



2009 Methodology Statement: ESRI Data—Consumer Spending

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An ESRI White Paper

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ESRI Data— Consumer Spending Methodology

ESRI has combined the latest Consumer Expenditure Surveys (CEX), 2005–2006, 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 2005–2006 surveys.

Over the years, both BLS and ESRI have updated their methods of collecting and estimating the consumer spending data. In 2004, BLS introduced multiple imputation of income data to estimate data for missing records, and in 2001, BLS revised the Interview Survey to collect income by using ranges in addition to discrete totals. The goal was to improve the accuracy of income reporting, but the changes also affect expenditures derived directly from income data such as Social Security deductions. Additionally, the values reported in the surveys vary for select data items due to coding and definition changes.

For example, items such as investments are commonly top coded to a select upper limit. Top coding replaces data when the value of the reported item exceeds prescribed critical values. The critical values for each top-coded variable are estimated in accordance with Census Disclosure Review Board guidelines. The top-coded value represents the mean of the subset of all outlying observations and, therefore, is subject to large changes from year to year. Any average, including average expenditures, can be influenced by the presence of extreme values. Therefore, when the top code is changed, the average also changes. BLS may include other coding changes.

ESRI has updated the models used to estimate consumer spending with 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 Segmentation. Tapestry Segmentation truly differentiates consumer spending by market—especially among the smallest U.S. market areas, where distinctions can be difficult to measure, and for the largest ticket items, where consumer preferences are more pronounced. However, changes in the methods of estimating consumer spending, including changes in the methods of data collection, may preclude direct comparison with previous CEX databases.

Spending patterns are developed by Tapestry Segmentation markets and updated to 2009 by adjusting to current levels of income. Expenditures represent the 2009 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. SPI compares the average expenditure for a product locally with 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 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 20 years, ESRI® consumer spending estimates have provided the data to measure local demand for goods and services.

Consumer Spending Trends

Consumer spending is all about choices—decisions that are influenced not only by market conditions but also by trends. In periods of economic boom, consumer trends feature opportunity and convenience; in times of economic trouble, market conditions drive spending patterns.

As the housing market began its downfall in 2007, so too did consumer confidence. ESRI's 2008 Consumer Spending data began to capture the changes in spending patterns influenced by mounting economic problems. Households witnessed the housing crisis and tightness restriction on credit and began to cut back on convenience and luxury. During 2008, the housing crisis escalated, and the country's economic problems were compounded by the credit crisis and rising unemployment. ESRI's 2009 consumer spending trends are dominated by the incredible impact of the recession. Households have experienced extreme losses in their savings, retirement accounts, stocks, bonds, and mutual funds as well as the equity in their homes.

The double-digit decline in credit card membership fees over the year confirms the personal effect of the credit crunch. With a lack of credit and stagnant or declining household incomes, consumers are struggling to make ends meet, let alone replenish their life savings. Contributions to life insurance plans have plunged by double digits, and retirement contributions are also down. Consumer spending has plummeted across the board. The average annual budget expenditure declined by more than 3 percent in the last year; spending for retail goods dropped by more than 5 percent.

Not only have households cut spending on big ticket items, they have clamped down on all unnecessary expenses. Convenience is no longer an option. Small ticket items, such as magazine subscriptions, books, and newspapers, have also shown double-digit declines in the past year; consumers are relying on the Internet and public libraries for their reading material. Laundry and dry-cleaning services are down, and personal care services are limited in frequency. More households are dropping lawn and garden care services and Internet services away from home, but keeping their housekeeping and security services.

Keeping abreast of the latest fashions is no longer a priority. Spending for women's apparel—especially suits, dresses, tailored jackets, and footwear—is down almost three times that of men's apparel. On the other hand, alteration, tailoring, and shoe repair

expenses have remained steady. Consumers have adapted their lifestyles, perhaps long-term, to adjust to the current economic conditions. More consumers have adopted the philosophy to reduce, reuse, and recycle. They are choosing to repair watches; jewelry; exercise and sports equipment; and TV, radio, and sound equipment instead of buying new items.

Consumers are economizing in any way they can, shopping at discount stores and choosing store brands. Preferences have shifted from fresh baked goods and meals to prepackaged or frozen goods. Spending for fruit and vegetables has dropped, but only half as much as spending for meat, poultry, fish, and eggs. Due to the increased cost of utilities, consumers are closely monitoring their usage. To save money, many households have opted out of residential telephone service. Spending for cellular telephone service continues to rise.

Purchase of new or used vehicles is out of the question for most households. Owners are driving their current vehicles longer and making only necessary oil changes and repairs to brakes, steering and cooling systems, and shock absorbers. Spending for repairs to air conditioning systems and exhaust systems, as well as body work and painting, are down. Consumers who do buy a new car are choosing fuel-efficient vehicles instead of trucks and forgoing upgrades such as GPS systems and audio/video equipment.

Households have even cut back on medical expenses, minimizing trips to the doctor and only opting for outpatient laboratory tests and x-rays instead of inpatient services. When prescriptions are necessary, patients are selecting generic drugs. Consumers have reduced spending for nonprescription drugs—in particular, nonprescription vitamins—using store brand products or doing without.

In distressed economic times, entertainment and recreation are usually the first expenses to be curtailed. Consumers are signing up for local recreation clubs and activities but avoiding costly participant sports and sporting events. Expenditure for online entertainment and gaming continues to grow; so does investment in playground equipment. Expensive trips out of town are rare, but when they do travel, consumers don't go far and adhere to a strict budget. They closely monitor spending for entertainment, food, and drink. Camping is an affordable local vacation. Average expenditures for camping fees have remained steady, but investment in camping equipment and recreational vehicles has plummeted.

ESRI expects the recession to bottom out in late 2009, but recovery will not happen overnight. Despite massive government intervention, financial markets are still under stress, unemployment continues to rise, and housing has not yet bottomed. Consumers have experienced the economic shock of their lifetime, which begs the question: Will consumers adopt lifestyle changes that encompass frugality and conservation, or will they lead the country to the next economic boom period?

ESRI's Data Development Team

Led by chief demographer Lynn Wombold, ESRI's data development team has a 30-year history 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 has crafted data methodologies, such as the demographic update, segmentation, the diversity index, and the Retail MarketPlace database, that are now industry benchmarks.



About ESRI

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