Modeling Fourth Exposure Draft Actuarial Standards Board 1850 M Street, NW, Suite 300 Washington DC 20036

Subject: Fourth Exposure Draft Proposed Actuarial Standards of Practice

Dear Actuarial Standard Board:

Thank you for the work of the ASB and the ASB's Modeling Task Force on the Proposed Modeling ASOP.

The proposed definition of "Model" and proposed language in Section 1.2 is unclear. It is very difficult to evaluate the remainder of the proposed standard because of the lack of clarity.

My comments are as follows:

 Proposed Section 1.2 states "For example, actuarial services performed in relation to pension plan contribution and cost projection models... may require application of the guidance in this ASOP." This is confusing for three reasons.

First, it does not provide guidance on what pension plan contribution calculations are models. This statement does not seem to contemplate the variety of required pension plan contribution calculation for private employer plans under IRC 430 and IRC 404. It would be helpful if language was developed either in the definition of model or in Section 1.2 that clarify when these calculations are models. Additionally, Proposed Section 1.2 does not seem to contemplate the variety of ways that actuaries develop recommended or customary contributions for private employer plans. If an actuary develops a recommends contribution by comparing the present value of accrued benefits ('PVAB') to the plan's assets, it seems that this would not be a model because the PVAB can be viewed as a sum of individual benefit calculations. However, other methods of developing a recommended or customary contributions would clearly involve modeling.

Second, Proposed Section 1.2 says "may". The following sentence references materiality, but it is not clear if materiality is the only reason that a pension actuary may not be required to apply the standard. Are there other reasons that an actuary may not be required to apply this ASOP to pension plan contributions?

Third, it continues to be unclear if it the calculation of the target liability, the contribution amounts or both that the ASB intends to be a model.

- It is still not clear to me if the ASB intends for private employer IRC 404 and 430 pension plan contribution calculations to be a model. Specific reasons that these calculations may not be a model:
 - Depending on the employer's funding policy, these calculation may literally provide no useful business information. Is it the ASB's intention that whether IRC 404 and 430 calculations are a model depends on the employer's funding policy? Could two actuaries perform the exact same calculations, but whether or not the services is a model depend on the intended use for the work product? It seems that how the employer uses the numbers would more appropriately be considered in the materiality than in the definition of a model.
 - The last sentence of the definition of model states "Models are used to help explain a system, to study the effects of different parts of a system, to predict the behavior of a system, or to derive estimates and guide decisions." IRC 404 and 430 calculations are not necessarily used for any of these purposes. The calculations are done to satisfy legislative and regulatory requirements, but many private employers have well-developed funding policies that do not use these calculations in any material way

Additionally, it is not clear if the last sentence of the definition is intended to be an integral part of the definition or merely explanatory.

- The statement that a model provides useful business information is confusing in the context of models that only provide output which is input for other models or which only produce information for expert testimony in a domestics relations context.
- Definitions of "events" and "entities" would add clarity.
- The incorporation of either the concept of a "measure" or "simplified model" would be helpful.
- The definition of "assumption" does not seem to contemplate assumptions that may be chosen for risk assessments.
- A definition of the "processing component" would be helpful. If different actuaries using
 professional judgment could produce materially different results using the same input, it seems
 that a processing component and model exist. If there is only one reasonable result when the
 same input is used, it would appear that there is a "measure" and neither "processing
 component" nor a "model". This would be consistent with the scope excluding benefit
 calculations in Section 1.2,

I suggest that the Modeling Task Force proactively solicit the feedback of pension actuaries who work on *private employer pension plans* including micro- and small plans.

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My practice area is pension and the focus of my practice is on micro to small private-employer pension plans. My comments are my individual comments and do not represent any organization.

Sincerely,

karen N. Smith May 15, 2019

Karen Smith



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