

Consumer Expenditure Survey (CE) Data Requirements

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This document provides an overview of the Consumer Expenditure Survey (CE) program's data requirements. The purpose of this document is to provide a basis for ongoing survey redesign discussions; however, it is also intended to be a living document that will be updated with any changes in program office priorities. While this document describes the data requirements of the CE program, a separate document describes the requirements of the Consumer Price Index (CPI) program (Casey, 2010). As both sets of requirements need to be taken into account, an integrated document synthesizing the two sets of requirements is forthcoming.

The mission of the CE is to collect, produce and disseminate information that presents a statistical picture of consumer spending for use by government agencies and private data users. The CE program's data requirements are to collect and publish all information necessary to fulfill the survey's objectives to determine aggregate expenditures and estimates of change for all consumers in the U.S.; publish tabulations of all expenditures nationally and for selected subgroups; provide comprehensive annual microdata for the analysis of the expenditure patterns of individual consuming units in the U.S.; and be of use in a variety of economic research, such as determining poverty thresholds and analyzing spending patterns by income level (CE Conceptual Framework, 2009).

This document discusses those data requirements that enable the CE to fulfill its mission, but does not discuss survey design features necessary to meet those requirements.

This document comprises three sections and several appendixes:

- Section I describes the constraints that currently apply to CE data requirements but are assumed to be suspended for the purposes of this document.
- Section II discusses the concepts of consumer unit (CU) and expenditures.
- Section III provides a list and discussion of the data requirements.
- Appendixes include a summary table of the data requirements (Appendix A), a table with the main categories of data showing their required collection period and prioritizing their accuracy (Appendix B), a list of the expenditure detail required (Appendix C), and a list of the primary inputs to this document (Appendix D).

I. Assumptions

CE data requirements are constrained internally by budget, resources, respondent cooperation, and respondent confidentiality. In addition, for the past 30 years, CE data have been a major input to the CPI cost weight process; the CPI is a Principal Federal Economic Indicator. The CE program has been aware of the responsibility to meet the needs of this

important data user, and has been responsive in meeting CPI requirements in the survey questionnaires. This has placed constraints on CE data collection: the level of expenditure details (see Casey 2010), the wording of questions, and the inclusion of questions that are not needed for CE estimates (for example, the time rented and the time available to be rented for vacation homes).

For purposes of this document, the CPI constraints are assumed to be suspended. This is a theoretical exercise, and in no way indicates a lack of support for the CPI program after the survey redesign. This is simply to delineate CPI versus non-CPI requirements for the CE. There may be approaches where the CPI can use data from other sources or statistical models to produce the level of detail needed. It is envisioned that the CE and CPI programs will work together to find a middle ground between the current CPI requirements and the requirements in this document that will produce the high quality data that CPI needs without imposing excessive burden on the CE. This may be a lengthy process because of the need to research other data sources and to develop and test statistical models. That is why this document is not seen as a “final” set of requirements for a redesigned CE, but rather as a living document that will evolve over time. In instances where the data requirements for the CE and the CPI are different, each program’s needs are stated in this document.

II. Supporting Concepts

1. Consumer unit. To achieve its goal of collecting expenditure data from the U.S. civilian noninstitutional population, the CE determined that it should obtain data from individuals or groups of persons that behave as an organized unit in making expenditure decisions. More particularly this meant either: 1) a single financially independent person living alone, sharing a household with others, or rooming in a private home, lodging house, or hotel, who did not share major expenditures with others, or 2) a group of persons, usually living together, who pooled their income and made joint decisions regarding their major items of expense.

The CE has identified this entity as a “consumer unit” or “CU.” This unit of measure is very similar to but may provide more accurate expenditure data than a “household” measure, because a household, by definition, includes all people living in a housing unit with a shared entrance. A household can include persons paying jointly for housing space but who do not share other living expenses. In addition, if household members are independent agents with respect to their spending decisions, it is unlikely any particular household member will know the expenditures of all other members, so the aggregate totals for the household are not collectible.

The formal definition of a CU in the CE is: (1) all members of a particular household who are related by blood, marriage, adoption, or other legal arrangements; or (2) a person living alone or sharing a household with others or living as a roomer in a private home or lodging house or in permanent living quarters in a hotel or motel, but who is financially independent; or (3) two or more persons living together who pool their income to make joint expenditure decisions.

