

April 29, 2016

TO: Actuarial Standards Board (ASB)
FROM: Bob Miccolis, FCAS, MAAA, FCA
SUBJ: Proposed Actuarial Standard of Practice (ASOP), *Property/Casualty Ratemaking*
(Second Exposure Draft)

I am submitting this comment letter with a number of comments and suggested edits on the above captioned Exposure Draft. These comments and suggestions are being submitted on my own behalf and are my own views and are not necessarily reflective of the views of my employer, my position in the CAS or other organizations that I am associated with.

I am hereby signing this comment letter electronically with respect to satisfying the ASB's requirement that unsigned or anonymous comments will not be considered by the ASB nor posted to the website.



Robert S. Miccolis, FCAS, MAAA, FCA
April 30, 2016

COMMENTS on Background Section - As noted in this section, the CAS requested an encompassing actuarial standard of practice in the area of property/casualty rate development (ratemaking). The CAS Statement of Principles is sorely in need of revision or possible elimination as ratemaking practices, and the market where they are applied, have evolved substantially since 1988. I believe that the ASB has endeavored to create a standard of practice that is much too anchored in the past and avoids the current practices and environment in which actuaries need standards. In particular, the term “rate” has implicitly been used in the context of the base price of insurance with respect to standard types of coverage. The context of this second draft and the first draft of the ASOP has been an attempt to redefine the term “rate” to mean cost. The ASB should reconsider the scope of this ASOP and not limit the scope to the cost of risk transfer, but to also address the pricing of insurance for actuarial practice. The CAS Statement of Principles uses the term “rate” in the context of the price of insurance, or at least the base price from which a final price is determined based on underwriting considerations. This ASOP on P&C Ratemaking should not attempt to redefine the context of a rate for insurance as a cost rather than as a price.

Of the 4 “fundamental” CAS principles referenced in the Background section, #4 (in particular, “not unfairly discriminatory”) is missing from this draft ASOP. If #4 is “fundamental”, then shouldn’t it be added? Principle #4 may more accurately be considered as a reflection of public policy decisions which have been incorporated into state laws and/or regulations for a very long time. Wherever rates are required by law or regulation not to be **inadequate, excessive and unfairly discriminatory**, an actuarial principle is not really relevant, except as it might be interpreted as guidance for how the actuary can comply with the law. However, the actuarial standards of practice have long been established by the ASB as the preferred means to provide practice guidance to actuaries. Actuarial principles should only explain concepts and provide education about those concepts. There is no question that actuarial standards of practice should support the development of rates by actuaries which comply with applicable laws and regulations. However, there is a question as to when law and regulation have referred to actuarial principles, what is needed to transition such references to actuarial standards of practice instead of actuarial principles.

As a consequence of **redefining a “rate”** the ASB has failed to meet its objective to provide a **complete standard on ratemaking**.

COMMENT on references in second exposure draft to existing ASOPs - ASOP No. 1 should also be referenced in the list of ASOPs in Appendix 1 as well because that ASOP addresses actuarial soundness. Per ASOP No.1, the actuary should disclose the basis for the determination of actuarial soundness as it is used in their work product or opinion. In particular, actuarial soundness is relevant to Section 2.3 of the draft ASOP. However, the draft ASOP avoids use of the term actuarial soundness. In practice, this term is used in many ratemaking applications and therefore this fairly common term should be incorporated into the ASOP. If the actuary provides professional services regarding rates, then the public and the actuary’s principal is likely to presume that actuarial soundness underlies the actuary’s ratemaking services unless specifically disclosed otherwise. Consequently, ASOP No. 1 is quite relevant to this proposed standard and should be included in the list of referenced ASOPs.

