

METHODOLOGY OVERVIEW & RATIONALE FOR USE WITH 2019 ALICE REPORTS (2017 DATA YEAR)

INTRODUCTION

ALICE, an acronym for **A**sset Limited, Income **C**onstrained, Employed, 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, technology, and health care.

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 development of new measures; four resultant measures; and the methodology and data sources used for each.

BACKGROUND: SHORTCOMINGS OF THE FEDERAL POVERTY LEVEL

An accurate and comprehensive measure of the scope, causes, and consequences of poverty forms the basis for identifying problems, planning policy solutions, and allocating resources. Since the War on Poverty began in 1965, the Federal Poverty Level (FPL) has provided a standard by which to determine 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 (Citro & Michael, 1995; O'Brien & Pedulla, 2010; Uchitelle, 2001).

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 percent of the FPL and Louisiana's Women, Infants & Children Program (WIC) uses 185 percent of the FPL (New Jersey Energy Assistance Programs, 2013; U.S. Department of Agriculture, 2015). Even Medicaid and the Children's Health Insurance



Program (CHIP) use multiples of the FPL to determine eligibility across the country (National Conference of State Legislatures, 2014; Roberts, Povich, & Mather, 2012).

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 (MIT), 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 who are struggling in each county in a state and describe the conditions they face.

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

PARAMETERS

To meet the ALICE project goals that new measures be transparent and provide data that is easily updated on a regular basis and replicable across all states, the ALICE tools were developed based on the following parameters:

- 1. Make a household the unit of analysis: Because people live in a variety of economic units (families, roommates, etc.), the ALICE tools measure households. 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 goal is to define the basic elements needed to participate in the modern economy. Other measures either are unrealistically low, where a household earning the Threshold still cannot afford basic necessities, or they create an income benchmark higher than is required to afford a household's basic needs. The ALICE measures provide a conservative estimate for the costs of household essentials: housing, child care, food, transportation, technology, and health care, 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 we can obtain reliable data across the country. Where possible, we also measure ALICE indicators at the 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. Make new measures transparent and easy to understand: To ensure that measures are transparent and easily understandable, all data come from official and publicly available sources, including the U.S. Census Bureau, the Department of Housing and Urban Development (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. Ensure that measures can be easily updated on a regular basis: ALICE measures are standardized using regularly collected, publicly available data to ensure that they can be applied across every county and updated regularly.
- 7. Make new measures replicable across all states: The ALICE measures quantify financial hardship across geographic jurisdictions and over time. The standard measures enable comparison and common understanding.

- 8. 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 (such as 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).
- 9. 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 ALICE research team developed four ALICE measures, described below, to identify and assess financial hardship at a local level and to enhance existing local, state, and national poverty measures.

Household Survival Budget: The Household Survival Budget is a minimal estimate of the total cost of household essentials – housing, child care, food, transportation, technology and health care, plus taxes and a contingency fund equal to 10 percent of the household budget. It is calculated separately for each county and for different household types. The budget can be updated as costs and the items considered necessary change over time. For comparison, a Household Stability Budget provides an estimate of a more sustainable budget, including a 10 percent savings category.

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

ALICE Income Assessment: The ALICE Income Assessment is a tool that measures: 1) how much income households need to reach the ALICE Threshold; 2) how much they actually earn; 3) how much public and nonprofit assistance is provided to help these households meet their basic needs; and 4) the Unfilled Gap -- how far these households remain from reaching the ALICE Threshold despite both income and assistance.

ALICE Housing Stock Assessment: The ALICE Housing Stock assessment calculates the number of housing units in a county that ALICE and poverty-level households can afford compared with the demand for affordable units. These include rental and owner-occupied units, both government-subsidized and market-rate.

METHODOLOGY: HOUSEHOLD SURVIVAL AND STABILITY BUDGETS

The Household Budgets are a means to understand the cost of living on a local scale. To evaluate the minimal amount needed to survive in a particular geographic area, the Household Survival Budget includes the cost of household essentials – housing, child care, food, transportation, health care, and technology, plus taxes and a 10 percent contingency – priced at the most basic level for each county in a state. The Household Survival Budget is calculated for different household types, including a single adult and a family of four (two adults, one infant, and one preschooler). For comparison, the Household Stability Budget provides an estimate of a more sustainable budget for the same household types.

