

LIVE UNITED







ALICE IN THE TIME OF COVID-19



The release of this ALICE Report for Washington 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 Washington presents the latest ALICE data available — a point-in-time snapshot of economic conditions across the state in 2018. By showing how many Washington 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 Washington 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 <u>UnitedForALICE.org/COVID19</u> for updates.

UNITED WAYS OF WASHINGTON

United Good Neighbors Jefferson County

United Way of Benton & Franklin Counties

United Way of Central Washington

United Way of Clallam County

United Way of Cowlitz County

United Way of Grant County

United Way of Grays Harbor

United Way of King County

United Way of Kitsap County

United Way of Lewis County

United Way of Mason County

United Way of Pierce County

United Way of Pullman

United Way of San Juan County

United Way of Skagit County

United Way of Snohomish County

United Way of Spokane County

United Way of Thurston County

United Way of Walla Walla County

United Way of Whatcom County

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 Washington. It is our hope that this Report will help raise awareness of the 33% 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 Washington, contact: Jim Cooper, jim@uwpnw.org

To access the ALICE data and resources for Washington, go to <u>UnitedForALICE.org/Washington</u>



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 Washington, 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 <u>UnitedForALICE.org</u>



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 <u>UnitedForALICE.org/Methodology</u>

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 milestraveled 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 Americans¹), 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 <u>UnitedForALICE.org/Washington</u>

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.

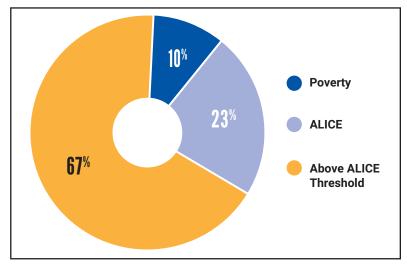
Data Notes: The data are estimates; some are geographic averages, others are one- or five-year averages depending on population size. Change-over-time ranges start with 2007, before the Great Recession, then measure change every two years from 2010 to 2018. County-level data remains the primary focus, as state averages mask significant differences between counties. For example, the share of households below the ALICE Threshold in Washington ranges from 27% in Island and Kitsap counties to 52% in Whitman County. Many percentages are rounded to whole numbers, sometimes resulting in percentages totaling 99% or 101%. The methodological improvements included in this Report have been applied to previous years to allow for accurate year-over-year comparisons. This means that some numbers and percentages at the state and county level will not match those reported in previous ALICE Reports for Washington.

TABLE OF CONTENTS

Asset Limited, Income Constrained, Employed	nited, Income Constrained, Employed1	
Who Is ALICE?	3	
Trends: Household Demographics	5	
The Cost of Living in Washington		
The ALICE Household Budgets		
The ALICE Essentials Index	9	
Trends: Cost of Living	10	
The Changing Landscape of Work in Washington	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 Washington	22	
Endnotes	27	
Figure 12	37	

ASSET LIMITED, INCOME CONSTRAINED, EMPLOYED

From 2010 to 2018, Washington 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, 33% of Washington's 2,881,943 households still struggled to make ends meet. And while 10% of these households were living below the Federal Poverty Level (FPL), another 23% — more than twice as many — were ALICE households: Asset Limited, Income Constrained, Employed. 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 Washington 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 are not keeping up with growth in 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, increases in wages that did not keep pace with growth in the 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 Washington workers 53% were paid by the hour, and 44% of the state's jobs paid less than \$20 per hour.
- The number of ALICE households is increasing in Washington 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 while the number of households in poverty is decreasing. 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 Washington, the percentage of households that were ALICE rose from 15% in 2007 to 23% in 2018. By contrast, those in poverty remained at around 11% throughout the period.

This Report provides critical measures that assess Washington's economy from four perspectives: They track financial hardship over time and across demographic groups; quantify the basic cost of living in Washington; 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 Washington GDP would be approximately \$71.7 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 Limited, Income **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 Washington, 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 Washington. 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 <u>UnitedForALICE.org</u> 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.

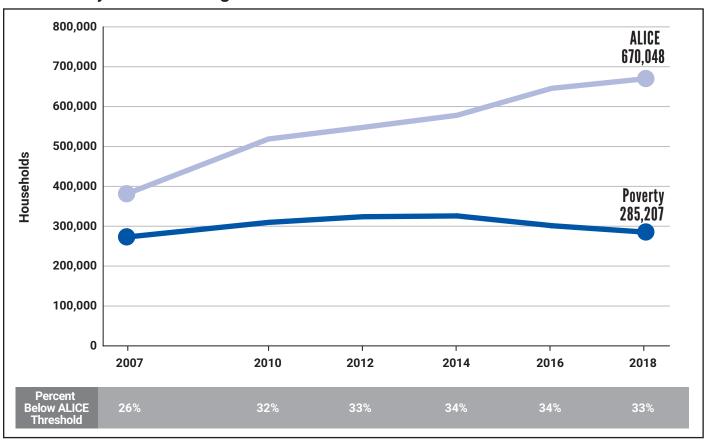
WHO IS ALICE?

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 Washington'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 households in Washington rose from 2,501,509 to 2,881,943 (a 15% increase), making Washington one of the fastest-growing states in the nation. During this period, the number of households in poverty increased from 272,915 in 2007 to 325,859 in 2014, then steadily decreased to 285,207 by 2018 (fluctuating between 10% and 12% of all households).³

While the number of Washington households in poverty returned to near pre-Recession levels by 2018, the number of ALICE households remained at a higher level. The number of ALICE households increased dramatically between 2007 and 2018 (from 381,306 to 670,048), with their share of all households rising from 15% to 23% during this time. Overall, the percentage of households living below the ALICE Threshold (ALICE and poverty-level households combined) increased from 26% in 2007 to 33% in 2018 (Figure 1).

