Home Economics

Analyzing Consumer Spending and Housing Costs

Daniel Oney
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Key Takeaways

- The Consumer Expenditure Survey helps revise the calculation of the Consumer Price Index and tracks household spending.
- Since the 1980s, housing expenses have risen while spending on transportation and food has declined, influenced by economic events like the 2007 housing bubble and COVID-19.
- Mortgage holders spend the most on housing. In Texas, lower-income households spend a higher percentage of their income on housing than the national average.

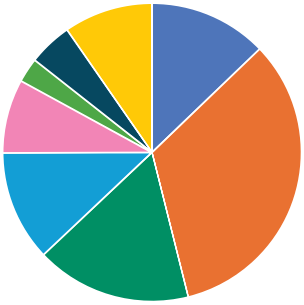
Consumer spending is fundamental to the economy, and Consumer Expenditure Survey (CES) data is a useful tool to assess the state of American and Texas households. With data spanning over 40 years and details on many budget categories, it is the most comprehensive survey of the spending habits of U.S. households. This article includes estimates of household spending over time and compares U.S. and Texas spending patterns with a focus on housing expenses. Real estate practitioners may find these metrics useful in their market analysis.

The CES has many uses, including revising the calculation of the Consumer Price Index (CPI) and comparing household spending across all major expense categories (see sidebar for a discussion of the relationship between the CES and the CPI).

The U.S. Bureau of Labor Statistics (BLS) publishes both the CES and CPI. Consumer spending data are published annually with detailed information for the nation. More recently, the BLS has released somewhat less detailed data for the largest states, including Texas. The CES is the most comprehensive survey of Americans' spending habits and covers every major item in most household budgets. Figure 1 shows the share of spending for the seven largest summary components plus the remainder. Over 100 expense

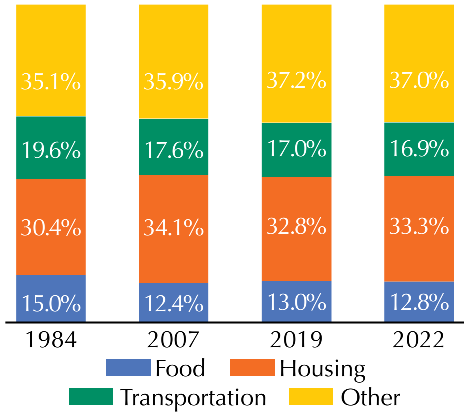
Figure 1. Spending by Major Category (U.S. Totals, 2022)

Average Household Spending (=$72,967)



Source: Texas Real Estate Research Center analysis of U.S. Bureau of Labor Statistics data

Figure 2. Consumer Spending by Major Category Over Time (U.S.)



Source: Texas Real Estate Research Center analysis of U.S. Bureau of Labor Statistics data

components, including details on many types of food, apparel, fuels, and more, are published in CES tables annually.

Long-Term Spending Trends

Household spending patterns have been surprisingly stable from decade to decade. Figure 2 compares spending by large summary categories from 1984, the earliest available data for the current CES. The 2007 and 2019 data points are important benchmark years. They are snapshots of household budgets just prior to major economic events, specifically the Great Recession (or Financial Crisis) and the COVID shutdown. The latest published data are for 2022.

The share of spending on transportation and food has decreased between 1984 and 2022, while the share spent on housing has increased. Housing's budget share matches market circumstances in these years. Housing consumed the largest share in 2007 during the housing bubble before the Great Recession. It fell slightly just prior to COVID and increased again in 2022 during that fevered housing market. The food budget has varied in recent years, but it remains below the 1984 high point. Transportation's share of spending has consistently fallen over the interval.

Focusing on Housing

As the largest component in the CES, housing deserves a closer look. The summary data presented above represent the average for all households. In reality, different types of households have different spending profiles when it comes to housing.

Relationship Between CES and CPI

The Consumer Price Index (CPI) attempts to measure inflation faced by U.S. consumers. Dating back to WWI, it is one of the oldest economic indicators published in the U.S.

Essentially, the CPI measures the monthly percentage change in the prices U.S. households face daily. The index focuses on urban households. It tracks many individual goods and services. The total sum of spending on these items is called the "basket."

