

**Title of Exposure Draft: Proposed Revision of Actuarial Standard of Practice (ASOP) No. 12**  
**Comment Deadline: May 1, 2024**

Instructions: Please review the exposure draft and give the ASB the benefit of your recommendations by completing this comment template. Please fill out the tables within the section below, adding rows as necessary. Sample for completing the template provided at the following link: <http://www.actuarialstandardsboard.org/email/2020/ASB-Comment-Template-Sample.docx>

Each completed comment template received by the comment deadline will receive consideration by the drafting committee and the ASB. The ASB accepts comments by email. Please send to [comments@actuary.org](mailto:comments@actuary.org) and include the phrase ‘ASB COMMENTS’ in the subject line. Please note: Any email not containing this exact phrase in the subject line will be deleted by our system’s spam filter.

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**I. Identification:**

Name of Commentator / Company
Bob Miccolis, FCAS, MAAA, FCA, Principal, Miccolis Consulting LLC

**II. ASB Questions (If Any). Responses to any transmittal memorandum questions should be entered below.**

Question No.	Commentator Response

**III. Specific Recommendations:**

Section # (e.g. 3.2.a)	Commentator Recommendation (Please provide recommended wording for any suggested changes)	Commentator Rationale (Support for the recommendation)
1.2 Paragraph 1	<b>Delete the following wording:</b>	There is no reason clearly stated or understood for limiting the scope of the standard to exclude testing or using of elements of a risk classification framework which have an actuarial basis. It does not make sense for the scope of the standard to treat “using” or “testing” differently with respect to the scope of this standard.

	<p>This standard also applies to actuaries when performing actuarial services with respect to using any elements of a risk classification framework in connection with financial or personal security systems, to the extent practical and consistent with the scope of the actuary’s assignment.</p> <p><b>Recommended replacement wording:</b></p> <p>This standard applies to actuaries when performing actuarial services with respect to designing, developing, selecting, modifying, reviewing, evaluating, opining on, testing, or using actuarial elements of a <b>risk classification framework</b> in connection with a <b>financial or personal security system</b>.</p> <p>If the actuary’s actuarial services involve testing, reviewing, or evaluating a <b>risk classification framework</b>, the actuary performing such services should consider the extent to which the actuary can determine that the similar services performed by another party were performed in accordance with this standard. The actuary should apply the guidance in this standard in conducting their test, review, or evaluation.</p>	<p>The actuary’s responsibilities should not exclude using or testing a risk classification framework unless the actuary discloses such exclusion or discloses Reliance on Information Provided by Another Party as mentioned per ED sections 3.6, 4.1, and 4.2.</p> <p>The wording which references “to the extent practical” should be excluded from the scope section. Certainly, practicality considerations may limit the actuary’s ability to perform relevant aspects of an actuary’s services. However, practicality is a common limitation. It is addressed in ASOP No. 1 and may be addressed in a common section in this and other standards. ED section 3.2.7 should be edited to clarify that practicality is not a scope limitation for the standard nor for the application of the standard. However, practicality is quite a common consideration for actuaries in many actuarial assignments. Practicality in ED section (3.2.7) should be in a separate section in section 3, rather than in a subsection. Recommended edits for the practicality section and the location for the section are provided later in this submission.</p> <p>The recommended replacement wording is similar to the wording in other standards, including ASOP No. 53 and ASOP No. 56. While there is no specific reference to practicality in ASOP No. 53, that standard does state that it applies “to developing or reviewing the future cost estimates by class within a risk classification system.” Consequently, the overlap between standards is not unusual and the wording should be reconciled for consistency.</p> <p>When an actuary relies on another actuary or on other experts in the applicable field, ASOP No. 1 or a common section in standards with similar sections should be used. This should apply to similar sections on recommended practices, and documentation and disclosures sections as provided in other standards. Section (3.2.7) addresses practicality separately, so it is redundant and inconsistent for the standard to repeat “when practical” or “to the extent practical,” in some sections, but not in other sections.</p> <p>The wording, “consistent with the scope of the assignment” should be removed. The actuary’s work will be relied on with respect to the intended purpose and use of the risk classification framework. Consequently, the standard should not be dependent on the scope of the actuary’s assignment without appropriate disclosures or reliance on other parties with regards to the requirements otherwise set forth in the standard.</p>
2.1	<p><b>Delete the following definition:</b></p>	<p>The proposed definition of adverse selection obscures how and why adverse selection should be an issue of concern to actuaries with respect to a risk</p>

**Adverse Selection**—The result of actions regarding an element of choice taken by risk subjects, which could adversely impact the effectiveness of a risk classification framework or the viability of the financial or personal security system. Adverse selection is sometimes referred to as “anti-selection.”