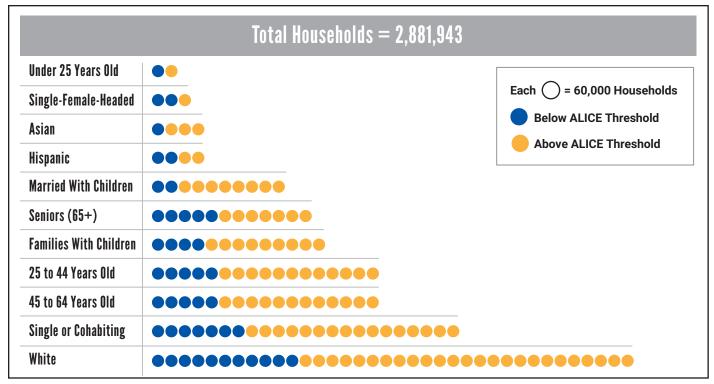
Figure 1. Households by Income, Washington, 2007–2018



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

ALICE households live in every county in Washington — 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 Washington — 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 40% of families with children living below the ALICE Threshold.

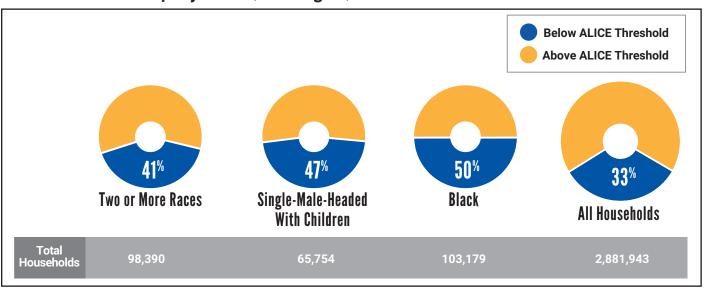
Figure 2. Household Types by Income, Largest Groups, Washington, 2018



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, 33% of households in Washington had income below the ALICE Threshold in 2018. But many smaller groups had a disproportionately high percentage of households below the ALICE Threshold. Three of these groups are shown in Figure 2: Seniors, Hispanic households, and families headed by single females (with children), with 43%, 48% and 70%, respectively. Additional small groups also have a disproportionately high percentage of households below the ALICE Threshold, including households headed by someone of two or more races, households with children headed by single males, and Black households (Figure 3).

Figure 3.
Select Household Groups by Income, Washington, 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 Washington, 12% of households were on the cusp of the ALICE Threshold in 2018, with earnings just above or below it.⁴ This matters not only for families, but also for the Washington 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.

Washington is increasingly diverse. While all of the state's four largest racial and ethnic groups grew between 2010 and 2018 (driven largely by growth in metropolitan areas, especially in King County), non-White groups grew at the fastest rate. The largest group, White households, increased by only 4%, with the greatest growth in households headed by someone 65 years and older (the size of all other White age groups remained flat or decreased during the same period). Black households — the smallest group — increased by 17%, Hispanic households by 29%, and Asian households by 42%. Financial hardship is also growing 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 29%, Hispanic households by 34%, and Asian households by 44%.⁵

Washington'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 Washington (48%), as well as the largest share of households below the ALICE Threshold (44%). 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.⁶

In Washington, 12% of households were on the cusp of the ALICE Threshold in 2018, with earnings just above or below it.

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 Washington is older than other racial/ethnic groups and will continue to account for an increasing share of the senior population. Second, having lived through a decade of financial challenges since the Great Recession, more Washington 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 Washington 40th out of 50 states, with a high preventable hospitalization rate, traffic congestion, and high housing costs driving down the ranking.⁷

Washington is home to a growing number of millennials. Over the past decade, there has been an increase in the number of millennials in the state, which saw the largest millennial net migration in the nation in 2018. Washington ranked third in the nation for the highest average earnings for millennials in 2018 and ranks third in WalletHub's analysis of the best states for millennials. The Seattle area is driving the growth of this population in the state, and compared

to the other 49 largest metropolitan areas in the country, millennials in Seattle are unique in their living arrangements: In 2018, Seattle had the lowest percentage of millennials living at home with parents (10% compared to the national average of 33%), the highest percentage of millennials living with an unmarried partner, and the highest percentage of 18- to 34-year-olds living alone.⁸

Inequality in income and wealth will continue to rise as wage growth and job stability in high-wage jobs greatly outpaces 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. By 2015, the average income of the top 1% in Washington was 24.2 times higher than the average income of the bottom 99% (Washington ranks 10th highest in the country for this measure). The Seattle-Tacoma-Bellevue metropolitan area had the worst gap in the state, with the top one percent earning 24.7 times more than all other earners. Washington also has the most regressive state and local tax system in the country, taxing the poorest Washingtonians at rates six times higher than the wealthiest (bottom 20% compared to top 1% of the income scale). Regressive tax systems like Washington's contribute to and perpetuate income inequality. 10

The gap in wealth (savings and assets) is even greater than the gap in income. Unable to save, ALICE families do not have the means to build assets, let alone catch up to those who already have assets (especially those who have been building assets for generations). ALICE families also face more barriers that, when compounded, create an even bigger wealth gap. These include issues like lower pay for women, racial/ethnic discrimination in homeownership, and student loan debt.¹¹

THE COST OF LIVING IN WASHINGTON

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 Washington, 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 Washington. 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 Washington is well above the Federal Poverty Level (FPL) for all household sizes and types (Figure 4). For a single adult, the FPL was \$12,140 per year in 2018, but the average Household Survival Budget in Washington was \$22,524 per year. The average Senior Survival Budget totaled \$25,848 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 the FPL and Household Survival Budgets were significantly lower than the Household Stability Budget, which reached \$45,324 per year for a single adult.

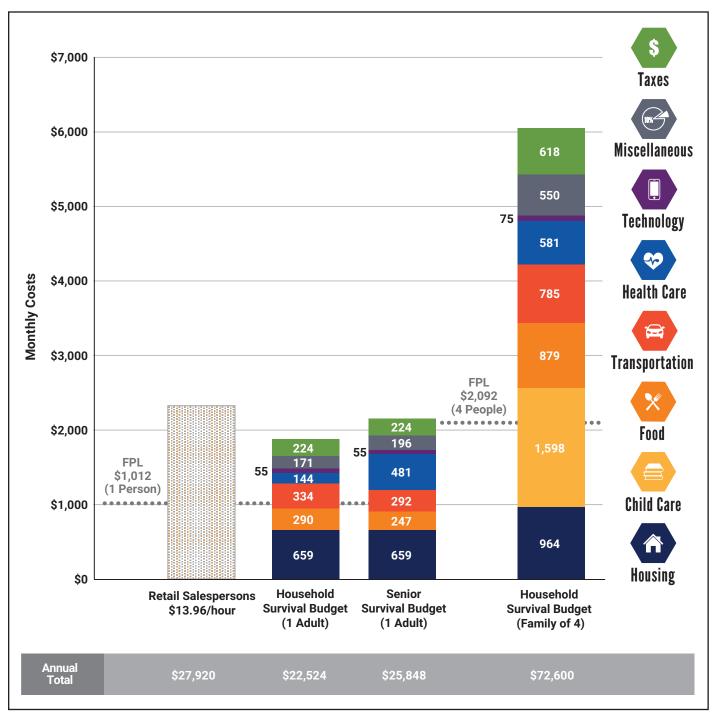
The gaps are even larger for families. The FPL for a four-person family was \$25,100 in 2018, while the Household Survival Budget for a family with two adults, an infant, and a four-year-old was \$72,600.13