While the CU is the current choice as the population unit for measuring and publishing CE data, this may not be the case in the future. Developments in data collection technology and methodology could make the collection of expenditure data at the individual member level

feasible. As living arrangements among people evolve, it may be that individuals will form new organizational units that are theoretically more appropriate than the CU for CE purposes. It is assumed, however, that such units would still make joint spending decisions and exhibit financial interdependence among its members. These are areas for further comparative research.

2. Expenditures. When determining what kind of spending the CE should collect, the closely-related concepts of consumption and expenditures are taken into account. Whereas, ultimately, the CE has been charged as an expenditure survey, its design has been flexible enough to collect data that can be used for some consumption analyses. In determining what constitutes an expenditure, the CE program has made decisions concerning when an expenditure has been considered to occur, how it is to be valued, how it is paid for, and for whom the expenditure has been made.

Expenditures are defined as the acquisition costs as measured by actual financial obligation at the time of acquisition in dollar terms, for any type of payment method, of all goods and services that are acquired from outside the CU. These goods and services are intended to increase the current economic well-being (or consumption) of the CU. Goods and services acquired for persons outside the CU (gifts) are included. Those purchases or portions of purchases directly assignable to business purposes are excluded. Also excluded are periodic credit or installment payments on goods or services already acquired. Goods and services obtained through non-financial means, such as home production, barter, and in-kind receipts do not qualify as well.

III. Requirements

1. Complete picture of spending for each consumer unit. CE expenditure data include everything from big-ticket items such as property, vehicles, and major appliances, to smaller purchases such as food, beverages, and household supplies, to routine or recurring expenses such as utility bills. This comprehensive set of data for each CU allows microdata users to analyze joint distributions and conduct other multivariate analyses of family spending. The CE regards a complete picture of spending at the CU level to be a requirement, although by using global questions, imputation, or other methods, it is not required that all expenditures be collected at the same level of detail from each CU. A complete picture of spending is not needed by CPI, which requires only aggregate estimates at the Entry Level Item (ELI) level for a geographic area.

2. Level of expenditure detail. Currently, the CE publishes standard data tables that include about 90 expenditure line items. (See <http://www.bls.gov/cex/2009/Standard/age/pdf> for an example of the current publication level of detail). The CE also creates unpublished tables at a much more detailed level (the Universal Classification Code (UCC) level) that include over 800 expenditure line items. In support of CPI, CE expenditure data are used to create 8 major groups (e.g., Housing), 70 expenditure classes (e.g., Appliances), 211 Item Strata (e.g., Major Appliances), and 303 ELIs (e.g., Refrigerators and Freezers). Both the UCC and the ELI level of specificity place a significant burden on respondents in terms of the number of questions asked and the length of the survey. This level of detail is also not needed for all data users.

The level of detail required by the CE to produce reliable estimates of the spending patterns of consumers is closer to the current standard publication level.

The authors reviewed both the detailed, UCC-level tables and the standard publication level tables to come up with a modified table stub that shows the level of detail required to meet the CE needs. Factors considered by the authors included dollar thresholds, percent share of total expenditures at the national or major demographic level, standard errors, as well as expert judgment in determining unique expenditure categories. Consistency with earlier publications was also important. The level of detail is shown in Appendix C.

3. Population. Sufficient coverage data for the national, civilian, non-institutional population are needed for analyzing the U.S. economy, and to allow for data comparisons with other sources such as the Bureau of Economic Analysis (BEA) Personal Consumption Expenditures (PCE). In order to provide national coverage, the CE must measure spending in both urban and rural areas.

4. Sample size. The required number of usable interviews must be sufficient to provide reliable estimates at the level of expenditure detail shown in Appendix C. According to general guidelines from the Statistical Methods Division CE Branch, it is desirable that the CE's highest-level expenditure estimates—the mean annual total expenditures per CU at the national level—have a coefficient of variation of one percent or less.

For the current survey design, this means the effective sample size should be at least 7,500 non-bounding interviews (interviews 2 through 5) per quarter in the Interview Survey, and 7,500 interviewed households per year in the Diary Survey. Because of an earlier sample size decrease, the current CE sample size is 7,000 non-bounding interviews per quarter in the Interview Survey, and 7,100 interviewed households per year in the Diary Survey, and the coefficient of variation is 1.25 percent. There is an initiative proposed in the 2012 President's budget that would increase the sample size by eight percent through the introduction of additional geographic areas.

