2019 Census of Governments: Finance—Survey of Public Pensions:
State- and Locally-Administered Defined Benefit Data

Systems Methodology

The U.S. Census Bureau sponsors and conducts the Survey of Public Pensions as authorized by Title 13, United States Code, Sections 161 and 182.

The survey measures revenues, expenditures, financial assets, and membership information for public-employee pension systems classified as defined benefit plans. Data are shown for individual pension systems as well as at the national, state, and local government level. The survey yields a series of tables and files that provide users with comprehensive statistical information about the financial activity and membership of state and local government employee pension systems.

Population of Interest

The population of interest for this survey includes public employee pension systems or funds administered by state and local governments throughout the nation. Pension systems are only included if they meet the following two criteria: (1) they are sponsored by a recognized unit of government as defined by the Census Bureau and (2) their membership is comprised of public employees compensated with public funds. These pension systems consist of defined benefit plans – not defined contribution or post-employment healthcare plans. In years ending in '2' and '7' the entire universe is canvassed as part of the Census of Governments. In intervening years, a sample of the population of interest is surveyed.

Content of the Survey

A pension system is a pension plan in which investments, contributions, and benefits are administered as a separate entity independent of the parent government general fund. Assets are accumulated and benefits paid under a particular set of actuarial assumptions, including employee age, compensation, and service credits. They include single employer systems, in which one government is the sole sponsor of the pension plan, as well as multiple employer systems, where two or more governments maintain membership on behalf of their employees.

For both the Census of Governments and the annual survey, the detail of the data is equivalent, encompassing the entire range of financial activity for government employee pension systems – benefits paid, government contributions, employee contributions, and total holdings and investments. Total holdings and investments data include securities and other assets, such as cash and short-term investments, corporate bonds and stocks, and mortgages held directly.

The survey year encompasses the fiscal year beginning July 1 of the previous survey year and June 30 of the current survey year, which most state- and locally-administered pension systems have fiscal years that end on June 30th (for example, for the 2016 survey year covers the fiscal year from July 1, 2015 to June 30, 2017) For those state- and locally-administered pension systems with fiscal years that end **after** June 30th, the survey year includes data from their previous fiscal year.

There are exceptions to the fiscal year definition rule for the state pension systems in Alabama, Michigan, and Texas. For systems in these states, the fiscal year moves beyond the June 30th cutoff, so these data for survey year covers the fiscal year from September 1 of the previous survey year to August 31 of the current survey year (TX), and from October 1 of the previous survey year to September 30 of the current survey year (AL, MI). This exception is applied in order to better align the pensions data with data from the Survey of Government Finances.

The F-11 and F-12 forms used to collect these data can be found here (provide URL). The variables collected on these forms are explained in detail in the [2006 Government Finance and Employment Classification Manual](#).

Data Collection

Data collected for the Census of Governments: Finance—Survey of Public Pensions: State- and Locally-Administered Defined Benefit Data are a matter of public record and are not confidential, as authorized by Title 13, United States Code, Section 9. Data for this survey were collected using the F-11 and F-12 forms.

Letters were mailed to approximately 300 state government employee pensions funds and approximately 1,800 local government employee pension systems to report to the survey. Staff contacted nonrespondents through a follow-up mailing and by way of follow-up telephone calls. All respondents were requested to report their data on the Census Bureau's Internet data collection instrument. Data were submitted electronically for approximately 50 percent of the state and local pensions respondents in a given survey year. When a system returned its Comprehensive Annual Financial Report (CAFR) instead of completing the form, Census Bureau staff compiled the data using the report. Staff also used CAFRs available on the Internet to compile data for nonrespondents.

The data collection schedule Census of Governments: Finance—Survey of Public Pensions: State- and Locally-Administered Defined Benefit Data are typically follows:

Initial mail-out	October
Follow-up mail-out	November -January

Data Processing

Editing
Editing is a process that ensures survey 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 two types: consistency edits and historical ratio edits of the current years reported value to a prior year's value.

The consistency edits check the logical relationships of data items reported on the form. For example, if a value exists for the number of retirees receiving benefits because of age or length of service then there must be a value reported for the amount of benefits paid.

The historical ratio edits compare by item code the data reported for the current year with data reported for the prior year or prior census for those not in the sample in the prior year. If data fall out of acceptable tolerance levels, the item is flagged for review.

For both types of edits, the edit results are reviewed by analysts and adjusted when needed. When analysts are unable to resolve or accept an edit failure, contact is made with the respondent to verify or correct the reported data.

Imputation

Not all respondents answer every item on the questionnaire. Effective with the 2012 Census of Governments: Finance—Survey of Public Pensions: State- and Locally-Administered Defined Benefit Data, the Survey improved upon item imputation methodology to fill in missing data based on grouping similar pension systems together. Both partial and full nonrespondents were imputed using either a mean growth rate, median growth rate, adjusted mean, mean, or direct substitution. These methods are applied to certain variables based on research conducted in 2012.

Nonsampling Error

The data from this survey are subject to 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, these data are subject to nonsampling errors such as the inability to obtain data for every variable from all units in the survey, inaccuracies in classification, nonresponse errors, misinterpretation of questions, mistakes in keying and coding, and coverage errors.

Response Rates

The latest response rates for the Annual Survey of Public Pensions can be found at:
https://www.census.gov/programs-surveys/aspp/technical-documentation/response-rates.html

Sample Design

The sampling frame consists of approximately 5,500 state and local government funded retirement systems. Every five years, in years ending with a "2" and "7", the Census Bureau conducts a Census of Governments.

The key variable Z01 (Total Cash and Investments) was used as a measure of size for the proportion-to-size sample design without replacement within each state and type of the governmental unit. The final sample was drawn with a sample size of about 2,000 units out of the approximately 5,500 units on the sampling frame.

Estimation

The Horvitz-Thompson estimator is used to do the estimations. The output files from estimation contain two deliverables: one for the BEA and one for publication. Both of the outputs provide the totals for local, state, and state & local levels. The BEA output provides the total for a subset of the retirement variables. The publication output provides twenty retirement categories. The coefficient of variance (CV) is included for each total to reflect the relative sampling error, which measures the precision of the estimates. The variance of the total is computed via the Taylor series approach, which is provided by PROC SURVEYMEANS of the SAS software system. Besides those two deliverables, the Response Rate (RR) and the Total Quantity Response Rate (TQRR) are calculated to measure the quality of the survey data.

The Horvitz-Thompson estimator is an unbiased estimator; however, it loses precision for cells with small sample sizes. Moreover, imperfections in the editing and imputation processes degrade the unbiasedness of the Horvitz-Thompson estimator.

Content Changes

Effective with the 2019 data release, the survey content was revised to streamline asset categories and remove data items that were not published. Further, the item codes were revamped in the process. Survey years 2017 & 2018 were revised to fit this new publication schema.

For data users interested in the granular asset details, the Quarterly Survey of Public Pensions was redesigned to provide greater detail on asset holdings.