COMMENTS on ASB's Responses to Letters from First Exposure Draft: The ASB's responses to the issues from the comments received from the first exposure draft (Appendix 2) includes many responses that simply state that the reviewers did not believe that the suggested change was appropriate or necessary, or that the drafted wording was sufficient. This kind of response is repeated several times on many comments submitted from one or more commentators. The ASB clearly has a due diligence obligation to the profession in drafting and approving standards. That obligation should include more substantive explanations about why the reviewers (and the ASB) were not persuaded to make changes suggested by the commenters or to provide a substantive explanation why the suggestions would not improve the draft standard. Many of the suggestions made were substantive and non-trivial. They certainly indicate a desire to have a high quality standard. Consequently, it would benefit the process greatly if the responses to the commentators were more meaningful in addressing the issues raised. Otherwise, the same comments are likely to be submitted to another exposure draft or at a public hearing. What process does the ASB use to ensure that their due diligence process gives fair consideration to such substantive comments? The ASB has long adopted a transparency and thorough due diligence process, but in this case there appear to be some weaknesses in the execution of that process.

In this particular draft standard, there was a lot of concern among the commentators about the scope of the standard versus the range of professional services provided by actuaries with respect to the overlap between ratemaking and pricing. The ASB approved the development of this standard with the stated scope, but there is confusion as to why the ASB has avoided developing a standard that can be used for both ratemaking and pricing. Also, there were comments submitted that indicate it is not clear how actuaries can separate their professional services between ratemaking and pricing. Consequently, guidance for actuaries who provide professional services to support insurance pricing, which are frequently subject to regulatory requirements, is really needed. This especially true where rates are regulated with the expectation that insurance prices are clearly based on the rates developed directly or indirectly by actuaries. For the actuary, how their ratemaking or pricing work will be used is clearly a professional responsibility. The ASB should expand the scope of the ASOP to provide such guidance and thereby help the profession to meet the expectations of the users of the actuary's professional services in both ratemaking and pricing.

Another concern is that the scope, as stated, is intended to include risk transfer and risk retention. However, the language in several sections of the draft standard only addresses risk transfer. This should be rectified and the guidance clarified to clearly apply both risk transfer and risk retention, where appropriate.

I submitted extensive comments and suggested edits to the First Exposure Draft of this ASOP. Many of my suggested edits were aimed at revising the ASOP to more specifically address P&C ratemaking in the context of regulatory rate filings. However, in this second draft of the ASOP the ASB has not accepted my overall suggestion that the ASOP is most needed for rate regulation. I still want to comment that the **ASOP should be more specific to be useful for ratemaking in the context of rate filings and complying with rate laws and regulation.** I have also attached my comment letter and suggested edits to the first draft because many of those previously submitted comments and edits are still relevant if the ASB would change the ASOP to specifically address actuarial practice for rate filings. My main overall comment is that **the drafted limitation to the**

estimation of costs does not really meet the needs of the actuary nor the regulator for rate filings. The price charged to the policyholder is a direct function of the filed rates for many types of P&C insurance, particularly personal lines. **Market goals, competition and legal restrictions are reflected in many rate filings and therefore should not be beyond the scope of this ASOP.**

COMMENTS on Changes Made to Second Exposure Draft - Below are my comments in response to the changes made to the second exposure draft:

1. *revising the scope of the ASOP to clarify the practice areas for which it is applicable and the actuarial activities to which it is applicable;*

COMMENT on Change #1: There is still confusion about rate vs. price. If a rate is simply defined as an estimate of risk transfer cost, then it does not make sense that a rate could be inadequate, excessive or unfairly discriminatory. How can the rate be a biased estimate of the cost under this definition? However, if the rate is synonymous with the price charged by the insurer for the transfer of risk from the insured, then the rate might be inadequate, excessive or unfairly discriminatory. A rate would be excessive (inadequate) if it were unreasonably higher (lower) than an unbiased estimate of the cost.

Also, when the actuary's professional services are for self-insurance and reinsurance the term "rate" can be confusing, particularly where there is not a conventional exposure base, e.g. rate on line. If the scope of the ASOP is to include estimating risk transfer or risk retention costs, then the term "rate" should be limited to those applications where there is a proportional relationship established between risk costs and a selected exposure base. The ASOP could still be appropriately applied by methodologies or techniques that reflect differences in exposure to loss, without referring to a rate and an exposure base. Rather, the ASOP would also apply to a situation where the actuary is estimating the risk transfer cost or the risk retention cost, without referring to a rate.

