

# ALICE RESEARCH METHODOLOGY

## Overview & Rationale

BIENNIAL UPDATE 2020



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## ALICE RESEARCH AND METHODOLOGY

United for ALICE conducts timely, high-quality research to better understand the nature and scope of financial hardship in the U.S – from a national perspective, down to the local level. To develop the ALICE Essentials Index, ALICE researchers collaborated with a Methodology Advisory Committee composed of experts from across the country. This collaborative model ensures that all ALICE products and tools are based on unbiased data that is transparent, replicable, current, and sensitive to local context.

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# METHODOLOGY OVERVIEW & RATIONALE

## FOR USE WITH 2020 ALICE REPORTS (2018 DATA YEAR)

### Introduction

**ALICE**, an acronym for **A**sset Limited, **I**ncome **C**onstrained, **E**mloyed, represents the growing number of individuals and families who are working, but are unable to afford the basic necessities of housing, child care, food, transportation, health care, and technology.

Each ALICE Report uses standardized measurements to quantify the cost of a basic household budget in each county in each state, and to show how many households are struggling to afford it.

This methodology overview describes the rationale for developing ALICE, an alternative to the Federal Poverty Level; the guiding parameters for ALICE measures; the seven current ALICE measures; and the methodology and data sources used for each.

To learn more about United for ALICE, go to [UnitedForALICE.org/Overview](http://UnitedForALICE.org/Overview)

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# BACKGROUND: SHORTCOMINGS OF OFFICIAL ECONOMIC INDICATORS

An accurate and comprehensive measure of the scope, causes, and consequences of financial hardship forms the basis for identifying problems, planning policy solutions, and allocating resources. However, the existing official economic indicators can mask the extent of hardship that ALICE households face.

## The Federal Poverty Level

Since the War on Poverty began in 1965, the Federal Poverty Level (FPL) has provided a standard for determining the number and proportion of people living in poverty in the U.S. Despite the FPL's benefit of providing a nationally recognized income threshold for determining who is poor, its shortcomings are well documented.<sup>1</sup>

Primarily, the measure is not based on the current cost of basic contemporary household necessities, and except for Alaska and Hawaii, it is not adjusted to reflect cost-of-living differences across the U.S. The net effect is an undercount of households living in economic hardship. The official poverty level is so understated that many government and nonprofit agencies use multiples of the FPL to determine eligibility for assistance programs. For example, New Jersey's Low Income Home Energy Assistance Program (LIHEAP) uses 200% of the FPL and Tennessee's Women, Infants, and Children Program (WIC) uses 185% of the FPL.<sup>2</sup> Even Medicaid and the Children's Health Insurance Program (CHIP) use multiples of the FPL to determine eligibility across the country.<sup>3</sup>

In light of the FPL's weaknesses, other measures of financial hardship have been developed. The federal government produces two alternatives to the FPL: the Supplemental Poverty Measure (SPM) from the U.S. Census at the state level, and the Area Median Income (AMI) from the Department of Housing and Urban Development (HUD) for sub-state geographies. Other sub-state geography alternatives to the FPL include Kids Count (Annie E. Casey Foundation), the Self-Sufficiency Standard (Center for Women's Welfare, School of Social Work, University of Washington), the Basic Needs Budget (National Center for Children in Poverty), the Family Budget Calculator (Economic Policy Institute), the Economic Security Index (Institution for Social and Policy Studies), the Living Wage Calculator (Massachusetts Institute of Technology), and the Assets and Opportunity Scorecard (Corporation for Enterprise Development). While the plethora of alternatives demonstrates the lack of satisfaction with the FPL, none comprehensively measure the number of households that are struggling in each county in a state and describe the conditions they face. The research conducted by United for ALICE fills this gap.

Finally, the term "poverty" – which the FPL purports to measure – is vague and lacks any assessment of the depth, duration, or consequences of financial hardship. In addition, the term has negative connotations and is often and inaccurately associated with a lack of employment.

## Inflation

Official measures of inflation make it difficult to assess the increase in expenses that ALICE families face over time. The most common measure of inflation, the Bureau of Labor Statistics' Consumer Price Index (CPI)<sup>4</sup>, measures the change in the price consumers pay for a specified large collection of goods and services across urban areas in the U.S. While this measure provides important information on year-to-year inflation and spending habits, two fundamental shortcomings make it less relevant for ALICE households: 1) Because the CPI covers a wide range of goods and services that all Americans buy regularly, it masks changes in the cost of the basic essentials – those things that matter most to ALICE, including housing, child care, food, transportation, and health care; and 2) The CPI only tracks the prices paid by urban consumers, while ALICE households live in urban, suburban, and rural areas.

The ALICE measures outlined in this Methodology Overview address these shortcomings to more accurately identify and assess financial hardship in the U.S.

# PARAMETERS

All ALICE measures are transparent, replicable, current, and developed based on the following parameters:

1. **Make a household the unit of analysis.** Because people live in a variety of economic units (alone, in families, with roommates, etc.), all ALICE measures are based on households. Consistent with the U.S. Census Bureau's American Community Survey (our primary source of data), ALICE households do not include those living in institutional group quarters, such as college dorms, nursing homes, homeless shelters, or prisons.
2. **Define the basic cost of living.** The ALICE measures provide a conservative estimate for the costs of household essentials: housing, child care, food, transportation, health care, and technology, plus miscellaneous expenses and taxes.
3. **Measure the number of households unable to afford the basic cost of living.** In addition to capturing the basic cost of living, it is important to know the number and proportion of households unable to afford it. Where possible, it is also important to understand their demographic characteristics and geographic distribution.
4. **Provide data at the local level.** Counties serve as the base geographic unit of analysis because they are the smallest jurisdiction for which there is reliable data across the country. Where possible, ALICE indicators are also presented at the U.S. Census Bureau's municipal, county subdivision, and Public Use Microdata Area (PUMA) level. State-level data, while available for a broader set of economic indicators, masks significant inter-county variation.
5. **Use official and publicly available sources to ensure transparency and replicability.** All ALICE data comes from official and publicly available sources, including the U.S. Census Bureau, HUD, the U. S. Department of Agriculture (USDA), and the Bureau of Labor Statistics (BLS). In particular, using readily available data from the American Community Survey's tabulated data as the basis for estimates ensures that calculations are transparent and easily verifiable.
6. **Use data that is regularly updated and available for all U.S. counties.** ALICE measures are standardized using county-level data that is publicly available and regularly collected and updated to allow for transparency and accurate change-over-time comparison.
7. **Identify important contextual conditions.** Because economic hardship does not occur in a vacuum, the ALICE tools provide the means to understand the conditions that struggling households face (such as few job opportunities), as well as the consequences of those struggles for the wider community (for example, more traffic and longer commutes as workers find lower-cost homes further away from job sites, or stress on emergency rooms overused for primary care).
8. **Use neutral language.** Because the term "poverty" carries negative connotations, a more neutral descriptive acronym is offered. The term "ALICE" describes a household that is Asset Limited, Income Constrained, Employed.

# THE ALICE MEASURES

The following measures are used by United for ALICE to quantify the basic cost of living, identify and assess financial hardship, identify gaps in assistance and community resources, and track change over time.

**The ALICE Household Survival Budget** is the bare minimum cost of household basics necessary to live and work in the modern economy. These basic budget items include housing, child care, food, transportation, technology, and health care, plus taxes and a contingency fund (miscellaneous) equal to 10% of the household budget. The budget is calculated separately for each county and for different household types and is updated as costs and household needs change over time. For comparison to a budget that provides stability to a household over time, the Project also reports **the ALICE Household Stability Budget**, which provides an estimate of slightly higher standards than the Household Survival Budget, including a 10% savings category.

