Methodology statement: 2024/2029 Esri Consumer Spending

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Background   Since 1980, the Consumer Expenditure Surveys (CEX) program has provided the data to study consumer spending and its effect on the gross national product. The primary goal of the survey is the regular update of the Consumer Price Index. 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 has used the CEX survey microdata to model consumer spending trends and measure local demand for goods and services.

Methodology Esri has combined the latest Consumer Expenditure Surveys from the United States Bureau of Labor Statistics (BLS) to estimate current spending potential. 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 survey 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. For more information on the BLS CEX surveys, refer to [U.S. Bureau of Labor Statistics Questions and Answers](#).

Esri integrates data from both surveys to provide a comprehensive database of all consumer expenditures. To compensate for the relatively small CEX survey bases, and the variability of single-year data, expenditures are averaged from the 2021 and 2022 surveys. With the integration of the 2022 survey data, some spending categories have been realigned. For example, the mealtime distinction of breakfast, lunch, dinner, and so on is no longer available for meals eaten at restaurants or other places. Moreover, spending on alcohol away from home by place of purchase or consumption is no longer available. However, spending on school supplies and equipment is no longer combined with spending on school books and now its own item.

As a share of budget, households are spending more on travel and higher fuel costs (both increasing by 0.6 percentage points). More spending is being earmarked toward home improvement, maintenance, and remodeling services. And, in general, households spending more on retail goods by an increase of 1.4 percentage points. Higher costs of financing are forcing consumers to spend more on vehicle maintenance and repairs rather than buy or lease new vehicles. Expenditures on health care and rent, as a share of wallet, have both dropped by 0.2 percentage points from the prior year. Similarly, budget dollars allocated to utilities has declined by 0.3 percent points, driven by reduced spending on phone services and electricity. The amount spent on cable and satellite TV services continues to decline as more households shift toward video downloads and streaming services.

Esri has updated the models used to estimate consumer spending with its 2024 Updated Demographics and next generation market segmentation system, Tapestry Segmentation. This new taxonomy is based on the latest decennial census data profiles recently published by the United States Census Bureau's Demographic and Housing Characteristics product. While the system will not be fully released until 2025, the Consumer Spending model incorporates the new neighborhood classification system. 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 Esri's Tapestry Segmentation System to differentiate consumer spending by market. Spending patterns are developed by Tapestry markets and calibrated to current levels of income. Consumer Spending estimates represent the expected annual expenditures for the current calendar year.

Direct comparison with previous CEX databases is affected not only by changes in consumer spending but also by changes in the source data. The BLS routinely adds new on-trend consumer items and drops redundant items from its data. Esri takes into consideration sample size when determining items to keep in its listings.

Esri's Consumer Spending database is built on the foundation of the BLS Consumer Spending Surveys. Personal Consumption Expenditures (PCE), a component of the National Income and Product Accounts, from the United States Bureau of Economic Analysis (BEA), also provide spending estimates. While the CEX surveys report price change from the consumer perspective, the PCE combines data from multiple government sources, administrative data, and trade associations including the Census Bureau's Economic Census, Retail Trade Surveys, Service Surveys, and the BEA's International Transactions Account[1]. The CEX surveys U.S. civilian noninstitutional households, but the PCE captures the full population as well as nonprofit organizations. Indirect spending to benefit the consumer, such as employee-paid health benefits, is also accounted for by PCE. More information on the difference between the BLS CEX survey and the BEA Personal Consumption Expenditures is provided in the U.S. Bureau of Labor Statistics Consumer Expenditure Surveys study. Caution must therefore be exercised when using Esri's Consumer Spending estimates as a measure of market size. As a guide, it is recommended that you treat the database as a budget allocation tool. In other words, given the income of a typical household in an area, Esri's consumer spending estimates determine the expected distribution of annual budget dollars to spending categories.

Data is reported by product or service and includes total expenditures, average spending per household, and a Spending Potential Index (SPI). The total expenditures value represents the aggregate amount spent by all households in an area. Esri follows the BLS reporting convention in which the average expenditure reflects the average amount spent per household in the area. Note that the average expenditure for any item consumed by only a small percentage of households will be significantly lower than the average expenditure of only households that purchased the item.

The SPI compares the average amount spent locally for a product to the average amount spent nationally. An index of 100 reflects the average. An SPI of 120 indicates that average spending by local consumers is 20 percent above the national average.

Esri's consumer expenditure offering includes a five-year projection. The model assumes current spending patterns and uses five-year demographic updates to estimate consumer spending. In other words, this is a demand planning tool that estimates the market for consumer items based on current-year consumption preferences.

Esri not only updates its list of product codes to reflect changes in the list of items reported by the survey but also reevaluates the sample size of low-frequency items. To better reflect the cost of owning a home, Esri has recategorized financial items

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[1] Concepts and Methods of the U.S. National Income and Product Accounts, page 90.

covering the cost of home equity loans, special assessments, and closing costs to the housing category. CEX data for 2024 and 2029 is reported for 707 products and services summarized in the spending categories below.

- Food at Home
- Food Away from Home
- Alcoholic Beverages
- Housing
- Household Services
- Household Goods
- Apparel & Services
- Transportation excluding Trips
- Travel
- Health Care
- Entertainment/Recreation
- Personal Care
- Education
- Miscellaneous Expenses
- Life & Other Insurance/Pensions & Social Security
- Financial
- Retail Goods

Esri's Data Development team

Led by chief demographer Kyle Cassal, and economist Douglas Skuta, Esri's Data Development team uses sophisticated quantitative methods to produce small area demographic and socioeconomic data to support informed decision-making. The team builds on a rich history of market intelligence to produce trusted independent estimates and forecasts for the United States based on innovative methodologies that use public and private data sources with the power of ArcGIS. Esri's Data Development team provides more than 7,000 proprietary data items to better understand the characteristics of people and places across multiple statistical and administrative boundaries and custom trade areas.

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