MARCH 2023

FASB Long-Duration Targeted Improvements—

A Discussion of Enhanced Disclosures

A Public Policy White Paper

American Academy of Actuaries
actuary.org

Developed by the Long-Duration Contracts Enhanced Disclosures Work Group of the Life Financial Reporting Committee of the Life Practice Council of the American Academy of Actuaries

Life Financial Reporting Committee
Long-Duration Contracts Enhanced Disclosures Work Group

Charles K. Chacosky, MAAA, FSA—*Chairperson*

Katie Cantor, MAAA, FSA	Weiling Lao, MAAA, FSA
Derek Farmer, MAAA, FSA	Jie Ming, MAAA, FSA
Bruce E. Fuller, MAAA, FSA	Carlos Orozco, MAAA, FSA
Gary Hu, MAAA, FSA	Duncan H. Szeto, MAAA, FSA
Marc Lambright, MAAA, FSA	Jingjing Xu, MAAA, FSA

Special thanks to those who assisted in the review of this white paper: Leonard J. Reback, MAAA, FSA; Jill A. Garofalo, MAAA, FSA; and Michael J. Lockerman, MAAA, FSA.

AMERICAN ACADEMY of ACTUARIES

AMERICAN ACADEMY OF ACTUARIES
1850 M STREET NW, SUITE 300, WASHINGTON, DC 20036
202-223-8196 | ACTUARY.ORG

March 2023

Contents

Background & Introduction

In 2018, the Financial Accounting Standards Board (FASB) issued an accounting standards update (ASU 2018-12, Financial Services—Insurance (Topic 944) *Targeted Improvements to the Accounting for Long-Duration Contracts*) with the stated goal of improving financial reporting for insurance companies that issue long-duration contracts such as life insurance and annuities. The stated objective of the ASU (frequently referred to as long-duration targeted improvements or "LDTI") is to improve, simplify, and enhance the financial reporting of long-duration contracts, by providing financial statement users with useful information in a timely and transparent manner. At its September 30, 2020, meeting, FASB affirmed its decision setting the effective date of ASU 2018-12 for calendar year-end SEC filers other than smaller reporting companies (SRCs) as January 1, 2023. Other calendar year-end entities will be required to adopt the ASU on January 1, 2025.

This white paper focuses on certain considerations in implementing LDTI's enhanced disclosures. FASB stated in its Basis for Conclusions section that the intended benefits of the ASU 2018-12 new enhanced disclosure requirements are:

> *Specifically, a rollforward of beginning to ending balances of the liability for future policy benefits, policyholder account balances, market risk benefits, separate account liabilities, and deferred acquisition costs will inform financial statement users about the components of changes in those asset and liability balances during the reporting period that they would not be able to otherwise discern by observing the total change in the asset or liability balances. The Board noted that users of financial statements indicated that these reconciliations would be one of the most useful disclosures because of the numerous factors that cause the changes in those balances, thus providing decision-useful information in assessing the performance and expected performance of an insurance entity. In addition, users will benefit from other information that is useful in their analyses, including measurement assumptions, changes in those assumptions, actual experience compared with expected experience, and crediting rate guarantees.*[1]

1 ASU 2018-12 BC7 e.

Enhanced disclosures under LDTI that may involve input from actuaries include:

- Tabular rollforwards from beginning to ending balances of:
  - liability for future policy benefits (LFPB) and additional liability for annuitization, death, or other insurance benefits (such additional liability referred to in the past and in this paper, for simplicity, as "SOP 03-1" liabilities);
  - policyholder account balances as described in paragraph 944-40-25-14, but excluding separate accounts described in paragraph 944-80-25-2 GA Policyholder Account Balance (PAB);
  - separate account (SA) liabilities;
  - market risk benefits (MRB); and
  - deferred acquisition costs (DAC) and other balances that are required to be amortized on a basis consistent with DAC, such as but not limited to sales inducements assets (SIA) and unearned revenue liability (URL).
- For LFPB, SOP 03-1, MRB, and DAC, information about (and quantification of change impact from) significant:
  - inputs, judgments, assumptions, and
  - methods used in the measurements of the balances listed above.

Primary Source Materials

This white paper is intended to outline FASB's long-duration contract enhanced disclosure concepts and explain some considerations for their implementation. Primary source materials referenced in this overview include:

- Accounting Standards Update 2018-12, Financial Services—Insurance (Topic 944) *Targeted Improvements to the Accounting for Long-Duration Contracts*
- ASC 270: *Interim Reporting*
- ASC 820: *Fair Value Measurements and Disclosures*
- *The AICPA Audit and Accounting Guide—Life and Health Insurance Entities* ("Audit Guide")
- The August 2022 exposure draft, *Application of ASU 2018-12 to the Accounting for Long-Duration Contracts under U.S. GAAP*, as developed by the Long-Duration Contract Work Group of the Financial Reporting Committee of the American Academy of Actuaries.

This white paper discusses considerations and issues that the work group found to be relevant to the preparation of certain disclosures and is also intended to encourage discussion on the issues set forth below and to provide a framework to foster dialogue among actuaries and other stakeholders, such as management and auditors involved in the process. It is not intended to guide actuaries in performing the underlying calculations of LDTI assets or liabilities (any such values contained herein are only illustrative in nature). Also, this white paper is not intended to directly address any LDTI transition disclosures.

Considerations When Implementing the Enhanced Disclosures

Aggregation/Disaggregation Levels

FASB concluded that useful disaggregation of disclosures depends on the characteristics of the contracts that an insurance entity (entity) writes and on various entity-specific factors. FASB did not prescribe any specific factor to be used as the basis for aggregating cohorts of contracts into disclosure 'categories'. Instead, FASB decided that entities should aggregate/disaggregate the data into new disclosure categories such that "*useful information is not obscured by either the inclusion of a large amount of insignificant detail or by the aggregation of items that have significantly different characteristics.*"[2] However, FASB mandated that "*an insurance entity should not aggregate amounts from different reportable segments according to Topic 280, if applicable.*"[3]

Discussion Points

Q-A1. At a high level, why change the disclosure aggregation/disaggregation levels?

A-A1. Prior to LDTI, there are limited U.S. GAAP requirements to disclose information about long-duration life contracts and often these were aggregated at the reporting segment level. Segment reporting often combines data from policies with different characteristics, which effectively limits the usefulness of some of the information. Thus, the work group anticipates that entities will need to establish new accounting policies and practices covering LDTI disclosure aggregation/disaggregation processes and how products are assigned into disclosure categories.

2 ASU 2018-12 BC95.
3 ASC 944-40-55-13H.

Q-A2. What aggregation concepts do actuaries consider when assigning product/issue year cohorts into LDTI's disclosure 'categories'?

A-A2. Actuaries assisting in selecting the new enhanced disclosures aggregation/disaggregation of products into LDTI categories typically consider items such as:

- Those identified in LDTI to consider—reportable segment, type of coverage, geography, market, or type of customer (e.g., individual or group).
- Product pricing eras—if the entity made significant changes in pricing/underwriting of a product, then such disaggregation may be indicated.
- Characteristics of the liability or asset subject to the disclosure.
- Significant use of reinsurance cessions, hedging and other risk-transfer techniques.
- The rollforwards of DAC (and other balances that are amortized on a basis consistent with DAC) are required to be disaggregated in a manner that is consistent with the related liability disclosures.
- Other disclosures presented by management outside the GAAP financial statements (e.g., earnings reports and statutory filings such as Management's Discussion & Analysis).
- Information regularly viewed by the chief operating decision maker for evaluating financial performance.[4]
- Other information that management or financial statement users ask for or use to evaluate the insurance entity's financial performance or that is used to make resource allocations.

Q-A3. What additional aggregation concepts might actuaries consider for the Market Risk Benefit (MRB) disclosures?

A-A3. Because MRBs are reported at fair value and MRBs (see **"MRB Rollforwards and Disclosures"** for more detail) have various features included in differing products, actuaries will consider concepts such as:

- The MRB fair value accounting model may have some MRBs in an asset position and others in a liability position at a valuation date. The work group anticipates the MRB rollforward beginning and ending amounts may be the net value. However, as required by 944-40-50-7B(c), the MRB rollforwards must be reconciled to the amounts reported in the balance sheet. Thus, actuaries would provide the MRB ending amounts separately (asset and liability).