The CE's current publication criterion requires that expenditure estimates shown in the standard publication tables should have a coefficient of variation below 25 percent. The CE sample size is set to be sufficient to allow the CPI to replace its cost weights every two years. The CE cross-tabulation tables also use two years of data. This sample size is sufficient for the public use microdata to meet the U.S. Census Disclosure Review Board's confidentiality requirements.

5. Geographic detail. The CE currently publishes tables at the national, regional, urban/rural, and self-representing metropolitan statistical area (MSA) levels. The self-representing MSA tables combine two years of data and the level of expenditure detail published is less than the standard publication tables (for an example of the MSA tables see <http://www.bls.gov/cex/2009/msas/northeast.pdf>). The annual public-use microdata identify region and most states—edited for confidentiality—as well as self-representing MSAs.

State governments, microdata users, and the general public want to use data at levels finer than the national level to measure expenditure trends. Even though most states are identified in the public-use microdata, state level weights are not calculated. Using CE data to measure

expenditures for individual states is a frequent request. Population weights are created at either the Census region level or at the self-representing MSA level; therefore the weights are not representative of any state's population. However it may be possible to create useful alternate weights at the state level for selected states, if they have a large enough sample in both urban and rural areas. There is sufficient demand for state level data that the CE program views this as a new data requirement. This could not be accomplished using existing resources and a sample increase would be necessary.

The CPI does not currently require expenditures at the state level but does require them at the regional and self-representing MSA level. Although this provides continuity for CE customers and the necessary level of geographic detail for microdata users, it is not a CE requirement. However, having state-level data will allow data users the flexibility to group the data into new geographic areas, including by region and sub-region.

Data show that expenditure dollars and shares in rural areas differ significantly from urban spending, so both populations need to be sampled for the CE. As mentioned above, the data are also necessary to provide national coverage. In summary, the CE requires national, urban and rural, and state level data.

6. *Time period and periodicity.* The CE data are published on an annual basis for the preceding calendar year; annual data are needed to support statistical significance of the publication categories. An annual period is also a frequently used and understandable reference period—for example, “the average American household spent \$1,986 on gasoline in 2009.” Allowing time for post-collection processing, the annual tables are published six months after the last data collection quarter of the publication year—for example, the 2009 calendar year data were published October 5, 2010, and the last data collection quarter needed to complete the 2009 calendar year publication ended on March 31, 2010. Major customers, such as the IRS (for sales tax values) and the U.S. Census Bureau (for supplemental poverty calculations), would like CE data to be available with a shorter lag time than currently. The CE would be more useful to the customers analyzing rapid changes in the economy if tables containing four quarters of information were published on a rolling basis every three months. The CE program will move to this publication schedule after a redesign of its processing systems. Therefore, the requirement is that CE be able to publish data within six months of the end of each data collection quarter.

In addition to using annual data, data users studying seasonal trends and purchase behavior use quarterly and monthly data. Calculating cost-of-living indexes using the chained CPI requires the ability to calculate cost weights each month. This is a CPI but not a CE data requirement. The requirement for CE is to be able to identify the quarter in which an expenditure was made.

7. *Panel component.* The CE Interview Survey estimates and microdata include four quarters of data from CUs. This panel component allows microdata users to track spending for a CU over the course of an entire year. The CE considers the ability to support micro-level analyses over a 12-month period to be a requirement, with data collected at more than one point in time. However, this may be accomplished by methods other than that of the current Interview Survey methodology of using five quarterly interviews. Information on the roster of

household members, such as which members are living in the household, member relationships, etc., should be updated each interview. The CPI does not require the CE data to come from a panel of respondents.

8. *Integrated microdata.* In the current survey design, the Interview and Diary Surveys have independent samples and data are collected and processed separately. Some items are unique to one survey or the other, and neither provides a full accounting of all spending by their sample units. To provide a complete view of consumer expenditures in published estimates, where the identification of individual sample units is not necessary, data from both survey sources are integrated. The CE program has developed a methodology to address those items where data are available from both survey sources, (see <http://www.bls.gov/opub/hom/pdf/homch16.pdf>).

