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GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (GAAP) ISSUES

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Panelists will cover recent developments in the U.S. and Canada. Topics include FASB and AICPA pronouncements, GAAP for mutuals, Canadian developments, and practical implementation issues such as materiality and the use of approximations.

MR. S. MICHAEL MCLAUGHLIN: We will cover some interesting areas relating to GAAP. We will talk about some mutual company issues, as everyone perhaps knows that mutual companies will be affected by GAAP in the very near future. We'll talk specifically about *Financial Accounting Standard (FAS) 115* and certain other current GAAP topics and cover some uses of GAAP financial statements for performance measurement.

I'll introduce our three speakers briefly. Mike Hughes is a senior consulting actuary with Ernst and Young LLP in Chicago, where I also work. Mike has a great deal of experience working on GAAP implementation projects for mutual companies, both large and small, and working on many other types of consulting projects. He's active on the Society's Financial, Investment Management and Emerging Areas Practice Advancement Committee.

Dave Rogers is a partner with Price Waterhouse LLP in New York. He has been very active in this area for many years. He would like me to point out for the record that he's at an accounting firm, but he's not an accountant.

Dennie Pritchard is second vice president and actuary at Life of Virginia in Richmond, VA. He's in the corporate actuarial area and is responsible for all actuarial aspects of GAAP accounting for his company. Life of Virginia has a long history of using GAAP financial statements for internal purposes, so we would like to get some perspective from Dennie, as well as from Dave and from Mike.

MR. MICHAEL A. HUGHES: I will talk about one of the hottest topics in the industry—at least it has been for half the industry during the last few years—and that is GAAP for mutuals and fraternals. What's so special about GAAP for mutuals? Well, back in the early 1970s, when GAAP was first defined for stock life insurance companies in the AICPA audit guide, mutual and fraternal insurance companies were exempt from the GAAP guidance. That exemption was continued in *FAS 60*, *FAS 97*, and *FAS 113*. *FAS 60*, which was released in the early 1980s, essentially codified the audit guide. *FAS 97*, as you may be aware, was introduced in the late 1980s and defined accounting for universal-life-type products. More recently, *FAS 113* was issued to provide guidance on accounting for reinsurance.

Not only were the mutual companies exempt from these statements, but there also was no GAAP accounting guidance for participating products of mutual companies. In light of the explicit exemptions for mutuals and the notable lack of guidance for participating products, statutory accounting principles came to be regarded as generally accepted accounting principles for mutual and fraternal companies, even though statutory accounting may not have been entirely consistent with other relevant GAAP guidance that was available on other items such as accounting for investments.

The FASB became aware of this situation and decided to issue Interpretation No. 40, which states that, even though you may be exempt from certain FASB statements, you need to comply with all other applicable FASB guidance if you want to say that your financial statements have been prepared in accordance with GAAP. The FASB then went on to promulgate *Statement No. 120*, which removed the exemptions in the earlier statements that I mentioned, and the AICPA issued statement of position (SOP) No. 95-1, which defined the appropriate accounting treatment for participating products.

When the AICPA developed the SOP, it considered two approaches. One was the premium-based approach, similar to *FAS 60* for traditional nonparticipating products. The other was a margins-based approach, similar to the *FAS 97* approach used for universal-life-type contracts. In the end, it adopted a hybrid approach in which the benefit reserve is defined as a net level reserve, somewhat analogous to the account value on a universal-life-type product, and deferred acquisition costs (DACs) are amortized in relation to expected gross margins. For income statement presentation purposes, however, the income statement will continue to report premiums as revenue and the change in reserves as a benefit expense, which differs from the treatment of universal-life-type contracts under *FAS 97*.

As you know, mutual companies are generally not required to report on a GAAP basis, so why bother? There are several possible advantages to implementing GAAP. You'll be able to receive a clean audit opinion; there would be no adverse or qualifying language in the opinion to clarify that the financial statements have not been prepared in accordance with GAAP, even though they may have been prepared in accordance with statutory principles. Many companies believe that this language would be undesirable.

In addition, the rating agencies are generally believed to take a more favorable view of companies that have prepared GAAP financial statements. GAAP information could also be used for internal management purposes. Some companies see this as an opportunity to upgrade or install internal management basis accounting systems. GAAP also provides for greater comparability of financial statements across companies and allows you to avoid a potential unfavorable competitive position if you do not have GAAP financials. Currently, an SEC exemption allows mutual companies with variable products to file statutory accounting statements with the SEC; this exemption could eventually be withdrawn once the new accounting requirements for mutuals have become effective. In light of all these advantages, virtually all large mutual companies have decided to implement GAAP.

There are several challenges involved with implementing GAAP, not the least of which is the difficulty of determining deferrable expenses, both on a current basis and when estimating historical deferrable expenses going back many years. Another challenge is estimating historical and future gross margins generated by interest-sensitive and participating life insurance contacts. Some other less obvious challenges include planning and project management, training and communications and various technical issues, such as calculating net level reserves, building an infrastructure to deal with DAC unlocking requirements, the treatment of internal replacements, policy increases or reissues, riders, dividend options, and policy loans.

