A Casualty Actuary's Guide to GASB Statement No. 10— Criteria for Determining Applicability of GASB 10 to Alternative Risk Programs and Suggested Guidelines for Actuarial Implementation

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Abstract

The Government Accounting Standards Board Statement No. 10 (GASB10) establishes accounting and financial reporting standards for risk financing and insurance related activities of governmental entities. It raises several issues that are not clearly defined for the actuary. At the current time the American Academy of Actuaries' Actuarial Standards Board is not contemplating a Compliance Standard for GASB 10. The intent of this paper is to provide some guidelines and commentary on how to address some of the less defined areas of the statement. While GASB 10 establishes standards for both entities other than pools and pools, this paper only looks at the standards as they apply to entities other than pools.

The provisions of GASB 10 apply to all state and local governmental entities. In addition, colleges and universities have the option of either using the AICPA College Guide model or the Governmental model. This paper will sequentially analyze the various sections of GASB 10.

Biography

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A Casualty Actuary's Guide to GASB Statement No.10

Criteria for Determining Applicability of GASB 10 to Alternative Risk Programs and Suggested Guidelines for Actuarial Implementation

The Government Accounting Standards Board Statement No. 10 (GASB10) establishes accounting and financial reporting standards for risk financing and insurance related activities of governmental entities. It raises several issues that are not clearly defined for the actuary. At the current time the American Academy of Actuaries' Actuarial Standards Board is not contemplating a Compliance Standard for GASB 10. The intent of this paper is to provide some guidelines and commentary on how to address some of the less defined areas of the statement. While GASB 10 establishes standards for both entities other than pools and pools, this paper only looks at the standards as they apply to entities other than pools. These standards are effective for periods beginning after June 15, 1994.

Scope (Paragraphs .101 - .103)[1]

GASB 10 sets accounting recognition and measurement requirements for individual public entities and public entity risk pools. A separate section (that is outside the scope of this paper) deals with requirements for public entity risk pools. The types of events subject to risk of loss evaluations include:

[1] Paragraphs refer to section C50 of the Codification of Governmental Accounting and Financial Reporting Standards published by the Governmental Accounting Standards Board.

A. Torts.[2]

B. Theft of, damage to, or destruction of assets

C. Business interruption

D. Errors or omissions

E. Job-related illnesses or injuries to employees

F. Acts of God.

This list appears to include all of the most common insurance coverages, including workers' compensation, general liability, automobile liability, auto physical damage, and property coverages. In particular, a liberal interpretation of 'damage to assets', by itself, includes most coverages. Additional sections of the Statement apply to accident and health insurance, but they are beyond the scope of this paper.

Transfer of Risk (Paragraphs .105 - .107)

When risk is not transferred to an unrelated third party it may be necessary to report the liability. A clear cut example of transfer of risk is given for an insurer that charges a premium for insurance coverage, with no potential for either a supplemental assessment or a premium refund based on the insured entity's own individual loss experience. Even if an

[2] Italicized wording represent direct quotes from GASB Statement No. 10.

assessment or refund is paid based on the combined pooled experience, transfer of risk has taken place.

A second example states that if a premium is paid and the *entity's losses exceed the initial charge, it will be assessed an additional amount to fully reimburse the insurer for those losses.* In this case, it is stated that the risk has been retained and that the *premium is more in the nature of a deposit.*

The difficulty with these two examples is that there is a vast gray area between the two cases. For example, in the case of a retrospectively rated workers' compensation program there is typically a deposit portion of the premium. While additional premium will be assessed for poor loss experience, there is typically a minimum and a maximum. If actual losses fall between the minimum and maximum, then the insurer is fully reimbursed for losses. This implies that risk has been retained. If losses exceed the maximum, then the insurer is not fully reimbursed for losses. This implies that a transfer of risk has taken place. If the presence of a maximum premium is used to justify that risk has been transferred, it is fairly easy to construct a high maximum retro that would leave the entity with greater exposure to additional premium payments than if it had selected a self-insured program with an aggregate stop loss policy. This is clearly not the intent of GASB 10, as is mentioned later in Paragraph .132.

