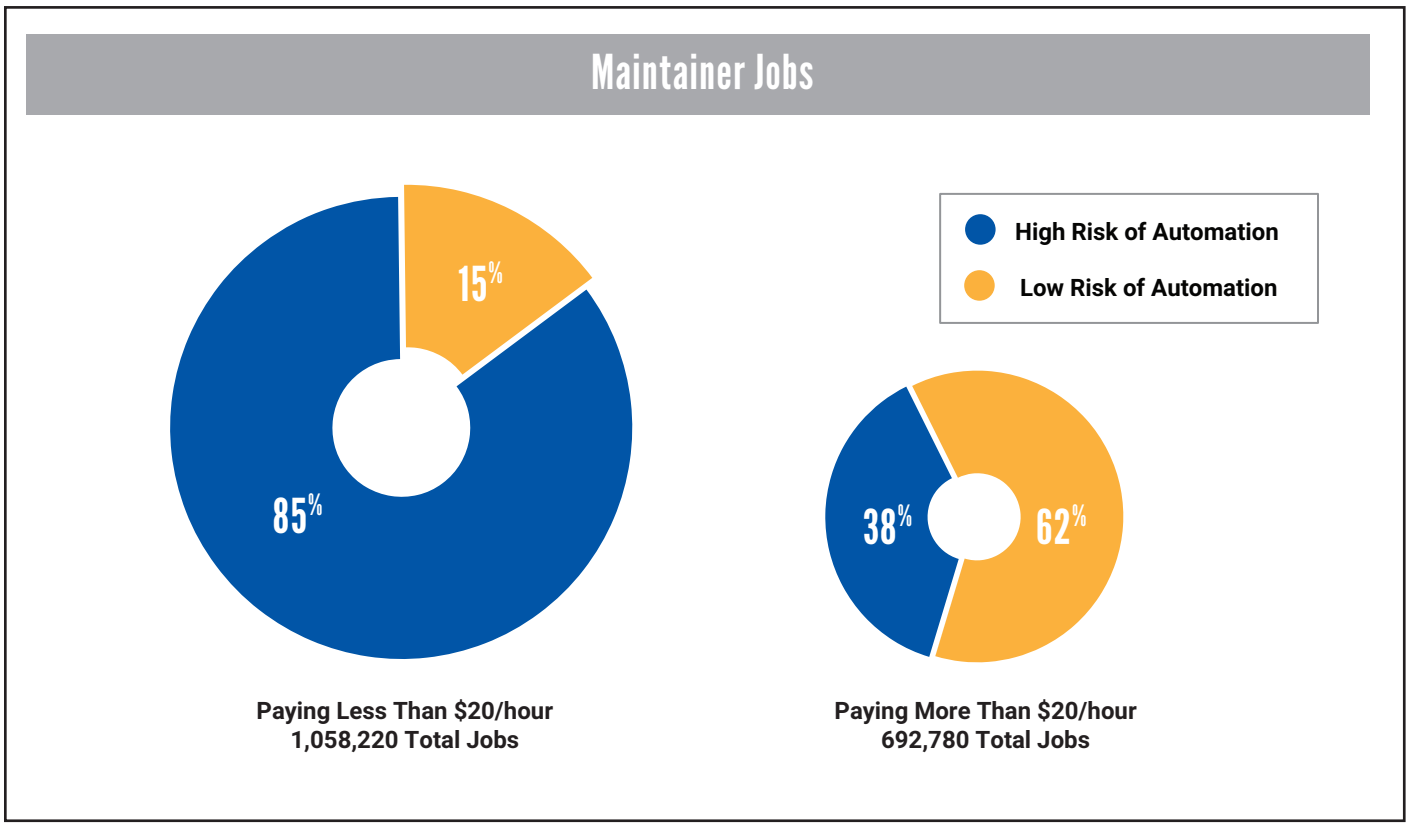
Figure 8.
Occupations by Wage and Type, Oregon, 2018



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; in Oregon, 85% of these low-paying jobs are at a high risk of automation. By comparison, only 38% of Oregon's Maintainer jobs paying more than $20 per hour are at that level of risk (Figure 9). There are also differences in salary and risk of automation based on the type of Maintainer job.

