

**Comments of the Center for Economic Justice  
to the NAIC Life Health Actuarial Task Force**

**Life Insurance Statistical Data Collection  
and Designation of Statistical Agents**

**April 2, 2007**

The Center for Economic Justice (CEJ) offers the following comments on the issue of life insurance data collection and the designation of statistical agents. Our comments are summarized as follows:

1. Data should be collected on a transaction basis (individual application, policy, claim) as opposed to on a summary basis. Transaction-based reporting has major advantages over summary data reporting in terms of efficiency for companies and regulators and in terms of usefulness of the data collected.
2. The designation of a statistical agent should be done by competitive bid process in which the bidders demonstrate their qualifications and willingness to meet the regulator's performance standards.
3. The designation of a statistical agent should be conditioned on, among other things, an agreement by the organization seeking designation that its primary responsibility as a statistical agent is to the regulator and not to the reporting companies. This performance standard should be obvious from the fact that the statistical agent is assisting the regulator in collecting data reported to the regulator.

**Summary vs. Detailed (Individual Application, Policy, Claim) Data**

A threshold issue is what type and detail of data to collect. For a variety of reasons, the collection of detailed data – meaning individual application, policy and claim data – is far more efficient and effective than collection of summarized data.

Summary data refers to compilations of experience according to pre-selected categories. The analysis of summary data is limited to questions specifically related to the summary categories used. There is no ability to analyze categories of data simultaneously or to examine sub-groupings within a category. Stated differently, there is no ability to employ modern multivariate data analysis on summary data. In addition, changes to summary data reporting requirements are expensive because they involve reprogramming the software to produce the summary reports and may involve the collection of additional data elements that were not necessary to collect with the prior data elements. Summary data collection also limits the ability to perform data quality review on the data because data errors may be masked in compilations. For example, there is no ability to examine outcomes at the edges of the categories. This leads to another problem – company behavior conditioned by the types of analyses produced by the summary categories.

The alternative is detailed data collection at the individual application, policy and claim level. The benefits of detailed reporting are many. Foremost is the ability to employ multivariate data analysis that looks at multiple data items simultaneously. This is precisely the approach taken by insurers for developing sales, underwriting, rating, risk classification and claims settlement strategies – data mining techniques applied to massive detailed databases. Regulators should obviously be employing the same advanced techniques to focus regulation activities in the same way that insurers use the techniques to focus their sales, pricing and claims settlement activities. Data mining of detailed data would enable regulators to parse spurious correlations from substantive correlations.

Another critical feature of detailed data is the ability to answer questions that have not been previously imagined. With summary data, the summary categories are established to answer specific questions. When a new question arises, the summary data are useless. With detailed data, a new question can generally be answered by a different analysis of existing data. Even in the situation where additional data are required, the new reporting consists of adding data elements to an existing data framework, as opposed to creating entirely new summary categories. This means greater efficiency and cost effectiveness over time.

Another benefit of detailed reporting is the elimination of special data calls for information not contained in summary reporting categories – an efficiency and effectiveness tool. The effectiveness comes into play because data routinely reported pursuant to data dictionary or stat plan are much more reliable than data reported on a one-time basis.

Another benefit of detailed reporting is the ability to employ more detailed data quality review to ensure that data reported accurately reflect actual experience. Another benefit of detailed reporting is the ability to add new data elements with minimal cost. Adding an additional data element to transaction reporting means adding a new data field to the record layout and reporting the same data report with the additional data element. Adding a new data element to summary reporting means not only additional data collection by the reporting company, but additional programming to produce the new summary reports that incorporate the new data element.

Finally, there is a point where the detail desired of summary reporting requires more records than necessary for detailed reporting. A brief review of the proposed statistical plan from Mr. Rhoades of MIB – a transaction-based statistical plan – shows that the number of summary categories would quickly reach or exceed the number of transactions for many or all reporting companies. For example, two data types times six gender types times dozens of birth years times dozens of issue ages times four age basis categories, etc., would quickly yield hundreds of thousands or millions of summary categories. Once you get to any level of summary detail, the number of summary records approaches the number of transaction records and the sole reason for summary reporting – fewer records reported – disappears.

Designation of Statistical Agent and Performance Standards of a Statistical Agent

CEJ advocates a competitive bidding process for organizations seeking designation as a statistical agent. Proposals from organizations seeking designation as a statistical agent should include documentation of qualifications and expertise, cost proposals, agreement to meet specified performance standards and reporting requirements, data quality review procedures and data security measures, among other things. Attached please find a request for interest and qualifications issued by the Texas Department of Insurance (TDI) in 1996 in connection with the designation of a statistical agent for private passenger automobile data. TDI used this competitive bidding process successfully for statistical agent designations in the mid 1990's. Also attached, please find the performance standards appendix.

Please note that the request for proposal included several attachments not included here, including the statistical plan describing the data to be collected and specific requirements for data quality review and for reports and submissions to the Commissioner.

Primary Responsibility of the Statistical Agent is to the Regulator

Pages 2 through 4 for the attached request for interest and qualifications set out the regulator's expectations of the designated statistical agent. The first expectation is that the designated statistical agent is the agent of the regulator. The role of the statistical agent is to assist the regulator and reporting companies with the reporting companies' submission of required information to the regulator. The primary responsibility of the organization designation as a statistical agent – in its role as statistical agent – is to the regulator collecting the data and designating the statistical agent. It is inappropriate, for example, for the designated statistical agent to assert any confidentiality claims on behalf of reporting companies or to impede the regulator's ability to access any and all data submitted pursuant to the approved statistical plan. For example, the regulator requires reporting of data from individual companies and must be able to review the experience of individual reporting companies. The designated statistical agent must provide the regulator with such individual company data if required or requested and must not advocate for individual company interests – such advocacy can be provided by the individual reporting companies.