Generally, a GAAP conversion project is heavily actuarial- and accounting-related, but some involvement from the investment, systems, tax and other areas may also be necessary. We have found it quite helpful to spend some time initially getting the right project team in place and getting the communication flows started among the different functional areas and among the lines of business involved in the process. Oftentimes a steering committee of some type is established to provide guidance on difficult issues and ratify key decisions that are made by the project team.

Training is essential on the front end if you want to get the most out of the resources that you have devoted to this project. The issues and concepts involved with GAAP are significantly different from those involved with statutory accounting principles, so it's very helpful to acquaint the project team to the GAAP concepts that they'll be dealing with. Specifically, different accounting models are used for the various product types defined under the GAAP guidance: traditional participating and nonparticipating, limited pay, universal-life-type, investment contracts, and so forth. In addition, there's a whole host of other GAAP accounting requirements, a whole hierarchy of GAAP, if you will, that needs to be followed if you're going to be preparing statements in accordance with GAAP. Determining deferrable expenses can be particularly tricky, and numerous assumptions need to be selected.

In addition to the training and communication issues upfront, various additional training and communication issues will emerge as you begin to roll out your GAAP financial results. Not only are there many different topics that you'll want to discuss, but also many different stakeholders and audiences have an interest in the GAAP results, including the board of directors, the finance and audit committee, senior management, the financial staff, the field and home office staff, policyholders, and rating agencies. So if you think about it, there are quite a few issues that could and should be addressed, and there are quite a few different audiences. Naturally, the interests and needs of each audience would be slightly different. The point is that some companies are developing fairly extensive training and communication programs as they begin to roll out the GAAP financial statements.

Various types of expenses get treated differently under GAAP, and classifying your expenses can be somewhat of a challenge. Our studies have shown that a typical company might have expenses distributed as follows: acquisition expenses in total might account for 40% of total general expenses. Three fourths of those acquisition expenses or 30% of total expenses might be deferrable. Not all acquisition expenses will necessarily be deferrable under GAAP. Maintenance expenses might account for approximately one-third of all expenses, investment expenses might account for 10%, and there would typically be some overhead that wouldn't fall into the other GAAP categories. These results can and will vary significantly depending on the distribution channel that you're using, the product mix, the age and growth rate of the company, and so forth, so they need to be taken with a grain of salt.

FAS 60 defined deferrable expenses as those acquisition costs that vary with and are primarily related to the acquisition of new and renewal business. Two criteria need to be satisfied to qualify for deferral. One is the attribution criteria and the other is variability.

Needless to say, expense deferral and amortization practices can vary from company to company, and they can have a significant impact on the GAAP results, so those are particularly important issues as you consider the move to GAAP.

Diagrams might be helpful when you consider the variability test. If the cost relationship varies linearly with production and if they were, in fact, attributable to producing new business, then you would definitely be able to defer the expenses. If the costs are fixed regardless of production, you would definitely not be able to defer any of the expenses. Between these extremes are various shades of gray; as the linear relationship starts to break down, less of the expense would typically be deferred.

Estimating historical gross profits can be one of the toughest challenges. Two approaches are often considered. The first is what I'll call a top-down approach, in which you actually go back and try to gather actual historical data and allocate them to the various products that you're "GAAP-ing." Although this may be more accurate, it has sometimes proven to be more time-consuming, and it does have the potential to become a blind alley. So before you go too far down this path, you'll want to make sure that you're not going to run into significant problems with missing or bad data that you might not be able to deal with very well.

The second approach is more of a bottom-up approach in which you construct models to estimate historical gross profits, perhaps by using the actuarial models that are used for other purposes. One of the advantages of this approach is that, as actuaries, we have a great deal of experience with modeling and we generally know that the job can be completed. The downside, though, is that we need to gather a lot of information to set historical experience assumptions and spend a fair amount of time validating the model. Anyway, these are basically the approaches that get used in practice.

Numerous technical issues are also likely to surface as you embark on a GAAP conversion project. If your dividend scales differ materially from a pure three-factor formula, you could find that the pattern of earnings are somewhat distorted on your participating products. DAC unlocking and the resulting volatility of earnings can also be a concern. Other issues include the treatment of internal replacements—rollovers from one product to another within the company—reissues of policies under different terms, riders, and policy loans.

Loss recognition may be needed for some products; if by using best-estimate assumptions, it turns out that the block of business is not expected to be profitable going forward, then it is necessary to recognize a loss in the current period to essentially put yourself in a break-even position going forward. If this situation were to occur, you'd want to approach the GAAP-ing for these products differently. Some companies have had a practice of using interest on surplus to subsidize dividend scales. When you look at the profitability of the product line without considering earnings on surplus, it could put you in a potential loss-recognition situation if the current dividend scales were to remain intact.

Some companies are now considering the need for establishing a liability to provide for policyholder benefits that will be paid as a result of realized capital gains. This is an issue that has received some attention in recent years. Last, but not least, documentation, internal control, and audit ability issues should be addressed throughout the process.