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



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

Among Oregon's Infrastructor jobs, 93% of jobs that pay less than $20 per hour are at risk of automation, compared to 55% of those that pay more than $20 per hour. Among Nurturer jobs, the discrepancy is even greater: 69% of jobs that pay less than $20 per hour are at risk of automation, compared with 6% of those that pay more than $20 per hour.[54]

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%).[55]

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.[56] 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.[57] 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.[58]

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.[59] The future of work and the role of automation have become a key topic in economic and policy discussions across the state.[60] 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.[61] 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.[62]

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 involve relational skills that are difficult or impossible to automate (although these workers will still have to learn to work with technology). From 2017 to 2027, the occupation projected to have the largest number of new jobs in Oregon is food preparation and serving workers; the median wage for these jobs in 2018 was $11.45 per hour, which was not enough to support the single-adult, senior, or family Survival Budgets (employer-reported tips are included in this wage). Of the state's top 20 growth occupations, 70% will pay less than $20 per hour, 53% will not require any formal educational credential at all, and 14% will require only a high school diploma.[63]

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.[64] 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.[65] 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 Oregon, 55% of college students who graduated in 2018 were in debt with an average loan of $28,628, a 19% increase from 2010.[66]

NEXT STEPS: DATA FOR ACTION

The ALICE data highlights significant problems in the Oregon 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.

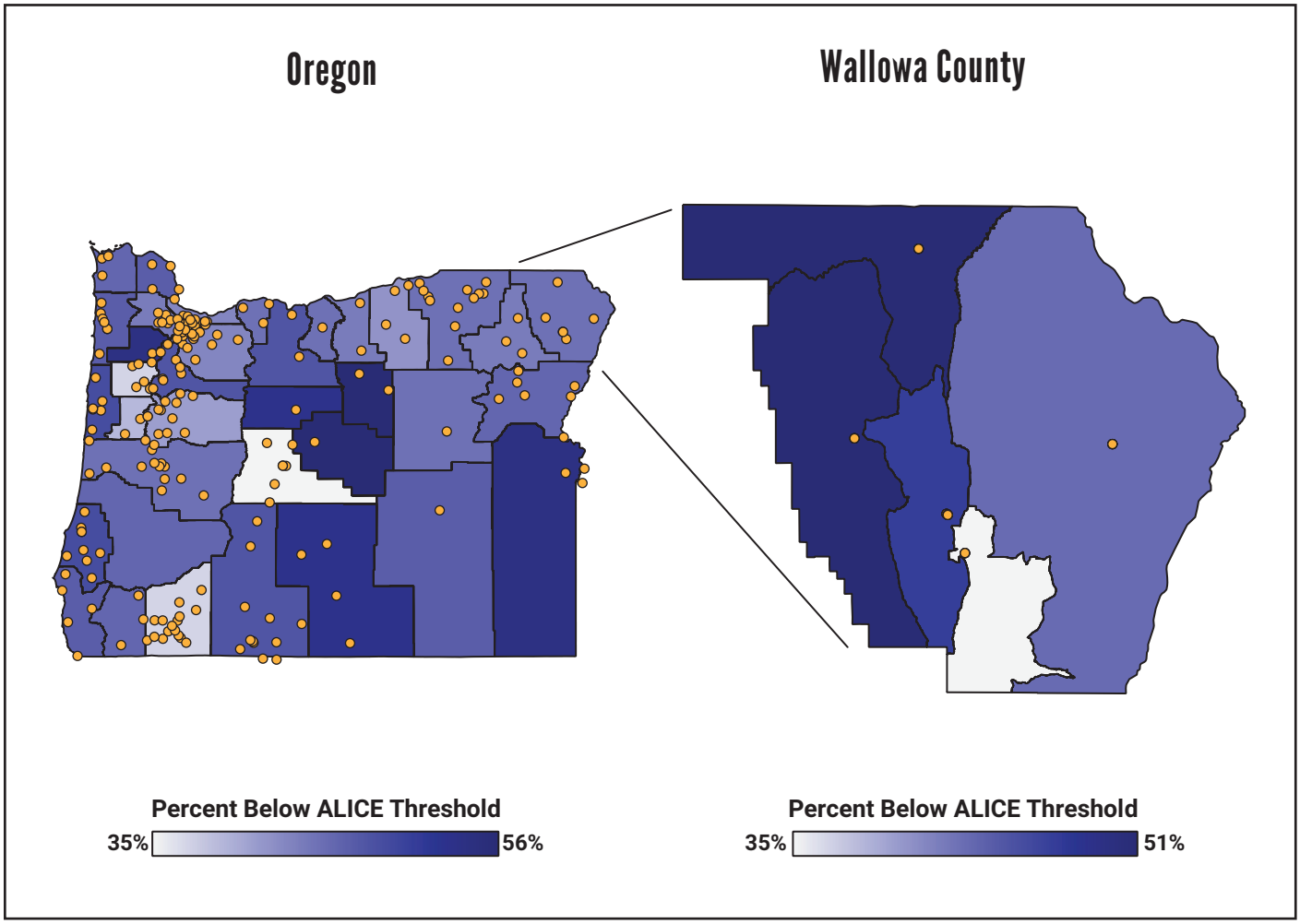
With the ALICE data tools, stakeholders can map where ALICE lives along with the location of community resources — such as public libraries or disaster-relief services — to identify gaps by town, ZIP code, or county (Figure 10). This data can help stakeholders answer targeted questions, including the 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. [67] 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.[68]

