

## *Revised Exposure Draft*

# Revised Standards of Practice for Pension Commuted Values (Section 3800)

**Actuarial Standards Board**

**October 2008**

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## Memorandum

**To:** All Fellows, Affiliates, Associates and Correspondents of the Canadian Institute of Actuaries and other interested parties

**From:** Charles C. McLeod, Chairperson  
Actuarial Standards Board

**Date:** October 28, 2008

**Subject:** **Revised Exposure Draft for Revised Standards of Practice for Pension Commuted Values (Section 3800) and Exposure Draft for Capitalized Value of Pension Plan Benefits for a Marriage Breakdown (Section 4300)**

**Comment deadline:** November 28, 2008

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### INTRODUCTION

#### **Pension Commuted Values (Section 3800)**

The attached revised Exposure Draft was approved by the Actuarial Standards Board (ASB) on October 16, 2008. Changes are highlighted against the current Standard.

The decision to re-expose was made because the following changes to the original Exposure Draft published on June 27, 2008 were considered substantial enough to necessitate re-exposure.

- The inflation assumption is now the break-even inflation rate (“BEIR”), the difference between the yields on non-indexed and real-return Government of Canada bonds, instead of the BEIR less 0.25%.
- Mortality is to be projected to 2020 (instead of to 2025).
- Effective January 1, 2011, the use of a generational mortality table will be required.
- Effective January 1, 2011, the time lag will be reduced from two months to one month.

Details of the changes made to the original Exposure Draft, as well as the reasons for those changes, are described later.

People wishing to comment on the changes to the original Exposure Draft should direct their comments to Rob Smithen at [rob.smithen@actuaries.ca](mailto:rob.smithen@actuaries.ca) with a copy to Chris Fievoli at [Chris.Fievoli@actuaries.ca](mailto:Chris.Fievoli@actuaries.ca) by **November 28, 2008**. The ASB would be interested in hearing both from people opposing the changes and from people who agree with the changes. Rob Smithen and Chris Fievoli will be responsible for reporting to members of the Commuted Values (CV) Working Group (see BACKGROUND section) and the ASB on the content of any submissions received. In addition, the ASB will be holding a session on Pension Standards at the CIA General Meeting in Toronto on November 13/14, 2008 when there will be an opportunity to comment on the Revised Exposure Draft.

The ASB hopes to make final decisions regarding the new Standard and publish the new Standard in mid-December 2008, with a target effective date of April 1, 2009. It should be noted; however, that in some provinces any new Standard cannot be used until any appropriate pension legislation or regulation has been amended. Early implementation would be permitted, but only for pension solvency valuations and hypothetical wind-up valuations with a valuation date on or after the date of publication of the Final Standard and only if appropriate to the circumstances of the plan and if permitted by any applicable regulator.

### **Capitalized Value of Pension Plan Benefits for a Marriage Breakdown (Section 4300)**

At the same time as the Exposure Draft for Section 3800 was published, an Exposure Draft for a revised Standard of Practice for the Capitalized Value of Pension Plan Benefits for a Marriage Breakdown (Section 4300) was published. The ASB received a number of comments from marriage breakdown practitioners on the Exposure Draft, both in writing and at the CIA's Actuarial Evidence Seminar in early September – none of them supporting the proposed Standard. In early September, Michael Kavanagh, Chair of the CIA's Actuarial Evidence Committee, wrote to Rob Smithen and Charles McLeod to formally request that the ASB either defer action on the Marriage Breakdown Standard until the Actuarial Evidence Committee had come up with a proposal of its own, which would be done by March 31, 2009, or update only the mortality table in the current Marriage Breakdown Standard. The ASB decided on October 16, 2008 to accept the deferral proposal, i.e., to defer consideration of any revisions to the current Marriage Breakdown Standard until it has received the proposal of the Actuarial Evidence Committee. The ASB will liaise with the Actuarial Evidence Committee and the Actuarial Evidence Committee's Working Group (the "Working Group") during the development of this proposal.

The ASB has provided the Actuarial Evidence Committee and its Working Group with the following guidance:

1. The deadline for the submission is March 31, 2009.
2. In the case of the discount rate assumption, the ASB accepts that the "replacement theory" approach contained in the memo attached to the Exposure Draft distributed in June 2008 makes sense for the Marriage Breakdown Standard, and therefore a discount basis, reflecting a replacement theory approach, is appropriate. For other assumptions, there should be a valid justification if the

recommended assumptions are different from those in the Pension Commuted Values Standard.

3. David Short (a member of the ASB) will participate as an ex-officio member of the Working Group. His role will be to liaise with the Working Group so that, as recommendations are developed, ASB feedback can be given to the Working Group.
4. The goal is to have a Standard acceptable to both the ASB and the Actuarial Evidence Committee. In any event, the ASB intends to issue a revised Exposure Draft, if necessary, for the Marriage Breakdown Standard in the second quarter of 2009.

Section 4300 is not discussed further in this memorandum.

## **BACKGROUND**

A Notice of Intent was published on March 26, 2008 and an Exposure Draft (the “original Exposure Draft”) was published on June 27, 2008. As noted in the Notice of Intent, “to ensure that there is an orderly process and that the various parties’ perspectives are fully considered, a project manager has been appointed. Rob Smithen has agreed to fill this role and will report directly to the ASB.”

As is required in the ASB’s Due Process, a “Designated Group” (also referred to as the “CV Working Group”) was appointed by the ASB in March 2008 to work with the project manager (Rob Smithen) to understand any technical issues involved and to determine the best way forward for the ASB to come to a decision with respect to revised Standards. This group currently consists of Rob Brown, Malcolm Hamilton, Charles McLeod, David Short and Rob Smithen. All of the members of this Designated Group, except Rob Smithen are also members of the ASB.

About 50 comments/submissions on the original Exposure Draft were received (this does not include comments/submissions on Section 4300), including submissions from several large pension plans, some regulators and some pension consulting firms. Several people either forwarded technical papers to us or recommended that we read certain papers. A summary of the comments received and the Designated Group’s (i.e., the CV Working Group’s) responses to those comments are contained in an Appendix. The ASB would like to thank everyone who took the time to respond.

As well, the ASB asked for a few submissions - from Doug Chandler, FCIA, giving examples of the financial impact of the proposed changes (published on July 31, 2008), and from Brendan George, FCIA, and Jeremy Bell, FCIA, seeking an opinion on some elements of the pension proposal (discussed later).

Some meetings also took place. Charles McLeod and Malcolm Hamilton were invited to speak to actuaries who work for Mercer (Canada) Ltd in early August 2008. Charles McLeod, Malcolm Hamilton and Rob Smithen met with Jean-Claude Primeau of the Office of the Superintendent of Financial Institutions (OSFI) on August 7, 2008 and Malcolm Hamilton met with the Canadian Association of Pension Supervisory Authorities (CAPSA) on September 30, 2008.