**The ALICE Senior Survival Budget** adjusts the Survival Budget to reflect reduced spending on food, as seniors eat less than younger adults; reduced spending on transportation, as seniors travel fewer miles for work and family

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responsibilities; and because seniors have increased health needs, the Senior Budget reflects increased spending on health care, which outpaces the benefits offered by Medicare.

**The ALICE Threshold** represents the minimum income level necessary for survival for a household. Derived from the Household Survival Budget, the ALICE Threshold is rounded to American Community Survey income category and adjusted for household size and composition for each county.

**The ALICE Income Assessment** is a tool that measures: 1) how much income households in a state need to reach the ALICE Threshold; 2) how much they actually earn; 3) how much public and nonprofit assistance is provided to help households below the ALICE Threshold meet their basic needs; and 4) the Unfilled Gap – the amount still needed for these households to reach the ALICE Threshold despite both income and assistance.

**The ALICE Essentials Index** is a national measure that tracks the increase in costs of specific basic necessities and can be seen as a companion or subset of the BLS' CPI, which covers all goods and services people buy regularly. These are goods found in the Household Survival Budget and standardized to provide a way to track these goods for all households, whereas a budget focuses on a particular household composition. The ALICE Essentials Index is calculated for both urban and rural areas.

**The Economic Benefits of Equity** quantifies the benefits of raising the income of all household income to the ALICE Threshold. The analysis includes additional earnings; additional taxes paid on higher incomes and reduced usage of tax credits for low-income earners; savings on government programs that alleviate poverty; as well as the multiplier effect of each category on the state GDP.

## METHODOLOGY: ALICE HOUSEHOLD SURVIVAL AND STABILITY BUDGETS

### The ALICE Household Survival Budget

The Household Survival Budget is comprised of conservative estimates of the cost of household essentials – housing, child care, food, transportation, health care, and technology, plus taxes and a 10% contingency (miscellaneous expenses) – in each county. The budget is the bare minimum cost to live and work in the modern economy. It is not sustainable over time, and it is not meant to be a recommended budget. There are many short- and long-term consequences of living on a budget at or below this level. These are highlighted in our report, *The Consequences of Insufficient Income* available online at [UnitedForALICE.org/consequences](https://www.unitedforalice.org/consequences).

The Household Survival Budget is calculated for different household combinations of adults, infants, preschoolers, and school-age children (6-17). The data definitions and sources are as follows, along with notes about the practical applications of these sources:

- Housing:** The housing budget is based on HUD's Fair Market Rent (HUD FMR – generally the 40<sup>th</sup> percentile of gross rents, but in some locations HUD reports the 50<sup>th</sup> percentile) for an efficiency apartment for a single person, a one-bedroom apartment for a head of household with a child or a household with two adults, and a two-bedroom apartment for a family of three or more. Gross rent, as reported by the FMR, includes the sum of the rent paid to the owner plus any utility costs incurred by the tenant. Utilities include electricity, gas, water/sewer, and trash removal services, but not telephone or internet service. If the owner pays for all utilities, then the gross rent equals the rent paid to the owner. Since HUD uses the same FMR for all counties within a metropolitan area, the Budget adjusts the rent in these areas using the standard deviation from the lowest of the American Community Survey's Median Gross Rent 5-year estimates. Specifically, counties at or below the median value within the metropolitan area will be assigned the FMR as its rental cost, and counties for which the American Community Survey rental cost is higher will be adjusted upward based on the deviation from the metropolitan median.

**Practical Application:** Housing at the 40<sup>th</sup> rent percentile is often not available.<sup>5</sup> From the data on housing burden, it is clear that housing units are not always allocated by income, making it even harder for ALICE and poverty-level households to find housing at or below HUD's FMR. Alternative measures or data sources, such as rent reasonableness, may be more accurate in some contexts, but are not possible to calculate for all counties in the U.S. and are therefore not included in the ALICE Measures.<sup>6</sup>

### Housing Data Sources

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

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

- **Child Care:** The child care budget is for registered Family Child Care Homes for infants, 4-year-olds, and after-school care as reported by each state's governmental department in charge of child care regulations. States are required to survey market rate costs every three years.<sup>7</sup> Some states, however, do conduct their surveys more frequently. Data collection varies by state; when available, the costs presented are the 75<sup>th</sup> percentile, otherwise the percentile is noted. Costs for school-age children are the least systematically reported, so are calculated at 3/8<sup>th</sup> the cost of full-time care for a 4-year-old. When data are missing, state averages are used (although missing data may mean that child care facilities are not available in those counties, and residents may be forced to use facilities in neighboring counties). When early years of child care costs are no longer available from the state, the state averages recorded by Child Care Aware of America are extrapolated by using the county variation in their most recent reports.<sup>8</sup>

**Practical Application:** While Family Child Care Homes are the least expensive registered child care option, availability is limited in many communities, which means that ALICE households often pay more, travel further, or sacrifice quality and safety.<sup>9</sup>

### Child Care Data Source

State governmental department in charge of child care regulation

- **Food:** The food budget is based on the Thrifty Level (lowest of four levels) of the USDA Food Plans. The household food budget is adjusted for six select household compositions including: single adult male, 19-50 years old; family of two adults (male and female as specified by the USDA), 19-50 years old; one adult female and one child, 2-3 years old; one adult female and one child, 9-11 years old; family of four with two adults (male and female) and two children, 2-3 and 4-5 years old; and family of four with two adults (male and female) and two children, 6-8 and 9-11 years old. Data are drawn from June for each year, as that is considered to be the annual average by the USDA. The USDA publishes a U.S. average for the cost of food; similar to the FPL, the USDA also publishes costs specific to Alaska and Hawaii. Therefore, the 48 contiguous states use the USDA's U.S. average, while Alaska and Hawaii use the adjusted costs.

Food budget numbers are adjusted to the county level using Feeding America's Cost-of-Food Index, with a lag of one year, starting in 2009. This indicator is generated by Feeding America using data from Nielsen PLC on Universal Product Code (UPC) barcodes of Thrifty Level Food Plan items in grocery stores throughout the country and includes state and county sales tax on food where applicable.<sup>10</sup> The calculations for Alaska and Hawaii are not adjusted as the USDA already provides state specific costs. Prior to 2009, prices are adjusted at the regional level using an adjustment factor from the USDA.<sup>11</sup>

**Practical Application:** The Thrifty Food Plan was designed to meet the nutritional requirements of a healthy diet; however, it includes foods that need a lot of home preparation time with little waste, plus skill in both buying and preparing food. This means that even ALICE households trying to keep food costs at a minimum may not be able to feed their family on a Thrifty Level Budget.<sup>12</sup>

### Food Data Sources

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

*Alaska and Hawaii Food Costs:* U.S. Department of Agriculture (USDA). (2018). *Official USDA Alaska and Hawaii Thrifty Food Plans*. Retrieved from <https://fns-prod.azureedge.net/sites/default/files/AKH11stHalf2018.pdf>

*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>

*Regional variation before 2009:* Economic Research Service (n.d.). *Regional variation nearly double inflation rate for food prices*. Retrieved from [https://www.ers.usda.gov/webdocs/publications/44331/10609\\_page19.pdf?v=41055](https://www.ers.usda.gov/webdocs/publications/44331/10609_page19.pdf?v=41055)

- Transportation:** The transportation budget is calculated using average annual expenditures for transportation by car and by public transportation. Because public transportation is generally less expensive than owning a car, low-income households are more likely to use transit for work where it is available. The Household Survival Budget uses the cost of public transportation when it is deemed a viable option, which is defined as 8% or more of the Metropolitan Statistical Area and county population using public transportation to commute to work (in counties where the working population is over 25,000), as reported by the American Community Survey. This threshold suggests there is sufficient infrastructure to make it a viable means to commute to work.<sup>13</sup> The budget includes the average annual expenditures for public transportation from the BLS' Consumer Expenditure Survey (CES). CES data are reported by metropolitan statistical areas and national regions; the budget matches counties to these jurisdictions. Costs are adjusted for household size. Public transportation includes bus, trolley, subway, elevated train, railroad, and ferryboat.

