

As A Reserving Actuary Do You Know Your ASOPs?

Casualty Loss Reserve Seminar

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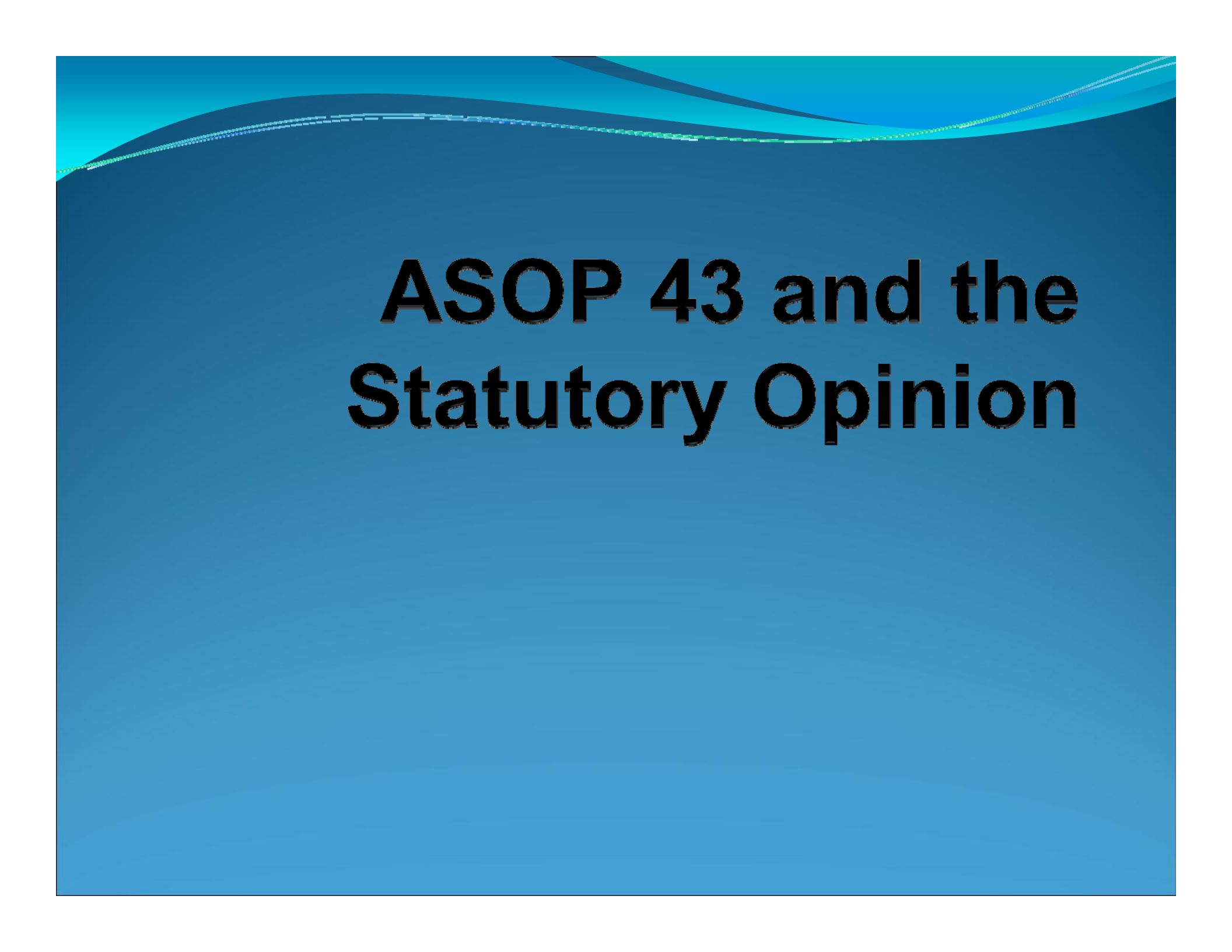
ASOPs to know:

- ASOP 43 – Property/Casualty Unpaid Claim Estimates
- ASOP 36 – Statement of Actuarial Opinion Regarding Property/Casualty Loss and LAE Reserves
- ASOP 23 – Data Quality
- ASOP 9 – Documentation and Disclosure in Property and Casualty Ratemaking, Loss Reserving & Valuations
- ASOP 41 – Actuarial Communications



Questions:

- When did you last read these ASOPs?
- Are you qualified?
- Have you read the current exposure drafts for 41 & 36?