2. *revising the reference to estimating "expected value of all future costs" to refer to "estimating all future costs"; and*

COMMENT on Change #2: This is good but the explanation of why expected value should be changed to estimated future costs is lacking and a cause for confusion. This can be an issue with respect to what is considered to be "fair" and "actuarially sound." Also, the reference to "all" can be confusing since the scope of the ASOP is intended to include situations where the ASOP is only applied to certain elements or components of the rate.

3. *revising the guidance provided in this proposed ASOP regarding the estimating of future costs in total as well as by underlying levels that comprise the estimate of future cost.*

COMMENT on Change #3: The term "underlying levels" is too vague. There are some references in the draft ASOP to elements of the rate – "elements or components" might be a better term to use. It should be made clear that such elements or components are not necessarily

simple additions used to arrive at the rate.

COMMENTS on Key Issues Made in Redrafting Second Exposure Draft - Below are my comments in response to the key issues:

In redrafting the proposed standard, the reviewers focused on the following key issues:

1. *reaffirming that the proposed ASOP is limited to the estimation of future costs. While the actuary may play a key role in the company's decisions in determining the price after taking into account other considerations, such as marketing goals, competition, and legal restrictions, this standard does not address those other considerations;*

COMMENT on Key Issue #1: This limitation to “future costs” is not completely accurate. In particular, retrospective rating includes estimation of future costs for some components, but the premium is adjusted to reflect the actual (not future) costs of certain elements (losses). More importantly, the difference between the price and the cost is not a distinction that is meaningful in practice. Unfortunately, this artificial difference makes the draft ASOP seem like it is side-stepping the key factor (price vs. rate). The scope of the ASOP should address the actuarial role in how prices are determined. Where rates are filed for insurance are approved as the only basis for the premiums charges, then such rates are indeed the prices. Where the rates can be adjusted, the adjusted rates are really the prices and they still need to meet the requirements of the laws and regulations. The laws and regulations do not apply to the cost of risk transfer, they apply to the price.

2. *clarifying that the proposed ASOP applies broadly to all activities related to the estimation of future costs associated with the transfer of risk in insurance or other risk- transfer mechanism;*

COMMENT on Key Issue #2: The broad application of the proposed ASOP with respect to estimation of future costs falls short on providing needed guidance to the actuary who wants to specifically apply this ASOP to rate filings. Another ASOP does apply to rate filing on the health side. So why can't this ASOP be written apply to rate filings in P&C? If this ASOP does not considered rate filings specifically, then there will be confusion with respect to how this ASOP relates to rate filings.

3. *clarifying that the proposed ASOP would apply to actuaries when performing professional services that may relate to the total rate as well as to a subset of the elements of the rate; and*

COMMENT on Key Issue #3: The reference that the ASOP can apply to a “subset of the elements” is too vague. There are some references in the draft ASOP to elements of the rate – Why not refer to the elements or components rather than “subsets”? It should be made clear that such elements or components may or may not be additive in arriving at the rate.

4. *confirming that this proposed ASOP provides guidance for the estimation of future costs for insurance, reinsurance, self-insurance, risk-funding or retention mechanisms, loss portfolio transfers, or any other risk-transfer mechanism, and not just for instances where there is a regulatory requirement to file rates determined by the ratemaking activity.*

COMMENT on Key Issue #4: The scope of the ASOP is intended to include reinsurance, self-insurance, risk-funding or risk retention mechanisms, or other risk transfer mechanisms. Consequently, the reference to “rates” can be awkward and confusing for many applications. The actuarial role in this wide scope of the ASOP can range from estimating future losses to providing pricing, or pricing advice, or for risk funding or other types of transactions. The wording of the draft ASOP is not consistent with the scope of the ASOP beyond traditional insurance rates. This draft ASOP really needs heavy editing so that its use is clear and relevant for the full scope as intended.