As many people know, the Standard for Pension Commuted Values has been a controversial one, not just in the last few months but for many years. This is partly

because this is not a simple subject and there is no generally accepted “right answer” on many of the assumptions.

The ASB found it particularly challenging to identify the public interest because of the conflicting interests of different stakeholders: terminating plan members, non-terminating plan members and plan sponsors. The ASB carefully considered the interests of the different stakeholders and spent considerable time debating the issues. We are satisfied that, in terms of the collective public interest, the revised Exposure Draft is an improvement over the current Standard and strikes a fair balance among stakeholders.

We think more research is needed on a number of points, such as the size of the liquidity adjustment, whether Government of Canada bonds are the right marker to use as the discount rate (as opposed to, for example, provincial or corporate bonds and/or the use of swap rates), and the likely rate of future mortality improvement. Some of the comments on the original Exposure Draft also recommended further research and analysis on topics such as these. The ASB agrees that additional research and analysis is desirable – but we do not think that doing nothing until this research has been completed is desirable. We think that the revised Exposure Draft is an improvement on the current Standard, although it should not be considered as the final answer. We will ask the CIA to conduct research on these issues and will consider further changes in the future, as appropriate.

## **SUMMARY OF REVISED EXPOSURE DRAFT**

The major differences between the current Standard, the original Exposure Draft and the revised Exposure Draft are as follows.

### **General Approach**

The general structure of the revised Exposure Draft is similar to the current Standard. In particular, the discount rate continues to be a two-tier structure, with one interest rate basis applying for the first ten years and a second interest rate basis applying subsequently.

The overall rationale in developing the revised Exposure Draft (as was the case for the original Exposure Draft) was that the commuted value should be the economic value of the obligations discharged by the pension plan by paying commuted values to terminating plan members electing to receive them. In general, the assumptions represent a market-based approach. In addition, the basis for calculating values should be as fair as possible to terminating plan members, non-terminating plan members and the plan sponsor.

### **Mortality**

**Current Standard** – UP 1994 Table projected with Scale AA to 2015.

**Proposal in original Exposure Draft** – UP 1994 Table projected with Scale AA to 2025. Also, the ASB gave notice that a generational table, once developed by the CIA, would most likely be adopted.

**Revised Exposure Draft** – UP 1994 Table projected with Scale AA to 2020. Additionally, effective January 1, 2011, the use of a generational mortality table will be required. The generational mortality table will be the UP generational table with Scale AA projection although, if the CIA has completed the development of a more recent mortality table (plus projection scales), based on Canadian pensioner mortality

experience, before 2011, it is likely that the Standard will be amended to require the use of that table.

**Rationale** – The ASB received a fairly large number of comments on the mortality assumption for pensions. The submissions covered the key issues - generational or not, the problems with using a static projection period, the particular problems with 2025 as the projection year and the question of whether mortality will continue to improve and how fast. There was no consensus position in the submissions.

The ASB believes that a generational table is the most equitable way to provide for mortality for pension plan commuted values. A generational table promotes equitable treatment between younger and older plan members. As an interim step, the UP generational table will be used. A Canadian table is urgently needed however, and a CIA Committee has been formed to develop one. Charles McLeod has asked the Chair of the CIA's Member Services Council and also the CIA President and President-elect to make this a very high CIA priority. A number of large Canadian pension plans have developed their own mortality statistics and we hope they will be amenable to providing their data to a CIA study.

The ASB decided to move only to 2020 as a projection year because of its intention to eliminate the static table in about two years.

It should be noted that although modifications of Scale AA have been developed in other areas of actuarial practice (e.g., life insurance), the Scale AA to be used in connection with Section 3800 is the unmodified scale that is currently in broad use by Canadian pension actuaries. The UP 1994 Table and Scale AA are contained in the Transactions of the Society of Actuaries, Volume 47 (1995), page 824 (Table 3).

### **Interest Rates**

**Current Standard** – Two-tier structure based on Government of Canada benchmark bond yields plus 50 bps.

**Proposal in original Exposure Draft** – Two-tier structure based on Government of Canada benchmark bond yields plus between 75 and 100 bps. The bps increase was to account for the illiquidity of pension benefits and not to cover either default risk or expenses, which were assumed to be very small or nil.

**Revised Exposure Draft** – Two-tier structure based on Government of Canada benchmark bond yields plus 90 bps.

**Rationale** – There were many submissions made to the ASB about this issue, most focusing on the liquidity adjustment. Some argued that introducing a liquidity adjustment was theoretically unsound and worked against the portability provisions of the legislation on pension plans. Others argued that the adjustment made sense, but that it was impossible to determine what an appropriate amount should be - that credit/liquidity were inextricably linked in various asset types and separating them was largely guesswork. Still others believed that an adjustment for credit risk was appropriate. The ASB was sent several technical papers on the subject. As well, the Designated Group asked Brendan George, FCIA, and Jeremy Bell, FCIA, (two actuaries who practice in the pensions and investments fields who were recommended to the ASB) to review the work previously done by Damon Williams, FCIA, CFA, Jim Cole, FCIA, CFA, and Graeme Robertson

FCA. This review concluded that a liquidity adjustment was appropriate, and the range chosen (75 bps to 120 bps) by Williams, Cole and Robertson made sense.

The ASB is (still) of the opinion that a liquidity adjustment is appropriate. A good example was contained in one of the submissions. It read as follows:

“Consider the following example. An individual is asked how much they are willing to pay for the following two bonds (Bonds A and B):

Bond A is a 30-year GoC bond, with a face amount of \$100,000 and a coupon rate of 4%.

Bond B is identical to Bond A, except that the purchaser must commit to holding the bond to maturity.

It is clear that a purchaser will be willing to pay more for Bond A than Bond B, as the holder of Bond A has the option of converting the bond to cash at practically any time during the next 30 years. On the other hand, the holder of Bond B is locked-in to holding the bond for the next 30 years and is, therefore, locked-in to the fluctuating value of the bond during this period. (In other words, the market value of Bond B would be discounted relative to the price of Bond A due to the difference in their liquidity). The liquidity of a deferred or immediate pension payable from a registered pension plan is typically more comparable to the liquidity of Bond B than Bond A. Therefore, if CVs are to be determined using a market-based approach (i.e., based on what the market would pay for the series of pension payments), a spread above GoC yields to reflect a premium for liquidity is appropriate.”

Although the ASB is of the opinion that an adjustment for liquidity is appropriate, we recommend that additional research be carried out by the CIA to refine the adjustment. Based on the research already available, however, we are comfortable that a 90 bps adjustment (which lies within the range proposed in the original Exposure Draft) is appropriate. We agree with the comments that it is impossible to completely isolate the financial impacts of liquidity and credit risk in relevant financial instruments and accept that a small element of the 90 bps adjustment may cover credit risk. If it does, however, it is only due to our inability to isolate it rather than any intent to include it.

