

Consumer Spending



Consumer Expenditures, Retail Potential & Retail Gap

Version

Release 2026A

Purpose

The Consumer Spending datasets consist of both the Consumer Expenditure and Retail Potential databases. The consumer expenditures cover most major household expenditures for both current and projected year, and for retail-oriented expenditures, aggregated to retail store types.

The Retail Gap database measures the difference between consumer expenditures on retail (Retail Potential) and brick and mortar Retail Sales. A positive number, or "Leakage," indicates that local consumers are spending their retail dollars out of the area where they live, and a negative number, or "Surplus," indicates that the area is drawing in (and selling to) consumers that are not local. The retail gap data is available at five, four and three-digit NAICS categories.

The Consumer Spending data is highly useful for demand estimation and market share analysis.

Base Geography

Census Block (Consumer Expenditures and Retail Potential)
Census Block Group (Retail Gap)

Content

For the 2024B release, the **Consumer Expenditure** (CEX) database was completely redesigned using the AGS Synthetic Household model, discussed below in the Methodology section. The content of the model, as well as the variable naming conventions, have changed to reflect this significant methodological change.

The data has been refreshed using the latest demographic characteristics from 2026A.

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The major categories have been redesigned and expanded to include:

- Total Expenditure
- Food at home (Grocery)
- Food away from home
- Alcoholic Beverages
- Shelter
- Utilities
- Household Operations
- Household Furnishings/Equipment
- Apparel
- Transportation
- Health Care
- Entertainment
- Personal Care
- Education
- Tobacco Products
- Miscellaneous Expenses
- Cash Contributions
- Tax and Retirement Savings

The structure of the variable names has been modified slightly, but still readily permits an analysis of expenditures at any level of detail and between levels of detail. It is possible to analyze any individual category within the context of its parent category (e.g. cheese expenditures as a share of total dairy product expenditures or total food at home expenditures). It is also readily apparent that one should not add together certain categories (e.g. APP01 + APP0101 would double count APP0101)

The retail potential database consists of average household and total market potential estimates by each of sixty-four retail store

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types. The store types are based on the NAICS classification and are listed below:

- 44111 New Car Dealers
- 44112 User Car Dealers
- 44121 Recreational Vehicle Dealers
- 44122 Motorcycle and Boat Dealers
- 44131 Auto Parts and Accessories
- 44132 Tire Dealers
- 44211 Furniture Stores
- 44221 Floor Covering Stores
- 44229 Other Home Furnishing Stores
- 44311 Appliances and Electronics Stores
- 44411 Home Centers
- 44412 Paint and Wallpaper Stores
- 44413 Hardware Stores
- 44419 Other Building Materials Stores
- 44421 Outdoor Power Equipment Stores
- 44422 Nursery and Garden Stores
- 44511 Grocery Stores
- 44512 Convenience Stores
- 44521 Meat Markets
- 44522 Fish and Seafood Markets
- 44523 Fruit and Vegetable Markets
- 44529 Other Specialty Food Markets
- 44531 Liquor Stores
- 44611 Pharmacy and Drug Stores
- 44612 Cosmetics and Beauty Stores
- 44613 Optical Goods Stores
- 44619 Other Health and Personal Care Stores
- 44711 Gasoline Stations with Convenience Stores
- 44719 Gasoline Stations without Convenience Stores
- 44811 Men's Clothing Stores
- 44812 Women's Clothing Stores

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44813 Children's and Infant's Clothing Stores
44814 Family Clothing Stores
44815 Clothing Accessory Stores
44819 Other Apparel Stores
44821 Shoe Stores
44831 Jewelry Stores
44832 Luggage Stores
45111 Sporting Goods Stores
45112 Hobby, Toy, and Game Stores
45113 Sewing and Needlecraft Stores
45114 Musical Instrument Stores
45121 Book Stores
45211 Department Stores
45291 Warehouse Superstores
45299 Other General Merchandise Stores
45311 Florists
45321 Office and Stationary Stores
45322 Gift and Souvenir Stores
45331 Used Merchandise Stores
45391 Pet and Pet Supply Stores
45392 Art Dealers
45393 Mobile Home Dealers
45399 Other Miscellaneous Retail Stores
45421 Vending Machines
45431 Fuel Dealers
51213 Motion Picture And Video Exhibition
54194 Veterinary Services
62111 Offices of Physicians
62121 Offices of Dentists
62132 Offices of Optometrists
62151 Medical and Diagnostic Laboratories
62211 General Medical and Surgical Hospitals
62441 Child Care Services
71121 Spectator Sports

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7211 Hotels and Other Travel Accommodations
7212 RV Parks
7213 Rooming and Boarding Houses
7221 Full Service Restaurants
7222 Limited Service Restaurants
7223 Special Food Services and Catering
7224 Drinking Places
81111 Automotive Mechanical and Electrical Repair and Maintenance
81112 Automotive Body, Paint, Interior, and Glass Repair
81119 Other Automotive Repair and Maintenance

Retail Gap is laid out like the Retail Potential variables shown above. For each NAICS classification, Retail Sales (from the BusinessCounts database) are deducted from Retail Potential. The Retail Gap variables have also been aggregated to three and four-digit NAICS levels as well. At the US level, most categories show a “leakage” based on the portion of retail sales estimated to go towards e-commerce. Note: For the accommodation industry categories (7211, 7212 & 7213), the sales amounts specifically refer to retail sales at these locations.

