

EXPOSURE DRAFT

PROPOSED ACTUARIAL STANDARD OF PRACTICE

**PROJECTED BENEFIT ILLUSTRATIONS
IN CONNECTION WITH
RETIREMENT PLAN AMENDMENTS**

**Comment Deadline
November 30, 2000**

**Developed by the
Pension Committee of the
Actuarial Standards Board**

**Approved for Exposure by the
Actuarial Standards Board
June 2000**

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June 2000

TO: Members of Actuarial Organizations Governed by the Standards of Practice of the Actuarial Standards Board and Other Persons Interested in Projected Benefit Illustrations in Connection with Retirement Plan Amendments

FROM: Actuarial Standards Board (ASB)

SUBJ: Proposed Actuarial Standard of Practice (ASOP)

This booklet contains the exposure draft of the proposed actuarial standard of practice, *Projected Benefit Illustrations in Connection with Retirement Plan Amendments*. Please review this exposure draft and give the ASB the benefit of your comments and suggestions. Each written response and each response sent by e-mail to the address below will be acknowledged, and all responses will receive appropriate consideration by the drafting committee in preparing the final document for approval by the ASB.

The ASB accepts comments by either electronic or conventional mail. The preferred form is e-mail, as it eases the task of grouping comments by section. However, please feel free to use either form. If you wish to use e-mail, please send a message to **comments@actuary.org**. You may include your comments either in the body of the message or as an attachment prepared in PDF or any commonly used word processing format. Please include the phrase “Benefit Illustrations” in the subject line of your message.

If you wish to use conventional mail, please send comments to the following address:

Benefit Illustrations
Actuarial Standards Board
1100 Seventeenth Street, NW, 7th Floor
Washington, DC 20036-4601

Deadline for receipt of responses in the ASB office: **November 30, 2000**

Background

Over the past months, regulators and others have raised concerns regarding the completeness of communications provided to plan participants with respect to retirement plan changes. Despite the fact that the content of communications to participants is, in the end, at the discretion of plan sponsors, the role of actuaries in assisting sponsors in changing plans and in communicating such changes has been questioned. In light of these events, the Pension Practice Council of the American Academy of Actuaries requested that the ASB develop an actuarial standard of practice addressing communication of benefit changes to participants.

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Actuarial Opinion of Compliance

In drafting this proposed standard, a principal concern of the ASB and the Pension Committee has been its scope and applicability. The content of communications to participants is generally within the discretion of plan sponsors—the actuary does not have the authority to prescribe specific content in order to satisfy an actuarial standard of practice. Furthermore, plan sponsors may prepare projected benefit illustrations without the assistance of actuaries. To address these concerns, the ASB Pension Committee has introduced an innovative concept in this proposed standard—the Actuarial Opinion of Compliance (AOC). A projected benefit illustration that has received an Actuarial Opinion of Compliance may contain the following statement:

A qualified actuary has determined that this projected benefit illustration has been prepared in accordance with Actuarial Standard of Practice No. [Number], Projected Benefit Illustrations in Connection with Retirement Plan Amendments, as promulgated by the Actuarial Standards Board.

It is the intent of this standard that a participant receiving a projected benefit illustration that contains this statement would be reassured that the information provided is “comprehensive” and “fair,” as those words are used in the proposed standard. The ASB and the Pension Committee hope that the Actuarial Opinion of Compliance will become the mark of quality for projected benefit illustrations. Those plan sponsors choosing to obtain an Actuarial Opinion of Compliance will enhance their credibility with plan participants. Participants who receive a projected benefit illustration without an Actuarial Opinion of Compliance may question why an Actuarial Opinion of Compliance was not obtained.

This proposed standard sets forth requirements that a projected benefit illustration must satisfy in order for an actuary to issue an Actuarial Opinion of Compliance. No deviation is permitted—if the projected benefit illustration does not fully satisfy every requirement of this standard, the actuary may not issue an Actuarial Opinion of Compliance.

The proposed standard would not apply when the actuary is preparing, reviewing, or giving advice on preparing projected benefit illustrations for which no Actuarial Opinion of Compliance will be issued. Instead, actuaries preparing, reviewing, or giving advice on preparing projected benefit illustrations that are not subject to this standard should be guided by the Code of Professional Conduct and other applicable actuarial standards of practice. They may also consider the guidance in this standard to the extent it is appropriate.

Section 3.3, Comprehensive Disclosure of Significant Changes

The board was divided regarding the nature and extent of information about prior plan benefits for which the participant is no longer eligible that should be required to be shown in a projected benefit illustration in order to obtain an Actuarial Opinion of Compliance.

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Some board members believed that numerical or graphical projections comparing the benefits provided by the amended retirement plan to the benefits that would have been provided had the plan not been amended should generally be required, in order for plan participants to understand the impact of the plan amendment (except in straightforward situations where it is reasonable to expect that participants could readily compare the benefits). In situations where such a comparison would be impractical or prohibitively expensive (for example when numerous prior plans providing different benefits are being merged into a single plan with one benefit formula), the plan sponsor would simply have to forego the Actuarial Opinion of Compliance.

Other board members believed it was appropriate for the projected benefit illustration to focus on what the amended retirement plan would provide going forward. While requiring a description of the benefit before the change and the general effect of the change, these board members did not believe it necessary to require numerical or graphical projections of prior plan benefits for which the participant is no longer eligible.

To encourage input from the profession on this issue, this exposure draft contains two alternatives for section 3.3, Comprehensive Disclosure of Significant Changes. Alternative (A) would generally require numerical or graphical comparisons of the prior plan and the amended plan. Alternative (B) would permit such numerical or graphical comparisons, but would only require a description of the plan before the change and the general effect of the change on the projected benefit. (Note that sections 3.3.1 through 3.3.3 would be identical under the two alternatives.) Sample Illustrations (A) and (B) in appendix 2 illustrate these two alternatives. Illustration (A) includes graphical projections comparing the benefits provided by the amended retirement plan to the benefits that would have been provided had the plan not been amended. This illustration complies with both Alternatives (A) and (B). Illustration (B) describes the benefit before the change and the general effect of the change on the projected benefit, but does not include numerical or graphical projections of prior plan benefits for which the participant is no longer eligible. Illustration (B) complies with Alternative (B), but does not comply with Alternative (A).

Requests for Comments

The Pension Committee is particularly interested in receiving comments on the following issues (we do not expect that all commentators will respond to each question):

1. Section 1.2, Scope, provides that the proposed standard applies to actuaries when they issue an Actuarial Opinion of Compliance certifying that a projected benefit illustration prepared for plan participants in connection with a retirement plan amendment complies with this standard.
 - a. Is the Actuarial Opinion of Compliance approach feasible?

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- b. Should the scope be redirected, to focus on information the actuary provides to the plan sponsor in connection with implementation of a retirement plan amendment, rather than on projected benefit illustrations for plan participants? For example, an alternative scope might require the actuary to supply to the plan sponsor sufficient information to enable the plan sponsor to prepare projected benefit illustrations that comply with this standard. Under this approach, the actuary's responsibility would be to the plan sponsor, not to the plan participants. This approach would not include the concept of an Actuarial Opinion of Compliance.
 - c. Should the scope be expanded to apply to all projected benefit illustrations prepared in connection with retirement plan amendments, regardless of whether an Actuarial Opinion of Compliance will be issued?
 - d. Should the scope be expanded to apply to other types of projected benefit illustrations that are not in connection with retirement plan amendments, such as routine annual projected pension benefit statements? If you believe the scope should be expanded, should the standard only apply when the plan sponsor chooses to obtain an Actuarial Opinion of Compliance, or in all situations? How should the requirements be different for other types of projected benefit illustrations?
2. Section 2.5, Projected Benefit Illustration, includes illustrations communicated by means of software programs and websites. Generally, these are interactive applications that allow an employee to create projected benefit illustrations based on rates of inflation, interest rates, and other assumptions and variables that the employee selects. In some applications the employee will be limited to a range for each assumption and variable. The application may also provide educational material to help the employee select a set of assumptions and variables. Section 3.4.8, Use of Computer Programs and Other Interactive Applications to Project Benefits, requires that the application provide guidance to users regarding reasonable assumptions (including warnings if selected assumptions are unreasonable) and a description of how each assumption is used in the calculations. Should the proposed standard be applied in these situations? Are the requirements of section 3.4.8 adequate and appropriate?
3. Section 2.9, Wear Away, defines wear away narrowly to include only those situations where no new benefits will be accrued for more than one year. Should this definition be broadened? For example, should wear away be defined to include all situations in which the projected benefit is expected to be less than the sum of the frozen pre-amendment accrued benefit plus the benefit that would be accrued under the amended plan formula for service after the effective date of the plan amendment?
4. As discussed above, two alternatives are provided for section 3.3, Comprehensive Disclosure of Significant Changes. Which alternative should be adopted in the final

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standard?

5. Section 3.4.4, Effects of Inflation, requires that benefits projected more than five years be shown in inflation-adjusted dollars or as percentages of final earnings, rather than as nominal dollars. Is this guidance appropriate?
6. Section 3.4.6, Available Payment Forms or Forms of Equivalent Value, requires that projected benefit illustrations show a form of payment that is available to the participant from the amended retirement plan. In addition, it also allows supplemental illustrations of equivalent value payment forms not available to participants. For example, the lump sum value of a projected benefit from a defined benefit pension plan could be shown only if (a) the plan permits lump sum payments, or (b) the annuity benefit that is provided by the plan is also illustrated. Is this guidance appropriate? If not, how should it be modified?
7. Section 3.5, Projected Benefit Illustrations Provided When Participants Are to Choose Among Two or More Retirement Plan Alternatives, outlines requirements that apply when a participant is given a choice between two or more alternative retirement plans. Are there any additional requirements that should apply, or is this guidance adequate?
8. Appendix 2 contains three sample projected benefit illustrations for hypothetical situations where a final pay defined benefit pension plan is amended and the participants are not given a choice regarding future plan benefits. (Illustration (B) would comply with section 3.3, Alternative (B), but not with Alternative (A)). Are such illustrations helpful in understanding the standard? Would additional samples be beneficial?