**Recommended replacement wording options if the definition is not removed:**

Recommended option 1

Adverse Selection—The result of actions taken by **risk subjects** or other participants in the **financial or personal security system** which could adversely impact the **actuarial soundness** ability of a **risk classification framework**. For example, adverse impacts from **adverse selection** could arise from policyholder and actions of competing insurers which influence insurance market functions such as **risk class** pricing, underwriting, claims handling, and policyholder buying and renewal habits, including price sensitivities, and other relevant actions by the participants. **Adverse selection** is sometimes referred to as “anti-selection.”

Recommended option 2

Adverse Selection—The result of actions taken by **risk subjects** or other participants in the **financial or personal security system** which could adversely impact the ability of a **risk classification framework** to satisfy its intended purpose. For example, adverse impacts from **adverse selection** could arise from policyholder and actions of competing insurers which influence insurance market functions such as **risk class** pricing, underwriting, claims handling, and policyholder buying and renewal habits, including price sensitivities, and other relevant actions by the participants. **Adverse selection** is sometimes referred to as “anti-selection.”

classification framework. Why does adverse selection need to be defined in this standard when there are common and appropriate definitions and explanations available from many sources? The definition provided in the ED is insufficient, unnecessary, and potentially confusing. Other definitions from the current ASOP No. 12 have been removed in the ED, apparently for the same reason that it was not necessary and could not be defined succinctly.

The section on the potential implications of adverse selection should remain in section 3 in the standard, even though the standard does not provide a specific definition. That section, Effect of Adverse Selection (ED section 3.2.5), could be important to the actuary in assessing actuarial soundness.

If this definition is not removed, alternative wording options are recommended which refer to “actuarial soundness” or “the ability of a risk classification framework to satisfy its intended purpose” These recommendations would be more direct and easier to interpret than “effectiveness.”

The term “effectiveness” is unnecessarily vague and potentially vulnerable to interpretation which may be misinterpreted. The term “actuarial soundness” has been a common term used by actuaries for over 100 years. It is referenced in several laws and regulations. It is the subject of an Academy public policy paper issued in 2012. ASOP No. 1 also addresses actuarial soundness. And it is a key term in P&C actuarial statement of principles on ratemaking issued by the CAS in 1988 and reinstated for reference for purposes of U.S.-regulated ratemaking in 2021. There are also various references to sound actuarial principles as the basis for actuarial soundness.

For the purpose of actuarial services for a risk classification framework, there should be a definition or other reference to the application of actuarial soundness based on common “sound” actuarial principles, or other authoritative references that address the principles widely considered to be “sound” for the intended purpose and intended use of a risk classification framework.

Reference to the viability of the financial or personal security system is unnecessary since the intended purpose of the risk classification framework would normally incorporate consideration of protecting the viability of the financial or personal security system. For example, the intended purpose might include consideration of an insurer’s anticipated underwriting profit or loss, or of the long-term viability of a social insurance program from the use of the risk classification framework.

		Recommended edits to section 3.2.5 below describe what the actuary should do regarding adverse selection, with a focus on materiality.
2.6	<p><b>Delete the following wording:</b></p> <p><u>Risk Measure</u>—A measurement of the outcomes of a contingent event mitigated by the financial or personal security system. Examples of risk measures include mortality rates, healthcare costs, and claim frequency and severity.</p> <p><b>Recommended replacement wording:</b></p> <p><u>Risk Measure</u>—A measurement or quantity related to the risk and the uncertainty associated with the possible or probable outcomes from contingent events covered or mitigated by a <b>financial or personal security system</b>. Examples of the measures related to possible outcomes from contingent events include mortality rates, healthcare costs, and claim frequency and claim severity. Examples of <b>risk measures</b> include estimated costs or benefits based on the expected value or mean, the mean adjusted by a risk margin, or a quantile or other quantitative statistic associated with the distribution of possible outcomes. The <b>risk measures</b> should be selected based on the intended purpose and intended use of the <b>risk classification framework</b>.</p>	<p>“Risk measure” is commonly used in actuarial practice to refer to various technical concepts, including expected cost, variance, value-at-risk, tail-value-at-risk, etc. The ED wording refers to items which are really the outcomes of uncertain events, rather than measures of the risk, i.e., the quantification of the uncertainties involved. Actuaries frequently use risk measures as a means compare uncertain outcomes with an equivalent certain outcome.</p> <p>The proposed wording in the ED confuses possible outcomes with typical risk measures. The examples of risk measures in the recommended reworded section are taken from the “intended measure” in ASOP 43 and ASOP 53.</p>
2.8	<p><b>Delete the following definition:</b></p> <p><u>Unintended Bias</u> —Impacts or outcomes on specific <b>risk subjects</b> resulting from the use of a <b>risk classification framework</b> that is not intentionally designed to result in such impacts or outcomes.</p>	<p>The current definition in the ED does not provide a clear definition of “bias.” The use of the term “unintended” in the ED is only described for a risk classification framework that is based on its intentional design to result in certain unacceptable impacts or outcomes. However, there is no description of the characteristics of biased impacts or outcomes. References to biased impacts or outcomes are not sufficiently described so the actuary can consider appropriate methods for assessing such impacts or outcomes.</p> <p>The intended purpose of the risk classification framework should be sufficient for this standard and allows for external considerations, even unintended bias if that term is imposed by external considerations, and can be incorporated without a specific reference to bias in the standard.</p>
Section 2	<b><u>New Definition Recommendation</u></b>	The term “actuarial soundness” has been a common term used by actuaries for over 100 years. It is referenced in several laws and regulations. It is the subject of an

