

Appendix 2

Comments on Exposure Draft and Responses

The exposure draft of this ASOP, *Life Settlements Mortality*, was issued in May 2013 with a comment deadline of July 31, 2013. Ten comment letters were received, some of which were submitted on behalf of multiple commentators, such as by firms or committees. For purposes of this appendix, the term “commentator” may refer to more than one person associated with a particular comment letter. The Life Settlements Task Force carefully considered all comments received, reviewed the exposure draft, and proposed changes. The Life Committee and the ASB reviewed the proposed changes and made modifications where appropriate.

Summarized below are the significant issues and questions contained in the comment letters and responses.

The term “reviewers” in appendix 2 includes the Life Settlements Task Force, the Life Committee, and the ASB. Also, unless otherwise noted, the section numbers and titles used in appendix 2 refer to those in the exposure draft.

GENERAL COMMENTS	
Comment	One commentator asked whether the standard applies to valuation work involved in calculating the “theoretical” Fair Market Value of individual life policies. If so, may an actuary simply rely on a survival table produced by one independent LE provider or would more than one be required?
Response	The reviewers believe the standard does apply to certain aspects (see section 1.2, Scope) of valuation assignments involved in calculating the “theoretical” Fair Market Value of individual policies with respect to life settlements and feel that the guidance in the standard is appropriate.
Comment	One commentator noted that the standard seems to have two very different goals: <ol style="list-style-type: none"> 1. guidance on appropriate calculation of actual-to-expected results for mortality; and 2. dealing with appropriate documentation for the selection and use of mortality assumptions with respect to Life Settlement reports per ASOP No. 41, <i>Actuarial Communications</i>. <p>The commentator stated that the actuarial profession should carefully consider whether it is truly in its best interest to attempt to meet this need via an ASOP.</p> <p>The commentator also suggested that this draft be bifurcated into two different standards. If this is not viable, then the drafters should be explicitly clear so that one purpose does not overwhelm the other and confuse readers.</p>
Response	The reviewers believe a single standard is appropriate.
Comment	One commentator suggested adding a paragraph in the background section of the transmittal memo that discusses the difficulties of using LE estimates from multiple LE providers. In addition, the commentator suggests the appendix should include these points. Otherwise, the document should be limited to A/E calculations.
Response	The reviewers do not believe this discussion is necessary in the transmittal memo or the appendix. The transmittal memo and appendix are not meant to provide guidance. Therefore, no change was made.

Comment	One commentator suggested that the background section of the transmittal memo mention that actuaries are globally involved.
Response	The standard applies to actuarial practice only in the U.S.; therefore, no change was made.
Comment	One commentator believed it is not correct to state that actuaries are involved in all aspects of the market in the background section of the transmittal memo. It should be made clear that actuaries are not underwriters. The commentator suggested changing “all” to “various.”
Response	The reviewers agree and changed “all” to “various.”
Comment	One commentator suggested that the standard address in course of settlement claims.
Response	The reviewers believe that these claims would be either in reported claims or incurred but not reported claims and made no change.
Comment	One commentator suggested the standard address stochastic analysis in determining suitable confidence intervals for actual deaths when performing Actual-to-Expected studies.
Response	The reviewers believe that such practice would be permitted under the standard and made no change.
Comment	Two commentators suggested the standard address how monthly mortality rates are determined from annual mortality rates.
Response	The reviewers disagree with expanding the standard to address the subject and made no change.
Comment	One commentator stated that in some cases the actuary has only the (mean or median) Life Expectancy number, which was calculated by someone other than a qualified actuary, to use as a single data point in backing into an assumed table of mortality rates, and the actuary often isn’t told how that one data point was determined. Because of this, the commentator cannot support the actuarial profession accrediting and codifying the use of these practices as sound actuarial practice through publication in an Actuarial Standard of Practice.
Response	The reviewers believe the ASOP appropriately addresses this concern, and therefore made no change.
Comment	One commentator stated that actuaries should aggregate mortality experience data properly recorded and then contributed by the major companies in the industry, develop a credible experience table applicable to that business, and then create from that table suitable mortality tables to be used for pricing, valuation, and other financial risk management for their principals.
Response	The reviewers believe this is beyond the scope of the ASOP and made no change.
Comment	One commentator stated that there is not much life settlement data at many ages; therefore, it is up to the actuary to consider how to determine reasonable mortality for life settlements. The commentator stated that both a suitable underlying mortality table and system of mortality ratios for impairments is needed and must be considered reasonable by the actuary.
Response	The reviewers believe the guidance in the standard is appropriate and made no change.
Comment	One commentator stated that the same LE can be generated by more than one mortality table, including modifiers. Therefore, it is important that the actuary review LEs at many different ages and mortality levels or review the basic mortality curve and modifiers.
Response	The reviewers believe the guidance in the standard is appropriate and made no change.
Comment	One commentator stated that mortality multiples can be determined from a debit/credit underwriting methodology, but can also be based on actuarial and underwriting studies that develop the relationship between standard mortality and the mortality on a life with particular impairments.
Response	The reviewers believe the ASOP adequately provides for this and made no change.