The ASB reviewed the draft at the June 2000 board meeting and approved its exposure.

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PROPOSED ACTUARIAL STANDARD OF PRACTICE

PROJECTED BENEFIT ILLUSTRATIONS IN CONNECTION WITH RETIREMENT PLAN AMENDMENTS

STANDARD OF PRACTICE

Section 1. Purpose, Scope, Cross References, and Effective Date

- 1.1 **Purpose**—This actuarial standard of practice (ASOP) provides guidance to actuaries in preparing, reviewing, or giving advice on preparing projected benefit illustrations for plan participants in connection with a retirement plan amendment for which an Actuarial Opinion of Compliance has been requested.
- 1.2 **Scope**—This standard applies to actuaries when they issue Actuarial Opinions of Compliance that projected benefit illustrations prepared for plan participants in connection with a retirement plan amendment comply with this standard.

This standard does not apply to actuaries when they prepare, review, or give advice on preparing the following types of projected benefit illustrations:

- a. projected benefit illustrations prepared for plan participants in connection with a retirement plan amendment for which no Actuarial Opinion of Compliance will be issued;
- b. projected benefit illustrations prepared for plan participants when there is no retirement plan amendment; or
- c. projected benefit illustrations or other analyses prepared for parties other than plan participants, such as the plan sponsor.

However, actuaries involved in preparing, reviewing, or giving advice on preparing projected benefit illustrations that are not subject to this standard may consider the guidance in this standard to the extent that it is appropriate. When preparing, reviewing, or giving advice on preparing projected benefit illustrations whether subject to this standard or not, the actuary should be guided by the Code of Professional Conduct and other applicable actuarial standards of practice.

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- 1.3 Cross References—When this standard refers to the provisions of other documents, the reference includes the referenced documents as they may be amended or restated in the future, and any successor to them, by whatever name called. If any amended or restated document differs materially from the originally referenced document, the actuary should consider the guidance in this standard to the extent it is applicable and appropriate.
- 1.4 Effective Date—This standard applies to an actuary issuing an Actuarial Opinion of Compliance on or after the date this standard is adopted by the Actuarial Standards Board.

Section 2. Definitions

The definitions below are defined for use in this actuarial standard of practice.

- 2.1 Accrued Benefit—The amount of a participant's benefit (whether or not vested) as of a specified date, determined in accordance with the terms of a retirement plan and based on compensation (if applicable) and service to that date.
- 2.2 Participant—An individual covered by the retirement plan who will be affected by a retirement plan amendment and is expected to receive a projected benefit illustration.
- 2.3 Pre-Amendment Accrued Benefit—A retirement plan participant's accrued benefit earned as of the effective date of the amendment, using the plan provisions in effect prior to the amendment.
- 2.4 Projected Benefits—Amounts that are expected to be payable to a participant from a retirement plan in the future, taking into account such items as the effect of advancement in age, compensation, and service credits.
- 2.5 Projected Benefit Illustration—Any communication or series of communications to retirement plan participants that illustrates projected benefits using numbers or graphics including relevant accompanying text. The projected benefits may be based on information specific to each participant or data for one or more hypothetical participants. The communication may be provided in any medium, for example, an individual benefit statement, a software program, a website, a booklet, or an employee newsletter.
- 2.6 Qualified Actuary—An actuary who satisfies the *Qualification Standards for Prescribed Statements of Actuarial Opinion* promulgated by the American Academy of Actuaries in the pension practice area.
- 2.7 Retirement Plan—An employment-related arrangement for determining the amount and timing of retirement benefit payments, eligibility for payments, etc. A retirement plan may be a defined benefit pension plan, a defined contribution plan, or a hybrid plan with

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both defined benefit and defined contribution elements. It may be a plan qualified under the Internal Revenue Code, a nonqualified plan of deferred compensation, or a governmental plan sponsored by the United States or its agencies or a state or local government.

2.8 Retirement Plan Amendment—A change in the provisions of a retirement plan that will change the amount, value, timing, rate of accrual, form of benefit payments, or the circumstances under which the retirement plan would pay benefits to plan participants. Examples of retirement plan amendments may include, but are not limited to, the following:

- a. a change in a defined benefit pension plan's benefit formula or participant contribution requirements;
- b. a change in the formula used under a defined contribution plan to determine participant or plan sponsor contribution levels;
- c. a change in a defined benefit pension plan's early retirement reduction factors;
- d. a change in the eligibility requirements for early or disability retirement;
- e. a change in the vesting schedule; and
- f. a change in the normal form or optional forms of payment.

A retirement plan amendment may include changes to two or more retirement plans covering the participant, such as terminating one retirement plan and adopting a new retirement plan.

2.9 Wear Away—A situation in which additional benefits will not be accrued under the amended plan for a period of more than one year following the effective date of the amendment, disregarding early retirement subsidies that the participant would not be entitled to receive if he or she terminated on the effective date of the retirement plan amendment. An increase in the present value of the pre-amendment accrued benefit due to the passage of time or survivorship is not considered an additional benefit accrual for this purpose.

Section 3. Analysis of Issues and Recommended Practices

3.1 Overview—A plan sponsor wishing to assure plan participants that a projected benefit illustration provides comprehensive and fair disclosure of the effect of a retirement plan amendment on future benefits may request an Actuarial Opinion of Compliance. If the

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actuary determines that the projected benefit illustration satisfies this standard of practice, the actuary may issue an Actuarial Opinion of Compliance.

Projected benefit illustrations need not be customized for the participant or based on individual participant data. Instead, projected benefit illustrations may be prepared for one or more hypothetical participants. When this approach is taken, the actuary should determine that sufficient illustrations are provided so that all or almost all participants are expected to receive an illustration that reasonably represents the effect of the retirement plan amendment on their own situation or circumstances. Moreover, the hypothetical participants should be selected to show the circumstances where the retirement plan amendment will increase projected benefits and where it will reduce projected benefits, as relevant.

Projected benefit illustrations need not be voluminous, but should be appropriate to the nature of the plan amendment. If a plan change can be comprehensively and fairly disclosed in a concise manner, the projected benefit illustration should do so. Moreover, at times such changes may be communicated to participants through a limited number of examples or through written descriptions (without extensive numerical examples).

As indicated below, an actuary may not issue a partial or conditional Actuarial Opinion of Compliance.

Appendix 2 contains examples of projected benefit illustrations that comply with this standard of practice.

- 3.2 Actuarial Review of Projected Benefit Illustrations—Before issuing an Actuarial Opinion of Compliance, the actuary should review the relevant plan provisions, both pre- and post- amendment, and the demographic characteristics of the relevant population. In addition, the actuary should review an appropriate sample of the projected benefit illustrations, whether on hard copy or electronic media. If the projected benefit illustration is in the form of an interactive computer program, website, or other media, the actuary should test illustrations based on potential inputs for a reasonably representative sample of participants. For example, illustrations for a salary-related plan should be tested at alternative salary growth rates.
- 3.3 Comprehensive Disclosure of Significant Changes [Alternative A]—Disclosure of significant changes is “comprehensive” if it meets the requirements of this section. The projected benefit illustration should disclose the significant changes made by the retirement plan amendment and illustrate the effect those changes might have on projected benefits. The illustration should describe prior plan benefits in sufficient detail to permit participants to make a meaningful comparison of prior and future plan benefits. To permit such meaningful comparison, the projected benefit illustration should generally include numerical or graphical projections comparing the benefits provided by the amended retirement plan to the benefits that would have been provided had the plan not

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been amended. However, when the plan change is straightforward, a description of the benefit before the change and the effect of the change on the projected benefit may be sufficient to permit a meaningful comparison.

- 3.3 **Comprehensive Disclosure of Significant Changes [Alternative B]**—Disclosure of significant changes is “comprehensive” if it meets the requirements of this section. The projected benefit illustration should disclose the significant changes made by the retirement plan amendment and illustrate the effect those changes might have on projected benefits. Projected benefit illustrations need not include numerical or graphical projections of those prior plan benefits for which the participants are no longer eligible. It is sufficient to describe the benefit before the change and the general effect of the change on the projected benefit. However, if the projected benefit illustration includes projections of prior plan benefits for which the participants are no longer eligible, such projections must comply with this standard.

3.3.1 **Illustrations of Benefits Payable Under the Amended Plan at Specific Points Due to the Occurrence of Specific Events**—When the retirement plan amendment changes the future benefit accrual pattern, benefit eligibility requirements, or ancillary benefits, the projected benefit illustration should generally show what a participant’s benefit would be in the event of a specific occurrence (such as termination, death, disability, or retirement) at various future times (for example, in one year or five years, at ages 55, 60, and 65). The projected benefit illustration need not show benefits at all possible times for all possible occurrences; however, it should include enough specific examples to reasonably show the types of events where the benefits were changed by the amendment and the magnitude of those benefits under the amended plan.

3.3.2 **Illustrations of Benefit Accrual Patterns**—The projected benefit illustration should communicate the pattern of benefit accruals over time and the effect of benefit eligibility requirements provided under the amended plan, including the following:

- a. **Subsidized Early Retirement**—If the amended retirement plan provides subsidized early retirement benefits, the projected benefit illustration should show any significant increase in early retirement benefits at the date the participant will satisfy the eligibility condition.
- b. **Other Changes in Accrual Pattern**—The projected benefit illustration should show plan provisions that may cause significant changes in the rate at which the participant will earn future benefits, such as maximum service or compensation limits, minimum benefits (including the effect of wear away), or multiple formulas.

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For example, a plan might provide that the benefit is the greater of the amounts calculated under each of two formulas. When this is the case, the projected benefit illustration should show the greater amount. An illustration that shows the projected benefit under only one formula for a period when the benefit under the other formula is expected to be greater does not meet the requirements of this standard.