	<p><u>Actuarial Soundness</u>—An assessment of the ability or sufficiency of a <b>risk classification framework</b> to satisfy its intended purpose. <b>Actuarial soundness</b> sometimes refers to the application of sound actuarial principles as the basis for an assessment.</p>	<p>Academy public policy paper issued in 2012. ASOP No. 1 also addresses actuarial soundness. And it is a key term in P&amp;C actuarial statement of principles on ratemaking issued by the CAS in 1988 and reinstated for reference for purposes of U.S.-regulated ratemaking in 2021. There are also various references to sound actuarial principles as the basis for actuarial soundness.</p> <p>For the actuarial services with respect to a risk classification framework, there should be a definition or other reference to the application of actuarial soundness based on commonly accepted actuarial principles (aka sound actuarial principles), or other authoritative references. Moreover, the intended purpose of a risk classification framework should provide the underlying basis for criteria from which an actuary should assess actuarial soundness. Applicable laws, regulations, risk and cost differences, fairness, equity, and restrictions on bias and unfair discrimination are all considerations which can impact the intended purpose of the risk classification framework, and therefore any assessment of actuarial soundness, could be based on applying sound actuarial principles in the context of the intended purpose.</p> <p>Actuarial soundness should not be replaced with a vague term such as effectiveness. ASOP No. 1 simply states that the actuary should define the meaning of “actuarially sound” used by the actuary by identifying the process or result used to assess actuarial soundness.</p> <p>The term “effectiveness” is unnecessarily vague and potentially vulnerable to misinterpretation. Alternative wording to “effectiveness” is recommended if “actuarial soundness” poses significant challenges. The replacement wording would refer to “the ability of a risk classification framework to satisfy its intended purpose.”</p> <p>Reference to the viability of the financial or personal security system is unnecessary since the intended purpose of the risk classification framework would normally incorporate consideration of protecting the viability of the financial or personal security system. For example, the intended purpose might include consideration of an insurer’s anticipated underwriting profit or loss, or of the long-term viability of a social insurance program from the use of the risk classification framework.</p>
Section 2	<p><b><u>New Definition Recommendation</u></b></p> <p><u>Protected Attribute</u>—An attribute or characteristic as defined or listed under applicable law and associated with the application of fair and equitable treatment of individuals or entities with identified commonalities.</p>	<p>The term “Protected Attribute” should be defined in this standard. The application of a protected attribute, or sometimes referred to as a protected class, is quite specific to the law or regulatory authority that governs the definition, application and purpose of the protection regulated by such authority. This standard should simply recognize a protected attribute as something that may be imposed on the design or</p>

	<p>Note that a protected attribute or characteristic may differ from the definition of risk characteristic provided in this standard.</p>	<p>use of a risk classification framework or may influence what risk-related attributes are used and how they are used.</p> <p>The term “protected class” is also used, but protected class is typically defined in law by listing characteristics or attributes associated with individuals or groups of people.</p>
<p>3.2.1</p>	<p><b>Delete the following wording:</b></p> <p><del>Intended Purpose—The actuary should confirm that the risk classification framework is appropriate for the intended purpose and intended use.</del></p> <p><b>Recommended replacement wording:</b></p> <p><del>Intended Purpose and Intended Use—The actuary should evaluate and confirm that the risk classification framework is appropriate for its intended purpose and intended use. The actuary should evaluate the actuarial soundness of the risk classification framework.</del></p>	<p>The current ASOP 12 includes section 3.3.1 on intended use which has been eliminated. Reference to both intended purpose and intended use appears in the ED (first sentence). The title of this section should also include “Intended Use” for consistency and to indicate its importance.</p> <p>The intended use of a risk classification framework is generally covered by another standard rather than in ASOP 12. For example, in P&amp;C ratemaking, ASOP 12 would cover the grouping of risk subjects into risk classes, while ASOP 53 would be the standard for estimating the future costs for each risk class.</p> <p>ED Section 3.2.9 (Effectiveness per the ED) is only one sentence and is closely related to ED Section 3.2.1 Intended Purpose. Combining these 2 sections into one section would be much clearer for the reader. The recommended added sentence to 3.2.1 is similar to ED Section 3.2.9 Effectiveness, which does not need to be its own section, and can be better understood when combined with ED Section 3.2.1 Intended Purpose.</p> <p>The term effectiveness is replaced with actuarial soundness, recommended as a new defined term in section 2.</p>
<p>3.2.3</p>	<p><b>Delete the following wording:</b></p> <p><del>Relationship of Risk Characteristics and the Risk Measures—The actuary should have a rational explanation that the relationship between a risk characteristic and a risk measure is not obscure, irrelevant, or arbitrary; however, the actuary is not required to demonstrate a causal relationship.</del></p> <p><del>In some cases, the actuary may lack clear evidence or face other practical impediments to demonstrate a consistent relationship between risk characteristics and a risk measure. In such circumstances, the actuary may use professional judgment to select risk characteristics.</del></p>	<p>A “rational explanation” and avoiding “obscure, irrelevant, or arbitrary” are quite subjective concepts. Actuaries should be relied upon for objective risk measures of anticipated risks and expected results. The terms used in the ED are not commonly used in actuarial practice.</p> <p>The current ASOP 12, section 3.2.1, is recommended to be retained, but edited to refer to “risk measure” rather than “expected outcome.” The justification for a risk classification framework is based on anticipated loss experience and that reference should be retained in the standard.</p> <p>An acceptable relationship between the risk measure and risk characteristic, based on plausibility, would be a more appropriate term than “rational.” Plausibility connotes common sense or basic evidence. Rationality may connote some level of proof.</p>