For transportation by car, the budget is tailored to the household size and composition. State-level costs for car minimum liability insurance from the Federal Highway Administration are used, which due to different minimum requirements and insurance marketplaces, show the largest variation of all car costs (ranging from \$261 in South Dakota to \$1,617 in Michigan in 2018). For many low-income households, car insurance rates are higher for those with a low credit score.<sup>14</sup>

Other car expenses come from AAA and include gas, oil, and other vehicle maintenance expenses, but not capital costs that include lease payments, car loan payments, or major repairs.

The calculation is the sum of household members' average daily miles of travel per person by age, times the cost per mile by car type times 300 days (50 work weeks, 6 days/week), plus license and fees by type of car, plus depreciation (assuming a 10-year-old car), plus minimum liability insurance by state.

$$[(\text{Average daily miles} * \text{cost per mile}) * 300] + \text{license and fees} + \text{depreciation} + \text{insurance}$$



There is one car per family, though the size of the car increases from a small sedan to a medium sedan when there are more than two family members. Allocations by household composition are as follows:

- Single adult: Adult 36-65 years; small sedan
- Two adults: Adult 36-65 years times 2; small sedan
- One adult, one child: Adult 36-65 years and under-16; medium sedan
- Two adults, one child: Adult 36-65 years times 2 and under-16; medium sedan
- Two adults, two children: Adult 36-65 years times 2, and under-16 times two; medium sedan

The budget assumes each driver has a clean driving record, and those who are high-risk drivers do not drive.

### Transportation Data Sources

*Transportation by Car*: 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](https://exchange.aaa.com/wp-content/uploads/2018/09/18-0090_2018-Your-Driving-Costs-Brochure_FNL-Lo-5-2.pdf)

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](https://nhts.ornl.gov/assets/2017_nhts_summary_travel_trends.pdf)

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

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

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

**Practical Application:** Since ALICE families drive older cars, the cost of vehicle maintenance is likely higher than the budget allots. Consumer Reports 2016 Auto Reliability Survey found that maintenance costs for a 10-year-old car were more than double the cost of a 3-year-old car.<sup>15</sup> And for many households, there are additional costs for young drivers or those with a recent accident.<sup>16</sup>

For public transportation, even within metro areas, the coverage varies. In some cities, public transportation is efficient in and out of suburbs but not across town. In others, there are large areas with no coverage. In most places, however, public transportation often does not go the full distance that most workers need, leaving gaps getting to and from work.<sup>17</sup>

- **Health Care:** The health care budget is the hardest to estimate because needs vary greatly based on a person's health status. The budget focuses on average spending but recognizes that this greatly underestimates the needs of many households. The health care estimate is made up of two separate components: 1) health insurance premiums, and, 2) out-of-pocket costs, including co-pays and medical services, prescription drugs, and medical supplies not covered by health insurance.

**Health insurance premiums:** Employer-sponsored health insurance is still the most common form of coverage (58% of the under 65 year population is covered under employer plans compared to 27% through Medicaid and other government programs, and 7% through nongroup plans such as the ACA marketplace; leaving 10% uninsured).<sup>18</sup> Employee contributions to employer-sponsored health care are used as reported at the state level by the Agency for Healthcare Research and Quality from their annual Medical Expenditure Panel Survey (MEPS). According to a Kaiser Family Foundation studies, low-income households are more likely to have someone in fair or poor health, which then adds 30% to 60% to family health care spending, even for people with employer-based coverage.<sup>19</sup>

**Out-of-pocket costs:** The biggest variation in health care spending is by age; therefore, to estimate the out-of-pocket costs for each household, the Household Survival Budget uses average out-of-pocket costs for families under 65 years (headed by someone 45-54 years) and by income.<sup>20</sup> Because people with lower incomes often spend less because they have limited funds, the cost estimate is based on household income \$40,000-\$69,000.<sup>21</sup>

While the health care budget estimate presented here is the most common low-cost insurance option with the most accurate data, there are an array of options low-income families use, which may be even more realistic for some families, but the data are not consistently available to measure. An increasing number of people under 65 years use the Affordable Care Act Marketplace and around 10% remain uninsured.<sup>22</sup> With high deductibles, Marketplace Silver and Bronze plans can cost more than employer-sponsored health plans, but in many states, subsidies are available. Even being uninsured has costs; in addition to out-of-pocket costs, uninsured households incur the “shared responsibility payment.” Four million taxpayers reported the payment, owing an average of \$708 dollars in 2016.<sup>23</sup> The penalty from 2016 through 2018 was the higher of these: 2.5% of household income (with a maximum of the yearly premium for the national average price of a Bronze Plan sold through the Marketplace), or \$695 per adult and \$347.50 per child under 18, for a maximum of \$2,085 per family.<sup>24</sup>

**Practical Application:** Health care is the budget item with the largest variation by household. Those who are healthy will incur fewer costs and households with a member with a serious condition have significantly higher costs. In 2016, the 5% of people who spent the most on health care spent on average \$50,000 annually; people in the top 1% spent over \$100,000. At the other end of the spectrum, the 50% of the population with the lowest costs spent \$276 a year.<sup>25</sup>

Recent surveys have also noted that greatest growth in people who are under-insured (not having adequate insurance coverage) is occurring among those with employer-sponsored health care.<sup>26</sup>

The cost of health insurance for employees at private-sector establishments is actually higher for employees at firms with more than 50% low-wage workers than for those with less than 50% low-wage workers, suggesting that low-wage workers pay a larger share of health insurance than higher-wage workers.<sup>27</sup>

### Health Care Data Sources

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

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

*Out-of-Pocket Costs:* Bureau of Labor Statistics. (2018). *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*. Retrieved from <https://www.bls.gov/cex/2018/CrossTabs/agebyinc/x45to54.PDF>

- **Technology:** Smartphones have become an essential part of life for people of all ages and income brackets, with 96% of Americans owning a cellphone of some kind, and 81% owning a smartphone.<sup>28</sup> This data does not vary greatly between urban and rural areas or across income brackets, and the only significant variation by age is for those 65 or older (who have lower rates of use). Because cellphones have become essential to work in the U.S., the cost of a smartphone plan is included in the Household Survival Budget for each adult. The cost is based on the cheapest available plan as reported by Consumer Reports. This cost does not include the added expense of the phone itself.

**Practical Application:** Because low-cost smartphone plans have limited functionality and accessibility, ALICE workers who need higher performance have to pay more. While there are government subsidies for low-income residents, the income eligibility is significantly less than the ALICE Threshold, and therefore these subsidies are generally not available for ALICE households.<sup>29</sup>

### Technology Data Source

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/>

- **Miscellaneous:** The Miscellaneous category includes 10% of the budget total (including taxes) as a provision for unforeseen cost increases in these budget items.

