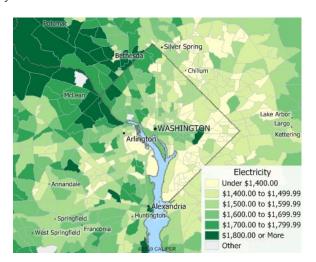
Getting Started with Consumer Expenditure Data

The Consumer Expenditure Data is based on responses from the Consumer Expenditure Surveys published by the Bureau of Labor Statistics. Consumer expenditure provides estimates for the amount of money each household spends, on average, for specific products.

The expenses contained in this dataset cover a variety of markets. You will find fields such as:

- Principal and interest payments made on home loans
- Principal and interest payments made on vehicles
- Amount spent on cigarettes or other tobacco products
- Amount spent on Medicare or Medicaid Premiums
- Contributions made to retirement
- Utilities including electricity, gas, and cable
- Insurance payments including homeowners, vehicle, renters, and more.



A Census Tract-based area layer is downloadable for free to users of the latest version of Maptitude. Don't have the latest version of Maptitude? Purchase or upgrade to the latest version of Maptitude to use this premium data.

> Download the Expenditure Data (Most recent version of Maptitude required)

Buy/Upgrade Maptitude (Required to download the Expenditure data)

Tips and Tricks for using the Consumer Expenditure Data

Our monthly newsletter and website have tips and tricks to help users effectively use the Consumer Expenditure Data. Some additional tips have been included below, as well as instructions for installing the data set.

Downloading and Installing the Consumer Expenditure Data Set

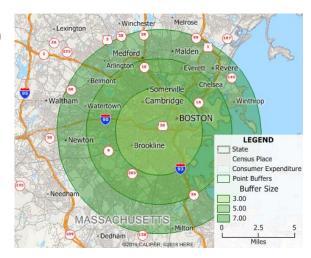
The Consumer Expenditure Data are accessible as a free download.

- 1. Download the data from the Caliper Store. NOTE, you must have the most recent version of Maptitude in order to download the data.
- 2. Once the files are downloaded, click **OK**, and then click **Install**. Follow the prompts to install the layers.
- 3. To add a layer to a Maptitude map, open the map, click 💋 on the Standard toolbar or choose *Map>Layers...*, then click **Add Layer** to display the File Open dialog box.
- 4. Browse for the folder where the downloaded data are located (e.g., c:\ccdata\Consumer Expenditure). Choose the **ccConsumerExpenditure.cdf** file and click **Open**.
- 5. Maptitude adds the layer to the map. Close the layers dialog box to see the layers on the map.

Finding the Average Household Expenditure in a Radius

A common use for the Consumer Expenditure Data involves finding the amount spent on a product for a given area. In this example, you will be measuring household expenses for property taxes near Boston:

- 1. Open a map that contains the Consumer Expenditure layer and zoom or pan to the area of interest.
- 2. Choose Tools>Analysis>Buffers Toolbar.
- 3. Click ! then click near Boston on the map to plot a point.
- 4. Click , then click **No** when prompted to save the point to a layer.
- 5. Enter **3**, **5**, **7** in the Sizes box to create buffers of 3, 5, and 7 miles, check the Calculate **Demographics** and **Cumulative Buffers** boxes, and click X.

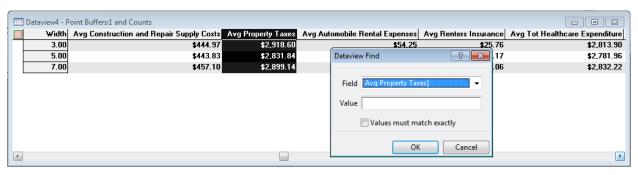


- 6. Choose **Consumer Expenditure** from the With Layer drop-down and click **OK**.
- 7. Click **OK** to create the buffers.

Maptitude creates buffers of 3, 5, and 7 miles around the location of choice and calculates the annual average household expenditure across the tracts for a variety of items. A Dataview containing purchasing data for the area will be displayed. This Dataview can be searched for a specific expense using the following steps:

- 8. With the Dataview as the active window, click Mor choose *Edit>Find...*
- 9. Click on the **Field** drop-down and type a portion of the name of the field that you would like to examine. In this example, we'll search Property, choose the [Avg Property Taxes] field, and click OK.

The Dataview will automatically scroll to your searched entry and highlight the column that you chose. This Dataview can be exported by choosing File>Export>Table and choosing .xlsx as the file type.

