Date: April 25, 2019

To: Actuarial Standards Board

From: Anthony T. Salis, FCAS, MAAA, CSPA

Subject: ASB Comments on the Fourth Exposure Draft on Modeling

First, I thank the committee for their work and efforts in putting this document together and presenting it for comments. I appreciate the work that has been put into this ASOP, especially through its many revisions. This fourth draft has incorporated many good changes from the third draft and I appreciate the flexibility this draft provides to cover considerations for a very broad range of model types and uses. Overall, I believe that this draft is polished and very close to being ready for adoption. I do, however, have a few comments on some changes for the committee to consider.

- **2.3 Governance and Controls:** I do not feel that "so that intended users can place their confidence in the output of the model" provides adequate clarification to what governance and controls are or what they do. For example, the model validation described in section 3.5.2 could fall under this definition of being able to place confidence in the output of the model. I see that examples are given in Appendix 1, but since these are not part of the standard of practice, I think that a more descriptive definition within the standard would be more appropriate. I suggest changing this definition to read, "The application of a set of procedures and an organizational structure designed so that intended users can have confidence that the model output is reliably calculated and utilized as intended."
- **2.6 Intended User**: I agree with James Galasso's suggestion to change "actuarial findings" to "model output".
- **2.11 Overfitting**: When applying a model to data different than the data used to build the model, there is usually an expectation that there will be some decrease in the prediction accuracy. It is the actuary's job to determine whether that decrease is large enough to cause concern. I would suggest changing this to say, "that prediction accuracy materially decreases," to allow for that judgment to be made.
- **3.1.6(b) Margins**: I do believe that definition for "margins" is needed. However, I understand that this has come up before and the committee does not want to include a definition. However, I do think it would be clearer to use the term "risk margins" as that points back to its usage in the Current Practices section of ASOP 30. That is the only reason for using margins provided in the Current Practices section of this exposure draft as well.
- **3.6 Documentation**: The wording in this section is weaker compared to other ASOPs. I suggest changing "should consider" to "should" in this section. An actuary should be appropriately documenting actuarial work products. I believe the wording in this section gives the actuary adequate flexibility for the degree of documentation.