Household Survival Budget

The Household Survival Budget is comprised of conservative estimates of the cost of household essentials – housing, child care, food, transportation, technology, and health care, plus taxes and a 10 percent contingency – in each county. The data definitions and sources are as follows:

1. **Housing:** The housing budget is based on U.S. Department of Housing and Urban Development's Fair Market Rent (HUD FMR – usually 40th percentile of gross rents, but in some locations HUD reports the 50th percentile) for an efficiency apartment for a single person, a one-bedroom apartment for a head of household with a child, and a two-bedroom apartment for a family of three or more. The rent 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. When HUD uses an average FMR for counties within a metropolitan area, the rent is adjusted using the standard deviation from the average of the American Community Survey's Median Gross Rent 5-year estimates.

Data Sources:

HUD FMR: http://www.huduser.gov/portal/datasets/fmr.html#2017

ACS: http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t Table B25031

2. Child Care: The child care budget is based on the average annual cost of care for one infant and one preschooler in registered family child care homes (the least expensive child care option). Data are compiled by each state's governmental department in charge of child care regulations. When data are missing, state averages are used, though 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. The source for county breakdowns varies by state.

Data Source: State governmental department in charge of child care regulation

3. **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 children 2-3 and 4-5 years old; and family of four with two adults (male and female) and children 6-8 and 9-11 years old. Data for June is used as that is considered by USDA to be the annual average.

Data Sources:

Thrifty USDA Food Plans: http://www.cnpp.usda.gov/sites/default/files/CostofFoodJun2017.pdf State food budget numbers are adjusted for regional price variation: https://www.ers.usda.gov/webdocs/publications/44331/10609_page19.pdf?v=41055

4. Transportation: The transportation budget is calculated using average annual expenditures for transportation by car and by public transportation from the Bureau of Labor Statistics' Consumer Expenditure Survey (CES). CES data is reported by metropolitan statistical areas and national regions, the budget matches counties to these jurisdictions. Costs are adjusted for household size (divided by CES household size except for single-adult households, which are divided by two). Building on work by the Institute of Urban and Regional Development, we suggest that in counties where 8 percent or more of the population uses public transportation, the cost for public transportation is used; in those counties where less than 8 percent of the population uses public transportation, the cost for auto transportation is used instead (Porter & Deakin, 1995; Pearce, 2015). Public transportation includes bus, trolley, subway, elevated train, railroad, and ferryboat. Car expenses include gas, oil, and other vehicle maintenance expenses, but not lease payments, car loan payments, or major repairs.

Data Sources:

American Community Survey:

http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t Bureau of Labor Statistics (CES): http://www.bls.gov/cex/csxmsa.htm#y1112 CES Region definitions: http://www.bls.gov/cex/csxgloss.htm

5. **Health Care:** The health care budget includes the nominal out-of-pocket spending on health insurance, medical services, prescription drugs, and medical supplies using the average annual health expenditure reported in the CES. The cost is based on region and household income. Costs are adjusted for household size (divided by CES household size except for single-adult households, which are divided by two).

Data Source:

Bureau of Labor Statistics (CES) - Cross-tabulated Tables https://www.bls.gov/cex/csxcross.htm#y1314

6. Technology: Smartphones have become a regular and relied upon part of life - ubiquitous across ages and income brackets. Ninety-five percent of Americans own a cell phone of some kind, and 77 percent own a smartphone (Pew Research Center, 2017). These data do 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 than their younger counterparts). Because cell phones have become essential to work in the U.S., the cost of a smartphone is added to the Household Survival Budget for each adult (Pew Research Center, 2018). The cost is based on the cheapest available as reported by Consumer Reports. While there are government subsidies for low-income residents, the income eligibility is significantly less than the ALICE Thresholds, and therefore these subsidies are excluded.

Data Source:

Consumer Reports: https://www.consumerreports.org/u-s-cell-phone-carriers/best-cell-phone-plans-save-money/ (2017 prices)

- 7. **Miscellaneous:** The Miscellaneous category includes 10 percent of the budget total (including taxes) to cover cost overruns.
- 8. **Taxes:** The tax budget includes both federal and state income taxes where applicable, as well as Social Security and Medicare taxes. These rates include standard federal and state deductions and exemptions, as well as the federal Child Tax Credit and the Child and Dependent Care Credit as defined in the Internal Revenue Service 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 incorporated as applicable.