Comment	One commentator stated that the purpose and scope of this ASOP is aimed at actuaries doing mortality and A/E studies for life expectancy providers in the life settlements market. The commentator believes it should be pointed out that there are other uses of life expectancies and anticipated mortality, such as for financial planning.
Response	The reviewers agree LEs can be used for other reasons; however, the purpose of the ASOP was to address life settlements mortality. Therefore, no changes were made.
TRANSMITTAL MEMORANDUM QUESTIONS	
Question 1: Life expectancy providers may provide survival curves with their estimates. As drafted, this standard does not require disclosure when the actuary chooses a different survival curve assumption. Should it?	
Comment	Four commentators believed the actuary should disclose whether a survival curve assumed is different from that of the life expectancy provider.
Response	The reviewers agree and added a disclosure requirement in the new section 4.1(c).
Comment	One commentator believed this question makes the assumption that the normal practice is for the actuary to use the survival curve as provided by the LE provider. The commentator suggested a change in language to demonstrate this is not necessarily the case.
Response	The commentator believed it is most important for the actuary to disclose how the LE provider reports are used. The reviewers revised section 4.1(a) to require a description of how the mortality assumption was developed.
Comment	One commentator stated that the level of disclosure for setting mortality assumptions for a life settlement population should be the same as that required for other types of calculations.
Response	The reviewers believe the disclosure level in the standard is appropriate and made no change.
Question 2: Methodologies for Actual to Expected studies for life settlements may vary depending on the purpose of the study. The task force chose to define a “historical method” as being distinct from any number of “modified methods.” Is this distinction clear? Is it clear when a historical method is required?	
Comment	Three commentators believed the distinction was clear and adequate.
Response	Some commentators question whether results based on a “historical method” should be required. They suggested the requirement either be removed or allow the actuary to decide on whether the disclosure of results based on a “historical method” is appropriate. The reviewers revised the wording in sections 3.4.3 and 4.2(e) to allow the actuary to decide whether it is appropriate to prepare and disclose historical results.
Comment	One commentator suggested that these terms be clarified for the benefit of other actuaries that do not have a lot of experience in this area.
Response	The reviewers agree and clarified the terms in response to the comment.
Question 3: Are the disclosures required in this standard sufficient and clear?	
Comment	One commentator believed the disclosures are sufficient and clear.
Response	One commentator believed the disclosures are redundant and noted that the standard states “the actuary should refer to ASOP [No.] 41.” In addition, items 4.1(f), 4.1(g), and 4.1(h) refer to specific sections of ASOP No. 41. The reviewers believe some level of redundancy is useful and retained the draft wording, noting that section 4.1(f), 4.1(g), and 4.1(h) are employed in other standards. These items were moved to a new section 4.3.
Question 4: One insured may have had multiple life expectancy estimates. Are the disclosures for handling this situation appropriate?	
Comment	Two commentators believed the disclosures are appropriate.

