AMERICAN ACADEMY *of* ACTUARIES

September 9, 2006

Commissioner James Poolman
Chairman, NAIC Life Insurance and Annuities (A) Committee
and Travel to Foreign Countries Working Group

RE: Academy of Actuaries'[1] Life Products Committee
Perspective on Travel Underwriting

Dear Commissioner Poolman:

One of the 2006 charges of the Life Insurance and Annuities (A) Committee is to discuss the travel underwriting issue. At the spring NAIC meeting a working group was appointed to carry out the Committee's charge – specifically, to analyze issues related to underwriting practices for life insurance policies related to lawful travel to foreign countries.

The Life Products Committee of the American Academy of Actuaries has authored the attached paper entitled the *Academy Life Products Committee Perspective on the Use of Travel in Life Insurance Underwriting*. We represent the actuarial profession, and are responding to your request in that capacity.

The purpose of the paper is to show that there is actuarial justification for the use of travel in underwriting, as well as when and why it may be appropriate to base underwriting decisions on past and future travel. The paper also explains that the principles used in travel underwriting are based on the general principles used in risk classification, which are necessary to promote solvency protection, equity and availability of coverage.

We appreciate the opportunity to testify at the Travel Underwriting Hearing during the Fall NAIC meeting, and would be happy to answer any questions.

Academy of Actuaries Life Products Committee

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[1] The American Academy of Actuaries is a national organization formed in 1965 to bring together, in a single entity, actuaries of all specializations within the United States. A major purpose of the Academy is to act as a public information organization for the profession. Academy committees, task forces and work groups regularly prepare testimony and provide information to Congress and senior federal policy-makers, comment on proposed federal and state regulations, and work closely with the National Association of Insurance Commissioners and state officials on issues related to insurance, pensions and other forms of risk financing. The Academy establishes qualification standards for the actuarial profession in the United States and supports two independent boards. The Actuarial Standards Board promulgates standards of practice for the profession, and the Actuarial Board for Counseling and Discipline helps to ensure high standards of professional conduct are met. The Academy also supports the Joint Committee for the Code of Professional Conduct, which develops standards of conduct for the U.S. actuarial profession.

AMERICAN ACADEMY *of* ACTUARIES

Report on the Perspective on the Use of Travel in Life Insurance Underwriting from the American Academy of Actuaries' Life Products Committee

Presented to the Life Insurance and Annuities (A) Committee's Travel to Foreign Countries Working Group

St. Louis, MO – September 2006

Life Products Committee

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Background

This paper gives an actuarial perspective on the question of when and why it is appropriate for life insurance companies to base their decisions on acceptance of an application for life insurance and the applicable premium rates on the insured's actual past or planned future travel to certain destinations. Legislation and regulation on this subject often have cited actuarial principles or practice. For example, several enacted and proposed state laws maintain the position that taking travel destinations, past or planned, into account is unfair discrimination *unless such use is "actuarially justified" or "based on sound actuarial principles or is related to actual or reasonably expected experience*"(emphasis added).[1]

Taking travel destinations into account when underwriting a policy is a form of "risk classification." There are three reasons—solvency protection, equity among current and prospective insurance policyholders, and availability of coverage—that make the use of risk classification necessary whenever the purchase of insurance is voluntary on the part of the applicant.[2] Actuaries have a primary responsibility for determining the level of reserves on the life insurance company's balance sheet that will be sufficient to pay claims and other benefits that become due under life insurance policies. Due to this responsibility, actuaries are concerned about underwriting practices that could adversely affect the ability of the insurer to meet its promises. Also, actuaries are focused on ensuring that the underwriting practices and premium rate structures of the insurer result in equitable treatment for policyholders based on the expected mortality experience of the particular class of insureds. Third, actuaries recognize that the ability to use appropriate risk classification processes leads to increased availability of insurance to the public.

The Actuarial Profession and Risk Classification

Actuaries are uniquely qualified by education, training, and experience to quantify the financial effects of the risks to which insurers are exposed. Some risks are more easily quantifiable than others because they are supported by substantial historical statistical data regarding the probability of the risk event occurring and the costs incurred as a result. In other situations, the actuary uses professional judgment, developed through education, training, and experience, to evaluate the likelihood of a risk event occurring and its financial impact. In applying this combination of statistical risk analysis and judgment, particularly to an area where only limited directly applicable historical data is available, the actuary may review other situations with comparable or near-comparable risks.

ASOP on Risk Classification and Applicability to Travel Risk

Professional guidance for actuaries practicing in the United States is provided through Actuarial Standards of Practice (ASOPs) adopted by the Actuarial Standards Board. ASOPs are intended to provide actuaries with a framework for performing professional assignments and to offer guidance on relevant issues, recommended practices, documentation, and disclosure.

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[1] ***California foreign travel underwriting statute*** ***(effective 1/1/06)***: 10111.7. (a) An insurer shall not deny or refuse to accept an application for life insurance, or refuse to insure, refuse to renew, cancel, restrict, or otherwise terminate a policy of life insurance or charge a different rate for the same life insurance coverage, based solely upon the applicant's or insured's past or future lawful travel destinations.
(b) Nothing in this section shall prohibit an insurer from excluding or limiting coverage under a life insurance policy, or refusing to offer life insurance, based upon lawful travel, or from charging a different rate for that coverage, when that action is based upon sound actuarial principles or is related to actual and reasonably expected experience.

[2] American Academy of Actuaries, "Risk Classification Statement of Principles," June 1980.

