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Auditing the statement of social insurance; Statement of position 04-1; Statement of position 04-1

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STATEMENT OF POSITION 04-1

AICPA

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Auditing the Statement of Social Insurance

Issued Under the Authority of the Auditing Standards Board

NOTE

This Statement of Position (SOP) represents the recommendations of the AICPA's Social Insurance Task Force (task force) regarding the application of Statements on Auditing Standards to audits of statements of social insurance prepared in accordance with the standards of the Federal Accounting Standards Advisory Board (FASAB). Audits of federal government agencies are also governed by *Government Auditing Standards* ("the Yellow Book") and applicable Office of Management and Budget (OMB) guidance.

The Auditing Standards Board has found the recommendations in this SOP to be consistent with existing standards covered by Rule 202 of the AICPA Code of Professional Conduct. AICPA members should be aware that they may have to justify departures from the recommendations in this SOP if the quality of their work is questioned.

Financial reporting for social insurance programs and auditing of statements of social insurance are developing areas of practice. As auditors gain additional experience in implementing this SOP, the task force will monitor and consider feedback from auditors and users of statements of social insurance, and will determine whether additional or revised guidance on this subject is needed.

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Introduction

1. The Federal Accounting Standards Advisory Board (FASAB) establishes accounting standards for reporting information about the following social insurance programs:

   a. Old-Age Survivors and Disability Insurance (OASDI or Social Security)

   b. Medicare (Hospital Insurance [HI] and Medicare Supplementary Medical Insurance [SMI])

   c. Railroad Retirement benefits

   d. Black Lung benefits

   e. Unemployment Insurance

2. FASAB standards require the financial statements of the federal agencies responsible for the Social Security, Medicare, Railroad Retirement, and Black Lung programs and the financial statements of the federal government-wide entity to present a statement of social insurance as a basic financial statement. FASAB standards require these agencies and the government-wide entity to report:

   a. The estimated present value of the income to be received from or on behalf of the following groups during a projection[1] period sufficient to illustrate the

1. The AICPA *Guide for Prospective Financial Information* (Guide) defines the term *projection* and differentiates it from the term *forecast.* In this Statement of Position (SOP), the term projection is used in its generic sense, as it is used in standards issued by the Financial Accounting Standards Advisory Board (FASAB) and the federal agencies that administer social insurance programs. The use of the term *projection* in this SOP is not intended to suggest that information presented in the statement of social insurance is a projection as defined in the Guide or that the provisions of the Guide would apply to the audit of the statement of social insurance.

long-term sustainability of the social insurance programs:

(1) Current participants who have not yet attained retirement age

(2) Current participants who have attained retirement age

(3) Individuals expected to become participants

b. The estimated present value of the benefit payments to be made during that same period to or on behalf of the groups listed in item *a*

c. The estimated net present value of the cash flows during the projection period (the income described in item *a* over the expenditures described in item *b*, or the expenditures described in item *b* over the income described in item *a*)

d. In notes to the statement of social insurance:

(1) The accumulated excess of all past cash receipts, including interest on investments, over all past cash disbursements within the social insurance program represented by the fund balance at the valuation date

(2) An explanation of how the net present value referred to in item c above is calculated for the closed group[2] (Paragraph 27(3)(i) of Statement of Federal Financial Accounting Standards [SFFAS] No. 17, *Accounting for Social Insurance,* identifies the information to be included in this explanation.)

(3) Comparative financial information for items *a, b,* c, and *d*(1) for the current year and for each of the four preceding years

(4) The significant assumptions used in preparing the estimates

2. The *closed group* is defined as those persons who, as of a valuation date, are participants in a social insurance program as beneficiaries, covered workers, or payers of earmarked taxes or premiums.

3. The income, expenditures, and net present value of cash flows recognized in the statement of social insurance differ from traditional concepts of income and expenditures for retirement and health benefit programs. Financial reporting for social insurance programs includes estimates of income and expenditures not only for current program participants but also for individuals expected to become participants in social insurance programs in the future. In paragraphs 26 through 28 of the basis for conclusions section of SFFAS No. 25, *Reclassification of Stewardship Responsibilities and Eliminating the Current Services Assessment*, FASAB acknowledges this difference and explains why the recognition of such amounts is essential to the fair presentation of federal financial statements:

> 26. The Board believes that the SOSI [statement of social insurance] should be treated as a basic financial statement because it is essential to fair presentation and is important to achieve the objectives of federal financial reporting. The related stewardship objectives include helping users to assess the impact on the country of the Government's activities, determine whether the Government's financial position improved or deteriorated over the period, and predict whether future budgetary resources will likely be sufficient to sustain public services and meet obligations as they come due. In that regard, the multi-trillion dollar obligations associated with Social Insurance over the next 75 years could significantly exceed the largest liabilities currently recognized in the U.S. Government Balance Sheet.
>
> 27. The Board acknowledges that there is great uncertainty inherent in long term projections, but believes that if the uncertainty is suitably disclosed—as is required by SFFAS 17—it need not preclude designating the information as a basic financial statement, essential for fair presentation in conformity with GAAP.
>
> 28. Even within the context of historical financial reporting, the Board notes that accrual-basis "historical" financial statements include many measurements that involve assumptions about the future. The distinction between reporting on the financial effects of events that have occurred and the effects of future events depends, obviously, upon the definition of the event. The information

required by SFFAS 17 reports on the financial effects of existing law and demographic conditions and assumptions, just as the pension obligation at a point in time is based on existing conditions. In that sense, Social Insurance information can be viewed as reflecting events that have occurred and, therefore, as "historical."

Applicability

4. This Statement of Position (SOP) provides guidance to auditors in auditing the statement of social insurance for the following social insurance programs:

   a. Old-Age Survivors and Disability Insurance (OASDI or Social Security)

   b. Medicare (Hospital Insurance [HI] and Medicare Supplementary Medical Insurance [SMI])

   c. Railroad Retirement benefits

   d. Black Lung benefits

   As permitted by Statement on Auditing Standards (SAS) No. 1, *Codification of Auditing Standards and Procedures* (AICPA, *Professional Standards,* vol. 1, AU sec. 543, "Part of Audit Performed by Other Independent Auditors"), as amended, a principal auditor may fulfill the requirements of this SOP by using work that other independent auditors have performed in conformity with the provisions of this SOP. For example, for the OASDI program, the auditor of the federal government-wide financial statements may use the work and report of the auditor of the Social Security Administration's statement of social insurance.

Management's Responsibilities

5. The agency's management (management) is responsible for preparing the statement of social insurance and the estimates underlying it in conformity with generally accepted accounting principles. In doing so, management must de-

termine its best estimate[3] of the economic and demographic conditions that will exist in the future. Because estimates in the statement of social insurance are based on subjective as well as objective factors, management must use judgment to estimate amounts included in the statement of social insurance. Management's judgment ordinarily is based on its knowledge and experience about past and current events and its assumptions about conditions it expects to exist. Management is responsible for the accuracy and completeness of the statement of social insurance.

