

DETERMINING MORE ACCURATE LIVING COSTS FOR MEDIAN- AND LOWER- INCOME AMERICAN FAMILIES

TRUE LIVING COST (TLC) INDEX

By The Ludwig Institute for Shared
Economic Prosperity (LISEP)

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Executive Summary

What it is:

The TLC Index is a metric that provides a more accurate picture of the cost of living for LMI families.

What it does:

The TLC measures the cost of a set of minimal adequate needs a household requires to function: housing, medical care, transportation, food, childcare, technology, and miscellaneous, taking into account household size and region.

Why it matters:

To understand the true economic well-being of LMI families, it is essential to understand how their cost of living changes over time. The CPI understates cost-of-living impact on LMI families.

A key to understanding the health of the economy and the well-being of median- and lower-income (LMI) Americans is a thorough and accurate indicator of the growth of wages and earnings over time, and their effect on real buying power. Through observation of these data, in tandem with other economic indicators, one can gain valuable information on the ability of individuals to sustain basic needs and accumulate material wealth.

One of the most closely watched economic indicators, in addition to employment and wage rates, is the Consumer Price Index (CPI), a widely accepted measure of inflation. The CPI monitors the price of a prescribed market basket of consumer goods and services, and thereby suggests a measure of changes in buying power over time. But while the CPI is a good measure of many rising prices, it has shortcomings when gauging the status of LMI families. In fact, the CPI is biased toward those who consume the most, through the inclusion of luxury items beyond the reach of LMI families – and failure to give appropriate weight to certain essentials. The result is a distorted picture of reality for the majority of consumers.

The Ludwig Institute for Shared Economic Prosperity (LISEP) provides a more accurate picture of the economic reality for LMI families through the creation of a cost-of-living metric.

This begins with a determination of the minimal adequate needs for certain core categories that take into account household size and geographic region. This is followed by tracking changes in prices for these items/services over time to determine the corresponding wage and earnings increases required to maintain basic living standards. The resulting metric is the **True Living Cost (TLC) Index**.

To determine the TLC, the following items are considered essential to maintain a minimal standard of living:

- Housing
- Food
- Transportation
- Healthcare
- Childcare
- Technology
- Miscellaneous (e.g., clothing, personal care, grooming, personal hygiene, etc.)

Each of these items are scaled based on household type and age of consumer. These items are then tracked over time to determine the TLC Index.

The TLC serves as a better measure of actual cost-of-living changes than the CPI by focusing on essential living expenses:

- **CPI includes “luxury items”** in measuring rising prices – less relevant to LMI families
- **Only urban populations are included in CPI**
- **TLC focuses on essentials:** Housing, medical care, transportation, food, childcare, technology, and miscellaneous expenses
- **The TLC reflects** household size and geographic region
- **Accordingly, CPI understates the rising cost of living on LMI families:** TLC rose 1.4 times faster than CPI since 2001

Focusing on essentials only, rather than a wide-ranging basket of consumer items, was revelatory, as price changes in certain items included in the CPI – such as luxury automobiles, for example – have a tendency to be more stable over time, thus ameliorating price fluctuations of essentials. LISEP found that the cost of living, as measured by the CPI, drastically understates changes in living costs for LMI families – **the cost of household minimal needs rose nearly 1.4 times faster than the CPI from 2001-2020, 63.5% compared to the CPI's 46.2%.¹** This discrepancy reveals that the cost of the most basic necessities has gone up dramatically in at least the last 20 years, with a much more profound impact on median- and lower-income Americans. Thus, the TLC Index exposes the inadequacy of the CPI as a measure for critical policymaking.

Some key findings:

- The CPI Housing Index rose 54%; the TLC Index for housing rose 149%
- CPI reported medical costs were up 90%; TLC was up 157%
- CPI reported telephone services went down 7% and information technology costs went down 66%; TLC reports cost of minimal technology needs went up 112%

While other category measures for TLC were in line with CPI reports – and in some categories, TLC reported lower increases – the overall conclusion is that the CPI presents a misleading snapshot of the rising costs of basic needs, which are the majority of expenditures by LMI families. In fact, 38.1% of American families in 2019² did not have the income, even after taxes and transfers, to meet these basic needs. Looking at only families with children, this number rises to 44.3%. This means that as of 2019, over 38% of families, and over 44% of families with children, could not meet their minimal adequate needs after taxes and transfers. The TLC shows that the situation is even more dismal than previously reported, and when one considers that increases in pay, retirement, and Social Security are tied to the CPI report, it is more evident than ever that tens of millions of working-class households are losing financial ground every year.

¹ LISEP endeavored to be as precise as possible in its estimates for each category, but it is important to note that the trend of prices rising faster than CPI holds true regardless of the chosen assumptions. More about LISEP's decision making can be found in the methodology under the Cost-of-Living section of the LISEP website.

² This is the most recent year in which there is a comprehensive American Community Survey showing household income.

Making Ends Meet

SINGLE PARENT WITH ONE CHILD (2019)

Median Income



\$47,684

Housing



\$13,554

Apparel and personal care



\$4,821

Food



\$4,736

Transportation



\$7,225

Childcare



\$9,517

Medical care



\$6,513

Technology



\$2,208

Taxes



\$5,116

Debt: \$6,006

Introduction

An important element for measuring a population's well-being is the ability to judge material wealth throughout time. But one cannot simply say that someone with \$3 today is better off than someone with \$1 a century ago. What can \$3 buy now compared to \$1 then? What is the overall economic environment for someone with this amount of money compared to previous years?

Currently, the most common way to adjust for prices throughout time is through the Consumer Price Index (CPI). The CPI takes a basket of goods and services consumed by urban, average households and tracks the price of this basket over time. This provides a metric of the dollar amount needed to maintain those households' consumption. Every two years, the basket is reassessed based on the government-issued Consumer Expenditure Survey, which tracks spending of those households across the United States. Although this approach does a very good job at tracking specific prices, it is flawed when it is applied to measure cost of living, especially for LMI households.

First, the CPI is mathematically biased towards the consumption of higher-income individuals and households. Because spending from the wealthier portion of the population is more than lower-income portions, high-income households have a larger influence on average spending. So even while LMI households are completely unaffected by the price changes of, for example, luxury watches, these changes influence the CPI.

Second, the CPI is actually the CPI-U, where the U stands for urban. This means only the urban population is considered, and for those living in rural areas, the CPI does not account for the price changes they might face. In spite of this shortcoming, the CPI does include suburban areas and manages to account for approximately 93% of the U.S. population – but this still excludes about 23 million Americans.

Third, the CPI does not allow for the addition of new items to the basket unless an old item is replaced. For example, from 1990 to 2020 mobile phones and cellular spending became a part of the budget for a vast majority of Americans.

But due to the CPI being a bundle where all the goods and services add up to 100%, these costs displaced other costs. But logically, purchasing a cell phone does not mean that one needs less housing – a key flaw in this approach to measuring consumer costs.