Comments on Questions as Requested by ASB:

Below are my comments/responses to the ASB’s questions requested on the second exposure draft:

1. *Are there any conflicts between the proposed ASOP and existing practice?*

COMMENTS on Question #1: Yes, there could be **conflicts where future risk transfer costs are analyzed where an exposure base is not used or is not relevant.** For example, some cost elements may not be proportional to an exposure measure, e.g., a portion of the expense may be either flat per policy or determined on some other base. Also, the cost of capital “expense” may vary based on the nature of the risks being transferred, rather than on some exposure base. For example, the capital amount used for the cost of capital can be a function of the coverage limits for a policy and/or the total limits aggregated for all policies exposed to certain hazards, such as hurricanes or earthquakes. The ASOP should be written so that it can be applied even where an exposure base is not relevant. This may require restructuring the ASOP to address applications where there is not a rate per exposure unit, but rather an estimate of total risk transfer (or risk retention) costs for the total exposure being transferred (or retained).

The biggest conflicts with existing practice are where **actuary provides professional services which are not easily separated between ratemaking and pricing.** Where ratemaking is generally accepted, particularly under rating laws and regulation, as setting the price charged to insureds, then the draft ASOP really needs to be changed to acknowledge how the rate relates to the price. Otherwise, the profession is open to criticism as creating a standard that side-steps the needs of the practitioner and the public. However, where ratemaking is generally accepted as a process for “costing” – determining the underlying costs – whether via estimating expected value (unbiased or actuarial central estimate) or the risk adjusted value (reflecting variability, risk and uncertainty) – then the ASOP should be written to define those specific actuarial services as estimating future risk transfer (or risk retention) costs.

The current draft ASOP is written in a way that avoids guidance when the intended purpose of the ratemaking services is pricing versus costing. **The ASOP should either (1) address the different intended purposes of ratemaking actuarial services, including pricing and costing, or (2) limit the scope of the ASOP to rate filings (similar to the ASOP on Health Rate Filings).**

2. *This standard is proposed to be effective for work “performed on or after” four months following the adoption of the standard. Does this language appear to create any undue burden?*

COMMENT on Question #2: No. If some work is performed before the effective date, and the work performed after the effective date relies on such prior work, then there could be some confusion about how the standard is to be applied. It should be made clear that any work performed on or after the effective date should include any reliance on work previously performed unless there is explicit disclosure of reliance on any substantive work performed before the effective date that would not meet the provisions of this ASOP.

3. *Is it clear that this ASOP does not provide any guidance on the use of what is generally referred to as “price optimization,” which relates to the company’s decisions in determining price?*

COMMENTS on Question #3: Yes, it is clear that the ASOP does not provide guidance about price optimization. However, the important question is why doesn’t it? The draft ASOP contains entirely too much side-stepping of the issues surrounding actuarial services which support the company’s decision in determining prices for risk transfer. **The issues that are presented by price optimization are clearly about the explicit or implicit rate classifications being used – either in class rates or in the application of rates and other factors in arriving at insurance prices.** It appears that current ASOPs do not require that a classification system (for insurance premium rates, i.e., pricing) be “not unfairly discriminatory” (notwithstanding the CAS Statement on Principles of Ratemaking and questions concerning unfair discrimination). However, in some cases it is generally accepted that laws or regulations or good public policy are intended to address fairness in insurance pricing, at least where insurance coverage is mandated or otherwise unavoidable, such as to obtain a home mortgage. Why shouldn’t such a requirement (i.e., not unfairly discriminatory) be incorporated into actuarial standards, at least where it is required or expected? **At a minimum, the ASOP should make it clear that the actuary should disclose compliance with such requirements, where applicable, and disclose the basis for assessing that the rates are “not unfairly discriminatory”.**

4. *The task force eliminated the reference to “expected” value of all future costs to eliminate the possible confusion that the only appropriate estimate of all future costs was a mean value without any consideration of potential variability. Is this change appropriate? Does this change lead to confusion about what is being estimated?*

COMMENT on Question #4: Yes, eliminating the reference to expected value is appropriate. Yes, it will possibly lead to confusion where the intended measure is

something other than expected value. The draft ASOP side-steps the issue of what basis the actuary is using to estimate future risk transfer (or risk retention) costs. **Adding a disclosure requirement for the actuary’s intended measure to the draft ASOP would be much more appropriate, and should be added, given the concerns expressed about not using “expected value” as used in the CAS actuarial principles** (understanding that those principles can be changed). Without such a disclosure, there will undoubtedly be confusion about the actuary’s estimates.

