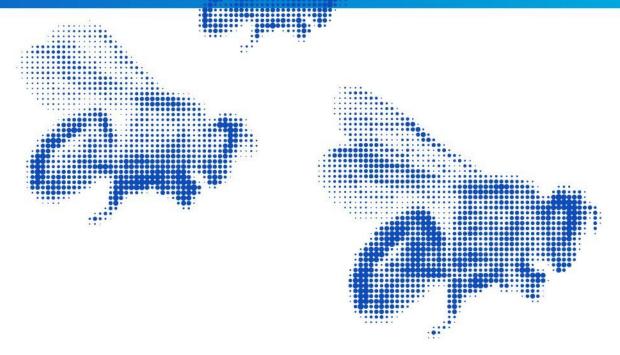


# The ASOP and the Actuary Featuring the Update Process and ASOP No. 25 (Credibility)

Steve Ekblad, FSA, MAAA, ACSW Spring Meeting, June 20, 2014





### The ASOP and the Actuary

#### The ASOP and the Aesop

ASOP = Actuarial Standard of Practice

Aesop = Ancient Greek storyteller credited with a number of fables

fa-ble ['fā-bəl] noun (http://www.merriam-webster.com/dictionary/fable)

- a short story that usually is about animals and that is intended to teach a lesson
- a story or statement that is not true
- a fictitious narrative or statement: as

a: a legendary story of supernatural happenings

b: a narration intended to enforce a useful truth; especially: one in which animals speak and act like human beings

c: falsehood, lie



## Agenda

- The ASOP and the ASB
- ASOP No. 25 (Credibility)



## The ASOP and the ASB



## The Actuarial Standards Board (ASB)

- Nine members with a broad range of backgrounds and areas of actuarial practice
- Appointments are:
  - Three-year terms
  - Two-term maximum
  - Made by the Selection Committee comprised of the Presidents and Presidents-Elect of the participating organizations:
    - American Academy of Actuaries
    - American Society of Pension Professionals and Actuaries
    - Casualty Actuarial Society
    - Conference of Consulting Actuaries
    - Society of Actuaries
- The ASB establishes and improves standards of actuarial practice ASOPs



## Why have ASOPs?

- Assure the public that actuaries are professionally accountable
  - Appropriate procedures, techniques, and approaches
  - A means for reviewing and updating the elements of actuarial practice
  - Criteria for evaluating actuarial work products
  - A basis for discipline
- Provide practicing actuaries with a basis for assuring that their work will conform to appropriate practices
  - Guidance in unfamiliar practice areas
  - Evidence that the profession effectively and responsibly serves the public
  - Evidence of appropriate professional performance constitutes a defense in any civil or professional disciplinary action
- Help assure regulatory authorities that the profession can govern itself



## **ASB Operating Committees**

- In general, the ASB's **operating committees** develop ASOPs
  - Casualty Committee
  - Health Committee
  - Life Committee
  - Pension Committee
  - ERM Committee (new!)
  - General Committee (for standards that apply to more than one practice area)
- Another committee or task force may be appointed specifically for drafting or updating a standard



#### Where do ASOPs come from?

- When creating or revising an ASOP, the ASB:
  - Reviews and evaluates current and emerging practices
  - Determines appropriate guidance
  - Publishes an exposure draft to obtain input from actuaries and other interested parties
  - Considers all comments received
  - Publishes a final standard or another exposure draft



#### Comments on comments on exposure drafts (not a typo)

- Purpose of exposure drafts
  - More viewpoints can be considered
  - Broader knowledge base can be reflected
  - Advance notice of possible changes to come

#### Comments are very important

- Every single comment received by the ASOP's comment deadline is addressed
  - Change is made when necessary to improve the clarity of guidance in an ASOP
  - Reason given for why or why not changes were made to the ASOP based on substantive comments received



#### Get involved!

- Read exposure drafts
- Comment on exposure drafts
- Contact the ASB (<u>asb@actuary.org</u>) or visit
  <a href="http://www.actuarialstandardsboard.org/">http://www.actuarialstandardsboard.org/</a> for further information



# ASOP No. 25 (Credibility)



## Flashback: Development of ASOP No. 25, original version

- Jointly developed by the Casualty and Health Committees of the ASB
- Initial casualty draft was shared with the health task force to extend the draft to encompass A&H coverages
- Also expanded to apply to group term life
- Proposed standard exposed to the profession in April 1994 with a comment deadline of August 31, 1994
- 33 comment letters received
- Comments reviewed by Casualty and Health Committees



## Flashback: Scope of ASOP No. 25, original version

- Comments on the exposure draft expressed concerns that the scope was too restrictive – scope was only modified slightly
- Section 1.2 Scope
  - Accident and health, group term life, property/casualty coverage, and other forms of non-life coverage
  - Other financial security systems, such as self-insurance, that provide similar coverages
  - Applicable to ratemaking, prospective experience rating, reserve analysis, solvency testing, and asset/liability management
  - "This standard does not apply to annuities and pension plans"
- The ASB voted in October 1996 to adopt the final standard
- ASOP No. 25: "Credibility Procedures Applicable to Accident and Health, Group Term Life, and Property/Casualty Coverages"