While the CPI remains a good measure of inflation on a national basis in the aggregate – that is, how prices change – when it is used as a cost-of-living metric, the CPI shows a distorted reality, particularly for LMI households. LISEP's goal is to construct a more accurate cost-of-living metric for LMI Americans by assessing the cost of meeting their "minimal adequate needs" each year, defined specifically for each good. LISEP's "minimal adequate needs" reflects the spending LMI families need to maintain a basic standard of living. To develop this metric, an assessment is made for basic needs in the categories of housing, food, transportation, medical care, childcare, and transportation. A final category includes miscellaneous expenses deemed necessary for an adequate standard of living, including apparel and personal care products. Recreation, such as going to the movies, was not included, as it was not determined to be part of a household's absolute basic needs.

There have been past attempts to adjust the CPI for different populations. The Bureau of Labor Statistics (BLS) publishes a CPI for the elderly,³ which analyzes price changes relevant to the U.S. population aged 62 and above. Further, BLS economists Thesia Garner, David Johnson, and Mary Kokoski (1996) developed a CPI for low-income households,⁴ which addresses the first problem outlined above but not the latter two. A current working paper by two other BLS economists, Josh Klick and Anya Stockburger,⁵ finds different results. The former paper determined that there is no significant difference in the inflation faced by poorer segments of the population, whereas the Klick and Stockburger paper finds that poorer segments face faster inflation.

The BLS also publishes the CPI for Urban Wage Earners and Clerical Workers (CPI-W), which measures the change in retail prices faced by households working in clerical and

3 Consumer Price Index Group. (n.d.). R-CPI-E Homepage. U. S. Bureau of Labor Statistics. Retrieved December 20, 2021, from <https://www.bls.gov/cpi/research-series/r-cpi-e-home.htm>

4 Garner, T. I., Johnson, D. S., & Kokoski, M. F. (1996). An experimental consumer price index for the poor. *Monthly Lab. Rev.*, 119, 32.

5 Klick, J., & Stockburger, A. (2021, March 8). Experimental CPI for lower and higher income households [Working paper in preparation]. U. S. Bureau of Labor Statistics.

wage occupations (29% of the population).⁶ ⁷ The CPI-W places more weight on “retail” prices facing those consumers, such as food, transportation, and apparel and less weight on housing, medical care, and recreation.⁸ A fourth BLS-constructed measure is the Chained Consumer Price Index (C-CPI-U). It differs from the CPI-U and the CPI-W by using a formula that allows for substitution across the categories of the goods basket and by updating the expenditure weights monthly as opposed to biennially.⁹ What both these metrics have in common is that they measure inflation of prices rather than cost of living – an important distinction from the LISEP True Cost of Living (TLC) Index.

Indeed, for all the various efforts to modify CPI, it remains the driver for many Americans’ thinking about cost of living and inflationary impact on wage growth.

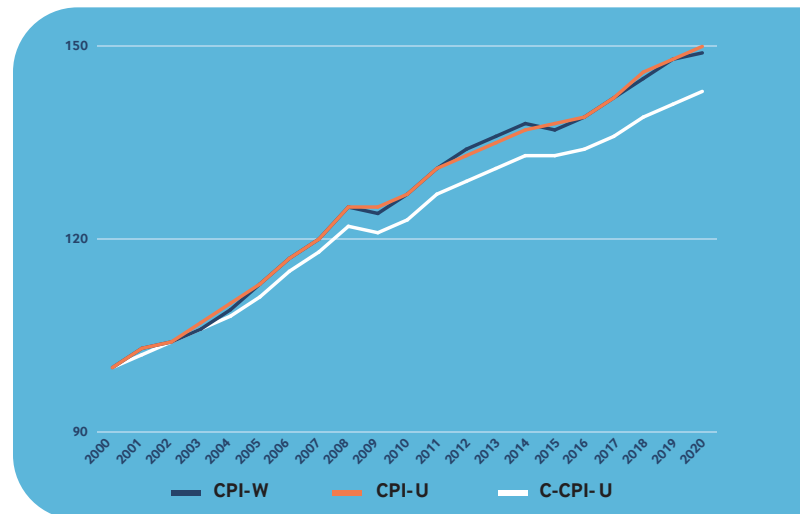


Figure 1: Change of CPI-U, CPI-W, and C-CPI-U, 2001-2020

Implications of using the CPI as a cost-of-living metric

The implications of using the CPI as a cost-of-living metric for LMI American families are numerous. More than 15 federal assistance programs are indexed to some iteration of the CPI in part or full. Two prominent categories are programs pertaining to children and veterans. The first category is important because 51% of households in the U.S. have children, and the second due to a societal responsibility to ensure for the well-being of those who served in the armed forces.

First, there is the Child Tax Credit (CTC). Even though the \$1,000 amount per child itself is not indexed to the CPI, the refundability threshold was tied to the CPI-U intermittently between 2001 and the present, which has a dramatic impact on the number of families that can qualify for the tax credit.¹⁰ Second, portions of the Supplemental Nutrition Assistance

Program (SNAP), which mitigates food insecurity for millions of children, is also subject to the CPI trajectory. Families are eligible to receive SNAP benefits if they meet the income thresholds set by the federal poverty guidelines, which are directly indexed to the CPI-U.¹¹ Third, child nutrition programs are also significantly influenced by the CPI-U fluctuations. In addition to the eligibility thresholds set by the federal poverty guidelines, the per-meal subsidies participating schools receive are indexed to the food away from home (FAFH) component of the CPI-U.¹²

Programs aimed at veterans suffer from the same issue. Military retirement, veterans disability compensation, veterans pensions, and the subsistence allowance for veterans vocational rehabilitation and veterans employment

6 Consumer Price Index Group. (n.d.). Newsroom Frequently Asked Questions. U. S. Bureau of Labor Statistics. Retrieved December 20, 2021, from <https://www.bls.gov/cpi/additional-resources/chained-cpi-questions-and-answers.htm>

7 Those households must meet two requirements: “more than one-half of the household’s income must come from clerical or wage occupations, and at least one of the household’s earners must have been employed for at least 37 weeks during the previous 12 months”: <https://www.bls.gov/cpi/questions-and-answers.htm>

8 Consumer Price Index Group. (n.d.). Newsroom Frequently Asked Questions. U. S. Bureau of Labor Statistics. Retrieved December 20, 2021, from <https://www.bls.gov/cpi/additional-resources/chained-cpi-questions-and-answers.htm>

9 Consumer Price Index Group. (n.d.). Newsroom Frequently Asked Questions. U. S. Bureau of Labor Statistics. Retrieved December 20, 2021, from <https://www.bls.gov/cpi/additional-resources/chained-cpi-questions-and-answers.htm>

10 Nuschler, D. (2013, April). *Inflation-Indexing Elements in Federal Entitlement Programs* (No. R42000). Congressional Research Service. <https://sgp.fas.org/crs/misc/R42000.pdf>.

11 Ibid.

12 Ibid.

participants are all indexed to the Cost-of-Living Adjustment (COLA) issued by the Social Security Administration (SSA), which uses a statutory formula based on the CPI-W.¹³ This means that veterans receive benefits that are not commensurate with the cost of living they face, and thus are worse off over time.