The U.S. government has a long history of collecting data on consumer spending, but the modern Consumer Expenditure Survey (CES) began publication in the 1980s. The data are collected through a combination of diaries and surveys completed by households throughout the year.

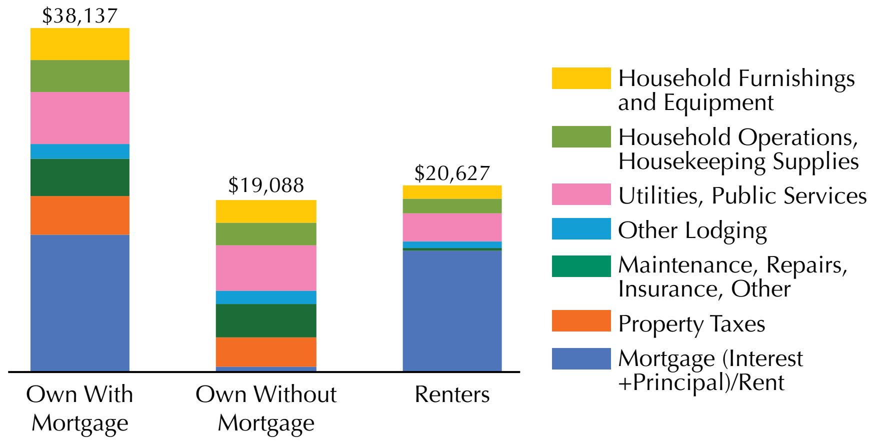
Government statisticians use the annual CES to see how much of household earnings are spent on each item in the basket. If spending on an item increases or decreases, that item is given more or less weight, respectively, in the CPI.

Over time, changes in technology, tastes, and preferences can cause major shifts in household spending. For example, if the share of total spending going to food increased by one percentage point, then the CPI should give one percentage point more emphasis on food. Once the weights (shares) of all goods and services are known, they can be multiplied by the latest prices for each item in the basket to produce a total spending estimate.

The BLS also attempts to adjust the CPI for factors like changes in the quality of goods and services.

Many different CPI indices are produced that represent price changes in the total basket and for components individually or in various combinations. For example, a widely watched index is for so-called core CPI, which excludes the often-volatile food and energy components. The current total weight or individual contribution to CPI for some key expenses include (out of a total 100 percent): food, 13.5 percent; shelter, 36.2 percent; and energy, 6.7 percent.

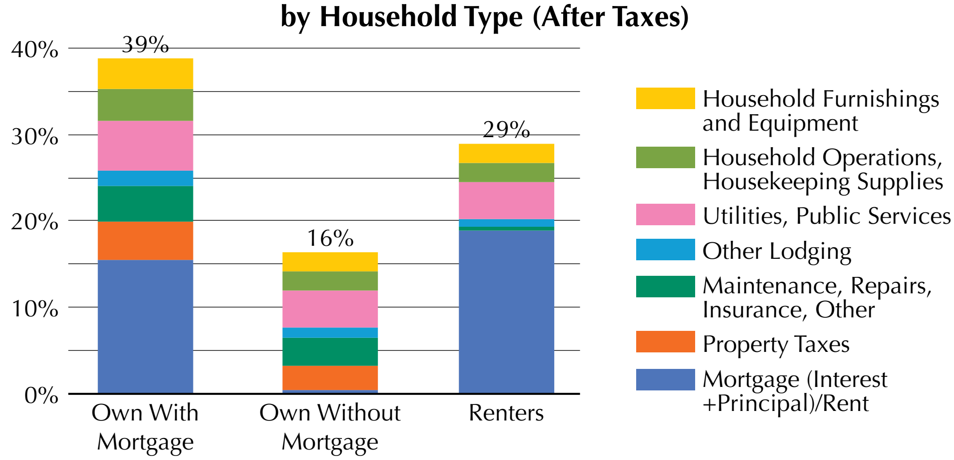
Figure 3. Total Spending on Housing Items by Household Type (U.S.)



Note: The CES applies mortgage interest as spending but mortgage principal as a change in net assets. This is correct from an economic accounting perspective, but households experience both components as an out-of-pocket expense. Data in this figure include interest and principal within the mortgage expense to present a more common-sense picture of spending.