There are 218 libraries across Oregon's 36 counties, shown in gold dots in Figure 10 (and in an interactive feature on UnitedForALICE.org/Oregon, where users can view library locations by county).[69] 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, Oregon, 2018



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

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

Mapping where ALICE households live in relation to the impact of natural disasters such as floods, hurricanes, or wildfires can help first and second responders meet critical needs. Disasters directly threaten the homes of ALICE families since more affordable housing is often located in vulnerable areas. The jobs where ALICE works are also more at risk, since low-wage and hourly paid jobs are more likely to be interrupted or lost. In addition, ALICE households have few or no savings for an emergency to begin with, and their communities often have fewer resources to assist households.[70]

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).[71]

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.[72] 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 Oregon, visit our website: UnitedForALICE.org/Oregon

Here is one possible question:

Is internet access related to income?

Access to digital technology has exploded over the last three decades: By 2017, 91% of U.S. adults owned a computing device and 81% had a broadband internet subscription. In Oregon, 84% of households had access to the internet at home in 2018.[73] Technology has also become more important for work, community participation, and, crucially, disaster response and recovery.

But access to technology still varies by income and geography. For many families, that lack of access translates directly to reduced job opportunities, educational opportunities, health care access, and financial tools. For example, low-income adults are more likely to use their phones to search and apply for jobs; nationally, 32% of smartphone users with income below $30,000 have applied for a job on their phone, compared with 7% of smartphone users with income above $75,000. Although smartphone technology is constantly improving, many tasks are still more difficult to complete on the small screen of a smartphone as opposed to a computer (e.g., word processing, filling out applications, editing spreadsheets), and many websites still do not have a mobile version, making navigation time-consuming and difficult, or sometimes impossible. 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. [74]

This high usage of smartphones for a critical task indicates that many low-income households have limited access to the internet at home. In Oregon, 24% of households with income below the ALICE Threshold do not have an internet subscription, compared with only 6% 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 almost one-third of households below the ALICE Threshold do not have an internet subscription.[75] Identifying these gaps can help businesses and government provide more resources to libraries, establish training centers, or target low-cost internet plans.[76]

THE BENEFITS OF MOVING TOWARD EQUITY IN OREGON

The strength of the Oregon 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 715,977 Oregon households — nearly half of all households in the state — struggled to support themselves. If all households earned enough to meet their basic needs, not only would each family's hardship be eased, but the Oregon 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 Oregon of bringing all households to the ALICE Threshold would be approximately $58.2 billion, meaning that the state GDP would grow by 24% (Figure 11). This is based on three categories of economic enhancement:

Earnings: Oregon's 2018 GDP reflected earnings of $18.5 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:** $21.3 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.[77] 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 Oregon, this increased economic activity would be valued at $25.5 billion.[78]

Tax revenue: Oregon's 2018 GDP reflected tax revenue of $1.3 billion from the state's households below the ALICE Threshold. Bringing all households to the ALICE Threshold would have a two-fold impact:

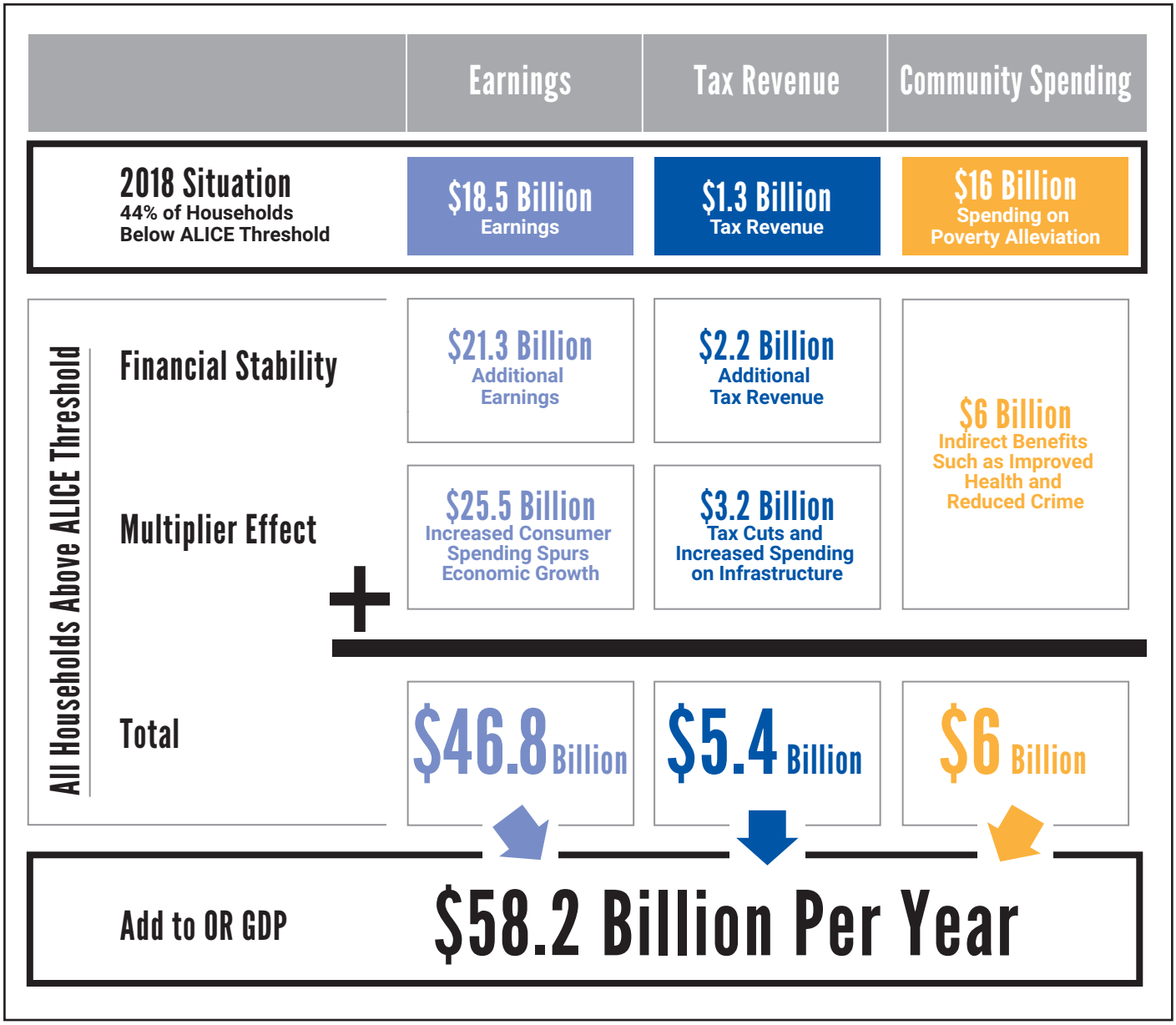
- **Additional tax revenue:** With additional earnings, there would also be additional taxes paid and reduced usage of tax credits such as EITC for low-income earners, totaling an additional $2.2 billion in tax revenue for Oregon.

- **Multiplier effect:** Additional state tax revenue gives state and local governments the opportunity to make investments that matter most to the well-being of residents and businesses — from tax cuts for small businesses to improvements in infrastructure, including health care and education — that can yield a high return on investment. Based on work by the Congressional Budget Office and Moody's Analytics, the estimated multiplier is 1.44, which would mean an added $3.2 billion in economic activity in Oregon.[79]

Community spending: Oregon's 2018 GDP reflected community spending of $16 billion on assistance to the state's households below the ALICE Threshold.[80] 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 $6 billion (or 2.5% of the state GDP, which is the estimated cost of childhood poverty alone).[81] 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 impact of redeploying private and nonprofit spending currently used to alleviate poverty.[82]