Data Sources:

Internal Revenue Service 1040: Individual Income Tax, Forms and Instructions for relevant years, such as: https://www.irs.gov/statistics/soi-tax-stats-individual-statistical-tables-by-size-of-adjusted-gross-income# grp2

State Individual Income Tax Brackets: https://taxfoundation.org/state-individual-income-tax-rates-brackets-2018/

State Individual Income Tax Rates: https://taxfoundation.org/state-and-local-sales-tax-rates-in-2017/

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 plus a 10 percent savings allocation and a 10 percent contingency allocation, as well as taxes for each county. The data builds on the sources from the Household Survival Budget; differences are outlined below.

- 1. **Housing:** The housing budget for a single adult is based on HUD's median rent for a one-bedroom apartment, rather than an efficiency at the Fair Market Rent of 40th percentile; for a head of household with children, the basis is a two-bedroom apartment at the median rent; and housing for a family 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 at the 40th percentile. Real estate taxes are included in the tax 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.
- 2. **Child Care:** The child care budget is based on the cost of a fully licensed and accredited child care center. These costs are typically more than 30 percent higher than the cost of registered home-based child care used in the Household Survival Budget. Data is compiled by local child care resource and referral agencies and reported to the national organization, Child Care Aware of America.
- 3. **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 regional variation, plus the average cost of food away from home as reported by the CES.
- 4. **Transportation:** Where there is public transportation, family transportation expenses include public transportation for one adult and gas and maintenance for one car; costs for a single adult include public transportation for one, and half the cost of gas and maintenance for one car. Where there is no public transportation, family expenses include costs for leasing one car and for gas and maintenance for two cars, and single-adult costs are for leasing, gas, and maintenance for one car as reported by the CES.
- 5. **Health Care:** Health care costs are based on employer-sponsored health insurance at a low-wage firm as reported by the U.S. Department of Health and Human Services in the Medical Expenditure Panel Survey (MEPS). Also included is out-of-pocket health care spending as reported in the CES.

Data Sources:

U.S. Department of Health and Human Services in the Medical Expenditure Panel Survey (MEPS) for relevant years. (Note: 2007 data not available; 2008 was used instead.) For example: Table II.C.2 Average total employee contribution

http://meps.ahrq.qov/mepsweb/data_stats/summ_tables/insr/state/series_2/2017/tiic2.htm

Table VII.C.2. Average total employee contribution (in dollars) per enrolled employee for single coverage at establishments that offer health insurance

http://meps.ahrq.gov/mepsweb/data_stats/summ_tables/insr/state/series_7/2017/tviic2.htm

Table VII.D.2. Average total employee contribution (in dollars) per enrolled employee for family coverage at establishments that offer health insurance where percent of low-wage employee contribution is 50 percent or more

http://meps.ahrg.gov/mepsweb/data_stats/summ_tables/insr/state/series_7/2017/tviid2.htm

6. **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.

Data Sources:

Consumer Reports: https://www.consumerreports.org/u-s-cell-phone-carriers/best-cell-phone-plans-save-money/ (2017 prices)

Telogical survey data http://www.telogicalsystems.com/

- 7. **Miscellaneous and Savings:** As in the Household Survival Budget, there is a miscellaneous category to cover cost overruns. In addition, there is a savings category. They are each 10 percent of the budget total (not including taxes).
- 8. **Taxes:** Taxes are calculated in the same manner as in the Household Survival Budget, but the amounts are much larger as the size of credits and exemptions does not increase with income.

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 and, where possible, their demographic features and geographic distribution. To do so, we calculate ALICE Thresholds for each county based on the Household Survival Budget. To assess the proportion of households living below that Threshold and their demographic characteristics, we round these figures to the nearest income category used in the American Community Survey, as discussed below. Data are from the American Community Survey: http://www.census.gov/acs/www/.

