2012 Census of Governments: Finance Methodology

The U.S. Census Bureau conducts a Census of Governments at 5-year intervals, as authorized by Title 13, United States Code, Section 161.

This survey methodology contains information on the data collected for fiscal year 2012.

Population of Interest

The population of interest for this survey contains the 50 state governments and more than 90,000 local governments (counties, municipalities, townships, special districts, and school districts) and the District of Columbia. In years ending in '2' and '7' the entire universe is canvassed. In intervening years, a sample of the population of interest is surveyed. The survey coverage includes all state and local governments in the United States.

Content of the Survey

For both the census and annual survey, the finance detail data are equivalent, encompassing the entire range of government financial activities - revenue, expenditure, debt, and financial assets. Revenue data include taxes, charges, interest, intergovernmental revenues, and other earnings. Expenditure data include total by function (such as education and police protection) and by character (such as current operations and capital outlays). Debt data include issuance, retirement, and amounts outstanding. Financial assets data include cash and securities holdings, by purpose.

The forms listed below are used to collect the data. The variables collected on these forms are explained in detail in the 2006 Government Finance and Employment Classification Manual. Respondents may reply to these regular 'F' forms questionnaires over the Internet.

Form Number	Description
F11 FY2012	Locally-Administered Defined Benefit Plans
F12 FY2012	State-Administered Defined Benefit Plans
F13 FY2012	Finances of Insurance Trust Systems
F28 FY2012	All Counties, Municipalities, and Townships
F29 FY2012	Multi-Function Special Districts
F32 FY2012	Single Function Special Districts
F33 FY2012	School System Finances
F42 FY2012	School Building Agencies

Data Collection

Data collected for the Census of Governments: Finance are public record and are not confidential, as authorized by Title 13, United States Code, Section 9. Data for this survey were collected using the forms listed in the Content of the Survey section and through state government administrative records.

The data collection for the state and local finance survey (both census and sample survey) is made up of three modes to obtain data: mail canvass, Internet collection, and central collection from state sources. Collection methods vary by state and type of government. Reviews of government accounting records provide data for most state government agencies and the 48 largest and most complex county and municipal governments. Data for local governments in about 27 states are consolidated and submitted by state agencies (central collections), usually as electronic transmissions or mutually developed questionnaires. Each of these central collection arrangements is unique, conforming to Census Bureau and the states' requirements.

Data for the balance of local governments were obtained via mail questionnaires sent directly to county, municipal, township, special district, and school district governments.

In some cases, the data from central collections and mail canvass procedures were incomplete or questionable. If Census Bureau analysts were unable to obtain corrected data from original sources, they attempted to obtain data from Comprehensive Annual Financial Reports (CAFRs). In many instances, supplied/compiled data are supplemented with secondary sources, such as debt information from Mergents and Thomson Financial.

The survey combines data from several government finance surveys, including the 2012 Census of Governments: Finance – Survey of State Government Finances, 2012 Census of Governments: Finance – Survey of Public Pensions, and the 2012 Census of Governments: Finance – Survey of School System Finances.

Note: All governments that received a mail questionnaire had the option of submitting their response via the Internet.

The following are important dates in the data collection process for fiscal year 2012:

September 2012	Initial mail-out
November 2012	Reminder letter mailed out
January 2013	Follow up mail-out
March - June 2013	Telephone follow-up

Data Processing

Editing:

Editing is a process that tries to ensure the accuracy, completeness, and consistency of the survey data. Efforts are made at all phases of collection, processing, and tabulation to minimize reporting, keying, and processing errors.

Although some edits are built into the Internet data collection instrument and the data entry programs, the majority of the edits are performed post collection. Edits consist primarily of four types: (1) *consistency edits,* (2) *historical ratio edits* of the current year's reported value to the prior year's value, (3) *current year ratio edits,* and (4) *balance checks*.

The *consistency edits* check the logical relationships of data items reported on the form. For example, if interest on debt is reported, then there must be debt.

The *historical ratio edits* compare data for the current year to data for the prior year or prior census year. If data fall outside of acceptable tolerance levels, the item is flagged for further review. For example, the reported property tax for the current year may be compared against the property tax last year, if the reporting unit was in last year's sample. If it was not in last year's sample, the current year value is compared to the prior census year value.

The *current year ratio edits* compare one data item on the form against a different data item. If data fall outside of acceptable tolerance levels, the item is flagged for further review. For example, airport expenditure to airport revenue is a current year ratio.

