LIVING ON THE EDGE: ANALYZING THE TRUE COST OF LIVING FOR EVERYDAY AMERICANS

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.

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 1.3 times faster than CPI since 2001

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.
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 1.3 times faster than the CPI from 2001-2022, 83.8% compared to the CPI’s 65.3%1. This discrepancy reveals that the cost of the most basic necessities has gone up dramatically in at least the last 22 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 71%; the TLC Index for housing rose 109%
• CPI reported medical costs were up 100%; TLC was up 194%
• CPI reported telephone services went down 5% and information technology costs went down 66%; TLC reports cost of minimal technology needs went up 128%

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. 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.
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. The basket of goods and services is reviewed annually based on data from the government-issued Consumer Expenditure Survey (two years prior), which tracks spending patterns of households across the U.S. 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 2022 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.

There have been past attempts to adjust the CPI for different populations. The Bureau of Labor Statistics (BLS) publishes a CPI for the elderly, 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, 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, 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

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wage occupations (29% of the population). 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. 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. 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.

**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 $2,000 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.

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. 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.

Programs aimed at veterans suffer from the same issue. Military retirement, veterans disability compensation, etc.

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6 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
11 Ibid.
12 Ibid.
veterans pensions, and the subsistence allowance for veterans vocational rehabilitation and veterans employment 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.\textsuperscript{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.

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.

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.)

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 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

Transportation needs for the TLC reflect the realities faced by LMI Americans. LISEP prioritizes essential trips like work, childcare, school, and groceries. By tracking car ownership data for the middle 50\% of income earners, LISEP then accounts for \( \frac{3}{5} \) of the average annual mileage. This ensures the TLC reflects essential driving needs without including unnecessary travel.\textsuperscript{14 15}

\textsuperscript{13} Ibid.
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. 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, the National Database of Childcare prices, 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.

### 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 2001-2022, the minimal needs cost for the average American household rose nearly 1.3 times faster than the CPI: 83.8% compared to the CPI change of 65.3%.

These differences were not evenly distributed across expenditure categories. The CPI housing index rose 71% while the TLC Index for housing grew more than 1.5 times as quickly at 109%. Other striking differences are in medical costs and technology costs. Medical costs for minimal needs went up 194%, compared to the CPI’s 100%. 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 5% 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 128%.

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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 76%, while LISEP estimates that the costs to meet minimal adequate food needs has increased 71%. (Figure 6) Childcare costs (Figure 7) also increased very similarly to the CPI.

On the other end of the spectrum, some CPI indexes have outpaced the cost increases faced by families to meet their minimal adequate needs. However, some CPI categories haven’t reflected the true cost increases faced by families struggling to meet basic needs. Transportation is a prime example. While the TLC Index shows transportation costs for essential needs have risen 32% for the average American family, the CPI for transportation has climbed a staggering 73%.

The discrepancies between the CPI and TLC transportation costs stem from their differing methodologies. The CPI assigns higher weight to motor fuel and maintenance, reflecting the average household’s spending habits. This naturally leads to a higher overall transportation cost in the CPI. In contrast, the TLC focuses on essential needs, assuming individuals drive only to meet basic necessities. This translates to a lower mileage assumption (around 10,000 miles per vehicle) compared to the average driving habits captured in the CPI. Consequently, the TLC assigns less weight to fuel and maintenance, resulting in a lower overall transportation cost.
Findings Part 2: Household Well-Being

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

Figure 9 shows the percentage change of the Median Usual Weekly Earnings for full-time workers (sometimes referred to as “Median Wages”) presented by the BLS since 2001. This is compared to the TLC Index percentage change since 2001. For each year, the orange line trends above the blue line, meaning that since 2001, workers received a lower real wage.

Figure 10 shows the wages of the median full time 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 11 utilizes other LISEP research, namely the True Weekly Earnings (TWE) to analyze incomes in relation to cost of living. Because the median earnings used by the government (shown in figure 12) are only for full time workers, this distorts the median wage metric. Thus in Figure 11, we show the TWE adjusted by CPI compared to the TWE adjusted by TLC to analyze real income growth. We have the same takeaways: median wages as measured by TWE have not increased as suggested by the CPI, and in fact they are slightly negative.
The TLC 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 12a and 12b reveal the cost of meeting basic needs for a two-income household, where each partner earns the median income (as defined by the TWE), exceeds the combined median earnings in 2001. Unfortunately, the situation has worsened since then. In 2022, even dual-income households struggled to meet minimal needs.
Figure 13 illustrates the difference in the actual financial well-being needed to maintain minimal needs versus that which is established by the official poverty guideline. In every family size, the former requires much more income.

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. 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. These income measures are pre-taxes and transfers.

17 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 1.3.

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 using 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.

The TLC Index reflects a basic cost of living, offering a crucial starting point for understanding the financial realities of low- and middle-income families. However, the American Dream encompasses more than just basic needs. LISEP’s Minimal Quality of Life Index dives deeper into the cost of life beyond mere survival, measuring the cost of achieving a minimal quality of life that fosters well-being, growth, and the potential for upward mobility.