4 ASC 944-40-55-13G.

- Because LDTI requires some MRB information to be disclosed in its GA PAB rollforward and some in its SA rollforward, actuaries might want to consider bifurcating the MRB rollforward between those associated with GA products (such as an indexed annuity) and those associated with SA products (such as a variable annuity) as illustrated in 944-40-55-29G. Otherwise, another reconciling note may be appropriate.
- For MRBs, considering the type of coverage may be more complex than traditional life.

Annual and Quarterly LFPB and SOP 03-1 Rollforwards

LDTI newly requires, for annual and interim reporting periods, a year-to-date disaggregated tabular rollforward of the beginning balances to the ending balances of the LFPB (for traditional and limited-payment contracts as described in ASC 944-40-25-11 and 25-28) and the additional liability for annuitization, certain death benefits such as universal life secondary guarantees (ULSG), or other insurance benefits as described in ASC 944-40-25-26 through 25-27A (referred to in the past as "SOP 03-1" liabilities).

For SEC filers subject to interim reporting, the disaggregated rollforwards are to be presented on a year-to-date basis each quarter during the fiscal year (typically a calendar year for life insurance companies). Consistent with the guidance in ASC 270-10-45-17 (*Adjustments Related to Prior Interim Periods of the Current Fiscal Year*) and ASC 250-10-45-25 (*Corrections Related to Prior Interim Periods of the Current Fiscal Year*), there typically would be no restatement of previously reported interim financial information related to a change in an accounting estimate such as unlocking of the actuarial assumptions during the third quarter of a fiscal year. Thus, for SEC filers, the work group believes that the second quarter rollforward would generally be the sum of the first quarter as reported plus the new data from the second quarter, as opposed to performing a year-to-date two-quarter recalculation and subtracting the first quarter to back into the second quarter values. Correspondingly, the third quarter rollforward would be the sum of the year-to-date second quarter amount as reported plus the new data from the third quarter. The year-end rollforward would be the sum of the year-to-date third quarter amount as reported plus the new data from the fourth quarter.

LDTI provides additional guidance regarding the components of these disclosures in three different ways: some items are specified as required by LDTI (via the use of "shall" or "should"), some are illustrated in LDTI, and some others are suggested in LDTI (via the use of "could"). For example, ASC 944-40-50-6 a. <u>requires</u> (via the use of "shall") that the LFPB rollforwards: (a) be gross of any related reinsurance recoverable and (b) present expected future net premiums separate from expected future benefits. Noting also that the same paragraph states that actual versus expected experience needs to be disclosed but can be disclosed either as a component of the rollforward or separately. Paragraph 944-40-50-13I illustrates "derecognition" as an element of the rollforward but it is not required.

Additionally, ASC 944-40-50-6 b. <u>requires</u> certain information either as components of the rollforward or as accompanying information of each of these disaggregated rollforwards be presented as follows:

1. the undiscounted and discounted ending balance of expected future gross premiums and expected future benefits and expenses in the LFPB (not required for SOP 03-1);
2. actual experience during the period for mortality, morbidity, and lapses, compared with what was expected for the period;
3. the amount of revenue and interest recognized in the statement of operations;
4. the amount of any related reinsurance recoverable;
5. the weighted-average duration of the liability; and
6. the weighted-average interest rates, a description of the technique(s) used to determine the interest rate assumption, and information about any adjustments to observable market information.

ASC 944-40-50-6 a. states that the disaggregated LFPB rollforward <u>shall</u> separately include the amounts of the following items:

1. the present value at the original discount rate of the expected net premiums at the beginning and end of the period;
2. the present value at the original discount rate of expected future policy benefits at the beginning and end of the period; and
3. the amount of any related reinsurance recoverable as of the end of the period.

ASC 944-40-50-6 d. requires disclosures for traditional and limited-payment contracts, of qualitative and quantitative information about adverse development that resulted in an immediate charge to current-period net income because of net premiums exceeding gross premiums.

The work group notes that the ASC 944-40-55-29E disaggregated LFPB rollforward illustration did not illustrate the discounted ending balance of expected future gross premiums as required by ASC 944-40-50-6 b 1. To be consistent, when disclosing the discounted ending balance of expected future gross premiums, the actuary may consider using the same discount rate (or rate curve) utilized for the disclosing the related discounted ending balance of expected future benefits.

ASC 944-40-55-13I states that the components of each of these disaggregated LFPB rollforward presented could include the amounts of the following items:

1. Issuances
2. Interest accrual
3. Net premiums or assessments collected
4. Benefit payments
5. Derecognition (lapses or withdrawals)
6. Effect of actual variances from expected experience
7. Effect of changes in cash flow assumptions
8. Effect of changes in discount rate assumptions

For annual reporting periods, and to the extent required by ASC 270 *Interim Reporting*, LDTI in 944-40-50-7(a) requires disclosure information about the significant inputs, judgments, assumptions, and methods used in measuring the LFPB and SOP 03-1 liabilities. Moreover, ASC 944-40-50-7(b) requires disclosures of the period changes to these items and the amount of the impact on the liability from such changes.

Discussion Points

Q-B1. In general, how would the actuary's supporting efforts for disclosures change from common practices prior to LDTI adoption?

A-B1. The enhanced disclosures will require more data extracts and model runs than pre-LDTI GAAP reporting and add new judgmental applications. These new rollforwards may necessitate numerous successive valuation runs (layered step-by-step) to quantify each movement's impacts on the reserve balance to satisfy LDTI requirements.

Because the LFPB beginning and ending balances are calculated on a present value basis and are bifurcated between the impact arising from net premiums and benefits, some of the LDTI rollforward reporting period items may need to be quantified by stepped reruns or specific extracts of the valuation model. ASC 944-40-55-29E also includes two-line items for the present value of future net premiums and future benefits arising from "Issuances" that occurred during the period. Because there is no direct or consistent relationship between an entity's actual interest earned and the two bifurcated ASC 944-40-55-29E "Interest accrual" line items, model run extracts may be needed to quantify the bifurcated "Interest accrual." However, some actuaries may be able to estimate the LDTI "Interest accrual" using an algorithm applied to actual interest earned during the period. Similarly, because an LFPB rollforward may be comprised of dozens of cohorts with individualized net premium ratios (NPRs), model extracts may be needed to quantify the "Net premiums collected" during the period. However, some actuaries may be able to estimate the LDTI "Net premiums collected" during the period using an algorithm applied to actual gross premiums during the period.

Q-B2. When performing LFPB rollforward analyses, the step order matters—does LDTI specify the timing/order of each of the LFPB rollforward steps?

A-B2. No. However LDTI illustrates the first step as measuring the difference between the beginning of the period balance (equal to the prior period's ending balance using its current discount rate) and that liability using the original locked-in discount rate. Next, ASC 944-40-35-6A(a)1 states that the effect of any assumption unlocking during the period (changes in the prospective cash flow assumptions, if any) as well as the true-up impact (updating for actual experience) made during the period is measured as of the beginning of the reporting period. For SEC filers, the work group also believes that if the entity had multiple updates during a reporting year, then their year-to-date information would be the mathematical sum of the individual quarterly remeasurement gains/losses (based upon the views expressed by FASB staff on its November 15, 2018, webcast, *IN FOCUS: FASB Accounting Standards Update on Insurance*). LDTI illustrates in 944-40-55-29E, the last analytical step (in the present value data presentation) as the impact at the end of the period from updating the liability balance using new end of period discount rate required by 944-40-35-6A(b)1. However, the other intervening step details are *suggested* by LDTI—therefore the entity can use its judgment in choosing other specific line items and their step order in the rollforwards.

Q-B3. What would an actuary consider when calculating the required actual/expected (A/E) comparative variance line items in the LFPB rollforward step?

A-B3. ASC 944-40-50-6b requires the reporting of comparatives between actual experience during the period (for mortality, morbidity, and lapses) with that which was expected for the period (commonly referred to by actuaries as a form of an 'A/E' analysis) either as a component of the rollforward or as accompanying information. LDTI, in 944-40-55-29E, illustrates this A/E variances in two single line items (one row combined for present value of net premiums and a second row combined for present value of benefits). However, an entity might consider how it has been reporting such A/E comparatives and if a more granular breakout is warranted (e.g., showing mortality and lapse A/E impacts separately from each other).