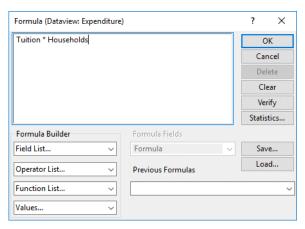


Creating a Field of Aggregate Household Expenditure

You may find it useful to know the aggregate expenditure for a product, that is, the sum of each household's spending on that item by tract. To compute this, you will need to create a new field on the Expenditure layer and fill it with a formula. In this example, you will create an aggregate field for tuition:

- 1. Right-click on the Consumer Expenditure layer and choose **New Dataview**.
- Click on right click on any field header and choose **Modify**
- 3. Click **Add Field.** A new field will be added to the bottom of the table structure.
- 4. Change the new field name to **Aggregate Tuition** and its type to **Real (4 Bytes)**.
- 5. Change the format for the Aggregate Tuition field from None to \$12,345.12.
- 6. Click **OK** then **Yes** to confirm the table changes.
- 7. Click on right click on any field header and choose **Modify** to reopen the table editor.
- 8. Click **Aggregation** and scroll to the bottom of the list, check the **Add** box next to the new Aggregate Tuition field, click **OK**, and click **Yes** to confirm the table changes.
- 9. Scroll to the far right of the Dataview. Rightclick on the column header for the empty Aggregate Tuition column and choose Fill.
- 10. Choose the **Formula** option and enter the formula College Tuition * Households. Click **OK**, then **OK** again to fill the column with your formula.

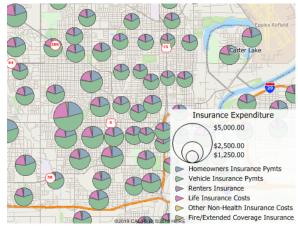
That's all there is to it! This new aggregate column can be used in overlay reports and visualizations like the one described in "Finding the Average Household Expenditure in a Radius."



Comparing Similar Expenses Against One-Another

Many of the expenses in the Consumer Expenditure Data come from similar categories and industries, such as different types of furniture purchases, appliance purchases, or even payments on various insurances. You can compare similar products using a Chart Theme.

- 1. Click sor choose **Edit>Find...** and search for a location or use the zoom and pan tools to navigate to an area of your choice.
- 2. Right-click on the Consumer Expenditure layer and choose Make Working Layer.
- 3. Choose *Map>Thematic Mapping>Chart*.
- 4. Type **Insurance** in the **Filter** box.
- 5. Highlight all the fields containing "Insurance," choose a pie chart as the Chart Type, and click OK.



Maptitude creates a chart theme across the Expenditure layer, with different colored slices of the pie charts indicating the amount spent on different types of insurance. The total size of each pie chart is representative of the amount spent on non-healthcare insurance.

Finding Average Spending in Your Territories

The Consumer Expenditure data set makes it easy to find how much people are spending, and what they're spending their money on, in your territories.

- 1. To begin, open a workspace containing a territory layer and the Consumer Expenditure layer.
- 2. Right-click on your territory layer and choose *Make Working Layer*.
- 3. Choose *Tools>Analysis>Overlay*.
- 4. Choose Consumer Expenditure from the Layer drop-down, uncheck Count the Number of Features box. Optionally, you can check Create a Report.
- 5. Click OK.

Maptitude calculates the average household spending for all items in your territories and displays a Dataview with the results. This Dataview can be exported to Excel by choosing *File>Export>Table* and changing the file type to .xlsx. If you checked Create a Report, then you'll also see a report containing the same information.

Aggregating Spending to Another Layer

Finally, you can aggregate the expenditure data to another layer. In this example, we'll calculate the total expenditure across all the states in the United States, but any expense and geography could be substituted for similar results.

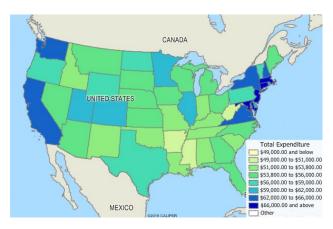
- 1. Open a map that contains the State layer and the Consumer Expenditure layer.
- 2. Right-click on the State layer and choose **New Dataview**.
- 3. Click por right click any field header and choose Modify.
- 4. Click Add Field, rename the field to Total Expenditure, and make sure the Type is set to Real (4
- 5. Change the format for the Total Expenditure field from None to \$12,345.12.
- 6. Click **OK**, then **Yes** to confirm changes to the table.

