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# Governmental Accounting Standards Series

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Statement No. 27 of the  
Governmental Accounting  
Standards Board

**Accounting for Pensions  
by State and Local  
Governmental Employers**



Governmental Accounting Standards Board  
of the Financial Accounting Foundation

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## Summary

This Statement establishes standards for the measurement, recognition, and display of *pension expenditures/expense* and related liabilities, assets, note disclosures, and, if applicable, required supplementary information in the financial reports of state and local governmental employers. Reporting requirements for *pension trust funds* of employers are included in two related Statements: No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, and No. 26, *Financial Reporting for Postemployment Healthcare Plans Administered by Defined Benefit Pension Plans*.

Employers that participate in *single-employer and agent multiple-employer defined benefit pension plans* (sole and agent employers) are required to *measure* and *disclose* an amount for annual pension cost on the accrual basis of accounting, regardless of the amount *recognized* as pension expenditures/expense on the modified accrual or accrual basis. Annual pension cost should be equal to the employer's annual required contributions (ARC) to the plan, unless the employer has a net pension obligation (NPO) for past under- or overcontributions.

The ARC is defined as the employer's required contributions for the year, calculated in accordance with certain parameters. The parameters include requirements for the frequency and timing of actuarial valuations as well as for the actuarial methods and assumptions that are acceptable for financial reporting. When the methods and assumptions used in determining a plan's funding requirements meet the parameters, the same methods and assumptions are required for financial reporting by both a plan and its participating employer(s).

An NPO is defined as the cumulative difference between annual pension cost and the employer's contributions to a plan, including the pension liability or asset at transition, if any. An employer with an NPO should measure annual pension cost equal to (a) the ARC,

(b) one year's interest on the NPO, and (c) an adjustment to the ARC to offset the effect of actuarial amortization of past under- or overcontributions.

The calculation requirements for the pension liability or asset at transition are similar to the requirements for calculating the NPO after the effective date. For some employers, the requirements include recalculation of any differences between the employer's actuarially determined required contributions and the contributions made, for all fiscal years beginning between December 15, 1986 and the effective date of this Statement.

Pension expenditures of governmental and expendable trust funds and all other entities that apply governmental fund accounting should be recognized on the modified accrual basis. A liability balance in the NPO should be recognized in the general long-term debt account group; an asset balance should not be recognized in the financial statements but should be disclosed. Pension expense of proprietary and similar trust funds and all other entities that apply proprietary fund accounting, and pension expenditures of colleges and universities that apply the AICPA College Guide model, should be recognized on the accrual basis; NPO balances should be recognized as fund liabilities or assets.

In addition to descriptive information about the plan and its funding policy, the required disclosures include three years of information about annual pension cost and, if applicable, the components of annual pension cost, the increase or decrease for the year in the NPO, and the year-end balance of the NPO. Information about the plan's funding progress for the past three actuarial valuations, calculated in accordance with the parameters, should be reported as required supplementary information. Information for one or more of those valuations may be disclosed in the notes to the financial statements. However, unless the note disclosures include all three valuations, the information also should be reported as required supplementary information.

Employers that participate in *cost-sharing multiple-employer defined benefit pension plans* are required to recognize pension expenditures/expense equal to the employer's

contractually required contributions and a liability for unpaid contributions. Recognition should be on the modified accrual or accrual basis, depending on the fund type or type of entity. Previously recognized pension liabilities should be adjusted at the effective date to equal the pension liability at transition, if any. That amount should be equal to the employer's contractually required contributions that are unpaid at the effective date. In addition to descriptive information about the plan and its funding policy, the required disclosures include three years of information about the employer's required contributions and the percentage contributed.

Employers that participate in *defined contribution plans* are required to recognize pension expenditures/expense equal to the employer's required contributions to the plan and a liability for unpaid contributions. Recognition should be on the modified accrual or accrual basis, depending on the fund type or type of entity. The required disclosures include descriptive information about the plan and the required and actual contributions of the employer and plan members.

This Statement also includes guidance for employers that participate in insured plans and for entities that are legally responsible for contributions to pension plans covering employees of other entities. Guidance also is provided for sole and agent employers that elect to apply the pension measurement provisions of this Statement to postemployment healthcare benefits on an interim basis, pending issuance of a future Statement(s) on accounting for those benefits.

The provisions of this Statement are effective for periods beginning after June 15, 1997. Early implementation is encouraged.

Unless otherwise specified, pronouncements of the GASB apply to financial reports of all state and local governmental entities, including general purpose governments, public benefit corporations and authorities, public employee retirement systems, utilities, hospitals and other healthcare providers, and colleges and universities. Paragraph 4 discusses the applicability of this Statement.
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Governmental Accounting  
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by State and Local  
Governmental Employers

November 1994



**Governmental Accounting Standards Board**  
of the Financial Accounting Foundation  
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**Statement No. 27 of the Governmental Accounting Standards Board**  
**Accounting for Pensions by State and Local Governmental Employers**  
**November 1994**

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**INTRODUCTION**

**Objective of This Statement**

1. The objective of this Statement is to enhance the understandability and usefulness of pension information included in the financial statements of state and local governmental employers.<sup>1</sup> The approach adopted is based on the view that the processes of government and the needs of users of the financial statements of governmental employers are best served when (a) the measurement of the employer's **pension expenditures/expense** for an accounting period is similar to the employer's required contributions for that period, in accordance with an established and actuarially sound **funding policy**, and (b) related information reported by the employer, the pension plan, or both entities is measured consistently. That information includes the employer's required contributions and the funded status of the plan. This Statement establishes certain boundaries, or **parameters**, for determining whether the amounts measured in accordance with the plan's funding policy are acceptable for financial reporting or whether different measures are required.

**Related Statements**

2. This Statement is one of three Statements that address related issues and have the same or related effective dates. Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, establishes standards for pension plans, whether their financial statements are included in the

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<sup>1</sup>Most public pension plans are **defined benefit pension plans**, and this Statement is written primarily within the context of those plans. Paragraphs 25–27 include the requirements for employers with **defined contribution plans**. Terms defined in the Glossary (paragraph 39) are printed in **boldface type** when they first appear.

employer's financial report (**pension trust funds**) or in a separate financial report issued by the plan or the **public employee retirement system** that administers the plan. Statement No. 26, *Financial Reporting for Postemployment Healthcare Plans Administered by Defined Benefit Pension Plans*, provides interim guidance for those plans, pending completion of the Governmental Accounting Standards Board's (GASB) project on financial reporting of **other postemployment benefits** by plans and employers. Certain provisions of this Statement refer to the related Statements.

## **STANDARDS OF GOVERNMENTAL ACCOUNTING AND FINANCIAL REPORTING**

### **Scope and Applicability of This Statement**

3. This Statement establishes standards of accounting and financial reporting for pension expenditures/expense and related **pension liabilities, pension assets**, note disclosures, and **required supplementary information** in the financial reports of state and local governmental employers. It does not address accounting and financial reporting for pension trust funds of the employer.

4. The requirements of this Statement apply to the financial statements of all state and local governmental employers that provide or participate in pension plans, including general purpose governments, public benefit corporations and authorities, utilities, hospitals and other healthcare providers, colleges and universities, and public employee retirement systems that are employers. The requirements apply whether the employer's financial statements are presented in separately issued (stand-alone) financial reports or are included in the financial reports of another governmental entity, and regardless of the fund type(s) used to report the employer's pension expenditures/expense.

5. This Statement supersedes all previous authoritative guidance on accounting and financial reporting for the employer's pension expenditures/expense and related

information, including the guidance in National Council on Governmental Accounting (NCGA) Statement 1, *Governmental Accounting and Financial Reporting Principles*; NCGA Statement 6, *Pension Accounting and Financial Reporting: Public Employee Retirement Systems and State and Local Government Employers*; NCGA Interpretation 8, *Certain Pension Matters*, except the requirements for special termination benefits, as amended by paragraph 6 of this Statement; paragraph 9 of GASB Statement No. 1, *Authoritative Status of NCGA Pronouncements and AICPA Industry Audit Guide*; GASB Statement No. 4, *Applicability of FASB Statement No. 87, "Employers' Accounting for Pensions," to State and Local Governmental Employers*; and GASB Statement No. 5, *Disclosure of Pension Information by Public Employee Retirement Systems and State and Local Governmental Employers*. Paragraph 24 of this Statement supersedes paragraph 11 of GASB Statement No. 12, *Disclosure of Information on Postemployment Benefits Other Than Pension Benefits by State and Local Governmental Employers*.

6. A defined benefit pension plan provides retirement income and also may provide other types of **postemployment** benefits, including disability benefits, death benefits, life insurance, and health care, that some employers offer through plans that do not provide retirement income. As used in this Statement, the term **pension benefits** includes retirement income and all other benefits provided through a defined benefit pension plan, *except postemployment healthcare benefits*. Application of this Statement to pension benefits is required.<sup>2</sup> Postemployment benefits provided through plans that do not provide retirement income are considered other postemployment benefits and application of this Statement is not required.<sup>3</sup> For example, disability and death benefits provided through a

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<sup>2</sup>The requirements of NCGA Interpretation 8 for special termination benefits should not be applied to pension benefits, as defined in this Statement. All pension benefits should be accounted for in accordance with this Statement.

<sup>3</sup>The Board has a separate project on its agenda concerning accounting for other postemployment benefits. Pending completion of that project, employers should provide the disclosures required by Statement 12, as amended by this Statement. The term *other postemployment benefits* does not include special termination benefits, which are addressed in NCGA Interpretation 8, as amended by this Statement.

defined benefit pension plan are pension benefits; disability and death benefits provided through a plan that does not provide retirement income are other postemployment benefits.

7. Postemployment healthcare benefits, including medical, dental, vision, and other health-related benefits, are considered other postemployment benefits, regardless of the type of plan that provides them. Paragraph 24 provides guidance for employers that elect to apply this Statement to postemployment healthcare benefits on an interim basis, pending issuance of a future Statement(s) on accounting for those benefits.

## **Employers with Defined Benefit Pension Plans**

### **Sole and Agent Employers**

#### ***Measurement of Annual Pension Cost and Net Pension Obligation<sup>4</sup>***

8. For employers with **single-employer** or **agent multiple-employer (agent) plans** (sole and agent employers), annual pension cost should be equal to the **annual required contributions of the employer (ARC)<sup>5</sup>** to the plan for that year, calculated in accordance with paragraphs 9 and 10 (the parameters), unless the employer has a net pension obligation (NPO) to the plan at the beginning of the year. The requirements for measuring annual pension cost when an employer has an NPO are discussed in paragraphs 11–13.

#### **Calculation of the ARC (the parameters)**

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<sup>4</sup>The terms ***annual pension cost*** and ***net pension obligation (NPO)*** are used to refer to the results of applying the *measurement* requirements of this Statement, regardless of the amounts that should be *recognized* in the financial statements on the modified accrual or accrual basis of accounting. *Recognition* requirements are addressed in paragraphs 14–18, *after* the measurement requirements. When the modified accrual basis is used, the amount recognized as pension expenditures may not be equal to annual pension cost. However, regardless of the amount recognized, paragraph 21 requires the disclosure of annual pension cost and, if applicable, the components of annual pension cost and NPO balances.

<sup>5</sup>The actuarial determination of the ARC generally is based on a projection of **covered payroll** for the period to which the ARC will apply. Some employers make contributions based on projected covered payroll; others contribute based on budgeted or actual covered payroll for the year. Any of those measures of covered payroll, consistently applied, is acceptable for calculating annual pension cost and the NPO, if any. That is, comparisons between the ARC and contributions made should be based on the same measure of covered payroll, consistently applied, whether that measure is projected, budgeted, or actual payroll. The ARC does not include payments of **pension-related debt**. Therefore, those payments should not be included in annual pension cost.

9. For financial reporting purposes, an **actuarial valuation** should be performed at least biennially in accordance with this paragraph and paragraph 10. The **actuarial valuation date** need not be the employer's balance sheet date, but generally should be the same date each year (biennium). However, a new valuation should be performed if significant changes have occurred since the previous valuation in benefit provisions, the size or composition of the population covered by the plan, or other factors that affect the results of the valuation. The ARC reported for the current year should be based on the results of an actuarial valuation performed in accordance with the parameters as of a date not more than 24 months before the beginning of the employer's fiscal year (first fiscal year, if actuarial valuations are biennial).

10. The ARC and all other actuarially determined pension information included in an employer's financial report should be calculated in accordance with this paragraph, consistently applied. The actuarial methods and assumptions applied for financial reporting should be the same methods and assumptions applied in determining the plan's funding requirements, unless compliance with this paragraph requires the use of different methods or assumptions. A plan and its participating employer should apply the same actuarial methods and assumptions in determining similar or related information included in their respective financial reports.<sup>6</sup>

- a. Benefits to be included—The **actuarial present value of total projected benefits** should include all pension benefits to be provided by the plan to **plan members** or beneficiaries in accordance with (1) the terms of the plan and (2) any additional statutory or contractual agreement(s) to provide pension benefits through the plan that are in force at the actuarial valuation date. Additional agreements may include, for example, collective-bargaining agreements and agreements to provide **ad hoc** cost-of-living adjustments and other types of **postretirement benefit increases** not previously included in the plan terms. Benefits to be provided by means of **allocated insurance contracts** for which payments to an insurance company have been made should be excluded. (Allocated insurance contracts should be excluded from plan assets.)

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<sup>6</sup>This provision and the parameters also are included in Statement 25.

- b. **Actuarial assumptions**—The selection of all actuarial assumptions should be guided by Actuarial Standard of Practice No. 4, *Measuring Pension Obligations*,<sup>7</sup> as revised from time to time by the Actuarial Standards Board. Accordingly, actuarial assumptions should be based on the actual experience of the **covered group**, to the extent that credible experience data are available, but should emphasize expected long-term future trends rather than give undue weight to recent past experience. The reasonableness of each actuarial assumption should be considered independently based on its own merits, its consistency with each other assumption, and the combined impact of all assumptions.
- c. **Economic assumptions**—In addition to complying with the guidance in paragraph 10b, the **investment return assumption (discount rate)** should be based on an estimated long-term investment yield for the plan, with consideration given to the nature and mix of current and expected plan investments and the basis used to determine the **actuarial value of assets** (paragraph 10e). The investment return assumption, **projected salary increase assumption**, and other economic assumptions should include the same assumption with respect to inflation.
- d. **Actuarial cost method**—One of the following actuarial cost methods should be used: **entry age, frozen entry age, attained age, frozen attained age, projected unit credit**,<sup>8</sup> or the **aggregate** actuarial cost method, as described in paragraph 40, Section B.
- e. **Actuarial value of assets**—Plan assets should be valued using methods and techniques that are consistent with the class and anticipated holding period of the assets, the investment return assumption, other assumptions used in determining the actuarial present value of total projected benefits, and current actuarial standards for asset valuation.<sup>9</sup> Accordingly, the actuarial value of plan assets generally should be **market related**.
- f. **Annual required contributions of the employer (ARC)**—The ARC should be actuarially determined in accordance with the parameters. The amount should include the employer’s **normal cost** and a provision(s) for amortizing the total **unfunded actuarial accrued liability (unfunded actuarial liability)**, in accordance with the following requirements:<sup>10</sup>
  - 1. **Maximum amortization period**—For a term of not more than ten years from the effective date of Statement 25, the maximum acceptable amortization period for the total unfunded actuarial liability is 40 years. After that ten-year term, the maximum acceptable amortization period is 30 years. The total unfunded

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<sup>7</sup>Actuarial Standards Board, Actuarial Standard of Practice No. 4, 1993 Reformatted Edition, *Measuring Pension Obligations* (Washington, DC: Actuarial Standards Board, 1993), or its successor documents.

<sup>8</sup>**Unprojected unit credit** is acceptable for plans in which benefits already accumulated for years of service are not affected by future salary levels.

<sup>9</sup>See footnote 7.

<sup>10</sup>The total unfunded actuarial liability may be positive (**actuarial accrued liability** greater than the actuarial value of assets) or negative (actuarial accrued liability less than the actuarial value of assets, or **funding excess**). The term *unfunded actuarial liability* refers to either situation. Separate determination and amortization of the unfunded actuarial liability are not part of the aggregate actuarial cost method and are not required when that method is used.

actuarial liability may be amortized as one amount, or components of the total may be separately amortized. When components are amortized over different periods, the individual amortization periods should be selected so that the **equivalent single amortization period** for all components combined does not exceed the maximum acceptable period. The equivalent single amortization period is the number of years incorporated in a weighted average amortization factor for all components combined. The weighted average amortization factor should be equal to the total unfunded actuarial liability divided by the sum of the amortization provisions for each of the separately amortized components.<sup>11</sup>

2. **Minimum amortization period**—A significant decrease in the total unfunded actuarial liability generated by a change from one of the actuarial cost methods specified in paragraph 10d to another of those methods, or by a change in the method(s) used to determine the actuarial value of assets (for example, from a cost-based valuation to a market-related valuation), should be amortized over a period of not less than ten years. The minimum amortization period is not required when a plan is closed to new entrants and all or almost all the plan members have retired.
3. **Amortization method**—The provision(s) for amortizing the total unfunded actuarial liability may be determined in **level dollar** amounts or as a **level percentage of the projected payroll** of active plan members. If the level percentage of projected payroll method is used, the assumed **payroll growth rate** should not include an assumed increase in the number of active plan members; however, projected decreases in that number should be included if no new members are permitted to enter the plan (for example, a plan that covers only employees hired before a certain date).
- g. **Contribution deficiencies or excess contributions** of the employer—A contribution deficiency or excess contribution is the difference between the ARC for a given year and the **employer's contributions** in relation to the ARC. Amortization of a contribution deficiency or excess contribution should begin at the next actuarial valuation, unless settlement is expected not more than one year after the deficiency or excess occurred. If settlement has not occurred by the end of that term, amortization should begin at the next actuarial valuation.

#### **Calculation of interest on the NPO and the adjustment to the ARC**

11. The employer's NPO comprises (a) the pension liability (asset) at transition, if any, determined in accordance with paragraphs 30–35, and (b) the cumulative difference since the effective date of this Statement between annual pension cost and the employer's

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<sup>11</sup>The requirements for calculating an equivalent single amortization period are included in paragraph 38.



contributions,<sup>12</sup> *excluding* (1) short-term differences and (2) unpaid contributions that have been converted to pension-related debt. A short-term difference is one that the employer intends to settle by the first actuarial valuation date after the difference occurred or, if the first valuation is scheduled within a year, not more than one year after the difference occurred. If the amount remains unsettled at the end of that term, the employer should include the entire unsettled difference in the NPO. (An amount for actuarial amortization of the difference should be included in the next and subsequent ARCs, as required by paragraph 10g.)

12. When an employer has an NPO, annual pension cost should be equal to the ARC, one year's interest on the NPO, and an adjustment to the ARC. The interest should be calculated on the balance of the NPO at the beginning of the year, using the investment return rate assumed in determining the ARC for that year (paragraph 10c). Because this calculation of interest is independent of the actuarial calculation, the ARC should be adjusted to offset the amount of interest (and principal, if any) already included in the ARC for amortization of past contribution deficiencies or excess contributions of the employer. That portion of the ARC is not precisely determinable but can be reasonably approximated based on the NPO, as discussed in paragraph 13.

13. The adjustment to the ARC should be equal to the discounted present value (ordinary annuity) of the balance of the NPO at the beginning of the year, calculated using *the same* amortization methodology used in determining the ARC *for that year*. (The adjustment applies only for that year; a new calculation should be made each year.) That is, the adjustment should be calculated using the same (a) amortization method (level

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<sup>12</sup>As used in this Statement, the term *employer's contributions* means contributions made in relation to the ARC. The term does not include amounts attributable to plan members under the terms of the plan (for example, employee contributions transmitted to the plan by the employer and contributions paid by the employer on the employees' behalf that are not included in the ARC). Similarly, the NPO should not include amounts attributable to plan members under the terms of the plan.

dollar or level percentage of projected payroll), (b) actuarial assumptions used in applying the amortization method, and (c) amortization period that were used in determining the ARC for that year.<sup>13</sup> The adjustment should be *deducted* from the ARC, if the beginning balance of the NPO is positive (cumulative annual pension cost is greater than cumulative employer contributions), or *added* to the ARC, if the NPO is negative.

***Recognition of Pension Expenditures/Expense, Liabilities, and Assets***

14. When an employer has more than one plan, all recognition requirements should be applied separately for each plan. (Separate display in the financial statements is not required, except as indicated in subsequent paragraphs.) Pension expenditures/expense include one or both of the following: (a) contributions in relation to the ARC and (b) payments of pension-related debt (not included in the ARC or the NPO). Liabilities for pension-related debt should be adjusted consistent with the recognition of related expenditures/expense. ARC-related liabilities (assets) should be adjusted to equal the year-end balance of the NPO, as discussed in paragraphs 16 and 17.

15. When an employer makes ARC-related contributions to the same plan from more than one fund, the employer should determine what portion of the ARC applies to each fund. When the employer has an NPO and the related liability (asset) is allocated to more than one fund, or to a fund(s) and the general long-term debt account group (GLTDAG), the employer should allocate the interest and ARC adjustment components of annual pension cost to each liability (asset), based on its proportionate share of the beginning balance of the NPO.

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<sup>13</sup>When more than one period is used in determining the ARC, the period for the adjustment to the ARC should be the period used to amortize net **actuarial experience gains and losses**. When the ARC is determined according to the frozen entry age, frozen attained age, or aggregate actuarial cost method, the period for the adjustment to the ARC should be the average remaining service life of active plan members. Appendix C to this Statement illustrates the calculation of the interest and ARC adjustments.

### **Governmental and expendable trust funds**

16. Pension expenditures from governmental and expendable trust funds should be recognized on the modified accrual basis; that is, the amount recognized should be equal to the amount contributed to the plan or expected to be liquidated with expendable available financial resources. If the amount of pension expenditures recognized for the year in relation to the ARC is less than (greater than) annual pension cost, the difference should be added to (deducted from) the NPO. A positive year-end balance in the NPO should be reported in the GLTDAG as the year-end liability in relation to the ARC.<sup>14</sup> If the year-end balance in the NPO is negative (cumulative net overcontribution of the ARC), a previously reported liability to the same plan should be reduced to zero. The NPO balance should be disclosed in accordance with paragraph 21, whether the balance is positive or negative.

### **Proprietary and similar trust funds and other entities that apply proprietary fund accounting**

17. Pension expense of proprietary and similar trust funds and all other entities that apply proprietary fund accounting should be recognized on the accrual basis. The employer should report pension expense for the year equal to annual pension cost. The NPO should be adjusted for any difference between contributions made and pension expense. A positive (negative) year-end balance in the NPO should be recognized as the year-end liability (asset) in relation to the ARC. Pension liabilities and assets to different plans should not be offset in the financial statements.

### **Colleges and universities**

18. Colleges and universities that apply the American Institute of Certified Public Accountants (AICPA) College Guide model in accordance with GASB Statement No. 15, *Governmental College and University Accounting and Financial Reporting Models*,

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<sup>14</sup>Short-term differences excluded from the NPO in accordance with paragraph 11 and not recognized in the funds should be reported in the GLTDAG.

should recognize pension expenditures and related pension liabilities (assets) on the accrual basis, consistent with the requirements of paragraphs 14, 15, and 17. Pension expenditures generally should be charged to the unrestricted current fund. However, a charge to the restricted current fund is acceptable when (a) related salaries are charged to that fund, (b) the entity is not legally or contractually precluded from charging pension expenditures to that fund, and (c) the entity expects to be reimbursed through grant proceeds for the amount of pension expenditures recognized in that fund. Colleges and universities that follow the governmental model should apply the requirements of paragraphs 14–17.

### **Cost-Sharing Employers**

19. Employers that participate in **cost-sharing multiple-employer plans** (cost-sharing employers) should recognize annual pension expenditures/expense equal to their contractually required contributions to the plan. Recognition should be on the modified accrual or accrual basis, whichever applies for the type of employer or for the fund type(s) used to report the employer’s contributions. Pension liabilities and assets result from the difference between contributions required and contributions made. Pension liabilities and assets to different plans should not be offset in the financial statements.

### **Notes to the Financial Statements**

20. Employers should include the following information in the notes to their financial statements<sup>15</sup> for each defined benefit pension plan in which they participate, regardless of the type of plan (except as indicated). Disclosures for more than one plan should be combined in a manner that avoids unnecessary duplication.

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<sup>15</sup>Statement 25 includes the requirements for the notes to the financial statements (and schedules of required supplementary information, if applicable) of pension trust funds included in the employer’s financial reports. When similar information is required by this Statement and Statement 25, the employer should present the disclosures in a manner that avoids unnecessary duplication.

- a. Plan description
  - 1. Name of the plan, identification of the public employee retirement system or other entity that administers the plan, and identification of the plan as a single-employer, agent multiple-employer, or cost-sharing multiple-employer defined benefit pension plan.
  - 2. Brief description of the types of benefits and the authority under which benefit provisions are established or may be amended.
  - 3. Whether the pension plan issues a stand-alone financial report, or is included in the report of a public employee retirement system or another entity, and, if so, how to obtain the report.
- b. Funding policy
  - 1. Authority under which the obligations to contribute to the plan of the plan members, employer(s), and other contributing entities (for example, state contributions to local government plans) are established or may be amended.
  - 2. Required contribution rate(s) of active plan members.
  - 3. Required contribution rate(s) of the employer in accordance with the funding policy, in dollars or as a percentage of current-year covered payroll. If the plan is a single-employer or agent plan and the rate differs significantly from the ARC, disclose how the rate is determined (for example, by statute or contract, or the plan is financed on a **pay-as-you-go** basis). If the plan is a cost-sharing plan, disclose the required contributions in dollars and the percentage of that amount contributed for the current year and each of the two preceding years.

21. Sole and agent employers should disclose the following information for each plan, in addition to the information required by paragraph 20:

- a. For the current year, annual pension cost and the dollar amount of contributions made. If the employer has an NPO, also disclose the components of annual pension cost (ARC, interest on the NPO, and adjustment to the ARC), the increase or decrease in the NPO, and the NPO at the end of the year.
- b. For the current year and each of the two preceding years, annual pension cost, percentage of annual pension cost contributed that year, and NPO at the end of the year. (For the first two years, the required information should be presented for the transition year, and for the current and transition year, respectively.)
- c. Date of the actuarial valuation and identification of the actuarial methods and significant assumptions used to determine the ARC for the current year and the most current information required by paragraph 22. The disclosures should include the actuarial cost method, the method(s) used to determine the actuarial value of assets, and the assumptions with respect to the inflation rate, investment return, projected salary increases, and postretirement benefit increases. If the economic assumptions contemplate different rates for successive years (**year-based or select and ultimate rates**), the rates that should be disclosed are the ultimate rates. Also disclose the amortization method (level dollar or level percentage of projected payroll) and the amortization period (equivalent single amortization period, for plans that use

multiple periods) for the most recent actuarial valuation and whether the period is **closed** or **open**. If the aggregate actuarial cost method is used, disclose that the method does not identify or separately amortize unfunded actuarial liabilities.