The ASB also received comments on the question of whether “reversion to the mean” made sense, i.e., a third tier after 20 years or so, with a fixed interest assumption in the 6% range. The number of advocates for such a position, which was recommended by the Task Force on Pension Value Consistency, was small but they were quite strong in their opinions. The ASB did not see anything new in their position to move us from the market-based approach, which underlies the original Exposure Draft and the revised Exposure Draft. The ASB’s view is that pensions are very long fixed income instruments and should be valued in line with the market valuation of other very long-term fixed income instruments. Although the market for such instruments is thin, the ASB concluded that it was more appropriate to extend the yield curve than to revert (discontinuously) after 20 years or so to a fixed level based on historical information.

## **Inflation**

**Current Standard** – Equal to the Break-Even Inflation Rate (BEIR), the difference between the yields on non-indexed and indexed Government of Canada Bonds.

**Proposal in original Exposure Draft** – Equal to the Break-Even Inflation Rate (BEIR) less 0.25%.

**Revised Exposure Draft** – Equal to the Break-Even Inflation Rate (BEIR). The adjustment to the yield on indexed bonds will, therefore, be the same 90 bps as for non-indexed bonds.

**Rationale** – The CV Working Group and the ASB spent considerable time discussing the inflation assumption. Given the overall rationale that the commuted value should be the economic value of the obligations discharged by the pension plan by paying commuted values to the beneficiaries, the BEIR was considered to represent an appropriate assumption for future inflation since the BEIR reflects the price that investors are willing to pay for inflation protection. The ASB concluded that there was a lack of concrete evidence for adjusting this price, which reflects the value of a Government of Canada inflation protection promise, to reflect the value of a comparable promise made by a pension plan.

#### **Time Lag**

**Current Standard** – Two months.

**Proposal in original Exposure Draft** - Two months.

**Revised Exposure Draft** – two months initially, with a one month lag effective January 1, 2011.

**Rationale** – The ASB sees merit in moving to one month (partly because it is desirable to base calculations on market dates as close to the valuation date as possible, and partly because this would be beneficial to pension plans that want to immunize some or all of their pension liabilities with matching assets), but is delaying any such change in order that plan administrators and others have time to make changes to administrative procedures, etc.

#### **Rounding**

**Current Standard** – nearest multiple of 0.25%.

**Proposal in original Exposure Draft** – nearest multiple of 0.10%.

**Revised Exposure Draft** – nearest multiple of 0.10%.

**Rationale** – There was little comment on this issue in the submissions.

#### **Implementation Date**

**Proposal in original Exposure Draft** – Implementation to be effective February 1, 2009, with early implementation possible for solvency valuations if legislation/regulation permits.

**Revised Exposure Draft** – The target implementation date is April 1, 2009. It should be noted, however, that in some provinces any new Standard cannot be used until any appropriate provincial or federal pension legislation or regulation has been amended. Early implementation would be permitted, but only for pension solvency valuations and hypothetical wind-up valuations with a valuation date on or after the date of publication of the Final Standard and only if appropriate to the circumstances of the plan and if permitted by any applicable pension regulator.

**Rationale** – An implementation date of April 1, 2009 should allow plan administrators sufficient time to adjust systems, etc. As noted above, in some provinces implementation will need to be delayed until the appropriate legislation or regulation has been amended.

**Other Changes**

The opportunity has been taken to make some small drafting changes since the publication of the original Exposure Draft.

**OTHER**

1. The following information will be posted to the ASB website:
  - Submission from Brendan George, FCIA, and Jeremy Bell, FCIA.
  - Some illustrations prepared by Doug Chandler, FCIA, showing the impact on annuity factors of the changes in the original and revised Exposure Drafts. These are updates of the illustrations published in July 2008.
2. The current Standard is scheduled to expire on February 1, 2009. Since the implementation date of the Final Standard (target April 1, 2009) will occur after February 1, 2009, the ASB plans to extend the current Standard until the implementation date of the Final (new) Standard.

CCM

## APPENDIX

### COMMENTS RECEIVED AND DESIGNATED GROUP'S RESPONSES

This appendix contains a summary of the major issues raised by CIA members and other interested parties with regard to the original Exposure Draft for Revised Standards of Practice for Pension Commuted Values, together with the Designated Group's responses and the rationale for those responses.

Given the number and length of the received comments, this is only a summary and responses by the Designated Group have not always been included if a comment was made by only one person. Although the responses are described as those of the Designated Group (as is required by the Actuarial standards Board's (ASB) due process), they also represent the views of the ASB.

#### Overview

The following table summarizes the number of responses received, grouped into major stakeholder categories. Some of the responses had more than one signatory, so the total number of signatories is also shown. The comments in this summary include formal written submissions, as well as any discussion list postings on which Rob Smithen and/or Lynn Blackburn were copied.

Group	Total Responses	Total Signatories
Pension Regulators and Other Government Agencies	4	4
Plan Sponsors, Unions, and Administrators	6	11
Consulting Firms	4	Not known for all respondents
CIA Members and other individuals	35	55
<b>Total</b>	<b>49</b>	<b>70 + Consulting Firms</b>

For simplicity, the above groups are referred to as "regulators", "sponsors", "consultants", and "members", respectively. Responses that were limited to the Marriage Breakdown Standard (Section 4300) were not included. As well, only comments that were directly applicable to the original Exposure Draft were included. Historical perspectives, or discussions of related subjects, were considered, but are not included in this document.

Comments from consulting firms were of two forms. Three responses were specifically identified as the official position of the consulting firm itself. No additional data were provided in terms of how many actuaries were employed by the particular firm, or how

many were in agreement (or disagreement) with the stated position. There was a fourth response which, although it was not identified as the official position of the firm, was jointly signed by 47 actuaries employed by that firm. After some discussion, it was decided to include this response in the “consulting firms” category, even though it was not presented as a official position.

Responses are shown under the following categories:

1. Mortality
2. Interest – Tiers and Fixed/Market Approach
3. Interest – Additional Adjustment and Purpose
4. Inflation
5. Rounding and Time Lag
6. Implementation Date
7. Consistency with Marriage Breakdown Standard
8. Other Comments

### **1) Mortality**

#### *Comments Received*

There were 12 responses that expressed misgivings about the extension to 2025, coming from all groups. Some expressed varied support for alternate dates of 2015 or 2020. Generally, those in opposition to the extension to 2025 were concerned that mortality improvements might not continue at current levels, or that there was insufficient data to justify the change. Others also expressed concern that a projection to 2025 was not justified for older plan members. There were nine responses in favour of the extension to 2025, but some of those responses only offered qualified support.

Several responses from regulators, consultants, and members called for the development of a new Canadian table, with one suggestion to do so in lieu of extending the projection year.