- 7. Scroll to the far right of the dataview, right-click your new Total Expenditure column, and choose Fill.
- 8. Choose **Aggregate**.
- 9. Choose **Consumer Expenditure** from the Layer drop-down.
- 10. Choose **Average of** from the Fill with drop-down, choose **[Total Expenditure]** from the next drop-down list, and choose **Households** from the Weight By drop-down list.
- 11. Click **OK** to return to the Fill dialog box and click **OK** again. Maptitude fills the field with the weighted average for the field you chose. Note that this may take a while as the total expenditure for each state is being calculated.

Your new field can be used for thematic maps and analysis on the State layer. For example, you can create a color map of total expenditure in each state using the steps below:

- 1. Right-click the State layer and choose Make Working Layer.
- 2. Choose *Map>Thematic* Mapping>Color.
- 3. Choose your **Total Expenditure** field from the Field drop-down and click OK.

Maptitude creates a color map of annual average household expenditure by State.



Consumer Expenditure Fields

Nearly 400 fields are included in the Consumer Expenditure data set. You can find a complete list broken into several categories below:

Equipment Repairs

- Television/Radio/Sound Equipment Repair
- Musical Instr. and Accessory Repair
- Heating or A/C Repair
- Comp. Systems and Equipment Repair

Clothing and Fashion Accessories

- Men's Coats and Jackets
- Men's Accessories
- Men's Shirts, Sweaters, and Vests
- Men's Pants and Shorts
- Boys' Shirts and Sweaters
- Boys' Accessories
- Women's Coats and Jackets
- Women's Dresses
- Women's Hosiery

- Women's Accessories
- Girls' Dresses and Suits
- Girls' Shirts, Blouses and Sweaters
- Girls' Skirts, Pants and Shorts
- Girls' Accessories
- Men's Footwear
- Boys' Footwear
- Girls' Footwear
- Women's Footwear
- Infant Underwear
- Sewing Materials and Supplies
- Watches
- Jewelry

Travel Expenses

• Bus Fare on Trips

- Local Transportation on Trips
- Plane Fare on Trips
- Ship Fare on Trips
- Train Fare on Trips
- Non-alcoholic Meal Expenses on Local Trips
- Non-alcoholic Meal Expenses on Vacations
- Non-alcoholic Grocery Expenses on **Vacations**
- Lodging on Vacations
- Parking on Vacations
- Lodging Cost on Local Trips
- Meals Excluding Alcohol on Vacations
- Alcohol on Vacations
- Gasoline and Oil on Vacations
- Plane Fare on Vacations
- Taxi Fare on Vacations
- Travel Items
- Airline Fares
- Intercity Bus Fares
- Intercity Mass Transit Fares
- Intercity Train Fares
- Car/Van Pools

Child-care Related Payments

- Sent to Students in College
- Child Support
- Alimony

Contributions

- Contributions
- Cash Gifts
- Educational Institution Contributions
- Political Organization Contributions
- Religious Organization Contributions
- Charity and other Org Contributions
- Contributions to Persons Outside the HH

Schooling

- Test Preparation/Tutoring
- School Supplies
- College Tuition

Furniture

- Sofas
- Living Room Chairs
- Living Room Tables
- Other Living Room Furniture
- Dining Room/Kitchen Furniture
- Mattresses/Springs
- Other Bedroom Furniture
- Infants Furniture
- Infants Equipment
- Patio/Porch/Outdoor Furniture
- Barbeque Grills or Outdoor Decorations
- Office Furniture for Homes
- Lamps and Other Lighting
- Other Household Decorations
- Closet and Storage Items
- Clocks and Other Household Décor
- Flatware

Cookware and Dinnerware

- Non-electric Cookware
- Dishes/Glasses/Serving Pieces

Linens, Curtains, and Temporary Carpeting

- Bedroom Linens
- Bathroom Linens
- Slipcovers/Pillows/Cushions
- Rugs/Carpet Squares/Temp Floor Covering
- Curtains/Drapes
- Blinds/Shades/Window Coverings
- Soft Surface Floor Covering

Healthcare

- Total Healthcare Expenditure
- Eye Exams/Treatment/Surgery
- Eyeglasses/Contact Lenses
- Dental Care
- Hospital Rooms/Services
- Non-physician Medical Prof. Services
- Physician Services
- Lab Tests/X-Rays
- Nursing or Convalescent Home Care
- Other Medical Care
- Hearing Aids