3.3.3 Disclosure of Wear Away—When the retirement plan amendment results in wear away, the projected benefit illustration should indicate how long it will be before additional benefits are expected to be accrued under the amended retirement plan.

- a. Assumptions—For purposes of determining whether there is wear away and the expected duration of wear away, the projected benefit illustration should be based on the assumption that the value of any variable that is not solely a function of the passage of time will remain constant from the effective date of the retirement plan amendment for all future periods. For example, age and service are solely a function of the passage of time, and therefore would be assumed to increase. Whereas the participant’s annual salary, indexed interest crediting rates, or variable lump sum conversion factor at the date benefits commence are not solely a function of the passage of time and should be assumed to remain constant.

If the projected benefit illustration is prepared before the effective date of the plan retirement plan amendment—and before the actuary can know the value of a variable as of such effective date—the projected benefit illustration may use an available value for such variable as of a date not more than three months before the projected benefit illustration is expected to be distributed to participants.

- b. De Minimis Additional Benefits—For a plan that provides a minimum benefit equal to the accrued benefit on the effective date plus a *de minimis* additional benefit, the projected benefit illustration should indicate how long only *de minimis* additional benefits are expected to be accrued, using the assumptions described in (a) above.

3.4 Fair Disclosure of Significant Changes—Disclosure of significant changes is “fair” if it meets the requirements of this section. The projected benefit illustrations should fairly disclose the effect of the retirement plan amendment and should not misrepresent the effect of the plan change.

3.4.1 Avoiding Bias—The projected benefit illustration should illustrate those provisions that will reduce a participant’s benefit, if any, as well as those that will increase benefits. In the case of provisions that would improve benefits under

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some circumstances, but reduce benefits under other circumstances, the information should identify both types of circumstances.

- 3.4.2 Reasonable Baseline Assumptions—Determination of projected benefits generally involves assumptions about future events and economic factors. For example, the projected benefits may be based on assumptions regarding future inflation, compensation, hours worked, investment returns or interest credits, and lump sum or annuity conversion rates. The projected benefit illustration should include a baseline projection based on actuarial assumptions that are individually reasonable. Furthermore, all economic assumptions used in the baseline projection should be consistent, generally reflecting the same underlying inflation rate. For example, if the salary increase assumption is low in anticipation of a low but reasonable inflation assumption, the investment return assumption used to project defined contribution account balances and the annuity conversion factors used to convert the account balance at retirement to an equivalent annuity should reflect the same low inflation expectation. This is not intended to suggest that only a single scenario is to be used or that a single inflation expectation should underlie all scenarios.
- 3.4.3 Relevant Alternative Scenarios—Because projected benefit illustrations involve assumptions about future events and economic factors, it is likely that actual benefits will differ from the benefits shown in the baseline projection. When the effect of the retirement plan amendment will vary significantly depending on the assumptions made, the projected benefit illustration should present a reasonable number of alternative scenarios indicating the extent to which benefits payable in the future will vary depending on future events. The alternative scenarios selected should include reasonable scenarios in which the amended plan would appear less attractive, if any, as well as those in which the amended plan would appear more attractive.

One acceptable approach is to show alternative projected benefit illustrations in which one assumption varies within a reasonable range, while other assumptions remain at the values used in the baseline scenario. For example, if the effect of the amendment will vary significantly depending on the assumed rate of future compensation increases, the projected benefit illustration may show projected benefits using baseline, high, and low compensation increase rates, with all other assumptions equal to the baseline projection values.

Alternative scenarios may be presented using assumptions that might otherwise appear to be inconsistent. For example, an alternative scenario may reflect a high compensation increase rate combined with other baseline assumptions reflecting low or moderate expected future inflation, because some participants are likely to have high merit increases even in a low inflationary environment. Although an alternative scenario incorporating no increase in compensation over a long period

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would not normally be considered as reasonable, it may be beneficial in demonstrating the impact of the amendment.

To the extent two or more assumptions reflect the same underlying economic factors, they should be consistent within each alternative scenario. For example, if the interest crediting rate and the annuity conversion factors are both based on 30-year Treasury yields, a projected benefit reflecting both of these factors should use consistent assumptions.

This standard does not preclude the use of select and ultimate economic assumptions.

- 3.4.4 Effects of Inflation—Because some of the benefits shown in a projected benefit illustration may be payable many years in the future, inflation could erode the value of benefits provided by the plan. Therefore, the projected benefit illustrations should show either inflation-adjusted dollars or benefits expressed as percentages of final earnings, as opposed to showing nominal dollar projections more than five years into the future. Alternatively, the projected benefit illustration may show both nominal dollar projections and also inflation-adjusted dollars or benefits expressed as percentages of final earnings, provided the projected benefit illustration describes the difference between the values.

- 3.4.5 Vesting Requirements—The projected benefit illustration should take into account the retirement plan's vesting requirements, even if the vesting requirements were not changed by the plan amendment. If the retirement plan amendment changed the vesting requirements, the projected benefit illustration should indicate the effect of the change. Whenever benefits that are not fully vested are shown, the projected benefit illustration should indicate that some or all of the benefit amount shown would be forfeited if the participant terminates before becoming vested.

In order to illustrate the benefit accrual pattern under the plan, the projected benefit illustration may show projected benefits for dates before the participant will become fully vested. However, if any nonvested benefit amounts are shown, the projected benefit illustration should indicate the plan's vesting requirements and show the date the participant will become fully vested.

- 3.4.6 Available Payment Forms or Forms of Equivalent Value—The projected benefit illustration should show a form of payment that is actually available to the participant from the amended retirement plan. In addition, payment forms that are of equivalent value, as described below, may be shown.

- a. Available Payment Forms—The projected benefit illustration should show benefits in a form of payment that is actually payable to the participant

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from the amended retirement plan. For example, if a defined benefit pension plan offers both immediate annuity and lump sum payment options, the projected benefit illustration may show projected benefit values as either immediate annuities or lump sums. However, except as provided in section 3.4.6(b), a lump sum value in excess of \$5,000 should not be shown for the annuity benefits payable from a defined benefit pension plan that only pays lump sums of \$5,000 or less.

- b. **Payment Forms of Equivalent Value**—At times, it may be desirable for the projected benefit illustration to illustrate the magnitude or value of projected benefits payable in a form that is not available directly from the retirement plan in addition to illustrating an available payment form. For example, this would be necessary to compare a profit sharing plan that only provides lump sum distributions with a defined benefit pension plan that only provides annuity payment forms. Similarly, this might be the most effective way to illustrate the substantial increase in benefit value that occurs when a participant becomes eligible for subsidized early retirement.

When determining projected benefits not available directly from the retirement plan, such as the annuity equivalent of a lump sum distribution or the single sum equivalent of an annuity form of payment available directly from the plan, the projected benefit illustration should be based on assumptions representative of annuities that would be actually available for purchase by the participant (including appropriate mortality margins and expense loads).

When the projected benefit illustration shows the present or future value of projected benefits, such values should be based on the same assumptions regarding the occurrence of future events as used to determine the projected benefit amount. For example, if the projected benefit illustration shows the present value of the projected age 62 retirement benefit, that value should not be discounted to reflect the probability that the participant will terminate employment before age 62, and should not be increased to reflect the probability that additional shutdown benefits may be payable upon plant closure before the participant attains age 62. As another example, actuarial adjustments to reflect the percentage of a covered group that is married should not be applied in benefit values disclosed in individual projected benefit illustrations.

- 3.4.7 **Avoiding Misrepresentations Regarding Plan Costs**—The projected benefit illustration need not include any information regarding the plan sponsor's cost to provide the retirement plan benefits. However, any such information shown on

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the projected benefit illustration should not misrepresent the effect of the plan change. For example, because of the full funding limitation, a plan amendment might not affect the plan sponsor's contribution to a defined benefit pension plan in the year the amendment is first reflected in the funding requirements. Nonetheless, it would be a misrepresentation to say that the amendment did not reduce the plan sponsor's cost if the plan amendment in fact reduced the plan's benefit liabilities and thereby postponed the date when contributions are expected to resume.

3.4.8 Use of Computer Programs and Other Interactive Applications to Project Benefits—A plan sponsor may choose to provide plan participants with a computer program or other form of interactive application in which the participant would have the ability to select various assumptions and other parameters that will be used in calculating and illustrating the participant's projected benefit. A projected benefit illustration using such an application should include the following:

- a. warnings in the event a participant selects assumptions or other parameters that are not reasonable;
- b. an explanation of how each assumption is used in the projected benefit calculation;
- c. an indication of relationships among the assumptions that the participant should take into account in selecting assumptions; and
- d. notifications of any approximations used in the calculations.

If the application limits the range of an assumption choice, then that range should be wide enough to include most assumptions that the actuary considers reasonable. For example, if the participant is allowed to pick an inflation assumption, then the program should, as a minimum, do the following:

- a. provide historical information on inflation, a description of how the inflation assumption chosen by the participant will be used in the application (for example, to adjust compensation and other limits that affect the benefit calculation) and how other assumptions are likely to be affected by the level of inflation assumed (for example, high inflation is likely to cause higher wage increases than would be expected if inflation were low); and
- b. warn the participant if a limit has been applied in calculating the projected benefit rather than the assumption selected by the participant.

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As an additional example, if the application approximates the U.S. Social Security calculation as a part of the benefit calculation (for example, by applying salary replacement ratios at normal retirement) then the program should indicate that approximations were used to estimate the Social Security benefits used in the illustration.

- 3.5 **Projected Benefit Illustrations Provided When Participants Are to Choose Among Two or More Retirement Plan Alternatives**—When the projected benefit illustration is provided to assist a participant in choosing between coverage under two (or more) retirement plan alternatives, it should present a comprehensive and fair comparison of the benefits provided under the alternatives, in addition to the requirements of sections 3.3 and 3.4. The comparison of alternatives is “comprehensive and fair” if it meets the requirements of this section.