With so many potential issues to deal with, it's important to focus your efforts on the most critical areas, and that's where the concept of materiality comes into play. Materiality is somewhat of a nebulous concept, but as you think about what's material, you need to consider the decision-making framework of a typical user and his or her probable response to a potential difference. Some quantitative considerations include the impact on earnings and equity, both relative and absolute amounts as well as trends. For GAAP accounting purposes, materiality is often defined in terms of a percentage of pretax earnings, whereas for statutory accounting purposes materiality may be defined in terms of a percentage of capital and surplus. Some qualitative considerations also come into play.

Our experience has been that several factors contribute to your success in this type of project. First it's important that you get buy-in from senior management at the beginning of the project and that management remains committed to the project throughout its duration. Second you need to be realistic about the amount of work involved and have adequate resources. To make the best use of your resources, it's important to provide education and training to the implementation team on the front end. Project management is important because different functional areas and lines of business are involved and the project may extend over many months. Last, but not least, it always helps to have some experience in this area.

Although the journey may be rough at times, eventually you will make it to the promised land, and I believe you'll be pleased with the decision to implement GAAP. You undoubtedly will have learned something new about your business and find that GAAP results are very meaningful for managing your business going forward. Later in our program Dennie Pritchard will share with us his experience of using GAAP for internal management reporting. In the interim, I will turn it over to David Rogers.

MR. DAVID Y. ROGERS: I've structured my presentation to provide a fundamental learning aspect and also to give you some insights as to current developments as well. Basically, I'm going to talk about *FAS 115*, "Accounting for Certain Investments in Debt and Equity Instruments." Oddly enough, *FAS 115* was effective for financial statements beginning on or after December 15, 1993. Here it is late in 1995 and it's still a fairly current development.

So what is *FAS 115* and what does it have to do with actuaries? *FAS 115* is basically accounting for assets. *FAS 115* basically establishes three classes of debt instruments, which is the focus. Those three classes are held-to-maturity, available-for-sale, and trading. In addition to those three classes of debt securities, it establishes three different accounting treatments in the financial statements. The held-to-maturity portfolio is accounted for under traditional methods; in other words, amortized cost. For the available-for-sale portfolio, the income statement treatment is at amortized cost, but the balance sheet treatment is recorded at fair value, so unrealized gains or losses—holding period gains or losses on those investments—are recorded as a separate component of equity. For the trading securities, unrealized gains and losses are treated as an element of income and are also recorded on the balance sheet, so there's a phase-in between held-to-maturity all the way down to trading securities. Incidentally, *FAS 115* does not apply to entities that were already accounting for their debt securities on a market-value basis. Things such as mutual funds and separate accounts would be expected to be excluded from the application of *FAS 115*.

There are a number of restrictions on movement of assets into and out of these three portfolios. Essentially, purchases can go into any of the three portfolios, and sales can come out of the available-for-sale portfolio or the trading portfolio. You would not be encouraged, except under very unusual circumstances, to sell any debt securities from the held-to-maturity portfolio. Additionally, there many limitations on transferring assets among the portfolios. For example, you would not be expected to be transferring securities from the available-for-sale to the trading portfolio or from the held-to-maturity to any other portfolio. About the only one that you might expect to occur would be a transfer from the available-for-sale portfolio to the held-to-maturity portfolio.

I asked Mike to indicate that I was not an accountant. The reason I asked him to do that was because the rules around these transfers are very sticky from the perspective of making accounting rules. Should you be considering transferring any investments, I'm going to refer you to your accounting advisor for information about whether that transfer would be permissible or would cause you undue accounting effects.

The application of *FAS 115* has been a very thorny process for all sorts of financial institutions. It's been so thorny that the FASB, the body that sends out the financial accounting standards, is considering drafting a question-and-answer guide related to the implementation of *FAS 115*. I've had the opportunity to review the question-and-answer guide in its draft form, and I thought one question on there would be of interest to this audience.

Is it consistent with *FAS 115* for an insurance company to classify securities as being held to maturity and also indicate to regulators that those securities could be sold to meet liquidity needs and a defined interest rate scenario whose likelihood of occurrence is reasonably possible but not probable? Now this question is kind of a setup. It's designed to find out if one could illustrate the sale of securities from a held-to-maturity portfolio to regulators without tainting your held-to-maturity portfolio; in other words, making it not likely that you had the ability to hold those securities to maturity. I'm a little concerned about this question because it seems to imply that in cash-flow testing, you would not be able to use scenarios that showed a sale from a held-to-maturity portfolio. The FASB's draft answer to this question is that you can't do it. I guess I have some questions about whether the question, in fact, is realistic and applies to cash-flow testing because of the limitations on your assumptions about new business. For example, in those scenarios, is it really pertinent in supporting a held-to-maturity portfolio?

If we're liability people, why do we care about *FAS 115* so much, besides this point about held-to-maturity portfolios? The answer comes from what could have been a relatively obscure document called the Emerging Issues Task Force (EITF) Abstracts, Topic D-41, Adjustments in Assets and Liabilities for Holding Gains and Losses as Related to the Implementation of FASB's Statement 115. It states that the SEC staff has been asked whether certain assets and liabilities, such as and it goes to say certain life insurance policyholder liabilities, deferred acquisition ellipsis, and the present value of future profits should be adjusted with a corresponding adjustment to shareholder equity at the same time unrealized holding gains and losses from securities classified as available for sale are recognized in shareholder equity.