With respect to the public-use microdata, however, no integration or statistical matching techniques are employed to augment the expenditure data reported by the sample units in either survey to construct a comprehensive unit-level picture of spending. The redesigned CE survey should incorporate the capability of producing microdata files where a full profile of expenditures is available for each sampled unit. To the extent that a future redesign employs a variety of modes of primary data collection from sample units, (for example, by using a web diary, telephone interview, or scanner data), or incorporates data from secondary sources (administrative data, data from other special-purpose expenditure surveys), a methodology to integrate the data from these multiple sources will also be required.

9. *Income.* One purpose of the CE is to provide information on the buying habits of American consumers. The main determinant of both the types of items purchased and the amount spent on those items is income. Income also assists in the verification of reported spending. The CE should endeavor to measure income received by the CU during the same time period the CU reports expenditures. Currently, the CUs are asked for their income for the past twelve months and their expenditures for the past three months.

There are several alternate definitions of income used for different types of analysis. Although some income breakdown is desirable for comparing the CE to other income data sources, the CE requires only an estimate of total income for each CU as well as the following income items: wages, salaries, and self-employment income; Social Security, private and government pensions; and all other income sources. If CE changed to provide these broader categories only, a substantial number of income-related questions currently collected in the CE could be eliminated.

10. *Socioeconomic information.* In addition to income, the CE collects socioeconomic information to meet a number of requirements. This includes those variables necessary for:

- Creating population weights to enable the creation of weighted estimates for publication tables and other CE products. Examples of such variables are age, race, Hispanic origin, and owner/renter tenure.
- Facilitating survey research on improving data quality (for example, paradata fields such as length of interview, collection mode, etc.).
- Comparing CE estimates to those derived by other major household surveys. Examples include tenure and structure type.

- Creating tabulations for publication, such as by income, age, composition of the CU, or size of the CU.
- Conducting economic analyses. Such variables include number of persons in the consumer unit, employment status, marital status, and occupation. As a special case rental equivalence of owned properties must also be collected as a measure of value of the service flow for housing.

Other useful demographic variables may be collected as resources permit, but should not be considered integral to the core scope of the CE, and will need to compete with other items for inclusion in the survey based on available resources and respondent burden. A question-by-question review of the survey for the 2013 revision will determine the details for this requirement.

11. *Assets and liabilities.* A measure of assets and liabilities is useful to explain expenditures based on the expenditure life-cycle theory—the idea that CU expenditures are based on a combination of current and expected available financial resources. Liability data can also shed light on future claims on income for debt service. The net change in assets and liabilities is necessary for examining the quality of the expenditure and income data, via the use of account balancing. The CE requires a measure of total assets and liabilities as well as the net change in assets and liabilities over a one-year period.

For a summary of the priorities given to the categories of data by periodicity and accuracy, see Appendix B.

Appendix A. Summary of the requirements

Requirement changes that would have a significant impact on current CPI requirements

- CE does not need the very detailed level that CPI currently requires. See Appendix B for the level of detail CE needs.
- CE does not need the assignment of specific months to expenditures. CE needs the quarter of the expense.
- CE does not need the data at the level of self-representing MSAs.

Significant new requirements

- A sufficient sample to produce state level estimates.
- Integration of microdata.

Category	Requirement
1. All spending for all CUs	CE requires that the microdata include all spending for all CUs but does not require the <i>collection</i> of all spending from all CUs—other methods could be used to create the data.
2. Expenditure level of detail	CE needs a more aggregated level of expenditure detail than is needed by CPI. The current CPI level of detail is 303 ELLs, and there are 96 items in Appendix C.
3. Population	Sufficient coverage data for the national, civilian, non-institutional population including data for urban and rural areas is required. No change to current requirements.
4. Sample size	The sample should be restored to pre-2006 levels, as the current sample does not meet the CE's requirements. Also, a sample expansion would be necessary to meet the new requirement to produce state level estimates.
5. Geographic detail	CE does not need expenditures at the regional and self-representing MSA level. There is a new requirement that expenditures are needed to produce state level estimates. This requirement is not met by the current sample size and design and would require a sample expansion. (Note that state level estimates would allow many new geographic groupings, including regional estimates.)
6. Time period and periodicity	CE only needs to identify the quarter an expense was made, not the month as currently. Also, the CE must be able to publish data within six months of the end of the data collection quarter.
7. Panel component	CE requires a panel component. It does not have to be a five-quarter panel, as long as it provides a 12-month