Preparing Social Insurance Estimates

6. Management is responsible for preparing the estimates underlying the statement of social insurance. That process ordinarily consists of:

   a. Identifying the relevant factors that may affect the estimates

   b. Developing assumptions that represent management's best estimate of circumstances and events with respect to the relevant factors

   c. Accumulating relevant, sufficient, and reliable data on which to base the estimates

   d. Determining the estimated amounts based on assumptions and other relevant factors

   e. Determining that the estimates are presented in conformity with generally accepted accounting principles and that disclosure is adequate

3. Paragraph 25 of FASAB Statement of Federal Financial Accounting Standards (SFFAS) No. 17, *Accounting for Social Insurance,* states, in part, "The projections and estimates used should be based on the entity's best estimates of demographic and economic assumptions, taking each factor individually and incorporating future changes mandated by current law." Certain agencies prepare social insurance information using assumptions prepared by a board of trustees. Auditors should consider such assumptions to represent the agency's "best estimates" if the trustees have characterized them as such, and agency management has determined them to be reasonable. With respect to these assumptions, the auditor should perform audit procedures that are consistent with the guidance in paragraphs 9 through 36 of this SOP.

Conceptual Model

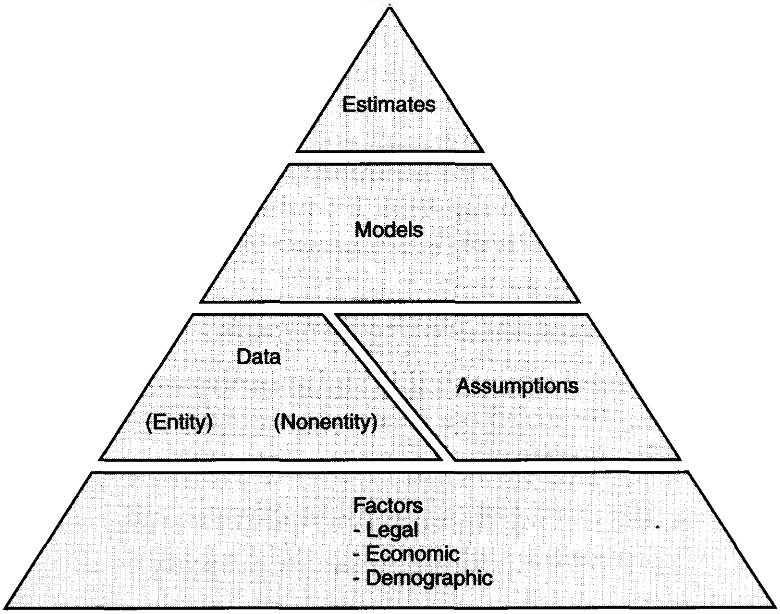

Figure 1. Elements of the Process of Developing Social Insurance Estimates

7. Figure 1, "Elements of the Process of Developing Social Insurance Estimates," is a conceptual model depicting the elements of the process that results in the statement of social insurance. It is not intended to depict the actual process used by an organization to develop the statement of social insurance. With the assistance of internal and external specialists, management considers, identifies, and documents[4] factors, assumptions, and data that serve as input to a model for developing estimates. When auditing the statement of social insurance, the auditor should be aware that the factors, data, assumptions, and models used to develop the statement of social insurance are closely interrelated and may not be separable. Following are definitions of the terms used in Figure 1:

4. Office of Management and Budget (OMB) Circular No. A-123, *Management Accountability and Control*, Section II "Establishing Management Controls," states, in part, "...documentation for transactions, management controls, and other significant events must be clear and readily available for examination."

a. *Factors.* The elements or variables that affect income or expenditures for a program and for which data must be gathered and assumptions must be generated, for example, legal, economic, and demographic factors. An example of a factor is the number of individuals reaching age 65 in a specific year.

b. *Assumptions.* Expectations about what will happen in the future. An example of an assumption is that there will be a 1 percent increase in the number of women working outside the home in each of the next five years. An assumption is expressed as a value or direction assigned to a factor.

c. *Data.* Organized factual information used for analysis or to make decisions. An example is census data and classifications of that data, such as the population classified by sex or age. Data may be developed within the entity that prepares the statement of social insurance or it may come from sources outside the entity.

d. *Models.* Methods or formulas for mathematically expressing how the assumptions and data relate to each other. For example, a model might indicate that a 1 percent decline in the birth rate in a given year will result in a 0.2 percent decrease in social insurance income and benefit payments 10 years later. A model is a set of coded instructions, rules, or procedures used to perform a desired sequence of events or to obtain a result. Typically, models are developed by using various computer applications.

e. *Estimates.* The amounts or valuations that result after processing the factors, data, and assumptions in a model. These estimates will be used in preparing the statement of social insurance.

Designing and Implementing Internal Control Related to Estimates

8. To help ensure the accuracy and completeness of the statement of social insurance, management should design and implement controls consistent with *Standards for Internal*

Control in the Federal Government issued by the Government Accountability Office (GAO; formerly the General Accounting Office). An entity's internal control may reduce the likelihood of material misstatements of estimates. Among the aspects of internal control that are relevant to the process of developing estimates are the following:

a. Management communication of the need for proper estimates

b. Accumulation of relevant, sufficient, and reliable data on which to base accounting estimates

c. Preparation of the estimates by qualified personnel

d. Adequate review and approval of the estimates by appropriate levels of authority, for example:

  (1) Review of the sources of the relevant factors

  (2) Review of the process used to develop assumptions

  (3) Review of the reasonableness of the assumptions and resulting estimates

  (4) Consideration of the need to use the work of specialists

  (5) Consideration of changes in previously established methods for developing estimates

e. Comparison of prior estimates with actual subsequent results to assess the reliability of the process and models used to develop the estimates

f. Appropriate general and application controls related to computer-based models used in the calculation of estimates included in the statement of social insurance

The Auditor's Responsibility

9. SAS No. 57, *Auditing Accounting Estimates* (AICPA, *Professional Standards,* vol. 1, AU sec. 342.10), states that the auditor should obtain an understanding of how management developed the estimate. Based on that understand-

ing, the auditor should use one or a combination of the following approaches to evaluate the reasonableness of an estimate:

a. Review and test the process used by management to develop the estimate.

b. Develop an independent expectation of the estimate to corroborate the reasonableness of management's estimate.

c. Review subsequent events or transactions occurring prior to the completion of fieldwork.

In auditing the statement of social insurance, if controls over the estimation process are effective, the most practicable and efficient approach may be to review and test the process used by management. However, if the auditor finds that controls over the estimation process are ineffective, the auditor should consider whether it is practicable to:

- Develop an independent expectation of the estimate, or portions of the estimate, to corroborate management's estimate

or

- Obtain competent evidence from outside the audited agency's process that would be sufficient to support the assertions in the statement of social insurance.

If it is not practicable to mitigate the effects of the ineffective controls through substantive procedures such as these, the auditor's report on the statement of social insurance should be modified.

10. The auditor's objective when auditing the statement of social insurance is to obtain sufficient, competent, evidential matter to provide reasonable assurance that:

a. The estimates presented in the statement of social insurance are reasonable in the circumstances.

b. The statement of social insurance is presented fairly, in all material respects, in conformity with generally accepted accounting principles, including adequate disclosure.