- Prescription Drugs
- Supportive Rehabilitative Equipment
- Medical and Surgical Equipment
- Conval./Handicapped/Elderly Care at Home
- Medicare Payments
- Medicare Part C Premiums
- Medicare Part D Premiums
- Medicaid Premiums

Small Appliances and Tools

- Appliances
- Small Electrical Kitchen Appliances
- Electric Personal Care Appliances
- Electric Floor Cleaning Equipment
- Other Household Appliances
- Sewing Machines
- Photographic Equipment
- Lawnmowers and Other Yard Equipment
- Power Tools
- Non-powered Tools
- Window Air Conditioners
- Portable Cooling and Heating Equipment
- Televisions
- Stereos/Radios/Speakers/Sound Component
- Other Sound and Video Equipment
- Musical Instrument/Supplies/Accessories
- Misc Tools & Home Improvement Supplies
- Hand Tools

Large Appliances

- Stoves/Ranges/Ovens
- Microwave Ovens
- Refrigerators/Freezers
- Built-in Dishwashers
- Clothes Washers/Dryers

Recreational Equipment

- General Sports Equipment
- Health and Exercise Equipment
- Camping Equipment
- Hunting and Fishing Equipment
- Winter Sports Equipment
- Bicycles or Bicycle Equipment

• Other Sports/Rec./Exercise Equipment

Digital Devices and Content

- Computers and Related Hardware
- Computer Accessories
- Computer Software
- Digital Book Readers
- Telephones and Accessories
- Video Game Hardware/Accessories
- Purchased Non-PC Video Games
- Purchased Video Files/Blu-rays/DVDs
- Rented Videos/Subscription Services
- Sirius Radio

Pets and Pet Care

- Pets/Pet Supplies/Pet Medicine
- Pet Services
- Veterinarian Expenses

Service Payments

- Cable/Satellite Payments
- Internet Access Payments
- Wireless/Internet Away from Home
- Satellite Radio Service
- Streaming Videos
- Streaming Audio
- Downloading Audio
- Home Security System Fees
- Residential Phone Service
- Cellular Service
- Vehicle Insurance Payments
- Fire/Extended Coverage Insurance
- Electricity
- Natural or Utility Gas
- Fuel Oil
- Bottled or Tank Gas
- Other Fuels
- Piped-in Water and Sewerage Maintenance
- Trash and Garbage Collection
- Automobile Rental Expenses
- Renters Insurance
- Legal Services
- Accounting Fees
- Gardening/Lawn Care Services

- Housekeeping Services
- Other Unreported Home Services
- Moving/Storage/Freight
- Life Insurance Costs
- Other Non-Health Insurance Costs
- Non-Health/Hospital/Vehicle/Property Insurance
- Bank Service Charges
- Termite or Pest Treatment
- Mortgage or Co-op Payments
- Online Gaming Services
- Home Security System Fees

Housing, Vehicle, & Other Loan Payments

- Lump Sum/Home Equity Loan Interest **Payments**
- Mortgage Interest Payments
- Principal Paid on Lump Sum/Home Equity
- Property Maintenance/Management Fees
- Principal Paid on Mortgages
- Rent Paid
- Interest Paid on Vehicles
- Principal Paid on Vehicles
- Property Taxes
- Mortgage Payments
- Homeowners Insurance Payments
- Interest Paid on Occupied Home Loan
- Principal Paid on Occupied Home Loan

Printed Content

- Newspaper/Magazine/Periodical Subs
- Newspaper/Magazine/Periodical Copies
- Books Purchased
- Photo Printing and Processing

Event Tickets

- Theater/Concert/Opera/Musical Tickets
- Tickets to Movies/Parks/Museums
- Season Tickets to Sporting Events

Club Memberships and Fees

- Sports Participation Fees
- Golf Course/Country Club Memberships

- Civic/Service/Fraternal Memberships
- Credit Card Memberships
- Health Club/Fitness Center/etc. Mem.
- Shopping Club Memberships
- Vacation Clubs

Automotive and other Transportation Expenses

- New Cars
- New Trucks
- Used Cars
- Total Down Payments on Vehicles
- Diesel Fuel
- Gasoline for Vehicles
- Vehicle Inspections
- Tire Purchases and Mounting
- Tolls and Toll Passes
- Electric Vehicle Charging