### **Required Supplementary Information**

22. Sole and agent employers should disclose the following information for the most recent actuarial valuation and the two preceding valuations, unless the aggregate actuarial cost method was used:

- a. The actuarial valuation date, the actuarial value of plan assets, the actuarial accrued liability, the total unfunded actuarial liability (or funding excess), the actuarial value of assets as a percentage of the actuarial accrued liability (**funded ratio**), the annual covered payroll, and the ratio of the unfunded actuarial liability (or funding excess) to annual covered payroll.
- b. Factors that significantly affect the identification of trends in the amounts reported, including, for example, changes in benefit provisions, the size or composition of the population covered by the plan, or the actuarial methods and assumptions used. (The amounts reported for prior years should not be restated.)<sup>16</sup>

The information should be calculated in accordance with the parameters and should be presented as required supplementary information. (Until three actuarial valuations have been performed in accordance with the parameters, the required information should be presented for as many years as it is available.)<sup>17</sup>

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<sup>16</sup>Amounts previously reported based on the **standardized measure of the pension benefit obligation** according to Statement 5 (superseded by this Statement) should, however, be restated, unless that measure was used in determining the employer's actuarially determined required contributions for the year for which the amounts are reported.

<sup>17</sup>Employers may elect to disclose the required information for the most recent valuation or for that valuation and one or both of the preceding valuations in the notes to the financial statements. The information *also* should be presented as required supplementary information (schedule of funding progress) unless information for all three valuations is disclosed in the notes. For sole employers that include the plan in the financial reporting entity (pension trust fund), presentation of information about the plan's funding progress as required for the pension trust fund by Statement 25 meets the requirements of this paragraph. For agent employers, the requirements of this paragraph apply to the employer's *individual* plan. The information should be presented even if the aggregate multiple-employer plan (all employers) is included as a pension trust fund in the employer's report and the required funding progress information is presented for the aggregate plan. For many sole and agent employers the actuarial methods and assumptions applied based on the funding policy before implementation of this Statement will not differ significantly from the parameters. Those employers should be able to provide information in accordance with the parameters for the past three actuarial valuations when this Statement is implemented. However, retroactive application of the parameters is not required.

## **Insured Plans**

23. For purposes of this Statement, an **insured plan** is a pension financing arrangement whereby an employer accumulates funds with an insurance company, while employees are in active service, in return for which the insurance company unconditionally undertakes a legal obligation to pay the pension benefits of those employees or their beneficiaries, as defined in the employer's plan. If an employer's pension financing arrangement with the insurance company does not meet these criteria, the plan is not an insured plan for financial reporting purposes and the employer should comply with all requirements of this Statement for sole and agent employers. Employers with insured plans should recognize pension expenditures/expense equal to the annual contributions or premiums required in accordance with their agreement with the insurance company and should disclose the following information in the notes to the financial statements:

- a. A brief description of the insured plan, including the benefit provisions and the authority under which benefit provisions are established or may be amended.
- b. The fact that the obligation for the payment of benefits has been effectively transferred from the employer to one or more insurance companies. Also disclose whether the employer has guaranteed benefits in the event of the insurance company's insolvency.
- c. The current-year pension expenditures/expense and contributions or premiums paid.

## **Postemployment Healthcare Benefits**

24. Employers are not required to apply this Statement to postemployment healthcare benefits. A sole or agent employer that applies the measurement and recognition requirements of this Statement to health care also should provide the notes to the financial statements required by this Statement instead of the note disclosures required by Statement 12. (All other employers that provide postemployment healthcare benefits should continue to apply Statement 12.) The employer also should disclose the healthcare inflation assumption. If the postemployment healthcare benefits are administered through a defined benefit pension plan and the information described in paragraph 22 is provided

for those benefits by both the plan and the employer, the information should be measured in the same manner by both entities. All information provided on postemployment healthcare benefits should be disclosed separately from information on pension benefits.<sup>18</sup>

### **Employers with Defined Contribution Plans**

25. Employers with defined contribution plans should recognize annual pension expenditures/expense equal to their required contributions, in accordance with the terms of the plan. Recognition should be on the modified accrual or accrual basis, whichever applies for the type of employer or for the fund type(s) used to report the employer's contributions. Pension liabilities and assets result from the difference between contributions required and contributions made. Pension liabilities and assets to different plans should not be offset in the financial statements.

26. A pension plan that has characteristics of both a defined benefit and a defined contribution plan requires careful analysis. If the substance of the plan is to provide a defined pension benefit in some form, the employer should apply the requirements of this Statement for defined benefit plans.

27. Employers should include the following information in the notes to their financial statements for each defined contribution plan to which they are required to contribute:<sup>19</sup>

- a. Name of the plan, identification of the public employee retirement system or other entity that administers the plan, and identification of the plan as a defined contribution plan.
- b. Brief description of the plan provisions and the authority under which they are established or may be amended.

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<sup>18</sup>Statement 26 requires application of the same measurement methods and assumptions by the plan and the employer, when the pension plan reporting standards are applied to similar or related postemployment healthcare information reported by both entities. The actuarial methods and assumptions applied for healthcare information need not be the same as those applied for pension information. The requirement for separate reporting of healthcare and pension information may be accomplished by including the information in separate columns of the same schedule.

<sup>19</sup>See footnote 15.



- c. Contribution requirements (for example, the contribution rate in dollars or as a percentage of salary) of the plan members, employer, and other contributing entities (for example, state contributions to local government plans) and the authority under which the requirements are established or may be amended.
- d. The contributions actually made by plan members and the employer.

### **Special Funding Situations**

28. Some governmental entities are legally responsible for contributions to pension plans that cover the employees of another governmental entity or entities. For example, a state government may be legally responsible for the annual “employer” contributions to a pension plan that covers employees of school districts within the state. In those cases, the entity that is legally responsible for the contributions should comply with all applicable provisions of this Statement for measurement and recognition of expenditures/expense, liabilities, assets, note disclosures, and required supplementary information. If the plan is a defined benefit pension plan and the entity with legal responsibility for contributions is the only contributing entity, the requirements of this Statement for sole employers apply, regardless of the number of entities whose employees are covered by the plan.<sup>20</sup>

### **EFFECTIVE DATE AND TRANSITION**

29. The requirements of this Statement are effective for periods beginning after June 15, 1997. Early implementation is encouraged.

#### **Pension Liabilities (Assets) at Transition (Defined Benefit Pension Plans)**

##### **Sole and Agent Employers**

30. For sole and agent employers, the pension liability (asset) at transition is the cumulative difference, including interest, for the years specified in paragraph 32, between (a) the employer’s required contributions in accordance with the plan’s actuarially

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<sup>20</sup>GASB Statement No. 24, *Accounting and Financial Reporting for Certain Grants and Other Financial Assistance*, provides standards for recognizing payments made on a government’s behalf by another entity.

determined funding requirements<sup>21</sup> and (b) the contributions made by the employer in relation to the required contributions. At the effective date of this Statement, all outstanding pension liabilities (assets), except pension-related debt, should be adjusted to equal the pension liability (asset) at transition. This Statement does not change existing standards of accounting and financial reporting for pension-related debt.

31. Employers should determine whether they have a pension liability (asset) at transition, regardless of the amount of pension liabilities (assets), if any, previously reported. The determination should be made separately for each plan. If the employer's records substantiate that all actuarially determined required contributions applicable to the years specified in paragraph 32 have been paid, the pension liability (asset) at transition is zero. Otherwise, the pension liability (asset) at transition should be calculated in accordance with the following paragraphs.

32. The calculation period should include all fiscal years of the employer that began between December 15, 1986 and the effective date of this Statement for which the actuarially determined required contributions of the employer were calculated, even if that information was not included in the employer's financial reports. The inclusion of fiscal years beginning prior to December 15, 1986 is acceptable.

33. To facilitate the calculation, the employer should assume that the pension liability (asset) balance at the beginning of the calculation period is zero. A year-by-year comparison should be made between the employer's actuarially determined required contributions and the contributions made. The calculation should begin with the earliest

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<sup>21</sup>The pension liability (asset) at transition and the NPO at the effective date are related and affect the calculation of annual pension cost for the transition year, as explained in paragraphs 11–13 and 35. Therefore, the pension liability (asset) at transition should be based on unsettled *actuarially determined* required contributions (excluding pension-related debt), *as calculated for the years specified in paragraph 32*. Retroactive application of the parameters is not required.

year (year 1) in which a difference occurred that was not settled by the next actuarial valuation date.

34. The unsettled difference for year 1 constitutes the beginning balance of the NPO for the next year (year 2). The required contributions for year 2 should be adjusted for interest and to offset the actuarial amortization of the past under- or overcontribution, as described in paragraphs 12 and 13 of this Statement; that is, the adjustments should be based on the beginning balance of the NPO and the investment return and amortization procedures applied in determining the required contributions for year 2. The ending balance of the NPO for year 2 should include the beginning balance and any difference between the *adjusted* required contributions and the contributions made for year 2, unless the difference was settled by the next actuarial valuation date. The employer should continue to apply these procedures to each subsequent year taken individually, working forward until the effective date of this Statement.

35. The NPO at the effective date is the basis for calculating the interest and ARC adjustments for the transition year, as required by paragraphs 12 and 13. The pension liability (asset) at transition is equal to (a) the NPO and (b) any short-term difference from the year before the effective date that was excluded from the NPO, as required by paragraph 11.

#### **Cost-Sharing Employers**

36. The pension liability at transition of a cost-sharing employer should be equal to the employer's (a) contractually required contributions that are due and payable at the effective date and (b) pension-related debt, if applicable. If a cost-sharing employer has recognized pension liabilities for amounts other than those specified in this paragraph, those liabilities should be reduced to zero.

#### **Disclosures**

37. In the transition year, employers should make the following disclosures for each single-employer, agent, and cost-sharing plan, even if the pension liability (asset) was zero both before and at the effective date. The employer should disclose that a pension liability (asset) at transition was determined in accordance with this Statement, the amount of the pension liability (asset) at transition, and the difference, if any, between that amount and the previously reported liability (asset) to the same plan.

<p style="text-align: center;"><b>The provisions of this Statement need not be applied to immaterial items.</b></p>
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*This Statement was adopted by the affirmative votes of four members of the Governmental Accounting Standards Board. Mr. Antonio dissented.*

Mr. Antonio objects to this Statement because he believes that certain significant changes made to the proposal in the 1990 ED on employer pension accounting and to Statement 5 on pension disclosures are not justified. Because of these changes, he believes this Statement does not improve existing standards of reporting by governmental entities.

### **Parameters**

Mr. Antonio notes that the 1990 ED was issued after extensive due process that included research leading to a Preliminary Views (PV) document and Board deliberations based on comments received in response to the PV. The PV set forth two views, with the differing viewpoints based on differing perceptions concerning the extent to which employer pension accounting measurements should be separated from the pension funding process. This issue has been discussed at length in various pension accounting standards, which include the 1956 Accounting Research Bulletin No. 47, *Accounting for Costs of Pension Plans*; the 1966 APB Opinion No. 8, *Accounting for the Cost of Pension Plans*;

and the 1985 FASB Statement 87. These standards indicate a successive movement away from measuring pension cost based on funding.

Most respondents to the PV favored the more funding-oriented view, and that view formed the basis for the 1990 ED. Although “funding-oriented,” it is important to note that both the 1990 ED and the view on which it was based contain elements of both APB Opinion 8 and FASB Statement 87. The 1990 ED therefore departed from a pure funding approach. As pointed out in paragraph 49 of the 1990 ED, the proposed standards were based on the view that, in the public sector, the actuarially required contribution should be acceptable for employer accounting purposes provided it was determined “consistent with the concepts of accrual basis accounting and interperiod equity.” Paragraph 50 of the 1990 ED proposed a reduction in the range of measurement alternatives because at that time the Board believed that the existing range was unreasonably broad. In essence, that ED continued the pension funding orientation for accounting measurement purposes, but placed greater constraints on it to narrow the range of options and more nearly relate the employer accounting charge for pensions to the period benefited by the employee service.

Because the 1990 ED represented a compromise between a pure accounting approach and a pure funding approach, the response was what one might have expected. The largest group of respondents either agreed with the proposed constraints placed on funding approaches for accounting measurement purposes or suggested that the constraints be made either slightly “tighter” or slightly “looser.” A smaller group of respondents suggested significant “tightening” of the constraints—for example, by amortizing the unfunded actuarial liability at transition over average remaining service life, adopting a single actuarial method, or adopting FASB Statement 87. Another, smaller group suggested “loosening” some but not all of the constraints—for example, by amortizing the transition liability on a closed basis but amortizing subsequent changes on a fluctuating basis up to 30 years. And a small group recommended significant “loosening” of the amortization methodology for both the transition liability and subsequent changes.

In keeping with the intent of the 1990 ED, Mr. Antonio believes an appropriate reaction to the respondents' comments would have been a slight adjustment of the proposed constraints. Instead, the Board has chosen to remove virtually all of those constraints on funding approaches when used for employer pension accounting measurements. Mr. Antonio is not surprised that a majority of respondents to this Statement's ED agreed with the Board's approach, given the flexibility provided. He continues to believe a Statement so devoid of constraints on accounting measurement and so full of options cannot be considered an improvement over current standards.

Mr. Antonio objects, in particular, to the provisions of paragraphs 10a and 10f, which, taken together, permit employer accounting recognition of certain types of benefits over inordinately long periods of time. These are pension benefits resulting from special termination benefits, benefit increases for retired and active plan participants, and other statutory or contractual agreements to provide pension benefits.

Special termination benefits are benefits offered to employees for a short period of time, often as an inducement to take early retirement, and often to help alleviate near-term budgetary problems. They are not benefits offered to employees in exchange for *rendering* service; instead, they are benefits offered in exchange for *terminating* service. These benefits generally take the form of either lump-sum cash payouts or additional pension benefits (for example, one year of pension service credit for every ten years worked). There is no justification for accounting for special termination benefits differently when they are paid out over many years in the form of pension benefits than when they are paid immediately.

FASB Statement No. 88, *Employers' Accounting for Settlements and Curtailments of Defined Benefit Pension Plans and for Termination Benefits*, requires that the cost of special termination benefits be recognized immediately—that is, when the employee accepts the offer and the amount can be reasonably estimated. NCGA Interpretation 8, which was based on a similar provision of FASB Statement No. 74, *Accounting for*

*Special Termination Benefits Paid to Employees*, contained a similar requirement, subject to the distinction in accounting and reporting as between proprietary and governmental funds. This Statement would modify NCGA Interpretation 8 and use pension plan funding techniques. This change could result in spreading employer accounting recognition of additional pension benefits resulting from special termination benefits over periods up to 40 years (and more, under certain funding methods). The Statement could result in the failure to make timely recognition of either the expenditures/expense or the liability. Mr. Antonio believes that a special termination benefit of this type is not a pension benefit (it is an ad hoc severance benefit paid in the *form* of a pension benefit) and should not be accounted for as if it were a pension benefit.

The 1990 ED proposed that an increase in the unfunded actuarial liability due to a benefit increase for retired plan participants be amortized (and therefore recognized) either in level dollar amounts over the estimated average remaining life expectancy of the retirees or by a method that reflects the gradually decreasing payout to retirees over their remaining life expectancies. In arriving at that conclusion, the Board recognized the differing views regarding the relationship between benefit increases to retired plan participants and the economic benefit to the employer. It therefore proposed a middle ground between immediate recognition of the entire unfunded actuarial liability and recognition over the estimated average remaining service life of active plan participants. This Statement, however, allows recognition of the expenditures/expense for these benefits for periods up to 40 years (and more)—long beyond the period that an employer could possibly derive economic benefit from the payment to those retirees. Mr. Antonio concludes that the Statement pushes employer accounting recognition beyond the bounds of reason.

The 1990 ED also proposed that an increase in the unfunded actuarial liability due to a benefit increase for active plan participants should be amortized over the estimated average remaining service life of those participants. In justifying that conclusion, the

Board reasoned that it was unreasonable to anticipate that employers would derive an economic benefit beyond the period of average remaining service life of the active participants entitled to the increase. However, this Statement allows recognition for periods up to 40 years (and more). Mr. Antonio believes that this standard, therefore, fails to meet the accrual accounting and interperiod equity criteria.

This Statement also permits amortization of other “statutory or contractual agreements to provide pension benefits” for periods up to 40 years (and more). He believes that this is an open-ended invitation to defer recognition not only of additional pension benefits resulting from special termination benefits, but also of any type of collective-bargaining arrangement that converts salaries and other benefits to pension benefits. Theoretically, any type of wage or salary payable for current services could be deferred and paid in the form of pension benefits as a result of collective bargaining, without immediate recognition of a liability.

The 1990 ED proposed amortization of the unfunded actuarial liability at transition and most subsequent changes in the unfunded actuarial liability on a “closed” basis. Under the closed basis, each component of the liability is fully amortized over the prescribed number of years. The 1990 ED also permitted amortization to be either in level dollar amounts or as a level percentage of projected payroll. The level dollar amortization method is similar to the mortgage payment method and is automatically a closed basis. Under the level percentage of payroll closed basis, the amortization payment in the early years is insufficient to cover the interest on the unfunded actuarial liability; however, as the payroll base rises in the later years, the total payment increases rapidly so that the unfunded actuarial liability is fully amortized in the prescribed number of years. Although Opinion 8 contemplated only the level dollar amortization method, the 1990 ED permitted use of the level percentage of payroll closed method because it helped to maintain a consistent percentage relationship between pension expenditures/expense and payroll while fully amortizing the unfunded actuarial liability in the prescribed number of years.



This Statement, however, permits not only the level dollar and level percentage of payroll closed methods, but also the “fluctuating” or “open” methods. Under some applications, the open method, when coupled with an amortization period of 30 to 40 years, produces no perceptible amortization of the unfunded actuarial liability. Thus, the additional pension benefits resulting from special termination benefits and the other pension benefits previously discussed may be amortized over periods far beyond the stated 30 to 40 years. Although actuaries may consider this to be an amortization method because the unfunded actuarial liability decreases over time as a percentage of payroll, Mr. Antonio believes it is not an amortization method in an accounting sense because the liability increases in absolute amount.

This Statement seeks to justify both the 30-to-40-year maximum acceptable amortization period and the open method based on the desirability of “stability in the contribution rates” and “simplicity in the calculations.” Even though more stringent parameters may result in additional calculations, Mr. Antonio believes from a cost-benefit standpoint, simplicity of calculation is not a relevant issue. Maintaining stability in pension funding rates may be a desirable feature from the employer’s and the plan’s perspective. But when transactions occur that affect only the current period or a short subsequent period, then accounting recognition should not be subordinated to pension funding techniques. Indeed, a strong case can be made, from a public policy perspective, that the cost of those events should not be spread out even for funding purposes.

Mr. Antonio believes that an accounting standard that permits options is no better than its weakest option. One option, which combines a 40-year amortization period, a level percentage of payroll amortization method, and an open method, results in no perceptible amortization and a likely increase in the liability far beyond the stated 40 years. When allowed in connection with additional pension benefits resulting from special termination benefits and ad hoc benefit increases to retired employees—causing future

recognition of expenditures/expense far beyond the benefit period—Mr. Antonio believes that this Statement fails to meet the test of fiscal responsibility.

### **Standardized Measure**

Mr. Antonio also objects to this Statement because it overturns the requirement in Statement 5 for reporting a standardized measure of the pension benefit obligation and substitutes the actuarial accrued liability (if any) produced by the method used to fund the plan. The change is justified, in part, on the basis of “consistency in the measurement and disclosure of pension information.” This purported virtue of “consistency,” however, leaves financial report users with a lack of comparability among governments in both the measurement of the expenditures/expense and the funded status of the plan. Mr. Antonio is not persuaded by the arguments for abandoning a standardized measure, which had been adopted by the NCGA in its Statement 6 and subsequently was reaffirmed by the GASB in its Statement 5.

The following reasons for using a standardized measure of the pension obligation are as valid today as they were when adopted in the 1980s by two governmental accounting standards-setting bodies:

- a. For employer financial reporting, the trend in funded status of its pension arrangements is useful information, particularly in the absence of employer reporting of the total liability. To be of maximum usefulness to *all* users, however, funded status needs to be reported on a comparable basis by all governmental entities. One frequently reads observations such as “the state of A pension plan is X% funded, compared with the state of B which is Y% funded and the all-state average of Z% funded.” Mr. Antonio believes that this kind of information, which requires standardized measurement of funded status, is useful to public policy researchers and the media (who may influence public perception as well as legislation), the investment community (for example, rating agencies in rationalizing one city’s bond rating against another), and governmental officials involved in the funding and oversight process (for example, in understanding how their government’s pension fund status compares with other governments).
- b. Use of the actuarial accrued liability produced by the funding methodology does not result in a common measure of the employer’s pension obligation. In fact, one of the six actuarial cost methods allowed by this Statement—the aggregate method—

produces a zero unfunded actuarial accrued liability regardless of the extent to which the plan has been funded; it therefore does not measure funding progress. Furthermore, the two “frozen” actuarial cost methods produce actuarial accrued liabilities that are not adjusted for actuarial gains and losses. The actuarial accrued liabilities produced by the various funding methods are nothing more than byproducts of the actuarial method used to compute the funding requirement; several of them cannot be used to measure funding progress. Furthermore, those methods that can be used to measure funding progress allocate differing amounts to past service (the portion that helps to measure the benefit obligation) and to future service. If one is interested in determining the funded status of one government’s plan relative to another government’s plan, a particular process should be chosen. This is what was done in NCGA Statement 6 and Statement 5.

- c. The use of funding methods to measure pension expenditures/expense can produce significantly different results under similar circumstances, particularly because of the extensive options allowed by the Board in computing the ARC. Requiring a standardized measure of the pension benefit obligation helps to overcome some of the differences that result from allowing funding methods to measure pension expenditures/expense. Failure to require a standardized measure of the pension benefit obligation weakens the position of the Board in permitting options in measuring pension expenditures/expense.
- d. Another reason for requiring a standardized measure of the pension benefit obligation lies in the uncertain accounting status of the employer liability resulting from past employee service. Accounting standards setters have long grappled with the issue of whether the employer liability is (1) merely the underfunded actuarial requirement or (2) the entire unfunded obligation for past service. In reaching its conclusion on that issue, the FASB (which requires reporting a minimum obligation in the body of statements) stated: “The Board acknowledges that the delayed recognition included in this Statement results in excluding the most current and most relevant information from the employer’s statement of financial position. That information is, however, included in the disclosures required . . . “ (FASB Statement 87, paragraph 104). By requiring reporting of neither a minimum liability nor a standardized measure of the obligation, this Statement adds further mystery to an already arcane subject.

In addition to the purported need for consistency in measurement and disclosure, the Board cites the results of a survey and comments received on the ED to justify abandoning the standardized measure of the obligation. The GASB’s due process, however, did not capture the views of many external users of governmental entity financial reporting, but instead was based primarily on the views of internal personnel (such as pension plan administrators and plan actuaries) or their perceptions about the needs of external users. Obviously, internal personnel need information about plan status in relation to the plan’s

own funding targets, and they have no difficulty getting that information. But that is not a sufficient reason for abandoning a standardized measure for external reporting by the governmental entity. The following comments deal with some of the points made by those who would abandon the standardized measure, and therefore supplement the comments in the preceding paragraph:

- a. Mr. Antonio believes the suggestion that a “standardized accounting measure [of the obligation] does not make comparable that which is inherently not comparable” and that a standardized measure is “unachievable” is simply an unsupported assertion. Other accounting standards setters seem to have had some success in developing a standardized measure; it is unfortunate that the Board failed to capitalize on the momentum created by Statement 5.
- b. The suggestion that a standardized measure may lead to “invalid conclusions” can be tested with a simple illustration. Assume that there are three governmental entities with plans that are alike in all respects, except that one funds on the entry age normal actuarial method, another on the aggregate method, and the third on the projected unit credit method. Assume further that, using the Statement 5 standardized measure and a standardized measure of the actuarial value of assets, all three governments report that their plans are 85 percent funded. But, using each plan’s own actuarial measurements—as required by this Statement—the first government’s plan is 75 percent funded, the second government is not required to state its plan’s funded status, and the third is 85 percent funded. Given the fact that all three plans have the same funded status using a standardized measure, it is difficult to understand how external users are more likely to draw “invalid conclusions” from the standardized measure than from different measures or no measure at all.
- c. The Board notes that some respondents felt that the standardized measure actually had been used, but not for the intended purpose; that is, it was used to justify reducing employer contributions. In response to those comments, one might ask why any disclosures are made unless they are intended for some kind of evaluative, comparative (and possible action) purpose. In fact, a change in any one of the following required disclosures might be used to justify reducing employer contributions: the actuarial cost method; the method used to determine the actuarial value of assets; the assumptions concerning the inflation rate, investment return, projected salary increases, and postretirement benefit increases; the amortization method; the amortization period; and whether the amortization period is closed or open.

## **Transition**

Mr. Antonio also objects to this Statement because he questions the justification for the changes to the 1990 ED transition approach. That ED provided that, at the transition

date, all pension liabilities in the general long-term debt account group (GLTDAG) should be removed from the accounts. The Board, at that time, proposed this approach because it recognized that pension accounting practices have been such that existing GLTDAG liabilities are not uniformly stated from jurisdiction to jurisdiction, that attempts to restate the GLTDAG liabilities are likely to be impractical, and that any information loss caused by removing the liabilities would be offset by the Statement 5 disclosure of the unfunded pension benefit obligation. Respondents to the 1990 ED agreed with this approach.

This Statement would require instead that employers attempt to restate the GLTDAG liability. Unfortunately, there is little uniformity in the requirement. The date at which the restatement is to begin may vary depending on the availability of data. Based on the calculation methodology in this Statement, a plan previously financed on a pay-as-you-go basis would not even be required to report a GLTDAG liability, even though its unfunded actuarial liability is likely to be relatively much higher than that of a plan that had been partially funding its obligation.

Mr. Antonio appreciates the difficulty of the issue and recognizes that alternatives to total removal of the GLTDAG liability could have been developed. However, he continues to support the approach in the 1990 ED as the only practical solution. That ED recognized that over time (based on the parameters set forth in the ED) the unfunded actuarial liability would gradually be either funded or reported as a liability. In any event, the required disclosure of a standardized measure of funded status would provide appropriate information about the unfunded pension obligation.

*Members of the Governmental Accounting Standards Board:*

James F. Antonio, *Chairman*  
Tom L. Allen  
Robert J. Freeman  
Barbara A. Henderson  
Edward M. Klasny

## **EQUIVALENT SINGLE AMORTIZATION PERIOD—CALCULATION METHOD**

38. This paragraph includes exhibits of the calculations that, if applicable, are required by this Statement. When components of the total unfunded actuarial liability are separately amortized over different periods, this Statement requires the individual periods to be selected so that the *equivalent single amortization period for all components combined* does not exceed the maximum acceptable amortization period. An equivalent single amortization period is a weighted average period calculated in accordance with paragraph 10f(1). For these exhibits, the maximum acceptable period is assumed to be 30 years. The data included in the exhibits are hypothetical and are not intended to indicate the Board's endorsement of the amortization periods and methods shown.

Exhibit 1 Equivalent Single Amortization Period *within* the Maximum Acceptable Amortization Period

Exhibit 2 Equivalent Single Amortization Period *outside* the Maximum Acceptable Amortization Period

Exhibit 3 Recalculation of Exhibit 2 So That the Equivalent Single Amortization Period Is *within* the Maximum Acceptable Amortization Period

**Exhibit 1—Equivalent Single Amortization Period *within* the Maximum Acceptable Amortization Period**

Lines 1, 2, and 3 of the exhibit are given. The total unfunded actuarial liability (UAL) comprises three components or bases (line 2). Each base is to be amortized as a level percentage of projected payroll over a different time period (line 3). The assumptions are 8% investment return and 5% inflation; based on those assumptions, the level percent discount rate is approximately 2.86%. Each amortization factor (line 4) incorporates that rate and the period.

The amortization calculations for each of the three bases result in a total (net) amortization payment of 4.82% of payroll (line 6, total column). If the employer continued to contribute at that rate and all else resulted as anticipated, the total unfunded actuarial liability would be fully amortized in 26 years (equivalent single amortization period, line 8). That period is within the maximum acceptable period of 30 years. Therefore, the amortization periods selected for each base are acceptable.