Actuaries performing professional services relative to the design, review or changing of a risk classification system are subject to *Actuarial Standard of Practice No.12: Risk Classification (ASOP 12)*. ASOP 12 states, in part:

"The actuary should select risk characteristics [defined in ASOP 12 as "measurable or observable factors or characteristics that are used to assign each risk to one of the classes of a risk classification system"] that are related to expected outcomes. A relationship between a risk characteristic and an expected outcome, such as cost [in the case of life insurance, this could be a death benefit payable], is demonstrated if it can be shown that the variation in actual or reasonably anticipated experience [in the case of life insurance, this could be the expected number of deaths] correlates to the risk characteristic. In demonstrating a relationship, the actuary may use relevant information from any reliable source, including statistical or other mathematical analysis of available data. The actuary may also use clinical experience and expert opinion…" [Bracketed information is not part of ASOP 12 and has been added for clarification.]

ASOP 12 states further that "Sometimes it is appropriate for the actuary to make inferences without specific demonstration…." The ASOP gives as an example the inference that persons with seriously impaired, uncorrected vision represent higher risks as operators of motor vehicles. Although not mentioned in the ASOP, travel to a country where there is a major outbreak of a highly infectious, life threatening disease is, similarly, an example of a situation in which the actuary may infer a higher risk to the traveler's life and health, even if the data needed for a specific demonstration is not available.

If premium rates are determined consistent with the provisions of ASOP 12, a higher premium rate may be charged when the likelihood of incurring a claim is increased. For example, time spent in locations where civil unrest is prevalent may well result in an increased likelihood of death and thus of a claim.

If the premium rate charged to the policyholder did not reflect this increased risk, *the cost of insuring the traveler would have to be subsidized by the remaining policyholders to assure that sufficient premiums are collected.* This would be inconsistent with the principle that insurance premium rates should reflect the expected cost of coverage and, in extreme cases, could affect the ability of the insurer to live up to its promises.

Over the long run, if neither the underwriting nor the premium rates charged reflect the actual costs of coverage, the applicants who are offered higher cost coverage at an insufficient premium rate will be more likely to purchase the insurance than those who are expected to cover the shortfall. This effect, called *adverse selection*, is of great concern to actuaries since, left unchecked, it can threaten the solvency of the insurer.

These considerations lead to the conclusion that, to the extent it affects the anticipated cost of providing coverage, *travel destination is an appropriate risk characteristic for life insurance.*

Past or Planned Future Travel to Specific Locations

Given that travel destination can be an appropriate risk characteristic, the next question is whether planned future travel to a *specific location* should result in charging an extra premium, restricting the amount or plan of insurance, or rejection of the application.

To answer this question, a company needs an estimate of the mortality cost that is expected if the application is accepted and the insured actually travels to the potentially hazardous location. Ideally, the increased cost, if any, attributable to future travel could be estimated with some degree of certainty based on statistical analysis of relevant historical data, if available. This could mean examination of any data that may have been compiled by the local government or other source about deaths due to civil strife, pandemics, or other potential hazards present in the location. This data then could be combined with the duration of the expected stays in the hazardous location and other factors to develop a premium rate.

However, when evaluating the risks for particular travel destinations, statistics based on past experience, whether well documented or not, are not always an appropriate basis for setting underwriting requirements and premium rates. This is because conditions during any future travel may vary significantly from what prevailed in the past (e.g. in the case of a civil war outbreak). In recognition of this possibility, ASOP 12 refers to "actual *or reasonably anticipated* experience" (italics added).

Moreover, for many risks, data sufficient to conduct a detailed analysis *may not* be available. Unfortunately, data collection can be problematic in places where, for example, a change in government has been followed by continuing civil strife. Also, it takes time to accumulate sufficient data for analysis. At the onset of a possible epidemic, data is scarce. If sufficient data is not available, the actuary is guided by ASOP 12 to look to "clinical experience and expert opinion." "Clinical experience" is experience derived from research not involving travel experience directly but which could be applied to the travel destination risk of death. For example, clinical studies of the rates of infection and death associated with a newly discovered virus can be used to estimate the risk of travel to destinations where the virus has been found. "Expert opinion" refers to a non-actuarial source of information. Actuaries could consider the expert opinion of the U.S. Government, other governments, private travel risk assessment companies and other appropriate sources in developing underwriting standards.

If, using the above principles, the estimated cost of providing death benefits for an applicant planning to travel to a specific location exceeds the estimated cost of providing death benefits for an average applicant for that age, sex, etc., not traveling to the specific location, there is a basis for charging an extra premium or restricting the amount or plan of insurance or even rejecting the applicant for insurance.

With respect to past travel, an actuary may not view such travel in and of itself as indicative of an increased mortality risk, except where the past travel has resulted in a risk factor that presents a current mortality risk, such as the applicant having become afflicted with malaria or other disease. However, past travel may be indicative of future travel, so that an actuary could be reasonably concerned that an applicant who has traveled several times to a hazardous location is more likely than other applicants to travel to the hazardous location in the future, regardless of the applicant's stated intent not to engage in such travel. Past travel, accordingly, could be relevant to the assessment of risk.

Role of Risk Classification in Insurance Market Place

When actuaries do not have data that is directly reflective of the risk, they use estimates based on data or information that has some correlation to the risk being valued. Actuaries who are charged with assessing the anticipated costs for life insurance when such risks are present conduct their work independently of actuaries in other companies and may come to different conclusions based on the weight they assign to the many factors that have to be considered.

A range of actuarial estimates may be expected to result in a range of premium rates and underwriting decisions by life insurers. Such variation is, of course, an indication of the competitiveness of a market—more than 2,000 companies are licensed to sell life insurance, and approximately 200 of these maintain a significant presence in the market. With so many competing companies, each assessing the risk independently, the consumer has a range of options. The breadth and diversity of the U.S. life insurance markets affords Americans having unusual risk characteristics (whether related to planned travel, illnesses in remission, hazardous occupations, or other aspects of their lives) multiple opportunities to obtain coverage at premium rates they find acceptable. This robust market is due, in no small measure, to the companies' realization that they are free to charge premium rates that reflect expected costs. Thus, *actuaries see risk classification as promoting the availability of life insurance coverage*.