The hourly wages needed to support these budgets were \$11.26 for the single adult Survival Budget; \$12.92 for the Senior Survival Budget; and \$36.30 for one worker or \$18.15 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 Washington, retail sales, was \$13.96 in 2018, or \$27,920 if full time, year-round — barely enough to support the single-adult Survival Budget and not enough to support the family Survival Budget, even with two workers.¹⁴

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 need assistance, even in a strong economy.

To see the details of each ALICE budget for different household types, visit <u>UnitedForALICE.org/Washington</u>

Figure 4.
Budget Comparison, Washington, 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, 2019—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; Centers for Medicare & Medicaid Services, 2019; Fowler, 2019; Fowler, 2019; Fowler, 2019; Fowler, 2019; Fowler, 2019; Fowler, 2019; Internal Revenue Service, 2020; Internal Revenue Service—FICA, 2020; Medicare.gov; The Zebra, 2018; U.S. Department of Agriculture, 2018—Official USDA Food Plans; U.S. Department of Housing and Urban Development, 2018—Fair Market Rents. For more details, see the Methodology Overview at UnitedEorALICE.org/Methodology¹⁵

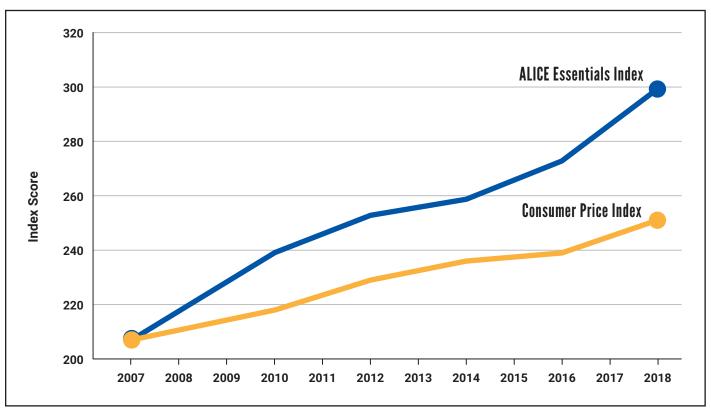
THE ALICE ESSENTIALS INDEX

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.¹⁶

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%. 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). 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 Washington, rising costs in urban areas — notably the Seattle-Tacoma-Bellevue metropolitan area — are due to rapid population growth and increasing demand for low-cost, urban rental units (especially among millennials and seniors). Affordable housing will become harder to find in Seattle and across the state, pushing workers in urban areas into surrounding suburbs and further from higher-paying jobs. 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

Commuting times will continue to increase, as will demand for alternative transportation options. High housing costs and urban sprawl push workers farther from their jobs and increase commute times, which has a negative impact on health, job retention, and productivity. With these pressures, along with minimal public transportation infrastructure outside of major cities and the cost of owning and maintaining a car, there will be increased demand in Washington to expand existing public transportation services and explore new options (e.g., rideshares and self-driving vehicles).²⁰

The child care industry will face new challenges, and so will parents. In Washington, the number of families with children increased only modestly (3%) between 2010 and 2018, as did the number of these households living below the ALICE Threshold (2%). However, the supply of child care providers is still not sufficient to meet demand. In 2018, Washington had the licensed child care capacity to serve only 17% of children under the age of 13. And a 2017 analysis found that 63 percent of Washington residents — the sixth highest rate in the nation — live in a "child care desert," with a dearth of available licensed care. This percentage is even higher for families living in rural areas (64%), and for Hispanic/Latino families (66%).²¹ The cost of

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.

child care relative to family income also continues to increase, with higher rates for child care in urban areas (especially in the Puget Sound region and the Vancouver area), and a greater reliance on family child care homes in rural areas. In 2018, the average annual costs for home-based care (\$11,208) and center-based care (\$14,844) for an infant were higher than the average annual tuition at a public four-year university in Washington (at \$9,760).²² 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 \$13.11 in Washington).²³ These issues matter for families and workers, but they also have an impact on the state economy: A recent report found that child care issues — such as lack of affordable care or a shortage of available hours — resulted in an estimated \$6.5 billion annual loss for Washington's economy (including \$2.08 billion in costs related to employee turnover and missed work alone).²⁴

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 Washington, and they often struggled to put food on the table. For example, reports consistently find higher rates of food insecurity among college students. Across the University of Washington's three campuses (located in Seattle, Tacoma, and Bothell), over a quarter of students surveyed in 2018 said they were worried about having enough food in the month prior to the survey,

and of these students, 18% said they cut the size of their meals or skipped meals.²⁵ There is also growing food insecurity at the other end of the age spectrum, with a projected 8 million food-insecure seniors nationwide by 2050. Compared to other seniors, food-insecure seniors are more than twice as likely to have depression, 91% more likely to have asthma, 66% more likely to have had a heart attack, and 57% more likely to have congestive heart failure. Public benefits help but do not eliminate the need for emergency assistance measures, such as food pantries.²⁶

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.²⁷ 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.²⁸ 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.²⁹ Students report that two of the major obstacles to academic success are juggling work with school and other responsibilities and difficulty meeting expenses.³⁰ 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. Washington has some of the best health care in the country, ranking 7th overall in the Commonwealth Fund's 2018 survey of state health systems (and 3rd for avoidable hospital use and cost). However, 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.³¹ It is likely that health disparities will grow given 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 Washington and across the country.³²