	<u>Base 1</u> <u>Initial</u> <u>UAL</u>	<u>Base 2</u> <u>Plan</u> <u>Amendment</u>	<u>Base 3</u> <u>Cumulative</u> <u>Loss (Gain)</u>	<u>Total</u>
1. Covered payroll				\$1,500,000
2. Amount of base	\$1,000,000	\$400,000	\$(100,000)	\$1,300,000
3. Remaining amortization years	30	15	10	
4. Amortization factor based on (3)	19.77	11.94	8.51	
5. Next year's payment (2)/(4)	\$50,582	\$33,501	\$(11,751)	\$72,332
6. Payment as a level percentage of payroll (5)/(1)	3.37%	2.23%	(0.78)%	4.82%

*Equivalent single period*

7. Weighted average amortization factor (2)/(5)	17.97
8. Equivalent single amortization period (nearest whole year)*	26

\*Number of years incorporated in the amortization factor (7) when the discount rate is 2.86%. An amortization factor incorporates a discount rate and a period. When one is known, the other can be calculated.

## **Exhibit 2—Equivalent Single Amortization Period *outside* the Maximum Acceptable Amortization Period**

Lines 1, 2, and 3 of the exhibit are given. The total unfunded actuarial liability (UAL) comprises three components or bases (line 2). Each base is to be amortized as a level percentage of projected payroll over a different time period (line 3). The assumptions are 8% investment return and 5% inflation; based on those assumptions, the level percent discount rate is approximately 2.86%. Each amortization factor (line 4) incorporates that rate and the period.

The amortization calculations for each of the three bases result in a total (net) amortization payment of 2.14% of payroll (line 6, total column). If the employer continued to contribute at that rate and all else resulted as anticipated, the total unfunded actuarial liability would be fully amortized in 59 years (equivalent single amortization period, line 8). Based on the assumptions made, 2.14% of payroll is insufficient to amortize the total unfunded actuarial liability in 30 years. One or more of the amortization periods selected for the individual bases should be changed. One solution is to spread the cumulative gain over a longer period, thereby *reducing* the credit taken (lines 5 and 6, Base 3) and *increasing* the total (net) amortization payment. Exhibit 3 presents that solution.



	<u>Base 1</u> <u>Initial</u> <u>UAL</u>	<u>Base 2</u> <u>Plan</u> <u>Amendment</u>	<u>Base 3</u> <u>Cumulative</u> <u>Loss (Gain)</u>	<u>Total</u>
1. Covered payroll				\$1,500,000
2. Amount of base	\$1,000,000	\$200,000	\$(300,000)	\$900,000
3. Remaining amortization years	30	15	10	
4. Amortization factor based on (3)	19.77	11.94	8.51	
5. Next year's payment (2)/(4)	\$50,582	\$16,750	\$(35,253)	\$32,079
6. Payment as a level percentage of payroll (5)/(1)	3.37%	1.12%	(2.35)%	2.14%

*Equivalent single period*

7. Weighted average amortization factor (2)/(5)				28.06
8. Equivalent single amortization period (nearest whole year)*				59

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\*Number of years incorporated in the amortization factor (7) when the discount rate is 2.86%. An amortization factor incorporates a discount rate and a period. When one is known, the other can be calculated.

**Exhibit 3—Recalculation of Exhibit 2 So That the Equivalent Single Amortization Period Is *within* the Maximum Acceptable Amortization Period**

Lines 1 through 8 are repeated from Exhibit 2 and the same assumptions apply. Given those assumptions, the minimum payment needed to pay off the total unfunded actuarial liability in 30 years (line 9) is \$45,524, or 3.03% of payroll (lines 11 and 12).

One way to achieve the required minimum payment is to keep the amortization payments for the two loss bases the same (line 13) and recalculate the maximum credit that can be taken for the cumulative gain (line 14). To achieve that amount, the amortization factor for the cumulative gain should be 13.76 (line 15) instead of 8.51 (line 4). The number of years incorporated in that factor when the discount rate is 2.86% is 18 years (line 16); Base 3 should be amortized over 18 years, not 10 years. *Note that other solutions are possible, including various combinations of shortening the periods for Base 1 and/or Base 2 and lengthening the period for Base 3.*

	<u>Base 1</u> <u>Initial</u> <u>UAL</u>	<u>Base 2</u> <u>Plan</u> <u>Amendment</u>	<u>Base 3</u> <u>Cumulative</u> <u>Loss (Gain)</u>	<u>Total</u>
1. Covered payroll				\$1,500,000
2. Amount of base	\$1,000,000	\$200,000	\$(300,000)	\$900,000
3. Remaining amortization years	30	15	10	
4. Amortization factor based on (3)	19.77	11.94	8.51	
5. Next year's payment (2)/(4)	\$50,582	\$16,750	\$(35,253)	\$32,079
6. Payment as a level percentage of payroll (5)/(1)	3.37%	1.12%	(2.35)%	2.14%

*Equivalent single period*

7. Weighted average amortization factor (2)/(5)				28.06
8. Equivalent single amortization period (nearest whole year)*				59

*Minimum payment*

9. Maximum acceptable average period				30
10. Amortization factor for (9)				19.77
11. Minimum next year's payment (2)/(10)				\$45,524
12. Minimum as a percentage of payroll (11)/(1)				3.03%

*Adjusted amortization period for  
Base 3*

13. Payment for Base 1 plus Base 2 (5)				\$67,332
14. Maximum credit against cumulative gain (11) – (13)				\$(21,808)
15. Base 3 amortization factor (2)/(14)				13.76
16. Base 3 amortization years				18

## **GLOSSARY**

39. This paragraph contains definitions of certain terms *as they are used in this Statement*; the terms may have different meanings in other contexts. Terms defined in paragraph 40, “Pension Actuarial Terminology,” are cross-referenced to that paragraph and are not redefined here.

### **Actuarial accrued liability**

See paragraph 40, A-4.

### **Actuarial assumptions**

See paragraph 40, C-2.

### **Actuarial cost method**

See paragraph 40, A-2.

### **Actuarial experience gain or loss**

See paragraph 40, A-8.

### **Actuarial present value of total projected benefits**

Total projected benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Expressed another way, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay total projected benefits when due.

**Actuarial valuation**

See paragraph 40, C-3.

**Actuarial valuation date**

The date as of which an actuarial valuation is performed.

**Actuarial value of assets**

See paragraph 40, A-5.

**Ad hoc postretirement benefit increase**

See Postretirement benefit increase.

**Agent multiple-employer plan (agent plan)**

An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan, based on the benefit formula selected by the employer and the individual plan's proportionate share of the pooled assets. The results of the individual valuations are aggregated at the administrative level.

**Aggregate actuarial cost method**

See paragraph 40, B-4.

**Allocated insurance contract**

A contract with an insurance company under which related payments to the insurance company are currently used to purchase immediate or deferred annuities for individual members. Also may be referred to as an annuity contract.

**Amortization (of unfunded actuarial accrued liability)**

See paragraph 40, C-5.

**Annual pension cost**

A measure of the periodic cost of an employer's participation in a defined benefit pension plan.

**Annual required contributions of the employer (ARC)**

The employer's periodic required contributions to a defined benefit pension plan, calculated in accordance with the parameters.

**Attained age actuarial cost method**

See paragraph 40, B-3.

**Closed amortization period (closed basis)**

A specific number of years that is counted from one date and, therefore, declines to zero with the passage of time. For example, if the amortization period is initially 30 years on a closed basis, 29 years remain after the first year, 28 years after the second year, and so forth. In contrast, an open amortization period (open basis) is one that begins again or is recalculated at each actuarial valuation date. Within a maximum number of years specified by law or policy (for example, 30 years), the period may increase, decrease, or remain stable.

**Contribution deficiencies (excess contributions)**

The difference between the annual required contributions of the employer(s) (ARC) and the employer's actual contributions in relation to the ARC.

**Cost-sharing multiple-employer plan**

A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are

not attributed individually to the employers. A single actuarial valuation covers all plan members and the same contribution rate(s) applies for each employer.

**Covered group**

Plan members included in an actuarial valuation.

**Covered payroll**

All elements included in compensation paid to active employees on which contributions to a pension plan are based. For example, if pension contributions are calculated on base pay including overtime, covered payroll includes overtime compensation.

**Defined benefit pension plan**

A pension plan having terms that specify the amount of pension benefits to be provided at a future date or after a certain period of time; the amount specified usually is a function of one or more factors such as age, years of service, and compensation.

**Defined contribution plan**

A pension plan having terms that specify how contributions to a plan member's account are to be determined, rather than the amount of retirement income the member is to receive. The amounts received by a member will depend *only* on the amount contributed to the member's account, earnings on investments of those contributions, and forfeitures of contributions made for other members that may be allocated to the member's account.

**Employer's contributions**

Contributions made in relation to the annual required contributions of the employer (ARC).

**Entry age actuarial cost method**

See paragraph 40, B-2.

**Equivalent single amortization period**

The weighted average of all amortization periods used when components of the total unfunded actuarial accrued liability are separately amortized and the average is calculated in accordance with the parameters.

**Excess contributions (contribution deficiencies)**

See Contribution deficiencies (excess contributions).

**Frozen attained age actuarial cost method**

See paragraph 40, B-6.

**Frozen entry age actuarial cost method**

See paragraph 40, B-5.

**Funded ratio**

The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

**Funding excess**

The excess of the actuarial value of assets over the actuarial accrued liability. See paragraph 40, A-6.



**Funding policy**

The program for the amounts and timing of contributions to be made by plan members, employer(s), and other contributing entities (for example, state government contributions to a local government plan) to provide the benefits specified by a pension plan.

**Insured plan**

A pension financing arrangement whereby an employer accumulates funds with an insurance company, while employees are in active service, in return for which the insurance company unconditionally undertakes a legal obligation to pay the pension benefits of those employees or their beneficiaries, as defined in the employer's plan.

**Investment return assumption (discount rate)**

The rate used to adjust a series of future payments to reflect the time value of money.

**Level dollar amortization method**

The amount to be amortized is divided into equal dollar amounts to be paid over a given number of years; part of each payment is interest and part is principal (similar to a mortgage payment on a building). Because payroll can be expected to increase as a result of inflation, level dollar payments generally represent a decreasing percentage of payroll; in dollars adjusted for inflation, the payments can be expected to decrease over time.

**Level percentage of projected payroll amortization method**

Amortization payments are calculated so that they are a constant percentage of the projected payroll of active plan members over a given number of years. The dollar amount of the payments generally will increase over time as payroll increases due to inflation; in dollars adjusted for inflation, the payments can be expected to remain level.

**Market-related value of plan assets**

A term used with reference to the actuarial value of assets. A market-related value may be market value (or estimated market value) or a calculated value that recognizes changes in market value over a period of, for example, three to five years.

**Net pension obligation (NPO)**

The cumulative difference since the effective date of this Statement between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

**Normal cost**

See paragraph 40, A-3. In this Statement, the term refers to employer normal cost.

**Open amortization period (open basis)**

See Closed amortization period (closed basis).

**Other postemployment benefits**

Postemployment benefits other than pension benefits; other postemployment benefits include postemployment healthcare benefits, regardless of the type of plan that provides them, and all postemployment benefits provided through a plan that does not provide retirement income, except benefits defined as special termination benefits in NCGA Interpretation 8, *Certain Pension Matters*, as amended.

**Parameters**

The set of requirements for calculating actuarially determined pension information included in financial reports.

**Pay-as-you-go**

See paragraph 40, C-8.

**Payroll growth rate**

An actuarial assumption with respect to future increases in total covered payroll attributable to inflation; used in applying the level percentage of projected payroll amortization method.

**Pension assets**

The amount recognized by an employer for contributions to a pension plan greater than pension expense.

**Pension benefits**

Retirement income and all other benefits, including disability benefits, death benefits, life insurance, and other ancillary benefits, *except healthcare benefits*, that are provided through a *defined benefit* pension plan to plan members and beneficiaries after termination of employment or after retirement. Postemployment healthcare benefits are considered other postemployment benefits, whether they are provided through a defined benefit pension plan or another type of plan.

**Pension expenditures/expense**

The amount recognized by an employer in each accounting period for contributions to a pension plan.

**Pension liabilities**

The amount recognized by an employer in a fund or in the general long-term debt account group for contributions to a pension plan less than pension expenditures/expense.

**Pension-related debt**

All long-term liabilities of an employer *to a pension plan*, the payment of which is *not* included in the annual required contributions of a sole or agent employer (ARC) or the

actuarially determined required contributions of a cost-sharing employer. Payments generally are made in accordance with installment contracts that usually include interest. Examples include contractually deferred contributions and amounts assessed to an employer upon joining a multiple-employer plan.

### **Pension trust fund**

A fund held by a governmental entity in a trustee capacity for pension plan members; used to account for the accumulation of assets for the purpose of paying benefits when they become due in accordance with the terms of the plan; a pension plan included in the financial reporting entity of the plan sponsor or a participating employer.

### **Plan members**

The individuals covered by the terms of a pension plan. The plan membership generally includes employees in active service, terminated employees who have accumulated benefits but are not yet receiving them, and retired employees and beneficiaries currently receiving benefits.

### **Postemployment**

The period between termination of employment and retirement as well as the period after retirement.

### **Postemployment healthcare benefits**

Medical, dental, vision, and other health-related benefits provided to terminated employees, retired employees, dependents, and beneficiaries.

### **Postretirement benefit increase**

An increase in the pension benefits of retirees or beneficiaries granted to compensate for the effects of inflation (cost-of-living adjustment) or for other reasons. *Ad hoc* increases may be granted periodically by a decision of the board of trustees,

legislature, or other authoritative body; both the decision to grant an increase and the amount of the increase are discretionary. *Automatic* increases are periodic increases specified in the terms of the plan; they are nondiscretionary except to the extent that the plan terms can be changed.

**Projected salary increase assumption**

An actuarial assumption with respect to future increases in the individual salaries and wages of active plan members; used in determining the actuarial present value of total projected benefits. The expected increases commonly include amounts for inflation, enhanced productivity, and employee merit and seniority.

**Projected unit credit actuarial cost method**

See paragraph 40, B-1.

**Public employee retirement system**

A state or local governmental entity entrusted with administering one or more pension plans; also may administer other types of employee benefit plans, including postemployment healthcare plans and deferred compensation plans. A public employee retirement system also may be an employer that provides or participates in a pension plan or other types of employee benefit plans for employees of the system.

**Required supplementary information (RSI)**

Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

**Select and ultimate rates**

Actuarial assumptions that contemplate different rates for successive years. Instead of a single assumed rate with respect to, for example, the investment return assumption,

the actuary may apply different rates for the early years of a projection and a single rate for all subsequent years. For example, if an actuary applies an assumed investment return of 8 percent for year 19W0, 7.5 percent for 19W1, and 7 percent for 19W2 and thereafter, then 8 percent and 7.5 percent are select rates, and 7 percent is the ultimate rate.

**Single-employer plan**

A plan that covers the current and former employees, including beneficiaries, of only one employer.

**Standardized measure of the pension benefit obligation**

The actuarial present value of credited projected benefits produced by the projected unit credit actuarial cost method, prorated on service, and other measurement requirements specified in Statement 5 (superseded by this Statement).

**Terminal funding**

See paragraph 40, C-10.

**Ultimate rate**

See Select and ultimate rates.

**Unfunded actuarial accrued liability (unfunded actuarial liability)**

See paragraph 40, A-6.

**Unprojected unit credit**

See paragraph 40, B-1.

**Year-based assumptions**

See Select and ultimate rates.

## **PENSION ACTUARIAL TERMINOLOGY**

40. This paragraph contains terms and definitions adopted by the Interim Actuarial Standards Board (now the Actuarial Standards Board) of the American Academy of Actuaries in 1988. The terms and definitions are reproduced, with permission, including the original section headings and item numbers, as published in “Appendix II: Pension Actuarial Terminology” of Actuarial Standard of Practice No. 4, *Measuring Pension Obligations*, approved for publication by the Actuarial Standards Board, October 1993.<sup>22</sup> Five items in the original (B-7, B-8, B-9, C-1, and C-6) are not included in this paragraph because they describe actuarial cost methods not included in the parameters or define terms not used in this Statement or Statement 25. Terms with an asterisk are not used in this Statement or Statement 25 but have been reproduced because they are used in the definitions of other terms.

### **Section A CORE TERMS**

#### **A-1\* Actuarial Present Value**

The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

- a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, Social Security, marital status, etc.),
- b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
- c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

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<sup>22</sup>Actuarial Standard of Practice No. 4 may be obtained from the Actuarial Standards Board, 1100 Seventeenth Street, NW, 7th Floor, Washington, DC 20036.

## **A-2 Actuarial Cost Method or Funding Method**

A procedure for determining the Actuarial Present Value of pension plan benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.

Note: An Actuarial Cost Method is understood to be a Closed Group Actuarial Cost Method unless otherwise stated.

## **A-3 Normal Cost or Normal Actuarial Cost**

That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

Note 1: The presentation of Normal Cost should be accompanied by reference to the Actuarial Cost Method used.

Note 2: Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment).

Note 3: For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated.

## **A-4 Actuarial Accrued Liability, Actuarial Liability, Accrued Liability, or Actuarial Reserve**

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.



Note: The presentation of an Actuarial Accrued Liability should be accompanied by reference to the Actuarial Cost Method used; for example, by hyphenation (“Actuarial Accrued Liability—XYZ,” where “XYZ” denotes the Actuarial Cost Method) or by a footnote.

**A-5 Actuarial Value of Assets or Valuation Assets**

The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.

Note: The statement of Actuarial Assumptions should set forth the particular procedures used to determine this value.

**A-6 Unfunded Actuarial Accrued Liability, Unfunded Actuarial Liability, Unfunded Accrued Liability, or Unfunded Actuarial Reserve**

The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

Note: This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, the excess of the Actuarial Value of Assets over the Actuarial Accrued Liability, or the Funding Excess.

**A-7\* Unfunded Frozen Actuarial Accrued Liability or Unfunded Frozen Actuarial Liability**

An Unfunded Actuarial Accrued Liability which is not adjusted (“frozen”) from one Actuarial Valuation to the next to reflect Actuarial Gains (Losses) under certain Actuarial Cost Methods. Generally, this amount is adjusted by any increments or decrements in Actuarial Accrued Liability due to changes in pension plan benefits or Actuarial Assumptions subsequent to the date it is frozen.

Adjustments are made from one Actuarial Valuation to the next to reflect the addition of interest and deduction of Amortization Payments.

**A-8 Actuarial Gain (Loss) or Experience Gain (Loss)**

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

Note 1: The effect on the Actuarial Accrued Liability and/or the Normal Cost resulting from changes in the Actuarial Assumptions, the Actuarial Cost Method or pension plan provisions should be described as such, not as an Actuarial Gain (Loss).

Note 2: The manner in which the Actuarial Gain (Loss) affects future Normal Cost and Actuarial Accrued Liability allocations depends upon the particular Actuarial Cost Method Used.

**Section B  
ACTUARIAL COST METHODS**

**B-1 Unit Credit Actuarial Cost Method**

A method under which the benefits (projected or unprojected) of each individual included in an Actuarial Valuation are allocated by a consistent formula to valuation years. The Actuarial Present Value of benefits allocated to a valuation year is called the Normal Cost. The Actuarial Present Value of benefits allocated to all periods prior to a valuation year is called the Actuarial Accrued Liability.

Note 1: The description of this method should state the procedures used, including:

- (a) how benefits are allocated to specific time periods;
- (b) the procedures used to project benefits, if applicable; and
- (c) a description of any other method used to value a portion of the pension plan's benefits.

Note 2: Under this method, the Actuarial Gains (Losses), as they occur, generally reduce (increase) the Unfunded Actuarial Accrued Liability.

**B-2 Entry Age Actuarial Cost Method or Entry Age Normal Actuarial Cost Method**

A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

Note 1: The description of this method should state the procedures used, including:

- (a) whether the allocation is based on earnings or service;
- (b) where aggregation is used in the calculation process;
- (c) how entry age is established;
- (d) what procedures are used when different benefit formulas apply to various periods of service; and
- (e) a description of any other method used to value a portion of the pension plan's benefits.

Note 2: Under this method, the Actuarial Gains (Losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

### **B-3 Attained Age Actuarial Cost Method**

A method under which the excess of the Actuarial Present Value of Projected Benefits over the Actuarial Accrued Liability in respect of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between the valuation date and assumed exit. The portion of this Actuarial Present Value which is allocated to a valuation year is called the Normal Cost. The Actuarial Accrued Liability is determined using the Unit Credit Actuarial Cost Method.

Note 1: The description of this method should state the procedures used, including:

- (a) whether the allocation is based on earnings or service;
- (b) where aggregation is used in the calculation process; and
- (c) a description of any other method used to value a portion of the pension plan's benefits.

Note 2: Under this method, the Actuarial Gains (Losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Note 3: The differences which regularly arise between the Normal Cost under this method and the Normal Cost under the Unit Credit Actuarial Cost Method will affect the determination of future Actuarial Gains (Losses).

### **B-4 Aggregate Actuarial Cost Method**

A method under which the excess of the Actuarial Present Value of Projected Benefits of the group included in an Actuarial Valuation over the Actuarial Value of Assets is allocated on a level basis over the earnings or service of the group between the valuation date and assumed exit. This allocation is performed for the group as a whole, not as a sum of individual allocations. That portion of the

Actuarial Present Value allocated to a valuation year is called the Normal Cost. The Actuarial Accrued Liability is equal to the Actuarial Value of Assets.

Note 1: The description of this method should state the procedures used, including:

- (a) whether the allocation is based on earnings or service;
- (b) how aggregation is used in the calculation process; and
- (c) a description of any other method used to value a portion of the pension plan's benefits.

Note 2: Under this method, the Actuarial Gains (Losses), as they occur, reduce (increase) future Normal Costs.

#### **B-5 Frozen Entry Age Actuarial Cost Method**

A method under which the excess of the Actuarial Present Value of Projected Benefits of the group included in an Actuarial Valuation, over the sum of the Actuarial Value of Assets plus the Unfunded Frozen Actuarial Accrued Liability, is allocated on a level basis over the earnings or service of the group between the valuation date and assumed exit. This allocation is performed for the group as a whole, not as a sum of individual allocations. The Frozen Actuarial Accrued Liability is determined using the Entry Age Actuarial Cost Method. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost.

Note 1: The description of this method should state the procedures used, including:

- (a) whether the allocation is based on earnings or service;
- (b) how aggregation is used in the calculation process; and
- (c) a description of any other method used to value a portion of the pension plan's benefits.

Note 2: Under this method, the Actuarial Gains (Losses), as they occur, reduce (increase) future Normal Costs.

#### **B-6 Frozen Attained Age Actuarial Cost Method**

A method under which the excess of the Actuarial Present Value of Projected Benefits of the group included in an Actuarial Valuation, over the sum of the Actuarial Value of Assets plus the Unfunded Frozen Actuarial Accrued Liability, is allocated on a level basis over the earnings or service of the group between the valuation date and assumed exit. This allocation is performed for the group as a whole, not as a sum of individual allocations. The Unfunded Frozen Actuarial Accrued Liability is determined using the Unit Credit Actuarial Cost Method. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost.

Note 1: The description of this method should state the procedures used, including:

- (a) whether the allocation is based on earnings or service;
- (b) how aggregation is used in the calculation process; and
- (c) a description of any other method used to value a portion of the pension plan's benefits.

Note 2: Under this method, the Actuarial Gains (Losses), as they occur, reduce (increase) future Normal Costs.

### **Section C SUPPLEMENTAL GLOSSARY**

#### **C-2 Actuarial Assumptions**

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided pension benefits; rates of investment earnings and asset

appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.

**C-3 Actuarial Valuation**

The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

**C-4\* Actuarially Equivalent**

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

**C-5 Amortization Payment**

That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability or the Unfunded Frozen Actuarial Accrued Liability.

**C-7\* Open Group/Closed Group**

Terms used to distinguish between two classes of Actuarial Cost Methods. Under an Open Group Actuarial Cost Method, Actuarial Present Values associated with expected future entrants are considered; under a Closed Group Actuarial Cost Method, Actuarial Present Values associated with future entrants are not considered.

**C-8 Pay-as-You-Go**

A method of financing a pension plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

**C-9\* Projected Benefits**

Those pension plan benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. That portion of an individual's Projected Benefit allocated to service to date, determined in accordance with the terms of a pension plan and based on future compensation as projected to retirement, is called the Credited Projected Benefit.

**C-10 Terminal Funding**

A method of funding a pension plan under which the entire Actuarial Present Value of benefits for each individual is contributed to the plan's fund at the time of withdrawal, retirement or benefit commencement.



## Appendix A

### BACKGROUND

41. Pension accounting and financial reporting was placed on the GASB's initial agenda, in 1984. In Statement No. 1, *Authoritative Status of NCGA Pronouncements and AICPA Industry Audit Guide* (1984), the Board identified three pronouncements as sources of acceptable accounting and reporting principles for employers and pension plans, pending issuance of a GASB Statement or Statements on pensions:

- a. National Council on Governmental Accounting (NCGA) Statement 1, *Governmental Accounting and Financial Reporting Principles* (1979).
- b. NCGA Statement 6, *Pension Accounting and Financial Reporting: Public Employee Retirement Systems and State and Local Government Employers* (1983), as interpreted by NCGA Interpretation 8, *Certain Pension Matters* (1983).
- c. Financial Accounting Standards Board (FASB) Statement No. 35, *Accounting and Reporting by Defined Benefit Pension Plans* (1980).

42. In Statement 1, the GASB also identified the American Institute of Certified Public Accountants (AICPA) Industry Audit Guide, *Audits of State and Local Governmental Units* (1974), as an authoritative source of guidance. The 1986 edition of the Audit Guide states that governmental employers should consider the provisions of Accounting Principles Board (APB) Opinion No. 8, *Accounting for the Cost of Pension Plans* (1966), in accounting for pensions. The GASB provided the interim guidance in Statement 1 because the effective date of NCGA Statement 6 had been extended indefinitely by NCGA Interpretation 8, and the applicability of Statement 35 to governmental plans had been deferred indefinitely by FASB Statement No. 75, *Deferral of the Effective Date of Certain Accounting Requirements for Pension Plans of State and Local Governmental Units* (1983).

43. In December 1985, the FASB issued Statement No. 87, *Employers' Accounting for Pensions*, which supersedes APB Opinion 8, as amended, and FASB Statement No. 36,

*Disclosure of Pension Information.* In September 1986, the GASB issued Statement No. 4, *Applicability of FASB Statement No. 87, “Employers’ Accounting for Pensions,” to State and Local Governmental Employers*, which provides that governmental employers should not change their accounting and reporting of pension activities as a result of FASB Statement 87.

44. In November 1986, the GASB issued Statement No. 5, *Disclosure of Pension Information by Public Employee Retirement Systems and State and Local Governmental Employers*. Statement 5 superseded all previous authoritative guidance on pension note disclosures, but continued to recognize the pronouncements, as amended, listed in paragraph 41 of this appendix as sources of guidance for pension recognition, measurement, and display, pending issuance of a future Statement or Statements. The guidance in those pronouncements, as amended, and Statement 5 was subsequently incorporated in Sections P20, “Pension Activities—Employer Reporting,” Pe5, “Pension Funds—Accounting,” and Pe6, “Pension Funds—Disclosure,” of the Codification.<sup>23</sup>

45. In October 1988, the GASB issued a Preliminary Views (PV) document, *State and Local Governmental Employers’ Accounting for Pensions*. The PV invited comment on two different approaches to accounting for pensions. Using the first approach, employers would apply the principles of FASB Statement 87, as written or as modified in the PV to provide a longer term perspective for pension amounts reported by governmental employers. Based on those principles, employers would compute a standardized measure of pension expenditures/expense and a minimum pension liability. However, employers would have the option of recognizing pension expenditures/expense equal to their periodic actuarially determined required contributions according to any actuarial cost method, provided that amount equaled or exceeded the standardized measure.