Methodology

Some goods scale differently than others based on household types and age of consumer. For example, the necessary food costs for a four-person household are less than the costs for four one-person households. On the other hand, the cost of two cars is exactly twice the cost of one car. Thus, it is useful to consider real-life family types when evaluating family budgets. LISEP considers the budgets for eight different family types: a single person with zero, one, two, or three children, and a couple with zero, one, two, or three children. This accounts for more than 90% of the U.S. population. For each of these family types, LISEP considers the necessary spending for each of the following categories: housing, food, transportation, healthcare, childcare, technology, and miscellaneous (clothing, personal care expenses, etc.) In addition, taxes are considered as an adjustment to assess the availability of funds for discretionary spending.

It should be noted that some of the categories (e.g., childcare) are only applicable to certain ages. To account for this, the ages for children are fixed at 4 for the first child, 8 for the second, and 12 for the third. Adults are assumed to be 40, and each adult has a median-income, full-time job. This assumption has been made to more accurately calculate costs throughout the index (taxes, healthcare), and has been determined to be the best approximation of an unbiased representation of the middle class.

Housing

Minimal adequate housing needs are defined by the guidelines established by the United Nations. Housing

LISEP's view is that over time, the application of the CPI to these programs has resulted in a declining economic reality for many Americans. Many important policymakers may also not appreciate how serious in practice this misapplication of the CPI has been for the well-being of LMI Americans.

units priced by the U.S. Department of Housing and Urban Development's (HUD) Fair Market Rents meet this standard. For this analysis, LISEP applies the Fair Market Rent for each county, published by HUD each year. It is assumed that each family with up to two children will share a room, and adults will have a room to themselves. Thus, in a four-person family consisting of a couple and two children, minimal adequate housing would require a two-bedroom apartment.

Food

Food costs are based on the minimal adequate need to meet the nutritional standard set by the Centers for Disease Control and Prevention (CDC) and the low-cost food plan from the U.S. Department of Agriculture (USDA), which meets the CDC standard. This plan meets all nutritional needs while assuming that all food is cooked at home, adjusting for regional food costs based on Feeding America's Map the Meal Gap data for each state. Feeding America is a leading researcher of hunger in America.

Transportation

Minimal adequate needs for transportation are based on the minimum required to transport an individual to a place of employment in a timely manner, based on a 45-minute commute one way. A study commissioned by the UK's Office of National Statistics found that once the commute reaches 45 minutes, it becomes significantly negatively correlated with life satisfaction.^{14 15}

13 Ibid.

14 *Commuting and Personal Well-being*. 2014. (2014, February). Office of National Statistics. https://webarchive.nationalarchives.gov.uk/ukgwa/20160105160709/http://www.ons.gov.uk/ons/dcp171766_351954.pdf

15 This study builds on a previous well-being study which finds similar results: Oguz, S., Merad, S., & Snape, D. (2013, May). *Measuring National Well-being - What matters most to Personal Well-being?* Office of National Statistics. <https://webarchive.nationalarchives.gov.uk/ukgwa/20160105231902/http://www.ons.gov.uk/ons/rel/wellbeing/measuring-national-well-being/what-matters-most-to-personal-well-being-in-the-uk-.html>. Although the study is conducted in the UK, the relationship between commute time and work is confirmed in: Choi, J., Coughlin, J. F., & D'Ambrosio, L. (2013). *Travel Time and Subjective Well-Being*. *Transportation Research Record*, 2357(1), 100–108. <https://doi.org/10.3141/2357-12>

The American Community Survey (ACS) is used to determine the share of public versus private modes of transportation. Costs are determined based on data from the Bureau of Transportation Statistics (BTS); costs are based on expenses associated with owning a car, as well as the cost of public transportation.

Healthcare

Minimal adequate healthcare is defined as not being underinsured, using the definition of uninsured from the Commonwealth Fund.¹⁶ It is assumed that each family is covered under employer-provided health insurance, with out-of-pocket expenses and employee contributions based on the Medical Expenditure Panel Survey (MEPS) from the Agency for Healthcare Research and Quality. It is also assumed that dental care is provided via the employer with an employee contribution. LISEP uses the Consumer Expenditure Survey (CE) from the Bureau of Labor Statistics (BLS) to calculate the pricing of dental care.

Childcare

Childcare needs were determined using the qualifications set forth by Childcare.gov and data from Child Care Aware of America, an organization focused on access to quality, affordable childcare, and the Afterschool Alliance, which provides average costs by state for families using aftercare, to measure the cost of childcare centers and afterschool programs. Due to a licensure requirement, it is assumed that childcare providers meet the minimal needs set forth on Childcare.gov. Childcare costs are not allocated for children 12 years of age or older.

Technology

Technology costs were determined based on a minimal level that allows a household to remain digitally connected.

Digital connectivity has proven to be a necessity to access job applications, educational opportunities, and government programs, and has evolved throughout the 21st century with the introduction and widespread adoption of cellular phones, smartphones, and broadband internet. This requires a reassessment each year to determine the needs of the population to remain digitally connected, and currently includes the price of internet service, a computer, phones (smartphones after 2013), and phone service. Phones are not allocated for children. LISEP draws from a variety of sources, including the CE survey, to price data, and PC Magazine and retail stores to price technological goods over time.

Miscellaneous

Based on research showing that grooming and personal hygiene are essential in both the work application process and in the workplace, reasonable expenses are allocated to maintain and/or seek employment, including apparel and personal care expenses. Costs are determined using the CE survey.

Taxes

In the main TLC Index number, tax burdens are not included. However, as an exercise later in this paper, we investigated the budget for recreation and savings for real world families, so we did incorporate tax burdens into that analysis. The TAXSIM32 model, created by researchers at the National Bureau of Economic Research (NBER),¹⁷ is used. For each family type and year, the total net taxes are calculated (taxes minus transfers) based on state and federal tax rates and transfer programs.

Findings Part 1: True Living Cost Index versus Consumer Price Index

Findings show that the cost of living, as measured by the CPI, drastically understates changes in the cost of living for the LMI family meeting minimal adequate needs. The TLC Index

shows that from 2001-2020, the minimal needs cost for the average American household rose nearly 1.4 times faster than the CPI: 63.5% compared to the CPI change of 46.2%.

16 Collins, S. R., Aboulafla, G. N., & Gunja, M. Z. (2020, August 19). *U.S. Health Insurance Coverage in 2020: A Looming Crisis in Affordability*. The Commonwealth Fund. Retrieved November 2, 2021, from <https://www.commonwealthfund.org/publications/issue-briefs/2020/aug/looming-crisis-health-coverage-2020-biennial>

17 The initial version of the model was published with the paper Feenberg, Daniel Richard, and Elizabeth Coutts, *An Introduction to the TAXSIM Model*, Journal of Policy Analysis and Management vol 12 no 1, Winter 1993, pages 189-194. The current version can be found at [z](https://www.econometrics.nl/en/publications/1993-1)

These differences were not evenly distributed across expenditure categories. The CPI housing index rose 54% while the TLC Index for housing grew nearly three times as quickly at 149%. Other striking differences are in medical costs and technology costs. Medical costs for minimal needs went up 157%, compared to the CPI's 90%. Although there is no specific index for technology in the CPI, LISEP used as a comparison both the cost for information technology and telephone services. The CPI for telephone services went down 7% and the CPI for information services went down 66%. Meanwhile, the TLC Index shows the cost for a family to meet their minimal technological needs increased 112%.