5. *Is it clear within the definition of ratemaking, section 2.8, that the ASOP provides guidance regarding the estimation of future costs at more refined levels than the aggregate?*

COMMENT on Question #5: No, the definition of ratemaking is not clear. The reference to **“refined levels”** is too vague. The ASOP makes reference to **“elements”** (“elements or components” might be a better alternative) and such elements (or components) should be clearly described as such. **It would be better to re-orient the ASOP towards the estimation of future risk transfer costs as the foundation for ratemaking AND pricing.** For risk retention costs, there is no need for pricing given the intended use of the risk retention cost estimates.

6. *Is it clear that this ASOP applies to elements of the rate, such as loss costs developed by advisory organizations such as ISO, NCCI, and AAIS?*

COMMENT on Question #6: Yes, it is clear that the ASOP applies to elements of the rate. However, I recommend that the committee contact these organizations, others like them and companies that use such organizations to ensure that there is a general consensus about their specific applications. Informal interviews with key individuals at these organizations may be helpful.

Comments on Specific Sections of the Draft ASOP:

Below are my comments on the specific sections of the second exposure draft:

COMMENTS on Section 1.2 (Scope): The reference in Section 1.2 in the second sentence to **“subset of the elements”** is too vague. There are some references in the draft ASOP to elements of the rate – the elements or components should be used. It should be made clear that such elements or components (or subsets) are not necessarily simple elements simple that can be added to arrive at the rate.

The language in Section 1.2 mentions **“the actuary’s role.”** However, this is a standard on actuarial practice, not on the actuary’s role. The language should be changed to **“the actuary’s professional services.”**

Suggested change to ASOP language – “If the actuary’s role relates to **certain specific elements, but not all elements**, of the rate, the guidance in this standard applies only to the professional services related to **those elements**.”

The scope sentence in Section 1.2 specifies “**evaluation**” of future costs. However, another paragraph limits the standard to the “**estimation**” of future costs. The scope also covers “**reviewing**” rates – synonymous with evaluating. The sentence later in this section should be changed with regard to limiting the standard to the estimation of future costs.

The sentence in Section 1.2 that begins “**Such professional services may consist of ...**” Should be moved to be the second sentence of Section 1.2, since it references the services noted in the first sentence.

A sentence in Section 1.2 reads “**This standard is limited to the estimation of future costs.**” This wording appears to contradict the other scope sentences that explicitly include reviewing and evaluation.

The reference in Section 1.2 to the actuary’s role may be seen as avoiding the actuary’s responsibilities when the actuary’s professional services include advising or determining the price charged. When the actuary’s professional services for ratemaking are performed where it is generally accepted (or required or expected) that rates are effectively setting the price charged to insureds, or setting the base for such prices (e.g., base rates), then the ASOP should include those considerations which would impact both the future costs and the prices charged. For example, risk, uncertainty and variability are likely to be considerations for ratemaking in a lot of cases outside of standard personal lines. However, where ratemaking services are performed in situations where such services are generally accepted for only estimating costs, then **the scope of the ASOP should not be limited, rather the ASOP should allow the actuary to limit the scope of services to estimating costs where such services do not include pricing.**

However, **where the intended purpose or use of the actuarial services is for the pricing of insurance, such as for rate filings**, then the actuary should be required to **explain how the estimated future risk transfer costs were reflected in the rates to be used for the pricing of insurance policies.**

COMMENT on Section 2.1 (Coverage): The term “**claim payment**” in Section 2.1 is too restrictive - change to “**payments for benefits, expenses or claims...**” Any benefits being provided (under a plan or contract), or the expenses associated with providing such benefits, would create an obligation. For example, loss prevention services, safety inspection costs, legal defense and investigation expenses involve direct or indirect payments for services within the coverage provided. The “coverage” is not only to provide for claim payments, but also other benefits that involve both contingent and non-contingent obligations.

COMMENTS on Section 2.2 (Experience Rating): The proper reference in Section 2.2 should be “**prospective**” **experience rating**. There can also be “group” experience rating which is applied to a group of individuals, so the reference to “individual” should be “such as”.

As written “actual experience” could be the experience for the period of coverage being rated – which would be retrospective rather than prospective. To avoid confusion, this definition should refer to a **prospective rate** that is based on **past experience** of an individual or a specified group of risks.