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<sup>23</sup>GASB *Codification of Governmental Accounting and Financial Reporting Standards* (Norwalk, CT: GASB, 1994).

46. Using the second approach described in the PV, employers would not compute a standardized measure; they would recognize their actuarially determined required contributions as pension expenditures/expense, provided the amount was determined according to certain criteria considered to be systematic and rational. The criteria included specific requirements for the selection of actuarial methods and assumptions for accounting purposes.

47. The GASB received 178 written responses to the PV, and 14 presentations were made at two public hearings held in March 1989. A large majority of the responses opposed the first approach presented in the PV. The respondents indicated that, in a governmental environment, point-in-time accounting measures such as those required by FASB Statement 87 would introduce an undesirable complexity and volatility in reported pension information, and that the traditional correspondence between accounting and funding measures should be retained. Based on the results of due process, the Board decided to proceed with the second approach outlined in the PV.

48. In January 1990, the Board issued an Exposure Draft of a proposed Statement, *Accounting for Pensions by State and Local Governmental Employers* (1990 ED). In the 1990 ED, the Board proposed that pension expenditures/expense should be recognized on the accrual basis in all fund types used to account for the employer's pension contributions, consistent with the proposed new standards for the measurement focus and basis of accounting for governmental funds (subsequently issued as Statement No. 11, *Measurement Focus and Basis of Accounting—Governmental Fund Operating Statements*) and the existing recognition requirements for proprietary funds.

49. The amount of pension expenditures/expense to be recognized would be equal to the employer's actuarially determined required contributions, provided that the actuarial methods and assumptions used to determine the required contributions met certain

constraints or parameters. If contribution requirements were calculated in some other manner, the employer would nevertheless measure pension expenditures/expense in accordance with the parameters. The parameters were similar to those proposed in the second approach included in the PV and reduced the range of actuarial methods and assumptions that were acceptable under existing accounting standards and recognized actuarial funding methodologies.

50. The Board also proposed in the 1990 ED that employers should recognize a pension liability or asset for any difference between the amount of pension expenditures/expense recognized in accordance with the parameters and the contributions actually made by the employer. Financial statement recognition would not be required for either the plan's unfunded actuarial liability according to the actuarial cost method in use or the unfunded pension benefit obligation (PBO) calculated in accordance with Statement 5. The 1990 ED did not address the display of pension liabilities or assets. The Board intended to address display issues in a Statement(s) resulting from the financial reporting project. The 1990 ED included limited amendments to Statement 5 but generally did not address note disclosures. The Board intended to review all pension disclosure requirements after completion of the measurement and recognition projects for employers and plans.

51. The 1990 ED included an option for certain special entities to adopt the requirements of FASB Statement 87 for the financial statements, unless prohibited by law or regulation, with continued application of the disclosure requirements of Statement 5. Those entities included gas and electric utilities, hospitals, colleges, and universities that follow the proprietary fund accounting model or another model similar to their private-sector counterparts.

52. The GASB received 92 written responses to the 1990 ED, and 11 presentations were made at a public hearing in May 1990. The proposal that received the most comment was

the option for certain special entities to adopt FASB Statement 87. Approximately 20 percent of the respondents expressed their agreement or disagreement with the option but did not comment on the basic GASB proposal. A majority of the remaining respondents generally supported the basic proposal; however, several major concerns were raised.

53. In addition to the FASB Statement 87 option, the principal issues raised in response to the 1990 ED concerned compliance difficulties for employers that participate in cost-sharing multiple-employer systems; compliance difficulties when contribution rates are set by statute and are not consistent with the parameters; various features of the proposed parameters, especially the requirements for the amortization of unfunded actuarial liabilities and the proposed guidelines for the investment return assumption; and whether the Board intended pension liabilities and assets to affect fund balances. Some respondents also recommended that the Board address accounting and financial reporting for pension plans and possible changes in the disclosure requirements of Statement 5 for employers and plans, before or in conjunction with the proposals for pension accounting by employers.

54. In July 1990, the Board began deliberations on possible alternatives to some of the parameters and on the applicability of the proposed requirements to cost-sharing employers. The Board also began deliberations on pension plan reporting issues and formally added to its agenda a project to review the disclosure requirements of Statement 5. The objectives of the review were (a) to ensure that the requirements for pension note disclosures and required supplementary information would be consistent with the new standards for the financial statements of pension plans and employers, (b) to review the appropriateness and usefulness of the standardized measure of the PBO required by Statement 5, and (c) to reduce the volume and complexity of the required disclosures. As part of that review, the Board researched constituents' experiences with the standardized

PBO disclosures since the effective date of Statement 5 (1987). The results of that review are summarized in paragraphs 57–59.

55. In July 1991, the Board concluded that final decisions on accounting for pensions by employers should be deferred until the projects on pension plan reporting and revisions to Statement 5 were complete or significantly advanced. Following that decision, the Board coordinated its consideration of reporting issues for pension plans and employers, with a view to enhancing the consistency of the reporting and disclosure requirements for both types of entities. As a result, the Board prepared three EDs of proposed Statements containing closely related provisions: (a) *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, (b) *Financial Reporting for Postemployment Healthcare Plans Administered by Defined Benefit Pension Plans*, and (c) the ED of this Statement (a revision of the 1990 ED). The Board exposed all three EDs for comment in February 1994 and held public hearings on the EDs in June and July 1994.

56. The Board received 91 comment letters in response to the ED of this Statement. A large majority of the respondents supported the provisions of the ED. They especially supported the Board's objectives of maintaining the maximum possible consistency between (a) pension accounting and actuarially determined funding measures and (b) similar or related pension information reported by a pension plan and its participating employer(s). Certain changes have, however, been made in this Statement as a result of respondents' recommendations. The principal changes are discussed in Appendix B to this Statement.

### **Review of Constituents' Experiences with the PBO Disclosures**

57. As stated in paragraph 54, one of the objectives of the project to review Statement 5 was to review the appropriateness and usefulness of the required standardized measure of

the PBO. As part of that review, the Board researched constituents' experiences with the required disclosures (note disclosures and required supplementary information) since Statement 5 became effective in 1987. The research included consultations with the task force and other advisers, including trustees and administrators of pension plans, representatives of their participating employers, and a citizens group; discussion of the issue at a task force meeting in July 1992; and a survey conducted in the fall of 1992. The survey was mailed to 53 percent of the 99 respondents to the ED of Statement 5 (issued in 1985); all those contacted had specifically commented on the proposal to adopt the standardized measure of the PBO. The survey respondents (65 percent of those contacted) included state and local governmental employer entities, state audit agencies, public accounting firms, actuaries and benefits consultants, pension plans and public employee retirement systems, pension oversight entities, members of the investor/creditor community, and representatives of various committees and associations of professionals interested in governmental financial reporting. Many of the respondents indicated that they had consulted with other individuals before responding, and several of the committees and associations surveyed their membership.

58. Survey respondents, the task force, and other advisers were asked to (a) consider their experiences with the PBO disclosures since Statement 5 became effective, (b) comment on whether the information had been used, (c) if so, give some specific examples of the kinds of users and the purposes for which the disclosures had been used, and (d) give their opinion about whether the Board should continue to require the PBO disclosures, modify the calculation in some manner, or discontinue the standardized approach and require disclosures based on the funding methodology, constrained by the parameters.

59. Some of the survey respondents, task force members, and other advisers supported continuing the required disclosures; however, they generally did not give examples of how

the disclosures had been used or by whom. The principal reasons given for supporting continued disclosure were similar to the objectives stated in Statement 5: to enable users to compare the funded status and funding progress of different plans. In contrast, a large majority of all the respondents recommended that the Board discontinue the standardized measure of the PBO and require measures of funding progress based on the plan's funding methodology. Many of the respondents cited the experiences of specific entities. The principal reasons given in favor of discontinuing the standardized measure of the PBO were as follows:

- a. Most of the respondents indicated that the standardized PBO disclosures are provided because they are required; they are not used for any purpose. Many of those respondents indicated that when users need information about a plan's funded status and funding progress, they use information based on the plan's funding methodology. That information is used and needed because it represents a financial reality that is not achieved by information based on a substitute accounting measure.
- b. Many respondents indicated that providing a standardized measure to enable users to compare different plans is an unneeded objective, an unachievable objective, or both. Many indicated that, in their experience, most users do not compare the funded status of different pension plans, even within the same state. Those respondents indicated that most users need information that is consistently measured and consistently reported from year to year for the same plan, based on the methodology used to fund the plan, so that they can assess the progress being made, the likelihood of changes in contribution rates, benefit levels, and so forth. Whether other plans, particularly those in other states or regions of the country, are better or worse funded has little relevance, they believe, to the decisions being made about a particular plan. Other respondents pointed out that pension plans differ in too many ways to make meaningful comparisons. In their view, presenting a standardized accounting measure does not make comparable that which is inherently not comparable; a "one size fits all" approach is inappropriate and may lead to invalid conclusions.
- c. A major concern of many respondents was that the PBO *has* been used, but not for the purposes for which it was intended. Rather, it has been used primarily to justify reducing employers' contributions. A large proportion of governmental plans use an entry age/level percentage of payroll approach to determine funding requirements. The PBO tends to be lower than the actuarial accrued liability according to entry age and, therefore, the funded status based on the PBO tends to be higher. The difference is particularly apparent when a plan has a high funding level. For many plans, the funded ratios reported based on the PBO have exceeded 100 percent, suggesting that the plan has a funding excess, even though, based on the funding methodology, the plan has a positive unfunded actuarial liability. As a result,



legislatures have been pressured to reduce employer contributions or increase benefits without increasing contributions, and some of those efforts have been successful. Respondents indicated that the reduction of contributions had been or was expected to be temporary; the rates would be increased again in the future. In the view of those respondents, all that had occurred was a deferral of costs to the future and a disruption of an orderly funding process.

- d. A few of the respondents who recommended discontinuing the standardized measure of the PBO thought that it could be useful to some users. However, in their experience, the measure and its purpose generally are not well understood and the disclosures are more confusing than useful. Although the PBO is a measure of accrued benefits that is independent of any actuarial cost method, the measure is approximately the same as an actuarial accrued liability determined using the projected unit credit actuarial cost method prorated on service. Respondents indicated that, as a result, legislators, public officials, and others interpret the required disclosure to mean that plans *should be funded* using the projected unit credit method and that the GASB prefers that approach. In some instances, plans have been pressured to change their actuarial cost method to projected unit credit from, for example, an entry age approach. Some respondents commented that projected unit credit was not commonly used for funding a governmental plan because it tends to accumulate assets more slowly, produce more volatile measures of contribution rates, and result in rising rather than level contribution rates. Some of those respondents recognized that it was not the GASB's intent to indicate a preference for any particular method of determining funding requirements. However, they indicated that it was difficult to explain to legislators and others who make decisions about contribution rates and benefit levels why the GASB would require disclosure of measures that differ from the measures produced by the funding methodology.

## Appendix B

### BASIS FOR CONCLUSIONS

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## **Appendix B**

### **BASIS FOR CONCLUSIONS**

#### **Introduction**

60. This appendix summarizes factors considered significant by Board members in reaching the conclusions in this Statement. It includes discussion of the alternatives considered and the Board's reasons for accepting some and rejecting others. Individual Board members gave greater weight to some factors than to others.

61. In developing this Statement, the Board had the counsel of a 22-member task force composed of individuals from government, public accounting, the actuarial profession, and the academic community. On October 27, 1988, the Board issued a Preliminary Views (PV) document, *State and Local Governmental Employers' Accounting for Pensions*, and invited comments on two different approaches to employer accounting for pensions: a majority view and an alternative view. On January 31, 1990, the Board issued an Exposure Draft of a proposed Statement, *Accounting for Pensions by State and Local Governmental Employers* (1990 ED), based substantially on the alternative view presented in the PV. The proposals in the PV and the 1990 ED and the results of due process for both documents are summarized in Appendix A to this Statement.

#### **Revised Exposure Draft and Related Statements**

62. The Board's basic approach to the measurement of pension expenditures/expense was exposed for comment in the 1990 ED and was strongly supported by a large majority of the respondents and the task force. In subsequent deliberations, however, and based in part on respondents' comments, the Board concluded that the scope, applicability, and certain measurement and recognition provisions of the 1990 ED should be changed and that this Statement should address issues that were specifically excluded from that ED. Those issues include balance sheet display, note disclosures, required supplementary

information, and the consistency of pension information reported, respectively, by pension plans and their participating employers. The Board concluded that the resulting standards would differ from those exposed and that a revision of the 1990 ED should be exposed for comment.

63. During its redeliberation of the 1990 ED provisions, the Board began deliberations on pension plan reporting issues and possible revisions to the disclosure requirements of Statement 5 for pension plans and employers. The Board has concluded that consistency in the measurement and disclosure of pension information reported by pension plans and their participating employers, combined with a reduction of duplication in the information reported by plans and employers, will enhance the understandability and usefulness of pension information to users of governmental financial reports. Therefore, the Board has given joint consideration to this Statement and Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*. Many of the measurement and disclosure requirements of the two Statements are the same or closely related, as are the illustrations and other appendices. The Statements were exposed for comment at the same time (February 1994) so that preparers, auditors, and users also could give joint consideration to plan and employer financial reporting of pension information. Statement No. 26, *Financial Reporting for Postemployment Healthcare Plans Administered by Defined Benefit Pension Plans*, also was exposed at the same time because certain provisions are related to those of this Statement and Statement 25. A large majority of the respondents to the ED of this Statement and one or both of the related Statements supported the Board's approach to pension accounting and financial reporting for plans and employers, including the consistency of related provisions in the plan and employer Statements. Consistent with that approach, the changes made in this Statement that also affect Statement 25 or 26 have been incorporated in those Statements.

## Measurement, Recognition, and Display

64. The 1990 ED was developed within the context of the Board's 1989 ED on the measurement focus and basis of accounting for governmental funds, issued in May 1990 as Statement No. 11, *Measurement Focus and Basis of Accounting—Governmental Fund Operating Statements*. Within that context, the standards in the 1990 ED required *accrual-basis recognition* of pension expenditures/expense in governmental as well as proprietary funds, and recognition of a pension liability or asset for any difference between *accrued pension expenditures/expense* and the employer's contributions to the plan. The standards did not address *where* those pension liabilities and assets should be recognized—that is, whether liabilities for pension expenditures of governmental funds should be recognized in the funds or in the general long-term debt account group (GLTDAG). Balance sheet display issues were to be addressed in the Board's financial reporting project.

65. As discussed in the 1990 ED, the Board intended the pension accounting standards to be implemented at the same time as (a) Statement 11 and (b) standards resulting from the financial reporting project and other projects requiring accruals in the governmental funds. The effective date of Statement 11 was deferred in June 1993 by Statement No. 17, *Measurement Focus and Basis of Accounting—Governmental Fund Operating Statements: Amendment of the Effective Dates of GASB Statement No. 11 and Related Statements*, pending further progress on the Board's financial reporting model project and related projects.

66. The Board has concluded that implementation of new pension accounting standards need not be delayed pending the results of the financial reporting model and related projects. The Board does not anticipate that the standards resulting from those projects will change the requirements of this Statement for the *measurement* of pension

information, although the requirements for the *recognition* and *display* of pension expenditures/expense, liabilities, and assets may be affected. The portion of the total cost of pension benefits attributable to each accounting period should be *measured* consistent with the accounting concept of accruals and should be disclosed, regardless of the amount *recognized* in the financial statements for contributions to the plan. The terms *annual pension cost* and *net pension obligation* (NPO) are used in this Statement with reference to the requirements for sole and agent employers. The terms describe, respectively, the cost attributable to each accounting period, based on the parameters, and the difference between annual pension cost and the employer's contributions to the plan. (Use of those terms is unnecessary for cost-sharing employers because application of the parameters by those employers is not required. The Board's conclusions with respect to cost-sharing employers are discussed in paragraphs 173–177.)

67. When the modified accrual basis is used, the amount recognized as pension expenditures may not be equal to annual pension cost; however, annual pension cost should be calculated and disclosed. A positive (liability) balance in the NPO should be recognized in the GLTDAG; a negative (asset) balance in the NPO should not be recognized in the financial statements but should be disclosed. When the accrual basis is used, pension expense is equal to annual pension cost; the NPO balance should be recognized in the financial statements, whether the balance is positive or negative. With this approach, the measurement standards of this Statement can continue without interruption, regardless of the changes that may occur in the recognition and display of pension information as a result of the financial reporting model and related projects. It should be possible to make those changes, if required, without a retroactive recalculation of pension information.

## Measurement of Annual Pension Cost

68. The measurement of defined benefit pension information included in financial reports has been the subject of debate and controversy for decades. Much of the debate has centered on the measurement of annual pension cost—that is, how to attribute the total cost of future pension benefits to the accounting periods when employee service giving rise to the benefits is performed.

69. The total amount of pension benefits that will be paid in the future and the timing and amount of the payments are highly uncertain. The total will be based on a formula included in the plan terms that, for governmental plans, generally is based on salaries at or near retirement and the number of years of service provided. Both of these quantities are unknown until retirement. Also unknown are the number of employees who will retire, their retirement dates, and the number of years they or their survivors will receive benefits. The total cost of pension benefits cannot be known with certainty, either for an individual employee or for plan members as a whole, until the last payment is made. The total cost can, however, be estimated, as can the portion attributable to each accounting period.

70. Estimating the total and periodic cost of pension benefits requires the application of actuarial methods and assumptions (collectively, an actuarial methodology). This is so whether the accounting estimates are based on a recognized actuarial funding methodology or whether a specific methodology, not used for funding, is developed for accounting purposes. Thus, the basic accounting issue is not *whether* annual pension cost will be based on an actuarial methodology but *which* methodology or methodologies should be selected. Should it be a recognized funding methodology? If so, given that several recognized methodologies are in use, should the one selected for determining the funding requirements of a particular plan also be used for accounting, or should a single methodology be required for accounting, regardless of the funding methodology?

71. The FASB concluded in Statement 87 that private-sector employers should use a specific methodology for accounting purposes that differs from the methodologies used in determining funding requirements. Many of the differences are due to an accounting emphasis on current point-in-time measures in contrast to the long-term perspective inherent in the calculation of funding requirements. The FASB has decided that those differences are appropriate in the private sector.

72. The governmental pension environment, however, differs from the private-sector environment in several significant ways, including (a) the perpetual nature of government and the long-term, going-concern nature of governmental plans, (b) the scope and variety of state laws that govern those plans, including statutory or constitutional guarantees of pension benefits and statutory funding requirements, (c) the significance of the public budget to legislators, public officials, the citizenry, and other users of governmental financial reports, as the primary mechanism for resource allocation decisions, and (d) the inapplicability to governmental plans and employers of most of the federal statutory and regulatory requirements that affect the funding of private pension plans and have influenced private-sector pension accounting and financial reporting standards.

73. The Board believes that it would be confusing and potentially misleading for legislators, public officials, and others who make decisions about benefit levels and contribution rates to provide accounting measures of pension information that differ from those produced by the funding methodology. In the Board's view, those measures should be acceptable for accounting, provided that the methodology is recognized by the actuarial profession and attributes a reasonable portion of the total cost of pension benefits to each accounting period. Regardless of the methodology selected, actuarial measures are estimates about future events and are inherently imprecise; no single methodology clearly produces better estimates than all others. More than one approach is acceptable for other types of accounting information that require estimates and should be acceptable for



pension information. The Board believes that these views are supported by the results of due process, as outlined in the following paragraphs.

**Preliminary Views (1988)**

74. In the initial discussions of pension issues, the Board generally agreed that the governmental pension environment differs from the private-sector pension environment but disagreed about the extent to which the differences should affect accounting for pensions. Some members believed that, despite environmental differences, governmental employers should apply FASB Statement 87, in its entirety or modified in some manner to address specific governmental requirements. Other members believed that the environmental differences justify or require a longer term approach to measuring annual pension cost than is inherent in FASB Statement 87. The Board invited comment on these different views in the PV.

75. A large majority of the respondents to the PV and the task force indicated that the traditional consistency between accounting methods and the methods used to determine funding requirements is important and useful and should be retained. The principal reasons given for rejecting standardized accounting measures, such as those required by FASB Statement 87, were (a) a FASB Statement 87 approach would introduce unnecessary and undesirable volatility and complexity into the measurement of pension expenditures/expense and (b) the lack of correspondence between accounting and funding measures would be inconsistent with the nature of decision making in government, the needs of users of governmental financial reports, and existing pension accounting standards for governmental entities.

**Exposure Draft (1990)**

76. After considering the responses to the PV, the Board developed the standards proposed in the 1990 ED. With the assistance of its actuarial consultants and the task

force, the Board examined various approaches to funding public plans and their acceptability for accounting purposes. The Board concluded that certain approaches are unacceptable for accounting because they fail to attribute a reasonable portion of the total cost of pension benefits to periods of employee service. Those approaches include **terminal funding** and pay-as-you-go financing (which is not an actuarial funding methodology).

77. The Board recognized, however, that a large proportion of governmental employers had been reporting pension expenditures/expense for many years based on recognized actuarial funding methodologies that were acceptable under existing accounting standards. The Board considered prevalent practices and concluded that many of them should continue to be acceptable. However, the Board also concluded that the range of alternatives available under existing standards was unnecessarily broad and a reduction in that range would be useful to users of the financial statements. The Board developed more specific requirements with respect to the selection of actuarial assumptions, the valuation of plan assets included in determining pension expenditures/expense, and the periods and methods used to amortize unfunded actuarial liabilities.

78. In paragraph 13 of the 1990 ED, the Board stated that its objective in developing the pension accounting standards was:

. . . to narrow the range of measurement alternatives for accounting purposes while maintaining the relationship between pension accounting and pension funding that is considered important and useful by the governmental community.

A large majority of the respondents to the 1990 ED supported that objective. They strongly supported a continuation of the traditional relationship between pension accounting and funding measurement and, *provided that relationship was maintained*, did not oppose a reduction in the number of alternatives available for accounting purposes.

Many respondents, however, including actuaries, general and financial administrators of plans and employer entities, and auditors, pointed out that some of the parameters for measuring pension expenditures/expense would defeat the Board's objective because they were incompatible with actuarially sound practices commonly used in determining funding requirements or were inappropriate for governmental plans for other reasons.

79. Although other parameters were mentioned, the principal parameters of concern were the requirements for amortization of most components of the total unfunded actuarial liability over specific, closed (declining) amortization periods that were shorter than the maximum periods previously acceptable for governmental plans. The proposed required period generally was the average remaining service life of active plan members, calculated from the date the event generating an unfunded actuarial liability occurred. (Fifteen years was an acceptable substitute for average remaining service life in many cases.) Based on those parameters, each new source of unfunded actuarial liabilities identified at each actuarial valuation, including actuarial experience gains and losses, plan amendments, and changes in actuarial methods and assumptions, would add a new layer to be amortized over its own specific, declining period. Respondents pointed out that those amortization requirements would add an unacceptable volatility to the employer's contribution rates and an inordinate degree of complexity to the calculations. In their view, the Board's objective of maintaining consistency between accounting and funding measures, though laudable, would be unachievable for a large proportion of governmental employers without a reduction of the complexity and rigidity of the parameters.

80. In order to enhance stability in the employer's contribution rates and simplify the calculations, many plans use practices that are acceptable under recognized funding methodologies but would be precluded for accounting under the parameters of the 1990 ED. Stability of contribution rates is a common funding objective for governmental plans and frequently is required by statute. For example, the statute or policy may prohibit

increases in benefits unless they can be funded without a significant increase in the contribution rates and without jeopardizing the actuarial soundness of the plan.

81. Several common practices help maintain stability in the contribution rates as well as simplifying the calculations. Those practices include amortizing the total unfunded actuarial liability as one amount or combining certain components, using amortization periods longer than average remaining service life, particularly for large components of the total unfunded actuarial liability, and using open amortization periods for some components or for the total unfunded actuarial liability. Respondents pointed out that many governmental plans have followed those practices successfully for many years; that is, they have achieved high funding levels or have made significant progress in increasing their funded status, while increasing member benefits and maintaining stability in the contribution rates.

**Revised Exposure Draft (1994)**

82. After considering the responses to the 1990 ED and with the assistance of its actuarial consultants and other members of the task force, the Board examined various possibilities for simplifying its original proposal while maintaining its objective for the standard. Two principal approaches were considered. One approach was to retain the proposed parameters for determining the employer's annual required contributions (ARC), but to accept a measure of pension expenditures/expense equal to the employer's required contributions, provided the amount was within a specified range around the ARC. The other approach was to retain the requirement to measure pension expenditures/expense equal to the ARC, but to simplify and add some flexibility to the parameters for determining the ARC.

83. The Board concluded that either approach could achieve the objectives, but the second approach would result in a simpler standard. The Board therefore has modified

and simplified the parameters of the 1990 ED, principally the requirements for the amortization of unfunded actuarial liabilities. For example, the Board has (a) established the same *maximum* acceptable amortization period of 30 years for all sources of unfunded actuarial liabilities, whether incurred before or after transition (a 40-year maximum is acceptable for not more than ten years from the effective date of Statement 25), and (b) eliminated the requirement for separate amortization of the various components of a plan's total unfunded actuarial liability and the requirement that all amortization periods be closed (fixed and declining by one year each year). A large majority of the respondents to the 1994 ED supported these modifications to the parameters. Those changes, other revisions to the parameters, and respondents' comments are discussed in the section of this appendix on calculating the ARC.

84. The revised amortization requirements of this Statement should contribute to reducing short-term volatility in the ARC, a volatility that may have little or no significance from a long-term perspective. The Board believes that perspective is appropriate to the perpetual nature of government and the long-term, going-concern nature of governmental pension plans. The long-term perspective also has influenced the Board's selection of other parameters, including the requirement to base the investment return assumption on an estimated long-term investment rate of return, and the guidance provided for the actuarial valuation of assets. The long-term perspective also underlies the Board's conclusion in Statement 5, reaffirmed in this Statement and Statement 25, that information about a plan's funding progress should be presented for several consecutive years, as required supplementary information. That information should assist users in assessing a plan's funding progress over time, rather than placing undue emphasis on current point-in-time measures.

85. The Board believes that the parameters in this Statement constitute a reasonable balance between (a) maintaining consistency between accounting and funding measures,

as preferred by a majority of those who responded to the PV, the 1990 ED, and the 1994 ED, and (b) reducing the number of alternatives previously available for measuring the employer's pension expenditures/expense.

### **Consistency Objectives**

86. The Board has concluded that the understandability and usefulness of financial reports are enhanced when actuarially determined pension information is calculated (a) consistent with the funding methodology, provided that methodology meets the parameters, and (b) in the same way by a pension plan and its participating employer(s). Therefore, this Statement and Statement 25 include the same requirements for measuring similar or related information reported by a plan and its participating employer(s). Both Statements include the parameters<sup>24</sup> and the requirement to use the same actuarial methods and assumptions for financial reporting that are applied in accordance with the funding methodology, when those methods and assumptions meet the parameters. A large majority of the respondents to the 1994 EDs of both Statements supported these consistency objectives.