Eleven responses endorsed the use of a generational table, coming from all groups. One response specifically endorsed the use of the UP1994 generational table. Other related suggestions included the following:

- One sponsor proposed the use of a plan-specific mortality assumption.
- One consultant called for a transitional structure to be implemented.
- One member suggested that a cap (i.e., 35 years) be placed on the improvements incorporated.

The concern about what impact this would have on legacy systems was expressed, but no one was of the opinion that this alone should be an impediment towards implementation.

One regulator suggested “revisiting this question at an appropriate time”, while one member’s response also opposed the use of a generational table, although they did not provide supporting justification for this position.

#### *Designated Group Responses*

As stated in the main memorandum, the ASB believes that the most equitable mortality table is a generational table. Consistent with many respondents, we hope for early

development and introduction of a Canadian table but, in its absence, we are not prepared to wait beyond January 1, 2011 to move to a generational table. We accept that no one knows for certain that mortality will continue to improve as it has in the past, but we do believe that is the best assumption at this time. Because the revised Exposure Draft requires a move to a generational table in 2011, we feel that a 2020 projection year, given that it would be used for less than two years, is more appropriate than a 2025 projection year.

## **2) Interest – Tiers and Fixed/Market Approach**

### *Comments Received*

There were 23 responses from all groups that expressed support for the market approach for determining interest rates. One regulator supported an economic value concept, believing there is no market for pension rights. Responses included the following points:

- One sponsor suggested using corporate (instead of government) bonds as the benchmark for multi-employer plans.
- One sponsor called for allowing each fund to use their own reserve funding discount rate.
- One consultant expressed concern that changes in liquidity spreads may not be accurately reflected going forward, but accepted government bonds as a practical solution.

Amongst supporters of the market approach, there was no opposition to the two-tier approach. Some members suggested moving to three tiers, or even a full yield curve.

Among the dissenting opinions, two members expressed a preference for the structure suggested by the Task Force on Pension Value Consistency (TFPVC) report.

Support for a fixed ultimate rate was mixed. One regulator felt it was problematic. Five members supported an ultimate rate that was fixed, or constrained in some fashion (i.e., long-term historical average). Two members specifically opposed a fixed ultimate rate. One member's response called for the inclusion of an equity component, while another was concerned that the Standard would not produce reasonable values if interest rates climbed to significantly higher levels.

### *Designated Group Responses*

On several occasions the ASB discussed whether a fixed interest rate after a period of time, as proposed by the TFPVC, made more sense than the market approach as used in the current Standard. We accept that no one knows for certain because there is no ready market to purchase pension benefits, but we believe that, were the market to exist, it would not price assuming a fixed interest rate after 20-30 years.

In terms of the appropriate marker that should be used to discount cash flows, we accept that Government of Canada rates plus a spread may not be the ideal approach. We will ask the CIA to study whether other bond markers - provincials, corporates and/or others - should be considered as the discount rate basis. We recognize that such other markers may lead to more volatility in the calculation of commuted values, a result that needs to be better understood before it is introduced.

### **3) Interest – Additional Adjustment and Purpose**

#### *Comments Received*

Opinions were divided on this issue.

Four sponsors accepted the rationale and the level of the liquidity adjustment, with two specifically supporting the high end of the range (e.g., 100 bps). Three members also supported the proposed adjustment, with two of those supporting the high end as well. Three consultants expressed support for the adjustment, with two stating a preference for the higher end. Amongst the regulators, one supported the liquidity argument, with a preference for the low end of the range (e.g., 75 bps), while another expressed no objection to a higher spread relative to the current Standard.

Eleven member responses rejected the liquidity adjustment argument. Other member comments related to the adjustment included the following:

- Use credit risk as a rationale instead of (or in addition to) liquidity risk.
- By rejecting the credit risk argument, a case could later be made for an additional credit adjustment, if that risk could be proved to be material.
- The adjustment should be only 50 bps.
- The end result is that sponsors appear to be trying to reduce commuted values.
- A spread should be used in the initial period, then bundle it in with a fixed ultimate rate.
- Use swap rates or provincials instead of adding an adjustment to Canadas.
- There is a possibility that the public will pressure regulators to reject the higher adjustment in favour of the current 50 bps.

Nine responses were received that were critical to various extents of the Williams, Cole, and Robertson paper justifying the liquidity adjustment. There were several calls for more diverse opinions, and/or further research to justify their conclusion, including asking the opinions of insurance and investment actuaries.

Other responses included the following points:

- One sponsor suggested delaying the implementation of the liquidity adjustment until a new mortality basis was introduced, and then doing both concurrently.
- One regulator suggested an adjustment that would vary with economic conditions, while one consultant specifically rejected that approach.

#### *Designated Group Responses*

For the reasons stated in the accompanying memo, we believe strongly that a liquidity adjustment should be added to the Government of Canada bond rate used in determining the appropriate discount rate in calculating commuted values. We accept the comments that the determination of the correct amount of that adjustment is difficult, if not impossible, given that, in assessing the extra yield for various fixed income instruments, credit and liquidity are hard to separate. However we saw little evidence in the material that was sent that dissuaded us from accepting the range we initially exposed (i.e., 75-100

bps). Given we had to select one point in the range for the new Standard, we opted for a point near the middle of the range. We accept that the research we received was only a first step in arriving at the best possible solution and, again, will ask the CIA to study the issue of liquidity and help us refine the adjustment when this Standard is next reviewed.

We strongly take exception to the view expressed by some respondents that we were trying to lower commuted values. We did not start with a fixed position on whether commuted values are too low or too high, but instead tried our best to arrive at the best theoretical solution. Although this Standard is used in solvency valuations, we view that as a regulatory requirement and did not make the funding impact on pension plans a major factor in arriving at the recommended Standard.

#### **4) Inflation**

##### *Comments Received*

Support for the additional 25 bps adjustment came from one sponsor and one consultant. One member supported the level, but not for liquidity reasons, while another member expressed unqualified support for the adjustment.

Two consultants were opposed to the 25 bps adjustment, and did not agree with the liquidity rationale. One called for additional justification, and an explicit inflation assumption, which is consistent with the Exposure Draft on Independently Reasonable Assumptions. One regulator had difficulty understanding why an indexed plan would have a different degree of liquidity, and called for more justification before the principle is adopted. Two member responses also indicated that they felt there was insufficient data to support the adjustment.

Other responses included the following points:

- One regulator supported an explicit inflation assumption, while another expressed interest in reviewing any work done to justify the addition.
- A member requested that the rates used to perform the calculations be readily available and free of charge.
- A member called for a monitoring process to ensure that the explicit recognition of inflation generates commuted values consistent with the traditional approach (a discount rate net of inflation).