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



Sources: ALICE Threshold, 2018; American Community Survey, 2018; Internal Revenue Service—1040, 2018; Internal Revenue Service—EITC, 2018: Internal Revenue Service—FICA, 2019; McKeever, 2018; National Association of State Budget Officers, 2019; Office of Management and Budget, 2019; Scarboro, 2018; U.S. Department of Agriculture—SNAP, 2019; Urban Institute, 2012; Walczak, 2019[83]

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 Oregon families and their communities would experience if policies were implemented that moved all households above the ALICE Threshold.[84]

Figure 12.
The Benefits of Sufficient Income

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

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

In addition to the benefits listed above, greater financial stability and having basic needs met can reduce the anxiety that comes from struggling to survive, or not having a cushion for emergencies. It also leaves more time to spend with loved ones and give back to the community — all of which contribute to happiness and improved life satisfaction.[85]

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.[86] 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.[87] 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 Change in the state population over time is reported at the household-level (not the individual level) to correspond with the ALICE data, which is based on household income.

4 American Community Survey. (2007–2018). *1-year estimates.* U.S. Census Bureau. Retrieved from https://data.census.gov/cedsci/

U.S. Census Bureau. (n.d.). National, state, and county housing unit totals: 2010–2018. Retrieved from https://www.census.gov/data/tables/time-series/demo/popest/2010s-total-housing-units.html

5 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.

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

Cunningham, S. (2020, January 9). Race and ethnic diversity in Oregon's workforce. State of Oregon Employment Department. Retrieved from https://www.qualityinfo.org/-/race-and-ethnic-diversity-in-oregon-s-workforce

Lehner, J. (2018, March 27). Oregon's unprecedented growth? Oregon Office of Economic Analysis. Retrieved from https://oregoneconomicanalysis.com/2018/03/27/oregons-unprecedented-growth/

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. (2010–2018). *1-year estimates*. U.S. Census Bureau. Retrieved from https://data.census.gov/cedsci/

2020 senior living report: Senior living in Oregon. (n.d.). Retrieved from https://www.caring.com/senior-living/oregon

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

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/

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

Lehner, J. (2018, March 27). Oregon's generational outlook. Oregon Office of Economic Analysis. Retrieved from https://oregoneconomicanalysis.com/2018/03/02/oregons-generational-outlook-graph-of-the-week/

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

Vespa, J. (2017, August 9). America Counts: Stories Behind the Numbers — A third of young adults live with their parents. U.S. Census Bureau. Retrieved from https://www.census.gov/library/stories/2017/08/young-adults.html

McCann, A. (2019). Best & worst states for millennials. *Wallet Hub*. Retrieved from https://wallethub.com/edu/best-states-for-millennials/33371/

10 Desilver, D. (2018, August 7). *For most U.S. workers, real wages have barely budget 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

11 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/

Oregon Center for Public Policy. (2017, October 4). Highest earning Oregonians pull away. Retrieved from https://www.ocpp.org/2017/10/04/fs20171004-highest-earning-oregonians/

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

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

13 Grobe, D., & Weber, R. (2018, March). *2018 Oregon child care market price study: DHS supplemental findings.* Oregon State University, College of Public Health and Human Sciences. Retrieved from https://www.oregon.gov/DHS/ASSISTANCE/CHILD-CARE/Documents/CCMR%202018%20Report%20Supplemental%20Findings.pdf

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

14 AAA. (2018). *Your driving costs.* Retrieved from https://exchange.aaa.com/wp-content/uploads/2018/09/18-0090_2018-Your-Driving-Costs-Brochure_FNL-Lo-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/tviid2.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.* U.S. Census Bureau. Retrieved from https://data.census.gov/cedsci/:
[Table B25064: Median gross rent (dollars)]
[Table B08301: Means of transportation to work]

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. (2018). *Occupational employment statistics: May 2018 state occupational employment and wage estimates Oregon.* U.S. Department of Labor. Retrieved from https://www.bls.gov/oes/current/oes_.or.htm

Chronic disease average percent out-of-pocket costs at 17.7% from 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/CMSProgramStatistics/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 (ZIP)*]. Retrieved from 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). *2017 National Household Travel Survey.* U.S. Department of Transportation. Retrieved from https://nhts.ornl.gov/assets/2017_nhts_summary_travel_trends.pdf

Fowler, B. (2019, May 23). *Best Low-Cost Cell-Phone Plans.* Consumer Reports. (2018 prices) Retrieved from https://www.consumerreports.org/u-s-cell-phone-carriers/best-cell-phone-plans-save-money/