Conclusion

Actuaries are committed to the complementary goals of company solvency, equity among policyholders and widespread availability of coverage. Focusing on these goals, actuaries provide the life insurance industry with the information that enables life insurers to fulfill their commitments to their policyholders. Properly designed risk classification systems, developed according to sound actuarial principles, play a significant role in achieving these goals. With regard to foreign travel, life insurers should not be restricted from setting sound underwriting standards, just as they should not be restricted from setting similar standards for other behaviors or conditions, such as smoking, obesity, or avocation that can expose the insured to a higher risk of premature death. Such restrictions, on sound, actuarially justified underwriting standards, likely would result in an inequitable subsidy of those traveling to hazardous destinations by other policyholders and could, in some circumstances, affect company solvency and/or the availability of coverage.

ATTACHMENT 1

Actuarial Standard of Practice No. 12

Risk Classification (for All Practice Areas)

Revised Edition

Developed by the
Task Force to Revise ASOP No. 12 of the
General Committee of the
Actuarial Standards Board

Adopted by the
Actuarial Standards Board
December 2005

Doc. No. 101

T A B L E   O F   C O N T E N T S

December 2005

TO: Members of the American Academy of Actuaries and Other Persons Interested in Risk Classification (for All Practice Areas)

FROM: Actuarial Standards Board (ASB)

SUBJ: Actuarial Standard of Practice (ASOP) No. 12

This booklet contains the final version of a revision of ASOP No. 12, now titled *Risk Classification (for All Practice Areas)*.

Background

In 1989, the Actuarial Standards Board adopted the original ASOP No. 12, then titled *Concerning Risk Classification*. The original ASOP No. 12 was developed as the need for more formal guidance on risk classification increased as the selection process became more complex and more subject to public scrutiny. In light of the evolution in practice since then, as well as the adoption of a new format for standards, the ASB believed it was appropriate to revise this standard in order to reflect current generally accepted actuarial practice.

Exposure Draft

The exposure draft of this ASOP was approved for exposure in September 2004 with a comment deadline of March 15, 2005. Twenty-two comment letters were received and considered in developing the final standard. A summary of the substantive issues contained in the exposure draft comment letters and the responses are provided in appendix 2.

The most significant changes from the exposure draft were as follows:

1. The task force clarified language relating to the interaction of applicable law and this standard.

2. The task force revised the definition of "adverse selection."

3. The task force reworded the definition of "financial or personal security system" and included examples.

4. The words "equitable" and "fair" were added in section 3.2.1 but defined in a very limited context that is applicable only to rates.

5. With respect to the operation of the standard, the task force added language that clarifies that this standard in all respects applies only to professional services with respect to designing, reviewing, or changing risk classification systems.

6. Sections 4.1 and 4.2 were combined into a new section 4.1, Communications and Disclosures, which was revised for clarity. The placement of communication requirements throughout the proposed standard was examined, and a sentence regarding disclosure was removed from section 3.3.3 and incorporated into section 4.1. A similar change was made by adding a new sentence in section 4.1 to correspond to the guidance in section 3.4.1.

   In addition, the disclosure requirement in section 4 for the actuary to consider providing quantitative analyses was removed and replaced by a new section 3.4.4, which guides the actuary to consider performing such analyses, depending on the purpose, nature, and scope of the assignment.

The task force thanks everyone who took the time to contribute comments on the exposure draft.

The ASB voted in December 2005 to adopt this standard.

Task Force to Revise ASOP No. 12

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ACTUARIAL STANDARD OF PRACTICE NO. 12

RISK CLASSIFICATION (FOR ALL PRACTICE AREAS)

STANDARD OF PRACTICE

Section 1. Purpose, Scope, Cross References, and Effective Date

1.1 Purpose—This actuarial standard of practice (ASOP) provides guidance to actuaries when performing professional services with respect to designing, reviewing, or changing risk classification systems.

1.2 Scope—This standard applies to all actuaries when performing professional services with respect to designing, reviewing, or changing risk classification systems used in connection with financial or personal security systems, as defined in section 2.4, regarding the classification of individuals or entities into groups intended to reflect the relative likelihood of expected outcomes. Such professional services may include expert testimony, regulatory activities, legislative activities, or statements concerning public policy, to the extent these activities involve designing, reviewing, or changing a risk classification system used in connection with a specific financial or personal security system.

Throughout this standard, any reference to performing professional services with respect to designing, reviewing, or changing a risk classification system also includes giving advice with respect to that risk classification system.

Risk classification can affect and be affected by many actuarial activities, such as the setting of rates, contributions, reserves, benefits, dividends, or experience refunds; the analysis or projection of quantitative or qualitative experience or results; underwriting actions; and developing assumptions, for example, for pension valuations or optional forms of benefits. This standard applies to actuaries when performing such activities to the extent such activities directly or indirectly involve designing, reviewing, or changing a risk classification system. This standard also applies to actuaries when performing such activities to the extent that such activities directly or indirectly are likely to have a material effect, in the actuary's professional judgment, on the intended purpose or expected outcome of the risk classification system.

The actuary should satisfy the requirements of applicable law (statutes, regulations, case law, and other legally binding authority) and this standard. However, to the extent applicable law conflicts with this standard, compliance with such applicable law shall not be deemed a deviation from this standard, provided the actuary discloses that the actuarial assignment was performed in accordance with the requirements of such applicable law.