Comment	One commentator believed the standard requires disclosure of the handling of multiple life expectancy estimates only when the method is prescribed by another party.
Response	The disclosure was moved from section 4.2 to 4.1, which is not limited to the situation where the method is prescribed by another party.
SECTION 1. PURPOSE, SCOPE, CROSS REFERENCES, AND EFFECTIVE DATE	
Section 1.1, Purpose	
Comment	One commentator believes one of the intents of the standard is for the purpose of developing mortality assumptions (as in section 3.3). The commentator recommended new wording: "...to actuaries developing and evaluating mortality assumptions, and evaluating mortality experience, associated...."
Response	The reviewers adjusted the description to be more general. The reviewers decided to use some of the recommended new wording in section 1.2, Scope.
Section 1.2, Scope	
Comment	One commentator stated that the scope of the proposed ASOP appears so broad that it includes virtually all actuarial work with regard to life settlements but is entirely focused on A/E calculations. The commentator suggested that the scope of the ASOP should be more specific.
Response	The reviewers note section 1.2, Scope, is limited to certain types of work related to mortality and that the guidance is not limited to A/E calculations.
SECTION 2. DEFINITIONS	
Comment	One commentator found the phrase "historical method" (historical A/E analysis in the definitions) confusing and believes a "modified method" is not so much a modified method as an alternative expected basis.
Response	The reviewers agree and changed the terms to improve clarity.
Section 2.3, Debits and Credits	
Comment	One commentator found this very unclear. The commentator asked whether debits and credits should be described in terms of percentages added to, or subtracted from, 100% of "standard" morality for the age and gender. The commentator thought an example might help.
Response	The reviewers believe the definition is clear and made no change.
Section 2.4, Duration	
Comment	One commentator asked: "Is it always measured in years? Never in months?"
Response	The reviewers deleted "measured in years" from the definition.
Section 2.5, Expected Deaths	
Comment	One commentator suggested that the standard provide guidance on calculating expected deaths.
Response	The reviewers disagree with expanding the standard to address the subject and made no change.
Comment	One commentator found this very unclear. The commentator suggested working the term "mortality assumption" into the definition, so that it can be referenced when defining Historical A/E Analysis and Modified A/E Analysis.
Response	The definition was modified to make it clearer, and, given the new definition, the reviewers concluded that including the term "mortality assumption" was not necessary.

Section 2.7, Historical A/E Analysis	
Comment	One commentator recommended the following definition: “A/E analysis based upon expected mortality rates consistent with those underlying the providers’ life expectancies and incorporating, as available, the mortality tables, underwriting multipliers, improvement factors, and other pertinent information used by the providers in determining the life expectancies.”
Response	The reviewers adjusted the definition of a “Historical A/E Analysis” (now referred to as “Historical A/E Mortality Basis”) to refer to “mortality assumptions” rather than “mortality tables.” The reviewers did not specify “providers” in the definition because there are situations where a historical A/E analysis is performed using original mortality assumptions that were not provided by an LE provider.
Comment	One commentator pointed out that the term “mortality tables” is used, but it is not defined.
Response	The reviewers changed “mortality tables” to “mortality assumptions.”
Comment	One commentator suggested the phrase be reworded as follows: “...and other pertinent information applicable to the individual life expectancies as of their associated underwriting dates.”
Response	The reviewers added the suggested wording with minor modifications.
Section 2.10, Incurred but not Reported (IBNR) Deaths	
Comment	One commentator suggested the following wording: “Deaths occurring during a period of exposure being analyzed but not reported during that period. Usually estimated based on past experience.”
Response	The reviewers believe the existing definition is appropriate and made no change.
Section 2.11, Incurred Claim	
Comment	One commentator suggested the following wording: “A death occurring during a period of exposure being analyzed, whether reported during that period or not.”
Response	The reviewers implemented the suggested wording.
Section 2.13, Life Expectancy (LE)	
Comment	Two commentators suggested grammatical changes to the definition.
Response	The reviewers revised the definition.
Section 2.14, Life Expectancy Provider (LE Provider)	
Comment	One commentator suggested deleting the phrase “specializing in the assessment of older or impaired lives.” The commentator noted that LE providers determine life expectancies on young lives as well as old, and on unimpaired as well as impaired, lives.
Response	The reviewers deleted the phrase “specializing in the assessment of older or impaired lives.”
Comment	One commentator suggested changing “underwriting services” to “underwriting analysis.”
Response	The reviewers agree and made the change.
Comment	One commentator suggested the second sentence about being the underwriter is not necessary.
Response	The reviewers agree and deleted the sentence.
Comment	One commentator suggested adding a sentence such as, “LE Provider is not limited to those entities who have sought and obtained official status as such by any of the states.”
Response	The reviewers do not believe the additional sentence suggested is necessary and made no change.