Balance checks are checks of linear relationships that exist in the data. Debt flow is an example of a *balance check*. The ending debt must equal the beginning debt plus the debt issued minus the debt retired.

After all data are edited and imputed, they are aggregated. A macro-edit, or aggregate-level, review is conducted with current year state aggregates compared to prior year and prior census aggregates. Macro-level ratio edits and tolerance levels were developed using the current year data.

For the *ratio edits, consistency edits, balance checks, and macro edits,* the edit results are reviewed by analysts and adjusted as needed. When the analyst is unable to resolve or accept the edit failure, contact is made with the respondent to verify or correct the reported data. The results of the action are tracked with a data edit flag.

Imputation:

Not all respondents answer every item on the questionnaire. There are also questionnaires that are not returned despite efforts to gain a response. Imputation is the process of filling in missing or invalid data with reasonable values in order to have a complete data set for analytical purposes. For census years, the complete data set is also needed for sample design purposes.

For non-responding general purpose governments, imputations for missing units are based on recently reported historical data from either a prior year annual survey or the most recent census, adjusted by a growth rate. If no historical data are available, data from a randomly selected similar unit are adjusted by the ratio of the populations of the non-responding and randomly selected donor governments.

The imputations for non-responding special districts are done similarly. If prior year reported data are available, the prior year data for the non-respondent are adjusted by a growth rate that is determined from reporting units that are similar to the non-respondent. Special districts are similar if they are of the same function code and similar geography, e.g., police protection in a state or water transport in a region. For non-responding special districts with no recently reported data available, data are used from a randomly selected donor that is similar to the non- respondent. In cases where good secondary data sources exist, the data from those sources are used.

For individual questionnaire items that are not reported by general-purpose governments or dependent and independent school districts, either data from another source, pro-rating of totals, or prior year data are used to give a complete dataset.

Note: Between years 2002 through 2006, individual government imputed data were released to the public. For 2007 through 2012, individual unit data are available upon request. The data carry imputation and edit flags to help the users determine the usability of the data for their purposes.

Tabulation:

After the data were edited and imputed, the survey data was aggregated to yield the viewable and downloadable files that are available on the website.

To view the most common aggregate finance categories that are used in tables and special tabulations, see Chapter 13 of the Government Finance and Employment Classification Manual, entitled Methodology for Summary Tabulations.

Sampling Error:

The data for the census year are not subject to sampling and do not contain sampling error. The user should be mindful that the data for years not ending in '2' or '7' are from sample surveys and are subject to sampling error. Discussions of sampling error are available in the survey methodology descriptions for those years.

Non-sampling Error

Although every effort (as described in the Data Processing section) is made in all phases of collection, processing, and tabulation to minimize errors, the data are subject to non-sampling errors such as inability to obtain data for every variable from all units in the population of interest, inaccuracies in classification, response errors, misinterpretation of questions, mistakes in keying and coding, and coverage errors.

Overall Unit Response Rate

The overall unit response rate to the 2012 Census of Governments: Finance was 82.7 percent. All of the 50 state governments responded to the survey. In determining the unit response rate, a unit was determined to be a respondent if it provided information on at least one

variable or if a CAFR was available. This unit response rate was calculated for each state as well as for the total U.S., and provides the percentage of the units in the eligible universe that actually responded to the survey.

Total Quantity Response Rate

The total quantity response rate was calculated for certain key variables for each state. This response rate is computed separately for each key variable by summing the data provided by the respondents for the key variable and dividing this sum by the sum of the respondent data and the imputed data for the key variable; the result is multiplied by 100.

Note: The total quantity response rates for 2009 – 2012 may not be comparable to previous years for debt and assets due to a change in the way the total quantity response rates are calculated for those items. The total quantity response rate for debt includes only total long term debt outstanding, and the total quantity response rate for assets includes other cash and investments only.

Response Rate Tables

The following unit response rates for 2012 are available in downloadable Excel file:

- Local Government Response Rates – Response Rates by state for local governments.

The following total quantity response rates for 2012 are available in downloadable Excel files:

- Local Total Quantity Response Rates – Percentage of the total local estimates of debt, revenues, expenditures, and assets that was reported.

- State and Local Total Quantity Response Rates – Percentage of the total state and local estimates of debt, revenues, expenditures, and assets that was reported.