To achieve this objective, the auditor carries out the audit as described in paragraphs 11 through 40. As discussed in footnote 9 of paragraph 18, if the auditor does not possess the level of competence in actuarial science to qualify as an actuary, it is necessary for the auditor to obtain the services of an independent actuary[5] to assist the auditor in planning and performing auditing procedures. Generally, the auditor will need the assistance of an independent actuary in performing various procedures during all phases of the audit and related to all elements of the estimates.

Planning the Audit

11. In planning the audit of the statement of social insurance, the auditor should:

    a. Obtain knowledge about the following matters:

    (1) The agency's program and its operations including relevant laws and regulations governing the program that have a direct and material effect on the statement of social insurance (paragraphs 12 and 13)

    (2) The agency's process for developing, evaluating, and incorporating estimates in the statement of social insurance (paragraph 14)

    (3) The work performed by the agency's actuary (paragraphs 15 through 19)

5. The actuary can either be under contract with the audit firm or employed by the audit firm. In either case, the actuary performing services for the audit firm would need to meet the independence standards of generally accepted governmental auditing standards (GAGAS), which are applicable to audits of statements of social insurance. For example, for actuaries under contract with the audit firm, the auditor should determine whether the actuary's firm is independent of the agency being audited and then assess the actuary's ability to impartially perform the work and report results. In conducting this assessment, the auditor should provide the actuary with the GAGAS independence requirements and obtain representations from the actuary regarding his or her independence from the audited entity. For actuaries employed by the audit firm, the independence requirements are the same as those for auditors. Paragraphs 3.06 through 3.18 of Chapter 3, "General Standards," *Government Auditing Standards: 2003 Revision* (GAO-03-673G) describe applicable independence requirements.

(4) The work performed and findings reported by any external review groups that have been commissioned by the agency, an appropriate advisory board, or the trustees[6] (paragraph 20)

b. Consider materiality (paragraphs 21 and 22).

c. Obtain an understanding of the agency's internal control as it relates to the preparation of the statement of social insurance (paragraphs 23 through 26).

d. Assess control risk (paragraphs 27 through 31).[7]

Obtaining Knowledge About the Agency's Program and Its Operations

12. The auditor should obtain knowledge about the program and its operations including:

    a. The nature of the program's activities

    b. The source of its funding

    c. Who the beneficiaries are

13. An important aspect of the program and its operations are the laws and regulations governing the program that may have a direct and material effect on amounts reported as social insurance income and expenditures. Auditors should obtain from agency management the laws and regulations governing the operation of the social insurance program, and make inquiries about the laws and regulations that significantly affect the determination of amounts included in the statement of social insurance. Auditors also should

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6. Certain social insurance programs are overseen by a board of trustees. For example, the Social Security Act establishes a board of trustees to oversee the financial operations of the Federal Old-Age and Survivors Insurance Trust Fund and the Federal Disability Insurance Trust Fund. The board is composed of six members, four of whom serve automatically by virtue of their positions in the federal government: the Secretary of the Treasury (the managing trustee), the Secretary of Labor, the Secretary of Health and Human Services, and the Commissioner of Social Security. The other two members are appointed by the President and confirmed by the Senate to serve as public representatives.

7. The auditor generally would conclude that inherent risk is high for assertions about estimates in the statement of social insurance because of the complexity of such estimates and the need for significant judgment in preparing them. Other factors that may affect inherent risk in auditing the statement of social insurance include the political climate surrounding social insurance programs, budget limitations, and economic conditions.

consider changes to laws and new regulations published in final form and how management has given effect to such changes in its determination of future social insurance income and expenditures.

Obtaining Knowledge About the Agency's Process for Developing, Evaluating, and Incorporating Estimates in the Statement of Social Insurance

14. The auditor should obtain knowledge about the agency's process for developing, evaluating, and incorporating estimates in the statement of social insurance. To obtain that knowledge, the auditor:

    a. Makes inquiries of management; individuals responsible for initiating, processing, or recording estimates; and internal and external specialists with expertise in relevant subject matter, such as actuarial science, economics, and law.

    b. Reads entity or nonentity documents and records used to prepare the statement of social insurance, as well as the agency's documentation of the process for preparing the statement of social insurance.

    c. Observes entity activities and operations used to prepare the statement of social insurance, such as transferring data from a tabulation report to a computerized application.

Obtaining Knowledge About the Work Performed by the Agency's Actuary

15. Information presented in the statement of social insurance ordinarily is determined on the basis of an actuarial valuation of the program performed or reviewed by the agency's actuary, using data received from sources inside and outside the agency, and actuarial techniques. SAS No. 73, *Using the Work of a Specialist* (AICPA, *Professional Standards,* vol. 1, AU sec. 336.12), states:

    > The auditor should (*a*) obtain an understanding of the methods and assumptions used by the specialist, (*b*)

make appropriate tests of data provided to the specialist, taking into account the auditor's assessment of control risk, and (c) evaluate whether the specialist's findings support the related assertions in the financial statements.

16. The auditor's qualifications do not encompass actuarial science or the complexities of probability and longevity associated with social insurance income and expenditures. The auditor may have a general awareness and understanding of actuarial concepts and practices; however, he or she does not purport to act in the capacity of an actuary. The auditor, therefore, should follow the guidance in SAS No. 73 to obtain assurance regarding the work of an actuary on such matters as program income and benefit payments.

17. An audit of the statement of social insurance requires cooperation and coordination between the auditor and the actuary. The auditor uses the work of the actuary as an audit procedure to obtain competent evidential matter; the auditor does not merely rely on the report of an actuary. Although the appropriateness and reasonableness of the methods and assumptions used, as well as their application, are within the expertise of the actuary, the auditor does not divide responsibility with the actuary for his or her opinion on the financial statements taken as a whole. Thus, the auditor should satisfy himself or herself as to the professional qualifications and reputation of the actuary as well as the actuary's objectivity, and should obtain an understanding of the actuary's methods and assumptions, test data provided to the actuary, and consider whether the actuary's findings support the related representations in the financial statements.

18. If the actuary who has prepared or reviewed the actuarial valuation of the social insurance program was engaged by the agency administering that program, it is necessary for the auditor to obtain the services of an independent actuary[8] to assist the auditor in performing auditing procedures that assess the agency actuary's methods, assumptions, and estimates, and aid the auditor in determining whether the agency actuary's findings are not unreasonable in the

8. See note 5.

circumstances.[9] *Government Auditing Standards,* which are applicable to audits of statements of social insurance, provide independence requirements and examples of personal, external, and organizational impairments to independence.

19. The auditor should document (*a*) the specific audit procedures that were performed with the assistance of an independent actuary, and the related findings and conclusions, (*b*) the relationship between the procedures performed with the assistance of an independent actuary and the auditor's assessments of audit risk and materiality, and (*c*) all other significant matters related to the objectives and scope of the independent actuary's work, including any limitations on the independent actuary's procedures.