The term “**average experience**” is not really accurate – “**expected experience**” would be more accurate (better/worse than expected as opposed to better/worse than average) – because the **past experience** is subject to variations that might not have been “expected” in advance (e.g., unusual events). **When using past experience to project future experience, the actuary should consider what was expected in the past, not just what actually happened (on average).**

COMMENT on Section 2.3 (Exposure Base): Even though exposures are typically used as a unit of measure, it is not always applicable or relevant. The use of an exposure base as defined in Section 2.3 assumes proportionality of costs to the exposure base. This may be true for some elements of the rate, but not for others – e.g., policy expenses, expense of inspecting property at one location versus many locations, cost of capital or profit loadings that reflect risk/uncertainty based on considerations other than exposure units, such as data limitations or low frequency / high severity risk characteristics.

Somewhere in the ASOP it is important to **explain that the exposure base is considered to be useful in some cases (or for some elements), but not necessarily in all cases (or for all elements).**

For some types of insurance, the exposure base might be considered to be the number of months (days) of coverage. This is really an exposure unit of the time exposed (for coverage of events that might occur during that time period) and presumes that every unit of time is equally “exposed” to creating the costs. While the definition is consistent with this example, it seems that the intent of such an exposure base is something different than a measure of time.

COMMENT on Section 2.4 (Method): In Section 2.4 the use of the term “**systematic**” with respect to a **procedure** appears to indicate a requirement without any explanation of what that requirement might be. The definition is fine without this term. Reference to “systematic” should be eliminated or replaced with something like “A **defined** procedure...”

COMMENTS on Section 2.6 (Premium): What is missing in Section 2.6 is the connection between rate and premium. **Where the “rate” is implicitly the premium rate, then the premium charged results from the rate multiplied by the exposure units.** However, in some cases the premium rating units may merely be a convenient measure for computing premiums and may not meet all of the characteristics of an accurate measure of exposure. There also are cases where a base premium is determined by multiplying rates by exposure units, but then other rating or pricing factors are applied. The base premiums is a direct function of the rates and is part of the pricing process.

Where the ASOP is being applied to risk retention or self-insurance costs, there is no premium,

per se. Therefore, it appears that the use of the term premium would not apply to risk retention or self-insurance cost estimates. This should be made explicit in the ASOP.

This definition of premium could be confusing with regard to how the price charged (premium) is reflected in the data being analyzed and how premium and loss experience is being used to estimate the future risk transfer or risk retention costs.

COMMENTS on Section 2.7 (Rate): The reference to “**all**” future costs in Section 2.7 is a problem – the ASOP is intended to apply to elements that are not “all” costs. The term “rate” should be defined so that it can be applied either to “all” elements or to any single or combination of elements or components of future costs.

The definition of rate is also of concern given the comments mentioned above for section 1.2 Scope. The common use of the term rate is taken as the price, or the core basis for the price, recognizing that there can be adjustments to the rate to get a final price. The context of setting a rate based on the projected costs certainly makes sense, but the main issue is that the rate should be defined as based on the cost, but not merely as the cost.

COMMENT on Section 2.8 (Ratemaking): The 1st sentence in the definition 2.8 of ratemaking should add “**or other self-insurance, risk funding or risk retention mechanisms.**” The reference to “**underlying levels**” should be changed to “**elements or components.**”

COMMENTS on Section 2.9 (Retrospective Rating): The proper terminology for section 2.9 is “**retrospective experience rating.**” The reference to “insured” only appears in this definition within the draft ASOP. This term should be changed to be consistent with other terms used in the ASOP (i.e., individual or entity), or be separately defined. The application of retro rating to groups is also possible. Retro rating is used frequently in reinsurance transactions, for example in terms of a loss sensitive feature.