Natural and human-made disasters will continue to impact ALICE households disproportionately. Across Washington, the increasing impact of these incidents, whether natural or human-made — 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). Unexpected expenses can intensify these impacts. In 2017, only 66% of Washington households had set aside any money in the prior 12 months that could be used for unexpected expenses or emergencies such as illness or the loss of a job. Though this was above the national rate of 42%, it still left a third of Washington residents 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. In the cost of the co

THE CHANGING LANDSCAPE OF WORK IN WASHINGTON

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

With a record-high per capita GDP and a record-low unemployment rate, Washington appeared to have a robust economic profile in 2018, with only 3% of adults actively looking but unable to find work.36 In 2016, the state approved Initiative Measure Number 1433, raising the minimum wage yearly and bringing the minimum wage up to \$11.50 per hour by 2018.37 The Seattle-Tacoma-Bellevue metropolitan area, in particular, saw unprecedented growth, especially in the technology sector, which in 2018 contributed \$94.5 billion to the state economy, with \$87.7 billion coming from the Seattle-Tacoma-Bellevue area. However, employment growth in Washington over the last 10 years was largely driven by a rise in low-wage jobs that could not keep up with the increased cost of the basic household budget (Figure 6). This is due in part to the fact that tech support, e-commerce, and modern manufacturing rely on low-wage jobs, such as those at call centers and distribution warehouses, which could not keep up with the fast increasing costs of essential budget items (especially the cost of housing, which has been growing rapidly in the Seattle metropolitan area). Although there was notable growth in high-wage jobs in the state between 2014 and 2018 - driven by the technology sector and often highlighted in the media - this gain in high-wage jobs represented a relatively small percentage of overall employment. Less in the spotlight, but more relevant in the rest of the state, are jobs in in Washington's large government sector (comprised of state and local government positions), and the health care and social assistance sector (which includes social service providers and workers at hospitals, nursing facilities, and ambulatory care centers). Both sectors grew between 2010 and 2018, but this growth has been concentrated at the low end, especially within the health care and social assistance sector.38

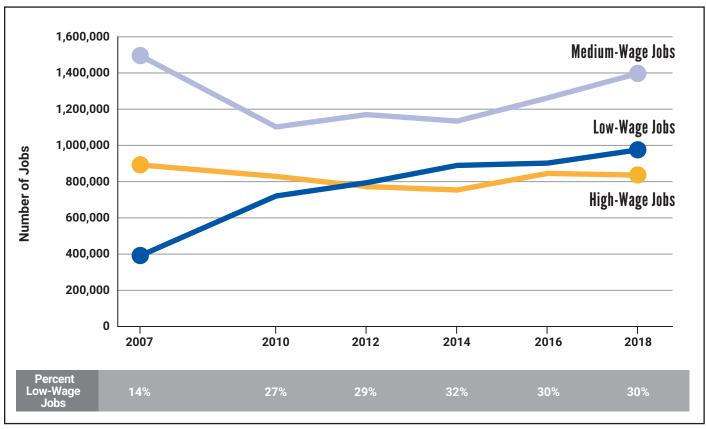
Figure 6 illustrates the following trends in wages compared to the cost of living in Washington from 2007 to 2018:

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 \$12.50 per hour; by 2018, the wage required had increased to \$18.15 per hour. The number of low-wage jobs increased by a staggering 149% during that period. This shows that, even with two earners working full time, it is not only possible but common for households to fall below the ALICE Threshold.

Although there was notable growth in highwage jobs in the state between 2014 and 2018 — driven by the technology sector and often highlighted in the media — this gain in high-wage jobs represented a relatively small percentage of overall employment.

- Medium-wage jobs (light-blue line) allow two workers to afford a family Household Survival Budget. In 2007, these
 were jobs that paid between \$12.50 and \$25.00 per hour, per worker; by 2018, wages needed for these jobs were
 between \$18.15 and \$36.30 per hour, per worker. The number of medium-wage jobs decreased by 7% during that
 period, yet they still represent the largest number of jobs by wage in the state.
- High-wage jobs (gold line) allow one worker to afford a family Household Survival Budget. In 2007, the wage required was \$25.00 per hour or more; by 2018, the wage required had increased to \$36.30 per hour. The number of high-wage jobs decreased by 6% during that period.³⁹

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



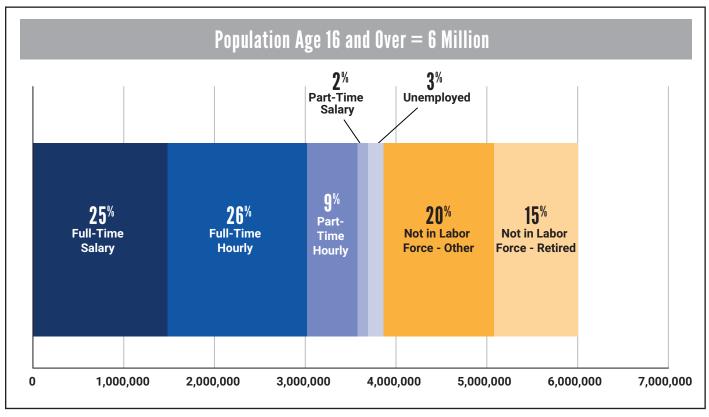
Note: Wage levels are defined by their relation to the Household Survival Budget. Dark-blue = Job cannot support family Household Survival Budget with two earners. Light-blue = Job supports family Household Survival Budget with two earners. Gold = Job supports family Household Survival Budget with one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

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

THE NEW LABOR FORCE

A 2018 overview of the labor status of Washington's 6,003,218 working-age adults (people age 16 and over) shows that 65% of adults were in the labor force (blue bars in Figure 7), yet more than half of them were workers who were paid hourly. In addition, 35% of adults were outside the labor force (gold bars).⁴⁰

Figure 7.
Labor Status, Population Age 16 and Over, Washington, 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 Washington 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 most adults in Washington were working in 2018 and most households had at least one worker, only 25% of working-age adults had the security of a full-time job with a salary. The rest were paid hourly and/or worked part time.⁴¹