87. The parameters apply both for measuring the ARC—the basis for measuring an employer's annual pension cost—and for calculating information reported by a plan and its participating employer(s) about the plan's funding progress. When the funding methodology does not meet the parameters, adherence to the parameters is required for financial reporting by both a plan and its participating employer(s). Because the parameters permit several alternatives, it would be possible for a plan and its participating employer(s) to select different alternatives for reporting similar or related information.

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<sup>24</sup>Application of the parameters is required for certain information reported by cost-sharing *plans*, including those reported as pension trust funds of the employer, but is not required for measuring the pension expenditures/expense of cost-sharing *employers*. The Board believes, however, that consistency of measurement will be achieved for most cost-sharing plans and their participating employers, as discussed in paragraphs 173–177.

Although this possibility is unlikely to occur in the majority of situations, the Board has specifically precluded it in both Statements because of the importance to users of consistency between plan and employer reporting of similar information.

### **Calculation of the ARC (the Parameters)**

#### **Frequency and Timing of Actuarial Valuations**

88. The Board has continued the standards established in Statement 5 for the frequency and timing of actuarial valuations, with one addition: the ARC applied in calculating the employer's annual pension cost should have been determined through an actuarial valuation performed not more than 24 months before the start of the employer's fiscal year (first fiscal year, if valuations are biennial). Based on prior research, the Board had proposed that the maximum acceptable delay between an actuarial valuation and application of the ARC should be 18 months. Several respondents indicated that for some employers, especially those participating in agent plans, 18 months would not be sufficient. Most of those respondents requested a maximum of 24 months and a few requested 36 months. The Board's research indicates that a 12-month delay is common, whether the employer participates in a single-employer or a multiple-employer plan. However, in some circumstances the delay is up to 24 months or longer because of a particular combination of the factors that affect the timing of the application of a new ARC. Those factors vary from state to state and for plans within a state. They include variations in the frequency of actuarial valuations and employer budgets (annual versus biennial), employer budget calendars, plan and employer fiscal years, the time needed to collect data and perform actuarial valuations, and required notification periods to employers of forthcoming changes in the ARC. The Board agreed that a delay of more than 18 months may be unavoidable in some circumstances and extended the maximum acceptable delay under this Statement to 24 months. The Board believes, however, that a delay of more than 24 months in applying the ARC should not be necessary.

### **Benefits to Be Included**

89. The actuarial present value of total projected benefits generally includes all pension benefits covered by the plan terms at the valuation date. However, practice varies with respect to changes in benefits that may occur after the actuarial valuation date. Examples include ad hoc (discretionary) cost-of-living adjustments and other postretirement benefit increases not included in the plan terms, and the results of collective-bargaining agreements. Sometimes those types of benefit changes are anticipated in an actuarial valuation; in other cases, they are excluded unless there is a firm commitment to make the change. Also, some ad hoc postretirement benefit increases are financed on a pay-as-you-go basis and are excluded from the actuarial valuation even when there is a firm commitment to provide them. The Board believes that all pension benefits for which a commitment exists at the actuarial valuation date should be included in the actuarial present value of total projected benefits. This Statement neither requires nor precludes including benefit changes under consideration but not confirmed at the valuation date.

### **Investment Return and Other Actuarial Assumptions**

90. The Board has concluded that the selection of all actuarial assumptions should be guided by the standards promulgated by the Actuarial Standards Board of the American Academy of Actuaries. Those standards may be revised from time to time. The rules of procedure of the Actuarial Standards Board include the required exposure of proposed standards, including revisions, for comment before adoption. The GASB intends to review proposed changes that affect pension accounting and financial reporting and will issue additional accounting guidance, if needed. Currently, guidance on the selection of actuarial assumptions for pension calculations is included in Actuarial Standard of Practice No. 4, *Measuring Pension Obligations*.



91. Investment return assumptions selected in accordance with Actuarial Standard of Practice No. 4 may be based on current or expected long-term rates, depending on the purpose for which the actuarial calculations are made. The investment return (discount) rate commonly selected for governmental pension plan calculations is based on an estimated long-term rate of return on current and expected future plan investments. The Board believes that rate is consistent with the long-term nature of governmental pension plans and should be required for governmental accounting for pensions. When an actuary applies different assumed rates for successive years included in a projection, known as year-based or select and ultimate rates, the ultimate rate is the expected long-term rate and should be disclosed.

92. The Board considered but rejected the possibility of requiring a specific investment return rate (for example, the expected return on long-term government bonds). Pension plan investment portfolios vary both among plans and for individual plans over time. The investment return assumptions selected for a particular plan should be best estimates at the actuarial valuation date of that plan's earnings on current and expected future investments.

93. This Statement does not include the guidelines proposed in the 1990 ED for assessing the reasonableness of the investment return assumption. The guidelines were that the assumed rate should be (a) within a range of 1.5 to 4 percentage points higher than the price inflation portion of the projected salary increase assumption and (b) not more than 1 percentage point above or below the median of the investment return assumptions used by the 100 largest governmental pension plans. Assumptions outside those guidelines were not precluded; however, disclosure of the reason for selecting them was required.

94. A large majority of the 1990 ED respondents who commented on the guidelines opposed the median guideline, for both conceptual and practical reasons. Slightly over

one-half of the respondents who commented thought the range guideline was acceptable; many of them indicated that the range was wide enough to accommodate most circumstances. However, many of the respondents questioned whether either guideline was necessary or appropriate, given the requirement to make the best estimate of individual assumptions and the need for investment return assumptions to be specific to the investment portfolios of individual plans. Several respondents pointed out that an unreasonable assumption could meet the guidelines, whereas a reasonable assumption might not. Others thought it inappropriate to attempt a numerical definition of reasonableness or to require disclosure of the reasons for management decisions, such as the selection of an assumption. A requirement to disclose significant actuarial assumptions should be sufficient and users could assess reasonableness for themselves.

95. After considering the responses and its objective for the guidelines, the Board concluded that the standard should not include numerical guidelines. However, in addition to the general requirements for best estimates and consistency of all actuarial assumptions, the Board has included a specific requirement that the assumed inflation rates included in the economic assumptions should be consistent. That requirement should help ensure that the relationship between the investment return assumption and the projected salary increase assumption is reasonable, which was the Board's original objective for the range guideline. This Statement also requires disclosure of the inflation, investment return, and projected salary increase assumptions. Respondents to the 1994 ED who commented on the issue supported the Board's decision not to establish numerical guidelines for investment return assumptions.

#### **Actuarial Cost Methods**

96. The actuarial cost methods accepted by this Statement were acceptable under APB Opinion 8 and NCGA Statement 6 and include those most commonly used in determining

the funding requirements of governmental pension plans. Actuarial cost methods are methods of attributing the actuarial present value of total projected benefits to periods of employee service. There are two classes of attribution approaches: benefit-allocation approaches, including the projected unit credit and unit credit methods, and cost-allocation approaches, including entry age, attained age, frozen entry age, frozen attained age, and the aggregate actuarial cost method. The two classes attribute costs in quite different ways. The methods within each class are related, although each has distinct features that can affect the rate and pattern of costs and the accumulation of plan assets. According to Actuarial Standard of Practice No. 4, the principal difference between the classes is whether the actuarial present value factors are applied before (cost class) or after (benefit class) the allocation of pension benefits to time intervals.

97. A large majority of governmental pension plans use a method from the cost-allocation class, most typically entry age. Cost-allocation methods tend to accumulate assets faster in the early years and are designed to produce a normal cost that remains level over time as a percentage of payroll. The level contribution design facilitates budgeting of pension contributions and is consistent with the budgetary concept of intergenerational equity in terms of the burden on citizens. In contrast, benefit-allocation methods, such as projected unit credit, produce progressively increasing normal cost rates for individual participants, although rates for the employee group as a whole may be level if the age distribution and size of the covered group are relatively stable.

98. In examining whether the various actuarial cost methods currently used for governmental plans are acceptable for accounting purposes, the Board considered information from a variety of sources and consulted regularly with actuaries, including those on its task force. The Board reviewed the results of a study conducted by the American Academy of Actuaries in 1985 in conjunction with the FASB's deliberations on pension accounting by employers, as well as a study prepared by the GASB's consulting

actuaries in 1988. That study included, for each of several typical governmental pension plan populations, comparisons of 20-year projections of annual funding requirements and asset accumulations according to various actuarial cost methods.

99. Based on its research, the Board has concluded that neither the benefit-allocation class nor the cost-allocation class of actuarial cost methods is demonstrably superior to the other for measuring the ARC. In addition, from the long-term perspective appropriate to governmental employer accounting for pensions, the pattern of ARCs and the asset accumulation achieved over time using each of the actuarial cost methods included in the parameters are sufficiently similar to preclude rejecting some methods in favor of others; any of those methods, coupled with the other parameters in this Statement, produces an acceptable measure of the ARC.

#### **Actuarial Value of Assets**

100. The Board has concluded that the actuarial valuation of plan assets should be based on the standards promulgated by the Actuarial Standards Board, currently Actuarial Standard of Practice No. 4. As stated in that publication, asset values, the investment return assumption, the determination of actuarial present values of pension plan benefits, and the purpose of the calculations are interdependent. The Board believes that, consistent with its view that the investment return assumption should be based on an estimated long-term rate of return on plan investments, the valuation of plan assets for the purpose of determining the ARC generally should be market related. However, current market values should not be used if those values would cause the ARCs for successive periods to fluctuate in a manner that would have little or no meaning from a long-term perspective.

101. The Board's conclusions are based on considerations similar to those described in this excerpt from Thomas P. Bleakney's *Retirement Systems for Public Employees*.<sup>25</sup>

*Valuation of Assets.* As the investments of a system grow, the method used for valuing them plays an increasing role in determining the actuarial gains or losses the system will incur. The portfolios of most systems are made up of securities held for extended periods. This permits the market values of some of the investments to diverge significantly from their costs—the prices paid for them. Valuing a portfolio at cost thus fails to give a realistic value to securities whose market values change substantially, common stocks being the most obvious example. The use of market value gives precision to the current value but creates substantial variability in the asset values. The special asset valuation methods in use [that is, smoothing techniques] are thus designed to strike a balance between two purposes, which are sometimes in opposition:

A recognition of each security's intrinsic value at the time of valuation;  
An attempt to gain stability of valuation, so as to avoid fluctuating gains and losses which have no long term significance.

102. Based on similar considerations, Actuarial Standard of Practice No. 4 states that the valuation of assets generally should reflect *some function of market value*, a term that includes both current market values and values produced by techniques that smooth the effects of short-term volatility in market values. The Board believes that smoothing changes in market values over, for example, three to five years is appropriate for calculating the ARC. However, plans invest in various kinds of assets with different holding periods. The Board has not precluded the use of current market values or cost-based values if, in the judgment of those familiar with the circumstances, use of those values is warranted for particular investments. Similarly, the Board has not placed constraints on the kinds of smoothing techniques or the length of smoothing periods used in the actuarial valuation of assets.

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<sup>25</sup>Bleakney, Thomas P., F.S.A., *Retirement Systems for Public Employees* (Homewood, IL: Richard D. Irwin, Inc., 1972), p. 125.

## **Unfunded Actuarial Liabilities**

103. Most pension plans have an unfunded actuarial liability, either positive (actuarial accrued liability greater than plan assets) or negative (funding excess). The term *unfunded actuarial liability* and the amortization requirements of this Statement apply to either situation. Different plans use different amortization approaches. Some plans amortize the total unfunded actuarial liability as one amount, over a single period. Others use different periods for different components of the total; for example, a period of 30 years may be used for the initial unfunded actuarial liability (incurred at the inception of the plan) and large plan amendments, while 15 years is used for actuarial experience gains and losses. Some plans amortize unfunded actuarial liabilities in level dollar amounts; others calculate the amortization payments as a level percentage of projected covered payroll. Some plans use closed amortization periods; others use open periods for the total unfunded actuarial liability or for certain components of the total.

104. All of these variations are acceptable under recognized actuarial funding methodologies. The approach selected for a particular plan, including the amortization periods and methods, depends on a variety of factors, including the characteristics of the plan and the covered population, statutory requirements, the funding objectives, and the degree of stability that is required in the employer's contribution rates, by law or the plan's established funding policy. The Board has carefully examined the conceptual and practical applications of various possibilities and their acceptability for measuring the ARC.

### ***Maximum Amortization Period***

105. The Statement initially accepts a maximum amortization period of 40 years. However, the Board has concluded that, for the future, amortization periods for unfunded actuarial liabilities should not exceed the estimated total service life of the employee

group. The Board believes that, for most employee groups, that period is not more than 30 years. The same maximum period (initially 40 years, subsequently 30 years) applies whether the event that generated an unfunded actuarial liability occurred before or after the effective date.

106. The requirement refers to the *maximum acceptable period*; the Board is neither encouraging the use of the maximum nor discouraging shorter periods. (A minimum period applies only for changes in actuarial methods, as discussed in paragraphs 118 and 119.) Provided the maximum is not exceeded, the selection of an amortization period should be appropriate to the overall methodology adopted for the plan, the type of change in the total unfunded actuarial liability being amortized, the characteristics of the plan population, and other factors that may affect the selection of a particular period. For those reasons and to simplify the standard, the Board has not required separate amortization of any component of the total unfunded actuarial liability and has not specified the periods that should be applied for particular components.

107. In the 1990 ED, the Board proposed that most changes in the total unfunded actuarial liability that occurred after transition should be separately amortized over average remaining service life (closed basis). A maximum of 40 years, or 30 years in some circumstances, was proposed for the unfunded actuarial liability at transition. A few respondents to that ED commented that average remaining service life was the conceptually appropriate period for all sources of unfunded actuarial liabilities, including those generated at the adoption of a plan or calculated at transition. However, a large majority of those who commented on the issue stated that average remaining service life was unreasonably short as a required period for a governmental plan; the requirement would unnecessarily increase the variability of the ARC and the complexity of the calculations, especially when combined with the requirements for separate amortization of each component of the total unfunded actuarial liability over its own closed period.

108. Some respondents to the 1990 ED thought that the existing accounting maximum of 40 years had worked well for many years and should be retained. Some respondents also questioned the appropriateness of *any* reduction in amortization periods and the resulting increase in required contributions, when many plans are well funded, funding excesses are not uncommon, and many employers are having difficulty balancing their budgets without curtailing services. However, the maximum period most frequently recommended in the responses was 30 years. Several reasons were given for recommending that period, including, for example, it is a reasonable approximation of total service life for many employee groups and is consistent with an entry age approach to cost allocation, it is acceptable from a sound funding perspective, and it is frequently used in practice as a maximum period.

109. The Board agrees that allocating past service costs over total service life (not to exceed 30 years) is consistent with the long-term, going-concern approach adopted for this Statement. The Board considered establishing 30 years as the maximum acceptable amortization period beginning at the effective date of Statement 25. However, that requirement could result in sudden large changes in contribution rates for those plans with remaining amortization periods between 30 years and the 40-year maximum acceptable under previous accounting standards. Therefore, the Board has accepted a 40-year maximum for not more than ten years from the effective date of Statement 25, to facilitate a gradual reduction of amortization periods greater than 30 years. As discussed in paragraph 106, the Board is neither encouraging the use of the maximum acceptable period, whether 30 years or 40 years, nor discouraging the use of shorter periods. In addition, this Statement does not require that amortization periods be closed (declining by one year each year); therefore, an immediate or more rapid reduction of amortization periods is acceptable.



110. Some respondents to the 1994 ED indicated that the Board should require amortization of certain types of changes in unfunded actuarial liabilities, principally those resulting from special termination benefits (discussed in paragraphs 146–162) and postretirement benefit increases, over the average remaining service life of active plan members or the remaining life expectancy of the retirees benefiting from the increase. A few respondents indicated that average remaining service life should be the required period for all unfunded actuarial liabilities, regardless of the period(s) used in determining funding requirements. Some of those respondents indicated that the objective of maintaining consistency between accounting and funding measures is inappropriate; average remaining service life is generally accepted and required for private-sector employers and also should be required for governmental employers. Consistent with the responses to the 1990 ED, however, and for similar reasons (discussed in paragraph 107), a majority of the respondents to the 1994 ED who commented on amortization issues agreed with the proposed maximum periods. They also agreed that, provided the maximum was not exceeded, the period(s) applied in determining funding requirements also should be applied for accounting purposes.

*Closed and Open Amortization Approaches*

111. The Board has spent a considerable amount of time examining whether closed-basis amortization should be required for accounting purposes, as proposed in the 1990 ED. Many respondents to the ED pointed out that a large proportion of governmental plans are required by statute or established policy to maintain fixed or stable contribution rates. Stable rates are commonly required because they are considered more equitable for taxpayers (each generation bears a similar burden for similar services), and they facilitate planning and budgeting for plans and employers and an orderly accumulation of plan assets. The use of an open approach to amortization helps maintain stability in the rates. It also simplifies the calculations because, for example, new sources of unfunded actuarial

liabilities can be combined and amortized jointly or with previously identified sources, avoiding the multiple layers of amortization that occur when specific closed periods are required for different sources.

112. The Board has consulted with actuaries and administrators of plans that have used an open approach for many years and has discussed the accounting and actuarial issues involved under both approaches with members of its task force and other advisers. The Board also has examined the financial reports and the comparative funding levels of plans in various states that use each approach. The Board has concluded that either approach is acceptable for measuring the ARC from a long-term, going-concern perspective. A large majority of the respondents to the 1994 ED agreed with the Board's conclusion.

113. The basic difference between the two approaches is which of two components of an amortization calculation is open—able to fluctuate: the contribution rate (percentage of payroll) calculated to amortize an unfunded actuarial liability, or the amortization period. One of the two has to be able to fluctuate to reflect the effects of changing events and revised expectations about future events, as new information is received. When an amortization period is closed (fixed), the contribution rate is open; when the rate is fixed or required to be stable, the variability that cannot impact the contribution rate is absorbed by the amortization period—the period is open.

114. When closed amortization periods are used, the contribution rates can fluctuate considerably, as some components of the total unfunded actuarial liability become fully amortized and amortization of new components begins. Use of an open approach for the total unfunded actuarial liability or some components of the total can greatly reduce that volatility. The amortization period is permitted to change as needed, to avoid a significant change in the contribution rates, provided the remaining period does not exceed a maximum period specified by law or policy. The period may increase or decrease from

one valuation to the next, sometimes considerably, especially when a plan is well funded. (Much of the variability is due to gains and losses on investments.) For example, for one large statewide plan, the remaining amortization periods for five recent consecutive years were 25, 29, 16, 30, and 28 years. When the maximum would otherwise be exceeded, some action is taken; for example, the contribution rates are increased or a benefit increase under consideration is reduced or postponed.

115. The Board notes that both a closed and an open approach are acceptable under recognized actuarial funding methodologies. The approach selected depends on many factors and should be appropriate to the circumstances of the plan, participating employers, and their operating environments. Either approach can produce satisfactory results from a sound funding perspective. The Board has found no evidence of a correlation between funding levels and whether a plan is using a closed or an open approach or some combination of the two. Many plans that have been using an open approach for many years have very high funding levels, including many with a funding excess. The same is true of many plans that use a closed approach. Some plans with low funding levels are using an open approach, while others have used a closed approach for many years.

116. Some governmental entities prefer the closed approach and it is sometimes required by statute or established policy. Some may prefer it because, conceptually, with all other factors remaining the same, an unfunded actuarial liability amortized over a closed period declines to zero in a specified number of years. However, pension plans are not static; they are long-term, going concerns. A plan's total unfunded actuarial liability may increase or decrease for many reasons, regardless of the amortization approach used. Experience gains and losses and changes in benefits are continually occurring. The use of closed periods does not mean that a plan automatically reaches full funding (actuarial value of assets equal to actuarial accrued liability) in a predictable period of time and stays

fully funded. Use of an open approach does not mean that a plan cannot reach full funding. It is a natural part of the funding process for most plans to have unfunded actuarial liabilities, either positive or negative (funding excess), regardless of the amortization approach and the number of years it has been applied. When the funding methodology is soundly conceived and appropriately applied, the results are monitored through frequent valuations and appropriate adjustments are made, and the employer pays the required contributions, the plan will progress to full funding, whether the amortization approach is open or closed.

117. The Board believes that the cost of a commitment to provide pension benefits and the funding progress of a plan should be assessed from a long-term perspective. From that perspective, either a closed or an open approach is acceptable and neither is preferable in all circumstances. An open approach smooths year-to-year fluctuations in the ARC that may have little or no significance from a long-term perspective. When a closed approach is used, many of those fluctuations will affect each year's ARC but will tend to offset each other over time. For similar plans under similar circumstances, the resulting trend in the ARC should be similar under either approach. This Statement and Statement 25 require disclosure of trend information about the ARC and the methods and assumptions used in determining the ARC. The Board has concluded that information is needed so that users can assess the long-term average cost of pension commitments and the extent to which the employer is meeting those commitments. The Statements also require trend information about the funding progress of the plan.

***Minimum Amortization Period***

118. A change in actuarial methods (actuarial cost method or asset valuation method) may cause a significant change in the total unfunded actuarial liability, including a change from a positive amount to a funding excess. The Board recognizes that changes in actuarial

methods may be appropriate in the judgment of those familiar with the circumstances, although they should occur rarely. However, sometimes the methods are changed specifically to produce a “contribution holiday”—a temporary reduction in the employer’s required contributions, including to zero. For example, a change from an actuarial cost method with a high funding objective to one with a lower funding objective (and lower future ARCs) can produce a large gain; immediate or rapid amortization of the gain can substantially or more than offset the amortization payments on other (loss) components of the total unfunded actuarial liability and can even offset normal cost until the gain is fully amortized. As a result, two potentially large changes may occur in the ARC—a decrease and an increase—within a few years of each other.

119. The Board believes that kind of situation may confuse users with respect to the employer’s future required contributions. Therefore, this Statement requires significant gains produced by a change in the actuarial cost method or in the asset valuation method (for example, from a cost-based method to a market-related method) to be amortized over at least ten years, unless the plan is closed to new entrants and all or almost all the plan members have retired. In those circumstances, a required minimum amortization period would be inconsistent with the objective of phasing out the plan.

***Equivalent Single Amortization Period***

120. The Board considered but has not required a minimum amortization period for other types of gains, although application of a minimum period is not precluded for either gains or losses. (A closed approach to amortization is not required.) Some plans use minimum periods for both gains and losses to reduce volatility in the contribution rates. The Board believes that goal is consistent with the long-term approach adopted for this Statement. The Board also believes that, when components of the total unfunded actuarial liability are separately amortized, gains and losses of a similar type (for example, actuarial experience

gains and losses) generally should be amortized over similar periods; that is, it generally would not be appropriate to recognize all gains immediately or over very short periods and spread all losses over longer periods. The Board recognizes, however, that a required minimum period may not always be appropriate. For example, in some circumstances, the immediate recognition of a gain to offset or partially offset a loss may help reduce volatility in the ARC.

121. The Board is concerned, however, that when components of the total unfunded actuarial liability are separately amortized, immediate recognition or rapid amortization of a gain that is a large proportion of the total unfunded actuarial liability may temporarily offset the amortization provisions for loss components being amortized over longer periods. As a result, the volatility of the ARC may be increased rather than reduced. A temporary reduction in the total provision for amortization (and the ARC) may occur, even though the remaining balances of the loss components are substantial, and the ARC will subsequently increase.

122. Rather than requiring a minimum amortization period for all gains, the Board has addressed this issue by requiring calculation of an equivalent single amortization period. That period is a weighted average of all periods used when components of the total unfunded actuarial liability are separately amortized, using a specific calculation method. When the results of the calculation indicate that the equivalent single period is greater than the maximum acceptable period (30 years or 40 years, whichever applies), one or more of the amortization periods initially selected for the components should be adjusted. The period for the gain should be lengthened, the period for one or more of the loss components should be shortened, or some combination of those changes should be made. The standard requires application of a specific methodology (illustrated in paragraph 38) because the calculation is designed to achieve a specific purpose. Other methods of

calculating a weighted average amortization period exist, but they were developed for different purposes and may not achieve the same result.

### *Amortization Methods*

123. This Statement requires the use of either the level percentage of projected payroll amortization method (level percent) or the level dollar amortization method. The Board has concluded that either method attributes a reasonable portion of unfunded actuarial liabilities to accounting periods from the long-term, going-concern perspective. From that perspective, neither method is preferable in all circumstances.

124. A large majority of governmental plans use the level percent method, combined, most typically, with the entry age actuarial cost method. The level percent method reflects traditional principles of sound funding which require a level contribution design—that is, a design whereby future citizens are not expected to contribute more than present citizens. That concept is sometimes referred to as intergenerational equity in the burden on taxpayers. The concept is implemented by establishing a contribution rate which, expressed as a percentage of active member payroll, is expected to remain level over time. The contribution rate includes normal cost and an amount, computed as a level percentage of projected covered payroll, that is designed to amortize an unfunded actuarial liability over a specific period of future years. Although inflation is likely to cause the absolute dollar amount of contributions to increase over time, contributions expressed in dollars adjusted for inflation (real dollars) are expected to be constant. Therefore, the burden on citizens does not increase relative to the payroll on which pension contributions are based.

### **Annual Pension Cost—Employer Has No Net Pension Obligation (NPO)**

125. When an employer has no NPO to a plan, annual pension cost is equal to the ARC, as defined in this Statement. The Board believes that many governmental employers have been making pension contributions for many years equal to their actuarially determined

required contributions. Those employers will have no pension liability or asset at transition and, therefore, no NPO at the effective date. (The pension liability or asset at transition is discussed in paragraphs 138–145.) The Board also believes that, for many of those employers, the calculation of their required contributions after the effective date will meet the requirements of this Statement for calculating the ARC. An employer in that situation will continue to have no NPO, and annual pension cost will be equal to the ARC, as long as the contributions made by the employer are equal to the ARC.

### **Annual Pension Cost—Employer Has a Net Pension Obligation**

126. The Board believes that an employer that contributes less (more) than annual pension cost has a liability (asset) that should be recognized in the financial statements (except for assets related to contributions from governmental and expendable trust funds). The total liability (asset) recognized in the financial statements may not be equal to the NPO for two reasons. First, short-term differences (defined in paragraph 11) between annual pension cost and contributions made should be recognized in the financial statements as fund liabilities or assets (or expenditures, if modified accrual is used) but should be excluded from the NPO. The Board has excluded them to accommodate normal delays in paying the ARC; the procedures for adjusting the ARC and adding interest do not apply for short-term differences. The employer should ensure that the actuary is informed of the employer's intent to settle a short-term difference within the period specified in paragraph 11, so that an amount for amortization of the difference is not included in an ARC determined during the settlement period. The Statement requires differences not settled by the end of that period to be included in the NPO and the next ARC. The second reason that the total recognized liability (asset) to a plan and the NPO may not be equal is that the NPO may have a negative (asset) balance if, for example, the employer makes statutorily required contributions that exceed the ARC. Those prepaid



contributions would be recognized as fund assets when the accrual basis is used and as expenditures when modified accrual is used.

### **Adjustment Procedures**

127. Because of the potential differences between recognized liabilities (assets) and the NPO, this Statement describes the requirements for calculating annual pension cost with reference to the NPO. Adjustments to previously recognized liabilities (assets) should be made based on the ending balance in the NPO. When an employer has an NPO, annual pension cost has three components: the ARC, one year's interest on the NPO, and an adjustment to the ARC. Proper application of the requirements for calculating the interest and ARC adjustment components requires coordination between the employer and the actuary. The requirements are illustrated in Appendix C. The following discussion assumes a liability balance in the NPO (net cumulative contribution deficiency). When the NPO has an asset balance, the opposite of the adjustment procedures for a liability balance should be applied; interest should be deducted and the ARC adjustment should be added in determining annual pension cost.