3.5.1 **Consistent Illustrations**—The projected benefit illustration should show benefits under each retirement plan alternative at the same points in time and for the same events. The points in time or events should be selected to provide a comprehensive and fair comparison of the options. For example, if a participant is allowed to choose between a defined benefit pension plan and a profit sharing plan and the retirement benefit under the defined benefit pension plan will be illustrated in one year, five years, and at ages 55, 60, and 65, the profit sharing plan benefit should also be illustrated at the same times.

3.5.2 **Identification of Significant Differences**—The projected benefit illustration should identify those provisions under the retirement plan alternatives where the benefits differ significantly. For example, if a participant is allowed to choose between a defined benefit pension plan with a death benefit of a 50% preretirement survivor annuity payable only to a surviving spouse and a defined contribution plan with a death benefit equal to 100% of the participant’s account balance payable to the participant’s designated beneficiary (not limited to a surviving spouse), the projected benefit illustration should describe the difference in the death benefits available from the plans.

3.5.3 **Comparison of Benefit Accrual Patterns**—If the pattern of benefit accruals differs significantly under the retirement plan alternatives, the projected benefit illustration should compare the pattern of benefit accruals under the alternatives. For example, one of the alternatives may be front-loaded while the other is back-loaded. As another example, one of the alternatives may have a career pay formula, while the other has a final pay formula. The projected benefit illustration need not illustrate the pattern of accruals if each of the alternatives has essentially the same pattern of accruals.

If benefit subsidies under the retirement plan alternatives differ significantly, the projected benefit illustration should clearly indicate when subsidies are available

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under each alternative, the magnitude of the benefit subsidy, and how the subsidy changes as time passes.

3.5.4 Focus on Key Variables—The projected benefit illustration should focus on the key variables or parameters that will have the greatest effect on the relative attractiveness of the alternatives. Such variables may include, but are not limited to, the following:

- a. age at employment termination;
- b. cause of benefit entitlement;
- c. age when benefits commence;
- d. rate of future salary increases;
- e. investment returns (or crediting rates);
- f. lump sum or annuity conversion factors;
- g. employee contributions;
- h. discretionary employer contributions; and
- i. cost-of-living adjustments.

For some of these variables, such as age at employment termination, it may be desirable to illustrate benefits provided at a number of points. For example, the projected benefit illustration could show benefits expected to be payable in one year, in five years, at earliest eligibility for reduced early retirement, at earliest eligibility for unreduced retirement, at earliest eligibility for reduced Social Security, at earliest eligibility for unreduced Social Security, and at normal retirement age.

For other variables, such as investment returns or salary increases, the projected benefit illustration need include only a few values sufficient to illustrate the range of uncertainty regarding future experience with regard to that variable. For example, it may be sufficient for the projected benefit illustration to show an investment return in line with current market expectations along with a return above and a return below the expected return. Similarly, with regard to salary growth, it may be sufficient to show annual rates equal to recent average rates of increase along with rates of 0% and twice the recent average.

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While it is not necessary to show the effect of each variable for each contingency (such as death, disability, or retirement), the projected benefit illustration should show situations in which the relative values of the alternate plans differ significantly.

- 3.5.5 Provision of Reasonably Adequate Information—The illustration should include reasonably adequate information for participants to understand the major differences between the plan alternatives. At times, rather than provide illustrations at various ages without interpretative commentary, it may be preferable to describe the major differences as required by section 3.5.2 and to provide a few specific examples to communicate the possible magnitude of the differences.
- 3.5.6 Comparison of Like Forms of Payment—To facilitate comparison, at a minimum the projected benefit illustration should show a common form of payment from the retirement plan alternatives. Thus, the payment of a life annuity from a defined benefit pension plan at some age should not be compared to a lump sum payment from a defined contribution plan at that same age. Either the defined benefit pension plan benefit should be restated as a lump sum (in the event that a lump sum payment would be available from the defined benefit pension plan), or the lump sum benefit payable from the defined contribution plan should be restated to a life annuity form based on reasonable assumptions representative of annuities that would actually be available for purchase by the participant (including appropriate mortality margins and expense loads). Payment forms of equivalent value should be determined in compliance with section 3.4.6.

Section 4. Communications and Disclosures

- 4.1 Identification of Data, Assumptions, and Procedures—The projected benefit illustration should identify the data, assumptions, and procedures used.
 - 4.1.1 Data Used—If the projected benefit illustration is based on individual participant data, the projected benefit illustration should summarize on each statement the participant data used, along with a notice that the participant should bring any data inaccuracies to the attention of the appropriate party. If the projected benefit illustration is based on hypothetical participant data, the projected benefit illustration should summarize the data used in the illustration, showing sufficient detail to permit participants to identify the hypothetical participant illustrations that are most relevant to their own situations.
 - 4.1.2 Principal Assumptions and Procedures—The projected benefit illustration should describe all principal assumptions and procedures used in sufficient detail to permit the participant to understand the basis for the results.

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4.2 Actuarial Opinion of Compliance with This Standard—The plan sponsor or administrator may request an actuarial opinion that a projected benefit illustration complies with this standard. If, in the opinion of the actuary, the illustration complies with all requirements of this standard, the actuary may issue an Actuarial Opinion of Compliance.

4.2.1 Content of the Actuarial Opinion of Compliance—The actuary should provide to the plan sponsor or administrator an Actuarial Opinion of Compliance that includes at least the following:

- a. retirement plan name(s);
- b. identification of the specific amendment(s) being communicated (i.e., amendment number or date adopted);
- c. identification of the projected benefit illustrations reviewed;
- d. a description of the nature and scope of the actuary's role in preparing or advising on the preparation of the projected benefit illustrations; and
- e. a statement that, if the projected benefit illustrations distributed to participants are prepared in a manner consistent with the reviewed illustrations, the plan sponsor or administrator is authorized to include the following representation in the projected benefit illustrations:

A qualified actuary has determined that this projected benefit illustration has been prepared in accordance with Actuarial Standard of Practice No. [Number], Projected Benefit Illustrations in Connection with Retirement Plan Amendments, promulgated by the Actuarial Standards Board.

The Actuarial Opinion of Compliance should not authorize the use of any other representation to the effect that the projected benefit illustration has been prepared in accordance with this standard.

4.2.2 No Partial or Conditional Opinion—In the Actuarial Opinion of Compliance, the actuary is not permitted to state that the projected benefit illustration is in partial or conditional compliance. This is not intended to limit the actuary's ability to advise the plan sponsor or administrator on changes required to bring a projected benefit illustration into full compliance with this standard.

4.3 Prescribed Statement of Actuarial Opinion—The actuarial communication described in section 4.2.1 is a prescribed statement of actuarial opinion as described in the

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Qualification Standards for Prescribed Statements of Actuarial Opinion promulgated by the American Academy of Actuaries.

- 4.4 Deviation from Standard—The actuary may not issue an Actuarial Opinion of Compliance if the projected benefit illustration deviates from this standard.

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Appendix 1

Background and Current Practices

Note: This appendix is provided for informational purposes, but is not part of the standard of practice.

Background

Retirement plan sponsors use a variety of means to inform plan participants about their retirement plans and changes to those plans; examples include the following:

1. summary plan descriptions and summaries of material modifications;
2. highlights brochures;
3. employee newsletters;
4. presentations at employee meetings;
5. personalized benefit illustrations or individual account statements; and
6. interactive software programs or web-based software that computes benefits payable at various times reflecting participant-entered assumptions.

Projected benefit illustrations are commonly included in such communications. Such illustrations may be individualized or may contain information relative to hypothetical sample participants.

Many plan sponsors provide personalized retirement benefit statements (including defined contribution plan individual account statements) to plan participants periodically. The content and level of detail vary greatly from sponsor to sponsor. Some benefit statements contain an estimate of the benefit earned to date only. Others show estimated projected benefit amounts expected to be payable in the future if the participant continues to be employed by the plan sponsor (with or without assumed increases in salary). Some statements are brief documents with little explanation; others are lengthy, providing great detail regarding the plan, ancillary benefits, and other matters (including information or estimated benefit amounts relative to other benefit plans sponsored by the employer).

ERISA requires that sponsors of qualified plans provide participant statements (containing, at a minimum, information regarding the benefit accrued to date) upon request. In fact, many plan sponsors distribute accrued benefit statements annually or semiannually to satisfy this requirement.

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The assumptions and other methodology used in preparing projected benefit illustrations vary greatly. Consistent assumptions, comparisons of like benefit types, and complete explanations have not always been provided. In cases where variable future experience could dramatically affect the level of benefits, sufficient information has not always been provided so that a participant can judge the potential variability of his or her future benefit.

Current Practices

In situations where there has been a modification in a plan, it is common practice for plan sponsors to provide benefit illustrations explaining the plan changes. Such illustrations often include estimates of the benefits earned by the participant to date, as well as estimates or explanations showing the impact of the plan changes on the participant's future benefit expectations. Sometimes, in connection with a plan change, participants are offered a choice between continuing to be covered under an existing plan or benefit arrangement, or participating in a new plan or benefit arrangement. In these instances, plan sponsors often provide personalized projected benefit illustrations or software programs to assist the participant in making his or her decision.

Recently, changes in retirement plans (especially conversions from traditional defined benefit pension plans to cash balance plans), and communication of such changes, have come under intense scrutiny by the press, the public, the United States Congress, and other governmental agencies. Concerns have been raised regarding the accuracy of communications provided to participants with respect to retirement plan changes and actuaries' roles in helping plan sponsors implement and communicate plan changes. In particular, there is concern that some plan sponsors may have misled participants regarding the following:

1. wear away and the true level of future benefit accruals;
2. reductions in (or elimination of) early retirement subsidies;
3. reductions in future benefit levels; and
4. benefits available to short-service participants who may terminate before becoming fully vested.