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. 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. In Washington, 68% of independent contractors surveyed in 2019 said they use contract work as a primary source of income and 56% said this work was essential to meeting their basic needs, yet only 29% said their work was steady from week to week. 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. 43

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 2018.⁴⁴ However, in the current economy, where many 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. When these workers are classified as independent contractors instead of employees, they are not eligible for unemployment insurance. And the consistency of wages from week to week also varies based on the number of jobs workers have. In Washington, 57% of independent contractors with one job said their work was "steady" or "somewhat steady" from week to week, compared to 39% of independent contractors with more than one job.⁴⁵

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. 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 Washington, 15% were out of the labor force in 2018 because they were retired and another 20% were out of the labor force for other reasons (gold bars in Figure 7). This totals 35% of adults outside the labor force.⁴⁷

Retirees (age 65 and over and not working) are traditionally one of the largest groups of adults out of the labor force. In Washington in 2018, they accounted for 15% 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 seniors who were still working; in 2018, 21% of seniors in Washington were still in the labor force.⁴⁸

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

- School: Nationally, 77% of high school students and 52% of college students did not work in 2018. At these rates, non-working students in Washington would account for one-third (33%) of the state's working-age adults out of the workforce.⁴⁹
- 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 (21%) of those out of the labor force in Washington in 2018.⁵⁰

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.⁵¹ 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 Washington ages, caring for an aging parent or a family member with a disability or chronic health issue.⁵²

These adults who were out of the workforce were not included in the state's low unemployment rate, which only counts adults actively looking for work. In previous periods of low unemployment, employers have had to offer much higher wages to attract workers back into the labor force or away from other businesses. However, in the 2018 economy, those out of the labor force 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.⁵³

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 Washington 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.⁵⁴ To better understand where ALICE works, we elaborate on Vinsel and Russell's concept by breaking down all occupations in Washington 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:

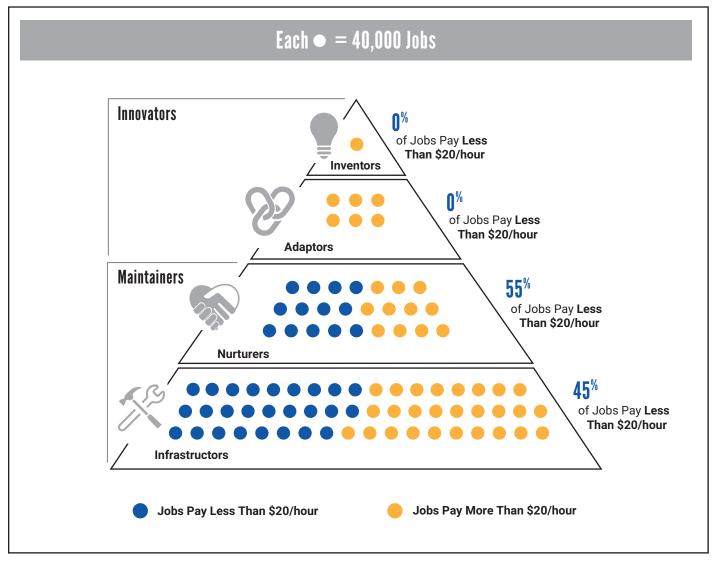
Adaptors implement existing tools or processes in new ways, responding to opportunities and changing circumstances (managers, industrial and organizational psychologists, analysts, designers, technicians, and even policymakers).

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 Washington are comprised of Maintainer occupations. The largest industry group in 2018, with 637,600 employees, was trade, transportation, and utilities, which consists largely of Infrastructor jobs. The second-largest, with 586,800 employees, was government. These jobs — including federal, state, and county government positions — are largely Nurturers (such as teachers, janitors, and health care workers) and Infrastructors (such as police officers and administrative workers). Both industries have large shares of ALICE workers. There are far fewer jobs in Innovator occupations (Adaptors and Inventors).

When stacked together, Washington'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 (45% of Infrastructor jobs and 55% 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 \$32,600 less than the family Household Survival Budget of \$72,600. By comparison, almost all Adaptor and Inventor occupations pay more than \$20 per hour.

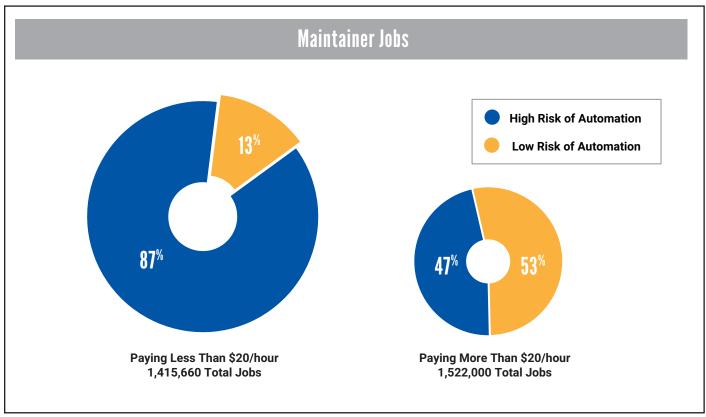
Figure 8.
Occupations by Wage and Type, Washington, 2018



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

The precarious nature of ALICE workers' jobs is reinforced by the powerful relationship between low wages and the high risk of jobs becoming automated (defined as having a greater than 50% chance of being replaced by technology in the next decade). Jobs that pay less than \$20 per hour are more likely to be replaced by technology compared to higher-paying jobs. This is especially true for Maintainer occupations, where most jobs pay less than \$20 per hour and 87% of these low-paying jobs are at a high risk of automation. By comparison, only 47% of Maintainer jobs that pay 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, Washington, 2018



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

Among Infrastructor jobs, 96% of jobs that pay less than \$20 per hour are at risk of automation, compared to 62% of those that pay more than \$20 per hour. Among Nurturer jobs, the discrepancy is even greater: 72% of jobs that pay less than \$20 per hour are at risk of automation, compared with 10% of those that pay more than \$20 per hour. 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%). The school diploma (55%) is more than double the risk for jobs that require a bachelor's degree (24%).

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. 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. 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.

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. 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. 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.