128. When a contribution deficiency has occurred, the ARC and annual pension cost are no longer equal. The ARC includes an amount for amortization of the deficiency. Amortization is required from a funding perspective but is inconsistent with accounting concepts. The deficiency was included in annual pension cost for a prior year and recognized as a liability; it should not be recognized again (recharged).

129. The adjustment procedures are designed to avoid an overstatement of annual pension cost and to maintain consistency between the actuarial and accounting measures. Without the adjustments, the actuarial and accounting measures would become increasingly different. The net result of the adjustments should be that annual pension cost is approximately equal to the ARC that would have applied if the employer had no NPO

(previous ARCs were paid in full), plus one year's interest on the NPO balance at the beginning of the year. The adjustments also enable the employer to return to measuring annual pension cost equal to the ARC, either when amortization of the contribution deficiency is complete or at any time, upon full payment of the NPO, including interest, as illustrated in Appendix C. The Board believes that interest should be added to the NPO (and the corresponding liability) in an amount equal to the return anticipated by the plan on the contributions that were not paid. Therefore, the appropriate interest rate is the rate of return on plan investments that was assumed in determining the ARC for the current year.

130. When the employer has an NPO, an adjustment to the ARC is needed to offset, approximately, the amount included in the ARC for amortization of the deficiency (actuarial experience loss). Amortization of the deficiency effectively constitutes a recharge of the deficiency to the employer, in installments, with interest. Therefore, during the amortization period, the ARC is greater than if the deficiency had not occurred. The increase is not always apparent because of the effect of other events on the ARC.

131. From a funding or financing perspective, the recharge to the employer through future ARCs is appropriate; assets need to be accumulated for the payment of benefits. (An exception is when a separate contract is made to pay the deficiency, with interest. The required payments under such a contract are excluded from the ARC. Pension liabilities that do not affect the ARC are referred to in this Statement as pension-related debt and are excluded from the NPO.) From an accounting perspective, it may not be appropriate to include the entire amount of the recharge in annual pension cost. The portion that is interest on the deficiency should be included. However, any portion that is a recharge of the deficiency itself should be excluded; it was included in annual pension cost for a prior year and has been recognized as a liability.

132. If the amount included in the ARC for amortization of a contribution deficiency were known, the employer could be notified each year of both the ARC (the amount the employer should pay to the plan for that year) and an adjusted ARC (the amount the employer should recognize as annual pension cost, including interest on the NPO); the employer would not make the adjustment calculations required by this Statement. The Board proposed that approach in the 1990 ED. However, further research has indicated that identifying the amounts included in the ARC for amortization of past contribution deficiencies would be complex and may not be possible, depending on the funding methodology and other factors, including the compounding of contribution deficiencies (and excess contributions) over time and the effect on the ARC of other gains and losses.

133. The Board has developed the adjustment procedures in this Statement to *approximate* the amount of amortization included in the ARC for past contribution deficiencies. The employer can approximate that amount by dividing the beginning balance of the NPO by an amortization factor supplied by the actuary. The factor should incorporate the actuary's methodology for amortizing actuarial experience losses, including the amortization period, method, and discount rate used in determining the ARC that is to be adjusted. Alternatively, if the employer notifies the actuary of the beginning balance for the year of the employer's NPO, the actuary can calculate the adjusted ARC plus interest (annual pension cost) in accordance with this Statement.

134. Several respondents commented on the proposed procedures in paragraph 31 of the 1990 ED for "Adjustment of Pension Liabilities [Assets]." Those procedures were equivalent in intent to the requirements of this Statement for measuring annual pension cost equal to an adjusted ARC, plus interest on the NPO. However, as previously discussed, the Board intended the procedures to be applied by the actuary; the employer would be notified of both the ARC and the adjusted ARC. Some respondents to the 1990 ED suggested an alternative to the Board's proposal that they believed would address the

issue of avoiding “double counting” annual pension cost and liabilities, while including in annual pension cost an appropriate amount for interest on the liabilities. The suggested alternative was that the actuary should increase the actuarial value of assets by the amount of the employer’s recognized pension liability before applying the actuarial cost method; interest then would be added to produce an adjusted ARC plus interest.

135. The Board believes that if the suggested procedures were applied, the correspondence between accounting and funding measures that is a principal objective of this Statement would be lost the first time a contribution deficiency occurred and never would be regained. Two measures always would be required: one for accounting and one for funding. Although the adjustment procedures proposed in this Statement may appear more complex, particularly when contribution deficiencies occur regularly or alternate with excess contributions, the Board believes they are appropriate to the objective of this Statement and should be applied.

136. A large majority of the respondents to the 1994 ED agreed that pension liabilities or assets recognized in the financial statements should be limited to the NPO, if any; that is, employers should not be required to recognize the total unfunded actuarial liability (or funding excess). A few respondents specifically agreed with the “even-handed” treatment of differences between the required measure of annual pension cost and contributions made; that is, both assets and liabilities should be disclosed, even though contributions from governmental funds greater than annual pension cost would not be recognized as assets. In contrast, a few respondents agreed with recognition and disclosure of a liability but disagreed with recognition and disclosure of an asset. In their view, the ARC should be considered the minimum contribution requirement and contributions greater than that amount should be recognized as expenditures/expense.

137. The Board believes that approach would be inconsistent with accrual accounting concepts. As discussed in paragraphs 66 and 67, this Statement requires annual pension cost to be *measured* and *disclosed* on the accrual basis of accounting, regardless of whether *recognition* is on the modified accrual or the accrual basis. As with any accrual-based cost, payments greater than the cost attributable to an accounting period should be considered assets (prepayments, for example) and payments less than periodic cost should be considered liabilities. The Statement does not require recognition of pension assets resulting from excess contributions from governmental funds; however, disclosure is required.

#### **Pension Liability (Asset) at Transition**

138. The Board's research indicates that some employers have recognized pension liabilities in accordance with NCGA Statement 6; others have applied APB Opinion 8. Some employers have applied one of those standards for many years; others have adopted it only recently. Most of the pension liabilities currently reported are to single-employer plans and have been recognized in the GLTDAG. Some employers that have applied Opinion 8 would not have recognized pension liabilities under Statement 6. That is, they have paid all required contributions determined in accordance with an acceptable actuarial cost method (the Statement 6 measure of pension expenditures/expense), but have recognized an Opinion 8 measure of pension expenditures/expense that was higher than the Statement 6 measure. Although not acceptable under either accounting standard, a few employers have recognized a liability for the plan's entire unfunded actuarial liability according to the actuarial cost method in use, or for the unfunded pension benefit obligation determined in accordance with Statement 5. Many employers currently have no recognized pension liabilities other than, in some cases, for pension-related debt. The Board believes that some of those employers might have recognized pension liabilities if they had applied Statement 6 or Opinion 8.

139. The Board’s research also indicates that employers that have recognized pension liabilities for unpaid actuarially determined required contributions generally have not adjusted those liabilities for the effect of actuarial amortization of the unpaid amounts (recharges to the employer, as discussed in the previous section of this appendix). Existing accounting and auditing standards do not include requirements or guidance for making such adjustments. If no adjustments have been made, currently reported pension liabilities are likely to be misstated. Liabilities that have been carried for several years may have been paid or partially paid, if the employer has paid all actuarially required contributions since the liabilities were recognized. However, existing standards provide no guidance on how to identify the amount of recognized liabilities that was included in subsequent required contributions and paid, or how to remove that amount from the accounts.

140. Because of the variety of past practice with respect to the measurement and recognition of pension liabilities and because liabilities recognized at the effective date will affect future annual pension cost, the Board has concluded that currently recognized pension liabilities should not be carried forward without restatement. In the 1990 ED, the Board proposed that all pension liabilities recognized in the GLTDAG should be brought to zero at the effective date. Adjustment procedures were proposed for fund pension liabilities (assets). The Board had concluded that a requirement to adjust the GLTDAG pension liabilities by calculating the difference between amounts contributed in the past and amounts that should have been contributed based on prior standards would be impractical for many employers. Therefore, the Board decided that employers should make a “fresh start”; they should implement the new pension accounting standards with no recognized pension liabilities (other than those in the funds and pension-related debt, if any).

141. The Board has reconsidered that approach, based in part on the fact that some employers currently report large pension liabilities. The Board believes that removing those liabilities may be confusing to users and could result in a material misstatement of the financial statements at the effective date. However, to carry the liabilities forward without adjustment also may result in a material misstatement. In either case, any misstatement would continue, possibly for many years. The amount of pension liabilities recognized at the effective date is the beginning NPO and will affect the measurement of annual pension cost for the transition and subsequent years.

142. The Board has concluded, therefore, that sole and agent employers should determine whether they have a pension liability (asset) at transition, consistent with the basic approach adopted in this Statement for the recognition of pension liabilities (assets) after the effective date. That is, the pension liability (asset) at transition, if any, should represent the unsettled balance, including interest, of past differences between the employer's required contributions in accordance with the plan's actuarially determined funding requirements and the contributions actually made by the employer. Application of the parameters is not required in determining the required contributions for prior years. The pension liability (asset), excluding any short-term differences incurred the year before transition, is the beginning balance of the NPO for the transition year.

143. The Board believes that many employers will have the records to substantiate full payment of the actuarially determined required contributions applicable to the calculation period and will not need to make any calculations; they have no pension liability (asset) at transition. If a retroactive calculation is required, the Board believes that most employers should have the necessary data for all fiscal years beginning after the effective date of Statement 5 (December 15, 1986) because that Statement required disclosure of the employer's required contributions (actuarially determined, if applicable), actual contributions, and the investment return assumption. However, the Board believes that

some employers will have (or can obtain from the records of the plan or actuary) the necessary actuarially determined data for years prior to the effective date of Statement 5; for other employers, actuarial calculations of required contributions were not initiated until after that date. The Board recognizes that a retroactive actuarial valuation would not produce meaningful information. Therefore, this Statement requires that the calculation begin with the earliest year after the effective date of Statement 5 for which the required actuarially determined information is available. Appendix C includes an illustration of the calculation procedures.

144. A minority of respondents disagreed with the requirement to determine a pension liability or asset at transition. Some of those respondents indicated that existing liabilities should be reduced to zero, as proposed in the 1990 ED, and some suggested that the calculation procedures should be optional. Some respondents indicated that a requirement to apply new accounting standards retroactively is inappropriate. The Board considered those responses but, for the reasons previously discussed, reaffirmed its conclusion that existing liabilities should be neither reduced to zero nor carried forward without adjustment.

145. A majority of the respondents agreed with the proposed calculation procedures, although some recommended a change in the required starting date. The Board had proposed that employers that have the necessary actuarially determined information for years prior to the effective date of Statement 5 should be required to begin the calculation at the earliest date for which the information is available. Some respondents recommended that adoption of a common starting date for all employers required to make the calculation would result in a more uniform application of the standard, and most of those respondents recommended the effective date of Statement 5. A few respondents indicated that it might not be practical or cost-beneficial to include all possible years prior to that date, particularly if the required data are available for several decades. The Board



agreed that the inclusion of years prior to the effective date of Statement 5 should be acceptable but not required, and this Statement has been modified accordingly.

### **Pension Benefits Affected by Special Termination Benefit Programs**

146. Special termination benefits may take various forms including, for example, lump-sum or installment payments by an employer to terminating employees or to other entities on their behalf for health or life insurance. Some programs also affect the pension benefits of terminating employees. For example, termination payments may be included in the compensation on which pension benefits will be based, or pension benefits may be affected by the granting of additional service credit. The Board considered whether NCGA Interpretation 8 or this Statement should apply to changes in pension benefits resulting from special termination benefit programs. The Board concluded that this Statement should apply to *all* changes in pension benefits, including those resulting from special termination benefit programs.

147. The requirements of NCGA Interpretation 8 for special termination benefits are included in Codification Section T25, “Termination Benefits (Special),” and are based on FASB Statement No. 74, *Accounting for Special Termination Benefits Paid to Employees* (1983). (FASB Statement No. 88, *Employers’ Accounting for Settlements and Curtailments of Defined Benefit Pension Plans and for Termination Benefits* (1985), which superseded Statement 74 for private-sector employers and is closely related to FASB Statement 87, does not apply to governmental employers.) The principal requirements of Section T25 are included in footnote 3 to that section, which reproduces paragraphs 2 and 3 of Statement 74, as follows:

An employer that offers for a short period of time special termination benefits to employees shall recognize a liability and an expense when the employees accept the offer and the amount can be reasonably estimated. The amount recognized shall include any lump-sum payments and the present value of any expected future payments.

The termination of employees under a special termination benefit arrangement may affect the estimated costs of other employee benefits, such as pension benefits, because of differences between past assumptions and actual experience. If reliably measurable, the effects of any such changes on an employer's previously accrued expenses for those benefits that result directly from the termination of employees shall be included in measuring the termination expense.

148. The Board's research and inquiries from preparers and auditors indicate that Section T25 is subject to various interpretations, and practice is correspondingly varied. Governments offer a wide variety of workforce reduction programs. Section T25 generally is interpreted to apply only to programs that are *one-time offers* and not to early retirement incentives and similar programs offered periodically. The Board has received numerous inquiries concerning (a) whether a particular workforce reduction program should be considered a special termination benefit program (Section T25 applies), (b) whether a program that does not appear to be a special termination benefit program should be accounted for consistent with Section T25, or whether the benefits provided should be considered other postemployment benefits (Statement 12 applies), and (c) how employers should account for a change in pension benefits granted through a particular workforce reduction program.

149. The Board believes the applicability of Section T25 to particular programs also is affected by how the phrase "for a short period of time" (paragraph 2 of Statement 74, quoted above) is interpreted. Some believe the phrase refers to the duration of the offer; others believe the reference is to the duration of the benefit payments. Either way, "short period" can be used to support including or excluding a particular program from the scope of Section T25.

150. The Board recognizes that the definition of special termination benefits should be clarified and additional guidance may be needed on accounting for benefits (other than pension benefits) provided through workforce reduction programs that may not be

considered special termination benefit programs. The Board believes that the issues involved require additional research and are beyond the scope of this Statement. The Board may address them in a future project(s). Some issues may be addressed, for example, in conjunction with the Board's project on other postemployment benefits.

151. The Board concluded, however, that the applicability of Section T25 to pension benefits should be considered within the scope of this Statement. The Board's research and inquiries received indicate that the first paragraph of footnote 3 to Section T25 has been interpreted to include or exclude pension benefits. The second paragraph of that footnote specifically includes pension benefits. The Board has examined whether the requirements of Section T25 are appropriate for changes in pension benefits resulting from special termination benefit programs and has concluded that pension benefits should be excluded from the scope of that section. This Statement amends Section T25 (and NCGA Interpretation 8) accordingly. The Board's conclusions are based on the following considerations.

152. With regard to the second paragraph of footnote 3 to Section T25, the Board's research indicates that the requirement for a retroactive calculation of the effects, "if reliably measurable," of a change (increase or decrease) in pension benefits rarely, if ever, is applicable in practice. The effect (loss or gain) of changes in the pension benefits of terminating employees on "an employer's previously accrued expenses" cannot be isolated from the effects of other gains and losses. (The Board notes that the FASB reached a similar conclusion in Statement 88 and replaced that paragraph of Statement 74 with requirements based on the specific measurement requirements of Statement 87.)

153. Application of the first paragraph of footnote 3 to Section T25 would require immediate recognition as expenditures/expense and a liability of the actuarial present value of a change in pension benefits resulting from a special termination benefit program,

regardless of the funding methodology. In some jurisdictions, immediate funding or a short amortization period (for example, five years) is required for pension benefit changes resulting from workforce reduction programs. In other jurisdictions, those changes are treated in the same way as other losses (plan amendments or experience losses) and may be amortized over various periods, if not offset by gains. The Board considered the theoretical and practical issues involved with requiring immediate accounting recognition of particular types of gains and losses, such as changes in pension benefits resulting from special termination benefit programs, when those amounts are treated differently for funding purposes.

154. Traditionally, deferral and amortization of initial unfunded actuarial liabilities and subsequent changes (plan amendments and experience gains and losses) have been an integral part of pension accounting as well as funding methodologies, whether accounting measurement is based on economic or financial resource flows and whether recognition is on the accrual or modified accrual basis. The principal reason is to reduce the year-to-year volatility that otherwise would occur in the employer's required contributions and expenditures/expense. The Board believes that approach is appropriate to the long-term nature of pension plans. The Board also believes it would be inconsistent to introduce volatility for some types of gains and losses, such as changes in pension benefits resulting from special termination benefits, by requiring immediate recognition, when the basic approach of this Statement continues the traditional focus on reducing volatility through deferral and amortization.

155. The Board is not persuaded by arguments that (a) deferral and amortization of pension costs are justifiable *only* when an exchange of future pension benefits for current service to the employer confers a future economic benefit on the employer and, therefore, (b) pension benefit changes resulting from special termination benefit programs should be recognized immediately because there is no economic benefit to the employer. The

concept of “economic benefit” has been debated for decades—what constitutes an economic benefit to the employer, whether particular types of changes in pension benefits result in an economic benefit, however defined, and, if so, how long that benefit may last. The Board believes that valid arguments can be made to support or deny the existence of an economic benefit for any kind of change in pension benefits.

156. Arguments denying the existence of an economic benefit are most frequently used with respect to benefit increases related to past employee service, in conjunction with support for basing pension accounting on point-in-time measures of economic cost. The Board believes that view is a “termination” approach and fails to recognize the ongoing nature of pension plans and the perpetual nature of government. Point-in-time measures of economic cost are inappropriate to an accounting focus on financial resource flows and inconsistent with the approach adopted in this Statement for the measurement of annual pension cost.

157. The Board also believes that, taken to a logical conclusion, the view that immediate recognition should be required for pension benefit changes resulting from special termination benefit programs *because service has been completed* also would require immediate recognition of the estimated cost of all retiree benefit increases, the retroactive portion of active employee benefit increases, and most of the remaining balance of the initial unfunded actuarial liability. That approach would fundamentally alter the most basic concepts of pension accounting, and the resulting volatility in expenditures/expense is readily imaginable.

158. The Board also rejected a requirement to apply Section T25 to pension benefits for practical reasons. A requirement for immediate recognition of a specific type of change in benefits would considerably increase the complexity of this Statement for employers that do not immediately fund those changes, particularly if the employer has an NPO for past

contribution deficiencies or excess contributions. In the calculation of actuarially determined contributions, a change in benefits may be treated as a plan amendment or an experience gain or loss, depending on statutory or policy requirements, the significance of the change, the actuarial cost method, and other considerations. If the change is treated as a plan amendment and the amortization methodology (period or method) differs from the methodology applied for contribution deficiencies and excess contributions (experience losses and gains), the employer would need to establish two NPOs—one for contribution deficiencies or excess contributions and one for the benefit change—and make adjustments to the ARC for each NPO. Otherwise, the accounting and actuarial calculations could not remain in tandem. The Board has concluded that the additional complexity is not justified for any specific components of the total unfunded actuarial liability.

159. In reaching that conclusion, the Board also recognized that an accounting requirement for immediate recognition or use of a specific amortization period for a particular component could extend the period(s) used for other, possibly larger, components. Therefore, any perceived advantage of requiring earlier recognition of some costs could be more than offset by a longer deferral of other costs than otherwise would have occurred.

160. A few respondents disagreed with the Board's conclusions concerning special termination benefits. Some of those respondents would require immediate recognition; others suggested amortization over some period, such as average remaining service life or the period of economic benefit to the employer, or suggested that each benefit should be analyzed to determine whether it qualifies for deferral and amortization or should be recognized immediately. The Board believes that some of those respondents interpreted the term *special termination benefits* to include (a) benefits that do not affect pension benefits, such as lump-sum cash payments or additional life insurance, and (b) benefits

under other types of workforce reduction programs that are outside the scope of Section T25. As discussed in previous paragraphs of this section, the Board has amended Section T25 *only to exclude changes in pension benefits* resulting from programs considered to meet the specifications of Section T25. This Statement does not change existing accounting standards for benefits granted under workforce reduction programs that *are not pension benefits*, including programs that meet the specifications of Section T25. As discussed in paragraph 150, the Board believes that additional guidance may be needed on accounting for some of those non-pension benefits; however, the issues involved are outside the scope of this Statement.

161. As discussed in paragraph 110, a majority of respondents who addressed amortization issues agreed that the Board should not require specific periods for any particular type of change in unfunded actuarial liabilities, such as changes in pension benefits resulting from special termination benefit programs. Although a few of those respondents indicated a preference for immediate recognition or short amortization periods for pension benefits resulting from workforce reduction programs, they agreed with the Board's conclusion that the standard should not *require* that treatment. In their view, the accounting treatment should be consistent with the funding methodology, which may include immediate funding or amortization, provided that methodology meets the parameters.

162. The parameters accept but do not require amortization of any loss (benefit increases, actuarial experience losses, and so forth). The amount may be recognized immediately, offset by a gain, or amortized, consistent with the funding methodology. As previously mentioned, some entities amortize pension benefit changes resulting from workforce reduction programs over short periods, when they are not immediately funded. The Board believes that immediate recognition or rapid amortization of those types of benefit changes may be appropriate in many cases. The fact that the Board has not *required* that approach

for accounting should not be interpreted as an encouragement to use long amortization periods, as discussed in paragraph 106 with reference to amortization periods in general.

### **Postemployment Healthcare Benefits**

163. The Board has continued in this Statement the distinction made in Statement 12 between pension benefits and other postemployment benefits. The term *postemployment* includes the period between termination of employment and retirement as well as the period after retirement. Pension benefits include all benefits provided through a defined benefit pension plan except postemployment healthcare benefits. Other postemployment benefits include (a) all postemployment benefits provided through plans or other arrangements that do not provide retirement income (and, therefore, are not pension plans) and (b) postemployment healthcare benefits, including medical, dental, vision, and other health-related benefits, whether they are provided through a defined benefit pension plan or in some other manner. (Other postemployment benefits do not include special termination benefits. Those benefits are excluded from the scope of Statement 12 and are addressed in Section T25, as amended by this Statement.)

164. Except for postemployment healthcare benefits, whether a particular type of benefit is a pension benefit or an other postemployment benefit depends on how the benefit is provided. For example, postemployment disability benefits, death benefits, and life insurance provided through a defined benefit pension plan are pension benefits and this Statement applies. Similar types of benefits provided through plans or other arrangements that do not include retirement income are other postemployment benefits and application of this Statement is not required.

165. The Board has a separate project on its agenda to address accounting and financial reporting for other postemployment benefits. Postemployment healthcare benefits are included in that project, even when they are provided through a defined benefit pension



plan. The Board believes that additional or different measurement standards from those in this Statement may be needed in accounting for health care (for example, guidance on estimating a healthcare inflation assumption or healthcare cost trend rate). No change is required in employer accounting for postemployment healthcare benefits until appropriate research has been conducted. In the interim, the disclosure requirements of Statement 12 continue to apply, as amended by this Statement.

166. Paragraph 24 of this Statement supersedes paragraph 11 of Statement 12. Paragraph 11 gave employers an option to apply the disclosure requirements of Statement 5 (pension notes and required supplementary information) to postemployment healthcare benefits instead of the requirements of Statement 12. If the option was elected, the measurement of required supplementary information about the funding progress of postemployment healthcare benefits was required to be consistent with the Statement 5 requirements for pension benefits. Separate disclosure of the funding progress of the two types of benefits was encouraged but not required.

167. Those provisions of Statement 12 recognized that some employers were advance-funding postemployment healthcare benefits, on an actuarially determined basis, through a defined benefit pension plan; they might need or prefer to present healthcare disclosures in accordance with Statement 5, particularly if they were unable to separate pension assets and benefits from healthcare assets and benefits. The Board has continued that approach in this Statement with respect to the measurement of expenditures/expense for postemployment healthcare benefits, pending completion of the Board's project on accounting for other postemployment benefits. The Board has, however, changed the requirements with respect to note disclosures and information about the funding progress of postemployment healthcare benefits. The requirements of this Statement for employers that provide those benefits through defined benefit pension plans are consistent with the requirements of Statement 26.

168. The Board's research indicates that the number of employers that are advance-funding postemployment healthcare benefits through pension plans has increased since Statement 12 was issued and some employers currently are considering that approach. For some of those employers, the required contribution rates or amounts for pension benefits and postemployment healthcare benefits are determined using a similar actuarial methodology. Those employers may prefer to apply the provisions of this Statement to postemployment healthcare benefits as well as pension benefits. This Statement accepts but does not require that approach.

169. The Board believes, however, that when a sole or agent employer elects to apply the parameters and related pension measurement and recognition provisions of this Statement to postemployment healthcare benefits, the employer also should provide note disclosures for those benefits in accordance with this Statement; those disclosures are consistent with application of the parameters and include more specific information than the disclosures required by Statement 12. The healthcare inflation assumption also should be disclosed.

170. Cost-sharing employers should continue to apply Statement 12, even when their contractually required contributions to a defined benefit pension plan include amounts for postemployment healthcare benefits. Because those employers are not required to apply the parameters in determining pension expenditures/expense, the pension disclosures for cost-sharing employers are more limited than those for sole and agent employers. The Board believes the disclosures under Statement 12 would provide more useful postemployment healthcare information for users of the financial statements of cost-sharing employers than an adaptation of the pension disclosures. Statement 12 also continues to apply for employers that provide postemployment healthcare benefits through a plan or other arrangement that is not a pension plan.

171. Employers (whether sole, agent, or cost-sharing) are not required to present information about the funding progress of postemployment healthcare benefits, even when the benefits are provided through a defined benefit pension plan. Statement 26 also makes presentation of that information optional. However, if both the plan and the employer present the information, it should be measured in the same way by both entities; the application of different measurement methods in the plan's and the employer's report would be confusing for users. The Board has not specified how the information should be measured. If plans and employers apply the parameters for health care, it is acceptable to apply different parameters from those applied for pensions. The Board has concluded that specific measurement methods should not be required until the Board has completed its research on accounting for other postemployment benefits, including postemployment healthcare benefits.

172. Both this Statement and Statement 26 require separate disclosure for pension and healthcare information. Combining pension and healthcare information can be misleading, especially when assets accumulated for one type of benefits cannot be used to pay the other type. The Board believes that most plans and employers should be able to separate the information for pensions and health care; many entities already do so and in many cases segregation of the two types of benefits and their related assets is legally required.

### **Cost-Sharing Employers**

173. One of the principal problems raised in the responses to the 1990 ED was that it proposed the same accounting requirements for cost-sharing employers as for sole and agent employers. Respondents indicated that it would be neither conceptually justifiable nor practical to require cost-sharing employers to recognize pension expenditures/expense for an amount other than their contractually required contributions. Those contributions

frequently are determined by statute and their payment is statutorily required. The employer's obligation is fulfilled by paying the required contributions. If the Board required recognition of a liability for amounts other than the required contributions, a cost-sharing employer would have no means (or no justifiable means) of paying it. Similarly, if the accounting standard required recognition of an asset for contributions greater than the accounting requirement, the employer could not reduce the asset; the withholding of future contribution payments to reduce the asset would place the employer in violation of its contractual commitments and the accounting asset would be replaced with a contractual liability.

174. The Board recognizes that the obligations of employers participating in cost-sharing plans differ significantly from those participating in single-employer or agent plans. For sole and agent employers, the cost of each employer's commitment to provide benefits is directly attributable to that employer. An actuarial valuation is performed for each employer and a contribution rate(s) is established for that employer. Each employer's rate is based on the projected benefits of that employer's employees. Because the cost of future benefits is attributable to each employer, this Statement requires all sole and agent employers to measure and report that cost in accordance with the parameters and related provisions of this Statement. Those measurement requirements apply, even if the contributions assessed by the plan differ from the ARC and are legally required.