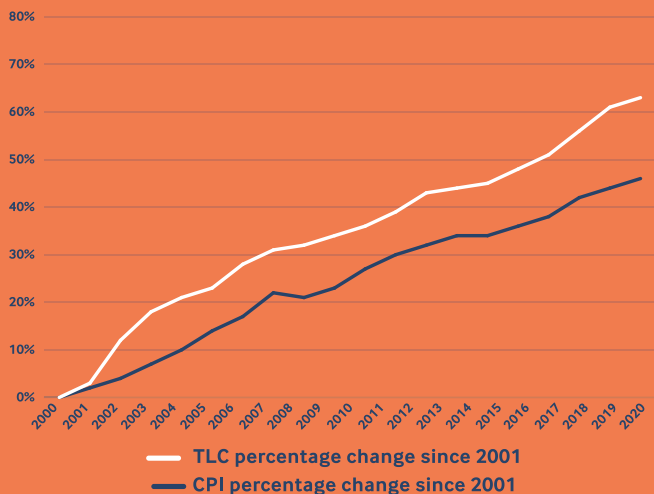


Figure 2: Percent Change of CPI Compared to the TLC, 2001-2020

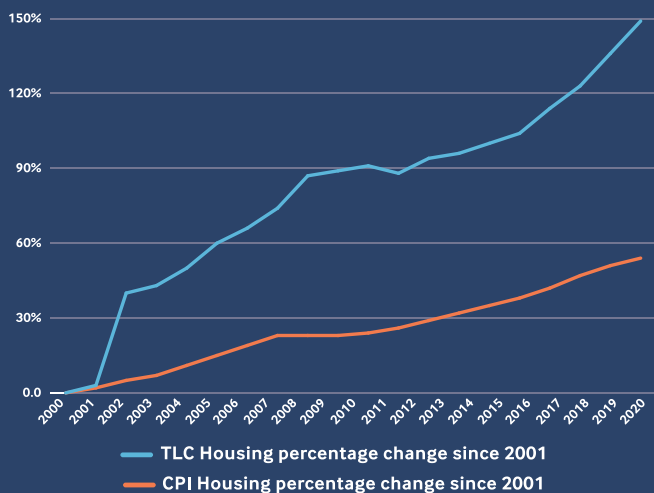


Figure 3: Percent Change of CPI Housing Compared to the TLC for Housing, 2001-2020

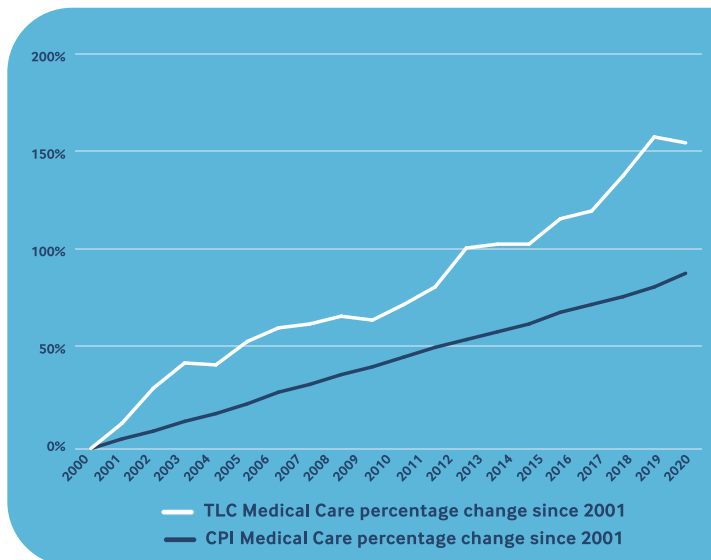


Figure 4: Percent Change of CPI Medical Care Compared to the TLC for Medical Care, 2001-2020

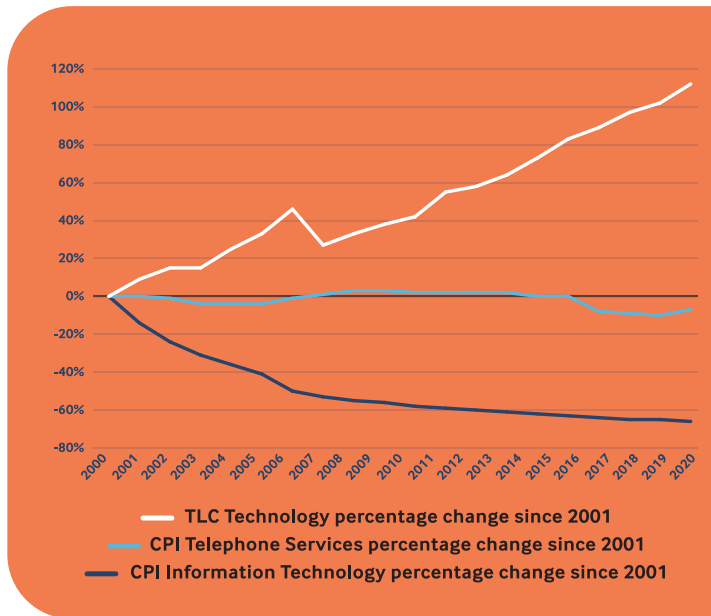


Figure 5: Percent Change of CPI Information Technology and Telephone Services Compared to the TLC for Technology, 2001-2020

The big difference between the change of CPI technology and TLC technology is largely due to the fact that the CPI prices quality adjustments into the calculations. This is useful for measuring inflation, but largely ignores the fact that quality-adjusted goods are often necessary to maintain socioeconomic status and employment ability. So, the way CPI utilizes quality-adjusted goods is misleading for LMI Americans. For example, although it is true that it is cheaper than ever to download one GB of data, it is now a necessity while in the past, this was not the case. It is also now necessary to be able to download data at home and doing so is more expensive for LMI families, not a cost reducer as it may be for wealthier people. The expectation

now is that one's home internet and mobile phone will be able to support these functions, particularly in the COVID-19 era of 2020, when technology access proved critical for educational and work engagement.

Within other categories, though, the CPI and TLC align well in rising costs. For example, food prices measured by the CPI have increased 54%, while LISEP estimates that the costs to meet minimal adequate food needs has increased 43%.

On the other end of the spectrum, some CPI indexes have outpaced the cost increases faced by families to meet their minimal adequate needs. One in particular is childcare. Childcare costs for the average American family to meet minimal adequate needs, as defined in the TLC Index, has gone up 47%, whereas the CPI for childcare and nursery school has increased by 90%.