**Practical Application:** This category provides a small recognition of the minimal nature of each budget item. It has been standard practice in estimating basic household expenses.<sup>30</sup> It's important to note that this category is used on basic budget items rarely with any left over for dinner at a restaurant, tickets to the movies, or travel, let alone a financial indulgence such as holiday gifts, or a new television — something that many financially secure households take for granted. It also does not allow for any savings, leaving a family vulnerable to any unexpected expense, such as a costly car repair, natural disaster, or health issue.

- **Taxes:** The tax budget includes federal and state income taxes, as well as payroll taxes. Income taxes include standard federal and state deductions and exemptions (though personal exemptions were eliminated in 2018).<sup>31</sup> They also include the federal Child Tax Credit and the Child and Dependent Care Credit as defined in the Internal Revenue Service 1040: Individual Income Tax, Forms and Instructions. They also include state tax deductions and exemptions such as the Personal Tax Credit and renter's credit as defined in each state treasury's 1040: Individual Income Tax, Forms and Instructions. ALICE's state taxes are calculated as the average of the tax rates of the income brackets that apply to the Household Survival Budget.

Local taxes are standardized using the Tax Foundation's individual income tax rates for county and towns. For towns, the tax rate is applied when the population of the town constitutes more than half of the county population.

Payroll taxes — also known as Federal Insurance Contributions Act (FICA) taxes — cover the employee's contribution required to fund Social Security and Medicare.

Real estate taxes are included in the cost of rental housing.

**Practical Application:** Taxes are a legal requirement of earning income in the U.S., even for low-income households. The Earned Income Tax Credit (EITC), a benefit for working individuals with low to moderate incomes, is not included in the tax calculation because the eligibility cut-off is well below the Household Survival Budget and not available to most households without children.<sup>32</sup> However, the EITC helps a large number of families living near or below the FPL: In 2018, 25 million workers and families received, on average, \$2,488.<sup>33</sup>

While the federal income tax system is progressive, in every state in the U.S., at least some low- or middle-income groups pay a higher share of their income in state and local taxes than wealthy families, especially where there is a sales tax.<sup>34</sup>

## Tax Data Sources

*Federal Income Taxes:* Internal Revenue Service. (2020, January 8). *1040 and 1040-SR: Instructions*. Retrieved from <https://www.irs.gov/pub/irs-pdf/i1040gi.pdf>

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

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

*Federal Insurance Contributions Act (FICA) taxes:* Internal Revenue Service. (2020, January 3). Topic no. 751 Social Security and Medicare withholding rates. Retrieved from <https://www.irs.gov/taxtopics/tc751>

## The ALICE Household Stability Budget

The Household Stability Budget represents a more financially stable, less austere standard of living compared to the Household Survival Budget. The Household Stability Budget is comprised of the actual cost of household essentials for stability plus a 10% savings allocation and a 10% contingency allocation, as well as taxes for each county. The data builds on the sources from the Household Survival Budget; differences are outlined below.

- Housing:** The housing budget for a single adult is based on HUD's median rent for a one-bedroom apartment (rather than an efficiency apartment used in the Survival Budget) at the FMR of 50<sup>th</sup> percentile. For one adult with children, the budget is based on a two-bedroom apartment at the median rent. Housing for a family of four is based on the American Community Survey's median monthly owner costs for those with a mortgage (instead of rent for a two-bedroom apartment used in the Survival Budget). Real estate taxes are included in the taxes category (below) for households with a mortgage. Adjustments are made for variation within a metropolitan area through the American Community Survey's 5-year estimates of Median Gross Rent, as discussed in the Household Survival Budget.
- Child Care:** The child care budget is based on the cost of a fully licensed and accredited child care center using the same source as the Household Survival Budget – those reported by each state's governmental department in charge of child care regulations. These costs are typically more than 30% higher than the cost of registered home-based child care used in the Survival Budget.
- Food:** The food budget is based on the USDA's Moderate Level Food Plan for cost of food at home (second of four levels), adjusted for county variation using the Feeding America Cost-of-Food Index, plus the average cost of food away from home as reported by the CES.
- Transportation:** The sources used for transportation in the Stability Budget are the same as those used in the Survival Budget (i.e., CES for public transportation and the Federal Highway Administration and AAA for car-related expenses); however, the budget allocations differ slightly. Where public transportation is deemed a viable option (see Survival Budget for definition), family transportation expenses include public transportation for two adults and gas and running costs for one medium sedan (including more extensive liability insurance than in the Survival Budget). Costs for a single adult include public transportation for one, and half the cost of gas and maintenance for one car.

Because these households have both access to public transportation and a car, it is assumed that they have increased expenses compared to households who only rely on public transportation (as reflected in the Survival Budget), but also drive fewer miles than households who only have a car and no access to public transportation. The calculation is the sum of household members' average daily miles of travel per person by age, times the cost per mile by car type times 100 days (50 weeks, 2 days/week), plus license and fees by type of car, plus depreciation (assuming a 10-year-old car), plus insurance by state.



$[(\text{Average daily miles} * \text{cost per mile}) * 100] + \text{license and fees} + \text{depreciation} + \text{full liability insurance}$

**Where there is no viable public transportation, the formula is:**

$[(\text{Average daily miles} * \text{cost per mile}) * 300] + \text{license and fees} + \text{depreciation} + \text{full liability insurance}$   
+ Vehicle outlay

And car allocations by household composition are as follows:

- Single adult: Adult 36-65 years; small SUV
  - Two adults: Adult 36-65 years times 2; small SUV
  - One adult, one child: Adult 36-65 years and under-16; minivan
  - Two adults, one child: Adult 36-65 years times 2 and under-16; minivan
  - Two adults, two children: Adult 36-65 years times 2, and under-16 times two; minivan
- **Health Care:** Health care costs are similar to the Survival Budget and are based on employer-sponsored health insurance at private-sector establishments as reported by the U.S. Department of Health and Human Services in the MEPS, the same as the Survival Budget. For out-of-pocket health care spending, the stability budget uses spending for households with income above \$70,000 from the CES. With more income, this budget assumes all family members are in good health.
  - **Technology:** Most jobs now require access to the internet and a smartphone. These are necessary to receive work schedules, changes in start time or location, access to work support services and customer follow-up. The Stability Budget includes the cost of a smartphone plan for each adult in the family and basic internet in the house.

#### Technology Data Sources (Stability Budget)

*Smartphone Plan Cost:* 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/>

*Home Internet Cost:* Using data provided by Telogical Survey Data. (2018). Available from <http://www.telogicalsystems.com/>

- **Miscellaneous and Savings:** As in the Household Survival Budget, there is a miscellaneous category as a provision for unforeseen cost increases in these budget items. In addition, there is a savings category. They are each 10% of the budget total (not including taxes).
- **Taxes:** Taxes are calculated in the same manner as in the Household Survival Budget. Because the size of credits and exemptions do not increase with income while tax rates do, the tax line item is much larger in the Stability Budget than the Survival Budget. Real estate taxes are added to the cost of homeownership for the family budget and included in the cost of rental housing for the single adult household and households with children.