Obtaining Knowledge About the Work Performed by External Review Groups

20. In some cases, the agency responsible for the preparation of the statement of social insurance or the program's trustees may commission the services of an external review group comprising technical experts in relevant fields to review the factors, assumptions, data, estimates, and models used to prepare the statement of social insurance. In many instances, individuals assigned to perform these reviews are recognized authorities in their respective fields of study. Because of the nature of these external review groups and the qualifications of the individuals typically assigned to them, the auditor should consider their work in an audit of the statement of social insurance. The auditor should obtain an understanding of the work performed by the external review group, how its findings are communicated to the agency, and how the agency has responded to these findings.[10] See para-

9. Although SAS No. 73, *Using the Work of a Specialist* (AICPA, *Professional Standards,* vol. 1, AU sec. 336.12), does not preclude the auditor from using the work of a specialist who is related to the client, because of the significance of the estimates of income and expenditures to the statement of social insurance, and the complexity and subjectivity involved in developing such estimates, auditing estimates in the statement of social insurance requires the use of an outside actuary, that is, an actuary who is not employed or managed by the agency. If the auditor has the requisite knowledge and experience in actuarial science, the auditor may serve as the actuary. If the auditor does not possess the level of competence in actuarial science to qualify as an actuary, the auditor should use the work of an independent outside actuary.

10. Although reviews by external review groups may not be conducted annually, in auditing the statement of social insurance the auditor should obtain and review the most recent report of such external review groups.

graph A18c of the appendix of this SOP, entitled "Illustrative Controls and Audit Procedures," for examples of inquiries the auditor makes of management to obtain knowledge about the work performed by external review groups.

Considering Materiality

21. Auditors use judgment in determining the appropriate element of the financial statements to use as a materiality base. Auditors generally consider materiality in the context of the financial statements taken as a whole, taking into account both quantitative as well as qualitative attributes of the financial statements. Auditors should exercise due professional care when setting the materiality base, carefully assessing the information gained during the planning phase of the audit and the needs of a reasonable person relying on the financial statements.

22. For certain federal agencies, amounts reported in the statement of social insurance may vary significantly from the amounts reported in the other basic financial statements, or may differ significantly on a qualitative basis. In such cases, it may not be appropriate to establish a single materiality threshold for the entire set of financial statements. Instead, the auditor should consider using a separate materiality level when planning and performing the audit of the statement of social insurance and related disclosures.

Obtaining an Understanding of the Agency's Internal Control

23. SAS No. 55, *Consideration of Internal Control in a Financial Statement Audit* (AICPA, *Professional Standards,* vol. 1, AU sec. 319), as amended, defines internal control, describes the objectives and components of internal control, and explains how the auditor should consider internal control in planning and performing an audit.

24. In auditing the statement of social insurance, the auditor should obtain an understanding of the design of the agency's controls relevant to an audit of the statement of social insurance and should determine whether those controls have

been placed in operation. In planning the audit, this knowledge is used to:

a. Identify risks of potential misstatements.

b. Consider factors that affect the risk of material misstatement.

c. Design tests of controls, when applicable.

d. Design substantive tests.

25. SAS No. 55 as amended defines internal control as a process—effected by an entity's board of directors, management, and other personnel—designed to provide reasonable assurance regarding the achievement of the objectives of (*a*) reliability of financial reporting, (*b*) effectiveness and efficiency of operations, and (c) compliance with applicable laws and regulations.

26. Internal control consists of the following five interrelated components:

a. *Control environment* sets the tone of an organization, influencing the control consciousness of its people. It is the foundation for all other components of internal control, providing discipline and structure.

b. *Risk assessment* is the entity's identification and analysis of relevant risks to the achievement of its objectives, forming a basis for determining how the risks should be managed.

c. *Control activities* are the policies and procedures that help ensure that management directives are carried out.

d. *Information and communication systems* support the identification, capture, and exchange of information in a form and time frame that enable people to carry out their responsibilities.

e. *Monitoring* is a process that assesses the quality of internal control performance over time.

Generally, controls that are relevant to an audit pertain to the entity's objective of reliable financial reporting.

Assessing Control Risk

27. After obtaining an understanding of the design of controls relevant to the statement of social insurance and determining whether those controls have been placed in operation, the auditor assesses control risk for assertions in the statement of social insurance. Control risk is the risk that a material misstatement that could occur in an assertion will not be prevented or detected on a timely basis by the entity's internal control. Assessing control risk is the process of evaluating the effectiveness of an entity's internal control in preventing or detecting material misstatements in the financial statements. Control risk should be assessed in terms of financial statement assertions. The assessed level of control risk is used to determine the nature, timing, and extent of substantive procedures to be performed for financial statement assertions.

28. The auditor may determine that assessing control risk below the maximum level for certain assertions would be effective and more efficient than performing only substantive tests. Also, the auditor may conclude that it is not practical or possible to restrict detection risk to an acceptable level by performing only substantive tests. In such circumstances, the auditor should obtain evidential matter about the effectiveness of both the design and operation of controls to reduce the assessed level of control risk.

29. SAS No. 55 as amended (AU sec. 319.04), indicates that the auditor has the option of assessing control risk at the maximum level if he or she believes controls are unlikely to pertain to an assertion or are unlikely to be effective, or because evaluating the effectiveness of controls would be inefficient. However, when auditing the statement of social insurance, the complexity and subjectivity of the estimates, the volume of data involved, and the importance of controls ordinarily would make performing only substantive tests an ineffective strategy.[11]

30. For certain assertions, the auditor may desire to further reduce the assessed level of control risk. In such cases, the

11. OMB Bulletin No. 01-02 states that "For those internal controls that have been properly designed and placed in operation, the auditor shall perform sufficient tests to support a low assessed level of control risk."

auditor considers whether evidential matter sufficient to support a further reduction is likely to be available and whether performing additional tests of controls to obtain such evidential matter would be efficient.

31. The risk of material misstatement of estimates ordinarily varies with the complexity and subjectivity of the process, the availability and reliability of the relevant data, the number and significance of assumptions that are made, and the degree of uncertainty associated with the assumptions.

Performing Audit Procedures

32. As indicated in paragraph 9 of this SOP, in evaluating the reasonableness of the estimates in the statement of social insurance, the auditor primarily reviews and tests the process used by management. The appendix of this SOP contains examples of:

    a. Procedures the auditor performs to obtain knowledge about the agency's process for developing, evaluating, and incorporating estimates in the statement of social insurance

    b. Controls that are relevant to an agency's preparation of the statement of social insurance (The auditor should obtain an understanding of the design of such controls and determine whether they have been placed in operation.)

    c. Procedures the auditor performs to test controls, assess control risk, and test assertions in the statement of social insurance

Testing the Work of the Agency's Actuary

33. When auditing estimates and considering the related factors, assumptions, data, and models, the auditor should obtain the services of an actuary in accordance with SAS No. 73.[12]

12. See footnote 9.

34. With respect to the actuarial present value of amounts reported in the statement of social insurance, the auditor, in following the guidance in SAS No. 73, should:

a. Read the agency actuary's actuarial report.

b. Obtain satisfaction regarding the professional qualifications, competence, and objectivity of the agency's actuary. Examples of factors to consider are the actuary's membership in a recognized professional organization and the opinion of other actuaries, whom the auditor knows to be qualified, regarding the actuary's professional qualifications.

c. Obtain an understanding of the actuary's objectives, scope of work, methods, and assumptions, and their consistency of application. The auditor should ascertain whether the methods and assumptions used in the valuation of the social insurance program are consistent with relevant Actuarial Standards of Practice adopted by the Actuarial Standards Board.[13] Management, not the actuary, is responsible for the assumptions made and methods used.

d. Inquire whether the actuarial valuation considers all pertinent provisions of laws and regulations governing program operations, including any changes to laws or regulations affecting the actuarial calculations since the date of the latest statement of social insurance.

e. Test the reliability and completeness of the data provided by the agency and used by the actuary in the actuarial valuation. (See paragraphs A11 through A14 in the appendix to this SOP.) In the event that data provided to the actuary are significantly incomplete, the auditor should inquire of the actuary about the treatment of the incomplete data and should determine whether the method used by the actuary to give effect to the missing data in his or her valuation is reasonable in the circumstances.