In addition, there are no examples given for deductible programs. There is little difference to the entity between an insured program with a $250,000 deductible and a self insured program with insurance coverage excess of $250,000 per occurrence. If the deductible is low, then there is clearly a transfer of risk. With a high deductible, there may be very little transfer of risk. The difficulty lies in determining at what point it is necessary to disclose and report estimated losses. The following guideline is suggested.

Guideline #1

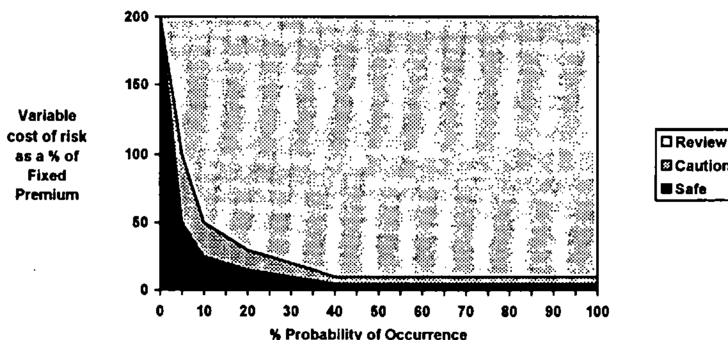
Any program, where there is greater than a 10% probability that the cost of risk not covered by a fixed premium can exceed 50% of the premium, should be actuarially reviewed.

While this creates a benchmark for one set of circumstances, there are additional considerations. As the probability of a given amount of untransferred risk increases, the need to evaluate the cost of that risk also increases. In addition, if the potential size of the untransferred risk increases, an actuarial review should take place even if the probability of occurrence is lower.

The graph below shows a continuum of reasonableness. The darkest area represents conditions under which an actuarial review is probably not necessary. The gray area represents conditions under which the necessity for an actuarial review should be

determined by an actuary and the lighter area represents conditions under which an actuarial review is recommended.

Exhibit 1. Determining the need for Actuarial Review under GASB 10



In this graph the variable cost of risk includes all cost of risk not subject to a fixed insurance premium. It can be either retained uninsured risk, or risk that is subject to a variable premium payment.

For any retrospectively rated program where the minimum premium is set at the basic premium, the variable cost of risk will be high as a % of the basic premium. If an insured program has a large deductible or high retention, it is extremely likely that the variable cost of risk will be a high % of the fixed premium associated with an excess policy. In

both of these cases an actuarial review should take place. After the review has taken place, a separate judgment can be made concerning the materiality of the result.

In the case of a program where there is a fixed premium of $1,000,000, the expected losses are $1,000,000, the average severity is $10,000, and there is a $1,000 deductible, it is unlikely that the cost of risk represented by the deductible would be a very high percentage of the premium. Therefore the potential losses would not ordinarily be reviewed.

After an actuarial analysis of the ultimate incurred losses and an estimate of loss reserves has been made, it is necessary to make a judgment concerning disclosure.

Measurement and Disclosure of the Cost of Risk (Paragraphs .110 - .115)

If the following two conditions are met, the entity should report an estimated loss from a claim.

A. Information available before the financial statements are issued indicates that it is ***probable*** *that an asset had been impaired or a liability had been incurred at the date of the financial statements. It is implicit in this condition that it must be*

probable that one or more future events will also occur confirming the fact of the loss.

B. The amount of loss can be reasonably estimated.

The term 'information available' could be construed as meaning that information of specific events is needed to indicate that claims may be filed or an asset may be impaired. An actuarial definition would be looser than this. It would include the concept that a historical pattern of unreported claims is sufficient to conclude that at any point in time there are probably unreported claims, even if there is no information available as to specific events that would give rise to such claims.

This wording is very similar to that used in the Statement of Financial Accounting Standards No. 5, "Accounting for Contingencies". It is subject to some of the same issues, such as "How large does a loss contingency have to be before it is material?"

GASB 10 does not have a statement concerning materiality of results. As stated in Property and Casualty Practice Note 1994-2, prepared by the Committee on Property and Liability Financial Reporting, American Academy of Actuaries, "Given the wide variation in company financial structures and insurance risks, no simple rule of thumb regarding materiality can be given that is meaningful and appropriate in all circumstances. In the final analysis, materiality will depend upon the actuary's judgment."