County variation after 2009 calculated using data provided by Gundersen, C., Dewey, A., Kato, M., Crumbaugh, A., & Strayer, M. (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.* Feeding America. Retrieved from https://www.feedingamerica.org/sites/default/files/2019-05/2017-map-the-meal-gap-full.pdf

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

Scarboro, M. (2018, March). *State individual income tax rates and brackets for 2018.* Tax Foundation. Retrieved from https://files.taxfoundation.org/20180315173118/Tax-Foundation-FF576-1.pdf

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 (USDA). (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 (HUD). (2018). *Fair Market Rents.* Retrieved from https://www.huduser.gov/portal/datasets/fmr.html#2018_data

Walczak, J. (2019, July). *Local income taxes in 2019.* Tax Foundation. Retrieved from https://files.taxfoundation.org/20190730170302/Local-Income-Taxes-in-20191.pdf

15 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

16 Bureau of Labor Statistics. (n.d.) CPI inflation calculator. U.S. Department of Labor. Retrieved from https://www.bls.gov/data/inflation_calculator.htm

17 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

18 Portland Housing Bureau. (2018). *State of housing in Portland.* Retrieved from https://www.portlandoregon.gov/phb/article/707182 [this is 2019 report]

State of Oregon. (n.d.). *Breaking new ground: Oregon's statewide housing plan, 2019–2023.* Oregon Housing and Community Services. Retrieved from https://www.oregon.gov/ohcs/DO/shp/SWHP-Full-Plan.pdf

19 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

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

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

20 Pratt, M., Sektnan, M., & Weber, R. B. (2019, January). *Oregon's child care deserts: Mapping supply by age group, metropolitan status, and percentage of publicly funded slots.* Oregon State University. Retrieved from https://health.oregonstate.edu/sites/health.oregonstate.edu/files/early-learners/pdf/oregon-child-care-deserts-01-29-2019.pdf

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

Bureau of Labor Statistics. (2018). Occupational employment statistics: May 2018 state occupational employment and wage estimates Oregon. U.S. Department of Labor. Retrieved from https://www.bls.gov/oes/current/oes_or.htm

Child Care Aware of America. (n.d.). *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/

King, M. C., & Dodson, L. (2019, September). *Oregon's unmet child care needs.* Family Forward Oregon. Retrieved from http://www.familyforwardoregon.org/site/wp-content/uploads/FFO-Child-Care-Report-2019.pdf

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

22 Oregon Hunger Task Force. (n.d.). *Hunger on campus: A listening session of the Oregon Hunger Task Force.* Retrieved from https://www.oregonhungertaskforce.org/uolisteningsession

Oregon State University. (2019, May 28). Addressing student food insecurity. Office of the President. Retrieved from https://leadership.oregonstate.edu/president/may-28-2019-addressing-student-food-insecurity

Tegethoff, E. (2017, July 24). Starving students? An unfortunate trend on college campuses. Public News Service. Retrieved from https://www.publicnewsservice.org/index.php?/content/article/58649-1

United States Department of Agriculture (USDA). (2019, September 4). Definitions of food security. Economic Research Service. Retrieved from https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx

23 Feeding America. (2020). Senior hunger poses unique challenges. Retrieved from https://www.feedingamerica.org/hunger-in-america/senior-hunger-facts

24 Edwards, M. (2019, November). Big improvements in food security for Oregon: (2013–2015 to 2016–2018). Oregon State University School of Public Policy. Retrieved from https://liberalarts.oregonstate.edu/sites/liberalarts.oregonstate.edu/files/sociology/oregonhungerreportnov2019.pdf

25 Broton, 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

Worthington, J., & Mabli, 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., & Gunderson, 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

Ziliak, J. P., & Gunderson, 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

26 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

27 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

28 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

29 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

30 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

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

31 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

32 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

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

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

33 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.