Source: Texas Real Estate Research Center analysis of U.S. Bureau of Labor Statistics data

Figure 4. U.S. Share of Spending on Housing Items by Household Type (After Taxes)



Source: Texas Real Estate Research Center analysis of U.S. Bureau of Labor Statistics data

Figure 3 compares the average spending based on housing tenure: homeowners with a mortgage, homeowners without a mortgage, and renters. Of the three types, mortgage holders spend the most on housing, over $38,000 annually on average. Homeowners without a mortgage enjoy a much lower outflow due to housing expenses ($19,000). Renters, which include those in single-family rentals and apartments, spend over $20,600 a year on housing.

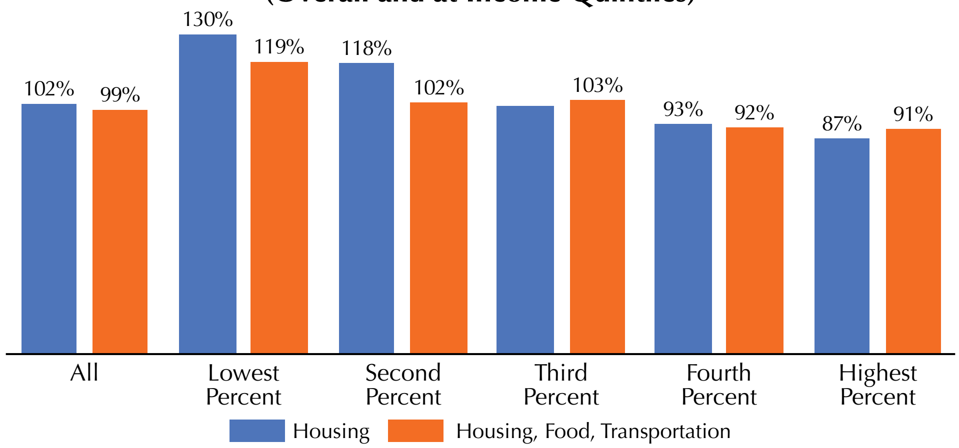
Figure 4 presents housing spending as a share of total after-tax income. Homeowners with a mortgage are still the highest spenders, devoting 39 percent of income to housing. Owners without a mortgage use only 16 percent of income on housing. Renters' incomes are relatively lower than homeowners, and this leads to a 29 percent share going to total housing costs.

Comparing U.S. and Texas Housing Expenses

Looking closer to home, insights about Texas can be drawn from state-level data that the BLS began publishing in recent years. The BLS publishes data only for the four largest states (California, Florida, New York, and Texas). State results have less detail and higher margins of error than the national data. With these warnings in mind, one can still estimate the relative burden of housing on household budgets.

Figure 5 shows the share of total housing-related spending by Texans as a percentage of the national average spending. The results are shown for all households and by income quintile. For instance, for all households, when it comes to housing expenses, Texans spend 102 percent as much, or 2 percent more than, U.S. households overall.

Figure 5. Texans' Spending as Percentage of U.S. Spending (Overall and at Income Quintiles)



Note: Includes TRERC estimates of mortgage principle for Texas households. Data averaged over the 2012-22 period.
Source: Texas Real Estate Research Center analysis of U.S. Bureau of Labor Statistics data

The chart also shows the situation in terms of spending on the three largest household expenses (housing, food, and transportation) combined. The spending gradient across income quintiles shows Texans with lower incomes tend to spend more on housing and the three major expenses than their national counterparts.

At higher income levels, Texans tend to spend a smaller share of income on these expenses. Specifically, Texas households in the bottom three quintiles (bottom 60 percent) spend more than the same quintiles nationally. Texas households in the top two quintiles (top 40 percent) spend less than those quintiles nationally. These income quintile results hold for housing and for the combined housing, food, and transportation comparison.

As this brief spotlight on high-level trends and some of the housing components shows, the CES can inform market analysis of residential and retail trends. The Texas Real Estate Research Center will continue mining this survey in its ongoing coverage of the Texas economy and its real estate markets.

Daniel Oney, Ph.D. (doney@tamu.edu) is research director with the Texas Real Estate Research Center.