Category	Requirement
	period with data collected from more than one point in time. The CU roster—the composition of the CU—should be updated every interview.
8. Integrated microdata	There is a new requirement to produce integrated microdata where a full profile of expenditures is available for each sampled unit.
9. Income	The requirement for income is to have a total for the CU; and wages, salaries, and self-employment income; Social Security, private and government pensions; and all other income sources. This means that the current structure of the questions is not needed.
10. Socioeconomic information	Currently there are more questions of this type than are needed by the CE program. A question by question review of the survey for the 2013 revision will determine the details for this requirement. CE requires those variables necessary for creating population weights, for allowing research on improving data quality, for comparing CE estimates to those of other surveys, for creating publication tables, and for conducting economic analyses.
11. Assets and liabilities	A measure of total assets and liabilities as well as the net change over a one-year period are required. The current survey has more detail than needed.

Appendix B. Main categories of data by periodicity and accuracy

The “Relative priority of data accuracy” column shows the importance of each category of data relative to the others. Expenditures are the most important, followed by income and socioeconomic variables (age, race, tenure, etc.) that are used in CE processing and publications.

Category	Collection period	Relative priority of data accuracy
Expenditures	Quarter the expense was made	High
Income	Income received in the same period as the expenditures were made.	Medium
Financial assets/liabilities	Total assets/liabilities in the same period as the expenditures were made. Changes in financial assets and liabilities over the whole collection period (e.g., one year)	Low
Socioeconomic	<ul style="list-style-type: none"> • Data collected in the roster of household members should be updated each data collection period. • Other data can be collected in the first data collection period only 	<p>Medium for data used in production processing and data dissemination (for example: sampling, weighting, data adjustment, tabulations.)</p> <p>Low for all others</p>

Appendix C. Level of Expenditure Category Detail Required by CE

Note: Expenditure categories in **boldface** are those for which the CE requires separate estimates; the remaining categories represent aggregations of lower-level categories. Component items for selected expenditure categories in Column 1 are shown in the second column. In general, the detailed list of components provides context for those expenditure categories whose titles are not fully descriptive of the contents of the category

Expenditure category	Components of category (where applicable)
Average annual expenditures	
Food	
Food at home	
Cereals, grains, and bakery products	
Beef, pork & other meats	
Poultry, fish and seafood, and eggs	
Dairy products	
Fresh fruits and vegetables	
Processed fruits and vegetables	
Frozen, canned & packaged prepared foods	
Sugar and other sweets, potato chips, nuts and other snacks	
Fats and oils, condiments & seasonings	
Nonalcoholic beverages	
Food away from home	
Lunch	
Dinner	
Breakfast, brunch, snacks and nonalcoholic beverages	

Expenditure category	Components of category (where applicable)
Other food away from home	Food on out-of-town trips; Food prepared by consumer unit on out-of-town trips; Catered affairs; School lunches; Meals as pay
Alcoholic beverages	
At home	
Away from home	Alcoholic beverages away from home; Alcoholic beverages purchased on trips
Housing	
Shelter	
Owned dwellings	
Mortgage interest and charges	
Property taxes	
Homeowners insurance	
Maintenance and repair	
Other owner's expenses	Ground rent; Property management and security; Parking
Rented dwellings	
Rent	
Other renter's expenses	Rent as pay; Maintenance, insurance and other expenses
Owned vacation homes and other properties	Owned vacation homes; Expenses for other properties; Interest paid, home equity line of credit (other property)
Lodging on out-of-town trips	
Utilities, fuels, and public services	
Natural gas	
Electricity	
Fuel oil and other fuels	
Telephone services	

Expenditure category	Components of category (where applicable)
Water and other public services	Water and sewerage maintenance; Trash and garbage collection; Septic tank cleaning
Household operations	
Personal services	
Child care	Babysitting and child care in your own home; Babysitting and child care in someone else's home; Day care centers, nursery, and preschools
Adult care	Care for elderly, invalids, handicapped, etc; Adult day care centers
Other household operations	
Computer information services	
Other household expenses	Housekeeping services; Gardening, lawn care service; Water softening service; Household laundry and dry cleaning, coin-operated and sent out; Termite/pest control products and services; Home security system service fee; Other home services; Moving, storage, freight; Appliance repair and rental, built-in and freestanding; Reupholstering, furniture repair; Repairs/rentals of lawn and garden equipment, hand or power tools, other household equipment; Rental of office equipment for nonbusiness use; Repair of miscellaneous household equipment and furnishings, computer systems for nonbusiness use; Installation of computer;
Housekeeping supplies	
Laundry and cleaning supplies	
Other household products	Cleansing and toilet tissue, paper towels and napkins; Miscellaneous household products; Lawn and garden supplies
Household furnishings and equipment	
Household textiles	
Furniture, floor & window coverings	Furniture; Floor coverings; Window coverings