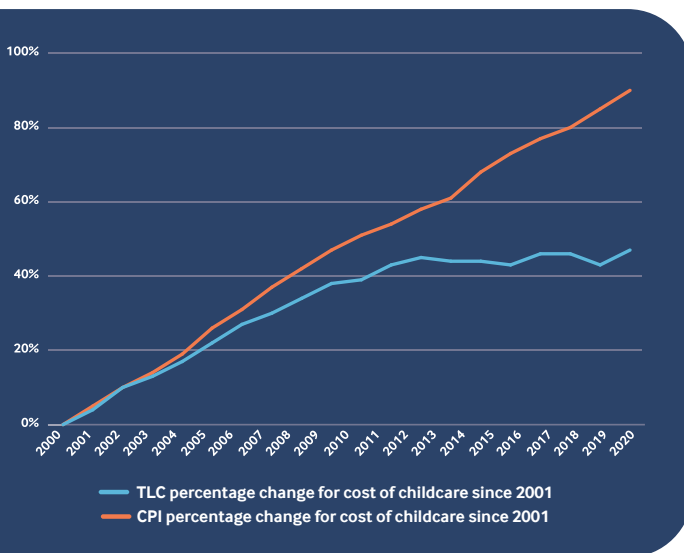


Figure 6: Percent Change of CPI Childcare Compared to the TLC for Childcare, 2001-2020

The primary reason for the disparity between these two measures for childcare is due to TLC's tracking of the average childcare costs across all American households, and the average American household has fewer children in 2020 than in 2001. Since 2001, the proportion of the population that is made up of single adult households has increased from 17.4% to 23.2%, and couples living without children have increased from 27.4% to 32.5%. Single parents and couples with one, two, or three children have all seen their proportions decrease during this period.

So, in keeping the number of children in the household constant, we see that the LISEP results conform similarly to the CPI measurements. The cost of raising one 4-year-old and a 4-year-old and 8-year-old together are shown in comparison with the CPI for childcare in Figure 7.

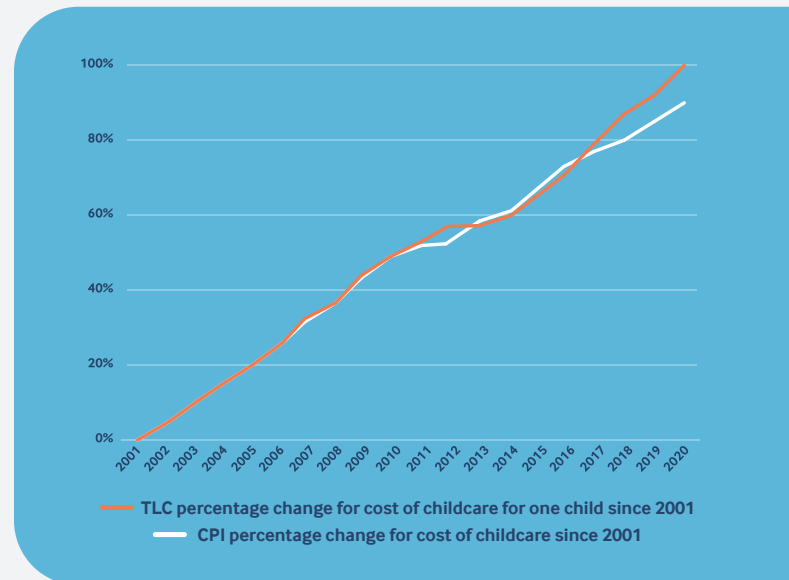


Figure 7: Percent Change of CPI Childcare Compared to the TLC of Providing Childcare for One Child, 2001-2020

The fact that U.S. households have fewer children is actually driving household costs down in all categories. Thus, even the 63.5% change in the TLC Index understates the increase in cost of living if the family type is held constant. For example, the cost for meeting one's minimal adequate needs for a single person has increased 82% compared to the CPI's 46%. Similarly, the same holds true for the other end of the spectrum: the cost of meeting minimal adequate needs for a couple with three children has increased 74%, compared to the total CPI's 46% (Figure 8).

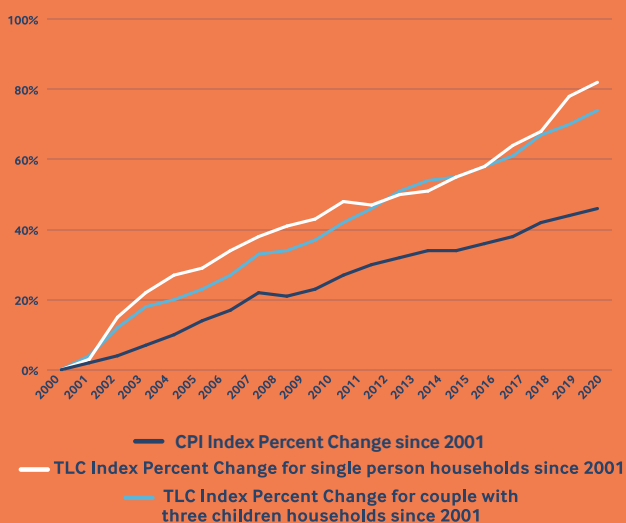


Figure 8: Percent Change of CPI Compared to TLC for Single-Person Households and Households with Dual Earners and Three Children, 2001-2020

The decision to have fewer children does not appear to be driven by choice. The General Social Survey (GSS) has been asking the question “What do you think is the ideal number of children for a family to have?” since 1972.¹⁸ The results of this question do not indicate that people think that it is ideal to have fewer children, rather there are other factors that

are pushing this demographic trend. Below is a graph of the average survey response since 1990, showing that people would prefer to have more children. Thus, we can surmise the cost of living for middle- and lower-income households is having unfortunate demographic effects, pushing families to have fewer children out of necessity rather than preference.

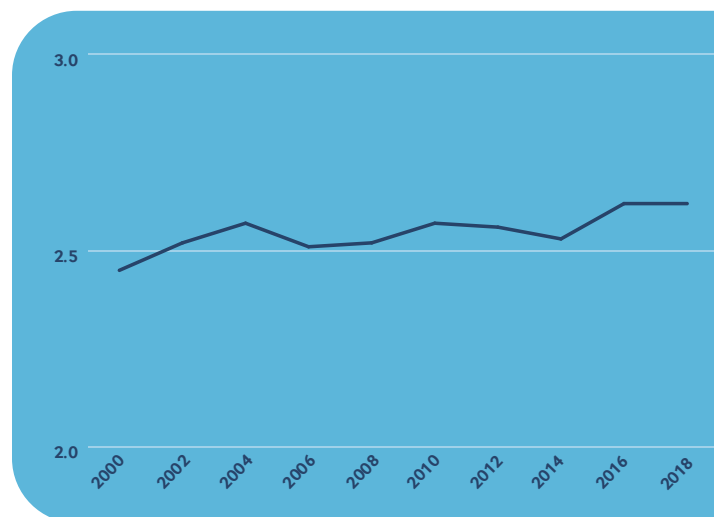


Figure 9: Average Number of “Ideal” Children from the General Social Survey of Ideal Number of Children, 2000-2018

Findings Part 2: Household Well-Being¹⁹

The TLC gives an accurate picture of what each family type needs to purchase to meet its adequate needs. Combining this with measures of household income provides a picture of overall household spending power over time.

