Claritas Consumer Spending Dynamix 2025

Methodology

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OVERVIEW

Claritas Consumer Spending Dynamix contains household expenditure estimates for products and services in more than a dozen main categories, and numerous subcategories. Each product/service is represented by five different measures (aggregate spending by all households, average spending per household, and a comparison of average household spending versus average household spending on a national level, percent buyer within a spending period, and average household expenditures per buyer within a spending period) and five different household groups (Total, White race alone, Black race alone, Asian race alone, and Hispanic households), for a detailed multi-cultural view of consumer household expenditures.

Some sample use cases of this data include:

- Comparing household demand across a trade area
- Gain higher understanding of high-dollar/low-incidence purchasing behaviors
- Identifying pockets of high (or low) penetrations of consumption of goods/services
- Compare household behaviors for specific items by household multi-cultural makeup for optimal delivery of marketing messaging

DATA DESCRIPTION

Claritas Consumer Spending Dynamix (CSDx) includes five types of expenditure variables: aggregate spending by all households, average spending per household, and a comparison of average household spending versus average household spending on a national level, percent buyer, and buyer average household expenditures. The “Buyer” expenditures represent the portion of households that purchase goods and services for each of the 500+ expenditure categories, and the average annual household expenditures for these “Buyer” households. This differs from the overall Average Household Expenditures, which use all households as the base, regardless of whether each household purchases or does not purchase the specific category of goods or services.

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CSDx contains household expenditure estimates for products and services in more than a dozen main categories, and numerous subcategories, for each of five household groups: Total, White race alone, Black race alone, Asian race alone, and Hispanic households; note: each "race alone" group includes both the Hispanic and non-Hispanic households of that race group. These estimates, useful for measuring market potential as well as other tasks, are projected into standard units of geography ranging from the micro-level to the macro-level: block group, census tract, ZIP Code, county, metro area, Nielsen Designated Market Area, state, and nation.

Claritas strives to create and maintain the most accurate, up-to-date demographic estimates and projections available anywhere, including the multicultural datasets for which Claritas is known as the industry leader.

Data Sources

Claritas Consumer Spending Dynamix uses the following source data:

- Consumer Expenditure Survey (CEX) from the U.S. Bureau of Labor Statistics (BLS) for years 2015, 2016, 2017, 2018, and 2019
- Bureau of the Census (U.S. Census Bureau) 2010 Census data
- National Oceanic and Atmospheric Administration climate data
- Claritas Pop-Facts Demographics
- Claritas CultureCode® Supplement to Pop-Facts®

Consumer Expenditure Survey

The Consumer Expenditure Survey (CEX) data are gathered through two types of survey instruments. On a quarterly basis, interview questionnaires are used to track relatively large expenditures including durable goods, property, vehicles, and other infrequently purchased items and services; on a weekly basis, diaries are used to track consumables and other frequently purchased items and services.

Each year, consumer units (nearly all are households) complete up to four interview questionnaires (one for four consecutive quarters). Five years' worth of data were collected for the years 2015 through 2019. Additional consumer units complete up to two diaries (one per week for two consecutive weeks) for the same 5-year period.

2010 Census

Census data is derived from the U.S. Census Bureau 2010 Census data is used in creating urban/rural populations.

NOAA Climate Data

The National Oceanic and Atmospheric Administration (NOAA) climate data is used for aiding in the estimates of utility spend. Because the climate has a major impact on this expenditure, 30-year average climate data is used to augment heating and cooling expenditure estimates.

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Claritas Pop-Facts® Demographics and CultureCode® supplement

Pop-Facts® demographics provide estimates of current year population and projections of the population in 5 years using various statistical models to estimate population changes from the most recent U.S. Census Bureau data.

The CultureCode® supplement to Pop-Facts provides the ability to designate portions of the population as a certain race or Hispanic ethnicity, based on U.S. Census Bureau data.

Demographic input data is updated annually with any newly available information and/or updated modeling and will reflect the population estimate on January 1 of the specified vintage year.

These demographics are used in combination with expenditure data to model household expenditures and give the user the ability to break expenditures down by household group in a certain area to better identify audiences and target potential customers.

The Five-Year Projections from Pop-Facts are used with the model to create the Five-Year Projection estimates of household expenditures.

For more information on Pop-Facts, please consult the latest *Claritas Demographic Update Methodology* document.

Expenditure Categories

Claritas Consumer Spending Dynamix offers estimates for the following categories:

- Average annual expenditures
- Food
- Alcoholic beverages
- Housing
- Apparel and services
- Transportation
- Healthcare
- Entertainment
- Personal care products and services
- Reading
- Education
- Tobacco products and smoking supplies
- Miscellaneous
- Cash contributions
- Personal insurance and pensions

Geographic Levels

Claritas Consumer Spending Dynamix is available in the latest standard Claritas cartographic boundaries for ease of implementation within platforms and analysis.

Census Geographies

- National (USA)
- State
- County

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- Combined Statistical Area (CSA)
- Core Based Statistical Area (CBSA)
- Place
- Tract
- Block Group

Other Geographies

- Minor Civil Division
- Congressional District
- ZIP Code
- Nielsen Designated Market Area (DMA)

Household Group

There are 5 different household groups breakdowns for each variable.

HOUSEHOLD GROUPS	
FIRST LETTER	**DEFINITION**
T	Total (all) households
W	White race alone households
B	Black race alone households
A	Asian race alone households
H	Hispanic households

Please note that the W, B, A and H household groups do NOT add up to the total.

