



December 30, 2013

Actuarial Standards Board
1850 M Street, NW
Suite 300
Washington, DC 20036

Re: Revisions to ASOP 38 Catastrophe Modeling

The Life Practice Council of the American Academy of Actuaries¹ is pleased to provide comments on the Exposure Draft of Actuarial Standard of Practice No. 38 (ASOP 38).

We appreciate the work done by the Actuarial Standards Board to expand ASOP 38 to apply to all practice areas. You have requested comment on the following specific issues:

1) *The definition in section 2.2 includes natural perils such as hurricanes, earthquakes, and tornados as well as other perils such as terrorist acts and pandemics. Is the inclusion of these other perils sufficiently clear and appropriate?*

Yes, subject to the changes suggested in the response to question #2 below.

2) *The proposed revision applies only to the selection or use of models that are built specifically to address catastrophes. It does not apply to models that have, as part of their output, extreme events such as hyper-inflation or a stock market collapse. Is the scope of the ASOP and definition of catastrophe model sufficiently clear?*

No. For the life practice area, where catastrophe risk is not usually a consideration in the actuary's work, the scope of the ASOP and the definition of catastrophe model is not sufficiently clear. It is our understanding that ASOP 38 is intended to apply only to catastrophes associated with *insurance* risk, and not any type of extreme events related to *operational* or *economic* risk. For the life practice area, insurance risk would mean mortality and morbidity risk, and we think it would be clearer if the ASOP indicated this limitation directly. Catastrophic increases in mortality and/or morbidity risk would be unlikely to be reflected in life pricing, but catastrophic risk in mortality and/or morbidity risk might be considered at the Enterprise Risk Management (ERM) level when determining a company's capital needs. Such increases in mortality/morbidity due to situations such as a terrorist act or a pandemic might require the use of special models.

¹ The American Academy of Actuaries is a 17,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. The Academy assists public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

We suggest the first sentence of the second paragraph of the Scope Section 1.2 might be rewritten as follows:

This standard only applies to models of insurance risk (e.g., a pandemic's effect on morbidity risk, an act of terrorism's effect on mortality risk, or damage from a severe flood) and does not apply to models of operational or economic risks (e.g., investment risk) that deal with instances of extreme events (~~such as~~ e.g., hyper-inflation or a stock market collapse).

We also suggest that the definition of Catastrophe Model in Section 2.2 be changed as follows:

Catastrophe Model—A representation of relationships among insured events based on statistical, financial, economic, or mathematical concepts and equations used to explain a system, to study the effects of different components, and to derive estimates based upon the future occurrences of large-scale, low-frequency, high-severity insured events such as hurricanes, earthquakes, tornados, terrorist acts, and pandemics.

- 3) *The proposed ASOP does not apply when the actuary is only designing, building, modifying, or developing a catastrophe model (or a portion of a catastrophe model). Is this sufficiently clear and appropriate?*

No. We do not understand the need to use the word “only” in this sentence. Would the sentence not serve the same purpose if it were deleted?

- 4) *The proposed ASOP now applies to all practice areas. Is that clear and appropriate?*

Yes.

- 5) *The proposed ASOP is intended to maintain the same level and quality of guidance as the current ASOP No. 38 in regards to property/casualty actuarial work involving the use of catastrophe models. Does the proposed ASOP meet that intent?*

The Life Practice Council cannot comment on this question.

- 6) *Is the proposed standard sufficiently flexible to allow for new developments in practice?*

Yes.

We thank you for your work on this ASOP and for the opportunity to provide the comments above. Please let us know if you need clarification on any of the points made above.

Sincerely,

Mary Bahna-Nolan, FSA, MAAA, CERA
Vice President
Life Practice Council
American Academy of Actuaries