Section 2.16, Mean Life Expectancy	
Comment	One commentator suggested changing the formula to an integral.
Response	The reviewers believe that the formula is unnecessary and deleted it.
Comment	One commentator believes the term “mean life expectancy” is redundant.
Response	The reviewers believe the term “mean life expectancy” is necessary because of the terminology used in the life settlements market.
Comment	One commentator suggested adding “The average life expectancy; also referred to as the actuarial or complete life expectancy.”
Response	The reviewers do not believe the additional terms are necessary and made no change.
Comment	One commentator stated that it seems unwise to specify a particular formula, especially when the formula is an approximation of the complete expectation formula and in a more exacting context would be written without an equal sign. Perhaps the formula given should be characterized as an example.
Response	The reviewers believe that the formula is unnecessary and deleted it.
Comment	One commentator was surprised to see “mean” and “median” life expectancies defined in terms of months, since most mortality estimates are annual.
Response	The reviewers have adjusted the definitions to be more generic. The unit of time is no longer specified.
Section 2.17, Median Life Expectancy	
Comment	One commentator suggested a change in the stated formula from a summation to an integral.
Response	The reviewers believe that the formula is unnecessary and deleted it.
Comment	One commentator believes “predicted median survival” or simply “median survival” would be a better term to use than “median life expectancy.” The commentator suggested changing the description to “...the smallest number m satisfying...”
Response	The term “median life expectancy” is used in the life settlements market. The reviewers decided no change to the term was necessary. The reviewers determined that a formula was unnecessary.
Section 2.18, Modification Factor	
Comment	One commentator suggested replacing “reflect rating classification” with “reflect impaired mortality.”
Response	The reviewers believe the term “rating classification” encompasses preferred, standard, and impaired cases and made no change.
Section 2.21, Mortality Multiple	
Comment	One commentator suggested the definition be changed to “A modification factor typically determined from a debit/credit underwriting methodology used to create a multiple intended to be applied to a standard mortality risk table.”
Response	The reviewers note mortality multiples in the life settlements market may be applied to preferred, standard, or impaired risk tables and made no change.
Section 2.22, Survival Curve	
Comment	One commentator stated that “Read literally, this means that there is one ‘curve,’ or set of probabilities, for each insured age x .”
Response	The reviewers disagree, as the definition refers to “an insured.”
Comment	One commentator asked whether the definition was intended to mean that each “curve” is a set, or table, of survival probabilities for all values of t from 1 to $\omega-x$.
Response	The reviewers believe the wording is clear and made no change.