Based on LDTI's required timing of this remeasurement gain/loss, the "expected" (in the variance between actual and the expected reporting) would be the expected in effect for the current period (not the expected from the prior period). Further, this A/E variance impact would be those other than the amounts that are reflected in the rollforward as "*Effect of changes in cash flow assumptions.*"

Actuaries might typically develop a reasonable disclosure approach that considers the unique quarterly impact that can arise from 'open' issue-year cohorts (those cohorts with existing business from prior periods and new business entering during the current period) and apply such approach consistently. For such 'open' cohorts, the NPR for existing business can change due to the cohort mix of the quarter's new entrants without a revision of the cohort's assumptions or variance in mortality or lapse experience. Often this 'open' cohort impact may not be material as the LFPB is typically small in the issue year or the mix does not vary significantly. If material, some actuaries might quantify such impact in the A/E rollforward line, the approach utilized and how it impacts quarterly reporting.

Some actuaries might show the differential between the A/E rates (e.g., for the period, the actual lapse rate was 1.79%, which was 0.29 percentage points higher than the expected lapse rate of 1.50%).

Q-B4. Other than the A/E, are the 944-40-55-13I suggested line items in the LFPB rollforward steps the actual impact on the liability, the expected impact on the liability, or a combination?

A-B4. This depends directly on how the entity has exercised its option as provided in ASC 944-40-35-6, which provides a limited update/no update option:

> *"The [cohort] liability for future policy benefits shall then be updated for actual experience at least on an annual basis.… An insurance entity need not update the liability for future policy benefits for actual experience more often than on an annual basis, unless cash flow assumptions are updated."*

If the entity updated the LFPB for actual experience for all of the cohorts included in a disclosure category, then the beginning and ending liability in that disclosure category is reflective of actual experience for the period. Therefore, the rollforward line items (except the A/E line) would be the LFPB impact from the actual experience during the period.

Conversely, if the entity did not update the LFPB for actual experience for any of the cohorts included in a disclosure category, then the ending liability in the disclosure category is reflective of expected experience during the period. Therefore, that period's impact arising from the other line items would be from the expected experience during the period.

If the entity updated the LFPB for actual experience for some, but not all of the cohorts included in the disclosure category, then a bifurcated process is necessary. For those cohorts that were updated, their period contribution to the other line items in the category would be based on their actual experience. For those cohorts that were not updated, their period contribution to the other line items in the category would be based on expected experience.

Q-B5. What other events might an actuary consider in the LFPB rollforwards?

A-B5. ASC 944-40-55-29E illustrates many routine events as individual rollforward line items (such as the net premium impact on LFPB from gross premium collection), but quantification of other events might be useful depending on the entity's facts and circumstances and whether these other items are material. If the impact of such other items is immaterial, those might be presented simply as a reconciliation amount (the disaggregated rollforwards must reconcile to the aggregate ending carrying amount in the balance sheet). A discussion of some of these other reserve movements is included next.

As stated above, ASC 944-40-55-13I suggests that derecognition events are lapses or withdrawals. However, there are several other derecognition events that impact the LFPB. For example, deaths are a derecognition event for life contingent single premium payout annuities.

Some entities might combine products issued from different subsidiary life insurance companies in a cohort and/or disclosure category. At some future date, the entity might divest itself from such a subsidiary. That would be another derecognition event and appropriately could be an additional explanatory "other" line item in the disclosures as opposed to being included with elective policyholder lapses in the disclosures.

ASC 944 also provides examples where policyholder elections result in contract modifications or internal replacements which are to be evaluated to determine if the original contractual liability should be derecognized. Such derecognition events could be an additional 'other' line item (or perhaps included with lapses). Also, ASC 944 provides examples where the policyholder election does not trigger derecognition (such as certain reductions in coverage) but could impact the liability balance. Those events effectively represent changes to the in-force data and the impact, if any, on the liability could be (a) included with the impact from updating the NPR or (b) presented directly as another line item or items in the LFPB rollforward (such as "other").

ASC 944-40-50-6a requires the LFPB rollforward to be gross of reinsurance ceded (which is consistent with the GAAP balance sheet presentation) and the expected future net premiums presented separately from expected future benefits. ASC 944-40-55-29E illustrates the "*Net liability for future policy benefits*" before reinsurance ceded as the difference between the balance at the end of the period for the "*Present value of expected future policy benefits*" and the "*Present value of expected net premiums.*" However, LDTI also specifies that at the reserve cohort level, when that subtraction results in a negative amount, then a zero floor must be applied to that cohort's liability. In such instances, the difference between "*Present value of expected future policy benefits*" and the "*Present value of expected net premiums*" will not equal the "*Net liability for future policy benefits.*" Thus, any required zero flooring will need to be quantified and perhaps (a) included with the impact from updating the NPR, or (b) presented directly as another line item (such as "flooring impact") in the LFPB rollforward, or (c) explained in some reconciliation note specific to such flooring impact.

LDTI is silent on disclosure requirements for the deferred profit liability (DPL) associated with limited-pay contracts with LFPB (such as 10-pay life and life contingent single premium payout annuities). As mentioned above, the disaggregated LFPB rollforwards must reconcile to the aggregate ending carrying amount in the balance sheet. Therefore, if the cohort's DPL is included in the balance sheet with its LFPB balance, then it might be necessary to include the DPL in the LFPB rollforward or as a reconciliation amount. If the DPL is reported separately on the balance sheet, then an entity may include in its LFPB disclosures a separate rollforward of the DPL with appropriate line items.

Although ASC 944-40-50-6 requires the LFPB information to be gross of reinsurance ceded, an entity could choose to provide additional LFPB information that is presented net of reinsurance ceded (or separates reinsurance assumed from direct written business) if the entity concludes such additional information would be beneficial to users of their financial statements.

Q-B6. For traditional and limited-pay contracts that have both LFPB and SOP 03-1 liabilities, are these liabilities combined into a single rollforward?

A-B6. Because of the disaggregation principle, combining items that are accounted for under two U.S. GAAP measurement models would not be appropriate in a single rollforward.

Q-B7. What might actuaries consider for the 944-40-50-6 required '*weighted-average interest rate*'?

A-B7. ASC 944-40-50-6 requires a "*weighted-average interest rate*" category disclosure include descriptions of the technique(s) used to determine the interest rate assumption and information about any adjustments to observable market information. The work group notes that the LFPB interest rate assumption is determined at the cohort level—not the category level. For companies that utilize an interest rate curve for their cohorts' discounting, the single-point "*weighted-average interest rate*" category disclosure may require additional work.

ASC 944-40-55-29E illustrates a single-point estimate for each of the category's two weighted-average interest rates (locked-in original 'interest accretion rate' and 'current discount rate') but did not provide information requiring the weights to be used. One approach would apply the LFPB at the end of period (EoP) as the weights to each individual cohort interest rate to estimate the category's average interest rate such as illustrated in the table below:

Cohort	LFPB Balance ($000) at EoP by Discount Rate			
	Original Discount Rate		Current Discount Rate	
A	$25,415	3.75%	$25,992	3.20%
B	28,890	4.25%	30,536	3.20%
C	9,661	4.00%	10,794	3.20%
D	1,827	3.50%	2,221	3.20%
E	1,048	4.25%	1,740	3.20%
All	**66,841**	**4.00%**	**71,283**	**3.20%**

Another approach could use the implied average rate, calculated for a category as follows:

$$\textit{Average Rate} = \frac{2 \text{ x Interest Accreted}}{(\text{BoP balance} + \text{EoP Balance -Interest Accreted})}$$

So, if the category's interest accretion was $2,700 for the period and the Beginning of Period (BoP) balance was $71,207, then the illustrated implied average rate for the category would be:

$$3.99\% = \frac{2 \text{ x } 2{,}700}{(71{,}207 + 66{,}841 - 2{,}700)}$$

The beginning and ending balances and interest accreted amounts (for the locked-in original discount rate) in the above formula are readily available due to being required amounts disclosed in the liability rollforward. The interest accreted amounts using the current discount rate are not readily available and would have to be derived.