	<p>Whether it is appropriate to use a <b>risk characteristic</b> may depend on societal, regulatory, and industry practices or may depend on the scope and context of the actuary’s work.</p> <p><b>Recommended replacement wording:</b></p> <p><u>Relationship of Risk Characteristics and the Risk Measures</u>—The actuary should consider the extent to which the relationship between a <b>risk characteristic</b> and a <b>risk measure</b> is actuarially sound.</p> <p>The actuary should select <b>risk characteristics</b> that are reasonably related to the <b>risk measures</b>. The actuary should consider the extent to which correlation exists between the variation in actual or reasonably anticipated experience and the <b>risk characteristic</b>. The relationship between a <b>risk characteristic</b> and a <b>risk measure</b> may be indicated using relevant information from any reliable source, including statistical or other analysis of available data. The actuary may also use clinical experience and expert opinion. However, the actuary is not required to demonstrate a causal relationship.</p> <p>In some cases, the actuary may lack clear evidence or face other practical impediments to demonstrate a reliable relationship between <b>risk characteristics</b> and a <b>risk measure</b>. In such circumstances, the actuary may be able to use professional judgment to select <b>risk characteristics</b> which are plausible and explainable by the actuary.</p>	<p>Plausibility gives the actuary better guidance and flexibility but still relies on the professional judgment of the actuary.</p> <p>The recommended edit explicitly refers to the “intended purpose and intended use.”</p>
3.2.4	<p><b>Delete the following wording:</b></p> <p>“To the extent practical ....”</p>	<p>Practicality may limit the actuary’s ability to perform relevant aspects of the actuary’s services. However, practicality is a common limitation and is addressed in ASOP No. 1 or may be addressed in a common section in this and other standards.</p> <p>Edits are recommended for ED section 3.2.7 to clarify that practicality is not a scope limitation for the standard nor a limitation on the application of the standard. However, practicality is quite a common consideration for actuaries in many actuarial assignments. Practicality in ED section (3.2.7) should be in a separate section in section 3, rather than in a subsection.</p>

<p>3.2.5</p>	<p><b>Delete the following wording:</b></p> <p><u>Effect of Adverse Selection</u>—The actuary should assess the potential for <b>adverse selection</b> effects that may result or have resulted from the design, development, selection, modification, or continued use of the <b>risk classification framework</b>. The actuary should take into account that a lack of ongoing monitoring of the <b>risk classification framework</b> may increase the risk of <b>adverse selection</b>. When practical and appropriate within the scope of the actuary’s assignment, the actuary should consider estimating the potential impact of <b>adverse selection</b> or mitigating the impacts of material <b>adverse selection</b>.</p> <p><b>Recommended replacement wording:</b></p> <p><u>Effect of Adverse Selection</u>—The actuary should consider the potential for <b>adverse selection</b> to have a material adverse impact on the <b>actuarial soundness</b> of the <b>risk classification framework</b>. The actuary should also take into account that a deficiency in the monitoring of the <b>risk classification framework</b> may increase the risk of <b>adverse selection</b>.</p> <p>When the actuary considers there to be a potential material adverse impact, then the actuary should assess the adverse impact. Such an assessment may include estimating the potential impact of <b>adverse selection</b> or providing suggestions for mitigating the material adverse impacts of <b>adverse selection</b>. If the actuary is unable to make such an assessment, then the actuary should refer to section 4 for appropriate disclosures.</p>	<p>Recommended edits to the first sentence help the actuary focus on the main issue that adverse selection could potentially pose a material threat to the usefulness and appropriateness of the risk classification framework in achieving its intended purpose. The use of the verb, <i>consider</i>, is preferable to the verb, <i>assess</i>, because an assessment suggests that the actuary should express an opinion on the materiality of the potential adverse impact. An assessment may not be necessary in many situations.</p> <p>The wording of the standard should better address adverse selection as a potential material issue for the actuary in terms of actuarial soundness, i.e., the ability of the ability of the risk classification framework to satisfy its intended purpose. The recommended replacement wording for this section describes in general terms what the actuary should do regarding adverse selection.</p> <p>The ED wording, “When practical and appropriate within the scope ...” should be deleted. This wording is superfluous and unnecessary. Without those conditions, the actuary would not need to make a judgment as to whether “estimating” or “mitigating” would be “practical and appropriate.”</p> <p>Having the condition, “within the scope of the actuary’s assignment...” is also problematic. The actuary’s work is expected to be upon with respect to the intended purpose and use of risk classification framework. Consequently, the standard should not permit the scope of the actuary’s assignment to ignore adverse selection. The suggested edits allow for the situation where the actuary is unable to assess adverse selection and in such cases the actuary can make appropriate disclosures.</p>
<p>3.2.6</p>	<p><b>Delete the following wording:</b></p> <p><u>Objectivity</u>—The actuary should take into account the extent to which the <b>risk characteristics</b> can be objectively determined. A risk characteristic can be objectively determined if it is based on verifiable facts or if, in the actuary’s judgment, the potential for</p>	<p>Objectivity may be difficult to determine, and the actuary may need to use judgments to assess the extent of possible objective fairness for determining risk characteristics.</p> <p>ASOP No. 1 addresses materiality and addresses the use of “significant” and “significance” which can be important for assessing objectivity. As stated in ASOP</p>