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13. Relevant standards include Actuarial Standards of Practice No. 21, *The Actuary's Responsibility to the Auditor,* No. 23, *Data Quality,* and No. 32, *Social Insurance.*

f. Assess the nature and significance of any reservations concerning assumptions or data that the actuary has stated in his or her report.

Testing the Fund Balance

35. Paragraph 27(3)(h) of SFFAS No. 17 requires the agency to report "the accumulated excess of all past cash receipts, including interest on investments, over all past cash disbursements within the social insurance program represented by the fund balance at the valuation date." As noted in paragraph 26 of SFFAS No. 17, the valuation date for the statement of social insurance may differ from the valuation date for the other financial statements. Accordingly, the auditor should conduct appropriate testing of the accumulated cash receipts over the accumulated cash disbursements, as of the social insurance valuation date. The nature and extent of testing is a matter of professional judgment. Examples of procedures the auditor may perform are confirmation testing or rollforward testing.

Obtaining Management's Representations

36. SAS No. 85, *Management Representations* (AICPA, *Professional Standards,* vol. 1, AU sec. 333), as amended, requires the auditor to obtain a representation letter from management confirming representations given to the auditor during the engagement, for example, a representation regarding the completeness of the information provided to the auditor. In an audit of the statement of social insurance, the representation letter should include, as applicable, the following representations:

    a. The actuarial assumptions and methods used to measure amounts in the statement of social insurance for financial accounting and disclosure purposes represent management's best estimates regarding future events based on demographic and economic assumptions, and future changes mandated by law.

b. There were no material omissions from the data provided to the agency's actuary for the purpose of determining the actuarial present value of the estimated future income to be received, and estimated future expenditures to be paid during a projection period sufficient to illustrate the long-term sustainability of the [*name of the social insurance program*] as of [*dates of statements of social insurance presented*].

c. Management is responsible for the assumptions and methods used in the preparation of the statement of social insurance. Management of the agency agrees with the actuarial methods and assumptions used by the agency's actuary and has no knowledge or belief that would make such methods or assumptions inappropriate in the circumstances. Management did not give any instructions, nor cause any instructions to be given to the agency's actuary with respect to values or amounts derived, and is not aware of any matters that have affected the objectivity of the agency's actuary. Management believes that the actuarial assumptions and methods used to measure amounts in the statement of social insurance for financial accounting purposes are appropriate in the circumstances.

d. The statement of social insurance covers a projection period sufficient to illustrate long-term sustainability of the social insurance program.

e. Management has provided the auditor with all the reports developed by external review groups appointed by the agency or the program's trustees related to estimates in the statement of social insurance.

f. The following matters relating to the statement of social insurance have been disclosed properly in the notes to the financial statements:

(1) The accumulated excess of all past cash receipts, including interest on investments, over all past cash disbursements within the social insurance program represented by the fund balance at the valuation date

(2) An explanation of how the net present value is calculated for the closed group[14] (Paragraph 27(3)(i) of SFFAS No. 17 identifies the information to be included in this explanation.)

(3) Comparative financial information for the items in paragraphs *2a, 2b, 2c,* and *2d*(1) of this SOP, for the current year and for each of the four preceding years

(4) Significant assumptions used in preparing the estimates

g. There have been no changes in [*or*, Changes in the following have been properly recorded or disclosed in the financial statements]:

(1) The actuarial methods or assumptions used to calculate amounts recorded or disclosed in the financial statements between the valuation dates (that is, January 1, 20X8, and January 1, 20X7) or changes in the method of collecting data.

(2) The actuarial methods or assumptions used to calculate amounts recorded or disclosed in the financial statements between the valuation date and the financial reporting date (that is, January 1, 20X8, and September 30, 20X8) or changes in the method of collecting data.

h. There have been no changes in [*or*, Changes in the following have been properly recorded or disclosed in the financial statements]:

(1) Laws and regulations affecting social insurance program income and benefits between the valuation dates (January 1, 20X8, and January 1, 20X7).

(2) Laws and regulations affecting social insurance program income and benefits between the valuation date and the financial reporting date (that is, January 1, 20X8, and September 30, 20X8).

14. The *closed group* is defined as those persons who, as of a valuation date, are participants in a social insurance program as beneficiaries, covered workers, or payers of earmarked taxes or premiums.

i. Accounting estimates applicable to the financial information of the agency included in the statement of social insurance are based on management's best estimate, after considering past and current events and assumptions about future events.

Reporting

37. Since FASAB has defined the statement of social insurance as a basic financial statement, the auditor reports on it as a part of his or her report on the other basic financial statements. In addition to following the requirements of SAS No. 58, *Reports on Audited Financial Statements* (AICPA, *Professional Standards,* vol. 1, AU sec. 508), as amended, the auditor's report on a federal agency's financial statements that present a statement of social insurance should include the following elements:

   a. An opinion as to whether the statement of social insurance presents fairly, in all material respects, the financial condition[15] of the agency's social insurance program(s) as of the valuation date in conformity with generally accepted accounting principles.

   b. An explanatory paragraph following the opinion paragraph, describing that (i) the statement of social

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15. In Statement of Federal Financial Accounting Concepts No. 1, *Objectives of Federal Financial Reporting,* the FASAB articulates a concept of *financial condition,* as distinct from *financial position.* Financial condition is broader and more forward-looking than financial position. Presenting information on financial condition is consistent with FASAB's financial reporting objective of stewardship. In illustrating how the stewardship objective aligns with the needs of users of federal financial statements, FASAB observes that,

> All users need information on earmarked revenues recorded in trust funds. They want to know, for example, whether the Social Security Trust funds are likely, in the foreseeable future, to need infusions of new taxes to pay benefits. Citizens need to know the implications of investing trust fund revenues in government securities.