An initial way to look at the change in the well-being of American households is to compare each family type’s ability to meet their minimal adequate needs throughout the

sample. Using data from the ACS, we can investigate the total household income for each family. By comparing each family in the population with their applicable family type’s minimal adequate needs budget, we can then see the percentage of each family type that is able to meet these needs. For every family type, fewer families can meet these needs in 2019 than in 2001 (shown in Figure 10).

¹⁸ What do you think is the ideal number of children for a family to have? (n.d.). General Social Survey Data Explorer. <https://gssdataexplorer.norc.umd.edu/variables/619/vshow>

¹⁹ In this section, LISEP further investigates the ability of American families of different sizes to meet minimal adequate needs, as well as how this ability has changed throughout time. For this comparison, 2019 is used as the final year due to the effect of the COVID-19 pandemic on the Census Bureau’s ability to record data through the American Community Survey (ACS) in 2020, causing data problems that led the Census to release only experimental estimates. In addition, a number of fiscal policies temporarily impacted Americans, including stimulus checks and increased unemployment benefit programs. Because of these temporary programs, the tax burden on all family types dropped substantially, but only temporarily, which skews the data. However, data using the 2020 ACS is available on the [LISEP website](https://www.census.gov/data/releases/releases/data/2020/2020-Data-Release-New-and-Notable). 2020 Data Release New and Notable. (2022, January 7), United States Census Bureau. Retrieved January 28, 2022.

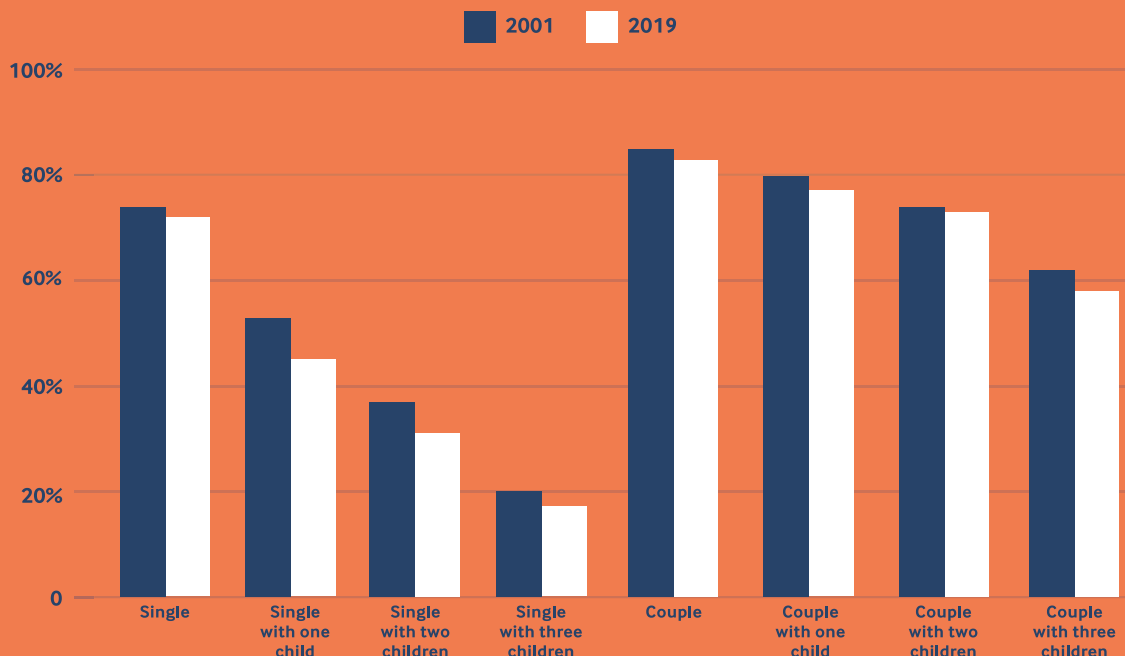


Figure 10:
Percentage of Families in the U.S. Population with Sufficient Household Income to Meet All Minimal Adequate Needs, 2001 and 2019, by Family Type

Figure 11 shows the percentage change of the Median Usual Weekly Earnings for full-time workers presented by the BLS since 2001. This is compared to the TLC Index percentage change since 2001. For each year, the blue line trends above the orange line, meaning that since 2001, workers received a lower real wage.

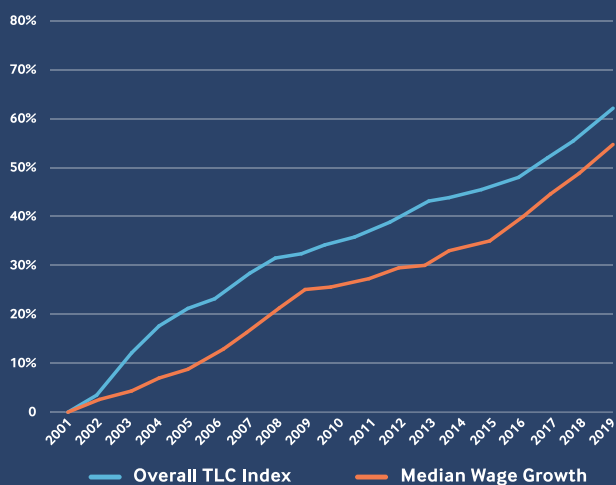


Figure 11: *Percentage Change of Median Usual Weekly Earnings for Full-Time Workers Versus TLC, 2001-2019*

Figure 12 shows the wages of the median worker since 2001, adjusted for inflation using the TLC Index. Like Figure 11, this suggests a reduction of spending power in the last two decades for the median earner. Figure 12 also shows wage growth adjusted by CPI, which indicates that median wages have increased moderately. It should be noted that wage growth has not actually been stagnant over the last two decades – it has been negative.