	<p>manipulation is not significant. For example, “blindness” may not be an objectively determinable <b>risk characteristic</b>, whereas “vision corrected to no better than 20/100” is a <b>risk characteristic</b> more clearly based on verifiable facts.</p> <p><b>Recommended replacement wording:</b></p> <p><u>Objectivity</u>—The actuary should take into account the extent to which the <b>risk characteristics</b> can be objectively determined. The actuary may judge that a <b>risk characteristic</b> can be objectively determined based on verifiable facts or that potential for a material deficiency in actuarial soundness is not significant. For example, “blindness” may not be an objectively determinable <b>risk characteristic</b>, whereas “vision corrected to no better than 20/100” is a <b>risk characteristic</b> more clearly based on verifiable facts.</p>	<p>No. 1, “a result may be significant because of its consequence.” Materiality would be a better term to indicate the potential severity of the consequences.</p> <p>The recommended definition of “actuarial soundness” is provided by this commentator for section 2.8 and it connects objectivity to the intended purpose of the risk classification framework.</p>
<p>3.2.7 Move to higher level in section 3, such as 3.8</p>	<p><b>Delete the following wording:</b></p> <p><u>Practicality</u>—The cost, time, and effort associated with <b>risk classification</b> may increase as the complexity increases. The actuary should take into account the following:</p> <ol style="list-style-type: none"> <li>a. the balance among homogeneity within <b>risk classes</b>, heterogeneity between <b>risk classes</b>, and credibility individual <b>risk classes</b>; and</li> <li>b. simplicity, ease of use, ease of explanation, and market acceptance.</li> </ol> <p><b>Recommended replacement wording:</b></p> <p><u>Practicality</u>— The actuary may face practical issues and limitations which affect the actuarial services performed or the use of the actuary’s work within the scope of this standard. The actuary may take into account the following practical considerations:</p> <ol style="list-style-type: none"> <li>a. the cost, time and effort associated with the design, development, selection, modification,</li> </ol>	<p>Practicality should be covered more broadly than in the current ED wording for 3.2.7. It is recommended that the practicality section move to a higher level in the standard, possibly a new section 3.8, rather than being a subsection under 3.2. There are other sections and subsections in the ED where practicality is also an important consideration. Generally, it would be better to have one section on this topic, rather than repeated references to “practical considerations” in many sections of the standard. And it also avoids the issue that sections which do not mention practical considerations would be somehow treated differently than sections which do.</p> <p>Additional edits might be needed in some sections to clearly direct the reader to the section in the standard which addresses practicality.</p> <p>Practicality should be addressed in one section to avoid redundant wording and potential inconsistencies in the standard if there are repeated references to “when practical” or “to the extent practical” in some sections, but not in other sections.</p> <p>Credibility is an attribute of data, rather than of <b>risk classes</b>. So the revised wording is “credibility of the data.”</p> <p>There may be some <b>risk characteristics</b> that are useful, but getting the data may not be practical or there may be issues with data accuracy. So the revised wording</p>

