

Society of Actuaries

Request for Proposal

Subject: Data Compilation for the 2014-2018 Public Pension Mortality Study

I. Background

The Society of Actuaries is seeking proposals for receiving and compiling public pension mortality experience data from public pension systems. The deliverables of this project will be used by the Society of Actuaries' Retirement Plans Experience Committee (Committee) to complete a study of public pension mortality. The Committee is responsible for developing comprehensive studies of pension mortality experience in the U.S.

II. Project Objectives

The objectives of this project are to receive, compile, and provide aggregated datasets of public pension mortality experience from 2014-2018¹ from public pension systems across the United States.

This project will include interaction with the Committee, Society of Actuaries' staff, and the data submitters. The desired end result of this project will be a comprehensive database of public pension mortality experience analytics (including exposures, death counts, mortality rates and actual to expected ratios) along with various attributes, such as status (active, healthy retiree, disabled retiree and beneficiary), age, gender, broad worker classification, and compensation/benefit level. Additional deliverables may include various subsets of the comprehensive database. The results of this project will facilitate the production of an experience study report, mortality tables and database for publication by the Society of Actuaries.

¹ The intent will be to collect 60 months of mortality experience for each plan. As many public pension systems do not have a calendar year census cycle, it is expected that many systems will submit partial years of data for 2013 and 2018. For example, a plan with a July 1 census date may submit data from July 1, 2013 – June 30, 2018. The expectation is that the partial year of data in 2013 will be included in the study for such plans.

III. Specific Components

The expected effort of the selected vendor will include the following:

1. Design Phase

- a. Work with the Committee and Society of Actuaries' staff to review existing drafts (supplied by the Society of Actuaries) and prepare final versions of:
 - i. The data request;
 - ii. Data validation checks, syntax checks, and data logic rules;
 - iii. Additional study fields and analytics to be added to the submitted data. These will include duration, income bracket, geographic category, attained age, exposures, death counts, crude mortality rates, actual to expected ratios, etc.; and
 - iv. Data reasonableness checks and summaries to be performed on the aggregated collected data and added study fields/analytics. These reports may include counts of syntax and data logic errors, the distribution of records with various attributes (i.e., gender, age, status type, worker classification, etc.), and listings of de-identified (excluding all personally identifiable information and protected health information) individual records affected by the most critical issues. Multiple iterations of these reports will be needed as data updates are received from contributors (in response to data questions) and direction is given from the Committee.
- b. Provide documentation of the items in 1.a.i-iv, above.

2. Programming Phase

- a. Program and finalize the data validation checks, data logic rules, additional study fields and analytics, and data reasonableness checks and summaries. (The timing of this phase should be concurrent with the Data Collection Phase and all programming should be completed before the close of the Data Collection Phase.)

3. Data Collection Phase

- a. Receive data submitted directly from data submitters through a secure transfer process. (The timing of this phase should be concurrent with the Programming Phase.)

4. Data Compilation Phase

- a. Perform the data validation checks, syntax checks, and data logic rules on the submitted data. Add the additional study fields and analytics to the submitted data. (Inconsistencies of any data submissions with the requested data format will be resolved as part of this step.) Work with the Committee and Society of Actuaries' staff and/or the data submitters to resolve issues uncovered during this step.
- b. Perform data reasonableness checks, prepare summaries and obtain sign-off from data submitters on the reasonableness of their submitted data. Work with the Committee, Society of Actuaries' staff, and/or the data submitters to resolve issues uncovered during this step.
- c. Aggregate the data, using guidance provided by the Committee and the Society of Actuaries' staff, and prepare the Deliverables (see Section VIII).

(This step may require the grouping of individual data field entries and/or the scaling of analytics to protect company confidentiality and private information.)

5. Maintain a rigorous time schedule. The target milestone completion dates for the project are as follows:
 - a. Design phase: June 30, 2020
 - b. Programming and data collection phase: September 30, 2020
 - c. Data Compilation phase: January 31, 2022

IV. Funding

Funding will be provided by the Society of Actuaries.

V. Schedule for Proposal

Proposals must be received no later than February 14, 2020 (a notice of intent to submit a proposal is requested by January 31, 2020). The proposal to be funded will be selected by February 28, 2020.

VI. Vendor Requirements

Only qualified vendors should present a proposal. Qualified vendors will have actuarial knowledge of analyzing pension mortality data, and familiarity in conducting experience studies. The selected vendor must be able to create and maintain a database that might contain over 45 million member records.

We will give preference to proposers who have past experience in working with pension mortality data. We will also consider any potential bias that a particular proposer might have, and proposers will only be considered if they can demonstrate that they can perform the duties required by the study without any bias.