In Actuarial Standards of Practice, Financial Reporting Recommendations and Interpretations, under Interpretation 9-B: Materiality, Quantitative Considerations, it states that "the actuary should also consider whether the cumulative effect or the net effect of a number of items (including items which may be the responsibility of other actuaries or of accountants) may be material even though each item individually may be immaterial." Therefore, even if each individual line of business has an immaterial result, it may still be necessary to report the totals for all lines combined.

There is also the question of whether the accountants view materiality in the same way as actuaries. The accountants look at the overall financial reports of the entity in making their judgment concerning materiality. Since the actuary frequently does not look at the overall financial status of a public entity, and is perhaps not qualified to do so, the most conservative course is for the actuary to judge materiality in light of the cost of risk. The following guideline is suggested.

Guideline #2

If a loss reserve is material to the overall cost of risk, then it should be identified and quantified by the actuary. At this stage the actuary should ignore the question of materiality to the financial statements of the entity.

It then becomes an accounting judgment to determine if the amount is material to the entity's financial reporting under GASB 10.

The determination of parameters for range estimates and the selection of a point estimate from within the range are addressed in GASB 10 and occasionally in Requests For Proposals for actuarial work from governmental entities.

For example, one governmental entity had a request that "the final work product shall have expected value and 90% confidence level, and shall comply with requirements of GASB 10" in their scope of work requirements.

In section 111 of GASB 10 reference is made to actuarial range estimates. It states, in part, *When some amount within the range appears at the time to be a better estimate than any other amount within the range, that amount should be accrued. When no amount within the range is a better estimate than any other amount, however, the minimum amount in the range should be accrued. Even though the minimum amount in the range is not necessarily the amount of loss that ultimately will be determined, it is not likely that the ultimate loss will be less than the minimum amount.*

There are several actuarial issues with respect to this statement. First, there is no definition as to what constitutes a 'range'. Should a range apply to (a) the range of possible outcomes, (b) the range of reasonable estimates , (c) each line of business, (d)

each department within the government, (e) each year separately, or (f) all coverages, years and departments combined? What confidence level is appropriate in defining a range? It is trivial to point out that if the range is to contain 50% of the likely outcomes, the result will be very different from a range that is designed to contain 90% of the likely outcomes. If the range is based on reasonable estimates, it is likely that the 90% confidence level will result in a narrower range than that defined by the 50% confidence level for the range of outcomes. Actuarial conservatism would typically lead us to select a range that is very likely to contain the actual outcome, and therefore we might go with the range to contain 90% of the likely outcomes. Such conservatism in setting the range could lead to a suspect result if the public entity follows the admonition in GASB 10 that, "When no amount within the range is a better estimate than any other amount, the minimum amount in the range should be accrued." This confusion can arise if part of the actuarial assignment is to provide the governmental entity with estimates of loss to be used in determining retention levels. The distribution of ultimate incurred losses used in the retention analysis would be different than the range of reasonable estimates for setting a balance sheet reserve.

Turning once again to the Property and Casualty Practice Note 1994-2, "...a reserve makes 'reasonable provision' if it is within the range of reasonable estimates of the actual outstanding loss and loss expense obligation. The range of reasonable estimates is a range of estimates that would be produced by alternative sets of assumptions that the actuary judges to be reasonable, considering all the information reviewed by the actuary." It is

further noted that "the range of reasonable estimates is narrower, perhaps considerably, than the range of possible outcomes of the ultimate settlement value of the reserve." The following guideline is suggested.

Guideline #3

Reserves should be set no lower than the minimum of the range of reasonable expected value estimates, not the minimum of the range of possible outcomes.