So when this came out, and this came out as a result of a number of inquiries from the industry, actuaries started thinking twice about whether they had adopted *FAS 115* correctly. They started looking at the proper way to make the adjustments in these liabilities and asset accounts to reflect the fact that they had recorded the unrealized gains and losses on these securities in their equity. The basic conclusion was that you should adjust these liabilities so as not to overstate equity relative to what might have occurred had the securities actually been sold.

For certain policyholder liabilities, the EITF abstract concluded that, to the extent that liabilities for insurance policies by contract credit or charge the policyholders for a share of realized gains and losses, those liabilities would also be adjusted for their relative share of unrealized gains and losses. I believe this is the actual language from which the mutual company movement to record policyholder liabilities related to realized investment gains is coming from.

If by contract they require them to share those gains and losses with their policyholders, then there would be an argument for adjusting the liabilities up or down, depending on the holding period gains and losses. With respect to deferred acquisition cost and then in parallel the present value of future profits or the value of insurance in force, the EITF abstract states that these items should be adjusted to reflect the effects that would have been recognized had the unrealized holding gains and losses actually been realized.

For interest-sensitive products in which acquisition costs are amortized in proportion to an estimated gross profit stream, the company's management has to ask itself, if that stream has been effected by the assumption that these gains are realized in its portfolio. The answer is usually yes, and so there's an adjustment to deferred acquisition cost that would generally offset the recording of the unrealized gains or loss—the holding period gains or losses in equity.

With regard to traditional life insurance contracts, it's somewhat one-sided in that the EITF abstract says that the deferred acquisition cost, the present value future profits and, in fact, the benefit reserves should not be adjusted unless a premium deficiency would have resulted had the gain or loss actually been realized. It's kind of a one-sided situation. If you have a significant amount of holding period gains, you are assuming that those gains have been realized. That might also lead to an assumption that your assets have been redeployed in a lower-yielding investment, which might lead to a loss recognition situation, which might lead you to write down your deferred acquisition cost. At some point, it might actually lead to a reserve-strengthening action, so that's the theory.

I think that it's appropriate to talk about practice. *FAS 115* can be interpreted very extremely and become a very complex implementation because of all the changes in the modeling that would have to occur for determining the effect of realizing gains on the gross profits against which you're amortizing deferred acquisition cost for interest-sensitive products. Also, for *FAS 60* products, in terms of doing the loss recognition, you're going to have to make assumptions about how assets that weren't sold were reinvested. As a result, some shortcuts have been adopted and practiced. I think an excellent summary of the implementation practices that insurance companies are using are in Alan Ryan's article, "*FAS 115* Update," in the August 1995 *Financial Reporter*. I would encourage you to obtain a copy. It runs through all the implementation considerations for adopting *FAS 115* with respect to deferred acquisition cost assets.

In the quest for simplifying a fairly complex subject matter, I have to admit an error. I think I oversimplified the alternatives here for developing what some people have referred to as the shadow DAC, which is the effect on deferred acquisition cost related to the holding period gains and losses. The above article suggests, and this is an approach that I've seen in use at many companies, simply using the amortization rate; in other words, the rate at which you're amortizing DAC against gross profits and applying that same rate to your holding period gains and losses, a very simple calculation. The article goes on to demonstrate how that simple approach does a very effective job of estimating the true impact.

I'm trying to get across that an alternative would be to go back to your model or whatever you happen to be using for estimating future gross profit and plugging in the unrealized gains or losses in the current year, estimating their effect in future years, measuring the impact on the amortization ratio, and taking that net difference and applying it to the deferred acquisition cost to determine the shadow DAC. It can be a more complex exercise, and it would lead to presumably a better result. The Ryan article demonstrates that the simple approach works very effectively in most situations.

I used to be of the opinion that loss recognition on *FAS 60* contracts was such an esoteric calculation under *FAS 115* that it wasn't necessary for companies to do that. I have since corrected my opinion on this matter. I do think it is necessary to go through the exercise of evaluating whether you need to write off any deferred acquisition cost or strengthen reserves as a result of *FAS 115*, and I think that's the bad news. The good news is that the adjustment is a temporary adjustment. In other words, it also would go through equity. So despite the guidance in *FAS 60* that says there's an earnings effect whenever you do loss recognition, there is an exception to the rule that's created by *FAS 115*. That exception allows recognition related to these holding period gains and losses to go through equity and also be reversed through equity, should the situation reverse.

Regarding the present value of future profits (PVFP) adjustments, the Emerging Issues Task Force 92-9 pronouncement effectively draws parallels between the methods that companies should use to amortize the present value of future profits that were recorded for an acquisition. It is sometimes called the value of insurance in force, to amortize that asset in a parallel manner to deferred acquisition cost. If you read that pronouncement and you try to think about the effect of *FAS 115*, you would then conclude that those assets should also be amortized or should be adjusted to reflect the *FAS 115* adjustments, which I believe is also true.