## The ALICE Senior Survival Budget

As people age, their household needs change.<sup>35</sup> With more data available by age, the Survival Budget includes a budget for those 65 years and older. The Senior Survival Budget reflects the fact that seniors eat less than younger adults, travel fewer miles for work and family responsibilities, and have increasing health needs, though these additional health care expenses are often offset through Medicare. Social security provides a valuable safety net ensuring that most seniors are out of poverty, but it is not enough to afford even the basic costs faced by most seniors.<sup>36</sup>

- **Housing, Technology, and Taxes:** Housing, technology, and tax budget calculations are the same as the under-65 Survival Budget.
- **Food and Transportation:** The food and transportation budget items use the same sources as the under-65 Survival Budget but reflect more specific costs by age (65+).

### Food and Transportation Data Sources (Senior Budget)

*Transportation by Car:* 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](https://exchange.aaa.com/wp-content/uploads/2018/09/18-0090_2018-Your-Driving-Costs-Brochure_FNL-Lo-5-2.pdf)

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](https://nhts.ornl.gov/assets/2017_nhts_summary_travel_trends.pdf)

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

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

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

- **Health Care:** The health care costs reflect two important differences for older Americans: the universal provision of Medicare and increasing health care needs. The Senior Survival Budget uses the cost for Medicare Part A and B: It assumes that when seniors turn 65, they are enrolled in Medicare Part A, which is free, and elect to purchase Part B. While Part B is not required, most seniors enroll because the cost for the premium is significantly less than the out-of-pocket costs for those with only Part A.<sup>37</sup> The Senior Survival Budget therefore includes average out-of-pocket costs, such as copayments, coinsurance and deductibles for seniors with Medicare Part B.<sup>38</sup> Out-of-pocket costs also include prescription drugs.

Because over 90% of older adults have at least one chronic disease and over 60% have at least two<sup>39</sup>, the Senior Survival Budget assumes that each senior has one chronic condition. The costs for seniors with two or more comorbid conditions are significantly higher than the costs included in this budget, and because poor health is significantly correlated with low income, this is likely the case for a disproportionate number of ALICE households.<sup>40</sup> Cost for chronic disease is reported by Centers for Medicare and Medicaid Services (CMS). The Budget uses the average cost of the top five chronic diseases: hypertension, arthritis, heart disease, cancer, and diabetes.<sup>41</sup> Since the chronic disease data are total expenditure, the Budget assumes the out-of-pocket portion of cost is the same as the average percentage of costs paid out-of-pocket as reported annually in the Medicare Current Beneficiary Survey; in 2016 (latest year available), it was 17.7%.<sup>42</sup> Cost for chronic disease is reported at the county level, allowing the Senior Household Survival Budget to reflect important local variation.<sup>43</sup>

Data from the CMS' Chronic Conditions Data Warehouse is only available from 2008 to 2017, there is a one-year lag in data with the budget year, i.e., the 2018 Household Survival Budget uses 2017 CMS data. Data prior to 2008 were deflated using the non-seasonally adjusted CPI-All Urban Consumers for all items.<sup>44</sup>

Seniors may face additional costs depending on their disability status. More than one-third of seniors have a disability related to hearing, vision, cognitive, ambulatory, self-care, or independent living.<sup>45</sup> These add to basic needs, ranging from assistive devices, special transport, personal assistance, and house adaptation, and can add 30% to the cost of daily living.<sup>46</sup>

### Health Care Data Sources (Senior Survival Budget)

Medicare Premiums: Medicare.gov. (n.d). *Part B costs*. U.S. Centers for Medicare & Medicaid Services. Retrieved from <https://www.medicare.gov/your-medicare-costs/part-b-costs>

Average Out of Pocket Costs: 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](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*

Additional Chronic Disease Costs: 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](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*

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>

**Practical Applications:** Out-of-pocket costs for prescription drugs are included in the budget because 89% of people 65 and older take one or more medications daily. Yet seniors often skimp or forego prescriptions altogether; 21% of seniors do not take their prescriptions due to cost.<sup>47</sup>

## Variation in Household Composition: Costs of Additional Household Members

To allow for budget configurations for every household configuration, there are formulas to estimate the marginal cost of adding adults and children to any of the standard six households included in ALICE Reports. All marginal costs are estimated on a county level and use pre-existing budgets and data sources as the basis for calculations.

- **Additional Adult:** To estimate the cost of adding someone at least 18 years old to a household, the formula takes the difference between the Household Survival Budgets of a one-adult household and a two-adult household, excluding housing, but adding the average marginal cost of an additional bedroom based on HUD's FMR.
- **Additional Child:** The cost of an additional child is the average cost of a child of a specific age (infant, pre-K, school-age) excluding child care, plus the full cost of child care for an infant, pre-K child, or school-aged child.

## Comparison of Household Budgets

The objective of the ALICE Household Survival Budget and ALICE Senior Survival Budget is to calculate the bare minimum needed to live and work in the modern economy, while the ALICE Household Stability Budget aims to show what is needed to support and sustain a secure and economically viable household. Figure 1 compares the sources used for the three ALICE Budgets, as detailed in the previous sections.

**Figure 1.**  
**Summary of Sources Used in ALICE Household Budgets**

Budget Category	Household Survival Budget	Household Stability Budget	Senior Survival Budget
<b>Housing</b>	HUD's FMR (40 <sup>th</sup> percentile) for an efficiency, one-bedroom, or two-bedroom apartment (based on family size), adjusted in metropolitan areas using the ACS	HUD's median rent for single adults and single parents, and a moderate house with a mortgage for a two-parent family as reported by the ACS	Same as Household Survival Budget
<b>Child Care</b>	Registered Family Child Care Homes (using state-specific sources)	Licensed and accredited center for an infant and a preschooler (using state-specific sources)	None
<b>Food</b>	USDA's Thrifty Food Plan by age with county variation from Feeding America	USDA's Moderate Food Plan plus one meal out per month as reported by the CES	Same as Household Survival Budget, but reflect more specific costs by age (65+)
<b>Transportation</b>	Operating costs for a car (based on average daily miles by age, cost per mile, license, fees, and insurance costs from AAA and Federal Highway Administration), or public transportation where viable as reported by the CES	For families, costs are for leasing one car and for gas and maintenance for two cars. For single-adults, costs are for leasing, gas, and maintenance for one car as reported by the CES	Same as Household Survival Budget, but reflect more specific costs by age (65+)
<b>Health Care</b>	Health insurance premiums based on employer-sponsored health insurance as reported by MEPS plus out-of-pocket costs by age and region from the CES	Health insurance premiums based on employer-sponsored health insurance as reported by MEPS plus out-of-pocket costs by age and region from the CES	Cost of Medicare Part A & B, out-of-pocket costs by age (65+) and region, plus out-of-pocket average spending for the top five chronic diseases as reported by CMS
<b>Technology</b>	Consumer Report's lowest-cost smartphone plan for each adult in a household	Consumer Report's lowest-cost smartphone plan for each adult in a household and basic home internet service reported by Telogical Systems	Same as Household Survival Budget
<b>Taxes</b>	Federal, state, and local taxes from the IRS and Tax Foundation	Federal, state, and local taxes from the IRS and Tax Foundation	Same as Household Survival Budget
<b>Savings</b>	None	To ensure stability over time, monthly savings set at 10% of budget	None
<b>Miscellaneous</b>	Cost overruns, estimated at 10% of budget	Cost overruns, estimated at 10% of budget	Same as Household Survival Budget

