

# Esri Consumer Spending Methodology 2017

An Esri® White Paper  
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# Esri Consumer Spending Methodology 2017

## Introduction

Esri has combined the latest Consumer Expenditure Surveys (CEX), 2014–2015, from the Bureau of Labor Statistics (BLS) to estimate current spending patterns. The continuing surveys include a Diary Survey for daily purchases and an Interview Survey for general purchases. The Diary Survey represents record keeping by consumer units for two consecutive weeklong periods. This component of the CEX collects data on small, daily purchases that could be overlooked by the quarterly Interview Survey. The Interview Survey collects expenditure data from consumers in five interviews conducted every three months. Esri integrates data from both surveys to provide a comprehensive database on all consumer expenditures. To compensate for the relatively small CEX survey bases and the variability of single-year data, expenditures are averaged from the 2014 and 2015 surveys.

Esri has updated the models used to estimate consumer spending with its 2017 demographic updates and the next generation of its market segmentation system, Tapestry™ Segmentation. The model that links the spending of consumer units in CEX surveys to all households with similar socioeconomic characteristics is a conditional probability model that integrates consumer spending with Tapestry to differentiate consumer spending by market. The distinction is effective among the smallest US market areas, where differences in consumer spending can be difficult to measure, and for the largest ticket items, where consumer preferences are more pronounced.

Direct comparison with previous CEX databases is affected not only by changes in consumer spending but also by changes in the source data. Two major changes, beginning with the 2013 CEX survey, effectively preclude comparison to estimates prior to 2016. The surveys were updated in 2013 to consolidate a number of items. This change produced the deletion of more than 90 Esri® product codes and the addition of almost 50 new codes.

The other change introduced a different calculation for federal and state taxes. In 2013, the CEX survey changed from reported tax payments to estimated taxes, based on TAXSIM, a program from the National Bureau of Economic Research. Taxes that were reported by survey respondents were considered too low.<sup>1</sup> Accurate tax data is important to estimating after-tax income and the effects of taxes on consumer spending.

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<sup>1</sup> US Bureau of Labor Statistics, Consumer Expenditure Interview Survey Public Use Microdata, 2013 User Documentation, September 2014.

## Consumer Spending Trends

Esri's consumer expenditure estimates signal a recovery in US annual budget expenditures; however, patterns of growth continue to highlight a shift in consumers' attitudes toward spending. Almost a decade since the financial crisis, despite near full employment, recovering home prices, and a near-term positive economic outlook, consumers are focusing their spending on the necessities and remaining cautious on discretionary spending.

New, two-income families are spending on day care or babysitting, the convenience of housekeeping services, and breakfast and snacks on the go. Increased health care spending is being stimulated by Obamacare requirements and reflects the aging of the population. The markets for convalescent and nursing home care, rental of supportive/convalescent medical equipment, and hearing aids have shown significant growth.

Housing costs represent almost a third of the annual budget and include mortgage and rental payments, insurance, utilities, and spending on maintenance and improvements. The housing market recovery has been somewhat uneven across the nation. Demand-driven home price appreciation characterizes the West Coast, while affordable housing and attractive job markets are heating up in midsize metropolitan areas in the South and Southwest. The Northeast and Midwest have shown a slower housing recovery.

The inequality of growth in the housing market is reflected in housing expenditures. Spending is up on both owned and rented dwellings, but spending growth on rental housing is more than three times that of owned dwellings. On average, mortgage expenditures have remained steady. Moving is out of the question for many in unaffordable or lagging markets. Homeowners have begun to reinvest in their homes. Spending on long overdue roofing, plumbing, and electrical work is up, while spending on larger remodeling projects is still conservative.

The increase in rental housing expenditures is driven by skyrocketing rents, particularly in large metropolitan areas where housing demand is high. Rental affordability is a cause for concern, but for many young families who flock to these metropolitan areas for jobs and lifestyle, purchasing a first home is out of the question. Housing affordability is also in decline, but the student debt burden is historically high as well. For these householders, saving for a down payment is a real struggle.

Declining gas prices have afforded the average consumer some flexibility in the budget. In addition, more consumers are enjoying higher levels of purchasing power as credit scores improve, particularly for those hardest hit during the recession, and bankruptcies and foreclosures begin to drop from credit reports.<sup>2</sup> Spending on travel and entertainment is rising; households are taking vacations, as their spending on entertainment at home is more focused. Movies, sporting events, and eating out are popular outlays, but spending on hobbies such as camping, fishing, hunting, and boating is limited. In-home entertainment is considered a necessity. Households are keeping up with technological trends, with above-average increases in audio/video streaming and online gaming.

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<sup>2</sup> <https://www.wsj.com/articles/credit-scores-hit-record-high-as-recession-wounds-heal-1496055600>

Spending patterns are developed by Tapestry markets and updated to 2017 by adjusting to current levels of income. Expenditures represent the 2017 annual averages and totals. Data is reported by product or service and includes total expenditures, average spending per household, and a Spending Potential Index (SPI). Because the average expenditure reflects the average amount spent per household, total expenditure represents the aggregate amount spent by all households in an area. The SPI compares the average expenditure made locally for a product to the average amount spent nationally. An index of 100 is average. An SPI of 120 shows that average spending by local consumers is 20 percent above the national average.

Since 1980, the CEX survey program has provided the data to study consumer spending and its effect on the gross national product. Nationally, the data is also used to measure the effects of economic policy changes or assess the welfare of populations such as the elderly or low-income families. For more than 30 years, Esri consumer spending estimates have provided the data to measure local demand for goods and services.

### **Esri's Data Development Team**

Led by chief demographer Lynn Wombold, Esri's data development team has a history of more than 35 years of excellence in market intelligence. The combined expertise of the team's economists, statisticians, demographers, geographers, and analysts totals nearly a century of data and segmentation development experience. The team develops datasets, including annual demographic updates, Tapestry Segmentation, Consumer Spending, Market Potential, and Retail MarketPlace, which are now industry benchmarks.

For more information about consumer spending data, call 1-800-447-9778.



Esri inspires and enables people to positively impact their future through a deeper, geographic understanding of the changing world around them.

Governments, industry leaders, academics, and nongovernmental organizations trust us to connect them with the analytic knowledge they need to make the critical decisions that shape the planet. For more than 40 years, Esri has cultivated collaborative relationships with partners who share our commitment to solving earth's most pressing challenges with geographic expertise and rational resolve. Today, we believe that geography is at the heart of a more resilient and sustainable future. Creating responsible products and solutions drives our passion for improving quality of life everywhere.



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