In reporting the actuarial present value of the estimated future income to be received, estimated future expenditures to be paid, and excess of income over expenditures during a projection period sufficient to illustrate the long-term sustainability of an agency's social insurance programs, and in disclosing in the notes to the financial statements comparative financial information for the five most recent years, the statement of social insurance presents the financial condition of the programs. Thus, in reporting on the statement of social insurance, the auditor refers to the financial condition of the agency's social insurance programs.

insurance presents the actuarial present value of the agency's estimated future income to be received from or on behalf of the participants and estimated future expenditures to be paid to or on behalf of participants during a projection period sufficient to illustrate long-term sustainability of the social insurance program; (ii) in preparing the statement of social insurance, management considers and selects assumptions and data that it believes provide a reasonable basis for the assertions in the statement; and (iii) because of the large number of factors that affect the statement of social insurance and the fact that future events and circumstances cannot be known with certainty, there will be differences between the estimates in the statement of social insurance and the actual results, and those differences may be material.

c. Reference to any standards or regulations in addition to generally accepted auditing standards, such as *Government Auditing Standards,* that apply to audits of federal financial statements and any additional elements of the auditor's report that those standards or regulations require.

38. The following is an illustrative auditor's report for a statement of social insurance.

Independent Auditor's Report[16]

We have audited the accompanying consolidated balance sheets of XYZ Social Insurance Agency, as of September 30, 20X8 and 20X7, the related consolidated statements of net cost, of changes in net position and of financing; the combined statements of budgetary resources for the years then ended; and statements of social insurance as of January 1, 20X8, 20X7, 20X6, 20X5, and 20X4.[17]

16. SAS No. 58, *Reports on Audited Financial Statements* (AICPA, *Professional Standards,* vol. 1, AU sec. 508.65 -.74) provides guidance on reporting on comparative financial statements, including guidance on reporting when there has been a change in auditors.

17. The auditor's report on the statement of social insurance covers a period of five years (see paragraph 27(3)(j) of SFFAS No. 17); whereas, the auditor's report on the other financial statements covers a period of two years. In the first year's audit of the statement of social insurance, the auditor would only express an opinion on one year; in year two, the auditor would express an opinion on two years, and so on, until all five years were covered.

These financial statements are the responsibility of XYZ Social Insurance Agency's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States; and Office of Management and Budget (OMB) Bulletin No. 01-02, *Audit Requirements for Federal Financial Statements.* Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of XYZ Social Insurance Agency as of September 30, 20X8 and 20X7; its net cost of operations; changes in net position, budgetary resources, and financing for the year then ended; and the financial condition of its social insurance programs as of January 1, 20X8, 20X7, 20X6, 20X5, and 20X4, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note X to the financial statements, the statements of social insurance present the actuarial present value of the Agency's estimated future income to be received from or on behalf of the participants and estimated future expenditures to be paid to or on behalf of participants during a projection period sufficient to illustrate long-term sustainability of the social insurance program. In preparing the statements of social insurance, management considers and selects assumptions and data that it believes provide a reasonable basis for the assertions in the statements. However, because of the large number of factors that affect the statement of social insurance and the fact that future events and circumstances cannot be known with certainty, there will be differences between the estimates in the statement of social insurance and the actual results, and those differences may be material.

Management's Discussion and Analysis (MD&A) and the Required Supplementary Information (RSI) are not required parts of the financial statements but are supplementary information required by the Federal Accounting Standards Advisory Board and OMB Bulletin No. 01-09, *Form and Content of Agency Financial Statements.* We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the MD&A and the RSI. However, we did not audit this information and express no opinion on it.

In accordance with *Government Auditing Standards,* we have also issued a report dated [*report date*] on our consideration of the agency's internal control and a report dated [*report date*] on its compliance with laws and regulations. Those reports are an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.

[*Signature*]

[*Date*]

39. The statement of social insurance does not articulate with the other basic financial statements. For that reason, the portion of the auditor's report that addresses the statement of social insurance ordinarily will not affect the auditor's report on the balance sheet or the statements of net costs, changes in net position, financing, or budgetary resources. The following illustrates a report in which the auditor disclaims an opinion on the statement of social insurance but expresses an unqualified opinion on the other financial statements.

Independent Auditor's Report

We have audited the accompanying consolidated balance sheets of XYZ Social Insurance Agency, as of September

30, 20X8 and 20X7, the related consolidated statements of net cost, of changes in net position and of financing, and the combined statements of budgetary resources for the years then ended, and we were engaged to audit the statements of social insurance as of January 1, 20X8, 20X7, 20X6, 20X5, and 20X4. These financial statements are the responsibility of XYZ Social Insurance Agency's management. Our responsibility is to express an opinion on these financial statements based on our audits.

Except as explained in the following paragraph, we conducted our audits in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States; and Office of Management and Budget Bulletin No. 01-02, *Audit Requirements for Federal Financial Statements.* Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

[*Insert paragraph describing limitation on scope of the audits of the statements of social insurance.*]

Because of the matter discussed in the preceding paragraph, the scope of our work was not sufficient to enable us to express, and we do not express, an opinion on the statements of social insurance as of January 1, 20X8, 20X7, 20X6, 20X5, and 20X4.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of XYZ Social Insurance Agency as of September 30, 20X8 and 20X7, its net cost of operations, changes in net position, budgetary resources, and financing for the year then ended in conformity with accounting principles generally accepted in the United States of America.

[*Omit explanatory paragraph required by paragraph 37b of this SOP.*]

[Modify the paragraph reporting on Management's Discussion and Analysis and Required Supplementary Information for the effects of the scope limitations regarding the statement of social insurance on that information, considering the guidance in SAS No. 42, Reporting on Condensed Financial Statements and Selected Financial Data *(AICPA,* Professional Standards, *vol. 1, AU sec. 552), as amended, and SAS No. 29,* Reporting on Information Accompanying the Basic Financial Statements in Auditor-Submitted Documents *(AICPA,* Professional Standards, *vol. 1, AU sec. 551), as amended.*]

[Reference to reports on internal control and compliance with laws and regulations in accordance with the Government Auditing Standards *is the same as in the illustration in paragraph 38 of this SOP.*]

[*Signature*]

[*Date*]

40. If the agency that operates a social insurance program issues financial statements that purport to present financial position, net cost of operations, changes in net position, budgetary resources, and financing for the years then ended, but omits the related statements of social insurance, the auditor ordinarily will conclude that the omission requires qualification of the auditor's opinion in the following manner.

Independent Auditor's Report

We have audited the accompanying consolidated balance sheets of XYZ Social Insurance Agency, as of September 30, 20X8 and 20X7, the related consolidated statements of net cost, of changes in net position and of financing, and the combined statements of budgetary resources for the years then ended. These financial statements are the responsibility of XYZ Social Insurance Agency's management. Our responsibility is to express an opinion on these financial statements based on our audits.

[*Same second paragraph as the standard report*]

The agency declined to present statements of social insurance as of January 1, 20X8, 20X7, 20X6, 20X5, and 20X4. Presentation of such statements describing the financial condition of its social insurance programs is required by accounting principles generally accepted in the United States of America.

In our opinion, except that the omission of the statements of social insurance results in an incomplete presentation as explained in the preceding paragraph, the financial statements referred to above present fairly, in all material respects, the financial position of XYZ Social Insurance Agency as of September 30, 20X8 and 20X7; its net cost of operations; and changes in net position, budgetary resources, and financing for the year then ended in conformity with accounting principles generally accepted in the United States of America.

