

Consumer Buying Power™

Release Notes

What Is It?

Consumer Buying Power™ (CBP) provides estimates of annual consumer spending for nearly 600 household expenditure items, spanning 14 categories of goods and services and over 100 retail store types. Use CBP to evaluate potential demand for a wide variety of products and services for any neighborhood in the U.S. Developed using the Consumer Expenditure Survey (CEX), conducted by the U.S. Bureau of Labor Statistics, the database offers current-year estimates and five-year projections of potential consumer expenditures for all standard census, postal and marketing geographies.

With CBP, you can analyze any area by total dollars spent or average dollars spent per consumer unit (a consumer unit is a household or any person living in a college dormitory). CBP helps you understand the full market potential and whether customers in an area spend more or less compared to other areas.

To help customers understand the change in demand over time, ENVISION reports include the expected annual percentage change from the current year to five years into the future. ENVISION also gives users access to an extensive library of executive reports that convey the key pieces of information your team needs to make decisions.

Data Vintage
2025

Base level
Geography
Block Group

Update Frequency
Annually

Variables
746 Current Year
746 Five Year

*To view the complete list of variables please visit:
environicsanalytics.com/variables

What's New?

This year, the variables list has significantly changed due to aggregating variables into new, higher-level categories. The component variables for these aggregations, in turn, dropped. The new variables for the 2025 vintage of CBP are focused on the Food, Apparel and Services, and Healthcare categories, which, together, account for over 60% of new variables. There are 250 dropped variables this year (125 current year, 125 five-year projection), over half of which come from the Food category, followed by the Apparel and Services, and Transportation categories.

How It Was Built

Key Data Sources

The primary data source for CBP is the Consumer Expenditure Survey (CEX), administered by the U.S. Bureau of Labor Statistics (BLS). A series of models are calibrated on the CEX. These models are used to score a multi-dimensional cross-distribution of consumer demographics derived from Claritas' Pop-Facts 2025 and data collected by the U.S. Census Bureau's American Community Survey from 2017-2022.

Beyond these estimates, Environics Analytics uses CEX-weighted annual expenditure data at the regional level as control values for 100 spending categories. The annual CEX data is utilized to create control totals for the years 2025 and 2030 in combination with Claritas Pop-Facts Premier's income estimates for those years.

CBP incorporates the interview and daily diary components from the CEX survey. The interview component collects monthly expenditures of approximately 6000 individual households for 12 consecutive months. The daily diary component tracks the household expenditures of approximately 3,000 households for two-week periods. Environics Analytics maintains a rolling five-year CEX survey archive to update the model coefficients used in creating current-year estimates.

Modeling Framework

The construction of CBP estimates at the Universal Classification Code (UCC) level involves three distinct phases:

- Creation of initial small-area behavioral estimates
- Collection and projection of the regional control totals

A mathematical reconciliation process that ensures everything "adds up" across all levels of geography and among the complete hierarchy of expenditure categories.

Small Area Estimates

A series of log-linear and multinomial logit models are calibrated using observation-level CEX micro-data. The models predict consumption using a combination of demographic, location and time data as independent parameters. The log-linear models generally estimate the ratio of total expenditure over total income before tax, which is then converted back to the dollar value of total expenditure. These estimates are partitioned using a parent-child structure of spending categories, which, for example, might divide the category Food into Food at Home and Food Away From Home. These categories are further subdivided into their root components (Food Away From Home is subdivided into Fast Food, Full Service, Employer, Catered etc.) for all CEX UCC codes.

Our researchers use these models to score a multidimensional cross-distribution of consumer demographic variables derived from the current release of Claritas Pop-Facts demographic estimates and the U.S. Census Bureau's American Community Survey 2022. This combination of the multidimensional cross-distribution of consumer demographics and CEX consumption data is produced for every block group in the U.S. Altogether, the initial development of CBP 2025 required more than 700 estimates of consumption using more than 150 models and more than 50,000 coefficients.

Regional Control Totals

CBP uses spending control totals from the CEX aggregate expenditure share tables available from BLS for calendar years 1994 through 2023. In CBP 2025, 100 categories of consumer expenditures at the regional level are used as control totals.

Consumption control totals for 2025 and 2030 are generated by applying historical share trends that correspond to each expenditure category in combination with Claritas' Pop-Facts Premier income estimates for the same years.

Reconciliation of small area estimates to Regional control totals

For each year, the CBP initial small area estimates at the block group level are reconciled for 2025 and 2030 to reflect the control totals based on the published CEX data from BLS. This reconciliation is achieved using a set of mathematical optimizations that adjust the initial small area estimates to agree with higher geographic-level control totals. This reconciliation process results in estimates that match the control totals at different levels of geography. This process also ensures that the estimates deviate as little as possible from the estimates derived from the model scoring stage.

By using both a bottom-up approach, through the aggregation of block group estimates, and a top-down approach, by controlling estimates to known values, CBP provides a realistic picture of household expenditures for any trade area. The modelling structure and rescaling system we use allow for reliable estimates at the small area level based on demographics that are subject to high-quality regional controls.

Retail Store Type Estimates

The variable All Retail Stores (NAICS 44-45) estimates expenditures at retail stores only; it excludes expenditures on services such as "Hospital Room and Services," for example. The estimates are created using a matrix that assigns merchandise-level expenditures to one or more retail store types. As an example, bread can be purchased at grocery stores or convenience stores. A similar process is used for Total Accommodation and Food Services (NAICS 72) variables.

The estimates for All Retail Stores (NAICS 44-45) and Total Accommodation and Food Services (NAICS 72) differ from those for Aggregate Annual Expenditures.

- All Retail Stores and Total Food Services represent consumer spending for 108 retail stores and food services establishments
- Aggregate Annual Expenditures is comprised of consumer spending on relevant merchandise items and services

The variables have their own aggregation hierarchy and low-level variables add up to high levels. For example, "New cars" and "New trucks" add up to "Cars and trucks, new".

Five-Year Projections

All current year variables are also available as five-year projections to help you estimate future market potential. Five-year projections for 2030 are established by first using the aggregate expenditure share tables available from BLS for calendar years 1994 through 2023. The series of log-linear and multinomial logit models calibrated on the CEX data are scored against a 2030 multidimensional cross-distribution of consumer demographics based on Claritas Pop-Facts' five-year projection. The small area estimates are bound by the 2030 regional control total. This approach allows the five-year projection to reflect demographic changes at the small area level.

Demographic Variables Used in CBP

CBP uses the demographic variables from Claritas Pop-Facts to produce a multidimensional cross-distribution of consumer demographics used to score statistical models. These variables include income, age of householder, presence of children, household size, marital status, education, and housing tenure.

How it's Used?



Create area rankings by merchandise line item or retail store type to understand which areas present greater opportunity for new retail operations.



Understand current household spending habits and which items attract a greater share of consumer wallets across the U.S.



Analyze projected consumer expenditure trends five years out based on growth rates and area demographic changes.

Sample Questions it Can Answer

- Which merchandise items attract greater share of wallet from consumers?
- How does spending on specific items change from neighborhood to neighborhood?
- Which types of stores are consumers most likely to shop at and what are they most likely to buy in our trade areas?
- Which areas present better opportunities for expansion relative to other areas?
- Should we adjust our merchandise mix for purchases of women's, men's and children's clothing based on trade area spending patterns?

For Data-Only Deliveries

Standard data are delivered in comma-separated values (.csv) format. For a detailed list of variables, consult the metadata file included with your data delivery.