1.3 Cross References—When this standard refers to the provisions of other documents, the reference includes the referenced documents as they may be amended or restated in the future, and any successor to them, by whatever name called. If any amended or restated document differs materially from the originally referenced document, the actuary should consider the guidance in this standard to the extent it is applicable and appropriate.

1.4 Effective Date—This standard will be effective for any professional service commenced on or after May 1, 2006.

Section 2. Definitions

The terms below are defined for use in this actuarial standard of practice.

2.1 Advice—An actuary's communication or other work product in oral, written, or electronic form setting forth the actuary's professional opinion or recommendations concerning work that falls within the scope of this standard.

2.2 Adverse Selection—Actions taken by one party using risk characteristics or other information known to or suspected by that party that cause a financial disadvantage to the financial or personal security system *(sometimes referred to as antiselection)*.

2.3 Credibility—A measure of the predictive value in a given application that the actuary attaches to a particular body of data (predictive is used here in the statistical sense and not in the sense of predicting the future).

2.4 Financial or Personal Security System—A private or governmental entity or program that is intended to mitigate the impact of unfavorable outcomes of contingent events. Examples of financial or personal security systems include auto insurance, homeowners insurance, life insurance, and pension plans, where the mitigation primarily takes the form of financial payments; prepaid health plans and continuing care retirement communities, where the mitigation primarily takes the form of direct service to the individual; and other systems, where the mitigation may be a combination of financial payments and direct services.

2.5 Homogeneity—The degree to which the expected outcomes within a risk class have comparable value.

2.6 Practical—Realistic in approach, given the purpose, nature, and scope of the assignment and any constraints, including cost and time considerations.

2.7 Risk(s)—Individuals or entities covered by financial or personal security systems.

2.8 Risk Characteristics—Measurable or observable factors or characteristics that are used to assign each risk to one of the risk classes of a risk classification system.

2.9 Risk Class—A set of risks grouped together under a risk classification system.

2.10 Risk Classification System—A system used to assign risks to groups based upon the expected cost or benefit of the coverage or services provided.

Section 3. Analysis of Issues and Recommended Practices

3.1 Introduction—This section provides guidance for actuaries when performing professional services with respect to designing, reviewing, or changing a risk classification system. Approaches to risk classification can vary significantly and it is appropriate for the actuary to exercise considerable professional judgment when providing such services, including making appropriate use of statistical tools. Sections 3 and 4 are intended to provide guidance to assist the actuary in exercising professional judgment when applying various acceptable approaches.

3.2 Considerations in the Selection of Risk Characteristics—Risk characteristics are important structural components of a risk classification system. When selecting which risk characteristics to use in a risk classification system, the actuary should consider the following:

3.2.1 Relationship of Risk Characteristics and Expected Outcomes—The actuary should select risk characteristics that are related to expected outcomes. A relationship between a risk characteristic and an expected outcome, such as cost, is demonstrated if it can be shown that the variation in actual or reasonably anticipated experience correlates to the risk characteristic. In demonstrating a relationship, the actuary may use relevant information from any reliable source, including statistical or other mathematical analysis of available data. The actuary may also use clinical experience and expert opinion.

Rates within a risk classification system would be considered equitable if differences in rates reflect material differences in expected cost for risk characteristics. In the context of rates, the word *fair* is often used in place of the word *equitable*.

The actuary should consider the interdependence of risk characteristics. To the extent the actuary expects the interdependence to have a material impact on the operation of the risk classification system, the actuary should make appropriate adjustments.

Sometimes it is appropriate for the actuary to make inferences without specific demonstration. For example, it might not be necessary to demonstrate that persons with seriously impaired, uncorrected vision would represent higher risks as operators of motor vehicles.

3.2.2 Causality—While the actuary should select risk characteristics that are related to expected outcomes, it is not necessary for the actuary to establish a cause and effect relationship between the risk characteristic and expected outcome in order to use a specific risk characteristic.

3.2.3 Objectivity—The actuary should select risk characteristics that are capable of being objectively determined. A risk characteristic is objectively determinable if it is based on readily verifiable observable facts that cannot be easily manipulated. For example, a risk classification of "blindness" is not objective, whereas a risk classification of "vision corrected to no better than 20/100" is objective.

3.2.4 Practicality—The actuary's selection of a risk characteristic should reflect the tradeoffs between practical and other relevant considerations. Practical considerations that may be relevant include, but are not limited to, the cost, time, and effort needed to evaluate the risk characteristic, the ongoing cost of administration, the acceptability of the usage of the characteristic, and the potential usage of different characteristics that would produce equivalent results.

3.2.5 Applicable Law—The actuary should consider whether compliance with applicable law creates significant limitations on the choice of risk characteristics.

3.2.6 Industry Practices—When selecting risk characteristics, the actuary should consider usual and customary risk classification practices for the type of financial or personal security system under consideration.

3.2.7 Business Practices—When selecting risk characteristics, the actuary should consider limitations created by business practices related to the financial or personal security system as known to the actuary and consider whether such limitations are likely to have a significant impact on the risk classification system.

3.3 Considerations in Establishing Risk Classes—A risk classification system assigns each risk to a risk class based on the results of measuring or observing its risk characteristics. When establishing risk classes for a financial or personal security system, the actuary should consider and document any known significant choices or judgments made, whether by the actuary or by others, with respect to the following:

3.3.1 Intended Use—The actuary should select a risk classification system that is appropriate for the intended use. Different sets of risk classes may be appropriate for different purposes. For example, when setting reserves for an insurance coverage, the actuary may choose to subdivide or combine some of the risk classes used as a basis for rates.