- Two Thresholds: Because there are significant differences between households by age, there are two
 separate ALICE Thresholds: one for households headed by someone under 65 years old, and another for
 households headed by someone 65 years and older. They are calculated separately for each county in a
 state.
 - Threshold for under 65: The Threshold for households headed by someone under 65 years old is based on the average of the least expensive Household Survival Budget (Single Adult) and the most expensive Household Survival Budget (Family of Four), reflecting the wide range of types of households in this age group. The average budget is then adjusted to the average household size of the location.

(HHSB Single Adult + HHSB Family of 4)/5 * Ave HH size under65

 Threshold for 65 and over: Households headed by someone 65 years and older are less likely to include children. Therefore, the Threshold is based on the Household Survival Budget for a Single Adult.

HHSB Single Adult * Ave HH size 65over

- 2. **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, \$60,000, or \$75,000.
- 3. 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 ACS average family size calculations to ensure reliability where there is a wide discrepancy (defined as the ACS's average household size +/- 1 full person), we use the ACS family calculation.
- 4. **Number of ALICE households:** The number of ALICE households is derived by subtracting the number of households in poverty from the ALICE Threshold. Poverty numbers are provided by the American Community Survey for most demographic groups. Because the ACS 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.
- 5. **Rounding:** To correct from rounding, Above ALICE Threshold is adjusted so total of the three income categories equals 100 percent.

6. Accounting for Large College Populations: For counties and municipalities with large college student bodies – either in absolute numbers or as a proportion of the total population – poverty and ALICE rates can be swayed by the high rate of these young, temporary residents. Using analyses from the Martin Prosperity Institute and input from state ALICE Research Advisory Committee members with expertise in local conditions, we can offer supplementary sensitivity analyses of ALICE rates that exclude and otherwise account for college students (Florida, 2016).

METHODOLOGY: 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 receive in income, cash government assistance, and in-kind public assistance, and the total needed to reach the ALICE Threshold. Household income includes wages, dividends, and Social Security.

There are many resources available to low-income families. 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.

- 1. **Federal Spending:** This figure includes a wide array of programs:
 - 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, Neglected and
 Delinquent Children and Youth Education, Rural and Low-Income Schools Program, and Homeless
 Children and Youth Education. 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 Section 8 Housing Choice Vouchers (including Fair Share Vouchers and Welfare-to-Work Vouchers, the Section 8 Rental Voucher program (14.855), or the former Section 8 Certificate program (14.857)), Low-Income Home Energy Assistance Program (LIHEAP), and Community Development Block Grants (CDBG).
 - FITC Farned Income Tax Credit
- 2. Health Care: This figure includes:
 - Medicaid Provides money to states, which they must match, to offer health insurance for lowincome 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.

- 3. State and Local Government Spending: This figure includes funds from state and local government, not pass-throughs from the federal government, in the areas of health, social services, transportation, and workforce development. Spending on ALICE was estimated from the National Association of State Budget Officers, "State Expenditure Report: Examining Fiscal 2016-2018 State Spending."
- 4. **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.

Data Sources:

Community Health Benefits – NCCS Data Web Report Builder, 501(c)(3) Statistics of Income 990 Report for 2012, Urban Institute and The Nonprofit Sector in Brief 2018: https://nccs.urban.org/publication/nonprofit-sector-brief-2018#finances

Earned income Tax Credit – Federal spending retrieved from <a href="https://www.eitc.irs.gov/eitc-central/statistics-for-tax-returns-with-eitc/statistics-for-2017-tax-returns-with-eitc/statistics-fo

Federal spending data was gathered from Office of Management and Budget, "Fiscal Year 2017 Analytical Perspectives Budget of the U.S. Government," U.S. Government Printing Office, Washington, DC. 2018. https://www.gpo.gov/fdsys/browse/collectionGPO.action?collectionCode=BUDGET

Non-Profit Revenue for Human Services, registered charity – NCCS Data Web Report Builder, 501(c)(3) Statistics of Income 990EZ and 990 Report, Urban Institute, 2012 and the Nonprofit Sector in Brief 2018: https://nccs.urban.org/publication/nonprofit-sector-brief-2018#finances

State spending data was gathered from: National Association of State Budget Officers (NASBO), "State Expenditure Report: Examining Fiscal 2016-2018 State Spending," 2018. http://www.nasbo.org/mainsite/reports-data/state-expenditure-report

Supplemental Nutrition Assistance Program (SNAP) data from U.S. Department of Agriculture (USDA), Data and Statistics website. http://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap

Supplemental Social Insurance, B19066 - Aggregate Supplemental Security Income (SSI) in the Past 12 Months For Households, American Community Survey, 2018.