It is generally the decision of the plan sponsor whether to provide projected benefit illustrations, and if so, what the nature and content of such illustrations will be. Nevertheless, to the extent actuaries participate in the development of communications to participants regarding changes in their benefit, the ASB seeks to provide guidance in this largely unregulated area of practice, in order to improve communications to participants.

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Appendix 2

Illustrations

This appendix contains three projected benefit illustrations for hypothetical situations where a defined benefit pension plan is amended and the participants are not given a choice regarding future plan benefits.

Illustrations (A) and (B) describe similar retirement plan amendments, changing a traditional final average pay benefit formula to a cash balance benefit formula. Illustration (A) includes graphical projections comparing the benefits provided by the amended retirement plan to the benefits that would have been provided had the plan not been amended. This illustration would comply with section 3.3, Alternative (A) or (B). Illustration (B) describes the benefit before the change and the general effect of the change on the projected benefit, but does not include numerical or graphical comparisons of the benefits provided before and after the plan amendment. Illustration (B) would be acceptable only under section 3.3, Alternative (B).

Illustration (C) is a one-page description of a straightforward benefit improvement. It would comply with section 3.3, Alternative (A) or (B).

The following sample illustrations are intended to demonstrate the operation of this standard. The plans illustrated are hypothetical in nature, not derived from any particular plans, and have been simplified for illustrative purposes. Further, the illustrations are not intended to impose particular assumptions, methods, or format on illustrations beyond the requirements of this standard.

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Sample Illustration A

How the 1/1/2001 Amendment to The ABC Company Retirement Plan May Affect You

**For participants at or near age 40
With approximately 5 years of service on 1/1/2001
Earning approximately \$20,000 per year**

The ABC Company Retirement Plan was amended with changes becoming effective on 1/1/2001. This illustration highlights the changes to the plan that will take effect as of 1/1/2001 and shows how they may affect you.

The plan sponsor has prepared several hypothetical illustrations for different combinations of age and service. You are being provided the one that is closest to your situation. Others are available upon request. A qualified actuary has determined that this projected benefit illustration has been prepared in accordance with Actuarial Standard of Practice No. [Number], *Projected Benefit Illustrations in Connection with Retirement Plan Amendments*, promulgated by the Actuarial Standards Board.

Amendments

The retirement plan was amended with changes becoming effective on 1/1/2001 as follows:

Normal Retirement

The old formula provided an annuity (life income) benefit beginning at normal retirement (age 65) and payable for as long as you live (depending on the payment form elected, benefits might also continue to your spouse or beneficiary after your death). The benefit amount was 1% of average pay per year of service. Average pay was the average of your highest 3 consecutive years of compensation from ABC Company.

The new formula will provide benefits through a “hypothetical account.” Your hypothetical account balance on 1/1/2001 will be the lump sum equivalent of your benefit under the old formula, based on your service and compensation through 12/31/2000. This initial lump sum equivalent balance has been calculated using 6.5% interest and the 1983 Group Annuity Mortality Unisex table.

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After 1/1/2001, your hypothetical account balance will be credited with interest and pay credits each year. Interest will be credited at the 30-year Treasury rate in effect for December of the prior year. Pay credits will equal 5% of your compensation earned during the year.

The life income benefit payable under the new formula is the annuity equivalent of your hypothetical account balance determined using the 30-year Treasury rate in effect for the plan year your benefits begin and the 1983 Group Annuity Mortality Unisex table. The 30-year Treasury rate that applies for benefits beginning in 2001 is 6.5%.

Early Retirement

Under the old formula, retirement benefits could start before age 65 only if you stayed employed until at least age 55 and had at least 15 years of service at termination. In that event, benefits could be paid at any time between termination of employment and age 65. If you chose an annuity benefit, it was reduced by 3% for each year that payments started before age 65.

Under the new formula, benefits can start at any age after termination of employment. Annuity benefits are equivalent to the vested portion of your account balance, determined using the 30-year Treasury rate that applies to the plan year in which payments commence, and the 1983 Group Annuity Mortality Unisex table.

Survivor Benefit

The old formula provided a survivor benefit equal to what the 50% survivor portion would have been if you had retired on the day before death. If you were not yet eligible for early retirement, then the survivor benefit was equal to what the 50% survivor portion would have been if you had terminated on the day before your death, lived to your earliest possible retirement date, then died on the day after your retirement. The survivor annuity benefit was payable *only* to your spouse.

The new formula pays the full account balance to your designated heir if you die before you retire.

Lump Sums

The old formula didn't pay lump sums—you could only receive your benefit in the form of an annuity at age 65 or at an early retirement age.

The new formula allows for the total vested portion of your account balance to be paid in a lump sum at any point after termination of employment.

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Vesting

The plan amendment did not change the plan's vesting requirements. You must still complete five years of service to be vested in your account balance. If you terminate before completing five years of service, you forfeit your entire account balance.

Benefit Comparisons

The following charts compare annuity benefits under the old and new formulas for benefits beginning:

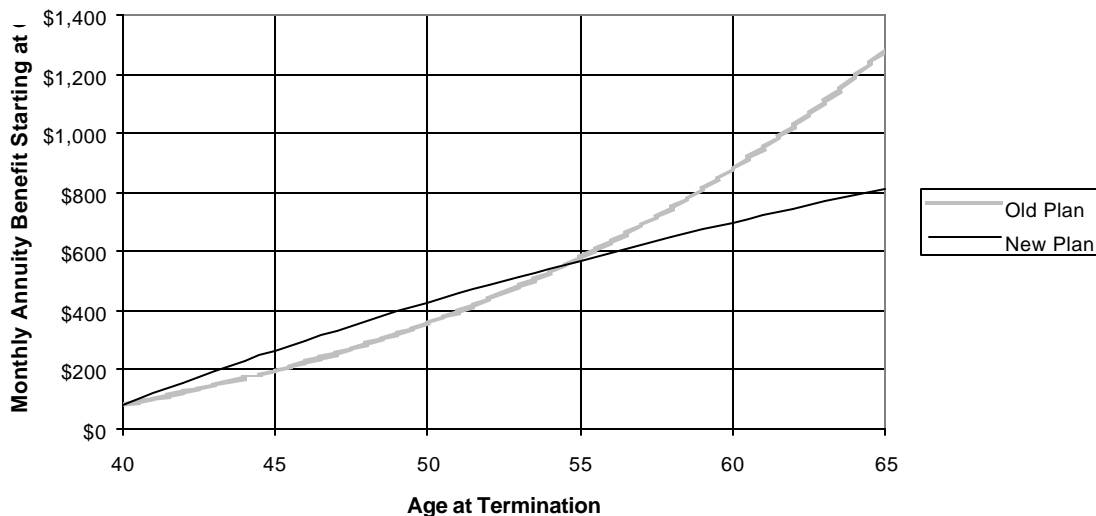
- at age 65 (normal retirement); or
- on your termination date before age 65 (early retirement).

Each chart shows annuity benefits you will have earned upon termination of employment between ages 40 and 65. The effect of different salary increase patterns and interest rates are also compared under the old and new formulas.

In addition, the effect of the new benefit formula on death benefits payable to your survivors is highlighted.

Normal Retirement

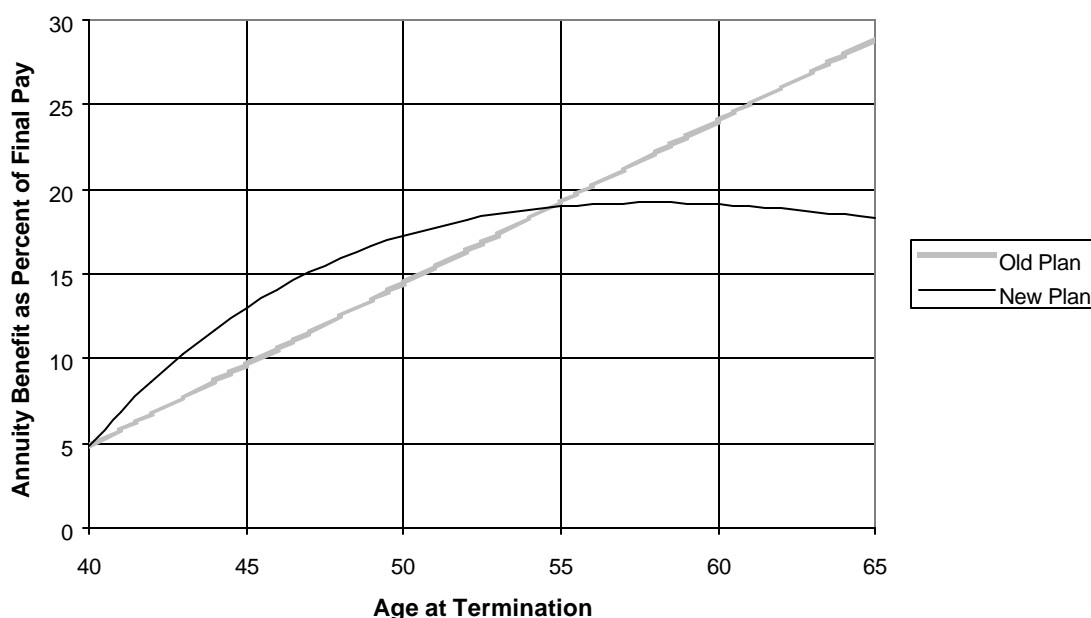
The following chart compares benefits provided under the old and new formulas at your normal retirement age. It assumes your salary increases 4% per year and the 30-year Treasury rate continues at 6.5%.



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As you can see, the new plan initially provides higher benefits. As your salary continues to increase after age 55, benefits under the new plan are lower because the new plan doesn't index the benefits attributable to prior service for salary increases.

A more important question than the value of the benefit as an absolute number is the level of the benefit as a percentage of pay. This helps you assess whether you will be able to maintain your current standard of living after you retire. The following chart shows annuity benefits as a percentage of final pay. It assumes that your salary increases 4% per year, and that the 30-year Treasury rate continues at 6.5%.