##### *Designated Group Responses*

Within the ASB one of the most difficult questions we had to grapple with was how to best deal with inflation. We know that the real return bond market is not large and is still relatively new. We accept that the break even inflation rate (BEIR), the difference between the nominal bond yield and real return bond yield, is volatile but, on average, has been higher than the actual inflation rate over the past ten years. However, we also acknowledge that an inflation linked bond market does exist and, in the end, we decided that the result of that market should rule in determining the best inflation assumption. Given that position, we decided to retract our earlier recommendation to add an extra 25 bps spread in the discount rate for indexed pensions and, instead, now recommend the same spread for both indexed and non indexed pensions.

We regret that the explanation we included for the extra 25 bps adjustment in the cover memo to the original Exposure Draft was not clear. We now accept that there is insufficient evidence at present to adjust indexed bond yields beyond the corresponding adjustment in non-indexed bond yields.

## **5) Rounding and Time Lag**

### *Comments Received*

Amongst the comments received, all were either explicitly supportive of the change in rounding, or expressed no concerns. Two members went further, suggesting that they would also support a lower threshold, such as 0.01%, or no rounding at all.

Support for retention of the two-month lag came from one regulator, one consultant, and one member. The primary reason given for support was for ease of administration.

Four responses (one sponsor, three members) expressed support for a shorter period, the most popular response being one month.

There was an additional member suggestion pertaining to the frequency with which rates are updated. In addition to recommending that the swap curve be used as the interest basis, it was suggested that the rates at the end of the previous month be used, unless they changed by a significant amount (i.e., more than 25 bps).

### *Designated Group Responses*

We found widespread agreement with the move to 10 bps rounding and did not feel moving to a lower threshold, or to no rounding at all, was appropriate since this would have implied greater accuracy than exists in some of the assumptions.

The time lag issue was more difficult. While we did not receive many responses on this issue, one or two were persuasive in arguing that, for those pension plans that want to immunize all or a portion of their liabilities, the shorter the lag period the better. The ASB sympathizes with this rationale and concurs that it is desirable to base commuted values on market conditions as close to the calculation date as possible. Hence, the ASB decided to move to a one-month lag. We are aware, however, that immediately making such a move may be burdensome to plan administrators so the requirement for a one-month lag will not become effective until 2011.

## **6) Implementation Date**

### *Comments Received*

Four responses (one regulator, three sponsors) felt that the implementation date was too soon, and requested a delay. One sponsor also cautioned that legislation in Ontario, Quebec, and New Brunswick would need to be amended to reference the new Standard.

One consultant specifically recommended an effective date of December 31, 2008.

Two member responses endorsed an early implementation (i.e., the Standard should be available for use at year-end 2008). A year-end date (as opposed to Feb. 1) was also seen as more convenient for solvency valuation purposes.

Two consultants endorsed lobbying regulators to allow early adoption of the new Standards.

### *Designated Group Responses*

In general plan administrators and, at least one regulator, would like an extended implementation date, while a number of plan sponsors and consultants felt that December 31, 2008 should be the implementation date. The ASB recognizes that whatever implementation date is chosen will result in different jurisdictions allowing the use of the new Standard at different times, a result that is not ideal.

#### **7) Consistency with Marriage Breakdown Standard**

##### *Comments Received*

Six responses (one regulator, five members) either supported consistent bases, or saw no reason why the two should differ. One member stated that the lack of consistency contradicted the mission of the TFPVC.

Five responses (one consultant, four members) saw no problem with the inconsistency. One member response suggested that regulatory prescriptions precluded the need for consistency.

Some responses called for partial consistency (i.e., consistency on only some issues). One regulator endorsed a consistent calculation basis, other than for interest rates. One sponsor supported a common mortality basis, but not a common economic basis. One member response called for a common interest rate basis only.

One consultant stated that they believed a common calculation for both pension commuted values and Marriage Breakdown was in the public interest, and that perception of the profession would not be enhanced by having different bases.

### *Designated Group Responses*

The ASB debated this issue extensively before the original Exposure Draft was issued and felt that it was correct to have most elements of the two Standards be identical. We did agree there was logic to having the interest rate basis be distinct in the two Standards. We have asked the CIA's Actuarial Evidence Practice Committee, who will be recommending a revised Marriage Breakdown Standard to the ASB, to only recommend differences between the two Standards where there is a valid justification.

#### **8) Other Comments**

##### *Comments Received*

A few key comments were received that did not fall into the above categories.

- a) One regulator suggested including tables that showed the differences in commuted values under the various bases, so readers could more easily understand the impact.
- b) One consultant commented that frequent changes in the Standard "reflect poorly on the profession", and questioned apparent additions to the accuracy of a model that is "grounded in a lot of best guesses."

The following comments were also received from members:

- c) Four members questioned why the recommendations of the TFPVC were rejected.

- d) Two members specifically said they will not support this draft. One other would support the TFPVC report, if it applied to both commuted values and marriage breakdown. One response expressed overall support, without a discussion of the particulars.
- e) Guidance on the amount of time before recomputation was requested (i.e., the Standard should specify an upper limit on the length of time that a given calculation could be said to be reasonable before it should be re-calculated under updated conditions).
- f) More input from public policy authorities should be collected.
- g) The original exposure draft confuses the concepts of “market value” and “market price.” “Market value” is the true underlying value of a property, while “market price” is the price at which one can transact.
- h) The ASB should publish a detailed commuted value model, which would include the following:
  - o Spot interest rates at all observable durations;
  - o A rationale for spot rates beyond the longest observable duration; and
  - o A mortality assumption consistent with our most accepted science on the subject of mortality improvements.
- i) The name of Projection Scale AA should be clarified, since different versions exist.
- j) A “layman’s” explanation of the 75-100 bps adjustment would be useful.
- k) Standards should not be made simpler solely for the benefit of our publics.
- l) Four members felt that the time-frame for comments was either unreasonably short, or should be deferred to allow further research on certain topics (such as liquidity adjustments).

#### *Designated Group Responses*

The comment about frequent changes in the Standard reflecting poorly upon the profession was alluded to by a few respondents. The ASB recognizes that this Standard has to continue to evolve as more understanding around some of the key elements of the mortality and discount basis are better understood. Consequently, it is inevitable that there will, at some point in the future, be further changes to this Standard, but the ASB will try to keep the frequency of future changes to as few as possible.

Several members expressed very strong opinions about certain elements of the Standard and some of these are reflected in the comment above that they will not support the Standard. The ASB recognizes the very different points of view of various members but also believes despite all the debate over the years about this Standard, that there still is not universal agreement on the correct answer. However, we strongly hope that everyone will recognize that every opinion expressed has been listened to and deliberated upon and that a thoughtful result has emerged.