The number of low-wage jobs will continue to increase, despite automation. Even though most jobs will change and evolve with demand as well as technology, it may not be economical or effective to automate certain jobs. For example, low-wage Maintainer jobs in areas like education and health care require employees to be on-site and often involve relational skills that are difficult or impossible to automate (although these workers will still have to learn to work with technology). Of the state's top-20 growth occupations from 2017 to 2027, 53% will pay less than \$20 per hour, 44% will not require any formal educational credential at all, and 18% will require only a high school diploma. However, software developers — the occupation with the largest predicted number of new jobs in Washington — has a 2018 median wage that was much higher than the other fastest-growing jobs, at \$61.63 per hour.⁶⁴

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 2017.⁶⁵ Yet, 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.⁶⁶ 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 Washington, 48% of college students who graduated in 2018 were in debt with an average loan of \$23,524, a 6% increase from 2010.⁶⁷

NEXT STEPS: DATA FOR ACTION

The ALICE data highlights significant problems in the Washington economy in 2018: stagnant wages, a rising cost of living, and 33% 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.

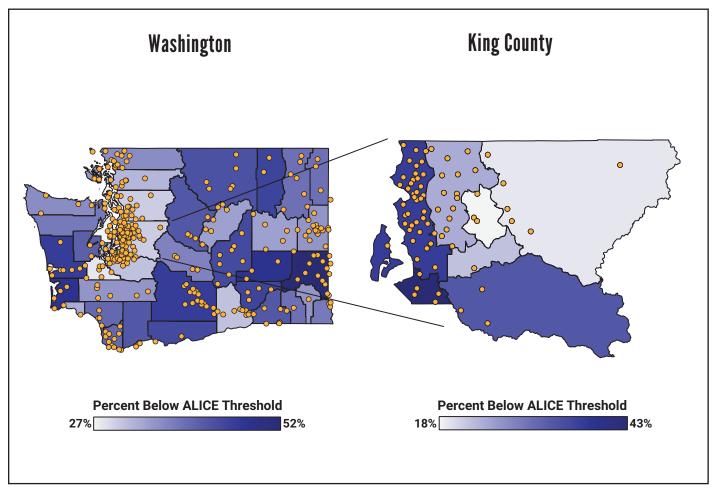
With the ALICE data tools, stakeholders can map where ALICE lives along with the location of community resources — such as public libraries or disaster-relief services — to identify gaps by town, ZIP code, or county (Figure 10). This data can help stakeholders answer targeted questions, including the 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. ⁶⁸ 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.⁶⁹

There are 347 libraries across Washington's 39 counties, shown in gold dots in Figure 10 (and in an interactive feature on <u>UnitedForALICE.org/Washington</u> where users can view library locations by county). 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, Washington, 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.⁷¹

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).⁷²

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.⁷³ 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 Washington, visit our website: $\underline{\text{UnitedForALICE.org/Washington}}$

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 Washington, 87% of households had access to the internet at home in 2018.⁷⁴ 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.⁷⁵

This high usage of smartphones for a critical task indicates that many low-income households have limited access to the internet at home. In Washington, 23% 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 in three households below the ALICE Threshold do not have an internet subscription.⁷⁶ Identifying these gaps can help businesses and government provide more resources to libraries, establish training centers, or target low-cost internet plans.⁷⁷

THE BENEFITS OF MOVING TOWARD EQUITY IN WASHINGTON

The strength of the Washington economy is inextricably tied to the financial stability of its residents. The more people participate in a state's economy, the stronger it will be. In 2018, when the national economy was often described as "strong," the reality was that 955,255 Washington households — more than one-third of all households in the state — struggled to support themselves. If all households earned enough to meet their basic needs, not only would each family's hardship be eased, but the Washington 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 Washington of bringing all households to the ALICE Threshold would be approximately \$71.7 billion, meaning that the state GDP would grow by 13% (Figure 11). This is based on three categories of economic enhancement:

Earnings: Washington's 2018 GDP reflects earnings of \$21.5 billion by Washington's households below the ALICE Threshold. Bringing all households to the ALICE Threshold would have a two-fold impact:

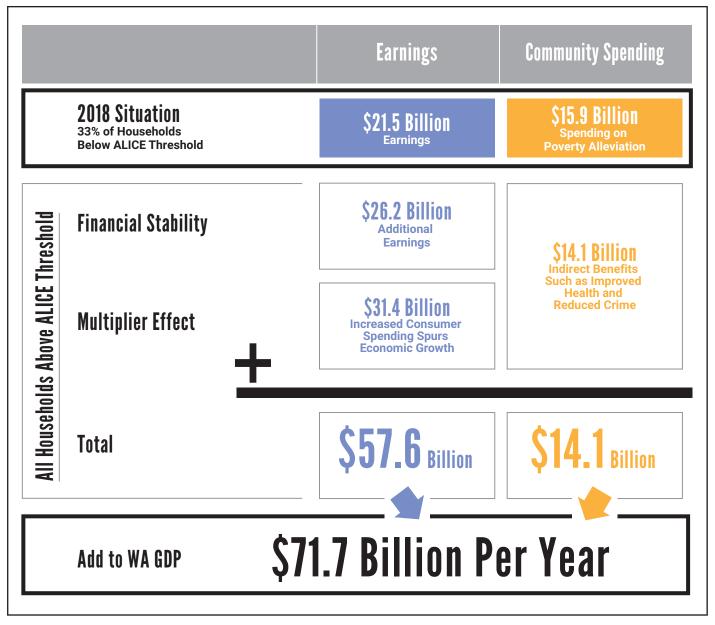
- Additional earnings: \$26.2 billion statewide.
- **Multiplier effect:** Studies show that almost all additional wages earned by low-wage workers are put back into the economy through increased consumer spending, which in turn spurs business growth. Realiding on economic calculations used by Moody's 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 Washington, this increased economic activity would be valued at \$31.4 billion.

Community spending: Washington's 2018 GDP reflects community spending of \$15.9 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 \$14.1 billion (or 2.5% of the state GDP, which is the estimated cost of childhood poverty alone). 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.

Figure 11.

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



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

Sources: ALICE Threshold, 2018; American Community Survey, 2018; McKeever, 2018; National Association of State Budget Officers, 2019; Office of Management and Budget, 2019; U.S. Department of Agriculture—SNAP, 2019; Urban Institute, 2012⁸³

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 Washington 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 cost: better maintained housing stock, lower crime rates, less spending o 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 fo 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 marke 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 acces 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.