Expenditure category	Components of category (where applicable)
Appliances	Major appliances; Small appliances
Miscellaneous household equipment	
Housewares & household decorative items	Housewares; Lamps and lighting fixtures; Clocks and other household decorative items; Indoor plants, fresh flowers
Information processing and communication equipment	Computers and computer hardware for nonbusiness use; Computer software and accessories for nonbusiness use; Personal digital assistants; Internet services away from home; Telephone answering devices; Business equipment for home use; Office furniture for home use; Telephones and accessories
Other household equipment	Laundry and cleaning equipment; Outdoor equipment; Lawn and garden equipment; Power tools; Hand tools; Closet and storage items; Rental of furniture; Other hardware; Smoke alarms (owned home); Smoke alarms (renter); Smoke alarms (owned vacation); Other household appliances (owned home); Other household appliances (renter); Miscellaneous household equipment and parts
Apparel and services	
Men	Men's apparel & footwear
Women	Women's apparel & footwear
Children 2 to 15	Boys' apparel & footwear; Girls' apparel & footwear
Children under 2	
Other apparel products and services	Watches; Jewelry; Luggage; Material for making clothes; Sewing patterns and notions; Shoe repair and other shoe service; Apparel laundry and dry cleaning, coin-operated and sent out; Alteration, repair and tailoring of apparel and accessories; Clothing rental; Watch and jewelry repair; Clothing storage
Transportation	
Vehicle purchases (net outlay)	
Cars and trucks, new	

Expenditure category	Components of category (where applicable)
New cars	
New trucks and other non-recreational vehicles	New trucks; New motorcycles; New aircraft
Cars and trucks, used	
Used cars	
Used trucks and other non-recreational vehicles	Used trucks; Used motorcycles; Used aircraft
Gasoline and motor oil	
Other vehicle expenses	
Vehicle finance charges	
Maintenance and repairs	
Vehicle insurance	
Vehicle rental, leases, licenses, and other charges	
Leased and rented vehicles	
Miscellaneous vehicle expenses	Vehicle registration state; Vehicle registration local; Drivers' license; Vehicle inspection; Parking fees; Tolls or electronic toll passes; Tolls on out-of-town trips; Towing charges; Global positioning services; Automobile service clubs
Public transportation	
Airline fares	
Other public transportation expenses	Intracity mass transit fares; Local trans on out-of-town trips; Taxi fares and limousine services on trips; Taxi fares and limousine services; Intercity train fares; Ship fares; School bus
Healthcare	
Health insurance	Commercial health insurance; Blue Cross, Blue Shield; Health maintenance organization (not BCBS)

Expenditure category	Components of category (where applicable)
Medicare payments	
Medicare prescription drug, Medicare supplements, long term care, and other health insurance	
Medical services	
Physician's services	
Dental services	
Other medical services	Eyecare services; Service by professionals other than physician; Lab tests, x-rays; Hospital room and services; Medical care in retirement community; Care in convalescent or nursing home; Repair of medical equipment; Other medical care services
Drugs	
Nonprescription drugs & vitamins	
Prescription drugs	
Medical supplies	
Entertainment	
Fees and admissions	
Movie, theater, sporting event admissions	Movie, theater, amusement parks, and other; Movie, other admissions, out-of-town trips; Admission to sporting events; Admission to sports events, out-of-town trips
Club memberships, participant sports & recreational lesson fees	Fees for recreational lessons; Other entertainment services, out-of-town trips; Recreation expenses, out-of-town trips; Social, recreation, health club membership; Fees for participant sports; Participant sports, out-of-town trips
Audio and visual equipment and services	
Cable and satellite television services	