In point c) above, four members questioned why the recommendations of the TFPVC were rejected. The Notice of Intent contained the words: “the recommendations of the task force will be considered in developing the exposure drafts, but are not to be regarded as a blueprint for the final Standards.” The ASB did consider the recommendations of the task force. In general, if a particular recommendation of the task force was not adopted by the ASB, we have given the reason for the ASB’s decision either in this memo, or in the cover memo that accompanied the Exposure Drafts in June 2008.

In point 1) above, four members felt that the time-frame for comments was too short, or should have been deferred. Ten weeks were allowed for comments and about 50 responses were received – a very large number compared to exposure drafts on other standards. This suggests that people had sufficient time to respond. As noted earlier, we agree that additional research on some topics is needed, but the ASB does not think that doing nothing until this research has been completed is desirable.

**3800 PENSION COMMUTED VALUES****3810 SCOPE**

- .01 The standards in this section 3800 apply to an actuary's advice on the computation of commuted values, including commuted values to be paid from a pension plan that is registered under an Act when the method of settlement is a lump sum payment in lieu of an immediate or deferred pension resulting from death or individual termination of plan membership except for the specific circumstances ~~which~~that are described below in paragraph 3810.03. In particular, the standards in this section 3800 apply,
- in a jurisdiction whether or not there is legislation in that jurisdiction ~~which~~that specifically provides for portability of pension benefit credits,
  - regardless of limits imposed by the Income Tax Act (Canada) on amounts that may be transferred to other tax-sheltered retirement plans, and
  - under a reciprocal pension agreement between plan sponsors where the result of the reciprocal agreement is either to establish a pension amount determined on a defined contribution basis or to establish an account balance under a defined contribution provision of a plan, whether the account balance is to be converted immediately or subsequently into a pension.
- .02 The standards in this ~~S~~section 3800 also apply to the determination of a lump sum payment from the pension plan in lieu of an immediate or deferred pension to which a plan member's former spouse is entitled after a division of the member's pension on marital breakdown.
- .03 The standards in this section 3800 do not apply,
- under a reciprocal pension agreement between plan sponsors where the result of the reciprocal agreement is to provide defined pension benefits for the plan member,
  - to the determination of commuted values of pensions and deferred pensions payable from pension arrangements that are not registered under an Act,
  - to the conversion of defined pension benefits to a defined contribution arrangement where there is no termination of active employment,
  - to the determination of commuted values of pensions that have commenced payment and where commutation is at the discretion of the member, except as explicitly required under paragraphs 3810.02 or 3860.01, or
  - when calculating the capitalized value of pension benefits for actuarial evidence purposes, pursuant to pPart 4000, where such value does not relate to a commuted value payable from a registered pension plan.

**Act**

.04 For the purposes of this section 3800, “Act” means a pension benefits standards act of a province or the federal government of Canada or the Income Tax Act (Canada).

**Retirement Compensation Arrangements**

.05 ~~As~~Since Retirement Compensation Arrangements (RCAs) are not required to be registered under the Income Tax Act (Canada), this section 3800 applies to commuted values payable from an RCA only if the RCA is registered under a pension benefits standards act of a province or the federal government of Canada.

**3820 METHOD**

.01 *The commuted value should be independent of the financial position of the pension plan at the valuation date.*

.02 *The actuary should establish the period for which the commuted value applies before recomputation is required, taking into account the requirements of applicable legislation and the plan rules. Commuted values paid after the end of such period should be recomputed on the basis of a new valuation date.*

.03 *The commuted value should be adjusted for a reasonable rate of interest, taking into account the requirements of applicable legislation, between the valuation date and the first of the month in which the payment is made.*

.04 *The commuted value should reflect the plan member’s full benefit entitlement as a deferred or immediate pensioner, as may be applicable, determined under the terms of the pension plan. In the case of a deferred pensioner, the commuted value should include the value of the death benefit that would have applied before commencement of the deferred pension.*

.05 *The actuary should not calculate a commuted value using methods or assumptions that produce a commuted value smaller than the value computed in accordance with this section 3800. [Effective February 1, 2005]*

**Valuation date**

.06 The valuation date means the date as ~~at~~of which a value is being computed. Generally, this would be the date upon which the plan member becomes entitled to an immediate or deferred pension resulting from death or individual termination of plan membership, or as of such other date as may be determined either by legislation, by the plan rules, or by a plan administrator who is empowered to do so, on which the right to receive a commuted value becomes effective.

.07 In the event that recomputation is required in accordance with this standard, the actuary would establish a new valuation date. The actuary would make calculations at the new valuation date in accordance with the standard in effect on the new valuation date.

**Conditions attached to payment**

.08 Applicable legislation or the plan provisions may attach conditions to the payment of a portion of the commuted value when the plan is less than fully funded on a plan termination basis.

**Benefit entitlement**

.09 Where, at the valuation date, a plan member has the right as a deferred or immediate pensioner, as may be applicable, to optional forms of pension or optional commencement dates, and where such right is contingent on an action which-that is within the member's control and where it is reasonable to assume that the member will act so as to maximize the value of the benefit, the option which-that has the greatest value would be used in the determination of the commuted value. For example, where a member has terminated employment and, upon application, is eligible for a particular benefit that has a value, it is reasonable to assume that, upon acquiring expert advice, the member will apply for the benefit.

.10 However, where such right is contingent upon an action which-that is within the member's control and where it is not reasonable to assume that the member will act so as to maximize the value of the benefit, an appropriate allowance would be made for the likelihood and timing of such action. For example, where a member is continuing in employment and is entitled to an unreduced pension that commences upon termination of employment, it may not be reasonable to assume that the member will immediately terminate employment in order to maximize the value of the benefit. In determining the likelihood and timing of such action, the actuary may use group data, and the actuary would be prepared to justify the allowance that has been made.

.11 The commuted value determined by the actuary using these assumptions made in accordance with the preceding paragraphs 3820.09 and 3820.10 may prove to have recognized certain potential entitlements that are never realized, or may prove to have disregarded certain entitlements that ultimately provide value.

**Alternative methods and assumptions**

.12 The actuary may calculate a commuted value on methods and assumptions that differ from those prescribed in this standard only if

the resulting value is larger, and

such value is required by the plan terms or applicable legislation, or by a plan administrator who is empowered to specify the basis on which commuted values are to be determined.