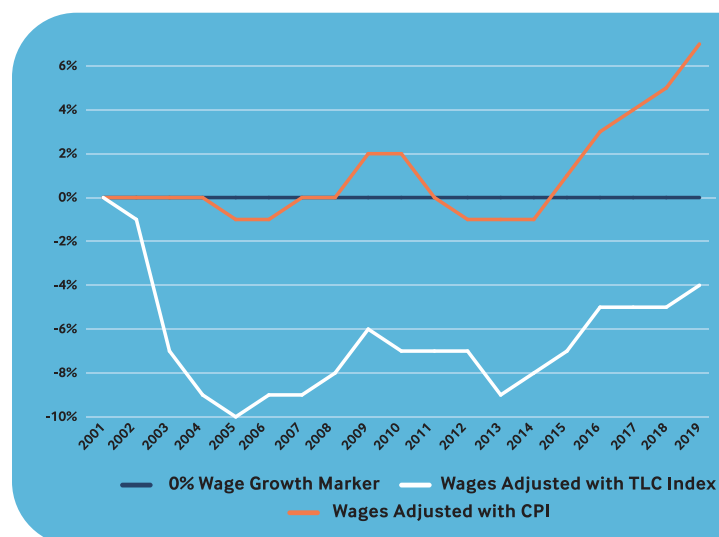
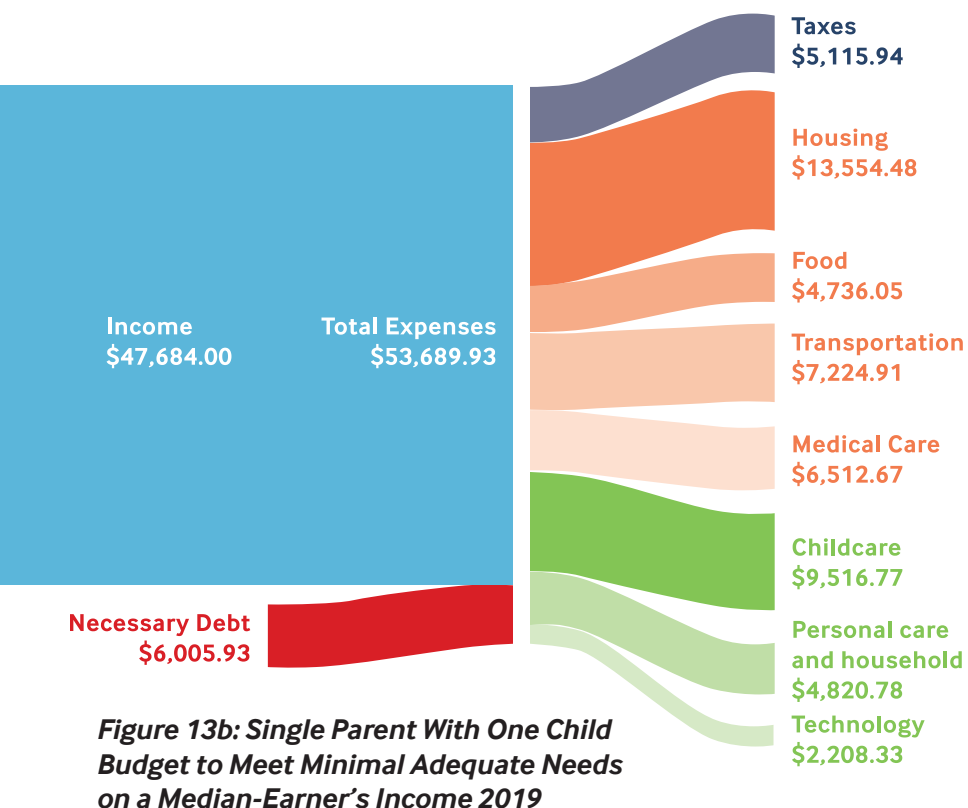
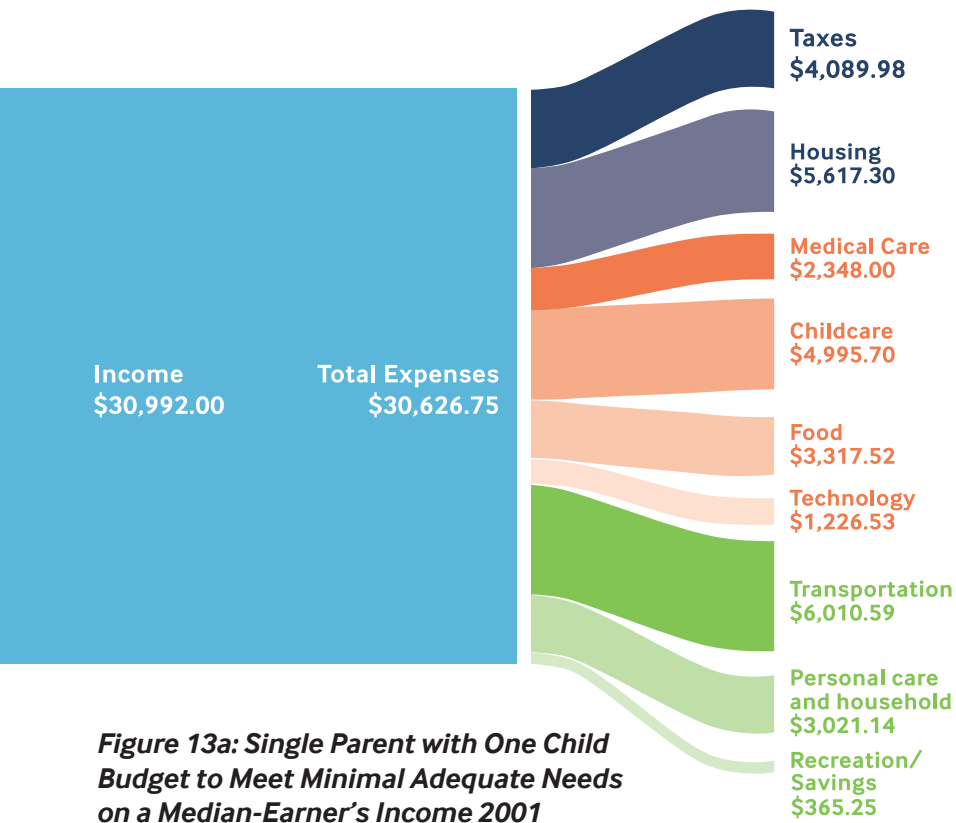


Figure 12: *Percent Growth in Median Earnings 2001-2019, Adjusted for Spending Power*



The TLC Index also provides valuable insight regarding costs and earnings for the average LMI household, as well as how the budget might break down regarding spending and earnings. The bottom line: Many households are failing to meet minimal adequate needs, even in the exact middle of the income distribution. In this section, household expenses are calculated after taxes and transfers.

Figures 13a and 13b show that spending for the minimal adequate needs for a single parent with one child exhausts most of the median earnings in 2001, but still leaves a modest budget for recreation or savings. Unfortunately, by 2019, even the median-wage worker does not earn enough to meet the minimal adequate needs for this household and is forced to borrow more than \$6,000 – more than one-eighth of the household's income – to meet just minimal needs.

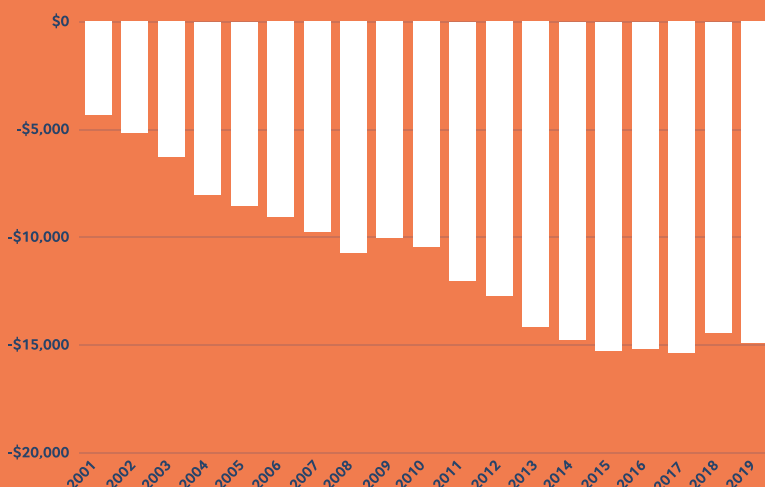


Figure 14: Savings/debt Accumulated by a Median-earning Single Parent with Two Children, 2001-2019