3.3.2 Actuarial Considerations—When establishing risk classes, the actuary should consider the following, which are often interrelated:

a. Adverse Selection—If the variation in expected outcomes within a risk class is too great, adverse selection is likely to occur. To the extent practical, the actuary should establish risk classes such that each has sufficient homogeneity with respect to expected outcomes to satisfy the purpose for which the risk classification system is intended.

b. Credibility—It is desirable that risk classes in a risk classification system be large enough to allow credible statistical inferences regarding expected outcomes. When the available data are not sufficient for this purpose, the actuary should balance considerations of predictability with considerations of homogeneity. The actuary should use professional judgment in achieving this balance.

c. Practicality—The actuary should use professional judgment in balancing the potentially conflicting objectives of accuracy and efficiency, as well as in minimizing the potential effects of adverse selection. The cost, time, and effort needed to assign risks to appropriate risk classes will increase with the number of risk classes.

3.3.3 Other Considerations—When establishing risk classes, the actuary should (a) comply with applicable law; (b) consider industry practices for that type of financial or personal security system as known to the actuary; and (c) consider limitations created by business practices of the financial or personal security system as known to the actuary.

3.3.4 Reasonableness of Results—When establishing risk classes, the actuary should consider the reasonableness of the results that proceed from the intended use of the risk classes (for example, the consistency of the patterns of rates, values, or factors among risk classes).

3.4 Testing the Risk Classification System—Upon the establishment of the risk classification system and upon subsequent review, the actuary should, if appropriate, test the long-term viability of the financial or personal security system. When performing such tests subsequent to the establishment of the risk classification system, the actuary should evaluate emerging experience and determine whether there is any significant need for change.

3.4.1 Effect of Adverse Selection—Adverse selection can potentially threaten the long-term viability of a financial or personal security system. The actuary should assess the potential effects of adverse selection that may result or have resulted from the design or implementation of the risk classification system. Whenever the effects of adverse selection are expected to be material, the actuary should, when practical, estimate the potential impact and recommend appropriate measures to mitigate the impact.

3.4.2 Risk Classes Used for Testing—The actuary should consider using a different set of risk classes for testing long-term viability than was used as the basis for determining the assigned values if this is likely to improve the meaningfulness of the tests. For example, if a risk classification system is gender-neutral, the actuary might separate the classes based on gender when performing a test of long-term viability.

3.4.3 Effect of Changes—If the risk classification system has changed, or if business or industry practices have changed, the actuary should consider testing the effects of such changes in accordance with the guidance of this standard.

3.4.4 Quantitative Analyses—Depending on the purpose, nature, and scope of the assignment, the actuary should consider performing quantitative analyses of the impact of the following to the extent they are generally known and reasonably available to the actuary:

a. significant limitations due to compliance with applicable law;

b. significant departures from industry practices;

c. significant limitations created by business practices of the financial or personal security system;

d. any changes in the risk classes or the assigned values based upon the actuary's determination that experience indicates a significant need for a change; and

e. any expected material effects of adverse selection.

3.5 Reliance on Data or Other Information Supplied by Others—When relying on data or other information supplied by others, the actuary should refer to ASOP No. 23, *Data Quality*, for guidance.

3.6 Documentation—The actuary should document the assumptions and methodologies used in designing, reviewing, or changing a risk classification system in compliance with the requirements of ASOP No. 41, *Actuarial Communications*. The actuary should also prepare and retain documentation to demonstrate compliance with the disclosure requirements of section 4.1.

Section 4. Communications and Disclosures

4.1 Communications and Disclosures—When issuing actuarial communications under this standard, the actuary should refer to ASOP Nos. 23 and 41. In addition, the actuarial communications should disclose any known significant impact resulting from the following to the extent they are generally known and reasonably available to the actuary:

a. significant limitations due to compliance with applicable law;

b. significant departures from industry practices;

c. significant limitations created by business practices related to the financial or personal security system;

d. a determination by the actuary that experience indicates a significant need for change, such as changes in the risk classes or the assigned values; and

e. expected material effects of adverse selection.

The actuarial communications should also disclose any recommendations developed by the actuary to mitigate the potential impact of adverse selection.

4.2 Prescribed Statement of Actuarial Opinion—This ASOP does not require a prescribed statement of actuarial opinion (PSAO) as described in the *Qualification Standards for Prescribed Statements of Actuarial Opinion* promulgated by the American Academy of Actuaries. However, law, regulation, or accounting requirements may also apply to an actuarial communication prepared under this standard, and as a result, such actuarial communication may be a PSAO.

4.3 Deviation from Standard—The actuary must be prepared to justify to the actuarial profession's disciplinary bodies, or to explain to a principal, another actuary, or other intended users of the actuary's work, the use of any procedures that depart materially from those set forth in this standard. If a conflict exists between this standard and applicable law or regulation, compliance with applicable law or regulation is not considered to be a deviation from this standard.

Appendix 1

Background and Current Practices

Note: The following appendix is provided for informational purposes but is not part of the standard of practice.

Background

Risk classification has been a fundamental part of actuarial practice since the beginning of the profession. The financial distress and inequity that can result from ignoring the impact of differences in risk characteristics was dramatically illustrated by the failure of the nineteenth-century assessment societies, where life insurance was provided at rates that disregarded age. Failure to adhere to actuarial principles regarding risk classification for voluntary coverages can result in underutilization of the financial or personal security system by, and thus lack of coverage for, lower risk individuals, and can result in coverage at insufficient rates for higher risk individuals, which threatens the viability of the entire system.