175. A cost-sharing plan is a single plan. All assets and benefit obligations are pooled, all risks and costs are shared, one actuarial valuation is performed, and the same contribution rate(s) applies to all participating employers. The contribution rate or amount charged to an individual employer may be higher or lower than the amounts that would result from a calculation based on the projected benefits of only that employer's employees. The obligation or commitment for benefits is not directly attributable to any individual participating employer; any attribution would be arbitrary. For example, if an employee

changes employers and both employers participate in the same plan, there is no change in either employer's obligation; the obligation for that employee's benefits is not attributable to any particular employer. For these reasons, the obligation of cost-sharing employers generally is limited to payment of the required contributions and the employers have little or no control over the amount of the required contributions or how they are determined.

176. The Board believes, however, that users need information about the cost of the commitment to provide benefits to members of cost-sharing plans and the extent to which the employers' contributions cover that cost. Therefore, Statement 25 requires cost-sharing plans to measure and report the *ARC at the plan level*—one ARC for all employers combined. Disclosure is required of the total contributions made by all participating employers in relation to the ARC, regardless of the amounts assessed by the plan to the individual employers. (That requirement also applies for single-employer plans and for agent plans at the aggregate plan level.)

177. The Board believes that, for most cost-sharing plans, there will be little or no difference between the ARC and the sum of the required contributions assessed to the participating employers, but there may be differences in some cases. The Board has concluded that an accounting requirement to allocate those differences to the individual participating employers would be inconsistent with the nature of a cost-sharing plan and the employers' obligations. The allocations would be arbitrary and the resulting liabilities or assets would not provide useful information for users of the employers' financial statements. Therefore, this Statement requires cost-sharing employers to recognize pension expenditures/expense equal to their contractually required contributions and a liability to the plan for contributions due and unpaid. A large majority of the respondents to the ED of this Statement, Statement 25, or both supported the Board's conclusions concerning financial reporting by cost-sharing employers and plans.

## **Note Disclosures and Required Supplementary Information**

178. This Statement supersedes Statement 5, which became effective in 1987. Statement 5 included requirements for note disclosures and required supplementary information to be presented by employers and plans, including disclosure of a standardized measure of the pension benefit obligation (PBO) and an “analysis of funding progress” based on the PBO. Statement 5 included the requirements for calculating the PBO, defined as the actuarial present value of credited projected benefits, prorated on service, and discounted at a rate equal to the expected return on present and future plan assets.

179. The PBO is independent of any actuarial cost method used in determining funding requirements. Disclosure was required for all plans and employers, whether the plan was advance-funded on an actuarially determined basis or financed in some other manner. The Board’s objective in requiring the PBO disclosures was to help users assess the funded status and funding progress of a pension plan and make comparisons among plans and employers. Statement 5 did not require disclosure of funded status or funding progress based on the methods used for funding the plan. However, many plans disclose that information in their stand-alone financial reports, generally in the actuarial section.

180. The Board indicated in the Basis for Conclusions to Statement 5 that the Board’s decision to require a standardized measure of the PBO for the purpose of assessing funded status and making comparisons did not mean that the Board preferred that approach for other purposes, including the measurement of expenditures/expense and liability display; methods for other purposes would be considered in the Board’s project on pension measurement and recognition. In developing the standards in this Statement and Statement 25, the Board has reviewed the requirements of Statement 5 for plans and employers. The objectives of the review were (a) to ensure that the requirements for note disclosures and required supplementary information would be consistent with the new

standards for the financial statements, (b) to review the appropriateness and usefulness of the standardized measure of the PBO, and (c) to reduce the volume and complexity of the required disclosures. As part of its review, the Board researched constituents' experiences with the standardized measure of the PBO, in addition to consulting with its task force and other advisers on that issue. The results of that research support the Board's conclusions in this Statement and are summarized in paragraphs 57–59.

181. Based on the results of its review, the Board has reduced the number of note disclosures and the level of detail previously required, especially in relation to the employer's pension expenditures/expense. Disclosures previously required that the Board believes are essential or useful to most users' understanding and interpretation of the financial statements have been retained, with appropriate modifications to conform to the new standards for measurement, recognition, and display of pension information. Disclosures that are no longer considered essential or that may be useful only to a minority of users have been reduced or eliminated. (It should be noted, however, that some disclosures specifically required by Statement 5 that are not included in this Statement or Statement 25 are covered by other standards and, therefore, continue to be required. An example is the required disclosure of information concerning related-party transactions.)

182. The Board also has reduced the amount of duplication previously required in the notes and required supplementary information presented for a plan and its participating employer(s), especially when the plan is included in the employer's financial report (pension trust fund) and a stand-alone plan financial report containing the required information is publicly available. The Board encourages employers that include several pension trust funds in the reporting entity to combine the required disclosures for pension expenditures/expense and pension trust funds in a manner that provides the required information for each plan without unnecessary duplication. Respondents to the ED of this Statement supported the reduction in required pension note disclosures for employers and

in the amount of duplication previously required between plan and employer financial reports.

### **Schedule of Funding Progress**

183. The Board has concluded that users need information about a plan's funding progress from a long-term perspective. An overemphasis on funded status (unfunded actuarial liability or funded ratio) at one point in time can be misleading and should not be encouraged. Information about funded status and funding progress is more useful and less subject to misinterpretation when presented for several consecutive years. Therefore, this Statement requires presentation of a schedule of funding progress that includes the results of at least the past three actuarial valuations. (A minimum of six valuation years is required by Statement 25 for a pension trust fund included in the employer's report when a stand-alone plan financial report is not publicly available.) The schedule should be presented as required supplementary information, unless information for all three valuations is disclosed in the notes or is presented for the pension trust fund, as indicated in footnote 17 to paragraph 22. The requirements for presentation of required supplementary information by, respectively, plans/pension trust funds and employers are summarized in Appendix D.

184. The required *content* of the schedule of funding progress is the same as previously required by Statement 5 for the analysis of funding progress, with the addition of the actuarial valuation date. That is, the schedule should include the plan assets, actuarial accrued liability, the difference between the two (unfunded actuarial accrued liability or unfunded actuarial liability), annual covered payroll, and two ratios or indices: the funded ratio (assets expressed as a percentage of the actuarial accrued liability) and the unfunded actuarial liability expressed as a percentage of active covered payroll. The latter ratio is a measure of the significance of the unfunded actuarial liability relative to the capacity to



pay it. The trend in those two ratios provides information about whether the financial strength of the plan is improving or deteriorating over time. An improvement is indicated when the funded ratio is increasing and the ratio of the unfunded actuarial liability to payroll is decreasing.

185. The *measures* required for the information included in the schedule of funding progress differ from those required by Statement 5. The Board has concluded that pension accounting information measured using the methods and assumptions applied in determining a plan's funding requirements, provided those measures meet certain basic accounting requirements, is more useful to the majority of users than information based on standardized accounting measures. That information includes a plan's funding progress as well as the employer's pension expenditures/expense. Therefore, the information included in the schedule of funding progress should be measured (a) in accordance with the parameters and (b) based on the plan's funding methodology, when that methodology meets the parameters.

186. The Board considered but decided not to require disclosure of funding progress based on the Statement 5 standardized measure of the PBO and, possibly, a standardized measure of assets, *in addition to* a schedule based on the parameters. The Board believes that a majority of users would find two sets of information more confusing than useful. The disclosure of two measures of purportedly the same information invites confusion about which is the "right" measure; it also invites selection of one or other measure to support a particular position, whether or not that measure is appropriate for that purpose.

187. In the Board's view, neither of the two measures is "right"; they have different purposes. The funding-based measure reports progress toward achieving the funding objectives using the methodology selected to achieve those objectives. That methodology, not a substitute standardized method, affects the employer's required contributions and,

therefore, the employer's resources. Measuring required contributions and funding progress based on the funding methodology can help users assess the current and potential future impact of the plan on the employer's resources, based on the methodology actually used. Providing information to help users make those assessments is the purpose of requiring disclosure of a plan's funding progress in an employer's financial report.

188. The standardized measure of the PBO is a statistic that some users may find useful for comparing the actuarial present value of benefits accrued for past service under different plans, regardless of the actuarial cost method in use, or for comparing funded status based on the PBO. (The PBO is not a measure of funded status; that measure would be the *unfunded* PBO—PBO less plan assets, the value of which was not standardized under Statement 5. Either historical cost or market value was required, depending on the accounting standard followed by the plan.) The Board believes that the majority of users do not make such comparisons. In addition, given the wide variation in the underlying characteristics and legal, economic, social, and political environments of pension plans, standardizing one statistic does not make plans comparable and may lead to invalid conclusions.

189. The Board also recognizes that general purpose financial reporting standards generally do not require entities to disclose either two measures of the same information or comparative statistics. They should not be required for pensions unless there is a demonstrable need for them by those who cannot obtain the information by requesting actuarial studies or other special reports. The Board's research, including constituents' experiences with the standardized measure of the PBO since Statement 5 became effective (1987), does not indicate the existence of such a need. On the contrary, the PBO appears to have been largely ignored and sometimes used for purposes for which it was not intended.

190. A large majority of those who commented on the schedule of funding progress in response to the ED of this Statement, Statement 25, or both supported the Board's conclusion that reported actuarially determined information should be based on the plan's funding methodology, provided it meets the parameters, and that the Statement 5 standardized measure of the PBO should no longer be a required disclosure. The reasons given by respondents were similar to those explained in paragraphs 59 and 185–188 of this Statement.

***Aggregate Actuarial Cost Method***

191. A schedule of funding progress is not required when the aggregate actuarial cost method is used in determining funding requirements because that method does not separately identify an actuarial accrued liability. The Board considered requiring a schedule of funding progress based on a different method; entry age, for example, is a related method. However, a requirement to use a different method would be inconsistent with the general approach of this Statement to require application of the method used to determine funding requirements, when that method meets the parameters. Instead, this Statement requires disclosure that the aggregate method is used and does not identify or separately amortize unfunded actuarial liabilities. (They are amortized through normal cost.) Relatively few plans use the aggregate method; for example, 6 percent of 451 plans included in a survey conducted in 1993 by the Public Pension Coordinating Council<sup>26</sup> reported using that method, and most are small plans. The Board is reluctant to impose additional costs on those plans. However, plans and employers that use the aggregate method are not precluded from presenting a schedule of funding progress based on, for example, an entry age calculation, if they believe the information would be useful to users of their financial statements.

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<sup>26</sup>Zorn, Paul, *Survey of State and Local Government Employee Retirement Systems* (Chicago, IL: Public Pension Coordinating Council, 1994), p. B-32.

## Special Entities

192. The Board has concluded that the requirements of this Statement should apply to all state and local governmental employers. The Board therefore has eliminated the option proposed for certain “special entities” in paragraph 44 of the 1990 ED. The proposed option was as follows:

Gas and electric utilities, hospitals, colleges, and universities that follow the proprietary fund accounting model or another model similar to their private-sector counterparts may elect (unless prohibited by law or regulation) to apply the standards in FASB Statement 87, in their entirety, instead of the standards in this Statement for recognition and measurement of pension expense and related liabilities or assets. If elected, FASB Statement 87 should be followed consistently from period to period. Financial statements prepared in accordance with FASB Statement 87 should be accompanied by all disclosures and trend information required by Cod. Sec. P20 [Statement 5], whether those financial statements are included in separately issued financial reports or in the financial reports of another entity.

193. The Board’s decision to eliminate the option is based on the following considerations:

- a. The Board’s approach to pension accounting and financial reporting recognizes the usefulness of consistency between accounting and funding measures, provided those measures meet the parameters, and consistency in the measurement of similar or related information reported by a plan and its participating employer(s). The approach also recognizes the usefulness in government of a long-term perspective for measuring the cost of pension benefit commitments and the funding progress of the plans established to meet those commitments. The Board believes that its approach is appropriate and useful for users of all governmental financial reports, including the reports of special entities. FASB Statement 87 is based on an entirely different approach. It is not and was not intended to be a funding methodology; it specifically separates accounting and funding measurement, and it focuses on current, point-in-time, standardized measures of pension information. The Board believes that to accept two such different standards of pension accounting in government is unacceptable conceptually and would serve only to confuse users of governmental financial reports.
- b. The Board believes that constituents have clearly expressed a preference for consistency between accounting and funding measures over standardized measures of pension information, such as those required by FASB Statement 87, in their responses to the PV, the 1990 ED, and the 1994 ED of this Statement. A large

majority of the respondents to the 1990 ED who commented on the option opposed it for both conceptual and practical reasons. Most indicated that, in their view, FASB Statement 87 is unacceptable for any governmental entity, including special entities. Many also highlighted the accounting, financial reporting, and administrative differences that would occur within and among governments, and the resulting confusion for users, if some entities applied the GASB standard and others applied FASB Statement 87.

- c. Most of the minority of respondents to the 1990 ED who supported the option did not comment on or express a preference for either the FASB or the GASB standard on its merits or its usefulness to users; rather, they expressed the view that all entities within the same industry, whether private or governmental, should apply the same accounting standards. The Board believes, however, that application of the same standards by all governmental entities is more important for users than application of the same standards by private-sector and governmental entities, particularly when a standard developed for private-sector entities is inappropriate for governments.
- d. The Board notes that, because of the type of pension plan in which they participate, a large majority of special entities either would report the same amounts under either standard or could not apply the FASB standard in any practical or meaningful way. Many special entities participate in defined contribution plans, cost-sharing multiple-employer defined benefit plans, or both. This Statement and FASB Statement 87 include *the same guidance* for the financial statements of employers that participate in those types of plans. (FASB Statement 87 refers to the private-sector equivalent of a cost-sharing plan as a multiemployer plan.) Many other special entities participate in single-employer or agent defined benefit plans that cover all or most employees of a particular governmental entity (state, county, city), not just special entity employees. Application of FASB Statement 87 by those special entities would require a separate valuation for the special entity. The Board believes that a separate valuation would not provide meaningful results or useful information to users of the financial reports of either the special entity (if a separate report is issued) or the government that includes the special entity.

194. Respondents to the 1994 ED generally did not comment on the elimination of the option to apply FASB Statement 87. The few respondents who commented indicated that the option should be available to special entities, to all governmental entities that apply proprietary fund accounting, or to all governmental entities. Those respondents generally (a) cited the need for or desirability of application of the same accounting standards for governmental and private-sector entities in the same industry or (b) disagreed with the Board's approach to pension accounting and financial reporting and indicated that FASB Statement 87 or a similar standardized accounting approach should be required for all

governmental entities. The Board reaffirmed its conclusion that an option to apply FASB Statement 87 should not be provided for the reasons discussed in paragraph 193.

### **Effective Date**

195. The Board had proposed that Statement 25 should be effective for plan fiscal years beginning after December 15, 1995, and this Statement should be effective for employer fiscal years beginning after December 15, 1996. As discussed in paragraph 88, the Board has concluded that the maximum acceptable delay between calculation of the ARC and its application by the employer(s) should be 24 months instead of 18 months as previously proposed. Consistent with that change, the Board has extended the effective dates of Statement 25 and this Statement by six months to, respectively, fiscal years beginning after June 15, 1996, and June 15, 1997.

196. Statement 25 specifies that the financial statements of pension plans should be prepared based on the plan's fiscal year. The plan's and employer's (or sponsor's) fiscal years may not coincide. When fiscal years differ and the plan is included as a pension trust fund in an employer's or sponsor's financial report, the employer or sponsor should follow the guidance in GASB Statement No. 14, *The Financial Reporting Entity*, with respect to the reporting date for the pension trust fund.

## **Appendix C**

### **ACCOUNTING PROCEDURES FOR TRANSITION AND SUBSEQUENT ADJUSTMENTS**

197. This appendix illustrates calculations that, if applicable, are required by this Statement for sole and agent employers. The facts assumed in the examples are illustrative only and are not intended to modify or limit the requirements of this Statement or to indicate the Board's endorsement of the policies or practices shown.

#### **Annual Pension Cost When an Employer Has a Net Pension Obligation (NPO)** [paragraphs 11–13]

Illustration 1 Accounting Procedures for Calculating Interest, Adjusting the ARC, and Computing Annual Pension Cost

#### **Transition** [paragraphs 30–35]

Illustration 2 Accounting Procedures for Calculating a Net Pension Obligation (NPO) and Pension Liability (Asset) at Transition

**Annual Pension Cost When an Employer Has a Net Pension Obligation (NPO)**  
[paragraphs 11–13]

**Illustration 1—Accounting Procedures for Calculating Interest, Adjusting the ARC, and Computing Annual Pension Cost**

1. Annual pension cost is the measure required by this Statement of a sole or agent employer’s “cost” of participating in a pension plan. The measure should be calculated and disclosed, regardless of (a) the amount recognized as pension expenditures/expense on the modified accrual or accrual basis and (b) the amount paid in relation to the employer’s annual required contributions in accordance with the parameters (ARC). *When an employer has no net pension obligation (NPO), annual pension cost is equal to the ARC.*

2. An NPO is a cumulative difference since the effective date of this Statement between annual pension cost and an employer’s contributions to a plan, including the pension liability (asset) at transition, and excluding (a) short-term differences, as defined in paragraph 11, and (b) unpaid contributions that have been converted to pension-related debt. An employer may have an NPO to more than one plan; NPOs to different plans should not be combined. *When an NPO has a liability (positive) balance, annual pension cost is equal to (1) the ARC, plus (2) one year’s interest on the beginning balance of the NPO, less (3) an adjustment to the ARC to offset, approximately, the amount included in the ARC for amortization of the past contribution deficiencies.* (This summary assumes a liability balance. When an NPO has an asset (negative) balance, the interest adjustment should be *deducted* and the ARC adjustment should be *added* to the ARC, to determine annual pension cost.)

3. When a contribution deficiency occurs, the next and subsequent ARCs include an amount for amortization of the deficiency (except for short-term differences, as defined in paragraph 11). The same accounting parameters apply for amortizing contribution deficiencies as for any other actuarial loss. The amount included in the ARC for



amortization of the deficiency depends on the amortization methodology applied and generally is not precisely determinable. The accounting adjustments are designed to *estimate* the amortization amount, remove it from the ARC, and add back an appropriate amount for interest on the NPO. The purpose of the interest and ARC adjustments is to avoid “double counting” annual pension cost and liabilities. Without the adjustments, annual pension cost and the NPO (liability) would be overstated by the portion of the amortization amount previously recognized in annual pension cost. With the adjustments, annual pension cost should be approximately equal to the ARC that would have been charged if all prior ARCs had been paid in full, plus one year’s interest on the NPO. The interest is an estimate of the investment earnings lost to the plan on the contributions that were not made. Making the adjustments also allows the employer to return to reporting annual pension cost equal to the ARC, either when amortization of the deficiency is complete, or earlier upon full payment of the NPO including interest.

4. Each year’s adjustments should be calculated using the same amortization method, period, and assumptions applied in calculating the ARC *for that year*. Each year’s adjustments apply only for that year; there is no amortization schedule to follow. In accordance with the parameters, the method should be either level percentage of projected payroll (level percent) or level dollar. The period should be the period applied by the actuary for amortizing actuarial experience gains and losses. In calculating the amortization amount, the actuary uses an amortization factor that incorporates the period and a discount rate. When level dollar is used, the discount rate is the investment return rate (assumed return on plan assets). When level percent is used, the discount rate is slightly less than the difference between the investment return rate and the inflation rate. (One formula for calculating a level percent discount rate is:  $[(1 + \text{investment return rate}) / (1 + \text{inflation rate})] - 1$ . For example, if the investment return and inflation assumptions

are 8% and 5%, respectively, the discount rate is  $[1.08/1.05] - 1$ , or approximately 2.86%.)

5. To make the adjustments, the financial statement preparer needs to know the *investment return rate* and the *amortization factor* applicable to the year for which the adjustments are made. The investment return rate and the factor may vary from employer to employer and from year to year. However, the accounting *procedures* for calculating the adjustments are identical.

- a. *The interest adjustment equals the balance of the NPO at the beginning of the year times the investment return rate.*
- b. *The ARC adjustment equals the balance of the NPO at the beginning of the year divided by the amortization factor.*

6. Following are four examples of the accounting calculations.

<u>Example No.</u>	<u>Amortization Method</u>	<u>Amortization Period</u>	<u>Employer Contribution</u>
1	Level dollar closed	15 years	ARC, except year 0
2	Level percent closed	15 years	ARC, except year 0
3	Level percent open	15 years	ARC, except year 0
4	Level percent open	15 years	Irregular

- a. Each example assumes that (1) the employer has no NPO at the beginning of year 0 and (2) without the effect of contribution deficiencies or excess contributions, the ARC for all years would be \$5,000. (All other effects on the ARC are assumed to offset each other so that the effect of the deficiency or excess contribution can be seen.) *The accounting procedures are the same in each example. Annual pension cost differs in Examples 1 through 3 because different amortization methods are used. In Examples 3 and 4, the amortization method is the same but the employer's contributions differ.*
- b. The assumptions are included at the top of each example. The amortization factors are based on the actuarial assumptions and the amortization method and period. (Use of a different formula for calculating the factors could produce slightly different factors. The financial statement preparer would use the same factors as the actuary.) *Simplified* actuarial calculations are included to the right of the accounting calculations *to illustrate the similarity of the two calculations.* However, the accounting and actuarial calculations are *independent* of each other and the actuary generally would not separately amortize contribution deficiencies and excess contributions; they would be amortized with other actuarial gains and losses and may

be fully or partially offset by those amounts. Therefore, neither the actuary nor the financial statement preparer would “see” the effect of a contribution deficiency or excess contribution on each year’s ARC. The accounting procedures *approximate* the actuarial calculations; the results may not always be as similar as in these examples. As indicated in paragraph 13 of this Statement, each year’s adjustments apply only for that year; a new calculation should be made each year. Therefore, each year’s calculations in these examples have been rounded to the nearest dollar. The results for individual years could be slightly different if a complete amortization schedule were prepared in year 1.

- c. The employer can return to reporting annual pension cost equal to the ARC in any year, if the NPO balance is paid in full, plus interest. Each example shows the amount that should be paid, if the decision to pay the balance is made in year 11.

**Example 1**

Employer contribution: ARC, except year 0  
 Amortization method and period: Level dollar closed, 15 years  
 Investment return: 8% per year  
 Amortization factors as shown (8% per year for 15 years, declining one year per year)

**FINANCIAL STATEMENT PREPARER**

**ACTUARY**

Year	ARC	Interest on NPO	ARC Adjustment	Amort. Factor	Pension Cost	Contribution	Change in NPO	NPO Balance	Loss/(Gain)	Amort. Factor	Amort. of Loss/(Gain)	Ending Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	(\$5000 + 12)	(8% x 9)	(9 / 5)		(2 + 3 - 4)		(6 - 7)	(BB* + 8)	(2 - 7)		(13 / 11)	[(BB* x 1.08) + (10 - 12)]
0	5000	--	--	--	5000	4000	1000	1000	1000	--	--	1000
1	5117	80	117	8.56	5080	5117	(37)	963	0	9	117	963
2	5117	77	117	8.24	5077	5117	(40)	923	0	8	117	923
3	5117	74	117	7.90	5074	5117	(43)	880	0	8	117	880
4	5117	70	117	7.54	5070	5117	(47)	833	0	8	117	833
5	5117	67	117	7.14	5067	5117	(50)	783	0	7	117	783
6	5117	63	117	6.71	5063	5117	(54)	729	0	7	117	729
7	5117	58	117	6.25	5058	5117	(59)	670	0	6	117	670
8	5117	54	117	5.75	5054	5117	(63)	607	0	6	117	607
9	5117	49	117	5.21	5049	5117	(68)	539	0	5	117	539
10	5117	43	117	4.62	5043	5117	(74)	465	0	5	117	465
11	5117	37	117	3.99	5037	5117	(80)	385	0	4	117	385
12	5116	31	116	3.31	5031	5116	(85)	300	0	3	116	300
13	5116	24	116	2.58	5024	5116	(92)	208	0	3	116	208
14	5117	17	117	1.78	5017	5117	(100)	108	0	2	117	108
15	5117	9	117**	0.93	5009	5117	(108)	0	0	1	117**	0

If the employer decided in year 11 to pay the outstanding balance and return to reporting annual pension cost equal to the ARC, the amount that should be paid is: \$465 + \$5037 = \$5503. The calculations for years 11 and 12 would be as follows:

11	5117	37	117	3.99	5037	5502	(466)	0	(385)	3.99	117	0
12	5000	0	0	--	5000	5000	0	0	0	--	0	0

\*BB = beginning balance for the year.

\*\*Adjusted for rounding errors, to bring ending balance to zero.

**Example 2**

Employer contribution: ARC, except year 0  
 Amortization method and period: Level percent closed, 15 years  
 Investment return: 8% per year  
 Inflation: 5% per year  
 Amortization factors as shown (2.86%, approximately, rounded to 3%, for 15 years, declining one year per year)

FINANCIAL STATEMENT PREPARER									ACTUARY			
Year	ARC	Interest on NPO	ARC Adjustment	Amort. Factor	Pension Cost	Contribution	Change in NPO	NPO Balance	Loss/(Gain)	Amort. Factor	Amort. of Loss/(Gain)	Ending Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	(\$5000 + 12)	(8% x 9)	(9 / 5)		(2 + 3 - 4)		(6 - 7)	(BB* + 8)	(2 - 7)		(13 / 11)	[(BB* x 1.08) + (10 - 12)]
0	5000	--	--	--	5000	4000	1000	1000	1000	--	--	1000
1	5084	80	84	11.94	5080	5084	(4)	996	0	11.94	84	996
2	5088	80	88	11.30	5080	5088	(8)	988	0	11.30	88	988
3	5093	79	93	10.63	5079	5093	(14)	974	0	10.63	93	974
4	5098	78	98	9.95	5078	5098	(20)	954	0	9.95	98	954
5	5103	76	103	9.25	5076	5103	(27)	927	0	9.25	103	927
6	5109	74	109	8.53	5074	5109	(35)	892	0	8.53	109	892
7	5115	71	115	7.79	5071	5115	(44)	848	0	7.79	115	848
8	5121	68	121	7.02	5068	5121	(53)	795	0	7.02	121	795
9	5128	64	128	6.23	5064	5128	(64)	731	0	6.23	128	731
10	5135	58	135	5.42	5058	5135	(77)	654	0	5.42	135	654
11	5143	52	143	4.58	5052	5143	(91)	565	0	4.58	143	563
12	5151	45	152	3.72	5045	5152	(107)	458	0	3.72	151	457
13	5161	37	162	2.83	5037	5162	(125)	333	0	2.83	161	333
14	5174	27	174	1.91	5027	5174	(147)	186	0	1.91	174	186
15	5201	15	201**	0.97	5015	5191	(176)	9	0	0.97	201**	0

If the employer decided in year 11 to pay the outstanding balance and return to reporting annual pension cost equal to the ARC, the amount that should be paid is: \$654 + \$5052 = \$5706. The calculations for years 11 and 12 would be as follows:

11	5141	52	141**	4.58	5052	5706	(654)	0	(565)	4.58	141**	0
12	5000	0	0	--	5000	5000	0	0	0	--	0	0

\*BB = beginning balance for the year.

\*\*Adjusted for rounding errors, to bring ending balance to zero.