Oregon Health Authority. (2018, November). *Climate change and public health in Oregon.* Retrieved from https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/CLIMATECHANGE/Documents/2018/2018-OHA-Climate-and-Health-Policy-Paper.pdf

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/

United States Environmental Protection Agency. (2016, August). What climate change means for Oregon. Retrieved from https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-or.pdf

34 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

35 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

36 Bureau of Labor Statistics. (2018). Occupational employment statistics: May 2018 state occupational employment and wage estimates Oregon. U.S. Department of Labor. Retrieved from https://www.bls.gov/oes/current/oes_or.htm

Bureau of Labor Statistics. (n.d.). Economy at a Glance: Oregon. U.S. Department of Labor: 2018. Retrieved from https://www.bls.gov/eag/eag.or.htm

Federal Reserve Bank of St. Louis. (n.d.). All employees: Total nonfarm in Oregon: 2018. Retrieved from https://fred.stlouisfed.org/series/ORNA

Federal Reserve Bank of St. Louis. (n.d.). Total gross domestic product for Oregon: 2018. Retrieved from https://research.stlouisfed.org/fred2/series/ORNGSP

Federal Reserve Bank of St. Louis. (n.d.). Unemployment rate in Oregon: 2018. Retrieved from https://fred.stlouisfed.org/series/ORUR

Lehner, J. (2018, December 27). *Oregon's 2018 in review*. Oregon Office of Economic Analysis. Retrieved from https://oregoneconomicanalysis.com/2018/12/27/oregons-2018-in-review/

State of Oregon. (2018, November 14). *Oregon economic and revenue forecast.* Office of Economic Analysis, Department of Administrative Services. Retrieved from https://www.oregon.gov/das/OEA/Documents/forecast1218.pdf

State of Oregon. (n.d.). Oregon Minimum Wage Rate Summary. Retrieved from https://www.oregon.gov/boli/WHD/OMW/Pages/Minimum-Wage-Rate-Summary.aspx

37 Bureau of Labor Statistics. (2018). Occupational employment statistics: May 2018 state occupational employment and wage estimates Oregon. U.S. Department of Labor. Retrieved from https://www.bls.gov/oes/current/oes_or.htm

38 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

39 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

40 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

41 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

42 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

43 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

44 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

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/

45 Bureau of Labor Statistics. (2018). Occupational employment statistics: May 2018 state occupational employment and wage estimates Oregon. U.S. Department of Labor. Retrieved from https://www.bls.gov/oes/current/oes_or.htm [2019 info]

46 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

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

State of Oregon Employment Department. (2020, February 10). *Oregon's aging workforce by industry and county, 2018*. Retrieved from https://www.qualityinfo.org/-/oregon-s-aging-workforce-by-industry-and-county-2018

47 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

48 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

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

49 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

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

50 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/

51 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

52 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

53 Bureau of Labor Statistics. (n.d.). Economy at a Glance: Oregon. U.S. Department of Labor. Retrieved from https://www.bls.gov/eag/eag.or.htm

Bureau of Labor Statistics. (n.d.). Industries at a glance: Trade, transportation, and utilities. Retrieved from https://www.bls.gov/iag/tgs/iag40.htm

54 Bureau of Labor Statistics. (2018). Occupational employment statistics: May 2018 state occupational employment and wage estimates Oregon. U.S. Department of Labor. Retrieved from https://www.bls.gov/oes/current/oes_or.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

55 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

56 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

57 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/

58 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

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

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

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

59 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

60 Task Force on Autonomous Vehicles. (2019, September 12). Task force on autonomous vehicles 2019 final report to the Oregon State Legislature. Retrieved from https://www.oregon.gov/ODOT/Get-Involved/Documents/AV%20Task%20Force%20Report%202019%20FINAL.pdf

Portland Business Alliance. (n.d.). *Automation and the future of work.* Retrieved from https://portlandalliance.com/automation/

61 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

62 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

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

63 Bureau of Labor Statistics. (2019, March 29). Technical notes for May 2018 OES Estimates. U.S. Department of Labor. Retrieved from https://www.bls.gov/oes/2018/may/oes_tec.htm

Bureau of Labor Statistics. (2018). Occupational employment statistics: May 2018 state occupational employment and wage estimates Oregon. U.S. Department of Labor. Retrieved from https://www.bls.gov/oes/current/oes_or.htm

Bureau of Labor Statistics. (2019). *Occupational outlook handbook.* U.S. Department of Labor. Retrieved from https://www.bls.gov/ooh/

State of Oregon Employment Department. (n.d.). 2017–2027 Employment Projections [*Oregon Occupational Employment Projections 2017–2027*]. Retrieved from https://www.qualityinfo.org/projections#1

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

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

64 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

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

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

65 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

66 Project on Student Debt. (2018). *Student Debt and the Class of 2018.* The Institute for College Access and Success. Retrieved from: https://ticas.org/posd/map-state-data#overlay=posd/state_data/2018/wa

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

67 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 [note from Aliyah in new template says this should be 58]