ASOP 43 and the Statutory Opinion

ASOP 36 vs ASOP 43

- ASOP 36 talks about how to form an opinion, and what to say
 - Is the carried reserve reasonable?
- ASOP 43 talks about how to do the estimation work
 - How to get a reasonable estimate
- So in nearly all cases, an ASOP 43-compliant analysis will precede application of ASOP 36



Analysis of Issues and Recommended Practice Outline

- Purpose or Use
- Constraints
- Scope
- Understanding of the Nature of Claims
- Unpaid Claim Estimate Analysis
 - Methods
 - Assumptions
 - Data
 - Recoverables (incl. collectibility, gross vs. net)
 - External conditions, changing conditions
 - Uncertainty
- Unpaid Claim Estimate
 - Reasonableness tests
 - Presentation

Purpose or Use

“The actuary should identify the intended purpose or use of the unpaid claim estimate”

- One of the purposes is to allow you to opine on the carried reserve
 - Does not have to be the only purpose
 - E.g. your ASOP 43 analysis might also establish the number that will be carried
- The Statutory carried reserve is “management’s best estimate”
 - How are you going to evaluate that?
 - Expected Value or Actuarial Central Estimate?
 - With or without a risk margin?
 - Do you need to consider discounting?

Handling of Constraints

- Sometimes constraints exist in the performance of an actuarial analysis, such as those due to limited data, staff or time. Where the actuary believes that such constraints create a significant risk that a more in-depth analysis would produce a materially different result, the actuary should notify the principal of that risk communicate the constraints on the analysis to the principal
- If you are subject to a significant constraint, you run the risk that you cannot then form an opinion
 - ***The “no opinion” opinion***

Scope of the Estimate

“The actuary should determine the scope of the unpaid claims estimate.”

- Gross or net
- Collectibility risk
- Unpaid claim adjustment expenses
- Cohorts of claims
- Other items needed to sufficiently describe scope
- *Your analysis should match the scope to the opinion scope*

Methods and Models

Actuary should select specific methods and/or models, modify or develop new ones based on relevant issues:

- Intended purpose, nature and scope
- Nature of claims, exposures
- Development characteristics
- Characteristics of available data and applicability to available data
- Validity of assumptions underlying each method or model

Methods and Models

- A number of methods may be available - selection based on facts & circumstances
- Different components of the estimate may require different methods
- “actuary should use multiple applicable methods to estimate unpaid loss for a particular component, unless
 - Reliance on a single estimate reasonable in actuary’s judgment
 - Disclose rationale for the decision in the actuarial communication
- Don’t have to use same method as the past
- Evaluate the appropriateness of chosen method(s) even if same method as the past

Assumptions

- Assumptions may be implicit or explicit
- Consider reasonableness of assumptions underlying method
- **Assumptions should have no deliberate or conscious bias to under estimation or overestimation (whatever the intended measure of the estimate).**
 - Bias with regard to an expected value estimate would not necessarily be bias with regard to a measure intended to be higher or lower than an expected value estimate
- Assumptions should not be internally inconsistent
- Consider sensitivity of estimate to reasonable alternative assumptions (If very sensitive, understand why, communicate)
- ASOP 43 says that it's okay to use assumptions dictated to you, subject to appropriate disclosure
 - But if you do, can you then form an opinion?

Data, Recoverables, etc.