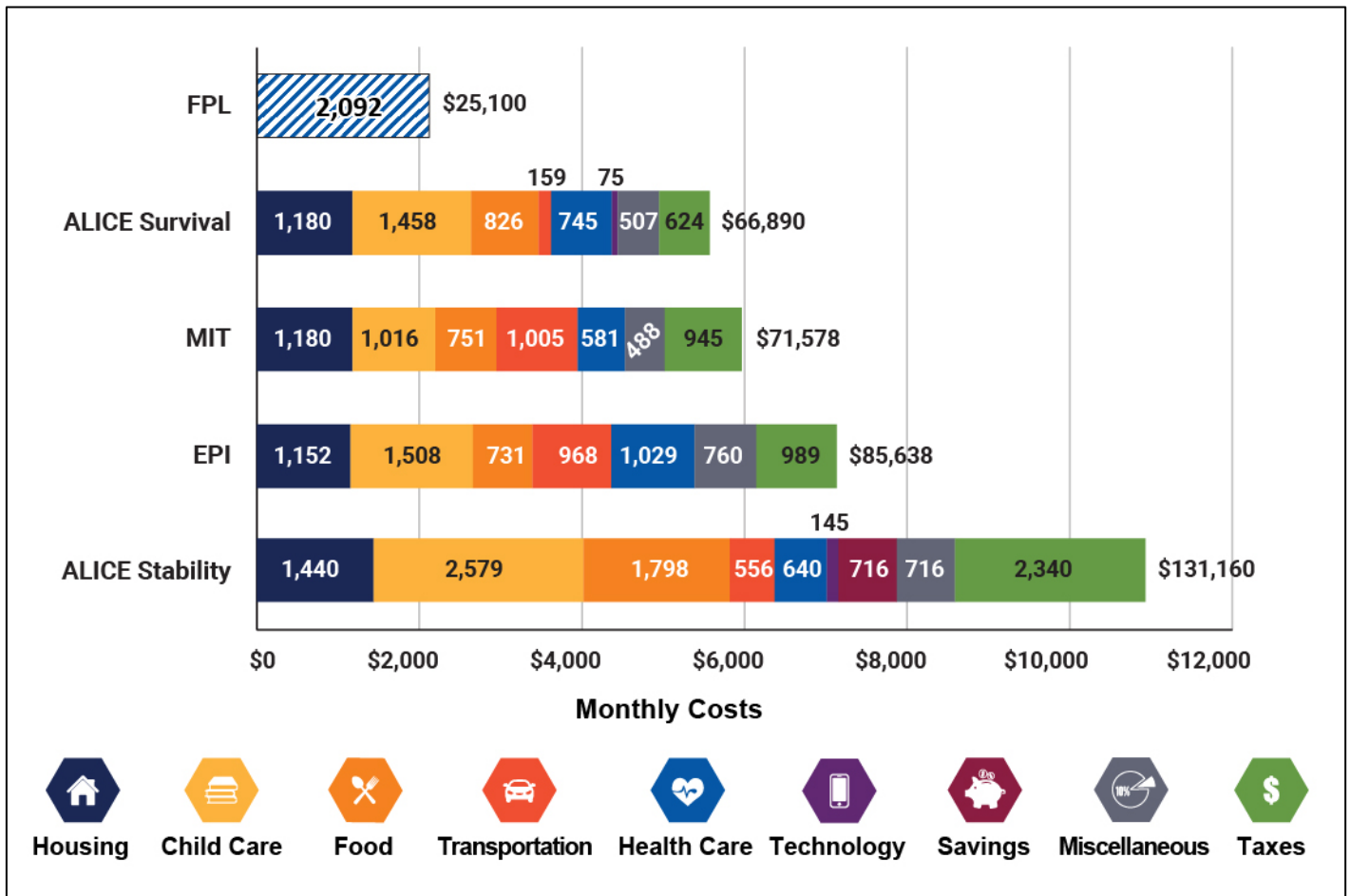
Other organizations have also created household budgets to estimate the cost of living across the country. The Massachusetts Institute of Technology's (MIT) Living Wage Calculator measures the minimum employment earnings necessary to meet a family's basic needs while also maintaining self-sufficiency.<sup>48</sup> The Economic Policy Institute's (EPI) Family Budget Calculator measures the cost to provide a reasonably secure yet modest standard of living.<sup>49</sup>



There are also budgets available for specific states, such as the Self-Sufficiency Standard<sup>50</sup> and budgets from the Iowa Policy Project.<sup>51</sup>

When compared to these other budgets, the ALICE Household Survival Budget is the lowest measure (except for the remarkably insufficient FPL) and the ALICE Household Stability Budget is the highest measure. An example of the cost breakdown of five budgets for Cook County, Illinois in 2018 are shown in Figure 2. In this example, the MIT budget is 7% higher than the ALICE Household Survival Budget; the EPI budget is 28% higher; and the ALICE Household Stability Budget is 96% higher.

**Figure 2.**  
**Example Comparison of Household Budgets, Family of Four, 2018**



Source: ALICE Household Survival and Stability Budget, 2018; Economic Policy Institute, 2018 – Family Budget Calculator; MIT, 2018