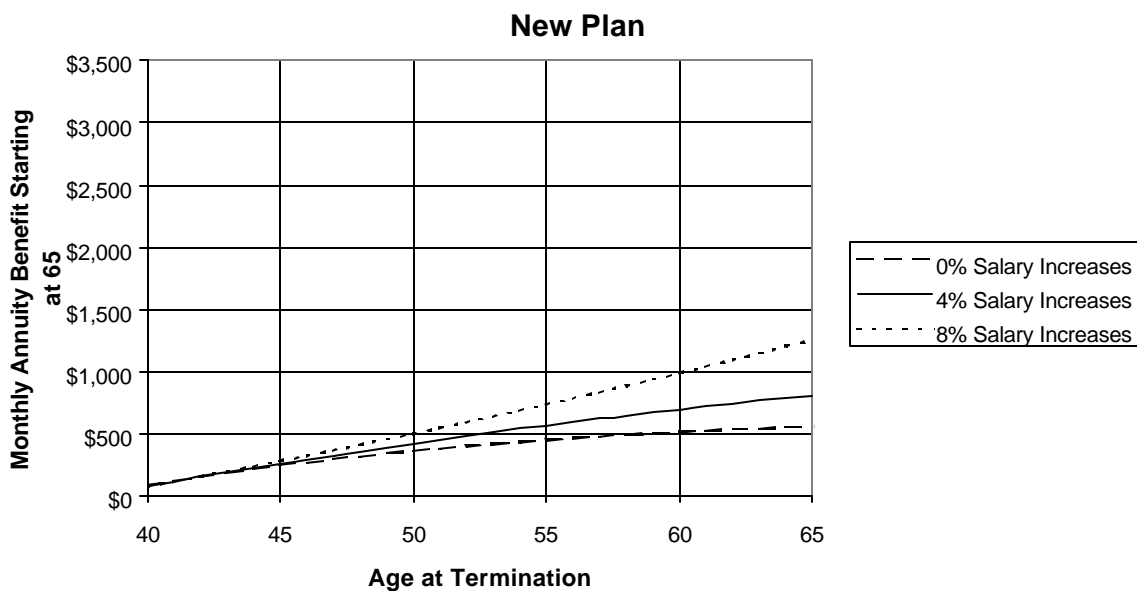
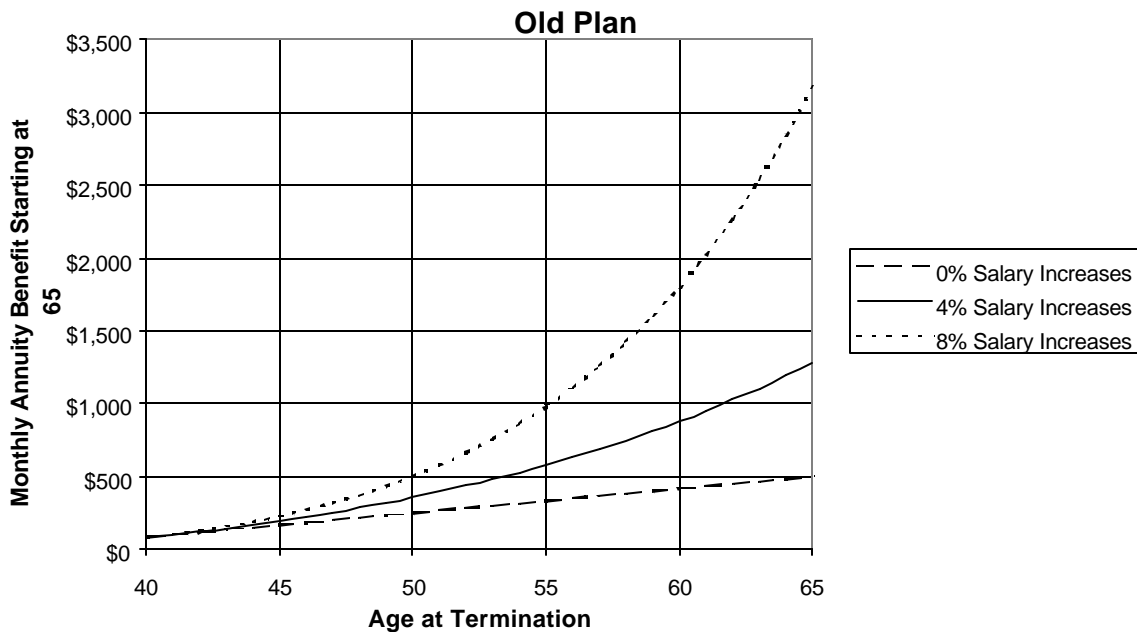


The new plan initially provides higher benefits as a percent of your final salary, but as your salary increases in the future, the new plan does not provide an increase for benefits attributable to prior service.

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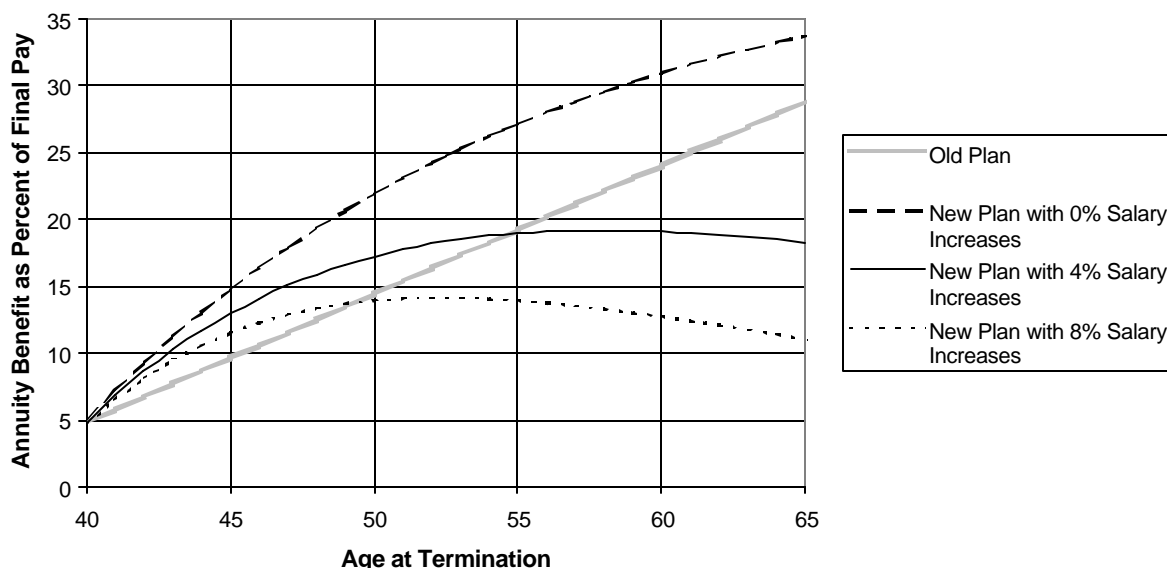
Variation caused by salary increase

The two charts below compare the dollar amount of annuity benefits under the old and new formulas for different salary increase patterns. These charts assume the 30-year Treasury rate continues at 6.5%.



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The chart below shows the new formula annuity benefit as a percentage of final pay under different salary increase scenarios. Since the old formula provides approximately the same benefit regardless of the salary increase pattern, it is shown only at the 4% increase rate. It assumes that the 30-year Treasury rate continues at 6.5%.



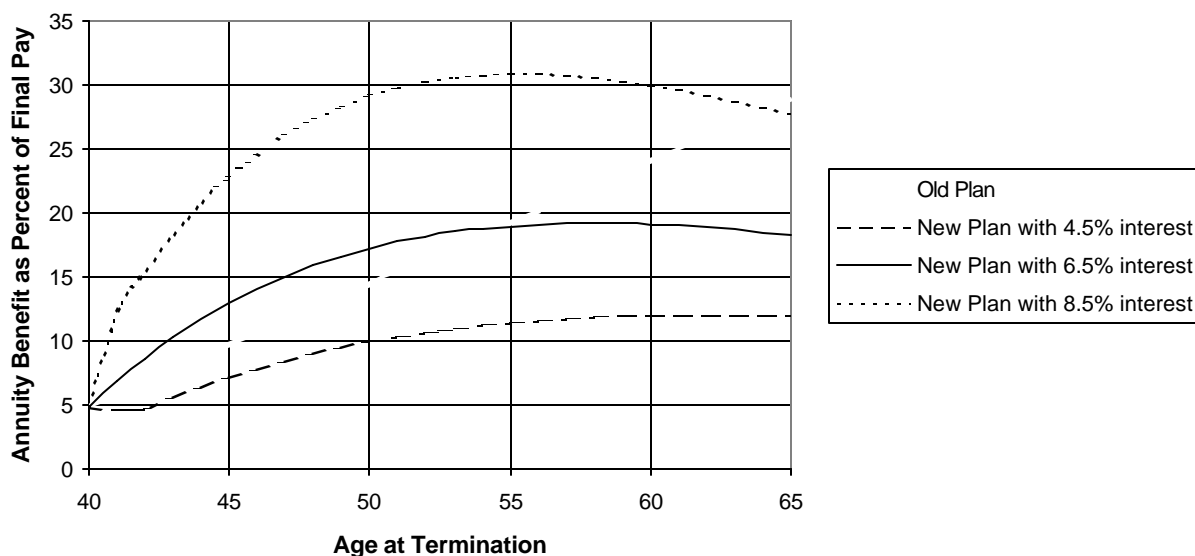
As you can see, the higher the salary increase, the greater the impact under the new formula of not indexing past service benefits for salary increases.

Variation caused by different 30-year Treasury Rates

The new formula uses 30-year Treasury rates two ways—to determine the annual interest credits, and to convert your account balance to an annuity at retirement, if you so choose. As a result, the benefits provided by the new formula will depend on future interest rates. The chart below shows the new formula benefit under three different interest rates. The old formula is unaffected by variations in interest rates.