- Actuary directed to ASOP 23 – Data Quality
- Actuary should consider if material recoverables/offsets exist
 - unless outside the scope
- Gross vs. Ceded vs. Net
 - Consider facts and circumstances when choosing which components to estimate



External conditions, Changing conditions

- Consider external conditions that may have a material effect, to the extent they are generally known to the actuary and amenable to estimation
- Consider significant changing conditions likely to be insufficiently reflected in the data or assumptions

Uncertainty

- Actuarial estimates are inherently uncertain
- Actuary is not required to measure uncertainty
- If uncertainty is in the scope – ASOP provides guidance
- Although you don't have to measure uncertainty
 - ASOP 36 requires that you determine if there is a significant RMAD
 - So some evaluation of the RMAD should be included in your 43 analysis – can be quantitative or qualitative

Reasonableness

Do a reasonableness test on the estimate against relevant indicators – a priori reasonable assumptions do not always yield reasonable estimates

“The actuary should assess the reasonableness of the unpaid claim estimate, using appropriate indicators or tests that, in the actuary’s professional judgment, provide a validation that the unpaid claim estimate is reasonable.”

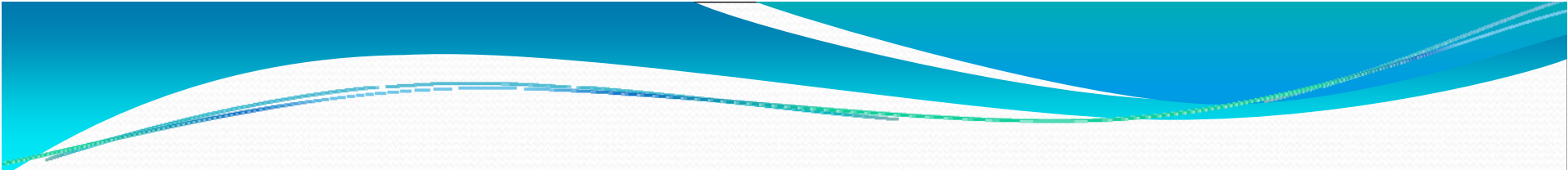
“When the actuary’s unpaid claim estimate comprises multiple components, the actuary should consider whether, in the actuary’s professional judgment, the estimates of the multiple components are reasonably consistent.”

Unpaid Claim Estimate Presentation

- Actuary should consider the intended purpose or use of the unpaid claim estimate when deciding how to present the unpaid claim estimate
 - How you got to your conclusion in the opinion (ASOP 36) should be *very* clear in your underlying report (ASOP 43)
- Multiple possible presentations (not an exhaustive list):
 - Point estimate
 - Range of estimates
 - Point estimate + margin for adverse deviation
 - Probability distribution
 - But note that a probability distribution of outcomes is *not* a probability distribution of reasonable estimates
- If the carried reserve is not the same as your point estimate
 - What makes the carried reasonable?

Communications & Disclosures

- General Guidance:
ASOP 41 Actuarial Communications
 - Principal & Scope, Form & Content, Timing, etc.
 - An actuarial report **is** required
 - Documentation should be sufficient for another actuary practicing in the same field to evaluate the work
- *ASOP 23 Data Quality*



Communications & Disclosures Specific to the Proposed Standard

- Clearly convey the intended purpose or use
 - More than one intended use?
 - Any compromises in order to produce a single work product for multiple intended uses?
- Any resource constraint issues?
- Clearly define the scope of the estimate



Dates Associated with the Estimate

- Actuarial communication should include
 - Accounting date
 - Valuation date
- Review date may have to be included in certain circumstances

As an example, “This unpaid claim estimate as of December 31, 2005 was based on data evaluated as of November 30, 2005 and additional information provided to me through January 17, 2006”



Communications & Disclosures

Uncertainty

- The actuarial communication should include discussion of the uncertainties in the estimated claim liability
- This discussion should include both the uncertainty in the estimate and the uncertainty of actual results varying from the estimate

Significant Events & Assumptions

- Include explicit discussion of any significant assumptions or events underlying the estimate that may not be obvious to the intended audience, including significant assumptions regarding the accounting basis or application of an accounting rule
- Where the final work product reflects a material assumption or methodology that differs from what the actuary believes to be reasonable
 - Disclose the dependency of the final result and
 - Disclose the source