FAS 121, "Asset Impairments," is another pronouncement that deals with assets that could involve the actuarial profession as well. Basically, *FAS 121* deals with asset impairment issues. One problem in accounting circles is when to recognize that the value of an asset is no longer realizable. *FAS 121* starts drawing some rules around that recognition process. It tells how to measure whether an asset is impaired and, then, if it is impaired, how to measure the degree of impairment.

The interesting thing about *FAS 121* is that, it says you should allocate your goodwill to the asset that generated the goodwill. For example, if you purchased a block of business and you've recorded a goodwill asset in your financial statements to reflect that purchase, when you're measuring the impairment of any assets that you've recorded, you would allocate that goodwill back to the asset that generated it. Fortunately, the scope statement of *FAS 121* is a remarkable situation because it's one of the first times in my memory that the FASB has specifically considered the insurance industry outside of *FAS 60,* and *FAS 97,* and it has exempted deferred policy acquisition cost from the scope of *FAS 121*. That's something we don't have to do, which is good news. However, FASB hasn't yet made a determination about the value of insurance acquired and the extent to which *FAS 121* applies to that asset. I understand that it's on the FASB's agenda or the agenda of some accounting body, and we hope to get some guidance in this area soon. It's possible that the value of insurance acquired would also be excluded, but don't bet on it.

I have a list of other developments. The first one is surplus notes. When I talk to my accounting colleagues, they tell me that this is a nonevent. However, it keeps coming up and I believe that it will be discussed by the Insurance Companies Committee. Basically, it deals with whether surplus notes are debt or equity. Some conventional practice has treated these items as debt, but there are some arguments, I understand, from an accounting perspective, that it would treat them as equity; therefore it's open for discussion. There will be some discussion and perhaps some guidance published with respect to what would characterize surplus notes as equity and what would characterize them as debt.

The AICPA SOP 89-5 came out in 1989, so this is about six years old. The title of this SOP is "Financial Accounting and Reporting of Prepaid Health Care Services." Apparently, there has long been a discrepancy between the way that a prepaid health plan determines date of service and the way an indemnity provider determines the date of service for an incurred claim, so that flows into the determination of the liability for unpaid claims. The question that's being addressed is whether it's appropriate to have that discrepancy. My argument would be to see what the contract says, but I don't know where the accounting profession will come out on that. Maybe that's what it will do.

The last item is the deferral of teaser rate differentials. I'm referring to a practice in which the insurance company would credit a higher rate on new business than it would on other business to attract new premium related to mostly single-premium deferred annuities. The question is, if you have that practice, if you have two products and one credits a higher rate than the other product, is that excess interest credit a deferrable acquisition expense? An informal survey was done of both insurance companies and the major accounting firms in the U.S. The decision was somewhat conflicting. The informal survey of insurance companies led to the conclusion that this element was deferrable, and the survey of the accounting firms was that this differential would only be deferrable if it was offset by a decrease in the commissions. There's a slight discrepancy here that perhaps needs to be cleared in some of the professional circles, but it is something that will likely be discussed further. That, effectively, concludes my comments on current events. I'm now going to turn it over to Dennie.

MR. DENNIE W. PRITCHARD: My part of the discussion on GAAP issues relates to performance measurement and other uses of GAAP financial statements. This will not be a technical presentation, but instead I will give you a couple examples of how we, at Life of Virginia, use GAAP. Before I get into how we use GAAP at Life of Virginia, I think it would be useful to note some of the shortcomings and limitations of GAAP. What is the primary goal of GAAP? It's to match up properly, on a current-period basis, revenues against expenses. The result of this is a one-year or current-period accounting gain. The problem is that it becomes a short-term focus in what, in most cases, is a long-term business. For that reason, it's not quite as good as a value-added approach. Certain distortions could also be present in GAAP. For instance, in the unlocking of deferred policy acquisition cost (DPAC) for *FAS 97* products, some portion of the unlocking could be related to change in expectation of future assumptions. Some portion could be cumulative. Some portion could be for the current period experience, but there could be distortions if future assumptions are changed.

David mentioned *FAS 115*. Well, that's only one side of the balance sheet. The assets designated as available for sale and trading securities are marked to market. Some of that comes through the income statement, and some of it comes through the balance sheet, but either way, nothing on the liability side is comparable.

Incorporating realized gains and losses into earnings could allow for the management of earnings because of the timing of taking those gains and losses. GAAP also does not produce a level pattern of ROEs. As Mike mentioned, in establishing GAAP for the first time, there could be different definitions of acquisition expenses. He showed that only approximately 75% of what would be classified as acquisition expenses end up getting deferred, and the rest would go against the bottom line. Also, for traditional products, GAAP requires a provision for adverse deviation that would be somewhat different from the pricing assumptions.

Even with these shortcomings, GAAP can and should be useful to management. There's a consistency from one statement to the next because GAAP has been in place for more than 20 years; therefore, a track record has been built up on GAAP. There should be comparability within our industry, and now, with the inclusion of gains and losses, in other industries. It's certainly better than statutory for analyzing earnings. Finally, there's information with GAAP reporting that probably is not available anywhere else, especially with the annual 10-K report that gives a great deal of footnote information related to employee benefits, taxes, investments, and related party transactions.