# Flashforward from flashback, but not all the way to now yet

- The ASB asked the Life Committee to consider whether the scope of ASOP No. 25 should be expanded to incorporate additional practice areas, and the Life Committee agreed
- A multi-discipline Credibility Task Force was formed under the direction of the General Committee to begin drafting an exposure draft
  - Included actuaries from the life, health, pension, and property/casualty practice areas
- First exposure draft issued in September 2012 with a comment deadline of 12/31/2012
  - Twenty comment letters received
  - Significant changes resulted from the many helpful, constructive comments, including clarifications to the scope of the ASOP



#### ASOP No. 25, revised edition

- Second exposure draft issued in June 2013 with a comment deadline of 9/30/2013
  - Nine comment letters received
  - Only minor changes made after the second exposure draft
- The ASB voted in December 2013 to adopt the standard
- ASOP No. 25: "Credibility Procedures"



# Section 1. Purpose, Scope, Cross References, and Effective Date

- 1.1 <u>Purpose</u>: Provide guidance with respect to selecting, developing, or applying credibility procedures
- 1.2 <u>Scope</u> of December 2013 version of ASOP No. 25 includes practically any actuarial application of credibility, except for:
  - Applications already covered by ASOP No. 35, Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations
  - Situations where applicable law overrides the guidance set forth in ASOP No. 25
- 1.3 <u>Cross References</u> section covers situations where other documents referenced by the ASOP are subsequently updated
- 1.4 <u>Effective Date</u> is 5/1/2014



#### Section 2. Definitions

- <u>Subject Experience</u> This is the specific set of data under consideration (e.g., a life insurance company's mortality study data)
- <u>Relevant Experience</u> Sets of data that can provide some predictive value for the parameters being studied (e.g., industry mortality tables)
- Credibility Procedure
  - Evaluation of subject experience for potential use in setting assumptions without reference to other data; or
  - Identification of relevant experience and the application of a method for blending the relevant experience with the subject experience
- Risk Characteristics Observable factors used to assign each risk to a risk class

# Section 3. Analysis of Issues and Recommended Practices

- 3.1 <u>Purpose and Use of Credibility Procedures</u>: Evaluate subject experience and improve the estimate of the parameter under study, including **pricing**, ratemaking, prospective experience rating, and **reserving**
- 3.2 <u>Selection or Development of Credibility Procedures</u>
  - Consider whether the procedure is:
    - Expected to produce reasonable results
    - Appropriate for the intended use and purpose
    - Practical to implement, considering the cost and benefit
  - Should also consider the characteristics of both the subject experience and relevant experience



# Section 3. Analysis of Issues and Recommended Practices (cont'd)

#### • 3.3 <u>Selection of Relevant Experience</u>

- Relevant experience should have demographics, coverages, and other risk characteristics that are similar to that of the subject experience
- The actuary should consider the extent to which subject experience is included in relevant experience
- If no relevant experience is available, all available subject experience should be considered when estimating the parameter under study
- 3.4 <u>Professional Judgment</u>: Application of credibility procedures is rarely a precise mathematical process
- 3.5 Homogeneity of Data
  - Consider the homogeneity of both the subject and relevant experience
  - Can enhance predictive value by separating experience into segments
  - Also consider the balance between the homogeneity and the size of the data set



19

#### Section 4. Communications and Disclosures

- Whenever appropriate, the actuary should disclose the credibility procedures used and any material changes from prior analyses
- The actuary should also include the disclosures from **ASOP No. 41**, *Actuarial Communications*, if the following apply:
  - If any material assumption or method was prescribed by applicable law
  - If the actuary states reliance on other sources for any material assumption or method
  - If the actuary has **deviated materially** from the guidance of this ASOP



### Appendix 1

- Background Historical Development
- Current Practices
  - Classical Credibility Procedures
  - Empirical Credibility Procedures
  - Bayesian Credibility Procedures
  - Emerging Practice Involving Statistical Models
  - Credibility Bases (by number vs. by amount, etc.)
  - Credibility Procedures for Ratemaking/Pricing
  - Credibility Procedures for Prospective Experience Rating
  - More Information



### Appendix 2

- Appendix 2 lists comments on the second Exposure Draft and responses to those comments
- Comments on the first Exposure Draft were listed in Appendix 2 of the second Exposure Draft and were not carried forward into the final ASOP

Contact the ASB (asb@actuary.org) or visit http://www.actuarialstandardsboard.org/ for further information on how to get involved with maintaining our standards **Ⅲ** Swiss Re Steve Ekblad, FSA, MAAA | ACSW Spring Meeting | June 20, 2014

# Legal notice

©2014 Swiss Re. All rights reserved. You are not permitted to create any modifications or derivative works of this presentation or to use it for commercial or other public purposes without the prior written permission of Swiss Re.

The information and opinions contained in the presentation are provided as at the date of the presentation and are subject to change without notice. Although the information used was taken from reliable sources, Swiss Re does not accept any responsibility for the accuracy or comprehensiveness of the details given. All liability for the accuracy and completeness thereof or for any damage or loss resulting from the use of the information contained in this presentation is expressly excluded. Under no circumstances shall Swiss Re or its Group companies be liable for any financial or consequential loss relating to this presentation.