Other approaches presented with their descriptions of the technique(s), such as an effective yield calculation, may also meet the ASC 944-40-50-6 "*weighted-average interest rate*" requirements.

Q-B8. What general background concepts might actuaries consider for the 944-40-50-6 required '*the weighted-average duration of the liability*'?

A-B8. LDTI did not provide general information or illustrations of "*the weighted-average duration of the liability.*" Financial analysts and actuaries utilize the duration of a financial debt-like instrument as an approximate measure of the sensitivity of the instrument's value to changes in interest rates. For example, a bond with a 3.2% current yield and a duration of 7.5 years would indicate that if the valuation rate immediately rose 80 basis points to 4%, then the value of that bond would drop (contra-directionally from the interest movement) by 6.0 (duration x interest movement). In practice, actuaries have used various methods to calculate durations of bonds, but perhaps not their LFPB. Therefore, before choosing a duration method to use for these LDTI disclosures, actuaries might review the strengths and drawbacks of those various approaches in light of the facts and circumstances of their LFPB categories.

Three common methods used by actuaries to calculate duration are described in the table below.

Duration Approach	General Description
Macaulay	Uses the time-weighted (i.e., time difference between the future expected payment date and the current valuation date) present value (at the liability's discount rates) of each period's net cash flow (positive or negative) divided by the present value of liability as of the valuation date.
Modified Macaulay	Generically, it's the Macaulay duration divided by (1 + the discount rate for the period)
Effective	Measured by rerunning the valuation model (at least once, but often more than once) using a parallel shift in the discounting yield curve. The net difference between the actual valuation and the alternate valuation is divided by the product of the actual value and the interest differential.

Q-B9. What LDTI specific items might an actuary consider in calculating the 944-40-50-6 required '*the weighted-average duration of the liability*'?

A-B9. Because the LFPB uses net premiums (instead of gross premiums), the actuary would remove the excess, if any, of gross premiums over LDTI net premiums from each cohort's projected net cashflows in order to calculate a Macaulay duration of the LFPB. Additionally, since each LFPB category typically will consist of numerous cohorts, actuaries might consider how to combine the cohorts' cashflows and discount rates for the category's duration disclosure.

ASU 944-40-55-29E did not illustrate a duration disclosure, so several approaches are possible. For example, an adequately stratified duration range disclosure (similar to ASC 944-40-55-29F illustrated credited rate range disclosure for GA PAB) could be pertinent to the users of financial statements. The 944-40-55-29F illustrated disclosure presents the required disclosure information across ranges and provides a reconciliating total. A similar LFPB category stratified durational range disclosure is illustrated in the table below:

Discount Rate	**LFPB Amounts ($000) by Range of Duration Years**					
	0 to 5	>5 to 10	>10 to 20	>20 to 30	> 30	LFPB Total
Original	$25,415	$28,890	$9,661	$1,827	$1,048	$66,841
Current	$25,992	$30,536	$10,794	$2,221	$1,740	71,283

Another viewpoint is that LDTI duration disclosure for a category should be a discrete number of years, conceptually similar to the Macaulay duration of a bond portfolio. Approaches in use to calculate a single-point duration of a bond portfolio that could be used for the duration of a LFPB category include: (1) combine the adjusted cashflows from all cohorts and then utilize a Macaulay method to develop a single-point number or (2) calculate the Macaulay duration for each cohort individually and apply weights (e.g., the LFPB amount for each cohort) to those individual cohort durations to estimate the category's weighted-average aggregate duration.

The first single-point Macaulay approach is a straightforward algorithm, but judgment would be applied in selecting the category's discount rate. However, a potential consideration of the first approach is that LDTI does not permit positive cashflows from one cohort to be used to augment or offset negative cashflows from another cohort to calculate its LFPB and/or apply the 100% cap. This approach may be less viable when the category's cohorts are not all in the same valuation system.

The second Macaulay approach described above does not combine cashflows from different cohorts to make the calculation and may be a viable estimate when extracting cashflows from the various cohorts and aggregating outside the valuation models is impracticable. Judgment would be needed with the second approach to gain comfort with what weights to use and how those are appropriate. This weighted-average duration approach is illustrated in the table below (which uses the original discount rate LFPB as the weights):

Cohort	EoP LFPB	Duration
A	25,415	3
B	28,890	8
C	9,661	15
D	1,827	25
E	1,048	50
All	**66,841**	**8.23**

Because LDTI requires the category's LFPB liability to be presented using two rates of interest (locked-in original "interest accretion rate" and "current discount rate"), the effective duration approach can be utilized directly to calculate the category's duration. The effective duration of a LFPB category would be calculated as follows:

$$\textit{Effective Duration} = \frac{\text{(LFPB @ original rate - LFPB @ current rate)/LFPB @ original rate}}{\text{-1 x (original discount rate - current discount rate)}}$$

The effective duration of a LFPB category using the illustrative LFPB values (above) for a category with a 4.00% locked-in original "interest accretion rate" and 3.20% "current discount rate" would be as follows:

$$\textit{Effective Duration} = \frac{(\$66{,}841 - \$71{,}283)/\$66{,}841}{-1 \times (4.00\% - 3.20\%)} = \textbf{8.31 years}$$

LFPB & SOP 03-1 Liability—Inputs, Judgments, Assumptions, & Methods

For the LFPB and SOP 03-1 liability, ASC 944-40-50-7 requires two types of disclosures of qualitative information, as follows:

a. *The significant inputs, judgments, assumptions, and methods used in measuring the liability for future policy benefits and the additional liability*

b. Changes in those significant inputs, judgments, and assumptions during the period, and the effect of those changes on the measurement of the liability

Discussion Points

Q-C1. What are some of the general considerations that actuaries might encounter with these new qualitative disclosures?

A-C1. Generally, life actuaries have been completing similar qualitative disclosures associated with their FAS 97 GAAP reserve and DAC valuation processes and their statutory reporting of asset adequacy analysis. However, other actuaries may not have prior FAS 97 DAC reporting experience. Such actuaries may find these qualitative disclosures challenging and may find describing and quantifying LDTI's LFPB retrospective unlocking process a new challenge for their models and data.

As described above, it is likely that the new duration disclosures will require new processes for many actuaries. For example, describing the chosen method and/or weights for LFPB as well as factoring in the various SOP 03-1 scenarios are new. Disclosing the cause and impact of a zero-floor LFPB event will also be new and perhaps a challenge for actuaries.

For SEC filers, ASC 944-40-50-7A combined with the present value nature of the expected net premium/benefits quarterly disclosure details for new issues may be a time and/or information challenge. The related qualitative explanations for new issues could be challenging for new product offerings and those instances where the net premiums would exceed the gross premium at issue (absent the ASC 944-40-30-7A 100% capping constraint).

Another challenge may arise from the LDTI-required use of an external interest rate reference to set the discount rates (such as calculations based on spot curve or forward curve). When there is limited or no observable market data (such as when liability durations exceed beyond the observable inputs) the method used by actuaries to set the discount rates is another new disclosure requirement of method (such as extrapolation techniques).

Because LDTI limits a LFPB cohort to one-issue-year grouping, disclosing how actuaries vary (or do not) assumptions by discrete issue years may be another new area. Likewise, the work group anticipates that disclosure of which products were included in (or excluded from) a disclosure category may require new actuarial/accounting inputs.

LFPB—Net Premium Capped at Gross Premium Disclosures

ASC 944-40-55-13B states that qualitative and quantitative information should be disclosed when updating cashflow assumptions at the cohort level, when the LFPB net premium as otherwise calculated would exceed the cohort's gross premium (calculated NPR greater than 100%). Although many actuaries have experience with loss recognition events, 944-40-55-13B may present new challenges related to prospective assumptions and this adverse development.

Discussion Points

Q-D1. What new challenges might LDTI's required quantitative disclosures as well as capping of net premiums at gross premium present to actuaries?

A-D1. As discussed above, LDTI effectively necessitates numerous successive valuation runs (layered step-by-step) to quantify assumption changes and draft a narrative explanation of the updated NPR. So that the balance sheet and income statement movement directly related to assumption changes can be understood by the users of the financial statements, additional explanation of the accounting impact of reserve assumption changes (such as, whether the assumption change resulted in any capping) may be warranted.