### 3830 DEMOGRAPHIC ASSUMPTIONS

~~.01 The demographic assumptions are the same for all types of immediate and deferred pensions.~~

~~.02.01 Except for situations specifically noted below, the actuary should assume,~~

~~separate mortality rates for male and female members, and~~

~~if the valuation date is on or before December 31, 2010~~

~~mortality rates equal to the UP-94 Table projected forward to the year ~~2015~~  
20252020 using mortality projection Scale AA<sup>1</sup> (UP-94@~~2015~~20252020);~~

~~if the valuation date is on or after January 1, 2011~~

~~mortality rates equal to the UP-94 Table with generational projection using  
mortality projection scale AA.~~

~~.03.02 No adjustment should be made to reflect the health or smoker status of the member.~~

~~.04.03 The current age of the plan member should be used when valuing an immediate pension.~~

~~.05.04 If the plan provides a contingent benefit only to the person who is the plan member's spouse at the date of termination of membership, the actual age of the spouse, if any, should be used in the computation. If this information cannot be obtained, an appropriate proportion married and age difference between the plan member and spouse should be assumed.~~

~~.06.05 Where the plan provides a contingent benefit to a plan member's spouse and a change in the member's marital status after the valuation date is relevant to the determination of the commuted value, the actuary should make an appropriate assumption concerning the likelihood of there being an eligible spouse, and the age of that spouse, at the time of death.~~

~~.06 When valuing deferred pensions, including deferred pensions for a plan member who may also be entitled to an immediate pension, the normal retirement age should be used, except in the situation where the terminated plan member has the right to elect an earlier commencement date and the consequent early retirement pension exceeds the amount ~~which~~that is of actuarial equivalent value to the pension payable at normal retirement age. The retirement age should be determined in a manner consistent with paragraph 3820.09. [Effective ~~February 1, 2005~~Month XX, 20089]~~

~~.07 The demographic assumptions are the same for all types of immediate and deferred pensions.~~

#### **Mortality**

~~.08 The actuary would calculate commuted values that do not vary according to the sex of the plan member where the actuary is required to do so by applicable legislation or by the provisions of the plan or by the plan administrator if the administrator is so empowered by the provisions of the plan. In this case, the actuary would adopt a blended mortality approach by either developing a mortality table based on a combination of male and female mortality rates, or computing the commuted value as a weighted average of the commuted value based on male mortality rates and that based on female mortality rates. The relative proportions of males versus females would be appropriate for the particular plan.~~

<sup>1</sup> The UP-94 Table and Projection Scale AA were published in the Transactions of the Society of Actuaries, Volume XLVII (1995).

.09 If the requirement that commuted values do not vary according to the sex of the plan member is legislated and applies only to benefits earned after a particular date or only to a subgroup of plan members, the actuary may extend the use of a blended mortality approach to commuted values of benefits earned prior to such date or to commuted values of benefits of all members.

### 3840 ECONOMIC ASSUMPTIONS

.01 *The actuary should select economic assumptions that vary depending on whether the pension is fully indexed, partially indexed or non-indexed.*

.02 *If the valuation date is on or before December 31, 2010, the actuary should select economic assumptions that depend on the reported rates for the applicable CANSIM series for the second calendar month preceding the month in which the valuation date falls. If the valuation date is on or after January 1, 2011, the actuary should select economic assumptions that depend on the reported rates for the applicable CANSIM series for the calendar month immediately preceding the month in which the valuation date falls.*

.03 *The actuary should calculate two interest rates, one applicable to the first ten years after the valuation date and the second applicable to all years thereafter.*

.04 *The commuted value of a fully or partially indexed pension should be at least equal to the commuted value applicable to a non-indexed pension in the same amount and having similar characteristics.*

.05 *The actuary should determine from the CANSIM series the following three factors:*

CANSIM Series	Description	Factor
<del>B14070</del> (V122542)	7-year Government of Canada benchmark bond yield, annualized ( <u>final Wednesday of month</u> )	$i_7$
<del>B14072</del> (V122544)	Long-term Government of Canada benchmark bond yield, annualized ( <u>final Wednesday of month</u> )	$i_L$
<del>B14081</del> (V122553)	Long-term real-return Government of Canada bond yield, annualized ( <u>final Wednesday of month</u> )	$r_L$

*Note that the factors ~~provided~~ determined above are not ~~reflect~~ the reported CANSIM series, but the annualized value of the reported figure.*

.06 *The actuary should also determine a fourth factor, calculated as follows:*

$$r_7 = r_L * (i_7 / i_L)$$

.07 *The actuary should determine the interest rates as follows:*

	Non-Indexed	Indexed
First 10 Years	$i_{1-10} = i_7 + $ <del>0.75% to 1.00%</del> <sup>2</sup> <del>0.50%</del> <u>0.90%</u>	$r_{1-10} = r_7 + $ <del>0.50% 1.00% to 1.25%</del> <sup>2</sup> <u>1.00% to 0.90%</u>
After 10 Years	$i_{10+} = i_L + 0.5 * (i_L - i_7) + $ <del>0.75%</del> <u>to 1.00%</u> <sup>2</sup> <del>0.50%</del> <u>0.90%</u>	$r_{10+} = r_L + 0.5 * (r_L - r_7) + $ <del>1.00%</del> <u>to 1.25%</u> <sup>2</sup> <del>0.50%</del> <u>0.90%</u>

<sup>2</sup> The add on has yet to be determined but is expected to be in the ranges indicated.

.08 *The actuary should calculate the commuted value of a non-indexed pension using a two-tier interest rate of*

$i_{1-10}$  for the first ten years and  $i_{10+}$  thereafter.

.09 *The actuary should calculate the commuted value of a pension ~~which~~that is fully indexed to increases in the Consumer Price Index using a two tier-~~interest~~ rate of*

$r_{1-10}$  for the first ten years and  $r_{10+}$  thereafter.

.10 *For pensions that are partially indexed to increases in the Consumer Price Index, the actuary should determine the implied rates of increase in the Consumer Price Index in the first 10 years and thereafter that make the above assumptions for non-indexed and fully indexed pensions internally consistent. The actuary should then determine the rates of pension escalation that are produced by applying to those implied rates of increase in the Consumer Price Index the partial indexing formula of the plan. The actuary should determine the adjusted interest rates applicable to partially indexed pensions by appropriately reducing on a geometric basis the non-indexed rates of interest to reflect the rates of pension escalation.*

.11 *Where increases in pensions are related to increases in the average wage index, the actuary should assume that the average wage index will increase at rates that are one percentage point higher than the implied rates of increase in the Consumer Price Index.*

.12 *A pension that is indexed according to an excess interest approach involves increases that are linked to the excess of formula A over formula B, where A is some proportion of the rate of return on the pension fund or on a particular class of assets, and B is a base rate or some proportion of the rate of return on another asset class. In determining the interest rates under formula A and formula B, the actuary should use the interest rate applicable to a non-indexed pension as a proxy for the rate of return on the pension fund or on any particular asset class for which the rate of return is expected to be equal to or greater than ~~the rate of return on long-term provincial bonds~~the non-indexed interest rates determined in accordance with paragraph 3840.07.*

.13 *Prior to calculating the commuted value, the actuary should round the rates of interest determined in accordance with this subsection 3840 to the nearest multiple of 0.2510%. The actuary should round only the interest rates to be used in the calculation of the commuted value. The actuary should not round any rates of interest, increase or escalation used in calculations prior to the final step of the determination. [Effective February 1, 2005Month XX, 20089]*

### **Pension index frequency**

.14 *For an indexed pension, the actuary would apply the indexed interest rates as determined above without adjustment only if the frequency of indexing is equal to the payment frequency. Reasonable approximations may be used to calculate an adjustment that takes into account the specific circumstances of the situation regarding payment frequency, indexing frequency, and time and amount of the first increase.*

**Pension indexed on an excess interest formula**

- .15 If the pension is indexed on an excess interest formula and the particular asset class is one for which the rate of return is expected to be less than the ~~rate of return on long term provincial bonds~~non-indexed interest rates determined in accordance with paragraph 3840.07, the actuary would appropriately reduce the rate of interest to reflect the actuary's expectation of the difference between the non-indexed interest rates determined in accordance with paragraph 3840.07~~rate of return on long term provincial bonds~~ and the rate of return on the particular asset class. In determining the expected rate of return on a particular asset class for this purpose, the actuary would be guided by the current economic environment as well as long-term historical experience.

