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Methodology statement: 2025/2030 Esri Consumer Spending

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Background Since 1980, the Consumer Expenditure Surveys (CEX) program has provided 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 about the BLS CEX surveys, refer to [U.S. Bureau of Labor Statistics Questions and Answers](#).

The BLS survey regularly evaluates and revises its methods for data collection, processing, and publication to enhance estimate quality and achieve greater cost efficiency. While the extent of change has been limited in the past, this year's release of the latest 2023 survey marks the beginning of more significant revisions. These new spending estimates mark the beginning of three phased improvements and modifications with respect to data collection, sample selection, and respondent questionnaire redesign.

The core purpose of the BLS program is to provide comprehensive insights into the spending habits and preferences of American households. The survey provides vital information on how consumers allocate their budgets across various categories such as food, housing, transportation, and healthcare. More than 15 years ago, the BLS began a research endeavor named the Gemini Project.¹ This is a multiyear initiative aimed at redesigning the survey to enhance data collection methods and improve the quality and accuracy of the information gathered from respondents. The project focuses on modernizing survey techniques, incorporating new technologies, and addressing challenges related to data processing and dissemination. By implementing these changes, the Gemini Project seeks to provide more reliable insights into consumer spending patterns. Overall, this redesign represents a significant effort to adapt the survey to contemporary needs, ensuring that it continues to be a valuable resource for understanding consumer behavior in an evolving economic landscape.

Esri integrates data from multiple survey years to provide a comprehensive database of all consumer expenditures. To compensate for the relatively small

¹ [Gemini Project to Redesign the Consumer Expenditure Surveys : U.S. Bureau of Labor Statistics](#)

survey bases and variability of single-year data, spending estimates spanning two consecutive years are averaged together. The June 2025 ArcGIS online release includes an update to Esri's Consumer Spending database that incorporates the BLS 2022 and 2023 Diary and Interview surveys. The 2023 survey data included a restructured questionnaire of the quarterly Interview Survey as well as considerable consolidation of several Diary Survey items into broader categories. The sum effect of the implementation of this first phase is a total reduction in Esri's unique variable inventory that now includes 630 products and services and represents around a 10 percent reduction from last year's variable inventory.²

For more information about the impact to the inventory, reference the [2025 Esri Consumer Spending Addendum](#) that lists all deleted variables, variables deleted but remapped to a broader existing or new variable, or definitions of existing variables updated this year.

Esri has updated the models used to estimate local consumer spending with its 2025 Updated Demographics and next generation ArcGIS Tapestry Segmentation System. This taxonomy is based on the latest decennial census data profiles recently published by the United States Census Bureau's Demographic and Housing Characteristics product. 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 ArcGIS Tapestry 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.³ 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 about 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,

² These variable (or "item") counts represent the overall unique structure of the data table irrespective of current year or forecast year variable inventories where unique/individual spending items are represented by three measures: a total expenditure, an average, and an index. So, this year's 630 products and services covers a total of 1,890 variables (630x3=1,890) in Esri's 2025 Consumer Spending database, and another 1,890 variables in the 2030 database.

³ [Concepts and Methods of the U.S. National Income and Product Accounts](#), page 90.

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 covering the cost of home equity loans, special assessments, and closing costs to the Housing category. CEX data for 2025 and 2030 is reported for 630 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



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