Before LDTI, GAAP guidance provided entities with greater latitude regarding aggregation groupings and impact from reinsurance ceded when assessing premium sufficiency. LDTI essentially redefines the groupings necessary in evaluating LFPB premium sufficiency to be constricted to no broader than an issue year and is determined before reinsurance ceded. The issue year grouping limitation may result in more recognition events because an insufficiency from one issue year cohort cannot be offset by sufficiency from any other issue year. Explaining why some issue year cohorts in a disclosure category are capped while others are not could be new for many actuaries.

Because these qualitative disclosure requirements are not prescriptive in nature, actuaries might consider exercising sound judgment in developing a narrative explanation of the increase to reserves and the cause of premium deficiencies. While favorable development disclosure is not directly mentioned in 944-40-50-6(d) or 944-40-55-13B (d), actuaries might consider, for example, increased narrative language in those instances where the favorable development overcomes the prior period's capping.

General Account (GA) PAB Rollforwards and Disclosures

For annual and interim reporting periods, LDTI requires certain disclosures (and suggests certain others) about the GA PAB (those described in paragraph 944-40-25-14, excluding separate accounts described in paragraph 944-80-25-2). ASC 944-40-50-7A requires new tabular presentations of the GA PAB "*by range of guaranteed minimum crediting rates and the related range of the difference between rates being credited to policyholders and the respective guaranteed minimums.*"

LDTI also requires year-to-date disaggregated GA PAB rollforwards but does not mandate the components. ASC 944-40-55-13J suggests components of each of these disaggregated GA PAB rollforward presented could include the dollar amounts of the following:

1. Issuances
2. Premiums received
3. Policy charges
4. Surrenders and withdrawals
5. Benefit payments
6. Transfers from or to separate accounts
7. Interest credited

Consistent with how LDTI treats LFPB rollforwards, it also requires reconciliation of the sum of the beginning and ending balances of these disaggregated rollforwards to the balance sheet amounts.

ASC 944-40-50-7A(b) requires certain census information of a GA PAB rollforward:

1. The weighted-average crediting rate
2. The guaranteed benefit amounts (in-force) in excess of the current account balances
3. Cash surrender value (in-force)

Finally, as noted above, ASC 944-40-50-7A(d) requires a tabular presentation of the PAB by range of guaranteed minimum crediting rates and the related range of the difference between rates being credited to policyholders and the respective guaranteed minimums.

Discussion Points

Q-E1. In general, how do these PAB rollforwards differ from the LFPB rollforwards described above?

A-E1. The work group anticipates these disclosures will be an easier transition for many actuaries since most companies have already been preparing PAB rollforwards for reporting supplemental information. PAB and the LFPB rollforwards will differ in that the PAB rollforward is retrospective in nature and is not bifurcated into separate premium and benefit disclosures. Thus, the PAB itself and the quantified rollforward items will be an accumulation of those amounts that actually occurred in the past year-to-date periods. Thus, these quantifications will not require rerunning valuation models and as many actuarial judgements as those needed for the present value nature of the LFPB rollforwards.

Another difference is that the pre-LDTI GAAP premium deficiency tests (including profits followed by losses) continue under LDTI for UL and life contingent deferred annuities. (Note however, that recoverability of DAC will not be part of the loss recognition testing.) Should additional liability for such premium deficiencies be necessary, those amounts would be reported separately from this rollforward. (See the **Disclosures for Loss Recognition** section below.)

Q-E2. What amounts (or when) are to be considered 'issuances'—day one or first year?

A-E2. LDTI is not precise on what premiums collected would be included in its suggested line item "issuances" in the PAB rollforward. For many contracts (such as single premium annuities) the premiums collected during the period from "issuances" will be straightforward. However, some products may have lump-sum premiums associated with new issues collected over several periods, such as annuity rollovers and exchanges and UL pour-ins. Therefore, companies and their actuaries may need to consider their set of facts when establishing their accounting practice. Note however, to avoid double counting, the amount of premiums that are included in the suggested line item "issuances" would be excluded from LDTI's other similar suggested line item, "premiums received."

Q-E3. For fixed annuities and UL, a company applies surrender charges in the early policy years for full surrenders and large partial withdrawals. How would collected surrender charges in the PAB rollforward disclosures be reflected?

A-E3. LDTI is not prescriptive as to where to reflect surrender charges in the PAB rollforward rate disclosures. Because collected surrender charges are part of the PAB that is withdrawn, these could be included in the suggested line item "surrenders and withdrawals." The work group notes that LDTI also requires the quantification of the end of period "cash surrender value" which is defined in LDTI as "*the amount of the contract holder's account balances distributable at the balance sheet date less certain surrender charges.*" In order to keep those two surrender values (amounts withdrawn and ending amounts) consistent, collected surrender charges could be included in the suggested line item "policy charges" (because it is a charge). GAAP guidance for estimated gross profits in ASC 944-30-35-5 lists "surrender charges" separate from monthly assessments. Thus, an actuary also might consider including an additional subtractive line item in the rollforward for collected surrender charges.

Q-E4. A UL or fixed annuity product has "guaranteed minimum crediting rates" that vary by policy year. How is this pattern reflected in the GA PAB disclosures?

A-E4. LDTI is not precisely clear. However, 944-40-50-7A requires reporting of the year-to-date period "*difference between rates being credited to policyholders and the respective guaranteed minimums*." The "being credited" requirement combined with the retrospective nature of these rollforwards would indicate that "guaranteed minimum crediting rates" appears to be referring to those that were in effect during the year-to-date reporting period and does not refer to crediting rates beyond the end of the current period.

Consider for example, a fixed annuity issued with contractual "guaranteed minimum crediting rates" of 4% for the first policy year and 2% thereafter. One interpretation is that, for reporting periods while this policy is still in its first year, its PAB would be included in the "guaranteed minimum crediting rate" range that includes 4%. Likewise, for reporting periods while this policy has consistently been in its second or later policy year, the work group would anticipate that its PAB would be in the "guaranteed minimum crediting rate" range that includes 2%. For those GAAP year-to-date reporting periods that cross over this policy's first anniversary, the *being credited* wording could indicate that this policy's PAB could be included in a crediting range above 2%. For example, if this policy was issued

July 1 prior year, and was effectively credited 3% during the disclosure year, then including its PAB in the range that includes 3% and in the "*at guaranteed minimum*" differential bucket could be consistent with LDTI's intent. However, because 2% is the rate *being credited* at the disclosure date, allocating its PAB in the range that includes 2% and in the "*at guaranteed minimum*" differential bucket could be consistent with LDTI's intent.

Q-E5. For an in-force block of fixed annuities and UL, a company declares revised crediting rates periodically. When that is communicated to the policyholders, the company policy of not changing the rates for the next 60 days is also explained. How is the company practice in the PAB crediting rate disclosures reflected?

A-E5. As discussed above, LDTI is not prescriptive as to "*guaranteed minimum crediting rates.*" Actuaries might consider their company's facts, but this type of declaration does not appear to be the intent of LDTI disclosures of "*guaranteed minimum crediting rates*" and appears more like LDTI's intent of bucketing those being credited relative to the initial contractual guarantees. The weighted average current credited rate shown, for example, at the bottom of the PAB rollforward in ASC 944-40-55-29F, would reflect the current credited rate amounts used in the rollforward.

Q-E6. What would an actuary consider for the GA PAB and MRB net amount at risk (NAAR) disclosures required by ASC 944-40-50-7A and ASC 944-40-50-7B?