	<p>testing, review, evaluation, opinion on, or use of the <b>risk classification framework</b>;</p> <p>b. the balance among homogeneity within risk classes, heterogeneity between <b>risk classes</b>, and credibility of the data for individual <b>risk classes</b>;</p> <p>c. the availability and accuracy of the needed data; and</p> <p>d. the simplicity, ease of use, ease of explanation, and market acceptance of the <b>risk characteristics</b> and the <b>risk classification framework</b>.</p> <p>As the complexity of the risk characteristics increases and the intended purpose of the risk classification framework broadens, implementation becomes more challenging and practicality considerations becomes more important. The actuary should consider practicality as it may have an impact on each section of this standard.</p>	<p>adds “the availability and accuracy of the needed data” to the list of practical considerations.</p>
3.2.8	<p><b>Delete the following wording:</b></p> <p><b>External Environment</b>—The actuary should take into account known or emerging external influences that have the potential for material adverse impacts on the effectiveness of the <b>risk classification framework</b> or on the viability of the <b>financial or personal security system</b>. Such external influences include applicable law and business, government, and industry practices.</p> <p><b>Recommended replacement wording:</b></p> <p><b>External Environment</b>—The actuary should take into account known or emerging external influences that have the potential for material adverse impacts on the <b>actuarial soundness</b> of the <b>risk classification framework</b>. Such external influences may include applicable law and business, government, and industry practices.</p>	<p>The recommended edits for this section are for consistency with edits to other sections, including the recommended edits for section 3.2.9.</p> <p>Effectiveness is replaced with actuarial soundness, consistent with other recommended changes in ED Sections 3.2.1, 3.2.6, 3.2.8, 3.2.9, and a new definition for actuarial soundness in section 2.</p> <p>Reference to the viability of the financial or personal security system is unnecessary since the intended purpose of the risk classification framework would normally incorporate consideration of protecting the viability of the financial or personal security system. For example, the intended purpose might include consideration of an insurer’s anticipated underwriting profit or loss, or of the long-term viability of a social insurance program from the use of the risk classification framework.</p>