Section 2.23, Underwriting	
Comment	One commentator suggested adding “and/or estimating life expectancy” after “...reflecting risk classification...”
Response	The definition is meant to address the underwriting process rather than LE estimation. The reviewers made no change.
SECTION 3. ANALYSIS OF ISSUES AND RECOMMENDED PRACTICES	
Section 3.2, Required Knowledge	
Comment	One commentator stated that section 3.2 sets out the requirement that an actuary “should be knowledgeable” about a variety of topics, with no limitations on this requirement.
Response	<p>Another commentator asked whether the subjects included are in the current syllabus for actuarial exams. The commentator suggested including recommended sources if the subject is covered. If not, the commentator asked whether sources should be included. The commentator asked, “If the ABCD is to determine whether a practicing actuary has the ‘required knowledge,’ on what will its opinion be based?”</p> <p>The reviewers note that the actuary needs to apply judgment in determining the degree of knowledge needed in a particular situation. The reviewers added the word “reasonably” and words “relevant aspects of.”</p>
Section 3.3.1, Base Mortality Table Selection	
Comment	One commentator suggested that some context be provided for the use of the word “population.” The commentator was concerned that some readers would not understand “population” refers to “appropriate population.”
Response	The reviewers changed “population” to “underlying population.”
Section 3.3.2, Mortality Table Modifications	
Comment	One commentator suggested adding “For example, policy face amount may be utilized as a proxy for the socio-economic effect.”
Response	The reviewers do not believe such an example is needed and, therefore, made no change.
Section 3.3.4, Application of Individual Underwriting to Mortality Assumptions	
Comment	One commentator believes the current wording does not clearly distinguish the actuarial role from the underwriting role.
Response	The reviewers disagree and made no change.
Comment	One commentator stated that the mortality experience for life settlements is available only for a limited portion of the survival curve. Therefore, consideration must be given to the lack of long-term experience and the selection of ultimate mortality. Consideration should be given to the “wearing off” of underwriting rating by which preferred or substandard extra mortality may be graded toward zero as the insured survives well beyond the original LE or reaches the ultimate age in the mortality table.
Response	The reviewers believe that mortality multiples can encompass wearing off and other factors affecting ultimate mortality and made no change.

Section 3.3.5, Mortality Assumption Adjustments Using A/E Analysis	
Comment	One commentator suggested adding the following: “Adjustments should be considered to A/E assumptions reflecting the specific experience of the population (i.e. the life settlement portfolio), and then the experience of the specific LE Provider. Mortality tables designed for life insurance valuation (for example, 2008VBT) have implicit conservatism for life insurance that produce aggressive assumptions for life settlements and are not appropriate without adjustments.”
Response	The reviewers disagree with expanding the standard to address the subject and made no change.
Section 3.4, Actual-to-Expected Analysis	
Comment	One commentator believed this section ignores that one of the main contributors to wide variation in historical A/E results is the impact of the underlying mortality table. The commentator believes that any A/E results crossing time periods where the underlying mortality tables vary greatly cannot be reasonably combined.
Response	The reviewers note, in performing mortality studies, the actuary needs to make judgments about which data to use and how to adjust the data and made no change.
Section 3.4.1, Incurred Claims	
Comment	One commentator suggested replacing “Incurred Claims” with “Incurred Deaths” or “Incurred Maturities.”
Response	The reviewers changed the term to “Incurred Deaths.”
Comment	One commentator suggested the following: “The actuary should consider whether any IBNR assumption is reasonable based on supporting analysis or lack thereof. If there is no data to support an IBNR assumption, it should be sufficient for the actuary to disclose that they have assumed zero IBNR or provided for a short delay in reporting.”
Response	The reviewers changed “adjusting” to “whether to adjust.”
Section 3.4.2, Multiple Life Expectancies for a Single Life	
Comment	One commentator asked if the method used should be consistent with the method used in analyses of life-insurance mortality experience. The commentator suggested the standard state whether the method is or is not consistent and explain and justify the reason if it is different.
Response	There are several methods used in the analyses of life-insurance mortality experience. In addition, there are several issues that are unique to the life settlements market that might necessitate using a different method. For these reasons, the reviewers decided to not require the explanation of any differences and made no change.
Section 3.4.3, Use of a Modified A/E Analysis	
Comment	One commentator suggested adding the phrase, “the modifications made shall be explicitly and completely disclosed and,” after the introductory phrase, “If a modified A/E method is used.”
Response	The reviewers believe section 4 appropriately addresses the concerns of the commentator and made no change.
SECTION 4. COMMUNICATIONS AND DISCLOSURES	
Comment	One commentator suggested that section 4.2 be presented as section 4.1 and the section 4.1 be moved to section 4.2 and titled “Disclosures under other Actuarial Communications utilizing Life Settlement Mortality.”
Response	The reviewers believe disclosures for all situations should be listed first and disclosures for specific situations should be listed second. The disclosures related to ASOP No. 41 were moved to the new section 4.3.