68 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 [note from Aliyah in new template says this should be 59]

69 The Institute of Museum and Library Services. (2019). *Public libraries survey.* Retrieved from https://www.imls.gov/research-evaluation/data-collection/public-libraries-survey

70 Krause, E. & Reeves, R. V. (2017, September). *Hurricanes hit the poor the hardest.* Brookings. 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/

71 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/

72 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/~fmagdoff/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

73 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/

74 American Community Survey. (2018). *Table S2801: Types of computers and internet subscriptions.* Retrieved from U.S. Census Bureau: https://data.census.gov/cedsci/

Perrin, A. (2017, June 28).*10 facts about smartphones as the iPhone turns 10.* Pew Research Center. 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

75 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/

76 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

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

77 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

78 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

79 Note: The tax calculations include only state taxes, not federal or local. The Congressional Budget Office estimates the impact of tax cuts targeted at lower- and middle income people and achieved without borrowing as high as 1.5; Zandi estimates the multiplier for increased infrastructure spending at 1.44. This calculation uses the conservative estimate of 1.44.

Bolstering the economy: Helping American families by reauthorizing the Payroll Tax Cut and UI Benefits. Hearings before the U.S. Congress Joint Economic Committee (2012) (Testimony of Mark M. Zandi). Retrieved from https://www.economy.com/mark-zandi/documents/2012-02-07-JEC-Payroll-Tax.pdf

Congressional Budget Office. (2014, November). *How CBO analyzes the effects of changes in federal fiscal policies on the economy.* Retrieved from https://www.cbo.gov/sites/default/files/113th-congress-2013-2014/reports/49494-FiscalPolicies.pdf

Duper, B., Karabarbounis, M., Kudlyak, M., & Saif Mehkari, M. (2019). *Regional Consumption Responses and the Aggregate Fiscal Multiplier.* Federal Reserve Bank of San Francisco. Retrieved from https://www.frbsf.org/economic-research/files/wp2018-04.pdf

80 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

Scarboro, M. (2018). *State individual income tax rates and brackets for 2018.* Tax Foundation. Retrieved from https://taxfoundation.org/state-individual-income-tax-rates-brackets-2018/

U.S. Department of Agriculture (USDA). (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

Walczak, J. (2019, July 30). *Local income taxes in 2019.* Tax Foundation. Retrieved from https://taxfoundation.org/local-income-taxes-2019/

Walczak, J., & Drenkard, S. (2018, February 13). *State and local sales tax rates 2018.* Tax Foundation. Retrieved from https://taxfoundation.org/state-and-local-sales-tax-rates-2018/

81 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

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. (n.d.) Total gross domestic product for Oregon: 2018. Retrieved from https://research.stlouisfed.org/fred2/series/ORNGSP

82 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

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

83 Internal Revenue Service. (2020, January 8). 1*040 and 1040-SR: Instructions.* Retrieved from https://www.irs.gov/pub/irs-pdf/i1040gi.pdf

Internal Revenue Service. (2019, October 2). *Statistics for 2018 tax returns with EITC.* Retrieved from https://www.eitc.irs.gov/eitc-central/statistics-for-tax-returns-with-eitc/statistics-for-2018-tax-returns-with-eitc

Internal Revenue Service. (2020, January 3). Topic no. 751 Social Security and Medicare withholding rates. Retrieved from https://www.irs.gov/taxtopics/tc751

McKeever, B. S. (2018, November). *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

Scarboro, M. (2018, March). *State individual income tax rates and brackets for 2018.* Tax Foundation. Retrieved from https://files.taxfoundation.org/20180315173118/Tax-Foundation-FF576-1.pdf

U.S. Department of Agriculture (USDA). (n.d.). SNAP data tables [*State level participation and benefits*]. 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.

Walczak, J. (2019, July). *Local income taxes in 2019.* Tax Foundation. Retrieved from https://files.taxfoundation.org/20190730170302/Local-Income-Taxes-in-20191.pdf

84 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/

85 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

86 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

87 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 (HUD). 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

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

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/hbtl-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/do/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

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

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

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

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/RWJFPhysiciansSurveyExecutiveSummary.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 (HUD). 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/jgcc_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

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

ALICE is a registered trademark of the United Way of Northern New Jersey.

© Copyright 2009–2020 United Way of Northern New Jersey. All rights reserved.
No further use, copying, dissemination, distribution, or publication is permitted without the express written permission of United Way of Northern New Jersey.