Ranges

- What is the range intended to convey?
- For example:
 - a range of estimates of the actuarial central estimate;
 - This is the range contemplated in ASOP 36
 - a range representing a confidence interval within the range of outcomes produced by a particular model or models;
 - a range representing a confidence interval reflecting both process and parameter risk;
 - some other clearly defined range

Material Changes

- If the analysis is an update, disclose any material changes in assumptions
- Disclose the reasons for the change
- Not required to quantify the effect

ASOP 36

- Covers Statements of Actuarial Opinions
- Main Provisions
 - Types of Opinions
 - Risk of Material Adverse Deviation

Types of Opinions

- Reasonable
- Deficient / Inadequate
- Redundant / Excessive
- Qualified
- No Opinion



Reasonable

If within range of reasonable estimates that:

- Could be produced by appropriate actuarial methods or alternative sets of assumptions actuary judges to be reasonable
- May include risk margins
- Usually does not represent range of all possible outcomes

Deficient or Redundant

Reserve is less than minimum / greater than maximum actuary believes reasonable

- Opine reserve not reasonable
- Must disclose difference between booked reserve and range

Qualified Opinion

Certain items cannot be reasonably estimated opined upon

- Only if items material
- Disclose items, reasons, amounts
- Opine on remainder



No Opinion

Deficiencies or limitations in the data, analyses, assumptions, or related information prevent conclusions

- Describe reasons



Risk of Material Adverse Deviation

Consider whether future paid amounts are subject to significant risks and uncertainties that could result in a material adverse deviation

- Include explanatory paragraph

Explanatory Paragraph

- The amount of adverse deviation considered material
- Description of major factors or conditions underlying risks and uncertainties
- Not required to include general, broad statements or exhaustive list of all potential sources of risk

Other Items in ASOP 36

- Items Covered by Opinion
- Materiality
- Reserve Analysis
- Uncertainty
- Expected Value Estimate
- Ceded Reinsurance
- Review Opinion
- Reliance on Others
- Disclosures

ASOP 36 Currently Being Revised

Changes from original:

- Removal of items covered by ASOP 43
- Expand identification of reserves
- Intended measure
- Clarify terminology / consistency with ASOP 43 and Qualification Standards

Exposure draft was exposed, comments were provided, redraft forthcoming



ASOP 23 – Data Quality

Broad Scope – all practice areas

- Selecting Data
- Relying on Data
- Reviewing Data
- Using Data
- Documentation and Disclosures

Selecting Data

Consider:

- Scope of assignment
- Intended use of analysis
- Reasonableness
- Comprehensiveness
- Known material limitations
- Feasibility and cost/benefit of alt data
- Sampling methods

Relying on Data

Can rely on data and other information provided by others:

- Subject to review
- Disclose reliance

Review of Data

Review for reasonableness and consistency (unless not necessary or not practical)

- Determine definition of data elements
- Identify questionable values
- Consistency with prior data

If not appropriate to review, disclose no review and resulting limitations

Use of Data

- Judge whether quality sufficient
- Perhaps obtain additional or corrected data
- Perhaps make adjustments or assumptions
- If believe material defects, determine nature and extent of checking, perhaps arrange for more extensive review
- If data inadequate decline assignment

Documentation

- Process followed to evaluate data
- Description of material defects
- Description of adjustments or modifications made and rationale

Disclosures

- Source of data
- Whether reviewed data
- Limitations on use of work product due to data issues
- Extent of reliance
- Adjustments or assumptions applied
- Unresolved data concerns
- Uncertainties or material biases due to data issues

Not Required To

- Determine whether data or other information falsified or intentionally misleading
- Develop additional data compilations solely for the purpose of searching for questionable or inconsistent data
- Audit data

Question:

- When did you last read these ASOPs?

Why an important question?

- Professional integrity
- Competence
- Others trust us
 - Will that last?
 - Do we care?



The Mission and the Message

- High standards
 - Establishment
 - Maintenance
 - Enforcement
- Advance the body of knowledge

How do we convey that message?