Consumer Expenditure Methodology

The 2024B redesign includes a two level modeling system undertaken at the household level in order to more accurately reflect consumer spending for small area geographic areas. The AGS Synthetic Household model is discussed in a separate document.

The model utilizes the latest two years of the Consumer Expenditure Survey, conducted by the US Census Bureau on behalf of the Bureau of Labor Statistics. Data were analyzed at the response (household) level by constructing two levels of statistical models. The top level model consists of 84 expenditure groups,

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with each group having a separate model that accounts for differences in expenditure by:

- Age of householder (life stage)
- Size of household
- Household income
- Number of vehicles available
- Tenure (owner / renter)

Several of the expenditure groups are unique to subsets of the household base only – renters, homeowners, and vehicle owners. By modeling at the household level, we are able to capture the often dramatic differences in household expenditures. Most of the models predict either per person or per vehicle expenditures.

The second level model allocates expenditures within the 84 groups to a total of 402 categories based on differences in life stage (age and household size) and income.

The results were then aggregated across all households and standardized to the published averages for the 84 groups.

Coverage is significantly expanded to include:

- Income tax payments (federal, state, local)
- Social security deductions
- 401k / IRA contributions
- Expanded charitable contributions to include type of charitable organization
- Food away from home classified by type of restaurant and meal

At the same time, the classification collapsed from 5 to 3 levels of hierarchy in order to simplify reports. Further, most gifts were

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allocated to a separate gift category within the appropriate group. For example, gifts of infants' apparel were moved from the gift group to the apparel group.

Retail Potential Methodology

The primary data sources used in the construction of **Retail Potential** include:

- Current year AGS Consumer Expenditure Estimates
- 2022 Economic Census
- Annual Integrated Economic Survey
- Monthly and Quarterly Retail Trade and E-Commerce Sales
- 2022 Annual Retail Trade Survey

The Economic Census presents a table known as their Industries by Product summary, which relates approximately 3,500 products from the North American Product Classification System (NAPCS) to the industries (NAICS) in which they are sold. Products were further grouped into merchandise lines. For each merchandise line, the distribution of sales by store type was computed, yielding a conversion table which apportions merchandise line sales by store type. Suppressed values from the Economic Census were algorithmically unmasked.

The AGS Consumer Expenditure database was re-computed to these merchandise lines by aggregating both whole and partial categories, yielding, at the block group level, a series of merchandise line estimates which are consistent with the AGS Consumer Expenditure database.

These two components were then combined in order to derive estimated potential by store type. The results were then compared to current retail trade statistics to ensure consistency and completeness.

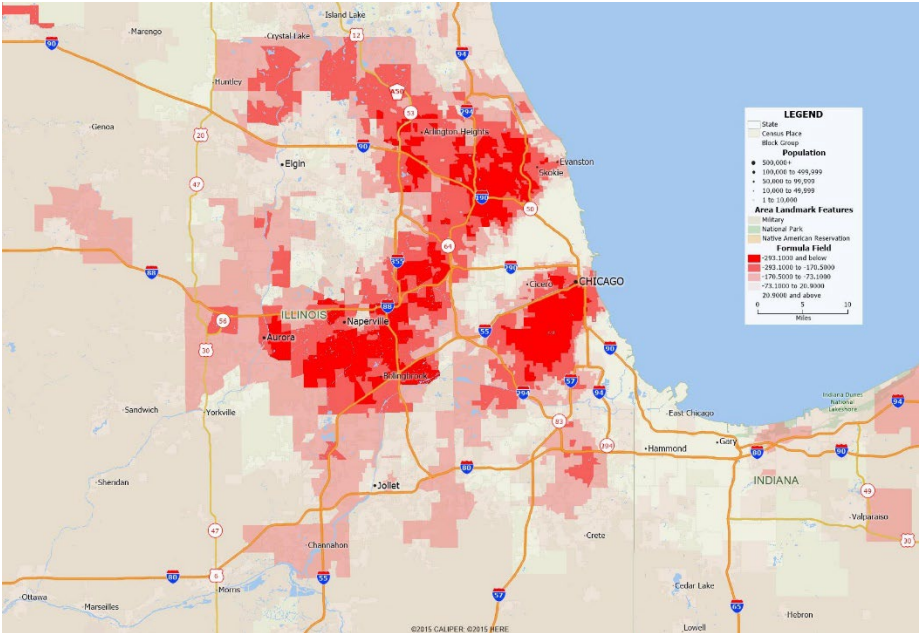
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Retail Gap Methodology

Retail Gap is created using the Retail Potential database (above) and the Retail Sales database. The specific methodologies for Retail Sales can be found in the "Business Counts" documentation.



Grocery store retail gap map for Chicago, showing areas of red which are highly underserved by the grocery store chains.

Data Sources

- 2021-2023 Bureau of Labor Statistics Consumer Expenditure Survey
- 2022 Economic Census
- 2023 Annual Integrated Economic Survey
- Advance Monthly Retail Trade Surveys
- Quarterly Retail E-Commerce Sales
- 2022 Annual Retail Trade Survey
- 2022 Services Annual Survey
- 2023 County Business Patterns
- 1998-2023 Estimated Annual U.S. Retail Sales - Total and E-commerce

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Further
Information

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