Well, how do we at Life of Virginia use GAAP? You need to know that we have multiple lines of business. We have interest-sensitive life, traditional life, variable life, and both fixed and variable individual annuities. We have group annuities, which would include our GICs. We have group life and a small amount of health insurance. We also have multiple distribution systems, which would include career agency, brokerage, stockbrokerage, financial institutions, investment products that market our GICs and our structures, and an agent-owned franchise network, which has characteristics of both broker and career agency.

Our parent company reports to shareholders, basically, on a line-of-business breakdown. However, at Life of Virginia, we are organized responsibility-wise along the distribution arm breakdown. For instance, a senior vice president is responsible for the results of the brokerage line. There would not be a senior vice president in charge of interest-sensitive life, for example. All our GAAP financials are done both by line of business and by distribution system and, within each distribution system report, those are further subdivided by line of business. All the relevant profit and loss (P&L) data are either tagged or allocated both ways; that is, each piece of information has a line of business associated with it, and it also has a distribution system associated with it.

I will show a sample of our GAAP financials. As I mentioned, they are done by line of business and by distribution system, and they're done quarterly. They won't be our real numbers, obviously, and the example I picked is the interest-sensitive life line of business. Table 1 is a typical GAAP income statement. Because this is a *FAS 97* product, premiums are no longer revenue; instead, policy charges and fees are accounted for as revenue. These would typically be cost-of-insurance deductions, percentage-of-premium loads, monthly administration fees, and surrender charges. Net investment income is the investment income realized on the assets backing the line of business.

Again, because it's a *FAS 97* product, the reserve increase is no longer an expense or benefit line, but instead is considered a deposit, so the interest credited to that deposit is shown as a benefit expense. The line for other benefit costs would typically be death benefits paid out in excess of the account value that is released upon death. You can see expenses and amortization of deferred policy acquisition cost. I've left off some lines there; one was what I mentioned earlier. The realized gains and losses would be in the income item. Also, let the line for expenses represent several lines, including commissions. But this is a typical GAAP profit-and-loss statement that we do quarterly. We compare that to the prior-year statement and also to budget, again, both by line-of-business breakdown and by a distribution system breakdown.

TABLE 1
GAAP OPERATING INCOME STATEMENT
INTEREST-SENSITIVE LIFE

	Amount
Policy charges and fees	$3000
Net Income	2,000
Total revenue	5,000
Interest credited on reserves	1,700
Other benefit costs	1,400
Expenses (including commissions)	800
Amortization of DPAC	600
Pretax operating income	$500

We start rearranging GAAP slightly to allow for a better analysis in Table 2. We're going to call this the alternative GAAP statement. You can see that policy charges and fees are still part of the revenue, but we're going to redefine revenue a little bit by adjusting the investment income. At Life of Virginia, we allocate investment income and the assets to generate that investment income on a net GAAP liability basis; that is, reserves less DPAC. We believe that is a good proxy for the cash generated by the line of business.

However, in the statement, interest is credited on the account value, which is the full gross liability. So to show a meaningful interest spread, we add to the statement the imputed net investment income on DPAC—$400. Then we move the interest credited on the reserve line from an outgo item to a negative income item. In this example, $700 is the interest spread on the gross GAAP liability. This adjustment is also made to put the interest spread on a basis that's consistent with the spread contribution in the estimated gross profits that a *FAS 97* model would determine that is the basis for amortizing DPAC. It's assumed that you're getting the full spread on your account value when you determine your amortization schedule.

In Table 3, I've brought the revenue that was determined from Table 2 and from that I've subtracted other benefit costs and expenses to get a gross profit, before consideration of amortization, of $1,500. Instead of the $600 of amortization of DPAC from Table 1, I've grossed that up to be $900 of amortization. This is then offset by $300 of interest credited on the DPAC. This is done to get what we call a K factor or a write-off factor that we can see from the statement by dividing the amortization before interest credited by the gross profit before amortization. As you can see in this example, the write-off factor or K factor ends up being 60%. That means 60% of the gross profits is required to amortize expenses that were deferred for acquiring this business. Finally, the last line is investment income on DPAC. It is shown as a negative here because of the inclusion of this amount in the interest margin above, in the $3,700.

TABLE 2
ALTERNATIVE GAAP OPERATING INCOME STATEMENT
INTEREST-SENSITIVE LIFE

	Amount
Policy charges and fees	$3000
Interest on invested funds	2,000
Investment income on computed DPAC	400
Less: interest credited on reserves	(1,700)
Interest spread	700
Total revenue	$3,700

This alternative GAAP P&L is done, again, by line of business and by distribution system. We show it for five running quarters. We have found that it's a good way to analyze trends in spreads, to look at the trend in K-factors, and for other various analyses that we would put to it. It's also helpful in picking up errors that would not be evident from the normal GAAP P&L. We also develop different ratios from this report for analysis. Some of those would be gross spreads as a percentage of assets, K factors, as I mentioned earlier, and deferrals as a percentage of premium.