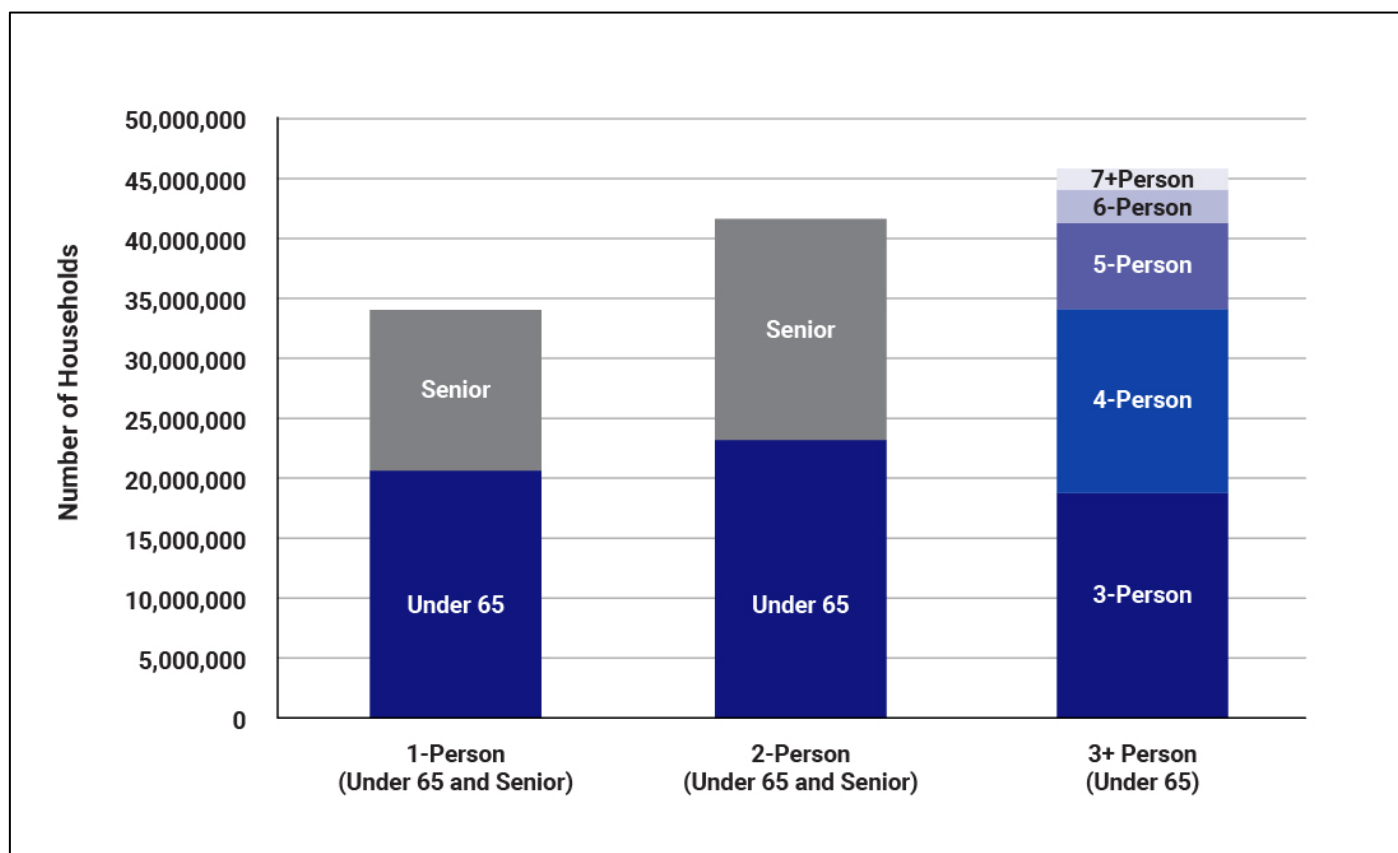
## METHODOLOGY: THE ALICE THRESHOLD

In addition to understanding the basic cost of living, it is important to know the number and proportion of households not able to afford it as well as their demographic features and geographic distribution. Therefore, there is an ALICE Threshold for each county. Based on the Household Survival Budget, the Threshold is rounded to the nearest income category used in the American Community Survey, as discussed below.

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**Two Thresholds:** Because there are significant differences among households by age, there are two separate ALICE Thresholds. In addition to the differences in the cost of basic needs by age, as discussed above, household sizes differ by age as well (Figure 3). For households headed by someone under 65 years old, the median household size across the U.S. is three, while the median household size across the U.S. for a household headed by someone 65 and older is two.<sup>52</sup>

**Figure 3.**  
**Households by Size, U.S., 2018**



Source: American Community Survey, 2018

- Threshold for under 65:** The Threshold for households headed by someone under 65 years is calculated for each county based on the average household size. The cost per person is calculated from the budget closest to the household size, per below. Then the per person cost is multiplied by the average household size of the county.

**HH = less than 2.5:** HHSB Adult \* Ave HH size under-65; If the result is greater than the cost of the Senior HHSB for two adults, then the cost of HHSB for two adults is used

**HH = 2.5 to 3.5:** HHSB two adults and one school age child / 3 \* Ave HH size under-65

**HH = above 3.5:** HHSB two adults, one pre-K and one school age child / 4 \* Ave HH size under-65

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- **Threshold for 65 and over:** Recognizing that a household headed by someone 65 years and older has different costs than younger households, the senior Threshold is based on the senior Household Survival Budget (HHSB) for one and two people, the most common senior household sizes (Figure 3).

Senior HHSB Adult \* Ave HH size 65+

If the result is greater than the cost of the Senior HHSB for two adults, then the cost of HHSB for two seniors is used.

**Household Income:** The average budgets are rounded to the tabulated American Community Survey estimates for household income in the following categories: \$30,000, \$35,000, \$40,000, \$45,000, \$50,000, \$60,000, \$75,000, or \$100,000.

**Average Household Size:** The average household size for households headed by someone under 65 is calculated as the number of households headed by someone under 65 divided by the total population under 65. The average household size for households headed by someone 65 and older is calculated as the number of households headed by someone 65 and older divided by the total population 65 and older. To ensure that results reflect local conditions as closely as possible, averages are calculated at the county level. Results are compared to American Community Survey average family size calculations to ensure reliability where there is a wide discrepancy (defined as the American Community Survey's average household size +/- 1 full person), we use the American Community Survey family calculation.

**Number of ALICE households:** The number of ALICE households is derived by subtracting the number of households in poverty from the total below the ALICE Threshold. Poverty numbers are provided by the American Community Survey for most demographic groups. Because the American Community Survey does not provide poverty estimates by race/ethnicity, the income category of less than \$15,000 per year is used as a proxy, since income figures are broken down by those characteristics.

**Rounding:** To correct for rounding, the percent of households deemed "Above the ALICE Threshold" may be adjusted so the sum of the three income categories equals 100%.

### Income Data Sources

American Community Survey. (2007-2018). 1-Year and 5-Year Estimates. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>

Table DP05: ACS Demographic and Housing Estimates

Table B17010: Poverty Status in last 12 months of Families by Family Type by Presence of Related Children under 18 years of Age

Table B17017: Poverty Status in last 12 months by Household Type by Age of Householder

Table B19031: Age of Householder by Income in last 12 months

Table B19037: Age of Householder by Income in last 12 months

Table S2501 Occupancy Characteristics

## METHODOLOGY: THE ALICE INCOME ASSESSMENT

The ALICE Income Assessment looks at the impact of public and nonprofit resources on the needs of ALICE households. This tool measures the "Unfilled Gap" between the total amount that households below the ALICE Threshold receive in income and the total amount these households still need to reach the ALICE Threshold.

**ALICE household Income:** The total income households below the ALICE Threshold currently receive includes wages, dividends, cash government assistance, Social Security, and in-kind public assistance. The totals are reported in the tabulated American Community Survey estimates by income bracket. The Income Assessment uses the aggregate amount, calculated using the mid-point of each income bracket multiplied by the number of households in each bracket below the Threshold.

The aggregate income that all households would need to reach the ALICE Threshold is calculated by multiplying the number of households with income below the ALICE Threshold in each county by the Threshold value, and then adding the county totals to reach the state total.

**Public and nonprofit resources:** Public assistance used in this analysis includes only programs for low-income households that directly help them meet the basic Household Survival Budget, such as TANF and Medicaid. It does not include programs that assist low-income households in broader ways (such as to attend college) or that assist communities (such as community policing). The analysis is only of funds spent, not an evaluation of the programs or efficacy of meeting household needs. The ALICE Income Assessment includes the following categories:

**Federal Assistance (excluding Health Care):**

- Social Services: Temporary Assistance for Needy Families (TANF), Supplemental Security Income (SSI), and Social Services Block Grant (SSBG).
- Child Care and Education: Only programs that help children meet their basic needs or that are necessary to enable their parents to work are included. They are Head Start, Title I educational services, and the Child Care and Development Fund Block Grant. Though post-secondary education is vital to future economic success, it is not a component of the basic Household Survival Budget, so programs such as Pell grants are not included.
- Food: Supplemental Nutrition Assistance Program (SNAP), School Lunch Program, School Breakfast Program, Child and Adult Care Food Program (CACFP), and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).
- Housing: HUD Housing Choice Vouchers, Low-Income Home Energy Assistance Program (LIHEAP), Public Housing Operating Funds, and Community Development Block Grants (CDBG).
- Taxes: Earned Income Tax Credit.