Comment	One commentator suggested section 4.1 and section 4.2 be renumbered 4.1.1, 4.1.2, etc.
Response	The reviewers disagree and note the numbering system follows standard ASOP formatting, and made no change.
Section 4.1, Disclosures	
Comment	One commentator suggested an item be added to section 4.1 for something like “the method used for interpreting and utilizing results from LE Providers.”
Response	The reviewers revised section 4.1(a) to require a description of how the mortality assumption was developed.
Comment	One commentator suggested that item 4.1(c) (incurred claims and IBNR) be removed since it will generally apply only to A/E calculations.
Response	The reviewers believe the disclosure is necessary for more than just A/E calculations and made no change.
Comment	One commentator believed item 4.1(e) should reflect purchases and sales.
Response	The wording was adjusted to reflect market participants.
Comment	On 4.1(e), one commentator stated “This is an area that deserves special caution. The actuary should clearly communicate that he/she cannot assign a ‘market value’ or determine a ‘market mortality assumption,’ because that will vary widely depending on the outlook of the individual buyer/seller. This additional unknown should be documented with the rationale for the actuary’s estimate.”
Response	The reviewers believe the disclosures discussed in sections 3.4.1 and 4.1.3(d) of ASOP No. 41 regarding risk and uncertainty address the issue raised and made no change.
Section 4.2, Disclosures when Performing an A/E Analysis	
Comment	One commentator suggested adding a requirement to disclose the total A/E results in addition to the durational requirement set forth in 4.2(b).
Response	The reviewers do not believe this should be a requirement and made no change.
Comment	On 4.2 (e), one commentator stated that the purpose of the historical A/E comparison is not clear from the ASOP. Such a comparison may not be useful for the actuary’s or client’s purposes. The ASOP should recommend, but not require, a historical A/E analysis for comparative purpose only if it meets the purpose of the analysis.
Response	The reviewers revised the wording to allow the actuary to disclose that historical A/E analysis results are not being presented and why.
APPENDIX: BACKGROUND AND CURRENT PRACTICE	
Comment	One commentator suggested removing the last sentence in the paragraph on “Adjusted to Current Methodology A/E analysis” (see Current Practices section of Appendix 1) where it is stated that an Adjusted analysis “attempts to address the question of how accurate the LE provider’s estimates are today.” The commentator believes this statement inappropriately implies that historical A/E analyses are not relevant in addressing how accurate the LE provider’s estimates are today.
Response	The reviewers agree and revised the last sentence to address the commentator’s concern.
Comment	One commentator suggested deleting the statement regarding “the main deficiency” of using the “Latest submission” (see Current Practices) method. The commentator believes this reflects an inappropriate bias.
Response	The reviewers agree and deleted the last two sentences.
Comment	One commentator stated that the discussion in the background section is limited to buyers of policies and suggested that this be adjusted to reflect buyers “and sellers.”
Response	The reviewers believe the discussion provides a good overview of the market and made no

	change.
Comment	One commentator suggested that the background section reflect the fact that part of the problem with the life settlement market is that the participants in the market often do not utilize qualified actuaries at all or may utilize non-credentialed actuaries.
Response	The reviewers believe the suggested statement is not appropriate in this particular document and made no change.
Comment	One commentator was surprised that the standard does not comment on the industry practice of measuring LEs in months rather than years. The commentator feels that this industry practice gives the non-actuarial investor community a sense of spurious accuracy.
Response	The reviewers agree that the industry practice of measuring LEs in months should be mentioned and adjusted the wording in the background section.