Adverse selection may result from the design of the classification system, or may be the result of externally mandated constraints on risk classification. Classes that are overly broad may produce unexpected changes in the distribution of risk characteristics. For example, if an insurer chooses not to screen for a specific risk characteristic, or a jurisdiction precludes screening for that characteristic, this may result in individuals with the characteristic applying for coverage in greater numbers and/or amounts, leading to increased overall costs.

Risk classification is generally used to treat participants with similar risk characteristics in a consistent manner, to permit economic incentives to operate and thereby encourage widespread availability of coverage, and to protect the soundness of the system.

The following actuarial literature provides additional background and context with respect to risk classification:

1. In 1957, the Society of Actuaries published *Selection of Risks* by Pearce Shepherd and Andrew Webster, which educated several generations of actuaries and is still a useful reference.

2. In 1980, the American Academy of Actuaries published the *Risk Classification Statement of Principles*, which has enjoyed widespread acceptance in the actuarial profession. At the time of this revision of ASOP No. 12, the American Academy of Actuaries was developing a white paper regarding risk classification principles.

3. In 1992, the Committee on Actuarial Principles of the Society of Actuaries published "Principles of Actuarial Science," which discusses risk classification in the context of the principles on which actuarial science is based.

Current Practices

Over the years, a multitude of risk classification systems have been designed, put into use, and modified as a result of experience. Advances in medical science, economics, and other disciplines, as well as in actuarial science itself, are likely to result in continued evolution of these systems. While future developments cannot be foreseen with accuracy, practicing actuaries can take reasonable steps to keep abreast of emerging and current practices. These practices may vary significantly by area of practice. For example, the risk classes for voluntary life insurance may be subdivided to reflect the applicant's state of health, smoking habits, and occupation, while these factors are usually not considered in pension systems.

Innovations in risk classification systems may engender considerable controversy. The potential use of genetic tests to classify risks for life and health insurance is a current example. In some cases, such controversy results in legislation or regulation. The use of postal codes, for example, has been outlawed for some types of coverage. For the most part, however, the legal test for risk classification has remained unchanged for several decades; risk classification is allowed so long as it is "based on sound actuarial principles" and "related to actual or reasonably anticipated experience."

Risk classification issues in some instances may pose a dilemma for an actuary working in the public policy arena when political considerations support a system that contradicts to some degree practices called for in this ASOP. Also, when designing, reviewing, or changing a risk classification system, actuaries may perform professional services related to a designated set of specific assumptions that place certain restraints on the risk classification system.

In such situations, it is important for those requesting such professional services to have the benefit of professional actuarial advice.

This ASOP is not intended to prevent the actuary from performing professional services in the situations described above. In such situations, the communication and disclosure guidance in section 4.1 will be particularly pertinent, and current section 4.1(e), which requires disclosure of any known significant impact resulting from expected material effects of adverse deviation, may well apply. Section 4.1(a), which relates to applicable law, and section 4.1(b), which relates to industry practices, may also be pertinent.

Appendix 2

Comments on the Exposure Draft and Responses

The exposure draft of this revision of ASOP No. 12, *Risk Classification for All Practice Areas*, was issued in September 2004 with a comment deadline of March 15, 2005. Twenty-two comment letters were received, some of which were submitted on behalf of multiple commentators, such as by firms or committees. For purposes of this appendix, the term "commentator" may refer to more than one person associated with a particular comment letter. The task force carefully considered all comments received. Summarized below are the significant issues and questions contained in the comment letters and the responses, which may have resulted from ASB, General Committee, or task force discussion. Unless otherwise noted, the section numbers and titles used below refer to those in the exposure draft.

GENERAL COMMENTS	
Comment	Several commentators suggested various editorial changes in addition to those addressed specifically below.
Response	The task force implemented such suggestions if they enhanced clarity and did not alter the intent of the section.
Comment	One commentator noted that the ASOP should deal with the ability of an insured to misrepresent or manipulate its classification.
Response	The task force believed that the considerations raised by the commentator are adequately addressed by sections 3.2.3 and 3.2.4.
Comment	One commentator thought that a section on public and social policy considerations should be added to the standard.
Response	The task force believed that social and public policy considerations, while essential aspects of the way the public views the profession, did not belong in an ASOP dealing with the actuarial aspects of risk classification.
Comment	One commentator questioned whether the ASOP would apply to company selection criteria (tiering criteria) and schedule-rating criteria that may be part of a rating scheme.
Response	The task force believes that the ASOP applies to the extent the selection or schedule rating criteria, used by a company as part of the risk classification system, creates the potential for adverse selection.
Comment	One commentator believed that the ASOP could conflict with proposed state legislation to ban credit as a rating variable and suggested adding an additional consideration in section 3 that the actuary should select risk characteristics in order to avoid controversy or lawsuits.
Response	The task force believes it has addressed issues regarding applicable law, industry practices, business practices, and testing the risk classification system under various scenarios.
Comment	In the transmittal memorandum of the exposure draft, the task force asked whether the key changes from the previous standard were appropriate.
Response	Several commentators responded that the changes were appropriate and some suggested additional changes that are discussed in this appendix.