[*Omit explanatory paragraph required by paragraph 37b of this SOP.*]

[*Modify, in accordance with the guidance in AU Section 558,* Required Supplementary Information *(AICPA,* Professional Standards, *vol. 1, AU sec. 558.08), the paragraph regarding Management's Discussion and Analysis and the Required Supplementary Information (RSI) for the omission of the RSI.*]

[*Reference to reports on internal control and compliance with laws and regulations in accordance with* Government Auditing Standards *is the same as in the illustration in paragraph 38 of this SOP.*]

[*Signature*]

[*Date*]

Effective Date and Transition

41. This SOP is effective for audits of statements of social insurance for periods beginning after September 30, 2005. SFFAS No. 17 (subparagraph 27(3)(a–h))requires disclosure of the information for the current year and for each of the four preceding years. Comparative information in the statement of social insurance that has not been audited should be marked as unaudited. Earlier implementation of the provisions of this SOP is permitted.

APPENDIX

Illustrative Controls and Audit Procedures

A1. This appendix contains examples of:

a. Procedures the auditor performs to obtain knowledge about the agency's process for developing, evaluating, and incorporating estimates in the statement of social insurance

b. Controls that are relevant to the agency's preparation of the statement of social insurance (The auditor should obtain an understanding of the design of such controls and determine whether they have been placed in operation.)

c. Procedures the auditor performs to tests controls and assertions in the statement of social insurance

A2. The appendix is divided into the following five sections:

a. Factors (paragraphs A3-A5)

b. Assumptions (paragraphs A6-A10)

c. Data (paragraphs A11-A14)

d. Models (paragraphs A15-A17)

e. Estimates (paragraphs A18-A20)

Each of these sections includes examples of the items described in paragraph A1. The procedures and controls included in this appendix are illustrative and do not represent a complete list of procedures and controls.

Factors

A3. In evaluating the reasonableness of an accounting estimate, the auditor ordinarily concentrates on key factors that are significant to the estimate, sensitive to variation, deviations from historical patterns, and subjective and susceptible to misstatement and bias. The following are examples of procedures the auditor performs to obtain knowledge about how the agency generates, evaluates, selects, and reviews factors to be included in estimates in the statement of social insurance:

a. Identifying the individuals involved in generating, evaluating, selecting, and reviewing factors to be included in estimates in the statement of social insurance

b. Determining how factors affecting social insurance estimates are generated, evaluated, selected, and reviewed, and how that process is documented[1]

c. Reading documentation of the process for generating, evaluating, selecting, and reviewing estimates to be included in the statement of social insurance

A4. In all audits, the auditor should obtain an understanding of internal control sufficient to plan the audit by determining whether applicable controls are suitably designed and placed in operation. The following are examples of controls related to factors:

a. Management's process for monitoring the environment to determine the effect that change in the environment (for example, legal, political, health, immigration) might have on the factors considered

b. Procedures to prevent and detect the inadvertent omission of factors that should be considered in developing the estimate (An example of such a control would be comparing factors considered and selected in the current period with those of prior periods.)

c. Hiring procedures to ensure that individuals responsible for generating, evaluating, selecting, and reviewing factors have the appropriate education and experience

1. Office of Management and Budget (OMB) Circulars No. A-123, *Management and Accountability Control,* and No. A-127, *Financial Management Systems,* outline documentation requirements for manual and automated financial related transactions and systems.

A5. The following are examples of procedures the auditor performs to test controls and financial statement assertions related to factors:

a. Reviewing documentation of the factors considered in developing the estimate

b. Evaluating whether the factors that have been considered are relevant and sufficient for the purpose of preparing the statement of social insurance

c. Considering whether there are additional key factors that management has not addressed

Assumptions

A6. In evaluating the reasonableness of an accounting estimate, the auditor ordinarily concentrates on assumptions that are significant to the accounting estimate, sensitive to variation, deviations from historical patterns, and subjective and susceptible to misstatement and bias.

A7. The following are examples of matters the auditor inquires about in discussions with management and other knowledgeable personnel to determine how the agency generates, evaluates, selects, and reviews assumptions to be included in estimates in the statement of social insurance:

a. The source of the assumptions for significant estimates[2]

2. For some agencies, the assumptions are established by an external board of trustees and provided to the agency. For example, for the Social Security program, the Social Security Act establishes a board of trustees to oversee the financial operations of the Federal Old-Age and Survivors Insurance Trust Fund and the Federal Disability Insurance Trust Fund. The board is composed of six members, four of whom serve automatically by virtue of their positions in the federal government. They are the Secretary of the Treasury (the managing trustee), the Secretary of Labor, the Secretary of Health and Human Services, and the Commissioner of Social Security. The other two members are appointed by the President and confirmed by the Senate to serve as public representatives. In such circumstances, the auditor's procedures generally would focus on testing the work performed by the agency's actuary in reviewing the assumptions developed by the board of trustees. The agency's actuary reports on whether (*a*) the techniques and methodology used to evaluate the financial and actuarial status of the program is based upon sound principles of actuarial practice and are generally accepted within the actuarial profession; and (*b*) the assumptions used and the resulting actuarial estimates are, individually and in the aggregate, reasonable for the purpose of evaluating the financial and actuarial status of the trust funds, taking into consideration the past experience and future expectations for the population, the economy, and the program.

b. How the assumptions underlying the estimates are documented

c. The process for determining the best estimate (for example, *intermediate*) assumptions (possible outcomes)

d. How management considers and determines the effect that variation in the underlying assumptions will have on the estimates

A8. The following are examples of controls related to assumptions:

a. The agency's documentation of the process used to generate, evaluate, select, and review assumptions

b. How management monitors the environment for possible changes that might affect the assumptions used to develop estimates, for example, the need to consider alternative assumptions

c. Comparing assumptions made in the current period with those of prior periods and reconciling differences

d. Hiring procedures to ensure that personnel have the appropriate education and experience to meet job description requirements

A9. The following are examples of procedures the auditor performs to test controls and financial statement assertions related to assumptions:

a. Identifying the assumptions used and evaluating the reasonableness of those assumptions

b. Determining whether data and other related information support the assumptions

c. Evaluating whether interrelated assumptions are consistent with each other

d. Comparing assumptions made by the entity to the range of assumptions made by entities in other industries, for example, insurance companies, financial institutions, or other government agencies, and evaluating the implications of significant differences *e.* Considering whether there are alternative assumptions about the factors

f. Evaluating whether the assumptions selected are consistent with supporting data, relevant historical data, and industry data

g. Reviewing available documentation of the assumptions used in developing the estimates

h. Evaluating whether facts and informed judgment about past and future events or circumstances support the underlying assumptions

i. Evaluating whether any of the significant assumptions are so subjective that no reasonably objective basis could exist to support the use of the assumption

j. Inquiring of program managers regarding the reasonableness of assumptions that are related to the manager's realm of responsibility

k. Evaluating whether the assumptions appear to be complete, that is, whether assumptions have been developed for each key factor

l. Considering whether the assumptions appear to be relatively objective, that is, are not unduly optimistic or pessimistic

m. Evaluating whether the assumptions are consistent with the laws and regulations governing the program

n. Evaluating whether the assumptions, individually and in the aggregate, make sense in the context of the statement of social insurance taken as a whole

o. Evaluating whether significant assumptions are appropriately disclosed in the statement of social insurance

A10. Assumptions that have no material effect on the statement of social insurance may not have to be individually evaluated; however, the aggregate effect of individually insignificant assumptions should be considered in making an overall evaluation of whether the assumptions underlying the reported amounts are reasonable.