Experienced based dividend plans can be quite similar to retro rating plans but they typically do not impact the premiums. However, such dividends can be a cost element that is included in ratemaking. Such dividends are not mentioned in the ASOP. This is partially addressed in response to the comments from the first exposure draft, as part of the expenses. However, just as the actuary is involved in the design of the structure and parameters for a retro plan, the same involvement could apply to an actuary in the design of a dividend plan which is retrospective based on actual experience for an individual entity or a defined group of entities. **Such dividend plans are part of the ratemaking function and should be somehow addressed in the standard.**

Also, this ASOP is intended to apply to reinsurance and other forms of risk transfer. **However, for reinsurance the typical references used in practice include “adjustable features” or “adjustable premiums” which are retrospective adjustments.** These retrospective adjustable

features can apply to premiums, losses (e.g., loss corridors) or commissions (e.g., sliding scale or profit sharing). **These features are an integral part of the estimating of risk transfer costs, and should be addressed in this ASOP.**

COMMENTS on Section 2.10 (Schedule Rating): Schedule rating as defined in Section 2.10 is typically NOT an actuarially determined rate adjustment. Rather, the schedule rating adjustment is normally a function of underwriting judgments applied to individual risks. This factual information should be added to the definition so as not to imply that schedule rating plans are based on techniques developed using actuarial methods, models or assumptions.

In Section 3. (Analysis of Issues and Recommended Practices) there is a lack any guidance as to what the actuary should do (or consider) when schedule rating plans are being used. It would seem logical and appropriate that the actuary should consider the impact that such rating plans can have on the premium charged. **In particular, the actuary should consider whether the schedule rating adjustments are double counting the impact of other rating adjustments, such as experience rating.** The actuary should consider adjusting the actuarial analysis to correct for any significant impact from overcompensation in the premiums due to the use of multiple rating plans.

COMMENT on Section 3.1 (Introduction): The reference in Section 3.1 to “Such elements **should** include, but are not limited to...” is too prescriptive. The language should state “Such elements **may** include, but are not limited to...”

The actuary should disclose “the costs ... that make up the rate.” As it is currently written, the actuary is only required to “**identify and consider**” loss and loss adjustment expenses, operational and administrative expenses, and the cost of capital. Rather, the actuary should disclose the elements considered for the rate and the intended purpose for the rate developed by the actuary.

COMMENTS on Section 3.2 (Organization of Data): Section 3.1 introduces “**elements**” that make up the rate. The use of that terminology should be used consistently rather than using a different word, “**portion**”, in Section 3.2 that essentially is meant to convey that same meaning. Alternatively, somewhere a clarification could be added that use of the following words in the ASOP are intended to be synonymous - elements, portion and components

The reference to “**several acceptable**” methods can be misleading because the wording does not specify what the actuary should do – which is inconsistent with the other paragraphs. The language should be changed to “**The actuary should consider which aggregation method is appropriate. Examples of such aggregation methods may include, but are not limited to ...**”

The last sentence of the paragraph refers to “**For each element, ...**” Each element of what? This reference is too vague and might be interpreted to apply to the rate, the ratemaking analysis, or each cost element for which some level of aggregation of data is selected,

One sentence in Section 3.2 uses the term “**level of granularity of data**” but should be changed to “**level of aggregation**” which is more direct and clear within the context of the sentence. Similarly, “**more refined data**” is used when “**a different level of aggregation**” would be more direct and clear. The reference to “**underlying levels**” is too vague and the term “**elements**” should be substituted in this sentence. The ASOP makes reference to “elements” elsewhere and would be more consistent than the current draft wording.

The last paragraph of Section 3.2 refers to an “**overall rate**”. This term is not typically used in ratemaking. Rather the terms “**overall rate level**” or “**overall rate change**” might be referenced. The reference to the overall rate is not clear and may cause confusion.

COMMENTS on Section 3.4 (Methods, Models and Assumptions): The reference to “**methods and models**” in Section 3.4 should be changed to “**methods or models**” to prevent confusion that the actuary needs to select both methods and models for estimating the rate. The word “or” in this context is inclusive of “and” but does not suggest that both methods and models are necessary. Similarly, “**methods, models, and assumptions**” should be changed to “**methods, models, or assumptions.**”

The reference in Section 3.4 to “**no known significant bias to underestimation or overestimation**” should be better aligned with the typical requirements of rate laws or regulations. The language should be more clearly worded, “**The actuary should use methods, models, or assumptions that, in the actuary’s professional judgment, produce rates that are not excessive or inadequate.**”