In addition to the GAAP P&Ls, we also do quarterly GAAP ROE statements, again, by line of business and by distribution system. These are relied upon heavily in managing the business. I'm showing the development of required GAAP equity in Table 4. The first four lines are the classic C-1 through C-4 risks. At Life of Virginia, we use the NAIC factors for C-1. We use our own factors for the other C-risks. In this example, you may note that I have not employed a covariance factor, which can recognize that certain risks are mutually exclusive. After the C-factors are determined, we add to that statutory equity adjustment, which is basically going to be the DPAC, and any reserve differences between GAAP and statutory. The total will be the required GAAP equity for that line of business. In this example it's $5,000.

TABLE 3
ALTERNATIVE GAAP OPERATING INCOME STATEMENT
INTEREST-SENSITIVE LIFE

	Amount
Total revenue	$3,700
Other benefit costs	1,400
Expenses (including commissions)	800
Gross profit (before amortization)	1,500
Less: amortization of DPAC	(900)*
Interest credited on DPAC	300
Less: investment income on imputed DPAC	(400)
Pretax operating income	$ 500

*K FACTOR = 60%

TABLE 4
REQUIRED GAAP EQUITY
INTEREST-SENSITIVE LIFE

	Amount
C-1 (asset risk)	$ 800
C-2 (insurance risk)	1,200
C-3 (interest rate risk)	1,500
C-4 (business risk)	500
Total C-1 through C-4	4,000
GAAP/statutory adjustment	1,000
Required GAAP equity	5,000

We're showing the development of the GAAP return on equity in Table 5. We have the GAAP pretax operating income from Table 1, from the normal GAAP P&L, and then we have the interest on the equity that we have allocated to this line. I know of at least two ways of determining the interest on this piece because we do it both ways. One would be just to use the average rate of earnings on total company GAAP surplus on the assumption that part of that surplus has now been moved out of free surplus and has been moved behind the line of business, so it's going to take its share of the income that's generated by the total company GAAP surplus.

Another way would be to use the average rate of earnings on the assets backing the net GAAP liability on the assumption that, if you have a line manager, he or she would want the equity piece invested in the same manner as the assets backing the reserves. Again, we do it both ways. From that total income of $850 on the average GAAP equity of $5,000, we come up with a pretax GAAP ROE of 17% in this example. In analyzing the ROE rate, we have to recognize that GAAP will not give a level ROE. If an actual rate in any particular reporting period is different from, say, a company hurdle rate, that may be expected. It may not necessarily mean that you're not meeting the hurdle rate, it's just a timing difference.

TABLE 5
GAAP ROE
INTEREST-SENSITIVE LIFE

	Amount
Pretax operating income	$ 500
Interest on allocated equity	350
Total income	850
Average GAAP equity	$5,000
Pretax GAAP ROE Percentage	17%

The ROE reports by line of business and distribution system can be used for the allocation of capital. They are used in pricing and can also be used for the setting of goals.

These are some of the examples of how we use GAAP at Life of Virginia. GAAP does have its limitations as an accounting system, but we have found that GAAP has a utility and importance even beyond its significant influence on a company stock price.

MR. MCLAUGHLIN: Dennie, do you do any comparisons of actual versus expected? I think you have some good analyses of actual results here. I was just curious whether you project those out ahead of time for some period and then reexamine how actual might have varied from what was expected.

MR. PRITCHARD: I did mention that we compare against budget. Budget should be consistent with the process that you go through in determining your amortization schedule. You have to project out estimated gross profits with all the elements and sources of earnings. When you set your annual budget, the two should be consistent. As a matter of fact, one is a good check on the other. So when we compare budget variances, many times that is comparing to expected, say for pricing or expected GAAP assumptions.

MR. MCLAUGHLIN: So budget and GAAP are essentially the same.

MR. PRITCHARD: They should be. There will be some differences, but there should be some consistency there, and enough consistency to where—I think the answer to the question is yes, we would be comparing against expected.

MR. STEVEN W. CARESS: We're a mutual company, so we're just novices in GAAP. What we found a little disturbing were fluctuations in profits due to unlocking and fluctuations in equity due to the *FAS 115*. Are there any strategies for trying to reduce those fluctuations?

MR. HUGHES: Well, with respect to the unlocking question and reducing the volatility in earnings, you'll see companies keep close tabs on emerging experience and avoid letting things get too far out of line before they unlock to reflect actual historical experience. So that's one way of dampening the unlocking adjustment for past experience. In terms of looking forward, you don't really see companies change their estimates going forward willy-nilly. So there would need to be some fairly careful thought and some credible experience before management would make any significant changes to estimates of future gross profits. Oftentimes, while there may be a favorable or unfavorable experience deviation in one area, experience deviations in other areas may be offsetting. The usual practice would be to unlock your assumptions going forward and adjust for both the favorable and unfavorable developments at the same time.