A-E6. Where applicable, actuaries would review how their company has disclosed NAAR for guaranteed benefits features (GMxB) for variable annuity under pre-LDTI GAAP guidance (such as the example in ASC 944-20-55-15 before ASU 2018-12). ASC 944-40-50-7B (MRB) defines NAAR as the "*guaranteed benefit amounts in excess of the current account balances,*" which is also used in ASC 944-40-50-7A. A footnote to ASC 944-40-55-29F (illustration of account balances for universal life and fixed annuities) describes the NAAR for a guaranteed minimum death benefit (GMDB) as being "*for those guarantees of benefits that are payable in the event of death, the net amount at risk is generally defined as the current guaranteed minimum death benefit in excess of the current account balance at the balance sheet date*." This definition is fully consistent with the pre-LDTI GAAP GMDB disclosure for a separate account product in ASC 944-20-55-15 (before ASU 2018-12), which says: "*For guarantees of amounts in the event of death, the net amount at risk is defined as the current guaranteed minimum death benefit in excess of the current account balance at the balance sheet date.*"

The GMDB NAAR calculation is straightforward valuation date data and should not require actuarial input or projections. However, the NAAR associated with guaranteed living benefits, such as a guaranteed minimum income benefit (GMIB), will require applied judgment because it is a present value of future payments that requires actuarial input and projections. LDTI amended its *Master Glossary* GMIB wording to remove the reference to separate account and now says: "*A guarantee that, regardless of account balance performance, the contract holder will be able to annuitize after a specified date and receive a defined minimum periodic benefit. These benefits are available only if the contract holder elects to annuitize.*"

The pre-LDTI GMIB disclosure example for a separate account product was in ASC 944-20-55-15 that says: "*For guarantees of amounts at annuitization, the net amount at risk is defined as the present value of the minimum guaranteed annuity payments available to the contract holder determined in accordance with the terms of the contract in excess of the current account balance.*" Thus, the actuary would review how their company has been disclosing NAAR for variable annuities GMIB (if any).

The actuary might consider (and disclose) the discount rate used in the present value of the projected guaranteed annuity payments. It may be appropriate to use the same discount rate as that used to determine the liability. But since this rate may both vary between liability types and between reporting periods, a consistent and well-reasoned discount rate may be more relevant to users of the disclosures. For GMIB NAAR, the actuary might consider the intent of "*payments available*" and remove or revise policyholder elective assumptions that diminish future GMIB utilization (such as early lapsation, non-election of annuitization, and timing of available annuitization choices). Likewise, for NAAR calculations associated with other MRB features, the actuary might consider removing any MRB margins above best-estimate assumptions and any adjustments for instrument-specific credit risk. It is less clear if the GMIB NAAR assumption set should remove or revise policyholder non-elective assumptions (such as death) which effectively diminish future GMIB available.

As an example, consider an illustrious GMIB that has a remaining waiting period of five -years with a benefit base of 110% of the original deposit with annuitization factors that reflect a 4% margin based on current best mortality estimate assumptions. Also presume that the current account value equals 85% of the initial $100 deposit and the assumed growth rate for the account value is 2% annually. One possible NAAR calculation could be to compare the expected account value in five years to the annuity value as follows: ($110/1.04) - ($85 x 1.02^5) = $11.92.

For those contracts with both guaranteed death and guaranteed living benefits, it may be appropriate for the actuary to disclose both NAAR amounts. However, it may also be appropriate to disclose either the larger NAAR or the NAAR that generates the greater liability. When both guarantees use the same benefit base, the larger NAAR will generally be the guaranteed death benefit while the NAAR that generates the greater liability is generally the living benefit. In any case, the actuary might consider explaining what they are presenting and how it was determined in a manner consistent with the illustration in ASC 944-40-55-29F.

For those contracts which have account balances in both the GA and SA, the disclosure of the guaranteed benefit amounts (if any) in excess of the current account balances may need to be allocated in a reasonable and consistently applied manner between the GA and SA disclosures.

Q-E7. What other information might an actuary provide for NAAR disclosures?

A-E7. For those NAAR amounts associated with either a SOP 03-1 liability or an MRB feature, users of the NAAR disclosures will likely want to make comparisons to the SOP 03-1 liability or MRB feature. Therefore, it is likely that actuaries may need to consider how this NAAR disclosure cross-references to the balance-sheet-related amounts and the related amounts of SOP 03-1 disclosures and/or the MRB disclosures.

Separate Account (SA) Rollforwards and Disclosures

ASC 944-80-50-1 requires the following separate account information disclosed in the financial statements of the insurance entity:

1. The general nature of the contracts reported in separate accounts, including the extent and terms of minimum guarantees (including MRBs).
2. The basis of presentation for both separate account assets and liabilities as well as the related separate account activity.
3. The aggregate fair value of assets, delineated by major investment asset category, supporting the separate accounts.
4. The amount of gains and losses recognized on assets transferred to separate accounts for the periods presented.

ASC 944-80-50-2 requires for annual and interim reporting periods; an insurance entity shall disclose the following information about SA liabilities described in paragraph 944-80-25-2:

1. A year-to-date tabular rollforward of the beginning balance to the ending balance disaggregated in accordance with paragraph 944-40-50-5A.
2. For each separate account liability rollforward presented, the related cash surrender values.
3. A reconciliation of the separate account liability rollforwards to the aggregated ending carrying amount of the liability in the statement of financial position.

Discussion Points

Q-F1. In general, how do these separate account liability rollforwards differ from the general account PAB rollforwards described above?

A-F1. In general, the work group anticipates that some separate account liability rollforwards will be completed in a manner similar to the general account PAB rollforwards described above. Two differences are mainly nominal in nature—the line item investment performance replaces the GA interest credited line item and subtractive line item net transfer from/to the GA replaces transfer from/to the SA. Notably, LDTI illustrates in 944-80-55-18 a line item entitled "Other Charges" but provides no indication how these amounts differ from its "Policy Charges." As discussed above, surrender charges might be included here as well as fees collected for GMxB.

This section of LDTI requires qualitative MRB information (e.g., the extent and terms of those minimum guarantees). The quantitative amounts of MRB liabilities or assets are included in the MRB rollforwards (see next subsection).

MRB Rollforwards and Disclosures

ASC 944-40-25-25C defines MRB features attached to various insurance products and requires fair value accounting for those features that meet this new GAAP definition. For annual and interim reporting periods, LDTI requires certain disclosures (and suggests selected others) about MRB amounts and characteristics.

LDTI requires year-to-date disaggregated MRB rollforwards but does not mandate the components. ASC 944-40-55-13K <u>suggests</u> selected components of each disaggregated MRB rollforward presented could include the dollar amounts of the following:

1. Issuances
2. Interest accrual
3. Attributed fees collected
4. Benefit payments
5. Effect of changes in interest rates
6. Effect of changes in equity markets
7. Effect of changes in equity index volatility
8. Actual policyholder behavior different from expected behavior
9. Effect of changes in future expected policyholder behavior
10. Effect of changes in other future expected assumptions
11. Effect of changes in the instrument-specific credit risk (when in a liability position)

In contrast to the other balances (such as LFPB, SOP 03-1, and PAB) that require rollforwards, the MRB balance is not affected by past cash flows. Therefore, actuaries may find that several of the illustrated items above either are not relevant or have potentially several definitions. For example, line 3, "benefit payments," could be the previously expected payments as of the prior valuation date as this amount will be released from the MRB. It could also be the actual benefit amount, but an offsetting adjustment in line 8 would then be necessary. There are more examples later in this section.

ASC 944-40-50-7B <u>requires</u> certain information about each disaggregated MRB rollforward:

1. the guaranteed benefit amounts in excess of the current account balances (for example, the net amount at risk)
2. the weighted-average attained age of contract holders

Similar to the other disclosures described above, LDTI also requires a reconciliation of the sum of these disaggregated rollforwards to the balance sheet disaggregated between MRBs that are in an asset position and those that are in a liability position, as well as information about the significant inputs, judgments, assumptions, and methods used in measuring the MRB. Moreover, the amount of impact on the MRB asset/liability from changes in those significant inputs, judgments, and assumptions during the period must be disclosed.

Similar to other rollforward discussions above, actuaries may want to consider additional line items in the rollforward. For example, in order to aid users of the disclosures, some actuaries may choose to identify the impact that arose from revisions to the underlying assumptions separately from the impact that arose from changes to risk margins used in the fair value of the MRB.

Actuaries would appropriately be aware that, to the extent that the tabular rollforward of the beginning to the ending balance related to MRB achieves the fair value disclosure requirements described in Section 820-10-50, an insurance entity need not duplicate the related fair value disclosure. However, it may be advantageous to ensure that the MRB disclosure also satisfies this requirement.