The reference in Section 3.4 to “**not internally inconsistent**” is rather obtuse and could be confusing in practice for the actuary. Such guidance is lacking with respect to defined criteria to apply some test(s) to meet this vague requirement of being internal consistent (or not being internally inconsistent). This language appears to be an attempt to reword the typical statutory language, “**not unfairly discriminatory,**” but it is a poor substitute and it could likely be a source for further confusion. Since the typical statutory language applies in many situations, the ASOP should specifically refer to that statutory language and then provide guidance on the considerations that are relevant to an actuary providing professional services in ratemaking.

In addition, there is **no reference in Section 3.4 or any other section with respect to actuarial soundness** being a criteria for estimating the risk transfer or risk retention costs. This descriptive characteristic is commonly used in ratemaking and this ASOP should address the application of the concept of actuarial soundness as it would apply to ratemaking (and pricing). ASOP No. 1 addresses actuarial soundness as that term might be used by an actuary in providing professional services. This guidance should at least refer to ASOP No. 1.

COMMENTS on Section 3.5 (Exposure Base): The reference in Section 3.5 to a “**strong relationship**” is very general, but the application of rates to exposure units would seem to require the relationship to be proportional between estimated costs and the exposure base. However, some concerns were expressed by the commentators and reviewers about a strict reference to being proportional. Therefore, this wording should be changed from “**bears a strong relationship to**” to “**is a reasonable basis as a scaling factor for risk transfer costs.**” See similar comments

submitted for Section 2.3.

Also, the wording **“for the ratemaking exercise”** in Section 3.5 could be misunderstood as being some sort of optional process. The language should be changed to **“when performing professional ratemaking services”**.

COMMENTS on Section 3.7.1 (Use of Historical Exposure and Premium Data): The last sentence in Section 3.7.1 is worded **“adjustment is often dictated by the nature of the data”** which could be misinterpreted as to why a method is being dictated by the data. That sentence should be changed to avoid a passive statement and to address what the actuary should do - **“The actuary should select an appropriate approach for adjustments that considers the nature of the available data.”**

There is no context of this reference to “premium” data and why such data would be relevant to ratemaking. If premium is the total of the premium charged, i.e., prices, then there is a major disconnect between insurance prices and the costs of risk transfer or risk retention. If the ASOP is limited to costs, then historical premiums should be irrelevant. The scope of the ASOP should be changed to recognize the reality that ratemaking is not solely about estimating costs.

COMMENTS on Section 3.7.2 (Use of Historical Loss and Loss Adjustment Expenses): The reference in Section 3.7.2 to **methods** or **models** is too narrow and may prove to be restrictive. The wording should be changed to **“assumptions, methods or models”** which reflects the broader concept. For example, using trend assumptions to adjust historical data is typically considered an assumption, rather than a method or a model. Section 3.4 appropriately includes **“methods, models, and assumptions”** in the wording that should also be used in this section.

Section 3.7.2 also includes the wording **“reflect the potential for future development of loss”** which could be misinterpreted as to how the potential for development is to be evaluated. The wording should be changed to **“reflect the estimated ultimate value of the loss”**.

The other reference in Section 3.7.2 to **methods** or **models** is too narrow and may prove to be restrictive. The wording should be changed to include **“assumptions, methods or models”** which is more inclusive. For example, using different trend assumptions to adjust historical data for different coverages should be considered to be trend assumptions, rather than different methods or models.

COMMENT on Section 3.9 (Ratemaking for New Coverages or Exposures): The wording in Section 3.9 (a) and (b) with respect to **“data”** fails to recognize the quite common situations where **data on phenomenon or events** is likely to be scarce and where models and assumptions are used in lieu of data in such situations. This wording should be expanded to include **“data, models and assumptions”** in both (a) and (b).

COMMENT on Section 3.14 (Reinsurance Provisions): The reference in Section 3.14 to

methods or **models** is too narrow and may prove to be restrictive. The wording should be changed to “**assumptions, methods or models**” which reflects the broader concept. Section 3.4 appropriately includes “**methods, models, and assumptions**” in the wording that should also be used in Section 3.14.