<p>3.2.9</p>	<p><b>Delete the following wording:</b></p> <p>Effectiveness—The actuary should evaluate the effectiveness of the <b>risk classification framework</b> at supporting the viability of the <b>financial or personal security system</b>.</p> <p><b>Recommended replacement wording:</b></p> <p><u>Actuarial Soundness</u>—The actuary should evaluate the <b>actuarial soundness</b> of the <b>risk classification framework</b> in terms of the ability to satisfy its intended purpose.</p>	<p>This Section (Effectiveness) is only one sentence and is closely related to ED Section 3.2.1 Intended Purpose. Combining these 2 sections into one section would be much clearer for the reader. The recommended replacement wording for 3.2.1 is similar to Section 3.2.9 Effectiveness, which does not need to be its own section, and can be better understood when combined with Section 3.2.1 Intended Purpose.</p> <p>When an actuary is engaged for a particular purpose, actuarial soundness is an implied condition that the services will be reasonably “fit” for that purpose (the principal’s requirements, needs, or desires). The recommended solution is to add a definition for actuarial soundness and use this term to streamline the verbiage in several sections. “Actuarial soundness” recommended as more direct and easier wording to interpret than “effectiveness.” If “actuarial soundness” is undesirable for some reason, the following alternative wording is suggested, “the ability of a risk classification framework to satisfy its intended purpose.”</p> <p>The term “effectiveness” is unnecessarily vague and potentially vulnerable to interpretation which may be misinterpreted. The term “actuarial soundness” has been a common term used by actuaries for over 100 years. It is referenced in several laws and regulations. It is the subject of an Academy public policy paper issued in 2012. ASOP No. 1 also addresses actuarial soundness. And it is a key term in P&amp;C actuarial statement of principles on ratemaking issued by the CAS in 1988 and reinstated for reference for purposes of U.S.-regulated ratemaking in 2021. There are also various references to sound actuarial principles as the basis for actuarial soundness.</p> <p>For the purpose of actuarial services for a risk classification framework, there should be a definition or other reference to the application of actuarial soundness based on common “sound” actuarial principles, or other authoritative references that address the principles widely considered to be “sound” for the intended purpose and intended use of a risk classification framework.</p> <p>Reference to the viability of the financial or personal security system is unnecessary since the intended purpose of the risk classification framework would normally incorporate consideration of protecting the viability of the financial or personal security system. For example, the intended purpose might include consideration of an insurer’s anticipated underwriting profit or loss, or of the long-term viability of a social insurance program from the use of the risk classification framework.</p> <p>The term effectiveness is replaced with actuarial soundness which is recommended as a new defined term in section 2.</p>
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<p>3.3</p>	<p><b>Delete the following wording:</b></p> <p><u>Existing Risk Classification Frameworks</u>—When modifying, using, reviewing, evaluating, or opining or on any elements of an existing <b>risk classification framework</b>, the actuary should understand the frequency of past reviews and the extent of previous changes made to the <b>risk classification framework</b>. The actuary should take into account whether past, recent, or expected changes or lack of changes made to the <b>risk classification framework</b> have the potential to have a material adverse impact on the effectiveness of the <b>risk classification framework</b> or on the viability of the <b>financial or personal security system</b>.</p> <p>The actuary should take into account whether the <b>risk classification framework</b> will remain appropriate for its intended purpose and use. Such changes could include those affecting the <b>risk characteristics</b> or <b>risk measures</b> used for <b>risk classification framework</b>.</p> <p><b>Recommended replacement wording:</b></p> <p><u>Existing Risk Classification Frameworks</u>—When modifying, using, testing, reviewing, evaluating, opining or using an existing <b>risk classification framework</b>, the actuary should understand the frequency of past reviews and the extent of previous changes made to the <b>risk classification framework</b>. The actuary should take into account whether past, recent, or expected changes or lack of changes made to the <b>risk classification framework</b> have the potential to have a material adverse impact on the <b>actuarial soundness</b>.</p> <p>The actuary should take into account whether the <b>risk classification framework</b> will remain appropriate for its intended purpose and intended use. Such changes could include those affecting the <b>risk characteristics</b></p>	<p>The recommended edits for this section are for consistency with edits to other sections, including the recommended edits for section 3.2.9.</p> <p>ASOP 12 currently includes a separate section on testing the risk classification system. This part of the standard should be retained in some form. The recommended edits provide a short and simple way to accomplish keeping testing as an essential part of the standard.</p> <p>Effectiveness is replaced with actuarial soundness, consistent with other recommended changes in ED Sections 3.2.1, 3.2.6, 3.2.8, 3.2.9, and a new definition for actuarial soundness in section 2.</p> <p>Reference to the viability of the financial or personal security system is unnecessary since the intended purpose of the risk classification framework would normally incorporate consideration of protecting the viability of the financial or personal security system. For example, the intended purpose might include consideration of an insurer’s anticipated underwriting profit or loss, or of the long-term viability of a social insurance program from the use of the risk classification framework.</p>
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	<p>or <b>risk measures</b> used by the <b>risk classification framework</b>.</p> <p>The actuary should consider testing the <b>risk classification framework</b> which might involve alternative <b>risk classes</b> using different <b>risk characteristics</b> or <b>risk measures</b> than used for the <b>risk classification framework</b>.</p>	
3.4	<p><b>Delete the following section:</b></p> <p><u>Potential for Unintended Bias</u>—The actuary should consider the potential for <b>unintended bias</b> as appropriate within the scope of the actuary’s assignment.</p>	<p>“Bias” is a challenging term to define for actuarial practice. It has a colloquial meaning as well as technical definitions across multiple disciplines (e.g., statistics, data science, psychology, sociology, law). The standard should not address bias specifically until there are clear actuarial principles which address bias and which the actuary can rely upon in order to comply with the standard.</p> <p>This standard should not require the actuary to determine the intentions for the design or use of the risk classification framework.</p> <p>Some users may refer to bias in the context of risk classification based on “expected” outcomes, rather than actual outcomes. However, the use of the term “expected” should not be limited to a probability-weighted “expected value” or a statistical average or mean value, or to situations where there is a high probability of a narrow range of outcomes.</p> <p>Unfortunately, there are no common actuarial principles or generally accepted actuarial practices for detecting different types of bias or the underlying causes of such bias. Consequently, it seems inappropriate and onerous to require the actuary to try to determine if an unintentional bias exists.</p>
3.5	<p><b>Delete the following wording:</b></p> <p><u>Protected Classes</u>—The actuary must follow applicable law regarding <b>unintended bias</b> prohibited impacts or outcomes on <b>risk subjects in protected classes</b>. When doing so, the actuary should understand the following:</p> <ol style="list-style-type: none"> <li>a. how <b>protected classes</b> are defined and identified according to applicable law;</li> <li>b. how <b>risk classification bias</b> is treated under applicable law, if applicable; and</li> <li>c. methods for estimating the impact of the <b>risk classification framework on protected</b></li> </ol>	<p>The recommended edits clarify that the actuary should understand both the applicable laws and accepted practices with regard to protected attributes and classes, and the data and methods permitted for assessing the potential for prohibited impacts or outcomes.</p> <p>The phrase in first sentence in this section “must follow applicable law” is redundant with section 1.2 which states that “...the actuary should comply with applicable law.” Also, this wording is not an appropriate use of “must follow” given the requirements in sections 1.2 and 4.2 (a) and (c) regarding conflicts with applicable law and departures from the standard in order to comply with applicable law. These parts of many standards cover the actuary’s responsibilities with regard to applicable law and address how to handle the guidance in the standard if it conflicts with applicable law.</p>