The chart illustrates the annuity benefits as a percentage of final pay and assumes 4% salary increases per year.

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The higher the interest rate, the greater your annuity benefit under the new plan. Here's why:

- Your account balance increases at a faster rate because of higher annual interest rates; and
- The annuity benefit that is equivalent to your account balance is higher, given the same account balance. Note that in no event would your actual annuity benefit be less than the annuity benefit you earned as of 12/31/2000 under the old plan.

Early Retirement

The following chart illustrates one of the most significant changes made by this plan amendment—the elimination of early retirement subsidies. This chart shows the annuity benefits at early retirement as a percentage of final pay. The illustration assumes that your salary increases 4% per year, the 30-year Treasury rate continues at 6.5%, and annuity benefits commence immediately following termination of employment. As you review this chart, keep in mind that annuity payments were not available under the old plan prior to age 55. The annuity benefits prior to age 55 shown here are for comparison purposes only and are equivalent to the accrued benefit payable at age 65, assuming 6.5% interest and the 1983 Group Annuity Mortality Unisex table.

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As you can see, the old plan provided higher annuity benefits once you were eligible for early retirement. In fact, under the old formula, the value of your retirement benefits would have doubled when you reached age 55 assuming you would have retired at that point. One of the reasons for changing to the new formula was to smooth out the benefit accrual pattern over all your years of service.

As for normal retirement, the annuity benefit provided at early retirement will depend on your salary increases over your entire career and on 30-year Treasury bond yields throughout your career and in the year you retire:

- If your future salary increases are higher than 4% per year, you will have higher annuity benefits in absolute dollars. But when expressed as a percentage of your final pay at termination, your annuity benefits will be less than the benefits shown in the chart above.
- The higher the interest rate, the greater the annuity benefit under the new plan.

Death Benefit

In general, the value of the death benefit under the new formula is more than double the value of the death benefit under the old formula if you die before age 55 and 15 years of service. The value of the death benefits would be about the same if you die after age 55 with at least 15 years of service.

Note: This illustration should not be taken as any statement regarding your future anticipated salary increase from ABC Company. In addition no statement is made regarding the actual future 30-year Treasury rates. Plan provisions and applicable tax laws will control actual benefits paid. In particular federal tax laws limit the compensation that may be taken into account for benefit purposes to a maximum of \$170,000. Benefits are also limited to a maximum of \$135,000 a year, reduced for payments prior to the Social Security Retirement Age.

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Sample Illustration B

How the New Cash Balance Plan May Affect You

**For participants at or near age 40
With approximately 5 years of service on 1/1/2000
Earning approximately \$20,000 per year**

The retirement plan was changed to a cash balance plan effective 1/1/2000. This illustration describes the plan changes and illustrates your future retirement benefits under the new cash balance formula.

The plan sponsor has prepared several hypothetical illustrations for different combinations of age and service. You are being provided the one that is closest to your situation. Others are available upon request. A qualified actuary has determined that this projected benefit illustration has been prepared in accordance with Actuarial Standard of Practice No. [Number], *Projected Benefit Illustrations in Connection with Retirement Plan Amendments*, promulgated by the Actuarial Standards Board.

Cash Balance Retirement Plan

The old formula provided a monthly income benefit beginning at normal retirement (age 65) and payable for as long as you live (depending on the payment form elected, benefits might also continue to your spouse or beneficiary after your death). The benefit amount was 1% of average pay per year of service. Average pay was the average of your highest 3 consecutive years of compensation from ABC Company.

The new cash balance plan provides benefits through a retirement account. Your starting retirement account balance on 1/1/2000 is the lump sum equivalent of your benefit under the old formula, based on your service and compensation through 12/31/1999. This initial lump sum equivalent balance has been calculated using 6.15% interest and the 1983 Group Annuity Mortality Unisex table.

After 1/1/2000, your benefits under the cash balance plan grow two ways:

- The company allocates *pay credits* to your account each month equal to 5% of your compensation for that month.
- The company allocates *interest credits* to your account each month based on your account balance at the beginning of the month. The interest rate credited will be adjusted each year and will equal the yield on 30-year U.S. Treasury bonds during the preceding November.

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When you retire, you have the choice of two different benefit payment forms:

- An annuity would provide you with a monthly income benefit for as long as you live. The cash balance plan offers the same five annuity options as the old formula: single-life; 50%, 75%, and 100% joint and survivor; and 10-year certain and life. All of these annuity forms are equivalent to your account balance at your retirement date, determined using the 30-year Treasury rate in effect during the plan year your benefits begin and the 1983 Group Annuity Mortality Unisex table. The 30-year Treasury rate that applies for benefits beginning in 2000 is 6.15%.
- A lump sum distribution of your retirement account balance would provide you with a cash distribution or you could roll it over directly into an IRA.

When you leave ABC Company

The old plan early retirement provision created a benefit “cliff.” You could begin receiving retirement benefits before age 65 only if you were at least age 55 and had at least 15 years of service when you left the company. The benefit was reduced by 3% for each year that payments started before age 65. This meant that you would have earned benefits slowly until you reached age 55 and completed 15 years of service. At that point, the value of your benefits doubled. Once you were eligible for early retirement, your retirement benefits continued to grow until normal retirement age. The old formula was said to be *back-loaded* because so much of the total benefit was earned during the last few years before retirement.

The new cash balance plan provides a portable retirement benefit that builds up steadily over your entire career. Upon termination of employment, you may receive your vested account balance as either a lump sum or an annuity, regardless of your age. You also have the option to leave your cash balance account in the plan, where it will continue to grow with monthly interest credits until you elect to receive your benefits.

If you leave ABC Company in mid-career, before becoming eligible for early retirement, your cash balance benefit is likely to be larger than the old formula benefit. However, the benefit at early or normal retirement will likely be less under the cash balance plan than it would have been under the old plan.

Death Benefit

If you die before you retire, your beneficiary can receive your vested benefit. If your beneficiary is your spouse, he or she has a choice of receiving your entire vested account balance as a lump sum or an annuity. A beneficiary other than your spouse would receive your vested account balance in a lump sum.

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The old formula provided a survivor benefit equal to what the 50% survivor portion would have been if you had retired on the day before death. If you were not yet eligible for early retirement, then the survivor benefit was equal to what the 50% survivor portion would have been if you had terminated on the day before your death, lived to your earliest possible retirement date, then died on the day after your retirement. The survivor annuity benefit was payable *only* to your spouse.

In general, the value of the death benefit under the cash balance plan is more than double the value of the death benefit under the old plan if you die before age 55 and 15 years of service. The value of death benefits would be about the same if you die after age 55 with at least 15 years of service.

Vesting

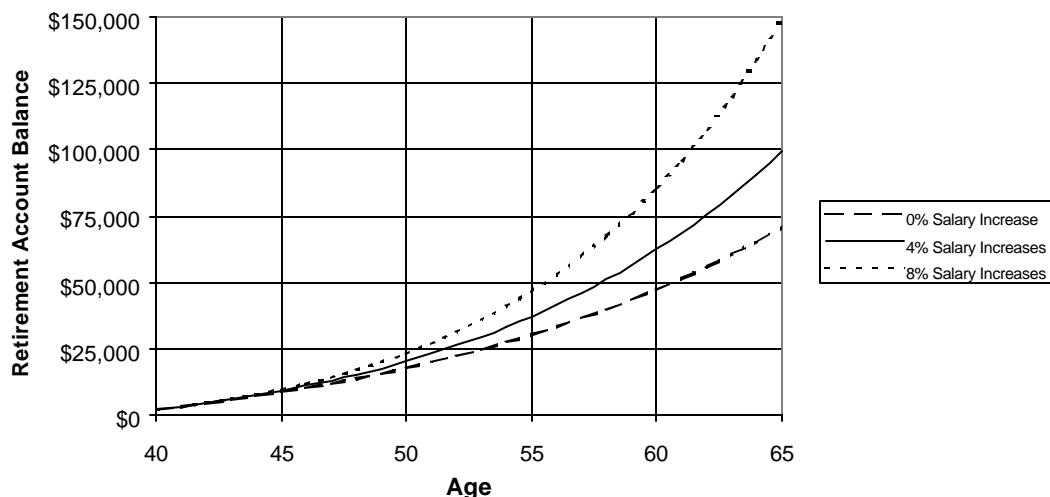
The plan amendment did not change the plan's vesting requirements. You must still complete five years of service to be vested in your account balance. If you terminate before completing five years of service, you forfeit your entire account balance.

Cash Balance Illustrations

The following charts show how your account balance will grow through age 65. Your account balance at retirement will depend on your career earnings and interest crediting rates. Because we cannot predict what your future salary increase will be or what future 30-year U.S. Treasury bond yields will be, we show projections for three different salary increase assumptions and three different interest crediting rates.

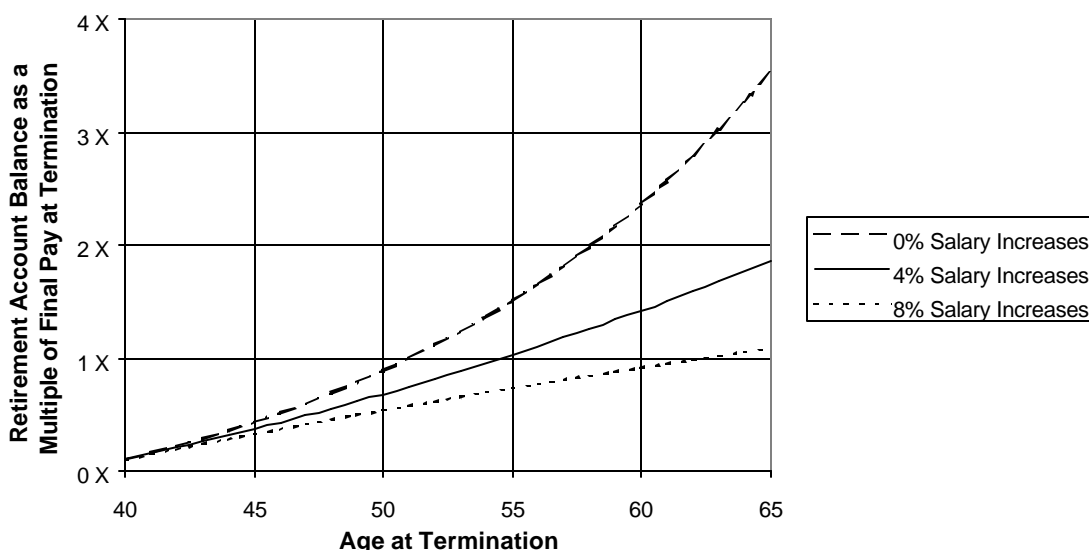
Variation caused by salary increase

The following chart shows the dollar amount of the cash balance account for three different salary increase assumptions. This chart assumes the 30-year Treasury rate continues at 6.15%.