Comment Response	One commentator expressed concern regarding the expansion of scope and the implications in actuarial work that would be otherwise unrelated to risk classification and the expansion of scope to the public policy arena in general. The task force has added modified wording in the standard to clarify that in all cases the standard applies only in respect to design, reviewing, or changing risk classification systems related to financial or personal security systems.
Comment Response	Two commentators believed that the revised standard should discuss the purposes of risk classification similar to the discussion in the previous standard. One commentator noted the discussion about encouraging “widespread availability of coverage” in particular. The task force retained a brief discussion of the purposes of risk classification in appendix 1 but did not believe it was appropriate for the ASOP to provide additional education about the purposes of risk classification. The task force noted that a white paper on risk classification that could contain such material is being developed.
Comment Response	Several commentators noted that the previous ASOP No. 12 had been very useful in court proceedings and recommended that the task force retain some of the wording in section 5 of the previous ASOP. One commentator suggested strengthening the revised standard so that actuarial testimony would be given greater weight by the courts in interpreting rate standards. Another commentator suggested strengthening the ASOP by adding an explicit statement that one objective during the development and use of risk classification systems is to minimize adverse selection. The task force reviewed the revised standard with these concerns in mind but concluded that the revised standard represents current generally accepted practice and provides an appropriate level of guidance. The task force considered the specific suggestions with respect to additional wording and incorporated some of the wording regarding adverse selection from the old section 5.5 into appendix 1.
Comment Response	In the transmittal memorandum of the exposure draft, the task force asked whether it was appropriate for the ASOP not to use the terms “equitable” and “fair.” Two commentators believed that the ASOP should use or define these concepts because they have been used in court proceedings, but the majority of commentators believed that it was appropriate not to define them and that the standard adequately addressed these concepts. The task force agreed that the ASOP should not define subjective qualities such as “equitable” and “fair.” As the result of ASB deliberation on this issue, language was added to section 3.2.1 to discuss what was meant by the terms “equitable” and “fair.” These terms are intended to apply to a risk classification system only to the extent the risk classification system applies to rates. As such, a formal definition was not added. Court decisions notwithstanding, there is no general agreement as to what characterizes “equitable” classification systems or “fair” discrimination. The task force also considered the possibility that further discussions about such issues might become part of the proposed white paper on risk classification that the American Academy of Actuaries is developing.
Comment Response	One commentator questioned why the standard offered separate guidance for “risk characteristics” (section 3.2) and “risk classes” (section 3.3). Another commentator believed there should be greater differentiation between the concepts of “risk characteristic” and “risk classification.” The task force believed that the ASOP uses these terms appropriately and made no change.
Comment Response	One commentator thought that section 3.3.2 should include guidance on appropriately matching the risk with the outcome when establishing a risk class. The task force believed that section 3.2.1 addressed this comment and noted that section 3.3.2(a) requires sufficient homogeneity with respect to outcomes.

Section 1.2, Scope	
Comment Response	In the transmittal memorandum of the exposure draft, the task force asked whether it was appropriate to include the actuary's advice within the scope of the standard. Several commentators agreed that including guidance on actuarial advice was appropriate. One commentator believed that the disclosure requirements in section 4 could be burdensome to an actuary who has provided brief oral advice. The task force kept actuarial advice within the scope of the standard and intended that the disclosure requirements in section 4 should apply to any actuarial advice that falls within the scope of the standard.
Comment Response	One commentator questioned what was meant by "legislative activities" as an example of a professional service. The task force intended that "legislative activities" could include drafting legislation, for example.
Comment Response	Several commentators questioned the meaning of "personal security system." One commentator questioned whether the definition of "financial or personal security system" would exclude share-based payment systems from the scope of the standard. The commentator recommended that the standard be revised to include such systems. The task force intended that the ASOP should apply if share-based payment systems or stock options were part of a financial or personal security system, as defined in the section 2.5. If such plans were not part of a financial or personal security system, the ASOP would not apply. The task force chose not to expand the scope to include such plans in all situations but did clarify the definition of "financial or personal security system."
SECTION 2. DEFINITIONS	
Comment Response	One commentator suggested that a definition of experience be included, citing the definition of "experience" in the previous ASOP (old section 2.5), which includes the wording, "Experience may include estimates where data are incomplete or insufficient." The task force agreed that experience may include estimates where data are incomplete or insufficient but did not believe that the old definition was necessary in the revised ASOP.
Comment Response	One commentator suggested that a definition of "reasonable" be included. The task force disagreed and did not add a definition of "reasonable."
Section 2.1, Advice	
Comment Response	One commentator suggested that "other work product" was not needed, since the standard already listed "an actuary's oral, written, or electronic communication." The task force revised the language to clarify that "communication or other work product" was intended.
Comment Response	One commentator believed that a definition for "advice" is not needed. The task force disagreed and retained the definition of advice.
Section 2.2, Adverse Selection	
Comment Response	In the transmittal memorandum of the exposure draft, the task force asked if the definition of "adverse selection" was appropriate or whether an alternative definition (included in the transmittal letter) would be preferable. Many commentators responded, some agreeing with the original, some with the alternative, and some suggested other wording. The other wording was most often to change the phrase, "take financial advantage of." The task force believed that some of the reasoning on the part of the commentators who preferred the current version did not accurately describe adverse selection. The task force ultimately decided to use the alternative definition in the standard and believed that it better addressed some commentators' concerns that the other definition could have a negative connotation with respect to motivation.