Household Expenditures Measures

There are 5 measures provided:

EXPENDITURES MEASURES	
SECOND LETTER	**DEFINITION**
E	Overall average annual household expenditure
A	Overall aggregate annual household expenditures
I	Index of average spending per household, par = 100
B	Average expenditure for the households who made a purchase in this category
P	% of households that made a purchase in this category

DATA DEVELOPMENT

Claritas Consumer Spending Dynamix data has been developed by applying advanced statistical modeling using Consumer Expenditure Survey (CEX) data combined with the latest geo-demographics.

The CSDx development process uses five years of CEX input data. To account for effects between years, all “off” years (2015, 2016, 2017, 2018) were adjusted to 2019 spending/buying

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prior to modeling. Further, 2019 provided the definition of the UCC's to be modeled. Thus, the number of years used in any given model for a UCC could range from 2 (the UCC was only present in 2018 and 2019) to 5 (the UCC was measured in the same way for each of the five years).

Geo-demographics are from Claritas Pop-Facts® Demographics and CultureCode® supplement and the U.S. Census Bureau.

Last, due to the wide variance in utility spend throughout the United States based on location, 30-year climate averages from NOAA from the over 7,000 reporting weather stations are used in the modeling. This accounts for costs related to heating and cooling degree days.

Model Specification

Claritas Consumer Spending Dynamix is a modeled data set. Potential model inputs have been chosen from a comprehensive list of household-level information present on both the interview and diary portions of the Consumer Expenditure Survey. As the models would be implemented at the block group level, Claritas uses categorical variables representing the content that would be available. These data include age, income, tenure, presence of children, marital status, education, climate, race and ethnicity, and urbanization.

Spend estimates are created using ridge regression with 10-fold cross-validation to predict total annual spend. The buyer estimates are then created using logistic regressions predicting buyer penetration within a time period.

Block Group Calculations

Block group estimates were implemented using the models created above. The process started with the 2019 models implemented against the 2019 Pop-Facts® demographics. The resulting data were adjusted to BLS 2019 actuals. The models and adjustments were then implemented using the 2025 current year Claritas demographic estimates and then the 5-year demographic projections (2030). As these data already incorporate changes to the projected income distributions, age, and other demographics, they were not modified further by Consumer Price Index projections.

Asian + Pacific Islander vs Asian Alone

In previous versions of Claritas Consumer Spending Dynamix, Asian and Pacific Islander households were combined. When it comes to household expenditures, the raw data for these two population groups shows distinct buying behaviors for Asians vs Pacific Islander households in many categories. Additionally, the relatively small size of Pacific Islanders leads to over-reliance of a few households for models.

Thus, having solely "Asian Alone" without the Pacific Islander portion provides better estimates for this population group.

Buying Rates and Average Spend per Buyer

As noted above, the Bureau of Labor Statistics collects data via two separate methods for the Consumer Expenditure Survey. The diary portion focuses on faster moving goods and collects

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information on a per-week basis. The interview portion tends to focus on larger, longer-term expenses and reports data on a quarterly basis.

This can introduce complications when looking at total spend estimates and average spend figures. The total spend figures reflect annual total spend and are not bound to the collection period. Likewise, average spend is simply looking at total spend divided by total households.

The final complication created by two different collection periods is the inability to accurately combine percent buyers across the two panel periods. Going back to the alcohol example where the purchase rate for "Beer and Ale" away from home per week is 8.97%, while "Alcoholic beverages purchased on trips" is 15.31%. You cannot simply multiply 8.97% by 52 weeks to get an average annual penetration of 466%. This ignores the fact that it could really be the same households buying "Beer and Ale" at the local bar each week. The best we can do is say the rate is somewhere between 8.97% and 100%. The crux of the matter is that the overlap between periods is not available in the data. The BLS does not provide estimates for any categories which include items from both diary and interview. We have included some estimates under the assumption that the products in a category are independent. While in general this is not true, within certain situations the estimates look right. However, because some categories cannot be accurately predicted, we have left them as "not available".

As a result of this, the roster notes a D, I or X to indicate the source of raw data and the time period for which our estimates are provided in the "Buying Period" column, and Buyer Percent/Buyer Average variables will display these characters in the variable titles.

- D – Diary (weekly or period of 2 weeks)
- I – Interview (quarterly)
- X – combination/ not available – Note that for some parent category items, this data may not available

With this release, buyer averages and buyer percent for items from the interview survey were annualized, to the greatest extent possible.

DATA VERIFICATION

Claritas is the leading expert in developing marketing information and applications based on geo-demographic and business information. Each year, Claritas completes their demographic update program—the industry benchmark for demographic estimation. The update includes current-year household and population counts for numerous demographic variables, including distinct household characteristics and population information. Claritas demographers and statisticians are among the industry leaders and represent decades of experience in the field of geography-based demographic estimation.

The Claritas Consumer Spending Dynamix production process leverages the renowned Claritas demographic update program by applying block group-level data elements to each household model developed from the Consumer Expenditure Survey. The result is a data set of estimated household market penetration and volume aggregated to the block group level of geography. These estimates are then aggregated to larger census, postal, and marketing geographies using proven, proprietary Claritas methodologies.

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TECHNICAL SUPPORT

If you need further assistance, not provided in the release notes, please contact the Claritas Solution Center between 9:00 a.m. and 8:00 p.m. (Monday through Friday, EST) at 855.400.2778.

LEGAL NOTIFICATIONS

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