Data

A11. The following are examples of matters the auditor inquires about in discussions with management and other knowledgeable personnel, and reads about in agency documentation to determine how the agency generates, evaluates, selects, and reviews data to be included in estimates in the statement of social insurance:

a. The source of the data for significant estimates and whether the data are developed internally or by outside parties

b. How data are collected, maintained, processed, and updated

c. How the data underlying the estimates are documented

A12. The following are examples of controls related to data:

a. Controls over the accuracy and completeness of internally prepared data, for example, review of the data for reasonableness and consistency with other data, and general and application controls over the data such as edit checks and batch totals

b. Controls that prevent and detect errors in the collection, maintenance, processing, and updating of the data, for example, manual controls to ensure that data are accurately entered and uploaded to a computerized system

c. Controls over the reliability of external sources of data, for example, confirming and verifying data by tracing and agreeing it to census information in reports prepared by the United States Census Bureau

d. Procedures to identify and document authorized users of the system and to restrict access to the system, for example, the use of unique user passwords and periodic changes to those passwords

e. Preparation and review of a risk assessment on a regular basis or when a significant change occurs in either the internal or external physical environment *f.* Preventive maintenance agreements or procedures for key system hardware components

g. On a regular basis, backing up software and data that are stored offsite

h. Restricting access to utility programs that can read, add, change, or delete data or programs to authorized individuals

i. Establishing procedures to ensure that original source documents are retained or are reproducible by the agency for an adequate amount of time to facilitate the retrieval or reconstruction of data

A13. The following are examples of procedures the auditor performs to test controls and financial statement assertions related to data:

a. Evaluating whether the data used to develop the estimates are relevant, reliable, and sufficient for the purpose

b. Identifing the source of the data, that is, whether the data were developed by the agency or by an outside entity

c. Reviewing documentation of the data used to develop estimates

d. Determining whether data used to develop estimates are consistent with supporting data, historical data, and other related information. An example would be determining whether a positive or negative correlation exists between sets of data if such a correlation would be expected to exist.

e. Evaluating the accuracy and completeness of internally prepared data

f. Tracing and agreeing internally prepared data to system output reports generated by the agency

A14. In determining the extent of the procedures to be performed on data obtained from an external source, a factor to consider is whether the data are widely disseminated and used, or whether the data were developed for limited use. An example of data that are widely disseminated and used is a report prepared by the U.S. Census Bureau. For such data, the auditor may trace and agree the information to reports prepared by the U.S. Census Bureau. If management has made adjustments to data obtained from a widely disseminated and used external source, the auditor should evaluate:

a. Management's reason for adjusting the data

b. The accuracy and completeness of the adjustments to the externally obtained data

c. Management's documentation supporting the adjustment

For data meant for limited use, all other factors being equal, the auditor should confirm or otherwise verify data obtained from other federal agencies and other external sources that were used in the actuarial valuation. If management has made adjustments to data developed for limited use, the auditor should evaluate:

a. Management's reason for adjusting the data

b. The accuracy and completeness of the adjustments to the externally obtained data

c. Management's documentation supporting the adjustment

Models

A15. The following are examples of procedures the auditor performs to obtain knowledge about how the agency generates, evaluates, selects, and reviews models used to develop estimates included in the statement of social insurance:

a. Inquiring of management and other knowledgeable personnel about how they design or select the model used for the development of estimates and how they document that model

b. Inquiring of management and other knowledgeable personnel about how they determine the effect that variations in the underlying assumptions have on the estimates

A16. The following are examples of controls related to models:

a. General and application controls related to the model, such as controls over input to the model and processing of that input

b. Controls that prevent and detect errors in the development and processing of the model

c. Controls that prevent or detect unauthorized access or changes to the model, for example, an access control table that is a component of the system and prohibits unauthorized users from accessing and changing the model. An example of a detective control is an audit log that tracks any changes made to the model.

d. Controls designed to ensure that the information contained in the statement of social insurance and related disclosures conforms to generally accepted accounting principles

e. Designating responsibility for significant information resources within the agency (for example, data and programs) and establishing and maintaining security over such resources

f. Comparing existing system security features to documented system security requirements

g. Assigning responsibility to individuals in a manner that ensures that no single individual has the authority to read, add, change, or delete information without an independent review of that activity

h. Subjecting hardware and software acquisitions and implementations to extensive testing prior to acceptance in production

A17. The following are examples of procedures the auditor performs to test controls and financial statement assertions related to models:

a. Reviewing documentation that describes the instructions, rules, or procedures used in the model to calculate estimates

b. Reperforming calculations used in the model to translate the assumptions, data, and factors into the estimate

c. Reviewing management's documentation of its sensitivity analysis and considering whether the results are consistent with the auditor's expectations

d. If available, comparing the results of the model with the results of models used by other organizations for reasonableness

Estimates

A18. The following are examples of matters the auditor inquires about in discussions with management and other knowledgeable personnel to determine how the agency generates, evaluates, selects, and reviews estimates to be included in the statement of social insurance:

a. How management obtains the expertise to develop and evaluate estimates in the statement of social insurance, including hiring procedures, professional development activities, and procedures for engaging outside specialists

b. Who has final authority for reviewing and approving estimates

c. The work performed by external review groups, their findings, and how those findings are used by the agency, for example:

(1) The scope and timing of the work performed by external review groups

(2) The composition of external review groups and the qualifications of the members

(3) Whether the external review groups are independent of the agency

(4) Whether the external review groups issued formal reports including findings or recommendations

A19. The following are examples of controls related to estimates:

a. Procedures related to the review and implementation of recommendations developed by external review groups

b. General and application controls related to estimates, such as evidence of supervisory and management review of estimates and supporting documentation

c. Controls intended to ensure that the information contained in the statement of social insurance and related notes conforms to Federal Accounting Standards Advisory Board (FASAB) guidance

d. Controls related to the supervision of individuals who develop estimates, and the review of those estimates and supporting documentation

e. Controls to regularly verify that personnel developing estimates are qualified to perform those tasks based on their education, training, and experience, as required

A20. The following are examples of procedures the auditor performs to test controls and financial statement assertions related to estimates:

a. Developing a trend analysis in which one period is compared to the next period

b. Determining whether the information in the statement of social insurance, including related disclosure, is supported by sufficient, competent evidential matter

c. Comparing the estimated future expenditures predicted by the actuarial model to actual expenditures for the previous fiscal year

d. Evaluating the reasonableness of the time period covered by the statement of social insurance. FASAB standards require that the statement of social insurance cover a projection period sufficient to illustrate long-term sustainability of the social insurance program.

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(2004)

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