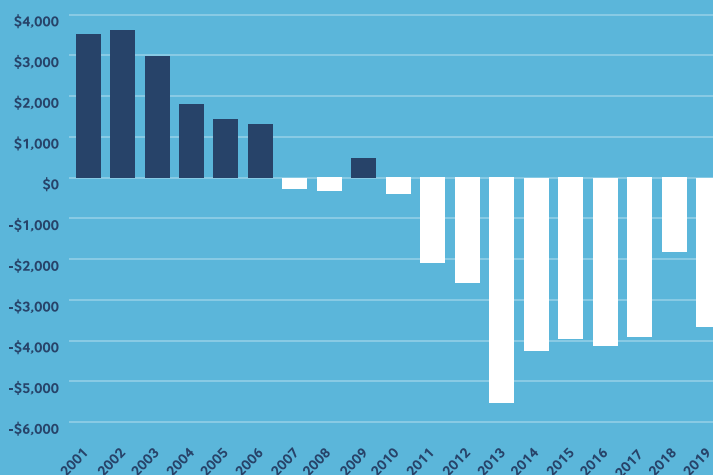


Figure 15: Savings/Debt Accumulated by a Dual-Income, High School Educated Couple with Median Earnings and Two Children, 2001-2019

Figures 14 and 15 address the discretionary spending ability of households throughout time after they meet their minimal adequate needs. This is the financial resources remaining for recreation, education, and possible savings after earned income and any government assistance.

Figure 14 considers a single-parent household with a parent that is a full-time worker earning a median wage with one child; Figure 15 considers a dual-earning household with two children in which both parents have full-time jobs and earn median wages for high school graduates. This level of education is relevant because the

percentage of the population that does not have more than a high school education is more than 60% throughout the 2001-2019 period.²⁰ Thus, this level of income would be applicable to most Americans.

Figure 14 shows that since 2001, a single parent with median earnings was not able to meet the household's minimal adequate needs without taking on debt or sacrificing the family's needs. Moreover, throughout this period, the amount of debt or minimal needs sacrificed grows significantly.

20 U.S. Census Bureau (2021) Years of School Completed by People 25 Years and Over, by Age and Sex: Selected Years 1940 to 2020. Retrieved from census.gov/data/tables/time-series/demo/educational-attainment/cps-historical-time-series.html

Figure 15 illustrates the unfortunate shift for dual - income families from having a small amount of discretionary spending to not being able to meet their minimal needs without taking on debt. Both income and expenses rose in nominal terms, but expenses have risen much faster. The difference between income and expenses is shown with the bars, blue when income is greater and white when expenses are greater than income. Thus, during the Great Recession, the rising cost of minimal adequate needs overcame income growth, even for households that have two full-time income streams. Unfortunately, the trend has continued.

Figures 14 and 15 indicate the inability of households today to save after paying taxes and meeting their minimal adequate needs, which implies that they must take on significant debt to obtain minimal necessities. This means that many middle-class households are unable to dedicate funds to leisure activities, save for retirement, or save for their children's education.

Figure 16 compares the official poverty rate to the percentage of families unable to meet minimal adequate needs.

Figure 16 illustrates the difference in the percentage of households in financial difficulty, subject to the definition of the concept. If difficulty is considered to be at or below the federal poverty rate, this would result in a much smaller portion of households than if difficulty is defined as the failure to meet one's minimal adequate needs.

Each year, the Department of Health and Human Services issues federal poverty guidelines, which are used to determine the eligibility of households for different federal assistance programs.²¹ Federal poverty guidelines are based on preventing hunger. For the purpose of this analysis, it is reasonable to assume that economic well-being must represent a level of living that is well beyond hunger avoidance, and instead must be considered as the ability to sustain one's minimal adequate needs in full. Thus, current use of federal poverty guidelines dramatically underestimates the alarming number of households in difficulty, leaving these households in need without support.

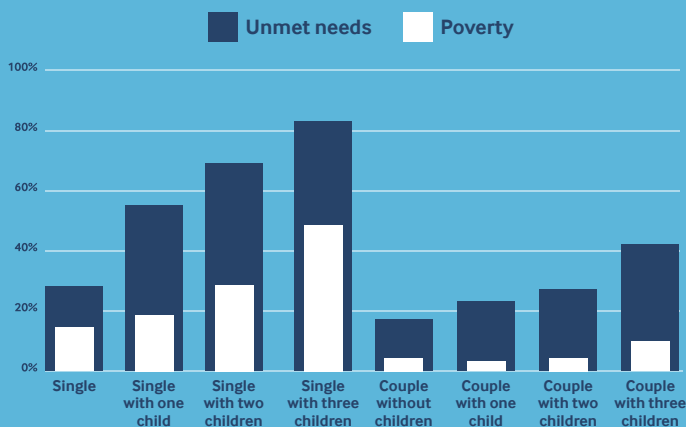


Figure 16: Percent of Households by Family Type Unable to Meet Minimal Adequate Needs Versus Household Poverty Rate, as Per the Federal Poverty Guidelines, 2019

21 The federal poverty guidelines are issued by the Department of Health and Human Services, in contrast with the federal poverty thresholds that are issued by the U.S. Census Bureau. While the former is used as income qualifier for federal assistance programs, the latter is used for statistical purposes to calculate the number of people in poverty each year. More information here: *Frequently Asked Questions Related to the Poverty Guidelines and Poverty*. (n.d.). U.S. Department of Health and Human Services: Office of the Assistant Secretary for Planning and Evaluation (ASPE). <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/frequently-asked-questions-related-poverty-guidelines-poverty>

Conclusion

A one-size-fits-all metric for measuring the financial well-being of a large population is most likely going to shortchange some segment of that population. It appears that the CPI actually shortchanges the vast majority of Americans in terms of measuring the ability to accumulate wealth and meet basic needs. This is especially true for LMI families.

By isolating the most basic expenditures required to maintain a minimal standard of living in modern society – housing, food, transportation, healthcare, childcare, technology, and basic personal needs – one can derive a more accurate picture of how changes in consumer prices impact the average American family. LISEP's analysis of this basic market basket of items shows that overall, the CPI underestimates the impact of basic-needs inflation by a factor of 1.4.

This can have far-reaching implications for LMI households in numerous ways. First, basic adjustments in wages, earnings, and payments, such as retirement benefits and Social Security, are often tied to the CPI. LISEP's research has demonstrated that if this is the case, these households are losing ground at an even greater rate than previously believed.

Second, the CPI is often the basis for national economic

policy. If policymakers are working off the assumption that everything is fine – when in reality, it is not – it will be LMI families that suffer.

While the CPI does an excellent job of measuring the rate of rising prices – inflation – in the aggregate for urban Americans, the resulting metric does little to reflect the actual impact on at least 50% of American households that are at median income or below. By focusing on the basic needs for Americans all over the U.S., policymakers can better guide their efforts toward initiatives that will make an immediate impact on the nation as a whole.

It should be noted that the TLC Index reflects a very basic cost of living. For Americans who aspire to a more generous lifestyle – occasionally going to the movies, going out to dinner, going on a vacation, even taking children to Disney – it's becoming increasingly out of reach for LMI families.



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