	<p><b>classes</b> are addressed under applicable law, if applicable.</p> <p><b>Recommended changes to ED</b></p> <p><u>Potential Impacts on Risk Subjects with Protected Attributes</u>—The actuary should consider the potential for prohibited or restricted impacts or outcomes on <b>risk subjects</b> with <b>protected attributes</b>. The actuary should understand the applicable laws and the practices used to comply with the laws with regards to the following:</p> <ol style="list-style-type: none"> <li>a. how <b>protected attributes</b> are defined and identified; and</li> <li>b. the data and methods the actuary may use, select, and apply in order to assess the potential for prohibited or restricted impacts or outcomes on <b>risk subjects</b> with <b>protected attributes</b> due to use of the <b>risk classification framework</b>.</li> </ol>	<p>The application of protected attributes, or protected classes, is very specific to the law or regulatory authority that governs the definition and the purpose of the protection imposed by such authority. The ASOP should simply recognize protected attributes or classes as something that may be imposed on the design or use of a risk classification framework, or have an effect on what attributes are used and how they are used.</p> <p>Protected attributes should be defined for purposes of this standard. A suggested definition is submitted under section 2.</p> <p>The recommended edits are intended to provide guidance that is clear about the relationship of how such protected attributes are defined and treated under laws and regulations, and point to the actuary’s obligations to understand the requirements of such laws with respect to the actuary’s work.</p>
4.1 e-h	<p><b>Delete the following wording:</b></p> <p><u>Required Disclosures in an Actuarial Report</u>—When issuing an actuarial report, the actuary should refer to ASOP Nos. 23, 41, and 56. In addition, the actuary should disclose the following in such actuarial reports, if applicable:</p> <ol style="list-style-type: none"> <li>e. the impact of significant <b>adverse selection</b> on the effectiveness of the <b>risk classification framework</b> or on the viability of the <b>financial or personal security system</b> (see section 3.2.5);</li> <li>f. external influences that have a known material adverse impact on the effectiveness of the <b>risk classification framework</b> or on the viability of the <b>financial or personal security system</b> (see section 3.2.8);</li> </ol>	<p>Recommended edits for subsections 4.1 (e) through (h) are consistent with the recommended edits for sections 3.2.5, 3.2.8, 3.2.9, and 3.3, respectively.</p> <p>Subsection 4.1 (g) should refer to a new 3.2.1 if the corresponding recommended combination of 3.2.9 into 3.2.1 is accepted.</p> <p>Effectiveness is replaced with actuarial soundness, consistent with other recommended changes in ED Sections 3.2.1, 3.2.6, 3.2.8, 3.2.9, and a new definition for actuarial soundness in section 2.</p> <p>References to the viability of the financial or personal security system is unnecessary since the intended purpose of the risk classification framework would normally incorporate consideration of protecting the viability of the financial or personal security system. For example, the intended purpose might include consideration of an insurer’s anticipated underwriting profit or loss, or of the long-term viability of a social insurance program from the use of the risk classification framework.</p>

	<p>g. the effectiveness of the <b>risk classification framework</b> or on the viability of the <b>financial or personal security system</b> (see section 3.2.9);</p> <p>h. changes made to the <b>risk classification framework</b>, and the impact such changes could have on the effectiveness of the <b>risk classification framework</b> or on the viability of the <b>financial or personal security system</b> (see section 3.3); and</p> <p><b>Recommended replacement wording:</b></p> <p><u>Required Disclosures in an Actuarial Report</u>—When issuing an actuarial report, the actuary should refer to ASOP Nos. 23, 41, and 56. In addition, the actuary should disclose the following in such actuarial reports, if applicable:</p> <p>e. the impact of significant <b>adverse selection</b> on the <b>actuarial soundness</b> of the <b>risk classification framework</b> (see section 3.2.5);</p> <p>f. external influences that have a known material adverse impact on the <b>actuarial soundness</b> of the <b>risk classification framework</b> (see section 3.2.8);</p> <p>g. the <b>actuarial soundness</b> of the <b>risk classification framework</b> (see section 3.2.9);</p> <p>h. changes made to the <b>risk classification framework</b>, and the impact such changes could have on the <b>actuarial soundness</b> of the <b>risk classification framework</b> (see section 3.3); and</p>	
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**IV. General Recommendations (If Any):**

<b>Commentator Recommendation (Identify relevant sections when possible)</b>	<b>Commentator Rationale (Support for the recommendation)</b>
<p>Start over with a collaborative effort to better articulate common actuarial principles which complement the continuation of valid traditional applications of risk classification with the emerging and evolving principles from advances in data science to solving actuarial and insurance problems.</p> <p>Create a more open process for meeting the challenges these issues present for actuaries. It may be necessary to take some steps backwards in order to assess a path forward more clearly.</p>	<p>For many actuaries, regulators and insurance entities risk classification is no longer a straightforward process with clear boundaries. Consequently, the process of revising an actuarial standard of practice for risk classification has obviously become a major challenge for the profession.</p> <p>While many comments focus on leaving the ASOP largely as is, there clearly are regulatory considerations that continue to emerge and create additional challenges. I don't believe leaving the current standard unchanged will adequately serve the profession. However, there are existing conflicting views on how to revise a standard when advances in artificial intelligence are disrupting many facets of traditional insurance processes.</p> <p>There are also ethical and professional conventions which are challenged by advances in machine learning and algorithmic generators. Actuaries and other professionals who work with actuaries may have differing views about the future of risk classifications, or about whether risk classifications will have limited future value and will eventually be completely replaced by algorithmic solutions.</p>

**V. Signature:**

<b>Commentator Signature</b>	<b>Date</b>
 <p><b>Robert S. Miccolis, FCAS, MAAA, FCA</b></p>	<p><b>May 1, 2024</b></p>