As an example, consider an entity that has one loss per year, and it is not known until ten years later whether the loss will settle for $1 or $1,000,000. Further, assume that there is one chance in ten that the loss will settle for $1,000,000. The expected value is therefore $1 X .9 + $1,000,000 X .1 = $100,000.90. The range of outcomes is from $1 to $1,000,000. The 'better' estimate, in one sense, is $1, as it will be precisely right nine years out of ten. GASB 10 says you should either use the 'better' estimate or the minimum amount in the range. In either case a reserve of $1 would be set up. If such results were accumulated for multiple years, in the aggregate there would be substantial under reserving.

It is suggested that, in reporting ranges for GASB 10, the actuarial distinction between a range of 'reasonable estimates' and a range of 'possible outcomes' be explicitly stated. Reserving to the minimum of a range of 'reasonable expected value estimates' should be

the standard. The concept of reserving to the minimum of a range of 'possible outcomes' is not acceptable.

GASB 10 does provide definitions for *probable*, *reasonably possible* and *remote*. A *probable* event is a likely event. A *remote* event has a slight chance of occurring and a *reasonably possible* event is anything in between probable and remote. These definitions are significant as *probable* events that are reasonably estimable should be reserved for in financial statements. *Reasonably possible* events should be disclosed with either a range estimate or a statement that such an estimate can not be made. GASB 10 is silent with respect to remote events. As a result, it is assumed that a remote event does not have to be disclosed.

Probable events should be accrued for if the amount of loss is *reasonably estimable*. GASB 10 states (in paragraph .113), *If an incurred but not reported (IBNR) loss can be reasonably estimated and it is probable that a claim will be asserted, the expenditure/expense and liability should be recognized.*

One difficulty occurs in that the term reasonably estimable is not defined by GASB 10 or the FASB. The actuarial literature tends to use the term actuarially estimable. Presumably, all actuarially estimable events are reasonably estimable, but the converse may not be true, as a reasonable estimate could be arrived at by non-actuarial methods. This implies that if a probable event is not actuarially estimable, a statement should be made with a caveat,

such as "While it is probable that a liability for claims exists, the size of the reserve is not reasonably estimable by generally accepted actuarial methods."

A minor wording difficulty with some sections of GASB 10, including paragraphs .113 and .114, is that it switches from using terminology such as *loss contingency* and *events* to the use of the word *claims*. Since some of the risks of loss included within the scope of GASB 10 are not third party coverages, there are no *claims* if the governmental entity is self insured. It is assumed that the use of the word claims is intended to include any loss contingency, no matter which risk of loss it arises from.

An interesting feature of the section on Disclosure of Loss Contingencies (paragraph .115) is that even if a loss amount is accrued as being both *probable* and *reasonably estimable*, an additional disclosure should be made if it is *reasonably possible* that an additional loss may have been incurred. This implies that if a range of reasonable expected value estimates has been made and the accrued amount is set at any value other than the maximum of the range, it is appropriate to disclose the difference between the accrued value and maximum of the range as being *reasonably possible*. For this not to be the case, an argument would have to be made that the likelihood of some values in the range of reasonable expected value estimate is *remote*. This would be contradictory on the face of it. This leads us to the following guideline.

Guideline #4

If the accrued loss contingency is less than the maximum value identified in the range of reasonable expected value estimates, then the difference between the accrued amount and the maximum value should be disclosed.

Discounting and Investments (Paragraphs .116 - .119)

The use of discounting to determine the present value of reserves is neither mandated or prohibited. *Claims liabilities associated with structured settlements should be discounted if they represent contractual obligations to pay money on fixed or determinable dates.* Since most structured settlements are funded by annuities, it is assumed that the cost of the annuity will become the paid loss amount. However, unless a release from further liability has been obtained, *the aggregate outstanding amount of the liabilities removed from the entity's financial statements should be disclosed as long as those contingent liabilities are outstanding.* If the structured settlement is not funded by an annuity, then discounting using an interest rate appropriate for the entity is recommended. In the case of annuities, one of the following three cases will apply.

1) If an annuity is in the name of the entity and not in the name of the claimant, then the outstanding reserves should be included in the loss reserve liabilities on the balance sheet.

2) If an annuity is in the name of the claimant, but a signed release from further obligation has not been obtained, then the related liability should be removed from the

balance sheet and a note to the financial statements disclosing the outstanding amount of liability covered by the annuity is necessary.

