2007 Census of Governments: Finance Methodology

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

The 2007 Census of Governments: Finance, similar to those taken since 1957, covers the entire range of government financial activities (revenue, expenditure, debt, and assets). The Census yields a series of tables and files that provide users with comprehensive statistical information about state and local government economic activity. In non-census years the Annual Survey of Government Finances is conducted covering equivalent data detail.

Population of Interest

The population of interest for this survey contains the 50 state governments and 89,476 local governments (counties, municipalities, townships, special districts, and school districts) including 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 securities and other 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. With the exception of the F13 and F25 questionnaires respondents may reply to these regular ‘F’ form questionnaires over the Internet.

<table>
<thead>
<tr>
<th>Form Number</th>
<th>Survey Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>F11 FY2007</td>
<td>Locally Administered Employee-Retirement Systems</td>
</tr>
<tr>
<td>F12 FY2007</td>
<td>State Administered Employee-Retirement Systems</td>
</tr>
<tr>
<td>F13 FY2007</td>
<td>Finances of Insurance Trust Systems</td>
</tr>
<tr>
<td>F25 FY2007</td>
<td>State Agencies</td>
</tr>
<tr>
<td>F28 FY2007</td>
<td>All Counties, Municipalities, and Townships</td>
</tr>
<tr>
<td>F29 FY2007</td>
<td>Multi-Function Special Districts</td>
</tr>
<tr>
<td>F32 FY2007</td>
<td>Single Function Special Districts</td>
</tr>
<tr>
<td>F33 FY2007</td>
<td>School Systems</td>
</tr>
<tr>
<td>F42 FY2007</td>
<td>School Building Agencies</td>
</tr>
</tbody>
</table>
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 28 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 our 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.


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

The data collection schedule used for the local governments for the 2007 Census follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/2007</td>
<td>Initial mail-out</td>
</tr>
<tr>
<td>10/2007</td>
<td>Reminder letter mailed out</td>
</tr>
<tr>
<td>11/2007</td>
<td>Follow up mail-out</td>
</tr>
<tr>
<td>02/2008-04/2008</td>
<td>Telephone follow-up</td>
</tr>
</tbody>
</table>

Data Processing

Editing:

Editing is a process that ensures data are accurate, complete, and consistent. Efforts are made at all phases of collection, processing, and tabulation to minimize 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 nonresponding 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 nonresponding and randomly selected donor governments.

The imputations for nonresponding special districts are done similarly. If prior year reported data are available, the prior year data for the nonrespondent are adjusted by a growth rate that is determined from reporting units that are similar to the nonrespondent. 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 nonresponding special districts with no recently reported data available, data are used from a randomly selected donor that is similar to the nonrespondent. 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 not released to the public. For 2007, 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.

**Nonsampling 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 nonsampling 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 2007 Census of Government Finance was 81.2 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.

Response Rate Tables:

The following unit response rates for 2007 are available in downloadable Excel file:

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

The following total quantity response rates for 2007 are available in a downloadable Excel files:

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

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