Discussion Points

Q-G1. What other guidance do actuaries consider for MRB?

A-G1. Because LDTI requires fair value accounting for MRB, actuaries might consider the fair value GAAP guidance, ASC 815, and ASC 820 as well as their entity's past practices in applying ASC 815 and ASC 820. Additionally, in tandem with this white paper, the LFRC's Market Risk Benefits Work Group has developed a white paper[5] specific to LDTI's definition of MRB and the considerations for an actuary performing MRB valuations. That MRB white paper would be useful reading for an actuary considering MRB disclosures. Specifically, actuaries may want to refer to the LFRC MRB white paper when providing information about the methods used in measuring the MRB as well as the significant inputs, judgments, and assumption sets.

5 https://www.actuary.org/sites/default/files/2022-12/MRB_white_Paper.pdf

Q-G2. MRBs can be in an asset position or in a liability position. Are bifurcated MRB rollforwards required by LDTI?

A-G2. Some entities may choose to present separate MRB rollforwards, but such bifurcation is not required by LDTI. However, the MRB balance shown in the rollforwards must be reconciled to the reported asset and liability amounts on the balance sheet.

Q-G3. When performing MRB rollforward analyses, the step order matters—does LDTI specify the timing /order of the MRB rollforward steps?

A-G3. LDTI illustrates the rollforward steps in the order listed above, but it is not required. The work group anticipates that many entities have prepared similar rollforward analyses for their embedded derivative features and may want to maintain that process order for MRB. Similar to the other rollforwards discussed above, actuaries may consider adding other lines to quantify the difference between the BoP and EoP balances. Some entities might consider aligning their step information with the key inputs used for their economic hedging programs for these MRB (see the Q&A on ASC 820 disclosure requirements below).

Q-G4. Some of the MRB rollforward steps are unclear. For example, what MRB amounts represent 'issuances' and 'interest accrual'?

A-G4. The suggested lines for the MRB rollforwards may not be relevant for all MRB, and so entities should tailor those line items to their individual facts and circumstances. LDTI does not specify requirements for some line items such as "issuances" and "interest accrual." Further, many MRB initial calculations will be calibrated such that the attributed MRB fees result in an MRB valuation of zero at inception. As such, entities will need to consider the relevance (to the users of the financial statements) of the illustrated lines when delineating changes in the fair value of their MRB.

Q-G5. If an entity cedes away some of its MRB risks, do these rollforwards need to be gross before reinsurance ceded or can these be net after reinsurance ceded?

A-G5. Although LDTI does not require the MRB rollforwards to be gross of reinsurance ceded away, the work group anticipates that many entities' MRB rollforwards will be gross of reinsurance ceded away, as illustrated in 944-40-55-29G. Because MRB are carried at fair value, these tabular rollforwards may satisfy certain disclosure requirements in ASC 820-10-50. If that is the case, then an insurance entity is not required to duplicate the related fair value disclosures.

Q-G6. How do LDTI disclosure requirements for MRB compare to the ASC 820 disclosure requirements that an entity has been performing for its embedded derivatives?

A-G6. The first difference the work group notes is around which entities must make the disclosures. Where MRB valuations use significant unobservable inputs, these are classified as Level 3 within the ASC 820 fair value hierarchy. ASC 820 Level 3 rollforwards are only required for SEC filers, but these MRB LDTI disclosures are required for all entities.

Second, ASC 820 requires disclosure of the amounts of "transfers"— (a) those assets/ liabilities that were not a Level 3 valuation in the prior reporting period and became a Level 3 in the current reporting period and (b) those amounts that were Level 3 in the prior period but became not Level 3 in the current period. The work group does not anticipate that any MRB valuations will be market observable, thus MRBs would not 'transfer' to another ASC 820 Level.

The third difference is that ASC 820 requires a "what-if" sensitivity to describe the potential impact of a "what-if" change of an input to a different amount that would result in a "*significantly higher or lower fair value measurement.*" The new MRB disclosures do not include such 'what-if' sensitivity. Thus, additional quantitative and qualitative information may be necessary either within the MRB note or other fair value notes to comply with ASC 820.

Other differences appear to be mostly labeling in nature. For example, ASC 820 rollforwards require "*Purchases, sales, issues, and settlements (each of those types of changes disclosed separately)*" while the MRB rollforwards illustrate similar line items labeled "*issuances, attributed fees collected, and benefit payments.*" ASC 820 requires a description of the "*valuation technique(s)*" and the "*significant unobservable inputs*" used in the fair value measurement. As discussed above, LDTI requires disclosure of the "*significant inputs, judgments, assumptions, and methods used in measurement.*"

Q-G7. What would an actuary consider for the MRB NAAR 944-40-50-7B disclosures?

A-G7. For contracts with both guaranteed death and guaranteed living benefits, it may be appropriate for the actuary to disclose both NAAR balances. However, it may also be appropriate to disclose either the larger NAAR or the other NAAR if that generates a larger liability. The larger NAAR will generally be the guaranteed death benefit while the NAAR that generates the larger liability will generally be the living benefit. In any case, the actuary may consider explaining what they are presenting and how it was determined in a manner consistent with the illustration provided in ASC 944-40-55-29F.

For more detailed discussion of NAAR calculations, please refer to discussions above in **Q&A- E6** regarding NAAR considerations for MRB associated with general account products.

LDTI's disclosure requirements do not require the disclosure of the amounts of associated account values for contracts with MRB. However, since the GAAP definition of NAAR uses the associated account values, actuaries could consider providing those amounts also.

Q-G8. What might an actuary consider for the 944-40-50-7B '*weighted-average attained age of contract holders*' disclosure?

A-G8. LDTI does not specify the weights to be used, so an actuary might consider the pertinent facts and circumstances of their MRB in choosing the weights as well as their entity's past practices, if any, in preparing similar disclosures for SOP 03-1 liabilities. Therefore, the disclosure might describe the weights chosen. Some actuaries think that the NAAR would be an appropriate weighting factor because it reflects the associated coverage risk. Other actuaries might choose to use the MRB value by using its absolute value. However, some MRB values for a policy will be near zero, effectively negating their weight in the average age when MRB values are used. Some actuaries might consider using account value, but that would also have the same near zero concern. Policy count avoids the near zero issue but is a limited data-point and is not risk-related. Other actuaries might simply use policy count.

Q-G9. Can a numerical illustration of a 944-40-50-7B attained age disclosure be provided?

A-G9. The table below is an illustration of an example of the possible consideration points discussed above, using NAAR as weights. The illustrated level of detail is not required by LDTI but provides greater clarity and supports reconciliations among required LDTI disclosures.

Disclosure of Information about Market Risk Benefits ($000)				
Variable Annuities	Death Benefits only	Living Benefits Only	Compound Benefits	Total
MRB—Asset	2,745	1,190	6,781	10,716
MRB—Liability	13,752	24,876	54,006	92,634
MRB—Net Liability	11,007	23,686	47,225	81,918
NAAR	512,871	1,379,145	3,872,191	5,764,207
Average Attained Age	54	66	60	61
Account Value*	2,498,176	4,134,852	17,893,414	24,526,442

* Reconciliation Note: The separate account liabilities of $40,737,558 in the ASC 944-80-50-2(a) note includes $16,211,116 of account value for variable annuities without MRB.

DAC, SIA & URL Rollforwards and Disclosures

ASC 944-30-50-2A is a new section and it requires disclosure of the following information about DAC and sales inducements:

1. The nature of the costs deferred and
2. Information about the inputs, judgments, assumptions, and methods used to determine amortization amounts and changes in those inputs, judgments, and assumptions.

ASC 944-30-50-2B is another new section, which requires a disaggregated tabular rollforward of DAC and other balances that are amortized on a basis consistent with DAC, such as SIA and URL. LDTI does not specify the DAC rollforward line items but requires that these be "*disaggregated in a manner that is consistent with the disaggregation of the related liability disclosures.*" For example, the work group expects that some entities will include their URL rollforward in its related contract liability rollforward under ASC 944-40-50.

Discussion Points

Q-H1. In general, how will the actuary's support for DAC disclosures change from common practices under pre-LDTI GAAP?