MR. ROGERS: If I could add to that, I think one of the key areas of volatility is caused by perhaps not adjusting one's dividend scales to reflect current experience or alternatively perhaps adjusting one's dividend scales despite stable experience. Many companies, I think, took the approach that GAAP needed to be done based on management plans. They would take their three- or five-year plan and project it out for however many years they needed to development their amortization schedules. When they then took some dividend action or didn't take some dividend action, the effect was volatility on current period earnings. I think the solution to that has to do with assuming kind of a reversion of the relationship of dividends to total predividend gross margins to some kind of longer-term, absolute level that's reasonable, and in that manner, you can eliminate some of the volatility.

MR. PRITCHARD: I'd like to second what Mike said about unlocking. I think it should be done early and often. You can't let it slip away from you. Another point I'd like to make is—and, again, going along with his comment on a change in future assumptions, that's very leveraged, the effect that it has on your statement. We found that a 1% change in our mortality from, say, 100% of pricing to 101% of pricing could be an unlocking impact of millions of dollars. You do have to keep on top of it. You may want to grade into it. And, even if you think there's enough experience behind you to indicate a change in the assumptions that you had, a grading technique could be a way to temper some of that.

MR. MCLAUGHLIN: Just so you get four answers instead of only three, I'll also comment that you should look at your option in terms of the choices that you have with regard to the DAC amortization interest rate. If you reflect, for example, realized capital gains and losses as an adjustment to your earned interest rate and use that adjusted rate in your DAC amortization, you're going to have an impact on your DAC amortization just because of that effect. So there's the option, little used I think, to use the earned rate expected of issuance on the contract, which actually has a favorable effect in many situations, on dampening that volatility.

MR. JEFFREY LEE LOFLEY: Some companies sell universal life policies with the stated interest rate the first year and with the expectation of reducing that interest rate by, say, one percentage point in the second policy year. What considerations would guide the decision as to whether to consider that to be a deferrable acquisition expense or a part of the gross margins?

MR. ROGERS: I believe that the considerations would be whether there was an effect on the commissions that would otherwise be payable as a result of crediting that higher rate in the first year. It would not normally be considered a deferrable item.

MS. LINDA M. MCCULLUM: I have a question about something you didn't specifically address, and that's the unearned revenue liability. Have any of you had experience in setting up unearned cost of mortality charges as an unearned revenue liability. If so, how do you determine what portion is unearned?

MR. PRITCHARD: I'll give that a try. We had a product and the profits emerged very early in the product, let's put it that way, and the main reason was because of the structure of the cost-of-insurance (COI) rates. Instead of it being the typical select and ultimate, it was the other way; the slope was inverse. We said we were not going to allow the COI rates to cause us mortality losses in the future. So we took a certain portion of each early COI rate and set it up as a reserve to be released in the future, when the COI structure would not be adequate to cover the pure mortality, particularly when you're talking about substandard issues. So we had at least a break-even situation, focusing only on the mortality piece.

MR. MCLAUGHLIN: I've also seen a contract that had a heavy sixth-year COI charge, and that was treated as unearned revenue when it occurred. The average of the fourth- and sixth-year mortality was used kind of to set what that rate would have been. The excess was that portion identified as unearned.

MR. DANIEL F. CASE: I'm with the ACLI but speak solely on my own behalf. The overall theme of our Annual Meeting is ethics and professionalism, and I think it's appropriate to say a little about those subjects. We work very hard to come up with numbers that are right or are at least approximately right for what we're trying to do. I think it's equally important to present those numbers correctly.

For example, if you were to work very hard to measure the height of the Matterhorn and determine that it's 4,500 meters, give or take a few meters, and you were then to put out a release saying that the height of Mount Everest is 4,500 meters, I think you would be putting out misinformation. I don't think it's an actuary's job to put out misinformation.

As many of you may know, the FASB and AICPA documents on mutual company GAAP do not specify how the residual item in the balance sheet is to be labeled. That residual item is neither a mutual company surplus nor policyholders' equity, if by policyholders we mean the company's current policyholders. For a brief explanation of those facts, I would invite you to read my article on this subject in the June 1995 issue of *The Actuary*. Please also read a correction of one sentence in that article, which appeared in the September 1995 issue of *The Actuary*. I invite you to read in the October 1995 issue a letter to the editor of *The Actuary* that was received, in response to my article and my response to that letter. I have slightly more detailed explanations at home (in limited quantity) that I can send you, if you are interested. I do hope that actuaries are interested in the question of how these numbers are presented. It seems to me that it's equally important to put the right label on the number. It's just as important as it is to determine the right number or a number that's approximately right.

MR. MCLAUGHLIN: Dan, were you saying that there's an inappropriate GAAP label? Was that the point that you were getting at?

MR. CASE: The documents don't specify how to label the bottom line. I'm urging that actuaries do whatever they can to make sure that bottom line is not captioned as surplus and is not captioned as policyholders' equity. I won't burden you with my reasons for that.

MR. MCLAUGHLIN: Fine. I think that actuaries also need to be aware of existing literature and work through due process to get some more statements and SOPs into the best condition that we can. I think, perhaps as Dennie pointed out, there are a couple areas where GAAP may not serve all purposes perfectly, but we continue to work to provide input and contributions to the accounting profession and to the other bodies that promulgate GAAP literature.