Food from Grocers and Other Stores

- Ready-to-eat and Cooked Cereals
- Pasta/Cornmeal & Other Cereal Products
- Biscuits and Rolls
- Cakes and Cupcakes
- Cookies
- Crackers
- Bread and Cracker Products
- Bread
- Flour and Flour Mixes
- Fresh and Frozen Beef Roasts
- Fresh and Frozen Beef Steaks
- Breakfast Meats
- Pork and Ham
- Lunchmeat and Non-breakfast Sausage
- Lamb, Mutton, Goat, and Game
- Chicken
- Processed and Frozen Seafood
- Butter and Margarine
- Other Dairy Products
- Citrus Fruit
- Frozen Noncarbonated Drinks
- Nonfrozen Noncarbonated Drinks

- Frozen Fruits and Vegetables
- Sweetrolls/Coffee Cakes/Doughnuts
- Frozen and Refrigerated Bakery Products
- Pies/Tarts/Turnovers
- Ground Beef
- Other Beef
- Pork Chops
- Other Pork
- Frankfurters
- Mutton/Goat and Game
- Other Poultry
- Fresh Fish and Shellfish
- Eggs
- Fresh Milk
- Cheese
- Ice Cream and Related Products
- Apples
- Bananas
- Other Fresh Fruits
- Potatoes
- Lettuce
- Tomatoes
- Other Fresh Vegetables
- Candy and Chewing Gum
- Jams/Preserves/Other Sweets
- Fats and Oils
- Salad Dressings
- Peanut Butter
- Cola
- Other Carbonated Drinks
- Tea
- Other Noncarbonated Beverages and Ice
- Canned and Packaged Soups
- Frozen Meals
- Other Frozen Prepared Foods
- Potato Chips and Other Snacks
- Nuts
- Salt/Spices/Other Seasonings
- Olives/Pickles/Relishes
- Sauces and Gravies
- Baking Needs and Miscellaneous Products
- Prepared Salads
- Prepared Desserts
- Baby Food

• Miscellaneous Prepared Foods

Food from Restaurants and other Locations

- Food and Non-Alcohol at Fast Food
- Food and Non-Alcohol at Restaurants
- Food and Non-Alcohol at Vending Machines
- Food and Non-Alcohol at Employer
- Alcohol at Restaurants/Bars

Cleaning and Hygiene Products

- Tissue/Toilet Paper/Paper Towels/Napkin
- Cosmetics/Perfume/Bath Preparations
- Deodorants/Feminine Hygiene/etc
- Adult Diapers

Home Improvement and Maintenance

- Unspecified Capital Improvements
- Remodeling one or more Rooms
- Other Improvements or Repair
- Sale Expenses Recently Occupied Homes
- Property Assessment
- Contractor Labor and Material Costs
- Construction and Repair Supply Costs
- Painting/Wallpapering Supplies
- Lumber, Paneling, Tile, Glass, Door, Etc.
- Blacktop and Masonry Materials
- Plumbing Supplies and Fixtures
- Electric Heating and A/C Equipment
- Landscaping Plants, Seeds & Equipment
- Lawn and Garden Supplies

Miscellaneous Expenses

- Stationery/Stationery Supplies/Giftwrap
- Miscellaneous Household Products
- Postage
- Souvenirs
- Camp Fees
- Smoking Accessories
- Unspecified Taxes
- Recreational Lessons
- Retirement Plans
- Unspecified Gifts

- Prepaid Phone Cards
- Cigarettes
- Non-Cigarette Tobacco Products
- Dry Cleaning
- Payments for Coin Operated Laundry
- Laundry and Cleaning Equipment
- Coin-op Laundry / Dry Cleaning
- Non-coin-op Laundry / Dry Cleaning
- Funerals/Burials/Cremation
- Cemetery Lot and Vault Upkeep
- Catering
- Fresh Flowers and Potted Plants
- Haircut/Styling Expenses
- Toys and Games
- Arts and Crafts
- Prof. Photography Fees
- Occupational Expenses
- Lotteries and Games of Chance
- Live Entertainment for Events
- Rental of Party Supplies for Events
- Sewing/Knitting/Quilting Materials
- Park or Museum Tickets
- Lodging
- Indoor Plants
- Athletic Gear and Game Tables
- Luggage

Caliper Consumer Expenditure Data

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