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Because inflation erodes the purchasing power of a dollar, account balance projections 25 years into the future don't really help you determine whether you will be able to maintain your standard of living after you retire. For this purpose, it is better to look at your account balance as a multiple of your annual pay at the date you terminate employment, as shown in the following chart. Like the previous chart, it shows three different salary increase patterns and assumes that the 30-year Treasury rate remains at 6.15%. This chart shows that if you continue working until age 65, you receive 4% annual salary increases, and the 30-year Treasury rate remains at 6.15%, your account balance at retirement will equal 1.9 years pay at your final pay rate.



As you can see, participants with the highest salary increases will have lower account balances—as a multiple of their final pay at termination—than participants with lower salary increases. Here's why:

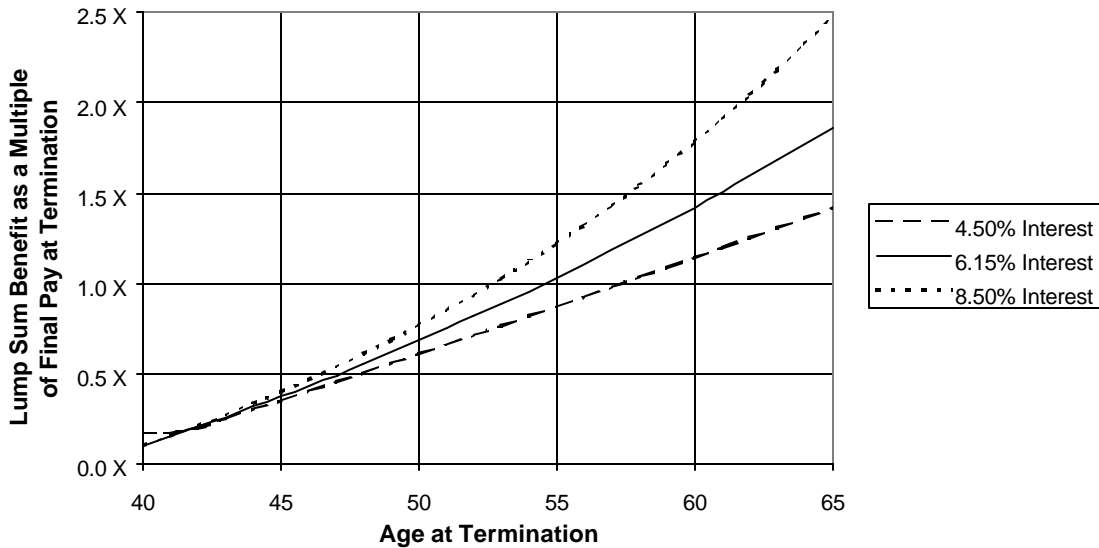
- The cash balance plan account balance reflects earnings over your entire career not just the last few years before you retire. For a participant who received large salary increases, this includes the early years of employment when pay was much less than in the final year with ABC Company.
- Participants who have experienced large salary increases have higher final pay, so even though their account balances are larger, as shown in the first chart above, they are a smaller multiple of final pay.

Variation caused by different 30-year Treasury Rates

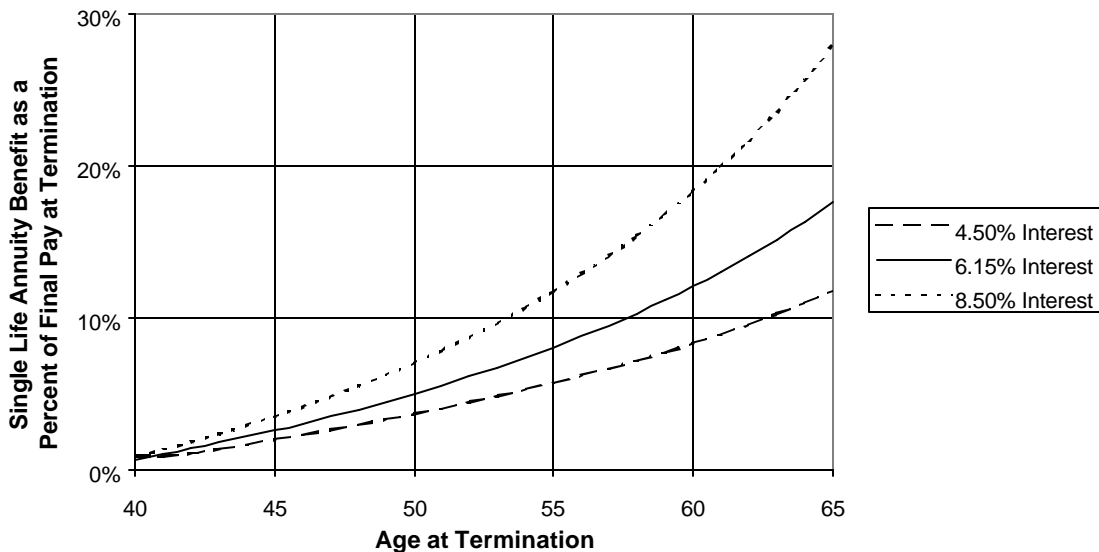
The cash balance plan uses 30-year U.S. Treasury bond yields to determine the interest credits. As a result, the benefits provided by the cash balance plan will depend on future interest rates. The chart below shows your total lump sum benefit as a multiple of your annual pay at the date you terminate employment for three different interest rates. Note that if the interest rate drops to 4.5% in the next year, your accrued benefit under the old plan at December 31, 1999 will be

EXPOSURE DRAFT

worth more than the cash balance account for the first few years. But once the cash balance account surpasses the value of your accrued benefit under the old plan, the lower interest rate will mean a lower lump sum benefit. This chart assumes 4% annual salary increases.



The cash balance plan also uses 30-year U.S. Treasury bond yields to convert your account balance to an annuity at retirement, if you so choose. The chart below shows the annuity benefit—payable immediately at the date you terminate employment—as a percent of your final pay for three different interest rates.



EXPOSURE DRAFT

The higher the interest rate, the greater your annuity benefit under the cash balance plan. Here's why:

- Your account balance increases at a faster rate because of higher annual interest rates.
- The annuity benefit that is equivalent to your account balance is higher, given the same account balance. Note that in no event would your actual annuity benefit be less than the annuity benefit you earned as of 12/31/1999 under the old plan.

The old plan formula wasn't affected by variations in interest rates. A participant retiring at age 65 with 30 years of service could expect to receive a single life annuity benefit of about 29% of final pay. A participant retiring early at age 55 with 20 years of service could expect to receive a single life annuity starting immediately of about 13% of final pay. The old plan didn't pay benefits before age 55 and 15 years of service.

Note: This illustration should not be taken as any statement regarding your future anticipated salary increase from ABC Company. In addition no statement is made regarding the actual future 30-year Treasury Rates. Plan provisions and applicable tax laws will control actual benefits paid. In particular federal tax laws limit the compensation that may be taken into account for benefit purposes to a maximum of \$170,000. Benefits are also limited to a maximum of \$135,000 a year, reduced for payments prior to the Social Security Retirement Age.

EXPOSURE DRAFT

Sample Illustration C

How the 1/1/2000 Amendment to The ABC Company Retirement Plan May Affect You

The benefit formula under the retirement plan was amended on 1/1/2000. This change applies to you if you are employed by ABC Company on or after 1/1/2000.

The old formula provided a benefit of 1% of average pay per year of service payable at age 65. Average pay was the average of your highest 3 consecutive years of compensation from ABC Company.

The new formula improves the formula to 1.5% of average pay for years beginning 1/1/2000, while maintaining the benefit formula attributable to prior years. The impact of this change will vary depending on the number of years you are employed after 1/1/2000.

For example...

Let's say you were hired on 1/1/1980 at age 40. On 1/1/2000 you have 20 years of service, and you are age 60. Your benefit at age 65 would be determined as follows:

1% of average pay \times 20 years of service prior to 1/1/2000

plus

1.5% of average pay \times 5 years of service after 1/1/2000.

This adds up to 20% of average pay for years prior to 1/1/2000 plus 7.5% of average pay for years after 1/1/2000, for a total of 27.5% of average pay. This represents a 10% increase over the old formula, which would have provided a total of 25% of average pay.

In contrast, if you were hired at age 40 on 1/1/2000, your benefit would be calculated entirely under the new benefit formula. In this case, your benefit at age 65 would be 25 years at 1.5% of average pay, or 37.5% of average pay, a 50% increase over the old formula.

Note: Plan provisions and applicable tax laws will control actual benefits paid. In particular, federal tax law limits compensation that may be taken into account for benefit purposes to a maximum of \$170,000. Benefits are also limited to a maximum of \$135,000 a year, reduced for payments prior to the Social Security Retirement Age.

A qualified actuary has determined that this projected benefit illustration has been prepared in accordance with Actuarial Standard of Practice No. [Number], Projected Benefit Illustrations in Connection with Retirement Plan Amendments, promulgated by the Actuarial Standards Board.