3) If an annuity is in the name of the claimant and a signed release from further obligation has been obtained, then the related liability should be removed from the balance sheet and a note is not necessary.

Funding of Losses (Paragraphs .120 - .134)

A variety of different funding mechanisms are identified by GASB 10. They include:

A. Internal fund

  1. General Fund

  2. Internal Service Fund

B. Public Entity Risk Pool

  1. With transfer or pooling of risk

  2. Without transfer or pooling of risk

C. Insurance

Both the general fund and internal service fund approach should recognize cost of risk liabilities and expenditures according to the standards identified above net of any expected excess insurance recoveries.

The use of a specific internal service fund for financing losses permits two additional options.

A) In charging other funds of the entity for the cost of risk, it is permissible for the total charges to be based on an actuarial method and adjusted over a reasonable period of time so that the internal service fund revenues and expenses are approximately equal. This permits some flexibility in setting annual charges.

B) In addition to the total charge determined in (A), a reasonable provision for expected future catastrophe losses may be included.

Deficits occurring under these two provisions do not have to be allocated back to other funds unless the fund is not balanced over a reasonable period of time. Any deficit fund balance should be disclosed in notes to financial statements. Any catastrophe fund retained earnings should be identified as equity designated for future catastrophe losses in notes to financial statements.

A *Public entity risk pool* is defined as *A cooperative group of governmental entities joining together to finance an exposure, liability or risk.* If a governmental entity participates in such a pool in which there is a sharing of risk among the participants, its periodic contribution is reported as insurance expense. If the pooling agreement permits additional assessments to its members in the event of adverse loss experience, the entity

should report any such assessment that is both *probable* and can be *reasonably estimated*. If additional assessments are not permitted, the entity should assess the financial capacity of the pool to meet its obligations when due. If it is probable that the pool will not be able to meet its obligations and the entity will be required to pay its own losses, then the reasonable estimated amount of such obligations should be reported. If the entity is entitled to a refund or dividend, then a reduction of expenditures should be recognized at the time the dividend is declared.

If the entity participates in a risk pool where service is provided, but there is no transfer of risk, GASB 10 directs that payments to the pool should be treated as either deposits or reductions to reserves. The cost of risk should be reserved for on the entity's books as if it is self-insured.

Several types of insurance related transactions are specifically discussed.

If a claims-made policy has been purchased and prior claims outside of the policy period are not covered, then the reasonably estimated cost of such excluded claims should be accrued for.

Retrospectively rated polices where additional premium may be required based on the entity's own loss experience should reserve for the reasonably estimated additional premium. Presumably, the same standards would apply to potential refunds also. If

additional premiums or refunds are to be made based upon the experience of a group, and are reasonably estimable, then the entity should accrue for them. If these amounts can not be reasonably estimated, then the loss contingency should be disclosed in the notes to the financial statements.

Paragraph .133 specifically states that for a retrospectively rated policy where refunds are primarily based upon the experience of a group, the entity should accrue for refunds on the basis of the group's experience to date. This does not seem to be in philosophical conformance to Paragraph .134 that states that a policyholder dividend related to its insurance or pool participation contract should be recognized at the time the dividend is declared. The reason for this difference may be that dividends generally require management approval before being declared and therefore are not certain until declared, whereas a retrospectively rated policy contains a legal obligation to adjust the premium.

If an entity provides separate risk management services to other organizations outside of the governmental reporting entity and there is material transfer or pooling of risk, then that activity should be accounted for as a public entity risk pool.

Disclosure Statements (Paragraph .136)

The required disclosures in the notes to financial statements are fairly straightforward and include, where applicable:

A. Description of risks of loss and how they are financed.

B. Description of significant increases in risk from prior year.

C. Description of any pool participations.

D. For retained risk:

1. Basis for estimating unpaid claims liability.
2. Discount rates and present value amounts of any discounted reserves.
3. Aggregate outstanding claims for which annuity contracts have been purchased and a release from further obligation has not been signed.
4. Reconciliation of changes in aggregate claims liability for the current fiscal year and prior fiscal year in a specified tabular format.

References

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