**Health Care Assistance:**

- Medicaid: Provides money to states, which states must match, to offer health insurance for low-income residents. Also known as the Medical Assistance Program.
  - Children’s Health Insurance Program (CHIP): Provides funds to states to enable them to maintain and expand child health assistance to uninsured, low-income children and, at a state’s discretion, to low-income pregnant women and legal immigrants.
  - Community Health Benefits: Spending by hospitals on low-income patients that includes charity care and means-tested expenses, including Unreimbursed Medicaid minus direct offsetting revenue as reported on Form 990 by a 501(c)(3) organization.
- **State and Local Government Assistance:** This figure includes funds from state and local government (not pass-throughs from the federal government) in the areas of health, social services, cash assistance, and workforce development.
  - **Nonprofit Assistance:** This figure includes spending by nonprofit organizations identified as Human Services organizations. Human Services nonprofit programs are those under section 501(c)(3) reported on Form 990EZ and 990 minus program service revenue, dues, and government grants as reported to the Internal Revenue Service. Because of a lag in data from the Urban Institute’s National Center for



Charitable Statistics (NCCS), 2012 state-level expenditures are adjusted upward using national estimates of growth in nonprofit spending.

**The “Unfilled Gap”:** The gap is the remainder after current need and assistance are subtracted from total need

$$\begin{array}{r}
 \text{Total aggregate household income to ALICE Threshold} \\
 \quad - \text{Current aggregate household income} \\
 \quad - \text{Public Assistance} \\
 \hline
 = \quad \text{Unfilled Gap}
 \end{array}$$

### Income Assessment Data Sources

*Community Health Benefits:* 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>

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

*Federal Spending Data:* U.S. Office of Management and Budget. (2017). Aid to State & Local Governments. In *Fiscal Year 2018 Analytical Perspectives Budget of the U.S. Government* (pp. 171-184). Retrieved from <https://www.gpo.gov/fdsys/pkg/BUDGET-2018-PER/pdf/BUDGET-2018-PER.pdf>

*Non-Profit Assistance:* 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>

*State and Local Government Spending Data:* 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>

*Supplemental Nutrition Assistance Program (SNAP) Data:* 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>

*Supplemental Social Insurance:* American Community Survey. (2018). *1-year and 5-year estimates* [Table B19066: Aggregate Supplemental Security Income (SSI) in the past 12 months (in 2017 inflation-adjusted dollars) for households]. U.S. Census Bureau. Retrieved from <https://data.census.gov/cedsci/>

## METHODOLOGY: THE ALICE ESSENTIALS INDEX

Based on items in the Household Survival Budget, the ALICE Essentials Index provides a national standardized measure of the average change over time in the costs of household essentials, a much narrower definition than the more common rate of inflation based on the BLS’ CPI. The Index includes only essential household items (those found in the Household Survival Budget – housing, child care, food, transportation, health care, and a smartphone plan), calculated for both urban and rural areas. In contrast, the national rate of inflation is based on the CPI, which covers all the goods and services that the general population buys regularly (food and beverages, housing, apparel, transportation, medical care, recreation, education, and communication services). Both indices include taxes where included in the price of the item, such as real estate tax included in rent, but not income or work taxes. With such a broad basket of items, the CPI obscures the change in cost of the bare essentials.<sup>53</sup> The ALICE Essentials Index can be used as a companion to the CPI to highlight how changes in the economy affect low-income families differently than they affect the general population.

The Index tracks the core costs of the three most common household compositions as reported in the Household Survival Budget:

- Two adults – housing, food, transportation, health care, and smartphone plan

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- Family of four with two children in pre-K — same as above plus the cost of children in pre-K, which is more than infant care but less than after-school care and the most reliably reported child care statistic.
- Single senior — same categories as a single younger adult, but with different needs, seniors have different costs than younger households.

The ALICE Essentials Index tracks prices in urban and rural counties, compared to the CPI, which just tracks prices for all urban consumers in Metropolitan Statistical Areas.<sup>54</sup> Counties are separated by U.S. Census designation for urban and rural, and each county is weighted according to its total household population.

## METHODOLOGY: ECONOMIC BENEFITS OF EQUITY

To better understand the extent to which financial hardship is a drain on a state's economy, the Economic Benefits of Equity quantifies the benefits of raising the income of all household income to the ALICE Threshold. The analysis includes additional earnings; additional taxes paid on higher incomes and reduced usage of tax credits for low-income earners such as EITC; savings on government programs that alleviate poverty, such as SNAP and TANF; as well as the multiplier effect of each category on the economy.<sup>55</sup> Lifting family income would be an enormous undertaking; this exercise shows the statewide benefits in order to make a compelling case for moving both policy and investment toward that goal.

- **Additional earnings:** Using the methodology from the Income Assessment, the current and additional aggregate income estimates are calculated from the American Community Survey tables on household income and the ALICE Threshold for each county in the state. The aggregate additional income has added impact because additional wages earned by low-wage workers are put back into the economy.<sup>56</sup>

The macroeconomic multiplier of increased consumer spending is estimated using the multiplier calculated by Moody's Analytics Chief Economist Mark Zandi and methods used by the Economic Policy Institute. Zandi estimated that every additional dollar in compensation for low-wage workers produces a \$1.20 increase in economic activity.<sup>57</sup>

- **Additional tax revenue:** In parallel to the methodology for additional income, tax revenue is calculated by multiplying the median value of each income bracket below the ALICE Threshold by their associated tax rate, then multiply by the number of households in that tax bracket in each county. Then to determine the aggregate amount, do the same for all income brackets. Then for the statewide number, add the county totals to reach the state total.

Additional tax revenue gives state and local governments the opportunity to make investments that matter most to the well-being of residents and businesses — from tax cuts for small businesses, to improvements in infrastructure, health care, and education — that can yield a high return on investment. The Congressional Budget Office reports that the impact of tax cuts is greater when targeted at lower- and middle-income people and achieved without borrowing, and can be a multiplier as high as 1.5. To be conservative, this analysis uses Zandi's estimate for the multiplier for increased infrastructure spending of 1.44.<sup>58</sup>

- **Redirected community spending and indirect benefits:** The current and additional aggregate assistance estimates are the same as reported in the Income Assessment. While there may be ways to spend these public assistance dollars — help families and communities *thrive*, not just survive — this analysis reports only the indirect benefits.

Increased financial stability is also associated with indirect benefits such as improved health (and reduced health care expenditures), reduced crime and homelessness, and greater community engagement. The National Academies of Sciences, Engineering, and Medicine analyzes the cost of childhood poverty and estimates that reversing it would add 5.4% to the state GDP.<sup>59</sup> To be conservative, this analysis uses Holzer's estimate that childhood poverty costs 2.5% of GDP in related health and criminal justice expenses.<sup>60</sup>

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## ADDITIONAL CONSIDERATIONS

Below are additional factors that should be considered when using ALICE Measures and Tools:

- The American Community Survey – which is a primary source used in the calculation of the ALICE Measures – relies on self-reported income, and therefore may be reported incorrectly for a variety of reasons. Respondents may also only report income from what they consider their primary occupation and not include other forms of income from more informal sources.
- The ALICE Measures provide a point-in-time estimate of expenses and financial need. They do not reflect the fact that for many households, income fluctuates throughout the year and that households may draw on savings or other assets when income is not sufficient to meet basic needs. These measures also do not distinguish between permanent and transitory income; students, for example, may have low transitory incomes while they are in school, but may have higher incomes after securing permanent employment.
- To ensure accuracy and confidentiality in ALICE maps, tables, and figures, county-level breakout groups (e.g., by age, race/ethnicity, and family status) with fewer than 50 households are not presented. At the sub-county level, geographies (e.g., zip code, place, and congressional district) with fewer than 100 households are not displayed.

## FOR MORE INFORMATION

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