VII. Proposal

To facilitate the evaluation of proposals, the following information should be submitted:

1. An outline of the approach to be used for working with the Committee, Society of Actuaries' staff, and data submitters to complete the components in Section III. Note any special considerations or limitations in completing those components.
2. Cost estimates in the form of a guaranteed total fixed cost, cost per phase, and/or guaranteed cost per unit of work (such as per contributor, per plan, per life-year of exposure, etc.). While cost will be a factor in the evaluation of the proposal, it will be closely weighed against the ability of the vendor to meet the requirements in Section IV.
3. Feedback and input on the time schedule provided in Section III.

4. The proposal should be accompanied by an overview of the proposing organization and brief resumes of key staff to be involved in the compilation of the data. Note any experience on similar studies or background that would be valuable to the effort. The person submitting the proposal must be authorized to speak on behalf of the firm or institution on whose behalf the proposal is submitted.
5. Procedures for keeping the contributing companies and data confidential and meeting potential privacy law requirements.
6. Any other related factors that give evidence of a proposer's capabilities to perform in a superior fashion should be detailed.

VIII. Expected Project Deliverables

1. Required Deliverables, provided through a secure transfer process:
 - a. Documentation that summarizes the final data validation checks, rules, and calculated fields implemented.
 - b. Intermediate² and final data validation summaries and error reports that show the counts of syntax and data logic errors, along with de-identified listings of affected records for the most critical errors for committee review. These de-identified listings should contain no personally identifiable information or protected health information.
 - c. Intermediate and final summaries of death counts by month, year, and status for each plan
 - d. Intermediate and final aggregated database, with contributor and plan indicator fields, to Society of Actuaries' staff in a .csv format and a data dictionary, which explains the fields, calculations, and layout of the database.
 - e. Mapping of the contributor and plan indicator fields to each contributor and plan and the contact information provided with the data submission to Society of Actuaries' staff.
2. Optional Deliverables, provided through a secure transfer process. Please provide a separate cost estimate to prepare the following deliverables:
 - a. Intermediate and final aggregated databases, with contributor and plan indicator fields, to Society of Actuaries' staff in an Excel Pivot table format and a data dictionary, which explains the fields, calculations, and layout of the database.
 - b. Intermediate and final aggregated databases, excluding any contributor or plan indicator fields, to the Committee and Society of Actuaries' staff in a .csv format and a data dictionary, which explains the fields, calculations, and layout of the database.
 - c. Intermediate and final aggregated databases, excluding any contributor or plan indicator fields, to the Committee and Society of Actuaries' staff in Excel pivot table format and a data dictionary, which explains the fields, calculations and layout of the database.
 - d. Final individual contributor databases to each data contributor in the same

² In this section, several items are described as "intermediate and final". There is an expectation that there will be multiple iterations of these items as updates resulting from data questions to contributors and guidance from committee review are provided.

format as 2b or 2c, above.

IX. Selection Process

The Committee and Society of Actuaries' staff are responsible for reviewing and evaluating the proposals. Input from other knowledgeable individuals also may be sought. The proposal evaluation will be based on a comparison of costs, services provided, information provided in Section VII, and other relevant information.

X. Notification of Intention to Submit Proposal

If you intend to submit a proposal, **please email your notice of intent by January 31, 2020 to Patrick Nolan at pnolan@soa.org.**

XI. Questions

Any questions regarding this Request for Proposal should be directed to Patrick Nolan at pnolan@soa.org or (847) 273-8860.

Questions and responses to questions will be sent to all parties who have indicated the intent to submit a proposal as noted in X above. Only those who have made a notice of intent will receive this distribution.

XII. Submission of Proposal

When submitting a proposal, please send an electronic version (e.g., Word Document, PDF) to Patrick Nolan at pnolan@soa.org.

Proposals must be received no later than February 14, 2020.

XIII. Project Monitoring

The Committee and Society of Actuaries' staff will be responsible for oversight of the progress of the experience study. A Letter of Agreement between the selected vendor and the Society of Actuaries will specify the deliverables, key dates, progress expectations, and payment schedule.

XIV. Conditions

The selection of a proposal is conditioned upon, and not considered final until, a Letter of Agreement is executed by both the Society of Actuaries and the researcher.

The Society of Actuaries reserves the right to not award a contract for this research. Reasons for not awarding a contract could include, but are not limited to, a lack of acceptable proposals or a finding that insufficient funds are available. The Society of Actuaries also reserves the right to redirect the project as is deemed advisable.

The Society of Actuaries plans to hold the copyright on all deliverables of the contract.

The data submitted for this study and all deliverables cannot be shared with any other party or used for any other purposes other than for completing the deliverables for this project and study without the Society of Actuaries' written permission. The Society of Actuaries will require that the original data submitted for this project be destroyed after a reasonable period of time following the publication of the study.

You must be able to meet any laws and regulations required to accept and handle any personally identifiable information (PII) or protected health information (PHI) that may be requested in the data request or ensure that the data request is structured in a manner such that no PII or PHI will be received. The Society of Actuaries will not accept or be able to receive any PII or PHI in connection with this project from you. Any data passed to the Society of Actuaries from you must be aggregated or translated in a manner to remove any PII or PHI.