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

U.S. Census Bureau. (2020, March 12). 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

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

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

King County, Washington. (2017). Demographic Trends of King County. Retrieved from https://www.kingcounty.gov/independent/forecasting/King%20County%20Economic%20Indicators/Demographics.aspx

State of Washington. (2018). Strong population growth in Washington continues. Office of Financial Management. Retrieved from https://www.ofm.wa.gov/about/news/2018/06/strong-population-growth-washington-continues

6 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

7 2020 senior living report: Senior living in Washington. (n.d.). Retrieved from https://www.caring.com/senior-living/washington

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/

State of Washington. (2019). State of Washington: 2019 population trends. Forecasting & Research Division, Office of Financial Management. Retrieved from https://www.ofm.wa.gov/sites/default/files/public/dataresearch/pop/april1/ofm_april1_poptrends.pdf

State of Washington. (2019). Population by age, mapped by county: Percent of population age 65 and above, 2018. Office of Financial Management. Retrieved from https://ofm.wa.gov/washington-data-research/statewide-data/washington-trends/population-changes/population-age-mapped-county

8 Balk, G. (2018, November 30). Millennials are most likely to live at home with parents — but not in Seattle. *The Seattle Times*. Retrieved from https://www.seattletimes.com/seattle-news/data/bucking-national-trend-seattle-millennials-least-likely-to-live-at-home-with-parents/

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

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

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/

9 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

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

Institute on Taxation and Economic Policy. (2018). Who pays? 6th edition. Retrieved from https://itep.org/whopays/#mostregressive

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/

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

Child Care Aware of Washington. (2019, January 31). 2018 data report: Trends, child care supply, cost of care, & demand for referrals [Appendix D: Child Care Center Rates by County; Appendix E: Family Child Care Rates by County]. Retrieved from https://childcareawarewa.org/wp-content/uploads/2019/03/2018-Data-Report.pdf

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

15 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/tviid2.pdf; https://meps.ahrq.gov/data_stats/summ_tables/insr/state/series_7/2018/tviid2.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/agebvinc/x45to54.PDF

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

Child Care Aware of Washington. (2019, January 31). 2018 child care data report. Retrieved from https://childcareawarewa.org/wp-content/uploads/2019/03/2018-Data-Report.pdf

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/vour-medicare-costs/part-b-costs

The Zebra. (2018). The State of Auto Insurance 2018. Retrieved from https://www.thezebra.com/state-of-insurance/auto/2018/

U.S. Department of Agriculture. (2018). Official USDA Food Plans. Retrieved from https://fns-prod.azureedge.net/sites/default/files/CostofFoodJun2018.pdf

U.S. Department of Housing and Urban Development. (2018). Fair Market Rents. Retrieved from https://www.huduser.gov/portal/datasets/fmr.html#2018_data

16 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

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

18 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

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.ichs.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

State of Washington. (2018, June 26). Strong population growth in Washington continues. Office of Financial Management. Retrieved from https://www.ofm.wa.gov/about/news/2018/06/strong-population-growth-washington-continues

Washington State Employment Security Department. (2019, January). 2018 labor market and economic report. Retrieved from https://esdorchardstorage.blob.core.windows.net/esdwa/Default/ESDWAGOV/labor-market-info/Libraries/Economic-reports/Annual-Report/2018%20Labor%20Market%20and%20Economic%20Report.pdf

Crowder, K. (2018). Seattle rental housing study: Final report, June 2018. University of Washington, Center for Studies in Demography and Ecology. Retrieved from https://www.seattle.gov/Documents/Departments/CityAuditor/auditreports/UWSRHSFINAL.pdf

20 Duranton, G., & Puga, D. (2014). The growth of cities. In *Handbook of Economic Growth*, 2, 771–853. Retrieved from https://www.sciencedirect.com/science/article/pii/B9780444535405000057

Jiao, J., Miró, J., & McGrath, N. (2017, November 3). Why the "Uberization" of public transit is good for cities. *Houston Chronicle*. Retrieved from http://www.houstonchronicle.com/local/gray-matters/article/Why-the-Uberization-of-public-transit-is-good-12329605.php

Robert Wood Johnson Foundation. (2012, October 25). How does transportation impact health? *Health Policy Snapshot Series*. Retrieved from https://www.rwjf.org/en/library/research/2012/10/how-does-transportation-impact-health-.html

Stiglic, M., Agatz, N., Savelsbergh, M., & Gradisar, M. (2018, February). Enhancing urban mobility: Integrating ride-sharing and public transit. *Computers and Operations Research*, 90(no. C), 12–21. Retrieved from https://dl.acm.org/citation.cfm?id=3165324.3165603

van Ommeren, J., & Gutiérrez-i-Puigarnau, E. (2011, January 11). Are workers with a long commute less productive? An empirical analysis of absenteeism. Regional Science and Urban Economics, 41(1), 1–8. Retrieved from http://www.sciencedirect.com/science/article/pii/S0166046210000633

21 Child care deserts are defined as communities with three or more children per available child care slot.

Washington State Department of Commerce. (2019, November 1). Recommendations report to the Legislature under SHB 2367, laws of 2018. Child Care Collaborative Task Force. Retrieved from http://www.commerce.wa.gov/wp-content/uploads/2019/11/Report-Child-Care-Collaborative-Task-Force-2019-Final.pdf

Malik, R., Hamm, K., Schochet, L., Novoa, C., Workman, S., & Jessen-Howard, S. (2018, December 6). *America's child care deserts*. Center for American Progress. Retrieved from https://www.americanprogress.org/issues/early-childhood/reports/2018/12/06/461643/americas-child-care-deserts-2018/

22 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/

23 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 Washington. U.S. Department of Labor. Retrieved from https://www.bls.gov/oes/current/oes_wa.htm

Child Care Aware of Washington. (2019, January 31). 2018 child care data report. Retrieved from https://childcareawarewa.org/wp-content/uploads/2019/03/2018-Data-Report.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

24 U.S. Chamber of Commerce Foundation. (2019, September). The mounting costs of child care: Impacts of child care affordability and access to Washington's employers and economy. Retrieved from https://www.uschamberfoundation.org/sites/default/files/AWB_MountingCostsReport_September2019.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

Fyall, R., Stevens, C., & Manzo, L. (2019, May 10). Understanding housing and food insecurity among University of Washington students: An internal report. University of Washington. Retrieved from https://evans.uw.edu/sites/default/files/student-housing-and-food-insecurity-report-may2019.pdf

Northwest Harvest. (2018). Focus on food security: Bringing food justice to Washington. Retrieved from https://www.northwestharvest.org/stuff/contentmgr/files/1/5fa7e4b8e1b3dc79b2eb7346e9bc8f90/pdf/fgr_17_18_webflipbook.pdf

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

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/

27 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

28 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

29 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

30 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

31 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.aimc.com/newsroom/enrollment-in-highdeductible-health-plans-continues-to-grow

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/i.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.