Comment Response	One commentator suggested that "antiselection" is synonymous with adverse selection and that should be made clear in the definition. The task force agreed and added that reference.
Section 2.4, Credibility (now 2.3)	
Comment Response	Two commentators believed that within the definition of "credibility" the language concerning "predictive" was confusing. The task force retained the definition as it is used in several other ASOPs.
Section 2.5, Financial or Personal Security System (now 2.4)	
Comment Response	Several commentators questioned the meaning of "personal security system." The task force clarified the definition.
Comment Response	One commentator suggested that "impact" be modified to read "financial impact." The task force disagreed and revised the definition of "financial and security systems" to delineate the impacts.
Section 2.6, Homogeneity (now 2.5)	
Comment Response	One commentator believed the definition of "homogeneity" needed revisions to include the concept of grouping similar risks. Another commentator found the definition unclear. The task force believes that the current definition is appropriate for this ASOP.
Section 2.7, Practical (now 2.6)	
Comment Response	One commentator believed the definition of "practical" was much too broad and needed to be more actuarial in nature. Alternatively, the commentator suggested dropping it and relying on section 3.2.4. The task force believed the definition was appropriate and made no change. Section 3.2.4 addresses actuarial practice with respect to practicality. While "practical" is used there and in other places, it is always modified by its context.
Section 2.8, Risk(s) (now 2.7)	
Comment Response	One commentator suggested that the definition of risks as individuals or entities seemed too limiting and noted that covered risks can also include pieces of property or events. The task force disagreed, believing that "entity" could encompass property and events.
Comment Response	One commentator suggested that a unit of risk be defined at the basic unit of risk. The task force disagreed and made no change.
Section 2.9, Risk Characteristics (now 2.8)	
Comment Response	One commentator suggested defining risk characteristics as "measurable or observable factors or characteristics, each of which is measured by grouping similar risks into risk classes." The task force disagreed and made no change.
Section 2.11, Risk Classification System (now 2.10)	
Comment Response	One commentator believes the definition of "risk classification system" is circular since "classify" is used in the definition. The task force agreed and revised the wording.
Comment Response	One commentator recommended that the term "risks" be changed to "similar risks" in this definition just as in the old definition of risk classification that used the phrase "grouping risks with similar risk characteristics." The task force disagreed and made no change.
Comment Response	One commentator suggested replacing "groups" with "classes." The task force disagreed and made no change.

SECTION 3. ANALYSIS OF ISSUES AND RECOMMENDED PRACTICES	
Section 3.2.1, Relationship of Risk Characteristics and Expected Outcomes	
Comment	One commentator expressed concern with the standard's differentiation between the section's quantitative and subjective factors.
Response	The task force did not intend to be prescriptive as to how to quantify the ratings scheme and believed that the ASOP was sufficiently specific. The ASOP does not address rate adequacy. Selection is the focus, not quantification.
Comment	One commentator believed that "clinical" was not an appropriate adjective to describe the experience an actuary is allowed to use.
Response	The task force intentionally used the term "clinical."
Comment	One commentator believed that if the classification cannot be measured by actual insurance data, then it is not really a risk classification system.
Response	The task force disagreed and made no change.
Comment	One commentator suggested that the three points addressing why risk classification is generally used be moved to background information.
Response	The task force agreed that such educational language was more appropriate in an appendix than in the body of the ASOP and has moved it.
Comment	One commentator believed that it may be difficult to deal with the process and procedures involved with considering the interdependence of risk characteristics and their potential impact on the operation of the risk classification system.
Response	The task force did not change the language to address this comment but notes that section 3.2.4 addresses considerations regarding practicality.
Section 3.2.2, Causality	
Comment	A number of commentators expressed concern with establishing a cause-and-effect relationship while others thought the standard did not go far enough in this regard.
Response	The task force agreed that, where there is a demonstrable cause-and-effect relationship between a risk characteristic and the expected outcome, it is appropriate for the actuary to include such a demonstration. However, the task force recognized that there can be significant relationships between risk characteristics and expected outcomes where a cause-and-effect relationship cannot be demonstrated.
Section 3.2.4, Practicality	
Comment	Two commentators suggested the use of examples of practical considerations.
Response	The task force revised the section to indicate that the language shows examples of practical considerations.
Comment	One commentator suggested that "theoretical," as used in section 3.2.4, be defined.
Response	The task force replaced "theoretical" with "other relevant."
Section 3.2.5, Applicable Law	
Comment	One commentator thought that the proposed language in this section was much too broad.
Response	The task force disagreed with the comment and made no change.

Section 3.3, Considerations in Establishing Risk Classes	
Comment	One commentator expressed concern that the documentation requirements for these considerations represented an increase from the previous version.
Response	The task force thought the documentation requirements were appropriate and necessary and made no change.
Section 3.3.1, Intended Use	
Comment	One commentator noted that stratifying data sets in loss reserving is different from risk classification, which is done to price risks, and believed that loss reserving permits more flexibility. The commentator stated that the definition of a risk classification system does not apply to loss reserving.
Response	The task force agreed with the first concepts but disagreed with the final sentence and therefore made no change.
Section 3.3.2, Actuarial Considerations	
Comment	With respect to section 3.3.2(a), one commentator suggested replacing the word "for" in the first line with "within" for clarification.
Response	The task force agreed and made the suggested change.
Comment	With respect to section 3.3.2(b), two commentators questioned what was intended by the use of the term "large enough."
Response	The task force believed the language was sufficiently clear and made no change.
Comment	One commentator pointed out that there are often classes that, individually, have associated experience with low statistical credibility and believed that alternatives to credibility should be included in section 3.3.2(b).
Response	While the task force agreed that there are situations in which actuarially sound classification plans will have individual classes where the experience has low statistical credibility, the task force believed that credibility is a desirable characteristic of risk classes within a risk classification system and that no expansion to include alternatives was necessary.
Comment	One commentator suggested replacing "statistical predictions" with "predictions" in section 3.3.2(b) to avoid the implication that underlying statistics were required. Another commentator suggested that the term "predictions" needed explanation.
Response	The task force agreed with these comments and replaced "predictions" with "inferences" and edited the language to improve its clarity.
Comment	One commentator suggested that the last sentence of section 3.3.2(b), while accurate, was irrelevant.
Response	The task force agreed and eliminated the sentence.
Comment	With respect to section 3.3.2(c), one commentator suggested the need for definitions of "accuracy" and "efficiency."
Response	The task force believed that the existing language regarding the actuary's professional judgment was sufficient in determining the meaning of "accuracy" and "efficiency" and did not add a definition of either word.