A-H1. For many actuaries, these DAC disclosures may require less effort. While ASC 944-30-50-2A and 944-30-50-2B are new, these replace ASC 944-30-50-2 b. which required disclosure of the "*nature of acquisition costs capitalized, the method of amortizing those costs, and the amount of those costs amortized for the period.*"

Further, since DAC no longer will accrue with interest, LDTI deleted the ASC 944-30-50-2 a.-required disclosure of the "*average rate of assumed investment yields used in estimating expected gross margins.*" That change will ease the burden on actuaries.

Q-H2. Will the new DAC disclosure requirements of inputs, judgments, and assumptions increase the actuary's work?

A-H2. Possibly, but for many companies, these LDTI inputs, judgments, and assumptions will be the same as those compiled and disclosed as part of their related ASC 944-40-50 liability disclosures. Specifically, ASC 944-30-35-3 requires that "*capitalized acquisition costs shall be charged to expense using assumptions consistent with those used in estimating the liability for future policy benefits (or any other related balance) for the corresponding contracts (see Subtopic 944-40), as applicable (for example, terminations).*"

The work group notes, however, that these disclosures will also be required for DAC associated with participating contracts. Since the liability for participating contracts remains unchanged by LDTI, these new disclosure requirements for DAC associated with participating contracts will require some new inputs from actuaries. However, the work group anticipates that describing this new straight-line DAC process for participating policies will ease the burden on actuaries as compared to the retrospective unlocking of estimated gross margins.

Q-H3. What might actuaries consider in disclosing DAC methods and amortization bases?

A-H3. Because ASC 944-30-35-3A allows for either a grouped or seriatim method for DAC amortization, the work group anticipates that many entities will disclose which cohorts follow which method. However, the work group does not anticipate that actuaries will be asked to provide quantitative demonstrations in the LDTI disclosures that their grouped method "*approximates straight-line amortization on an individual contract basis.*"

Q-H4. What might actuaries consider when making the LDTI disclosure about the DAC amortization "experience adjustment"?

A-H4. As discussed in paragraphs A.70-74 of Appendix A to the Audit Guide, LDTI permits an entity to select between two DAC "experience adjustment" calculation methodologies. Actuaries might consider disclosing which calculation methodology their entity has chosen. This is because (as described below) in some periods neither calculation methodology will result in a separately reported immediate DAC "experience adjustment."

Under the calculation approach utilized in the ASC 944-30-55-7B illustration, there is a separately reported immediate DAC "experience adjustment" (DAC write-down) when actual terminations exceeded expected terminations for the period. However, paragraph A.73 of Appendix A to the Audit Guide states, "*no adjustment would be made under this calculation methodology if there were fewer than expected terminations.*"

Under the alternative calculation approach, paragraph A.74 states, "*In contrast, if current reporting period experience and any assumption updates are included in the calculation of the current period amortization rate, no separate experience adjustment would exist because the amortization rate calculation considers the current reporting period experience.*"

Paragraph A.72 of Appendix A states: "*An entity should select one of these calculation methodologies and apply it consistently.*"

Q-H5. What might an actuary consider for reinsurance ceded?

A-H5. For new reinsurance cessions of previously in-force business, a company may consider an additional line for any current period reduction to the beginning of period DAC balance due to the accounting for the new ceding commission (if material). Conversely, because LDTI does not require disclosure, the work group does not anticipate that actuaries will be requested to provide disclosure information around the amortization of the "cost of reinsurance."

Disclosures for Loss Recognition and Premium Sufficiency Testing

LDTI eliminates the historical loss recognition testing that was required for traditional and limited-payment policies that have been classified under GAAP as 'insurance contracts'. However, loss recognition remains a requirement (under ASC 944-60-15-5 and ASC 944-60-25-7) for universal life-type contracts, participating contract reserves, and for the present value of future profit (PVFP, or value of business acquired ["VOBA"]) associated with any acquired long-duration contracts, including traditional life.

FASB added these related disclosure requirements (944-60-50-2):
944-60-50-2 For annual reporting periods, and to the extent required by Topic 270 on interim reporting, an insurance entity shall disclose the following:

a. The amount of a liability that is established as a result of a premium deficiency and loss recognition testing determined in accordance with paragraphs 944-60-25-7 through 25-9 and a description of the factors that led to the establishment of the liability.
b. Information about the methodology used when performing premium deficiency testing in accordance with paragraphs 944-60-25-7 through 25-9.
c. Whether the entity considered anticipated investment income when performing premium deficiency testing in accordance with paragraphs 944-60-25-7 through 25-9 and, if so, what that assumption was.

LDTI also added a new disclosure requirement for a closed block (formed as a result of demutualization) in 944-805-50-3:

a. 4. …including the results of premium sufficiency or deficiency determined in accordance with paragraphs 944-60-25-7 through 25-9.

Discussion Points

Q-I1. In general, how will LDTI change the actuarial disclosures for loss recognition events from common practices under pre-LDTI GAAP?

A-I1. Pre-LDTI practices for actuarial disclosures for loss recognition events tend to be both rare (because loss recognition is a relatively infrequent event) and informal. Under LDTI, the work group anticipates that many companies will increase their narratives regarding loss recognition testing and events because of LDTI's new requirements as well as to be consistent with the new practices of their potential LFPB 100% capping events described above.

Q-I2. When considering liability, what factors might actuaries consider *'led to the establishment of the liability'*?

A-I2. The work group anticipates that actuaries might disclose the nature of the liability and perhaps quantify the adverse developments relative to assumptions (such as mortality deterioration, adverse persistency and greater benefit utilization) that contributed to (or slightly offset) the loss recognition event. Additionally, because LDTI does not specify what discount rate would be used in the loss recognition valuation nor how reinsurance ceded impacts the testing, the work group anticipates that actuaries will be called upon to provide narrative disclosures around those specific factors.

Q-I3. What might an actuary be asked to disclose regarding '*methodology used when performing premium deficiency testing*'?

A-I3. Pre-LDTI practices for premium deficiency testing for UL contracts vary and disclosures are rarely provided unless a significant loss recognition event occurred. The work group anticipates that actuaries will be asked to provide greater narratives covering their testing methodology (such as gross premium valuation or other margin analyses), especially with regard to what was included in "profits/losses" under their "profits followed by losses" ASC 944-60-25-9 testing as well as how any 'cost of reinsurance' impacts the testing.

When anticipated future investment income is included in the testing, actuaries will likely describe the composition/allocation of the assets backing the liabilities and their assumptions around defaults, investment expenses and reinvestment strategies and investment/reinvestment return rates.

Q-I4. What changes might an actuary consider for disclosures regarding '*the results of premium sufficiency or deficiency*' testing of a 944-805-50-3 closed block?

A-I4. Pre-LDTI practices for premium sufficiency testing for closed blocks in most aspects will continue under LDTI. 944-60-25-7 removed maintenance expenses and acquisition costs as part of the premium sufficiency testing.

Under Implementation Guidance and Illustrations/Demutualizations, 944-805-55-3 through 55-13 provide disclosure examples of a closed block. LDTI made minor changes to this example, consistent with the changes to 944-60-25-7. The work group anticipates that actuaries may be asked to provide additional language and possibly quantifications around the results of the current year's premium sufficiency testing and/or trend from prior year(s).

Conclusion

For many actuaries, these enhanced disclosures will require more data and model analyses than pre-LDTI GAAP reporting as well as the addition of new judgment areas. The new rollforwards will necessitate numerous successive valuation runs (layered step-by-step) to quantify each movement's impact on the reserve balance to satisfy LDTI requirements and intent. These enhanced disclosures will require quantifications and qualitative narratives covering new prospective actuarial assumptions and judgments as well as explanations of adverse developments relative to the prior period's actuarial assumptions.

This overview discusses considerations and issues that the work group believes to be relevant to the preparation of the disclosures. This overview is also intended to encourage discussion on the issues set forth above, providing a framework to foster dialogue among actuaries and other stakeholders, such as management and auditors involved in the process. This white paper is not intended to guide actuaries in performing the underlying calculations of the assets or liabilities; further any and all values contained herein are only illustrative in nature.

American Academy of Actuaries

1850 M STREET NW, SUITE 300, WASHINGTON, DC 20036
202-223-8196 | **ACTUARY.ORG**