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/

State of Washington. (n.d.). Climate change. Department of Ecology. Retrieved from https://ecology.wa.gov/Air-Climate/Climate-change

University of Washington. (2013, December). State of Knowledge Report—Climate change impacts and adaptation in Washington State: Technical summaries for decision makers. Climate Impacts Group. Retrieved from www.cses.washington.edu/db/pdf/snoveretalsok816.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.wilev.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 Federal Reserve Bank of St. Louis. (n.d.). All employees: Total nonfarm in Washington: 2018. Retrieved from https://fred.stlouisfed.org/series/WANA

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

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

37 Washington State Legislature. (n.d.). RCW 49.46.020 Minimum hourly wage — Paid sick leave. Retrieved from https://app.leg.wa.gov/RCW/default.aspx?cite=49.46.020

38 CompTIA. (2019, March). Cyberstates 2019: The definitive guide to the U.S. tech industry and tech workforce. Retrieved from https://www.cyberstates.org/pdf/CompTIA Cyberstates 2019.pdf

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

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

Washington State Employment Security Department. (2019, January). 2018 labor market and economic report. Retrieved from https://esdorchardstorage.blob.core.windows.net/esdwa/Default/ESDWAGOV/labor-market-info/Libraries/Economic-reports/Annual-Report/2018%20Labor%20Market%20and%20Economic%20Report.pdf

Washington State Economic and Revenue Forecast Council. (2019, April). Washington state economic update. Retrieved from https://erfc.wa.gov/sites/default/files/public/documents/presentations/RTC_20190411.pdf

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

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

Bureau of Labor Statistics. (2018). States and selected areas: Employment status of the civilian noninstitutional population, 1976 to 2019 annual averages. U.S. Department of Labor. Retrieved from https://www.bls.gov/lau/staadata.txt

41 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

42 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

43 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

Phair, D. (2016, December). The "gig" economy. Seattle Jobs Initiative. Retrieved from https://www.seattle.gov/Documents/Departments/economicDevelopment/workforce/SJI_GigEconomy_v2.pdf

State of Washington Department of Commerce. (2019, July). *Independent contractor study: Report to the Legislature*. Retrieved from https://deptofcommerce.app.box.com/v/independent-contractor-study

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

44 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

45 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-aig-economy.aspx

State of Washington Department of Commerce. (2019, July). Independent contractor study: Report to the Legislature. Retrieved from https://deptofcommerce.app.box.com/v/independent-contractor-study

46 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/

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

48 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

City of Seattle. (2018, July). Age friendly Seattle: Action plan 2018–2021. Retrieved from <a href="http://www.seattle.gov/Documents/Departments/AgeFriendly/AgeFr

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/graving-america.html

49 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

50 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 III, 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

51 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

52 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/

53 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

 $\underline{https://www.epi.org/publication/the-fuzzy-line-between-unemployed-and-not-in-the-labor-force-and-what-it-means-for-job-creation-strategies-and-the-federal-reserve/$

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

54 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

55 Bureau of Labor Statistics, (n.d.), Economy at a Glance; Washington, U.S. Department of Labor, Retrieved from https://www.bls.gov/eag/eag.wa.htm

Bureau of Labor Statistics. (2019, March 29). Occupations with the highest employment in the public sector, May 2018. Retrieved from https://www.bls.gov/oes/2018/may/public.htm

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

57 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-Al_Report_Muro-Maxim-Whiton-FINAL-version.pdf

58 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

59 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-iune-2019/

60 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

61 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%20 future%20that%20works/MGI-A-future-that-works-Executive-summary.ashx

Washington Workforce and Education Coordination Board. (2019, December). Future of work task force 2019 policy report. Retrieved from https://www.wtb.wa.gov/wp-content/uploads/2019/12/Future-of-Work-2019-Final-Report.pdf

62 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

63 Bond, J. (2017, January). AGVs roll into a new role. Modern Materials Handling. Retrieved from https://www.mmh.com/article/agys_roll_into_a_new_role/agys_

McKinsey Global Institute. (2017). A future that works: Automation, employment and productivity. Retrieved from https://www.mckinsey.com/~/media/McKinsey/Global%20 Themes/Digital%20Disruption/Harnessing%20automation%20for%20a%20future%20that%20works/MGI-A-future-that-works. Full-report.ashx

64 Bureau of Labor Statistics. (2019). Occupational outlook handbook. U.S. Department of Labor. Retrieved from https://www.bls.gov/ooh/a-z-index.htm

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

Washington State Employment Security Department. (2018). Long-term occupational projections (alternative state specific). Retrieved from https://esd.wa.gov/labormarketinfo/projections

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-Al_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

65 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

66 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

67 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

68 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

69 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

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

71 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/

72 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/

73 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

74 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/

75 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

76 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/

77 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/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

78 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

79 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

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

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

81 The National Academies of Sciences, Engineering, and Medicine analyzes the cost of childhood poverty and estimates that reversing it would add 5.4 percent to the state GDP. To be conservative, this analysis uses Holzer's estimate that childhood poverty costs 2.5 percent 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 Washington: 2018. Retrieved from https://research.stlouisfed.org/fred2/series/WANGSP

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 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/fdsvs/pkg/BUDGET-2018-PER/pdf/BUDGET-2018-PER.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.

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. 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.ichs.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-CenterforHousing-Onletal.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.ichs.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.cshb.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.rwif.org/files/research/RWJFPhysiciansSurveyExecutiveSummarv.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/igcc_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.