**Other modifications**

- .16 Where benefit adjustments are based on one of the above approaches but are either modified by applying a maximum or minimum annual increase, with or without carry forward of excesses or deficiencies to later years, or modified by prohibiting a decrease in a year where the application of the formula would otherwise cause a decrease in pension, the actuary would adjust the interest rates otherwise applicable, based on the likelihood of the modification causing a material change in the pension payable in any year. In determining such likelihood, the actuary would be guided by the current economic environment as well as long-term historical experience. The actuary would be prepared to justify any such adjustment or lack of adjustment to the interest rates.
- .17 Where increases in benefits are not determined by reference to increases in the Consumer Price Index, the actuary should ensure that the commuted value is not inconsistent with the values of non-indexed pensions and fully indexed pensions.

**Alternative calculation method**

- .18 For pensions that are either fully or partially indexed, rather than using the implicit approach described above, the commuted value may be determined explicitly by indexing each expected payment based on the indexing rate that makes the assumptions for non-indexed and fully indexed pensions, prior to rounding under paragraph 3840.13, internally consistent.

**3850 DISCLOSURE**

- .01 *When communicating the amount of the commuted value of a member's pension, the actuary should provide,*
- a description of the benefit entitlements involved,*
  - a description of the actuarial assumptions used in determining the commuted value and the rate of interest to be credited between the valuation date and the date of payment,*
  - a statement of the period for which the commuted value applies before recomputation is required,*

*when the payment of a portion of the commuted value is subject to a condition based on the financial position of the plan, the additional contribution required for the payment of the full commuted value to be made or the recommended schedule for payment of the balance of the commuted value, if applicable, and a statement as to whether the commuted value has been computed in accordance with this standard of practice.*

.02 *Where the commuted value has not been determined in accordance with this standard of practice, the actuary should clearly state that the calculation is not in compliance with this standard and disclose all areas of noncompliance and the reasons for the noncompliance.*

.03 *When communicating to the plan administrator an actuarial basis to be used in determining commuted values, the actuary should provide a statement that the actuarial basis is in accordance with this standard of practice.*

### **Disclosure of plan values which differ from this standard**

.04 *In a situation where the use of commuted values (~~in this subsection 3850~~ called plan values in this subsection 3850), that are different from those computed in accordance with this section 3800, is required by the plan terms or applicable legislation, or by a plan administrator who is empowered to specify the basis on which commuted values are to be determined, the following disclosure requirements are applicable:*

*if the plan values are lower, the actuary should disclose that the commuted values so calculated are in accordance with the plan or the applicable legislation but not in accordance with the standard, or*

*if the plan values are higher, the actuary should disclose that the commuted values so calculated are in accordance with the plan or the applicable legislation and the standard.*

.05 *Where the actuary is required to calculate commuted values that do not vary according to the sex of the plan member, and where that requirement applies only to benefits earned after a particular date or only to a subgroup of plan members, the actuary should describe the extent to which the actuary's blended mortality approach has been extended to benefits earned before the particular date or to benefits of all members.*

.06 *Where the actuary uses assumptions or methods described in this standard to calculate a commuted value in a situation where this standard does not apply, the actuary should not state or imply that the commuted value has been computed in accordance with this standard.*  
 [Effective ~~February 1, 2005~~Month XX, 2009]

### 3860 REDUCED LIFE EXPECTANCY

.01 The standard in this subsection 3860 applies to an actuary's advice on the computation of commuted values, from a registered pension plan, where the right to receive the lump sum is based on subsection 51.1 of the regulations to the *Ontario Pension Benefits Act*. This standard may also be applicable in other directly comparable situations.

.02 This standard does not apply where the right to receive a lump sum is not conditional upon medical certification, under legislation or plan provisions, even if the former member is known to be terminally ill.

.03 | All standards set out in preceding subsections of section 3800 apply, except as superseded by the following recommendations.

.04 *The commuted value should be calculated as of the date of the medical certificate specifying that the former member has life expectancy less than two years , even if other conditions for payment of the benefit (such as spousal consent) are not met until a later date.*

.05 *The commuted value should be adjusted for interest and benefits paid to the date of payment.*

.06 *The computation should not be adjusted to reflect the actual death or change in health of the former member after the valuation date. However, if a former pension plan member becomes eligible for immediate commencement of a pension after the date of the medical certificate and prior to payment of the benefit, this eligibility should be reflected in the calculation.*

.07 *If the former member is entitled to a commuted value transfer based on plan provisions or legislation that is not conditional on reduced life expectancy, the amount payable should be the greater of the amount calculated in accordance with this subsection 3860 and the amount computed in accordance with subsections 3820 through 3840 without regard to shortened life expectancy. [Effective February 1, 2005]*

#### **Benefit Entitlement**

.08 The commuted value would reflect the plan member's full benefit entitlement as a deferred or immediate pensioner, as may be applicable, determined under the terms of the pension plan.

There are three possible cases:

- (a) a former member with deferred pension entitlement, not eligible for immediate commencement of pension.

In this case, the commuted value would reflect the present value of the death benefits that would be payable in respect of the former member. For this purpose, the value of the death benefit would be calculated as of the valuation date, assuming the former member died as of the valuation date.

- (b) a former member with deferred pension entitlement, eligible for immediate commencement of pension.

In this case, the lump sum value would be the greater of the amount determined per as in (a) above and a value determined as if the individual had retired at the date of valuation and elected the most favourable combination of the highest surviving spouse pension permitted by the plan (if there is an eligible spouse) and the longest guaranteed period available under the plan. This value should be determined as for pensioners per in (c) below.

- (c) a former member in receipt of pension.

In this case, the commuted value would reflect the present value of pension payments for a period certain of four months from the valuation date, any additional guaranteed payments and any survivor benefits potentially payable.

### **Disclosure**

- .09 When communicating the amount of the commuted value of a member's pension, the actuary would also provide a description of the survival period assumption.