METHODOLOGY: ALICE HOUSING STOCK ASSESSMENT

One of the most difficult conditions that most ALICE households face is the high cost of housing. Ultimately, housing cost is determined by what someone is willing to pay. However, the housing stock in an area can become out of sync when it is slow to adjust to demographic and economic changes. A mismatch occurs when the types of housing units residents want at certain price levels do not match the types of housing that exist, and a limited supply pushes up prices for all units.

An analysis of the number of units that are affordable for ALICE families reveals that there is indeed a mismatch between the number of households with income below the ALICE Threshold and the number of housing units that they can afford in a given county. Because there has been no accurate assessment of the number of rental and owner-occupied units that includes both government-subsidized and market-rate housing that ALICE families can afford, we developed the ALICE Housing Stock Assessment.

The demographic and economic changes discussed above are causing significant shifts in housing demand. At the same time, there are many constraints on the housing market that prevent it from adjusting quickly. They include limited land availability for new housing, zoning regulations on the type of housing that can be built, and the cost of construction.

The ALICE Housing Stock Assessment relies on the actual cost of housing and a county-level, cost-based threshold, whereas other approaches use either the Area Median Income (which takes into account county variation but does not necessarily have a relation to the actual cost in the area) or the bottom quintile or a flat rate (such as \$500) across all areas (Apgar, 1990; Goodman, 2001; Quigley & Raphael, 2001; U.S. Department of Housing and Urban Development, 2015). Also, these other approaches do not take into account the distribution of income below their thresholds, while the ALICE Housing Stock assessment does so along the Census breaks.

- 1. **Housing Affordability:** Defined as spending no more than one-third of income on housing.
 - Rental Affordability is based on the cost of rent.
 - Ownership Affordability is based on the cost of mortgage payments plus real estate taxes.
- 2. **Number of Affordable Units:** Calculated by totaling the number of units where the housing cost is below one-third of the ALICE Threshold.
 - Renter-occupied: Based on the gross rent as reported in the tabulated American Community Survey estimates in the following categories: Less than \$200, \$200 to \$299, \$300 to \$499, \$500-\$749, \$750 to \$999, \$1,000 to \$1,499, and \$1,500 or more.
 - Owner-occupied: Based on the real estate taxes and mortgage of housing value as reported in the tabulated American Community Survey estimates in the following categories: Less than \$50,000, \$50,000 to \$99,999, \$100,000 to \$149,999, \$150,000 to \$199,999, \$200,000 to \$299,999, \$300,000 to \$499,999, \$500,000 to \$999,999, and \$1,000,000 and over.
- 3. **ALICE Renters and Owners:** Based on the income brackets of households. These differ from the income brackets of households by age:

Housing Survey income brack	ets ACS Income brackets
Less than \$5k, \$5-10k	Less than \$10k
\$10-15K	\$10-15K
\$15-20k	\$15-20k
\$20-25k	\$20-25k
\$25-35k	\$25-30k, \$30-35k
\$35-50k	\$35-40k, \$40-45k, \$45-50k
\$50-75k	\$50-60k, \$60-75k
\$75-100k	\$75-100k
\$100-150k	\$100-125k, \$125-150k

The larger income ranges by housing tenure reduce the precision of estimates for ALICE renters and owners. Thus, the results of this analysis are presented in ranges and compared to estimates derived from other methods to provide the best housing picture.

4. Comparison: Comparison between the number of affordable units and the number of ALICE households provides some insight into the additional number of units needed to house all ALICE households affordably. Such a comparison is bound to underestimate the need, as it assumes that all ALICE and poverty households are currently living in units that they can afford. The number of households that are housing burdened reveals that existing units are not perfectly allocated by income.

ADDITIONAL INFORMATION

For questions, contact Stephanie Hoopes, Ph.D., at Stephanie.Hoopes@UnitedWayNNJ.org