- Internally
- Externally
 - Our work speaks for us
 - ASOPs 9 & 41 show the way to effective presentation

... Or do they?



ASOP 9: The Bones

1. Purpose, Scope, and Effective Date
2. Definitions
3. Background and Historical Issues
4. Current Practices and Alternatives
5. Analysis of Issues and Recommended Practices
6. Communications and Disclosures

ASOP 9: The Beef

2.1 Definition: Actuarial Report:

- formal means of conveying ... conclusions
- communicating the methods and procedures
- ensuring that the parties addressed are aware of the significance

More Beef

5.2 Extent of Documentation

- sufficient for another actuary ... to evaluate the work
- describe clearly the sources of data, material assumptions, and methods.
- material changes ... from the last analysis
 - documented
 - explain the reason(s) for and
 - describe the impact of the changes.



ASOP 41: The Bones

1. Purpose, Scope, Cross References, Effective Date
2. Definitions
3. Analysis of Issues & Recommended Practices
4. Communications and Disclosures

ASOP 41: The Beef

2.3 Definition: Actuarial Report:

- What it IS
 - Written or electronic
 - Formal record and communication of methods, procedures & conclusions
- What it is NOT
 - Transcripts or summaries of oral communication
 - Internal communications
 - Communications among those providing services

More Beef

Definition: Intended Audience

- Always the Principal
- Others after discussion with the Principal
- Still more designated by Principal

... with actuary's consent

- Regulators
- Policyholders
- Investors

3.1 General Requirements

- 3.1.2 Form and Content
 - Actuary should *consider* ... an actuarial report
- 3.1.4 Identification of responsible actuary
 - Do so clearly *when not already apparent*
- 3.1.5 non-Independence
 - Disclose pertinent relationship *if not apparent*
 - Reference to Code of Conduct Precept 6
- 3.1.7 Advocacy
 - Disclose *if not readily apparent*

3.5 Responsibility to Other Users

- 3.5.1 Use by Others
 - Recognize the risk of ... misuse
 - Take steps to present clearly and fairly
- 3.5.2 ASOP 41 creates no Obligation to Other Users

Caveat Actueмпtor!

*Is this section advice on
how to limit liability??*

3.6 Documentation

- Create supporting records to the extent practicable
- Identify data, assumptions, and methods
- Sufficient clarity for another actuary to evaluate the reasonableness of the work
- material changes ... from the last analysis
 - documented
 - explain the reason(s) for and
 - describe the impact of the changes

ASOP 41 Revision

Exposure Draft September 2008

Comment period closed December 31, 2008

23 comments received



Tentative plans to review during Sept ASB meeting



ASOP 41 Exposure Draft

1. Purpose, Scope, Cross References, Effective Date
2. Definitions
3. Analysis of Issues & Recommended Practices
4. Communications and Disclosures

ASOP 41 Exposure Draft

Priority to make sure ASOPs clear and unambiguous

Key Changes:

1. All required disclosures in section 4.
2. Deviations codified in section 4.
3. Reference to PSAOs removed.
4. Scope expanded to improve clarity.
5. Reorganization of Section 3.
6. Clarity on responsibility for methods and assumptions.

ASOP 41 Exposure Draft

Request for Comments

1. Appropriate for actuary to be responsible?
2. Is there confusion?
 - “Communications” in title;
 - content on documentation.
3. Clear on when to issue a report?
4. Clear on deviation disclosures

ASOP 9 Timetable



July 2009: The ASB reviewed the document and has decided to defer its repeal until revisions to ASOP 41 are finalized.

Same comment 6 quarters running.

Looks like it's a done deal, doesn't it?

What message are we sending?

Repeal of 9 – Why?

Pros

- Uniformity across areas of practice
- ASOP 9 is just too tough to live up to.
- Good actuaries do it anyway – no need to have it required.

Cons

- Lowers the bar rather than raising it
- Admits that a prior standard overstated our ability
- Diminishes the value of our profession in the eyes of those who rely on us.

Questions from the Audience?