Expenditure category	Components of category (where applicable)
Audio-visual equipment	Radios; Phonographs; Televisions; Tape recorders and players; Miscellaneous sound equipment; Miscellaneous video equipment; Satellite radio service; Sound equipment accessories; Online gaming services; VCR's and video disc players; Digital media players and recorders; Video game hardware and software; Video cassettes, tapes, and discs; Streaming, downloading video; Repair of TV, radio, and sound equipment; Rental of televisions; Personal digital audio players; Sound components and component systems; Satellite dishes; CDs, records, audio tapes; Streaming, downloading audio; Rental of VCR, radio, and sound equipment; Musical instruments and accessories; Rental and repair of musical instruments; Rental of video cassettes, tapes, films, and discs; Rental of computer and video game hardware and software; Installation of televisions; Installation of satellite television equipment; Installation of sound systems; Installation of other video equipment or sound systems
Pets, toys, hobbies, and playground equipment	
Pets	
Toys, games, hobbies, incl. photography	Toys, games, arts and crafts, and tricycles; Stamp and coin collecting; Photographic equipment, supplies and services
Other entertainment supplies, equipment, and services	
Boats, RV's, and other recreational vehicles	Unmotored recreational vehicles; Motorized recreational vehicles; Rental of recreational vehicles; Outboard motors; Docking and landing fees

Expenditure category	Components of category (where applicable)
Sports, recreation and exercise equipment	Playground equipment; Athletic gear, game tables, and exercise equipment; Bicycles; Camping equipment; Hunting and fishing equipment; Winter sports equipment; Winter sports equipment; Water sports equipment; Other sports equipment; Global positioning system devices; Rental and repair of miscellaneous sports equipment
Personal care products and services	
Personal care products	
Personal care services	
Reading	
Education	
College tuition	
Other school tuition	Elementary and high school tuition; Vocational and technical school tuition; Test preparation, tutoring services; Other schools tuition
Food and housing at school	Food or board at school; Housing while attending school
School books, supplies, and other expenses	Other school expenses including rentals; School books, supplies, equipment for college; School books, supplies, equipment for elementary, high school; School books, supplies, equipment for vocational and technical schools; School books, supplies, equipment for day care, nursery; School books, supplies, equipment for other schools; School supplies, etc - unspecified
Tobacco products and smoking supplies	
Miscellaneous	
Finance charges excluding mortgage and vehicle	
Legal fees and financial expenses	Legal fees; Accounting fees; Checking accounts, other bank service charges; Safe deposit box rental
Funeral expenses	Funeral expenses; Cemetery lots, vaults, maintenance fees

Expenditure category	Components of category (where applicable)
Other miscellaneous expenses	Postage and stationery; Miscellaneous fees; Lotteries and pari-mutuel losses; Miscellaneous personal services; Dating services; Occupational expenses; Credit card memberships; Shopping club membership fees; Vacation clubs; Fireworks; Souvenirs; Visual goods; Pinball, electronic video games; Live entertainment for catered affairs; Rental of party supplies for catered affairs
Cash contributions	
Alimony, child support and support for college students	Support for college students; Alimony expenditures; Child support expenditures
Cash contributions to church, religious organizations	
Cash contributions to charities, educational and other organizations	Cash contributions to charities and other organizations; Cash contribution to educational institutions
Other cash and non-cash gifts	Cash contribution to political organizations; Other cash gifts; Gift to non-CU members of stocks, bonds, and mutual funds
Personal insurance and pensions	
Life and other personal insurance	
Pensions and Social Security	
Deductions for Social Security	
Payroll deductions to retirement plans	Deductions for government retirement; Deductions for railroad retirement; Deductions for private pensions
Non-payroll deposit to retirement plans	

Appendix D. Document Inputs

The primary inputs to this document are:

- Gemini Project Vision Document (Gemini Steering Team, 2010)
<http://www.bls.gov/cex/geminimaterials.htm>
- CE Data in the CPI: Production Requirements and Redesign Interests (Casey, 2010) <http://www.bls.gov/cex/ovrvwcpirequirement.pdf>
- Data User Needs Forum Final Report (Henderson et al., 2010)
- A Conceptual Framework for the Consumer Expenditure Surveys (Henderson et al., 2000)
- CNSTAT Charge to the Panel (Horrigan et al., 2011)
http://www.bls.gov/cex/redpanl1_horrigan.pdf