**Example 3**

Employer contribution: ARC, except year 0  
 Amortization method and period: Level percent open, 15 years  
 Investment return: 8% per year  
 Inflation: 5% per year  
 Amortization factor: 11.94 (2.86%, approximately, rounded to 3%, for 15 years, constant)†

**FINANCIAL STATEMENT PREPARER**

**ACTUARY**

Year	ARC	Interest on NPO	ARC Adjustment	Amort. Factor	Pension Cost	Contribution	Change in NPO	NPO Balance	Loss/(Gain)	Amort. Factor	Amort. of Loss/(Gain)	Ending Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	(\$5000 + 12)	(8% x 9)	(9 / 5)		(2 + 3 - 4)		(6 - 7)	(BB* + 8)	(2 - 7)		(13 / 11)	[(BB* x 1.08) + (10 - 12)]
0	5000	--	--	--	5000	4000	1000	1000	1000	--	--	1000
1	5084	80	84	11.94	5080	5084	(4)	996	0	11.94	84	996
2	5083	80	83	11.94	5080	5083	(3)	993	0	11.94	83	993
3	5083	79	83	11.94	5079	5083	(4)	989	0	11.94	83	989
4	5083	79	83	11.94	5079	5083	(4)	985	0	11.94	83	985
5	5082	79	82	11.94	5079	5082	(3)	982	0	11.94	82	982
6	5082	79	82	11.94	5079	5082	(3)	979	0	11.94	82	979
7	5082	78	82	11.94	5078	5082	(4)	975	0	11.94	82	975
8	5082	78	82	11.94	5078	5082	(4)	971	0	11.94	82	971
9	5081	78	81	11.94	5078	5081	(3)	968	0	11.94	81	968
10	5081	77	81	11.94	5077	5081	(4)	964	0	11.94	81	964
11	5081	77	81	11.94	5077	5081	(4)	960	0	11.94	81	960
12	5080	77	80	11.94	5077	5080	(3)	957	0	11.94	80	957
13	5080	77	80	11.94	5076	5080	(3)	954	0	11.94	80	954
14	5080	76	80	11.94	5076	5080	(4)	950	0	11.94	80	950
15	5080	76	80	11.94	5076	5080	(4)	946	0	11.94	80	946

If the employer decided in year 11 to pay the outstanding balance and return to reporting annual pension cost equal to the ARC, the amount that should be paid is: \$964 + \$5077 = \$6041. The calculations for years 11 and 12 would be as follows:

11	5082	77	82**	11.94	5077	6041	(964)	0	(959)	11.94	82**	0
12	5000	0	0	--	5000	5000	0	0	0	--	0	0

†A constant 15-year period is assumed for simplicity. When the period is allowed to fluctuate, the amortization factor will be different each year.

\*BB = beginning balance for the year.

\*\*Adjusted for rounding errors, to bring ending balance to zero.

**Example 4**

Employer contribution: Irregular  
 Amortization method and period: Level percent open, 15 years  
 Investment return: 8% per year  
 Inflation: 5% per year  
 Amortization factor: 11.94 (2.86%, approximately, rounded to 3%, for 15 years, constant)†

**FINANCIAL STATEMENT PREPARER**

**ACTUARY**

Year	ARC	Interest on NPO	ARC Adjustment	Amort. Factor	Pension Cost	Contribution	Change in NPO	NPO Balance	Loss/(Gain)	Amort. Factor	Amort. of Loss/(Gain)	Ending Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	(\$5000 + 12)	(8% x 9)	(9 / 5)		(2 + 3 - 4)		(6 - 7)	(BB* + 8)	(2 - 7)		(13 / 11)	[(BB* x 1.08) + (10 - 12)]
0	5000	--	--	--	5000	4356	644	644	644	--	--	644
1	5054	52	54	11.94	5052	4685	367	1011	369	11.94	54	1011
2	5085	81	85	11.94	5081	4295	786	1797	790	11.94	85	1797
3	5151	144	151	11.94	5144	5333	(189)	1608	(182)	11.94	151	1608
4	5135	129	135	11.94	5129	4535	594	2202	600	11.94	135	2202
5	5184	176	184	11.94	5176	4611	565	2767	573	11.94	184	2767
6	5232	221	232	11.94	5221	4873	348	3115	359	11.94	232	3115
7	5261	249	261	11.94	5249	5795	(546)	2569	(534)	11.94	261	2569
8	5215	206	215	11.94	5206	4216	990	3559	999	11.94	215	3559
9	5298	285	298	11.94	5285	4769	516	4075	529	11.94	298	4075
10	5341	326	341	11.94	5326	5341	(15)	4060	0	11.94	341	4060
11	5340	325	340	11.94	5325	5340	(15)	4045	0	11.94	340	4045
12	5339	324	339	11.94	5324	5339	(15)	4030	0	11.94	339	4030
13	5338	322	338	11.94	5322	4258	1064	5094	1080	11.94	338	5094
14	5427	408	427	11.94	5408	4969	439	5533	458	11.94	427	5533
15	5463	443	463	11.94	5443	5348	95	5628	115	11.94	463	5628

If the employer decided in year 11 to pay the outstanding balance and return to reporting annual pension cost equal to the ARC, the amount that should be paid is: \$4060 + \$5325 = \$9385. The calculations for years 11 and 12 would be as follows:

11	5340	325	340	11.94	5325	9385	(4,060)	0	(4,045)	11.94	340	0
12	5000	0	0	--	0	5000	0	0	0	--	0	0

†A constant 15-year period is assumed for simplicity. When the period is allowed to fluctuate, the amortization factor will be different each year.

\*BB = beginning balance for the year.

**Transition** [paragraphs 30–35]

**Illustration 2—Accounting Procedures for Calculating a Net Pension Obligation (NPO) and Pension Liability (Asset) at Transition**

This Statement is effective for the City of Red on January 1, 19Z0. The City has a single-employer defined benefit pension plan and its required contributions to the plan are actuarially determined. Contributions are made from the general fund. At December 31, 19Y9, the City reported a liability to the plan of \$6,472,000. The entire amount was reported in the general long-term debt account group and none of it is pension-related debt. The City’s records indicate that \$3,400,000 of the reported liability is for contribution deficiencies for the years 19Y6 through 19Y9. The origin of the remaining \$3,072,000 is unknown; the City’s records substantiate that the City paid all actuarially determined required contributions to the plan for the 10 years prior to 19Y6. Based on its analysis, the City concludes that this Statement requires calculation of a pension liability (asset) at transition and the calculation should include all fiscal years from 19Y6 through 19Y9.

The following information is needed for the calculation and was obtained from the records of the City and the plan’s actuary:

(Dollar amounts in thousands)

<b>Year Ended 12/31</b>	<b>City’s Contributions</b>		<b>Investment Return</b>	<b>Amortization Factor</b>
	<b>Actuarially Determined</b>	<b>Actually Made</b>		
19Y6	\$10,000	\$9,000	N/A	N/A
19Y7	10,500	9,500	7.5%	11.94
19Y8	10,800	10,000	8.0	11.52
19Y9	11,100	10,500	8.0	11.52

The methods and assumptions that apply for the calculation are those used for amortizing actuarial experience gains and losses in determining the City’s contribution rates for the years indicated. The amortization factors incorporate those methods and assumptions. In this example, the actuary used level percent amortization over 15 years, open. The



assumed inflation rates and discount rates were 4.4% and 3% for 19Y7; 4.3% and 3.5% for 19Y8 and 19Y9.

In accordance with this Statement, the calculation assumes a zero liability at the beginning of the calculation period. The City's first contribution deficiency occurred in 19Y6 and, therefore, the first NPO balance occurred at the end of that year. The City applies the required adjustment procedures beginning in 19Y7 and works forward year by year. In each year, any deficiency that was subsequently paid should be excluded from the ending balance of the NPO. In this example, the City of Red did not pay any of the deficiencies identified. The results for the City of Red are as follows:

(Dollar amounts in thousands)

	<u>19Y6</u>	<u>19Y7</u>	<u>19Y8</u>	<u>19Y9</u>
Actuarially determined contribution (A)	\$10,000	\$10,500	\$10,800	\$11,100
Interest on NPO	0	75	159	222
Adjustment to (A)	<u>0</u>	<u>(84)</u>	<u>(173)</u>	<u>(241)</u>
Annual pension cost	10,000	10,491	10,786	11,081
Contributions made	<u>(9,000)</u>	<u>(9,500)</u>	<u>(10,000)</u>	<u>(10,500)</u>
Increase in NPO	1,000	991	786	581
NPO beginning of year	<u>0</u>	<u>1,000</u>	<u>1,991</u>	<u>2,777</u>
NPO end of year	<u>\$ 1,000</u>	<u>\$ 1,991</u>	<u>\$ 2,777</u>	<u>\$ 3,358</u>

Calculations:

Interest (NPO at beginning of year times investment return rate)	—	\$1,000 × .075	\$1,991 × .08	\$2,777 × .08
Adjustment to (A) (NPO at beginning of year divided by amortization factor)	—	\$1,000 /11.94	\$1,991 /11.52	\$2,777 /11.52

### Transition Adjustment

Any short-term differences excluded from the NPO for the year before transition should be included in the pension liability at transition. The City of Red has no short-term differences for 19Y9. Therefore, the 19Y9 NPO ending balance of \$3,358,000 is the City's pension liability at transition. At the beginning of 19Z0 (transition year), the City adjusts its

previously reported pension liability of \$6,472,000 to equal the pension liability at transition (a reduction of \$3,114,000). The City should disclose the pension liability at transition and the difference from the previously reported balance, as required by paragraph 37 of this Statement.

For 19Z0 and all subsequent years for which an NPO exists, the City applies the interest and ARC adjustments required by paragraphs 12 and 13 of this Statement in determining annual pension cost. In 19Z0, the City's ARC is \$11,400,000 and the City contributes \$11,000,000. In determining the ARC, the actuary used the same methods and assumptions as for 19Y9. The City calculates and discloses annual pension cost for 19Z0 as follows:

(Dollar amounts in thousands)

ARC	\$ 11,400	
Interest on the NPO	269	[\$3,358 × .08]
Adjustment to the ARC	<u>(291)</u>	[\$3,358/11.52]
Annual pension cost	11,378	
Contributions made	<u>(11,000)</u>	
Increase (decrease) in NPO	378	
NPO beginning of year	<u>3,358</u>	
NPO end of year	<u>\$ 3,736</u>	

The City recognizes pension expenditures of \$11,000,000 in the general fund. There are no short-term differences. Therefore, the City reports a pension liability in the general long-term debt account group at December 31, 19Z0 equal to the ending balance of the NPO.

## Appendix D

### ILLUSTRATIONS OF DISCLOSURES

198. This appendix illustrates disclosures required by this Statement. The facts assumed in these examples are illustrative only and are not intended to modify or limit the requirements of this Statement or to indicate the Board's endorsement of the policies or practices shown. Existing standards may require disclosures in addition to those illustrated. Illustrations 2, 3, and 4 are coordinated with Illustrations 1 and 2 of Appendix C to Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*.

Illustration 1 Summary of Note Disclosures and Required Supplementary Information for Employer Reporting

Illustration 2 Notes to the Financial Statements for an Employer Contributing to a Single-Employer Defined Benefit Pension Plan

Illustration 3 Notes to the Financial Statements for an Employer Contributing to a Cost-Sharing Multiple-Employer Defined Benefit Pension Plan

Illustration 4 Notes to the Financial Statements for an Employer Contributing to an Agent Multiple-Employer Defined Benefit Pension Plan

Illustration 5 Notes to the Financial Statements for an Employer with Three Single-Employer Defined Benefit Pension Plans

**Illustration 1—Summary of Note Disclosures and Required Supplementary Information (RSI) for Employer Reporting<sup>1</sup>**

Reporting Situation		Type of Plan					
Employer Report Includes Pension Trust Fund (PTF)	Plan Issues Stand-Alone Report	Single-Employer Plan		Agent Multiple-Employer Plan <sup>2</sup>		Cost-Sharing Multiple-Employer Plan	
		Employer	PTF	Employer	PTF	Employer	PTF
YES	YES	Notes ¶20 and 21	Notes ¶32 (Reduced) RSI ¶33–40 (Reduced)	Notes ¶20 and 21 RSI ¶22	Notes ¶32 (Reduced)	Notes ¶20	Notes ¶32 (Reduced)
YES	NO	Notes ¶20 and 21	Notes ¶32 (Full) RSI ¶33–40 (Full)	Notes ¶20 and 21 RSI ¶22	Notes ¶32 (Full) RSI ¶33–40 (Full)	Notes ¶20	Notes ¶32 (Full) RSI ¶33–40 (Full)
NO	YES	Notes ¶20 and 21 RSI ¶22		Notes ¶20 and 21 RSI ¶22		Notes ¶20	

<sup>1</sup>Paragraph numbers in the *Employer* columns refer to this Statement; paragraph numbers in the *PTF* (pension trust fund) columns refer to Statement 25. *Full* RSI comprises a schedule of funding progress and a schedule of employer contributions for each of the past six consecutive fiscal years of the plan and RSI notes. *Reduced* RSI (and ¶22 RSI for employers) comprises a schedule of funding progress for at least *three* valuations. (All stand-alone plan reports are required to include full notes and RSI.)

<sup>2</sup>For agent employers, ¶22 RSI (employer) is for the employer’s *individual* plan; ¶33–40 RSI (PTF) is for the *aggregate* (all employers) plan.

## **Illustration 2—Notes to the Financial Statements for an Employer Contributing to a Single-Employer Defined Benefit Pension Plan**

*[Note: This example assumes that the plan is included as a pension trust fund in the employer's financial reporting entity. Therefore, the requirement of paragraph 22 of this Statement to present a schedule of funding progress covering at least three actuarial valuations would be met by complying with paragraphs 33–40 of Statement 25. If the plan was not included in the employer's financial reporting entity, the employer would be required to present a schedule of funding progress similar to those included in Illustrations 4 and 5 of this appendix.]*

### **State of Columbine Notes to the Financial Statements for the Year Ended December 31, 19X2**

#### **Note X. Pension Plan**

*Plan Description.* State Employees Pension Plan (SEPP) is a single-employer defined benefit pension plan administered by the Columbine Retirement System. SEPP provides retirement, disability, and death benefits to plan members and beneficiaries. Cost-of-living adjustments are provided to members and beneficiaries at the discretion of the State legislature. Article 29 of the Regulations of the State of Columbine assigns the authority to establish and amend benefit provisions to the State legislature. The Columbine Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for SEPP. That report may be obtained by writing to Columbine Retirement System, State Government Lane, Anytown, USA 01000 or by calling 1-800-555-PLAN.

*Funding Policy.* The contribution requirements of plan members and the State are established and may be amended by the State legislature. Plan members are required to

contribute 7.8% of their annual covered salary. The State is required to contribute at an actuarially determined rate; the current rate is 11.9% of annual covered payroll.

*Annual Pension Cost and Net Pension Obligation.* The State's annual pension cost and net pension obligation to SEPP for the current year were as follows:

(Dollar amounts in thousands)

Annual required contribution	\$137,916
Interest on net pension obligation	2,867
Adjustment to annual required contribution	<u>(2,089)</u>
Annual pension cost	138,694
Contributions made	<u>(137,916)</u>
Increase (decrease) in net pension obligation	778
Net pension obligation beginning of year	<u>38,221</u>
Net pension obligation end of year	<u>\$ 38,999</u>

The annual required contribution for the current year was determined as part of the December 31, 19X1 actuarial valuation using the entry age actuarial cost method. The actuarial assumptions included (a) 7.5% investment rate of return (net of administrative expenses) and (b) projected salary increases ranging from 5.5% to 9.5% per year. Both (a) and (b) included an inflation component of 5.5%. The assumptions did not include postretirement benefit increases, which are funded by State appropriation when granted. The actuarial value of assets was determined using techniques that smooth the effects of short-term volatility in the market value of investments over a four-year period. The unfunded actuarial accrued liability is being amortized as a level percentage of projected payroll on an open basis. The remaining amortization period at December 31, 19X1 was 23 years.

### Three-Year Trend Information

(Dollar amounts in thousands)

<b>Fiscal Year Ending</b>	<b>Annual Pension Cost (APC)</b>	<b>Percentage of APC Contributed</b>	<b>Net Pension Obligation</b>
6/30/X0	\$119,757	99.1%	\$37,458
6/30/X1	125,039	99.4	38,221
6/30/X2	138,694	99.4	38,999

**Illustration 3—Notes to the Financial Statements for an Employer Contributing to a Cost-Sharing Multiple-Employer Defined Benefit Pension Plan**

**Poison Ivy School District Notes to the Financial Statements  
for the Year Ended December 31, 19X2**

**Note X. Pension Plan**

*Plan Description.* The Poison Ivy School District contributes to the School District Employees Pension Plan (SDEPP), a cost-sharing multiple-employer defined benefit pension plan administered by the Columbine Retirement System. SDEPP provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. Article 30 of the Regulations of the State of Columbine assigns the authority to establish and amend benefit provisions to the SDEPP Board of Trustees. The Columbine Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for SDEPP. That report may be obtained by writing to Columbine Retirement System, State Government Lane, Anytown, USA 01000 or by calling 1-800-555-PLAN.

*Funding Policy.* Plan members are required to contribute 7.6% of their annual covered salary and Poison Ivy School District is required to contribute at an actuarially determined rate. The current rate is 10.5% of annual covered payroll. The contribution requirements of plan members and Poison Ivy School District are established and may be amended by the SDEPP Board of Trustees. The School District's contributions to SDEPP for the years ending December 31, 19X2, 19X1, and 19X0 were \$7,619, \$6,926, and \$6,596, respectively, equal to the required contributions for each year.



**Illustration 4—Notes to the Financial Statements for an Employer Contributing to an Agent Multiple-Employer Defined Benefit Pension Plan**

**City of Dill Notes to the Financial Statements  
for the Year Ended December 31, 19X2**

**Note X. Pension Plan**

*Plan Description.* The City's defined benefit pension plan, Dill Employees Pension Plan (DEPP), provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. DEPP is affiliated with the Municipal Employees Pension Plan (MEPP), an agent multiple-employer pension plan administered by the Columbine Retirement System. Article 39 of the Regulations of the State of Columbine assigns the authority to establish and amend the benefit provisions of the plans that participate in MEPP to the respective employer entities; for DEPP, that authority rests with the City of Dill. The Columbine Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for MEPP. That report may be obtained by writing to Columbine Retirement System, State Government Lane, Anytown, USA 01000 or by calling 1-800-555-PLAN.

*Funding Policy.* DEPP members are required to contribute 8% of their annual covered salary. The City is required to contribute at an actuarially determined rate; the current rate is 11% of annual covered payroll. The contribution requirements of plan members and the City are established and may be amended by the MEPP Board of Trustees.

*Annual Pension Cost.* For 19X2, the City's annual pension cost of \$2,590,000 for DEPP was equal to the City's required and actual contributions. The required contribution was determined as part of the December 31, 19X1 actuarial valuation using the entry age actuarial cost method. The actuarial assumptions included (a) 7.5% investment rate of return (net of administrative expenses), (b) projected salary increases ranging from 5.5% to 11.5% per year, and (c) 2% per year cost-of-living adjustments. Both (a) and (b)

included an inflation component of 5.5%. The actuarial value of DEPP assets was determined using techniques that smooth the effects of short-term volatility in the market value of investments over a four-year period. DEPP's unfunded actuarial accrued liability is being amortized as a level percentage of projected payroll on a closed basis. The remaining amortization period at December 31, 19X1 was 14 years.

### Three-Year Trend Information for DEPP

(Dollar amounts in thousands)

<b>Fiscal Year Ending</b>	<b>Annual Pension Cost (APC)</b>	<b>Percentage of APC Contributed</b>	<b>Net Pension Obligation</b>
6/30/X0	\$2,409	100%	\$0
6/30/X1	2,511	100	0
6/30/X2	2,590	100	0

### REQUIRED SUPPLEMENTARY INFORMATION Schedule of Funding Progress for DEPP

(Dollar amounts in thousands)

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) -Entry Age (b)</b>	<b>Unfunded AAL (UAAL) (b - a)</b>	<b>Funded Ratio (a/b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll ((b - a) / c)</b>
12/31/W9*	\$49,629	\$52,838	\$3,209	93.9%	\$21,367	15.0%
12/31/X0	55,088	57,615	2,527	95.6	22,276	11.3
12/31/X1	59,262	62,817	3,555	94.3	23,551	15.1

\*Revised economic and noneconomic assumptions due to experience review.

**Illustration 5—Notes to the Financial Statements for an Employer with Three Single-Employer Defined Benefit Pension Plans**

*[Note: This illustration shows one way an employer with several plans can combine disclosures so that the required information is presented for each plan without unnecessary duplication. The Illustration assumes that each plan issues a stand-alone report that complies with Statement 25. However, the plans are not included in the employer’s financial reporting entity. Therefore, the employer is required to present a schedule of funding progress for each plan, in accordance with paragraph 22 of this Statement.]*

**City of Barbet Notes to the Financial Statements  
for the Year Ended December 31, 19X2**

**Note X. Pension Plans**

*Plan Descriptions.* The City of Barbet contributes to three single-employer defined benefit pension plans: Employees Retirement Plan, Fire and Police Retirement Plan, and Elected Officials Retirement Plan. Each plan provides retirement, disability, and death benefits, and annual cost-of-living adjustments to plan members and beneficiaries. Article 37 of the Barbet City Code assigns the authority to establish and amend benefit provisions to the Board of Trustees of each retirement plan. Each plan issues a publicly available financial report that includes financial statements and required supplementary information for that plan. Those reports may be obtained by writing or calling the plan.

Employees Retirement Plan  
101 Municipal Lane  
Barbet, XX 12345  
(999) 999-9999

Fire and Police Retirement Plan  
105 Municipal Lane  
Barbet, XX 12345  
(999) 999-9998

Elected Officials Retirement Plan  
108 Municipal Lane  
Barbet, XX 12345  
(999) 999-9997

*Funding Policy and Annual Pension Cost.* The Board of Trustees of each plan establishes and may amend the contribution requirements of plan members and the City. The City's annual pension cost for the current year and related information for each plan is as follows:

	<b><u>Employees Retirement Plan</u></b>	<b><u>Fire and Police Retirement Plan</u></b>	<b><u>Elected Officials Retirement Plan</u></b>
Contribution rates:			
City	4.6%	15.9%	28.3%
Plan members	5.0%	7.0%	5.8%
Annual pension cost (thousands)	\$11,778	\$18,544	\$195
Contributions made (thousands)	\$11,778	\$18,544	\$195
Actuarial valuation date	1/1/X2	1/1/X2	1/1/X2
Actuarial cost method	Entry age	Entry age	Attained age
Amortization method	Level percentage of pay, open	Level percentage of pay, open	Level percentage of pay, closed
Remaining amortization period	20 years	25 years	8 years
Asset valuation method	5-year smoothed market	5-year smoothed market	5-year smoothed market
Actuarial assumptions:			
Investment rate of return*	8.5%	8.5%	7.5%
Projected salary increases*	6.2-8.0%	5.7-10.3%	6% every 4 years
*Includes inflation at	4%	4%	4%
Cost-of-living adjustments	1.25% per year	1.25% per year	6% every 4 years

### Three-Year Trend Information

(Dollar amounts in thousands)

	<u>Year Ending</u>	<u>Annual Pension Cost (APC)</u>	<u>Percentage of APC Contributed</u>	<u>Net Pension Obligation</u>
Employees Retirement Plan	12/31/X0	\$10,247	100%	\$0
	12/31/X1	13,944	100	0
	12/31/X2	11,778	100	0
Fire and Police Retirement Plan	12/31/X0	\$22,753	100%	\$0
	12/31/X1	25,088	100	0
	12/31/X2	18,544	100	0
Elected Officials Retirement Plan	12/31/X0	\$255	100%	\$0
	12/31/X1	165	100	0
	12/31/X2	195	100	0

**REQUIRED SUPPLEMENTARY INFORMATION**  
**Schedules of Funding Progress**

(Dollar amounts in thousands)

**Employees Retirement Plan**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) –Entry Age (b)</b>	<b>Excess of Assets over AAL (a – b)</b>	<b>Funded Ratio (a / b)</b>	<b>Covered Payroll (c)</b>	<b>Excess as a Percentage of Covered Payroll ((a – b) / c)</b>
1/1/X0	\$621,334	\$591,196	\$30,138	105.1%	\$299,438	10.1%
1/1/X1	651,223	602,472	48,751	108.1	301,872	16.1
1/1/X2	693,241	676,442	16,799	102.5	298,770	5.6

**Fire and Police Retirement Plan**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) –Entry Age (b)</b>	<b>Unfunded AAL (UAAL) (b – a)</b>	<b>Funded Ratio (a / b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll ((b – a) / c)</b>
1/1/X0	\$ 993,044	\$1,059,517	\$66,473	93.7%	\$147,593	45.0%
1/1/X1	1,065,786	1,140,059	74,273	93.5	157,471	47.2
1/1/X2*	1,160,880	1,205,406	44,526	96.3	153,989	28.9

\*Revised economic assumptions and changes in plan benefit provisions.

**Elected Officials Retirement Plan**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) –Attained Age (b)</b>	<b>Unfunded AAL (UAAL) (b – a)</b>	<b>Funded Ratio (a / b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll ((b – a) / c)</b>
1/1/X0*	\$3,216	\$3,803	\$587	84.6%	\$495	118.6%
1/1/X1*	3,531	4,682	1,151	75.4	495	232.5
1/1/X2†	4,023	4,075	52	98.7	690	7.5

\*Changes in plan benefit provisions.

†Revised economic assumptions.

## Appendix E

### CODIFICATION INSTRUCTIONS

199. The sections that follow update the June 30, 1994 *Codification of Governmental Accounting and Financial Reporting Standards* for the effects of Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers*. Certain Codification sections included in this appendix have also been updated for the effects of Statements No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, and No. 26, *Financial Reporting for Postemployment Healthcare Plans Administered by Defined Benefit Pension Plans*. Only the paragraph number of each of these Statements is listed if the paragraph will be cited in full in the Codification.

\* \* \*

### FINANCIAL REPORTING

### SECTION 1900

Sources: [Revise as follows:] NCGA Statement 1  
GASB Statements 9 through 10  
GASB Statement 14  
GASB Statements 25 through 27

#### **Statement of Principle Interim and Annual Financial Reporting**

[Revise as follows:]

[NCGAS 1, ¶128; GASBS 9, ¶6; GASBS 10, ¶50; GASBS 14, ¶11, ¶12, ¶19, ¶43, ¶65, and ¶66; GASBS 27, ¶22]

.116 [Remove source reference to GASBS 5, ¶7 and replace it with GASBS 27, ¶22; add the following to footnote 1:] In certain circumstances, combining statements are required for pension trust funds and for postemployment healthcare plans administered by defined

benefit pension plans. (See Sections Pe5, “Pension Plans—Defined Benefit,” paragraph .107, and Po50, “Postemployment Healthcare Plans Administered by Defined Benefit Pension Plans,” paragraph .105.) [GASBS 14, ¶51; GASBS 25, ¶15; GASBS 26, ¶7]

\* \* \*

## COMPREHENSIVE ANNUAL FINANCIAL REPORT

## SECTION 2200

Sources: [Revise as follows:] NCGA Statement 1  
AICPA Statement of Position 80-2  
GASB Statement 6  
GASB Statements 9 through 10  
GASB Statement 14  
GASB Statements 25 through 27

### **Statement of Principle Annual Financial Reporting**

[Revise as follows:]

[NCGAS 1, ¶128; GASBS 9, ¶6; GASBS 10, ¶50; GASBS 14, ¶11, ¶12, ¶19, ¶43, ¶65, and ¶66; GASBS 27, ¶22]

.108 [Remove source reference to GASBS 5, ¶7 and replace it with GASBS 27, ¶22; add the following to footnote 1:] In certain circumstances, combining statements are required for pension trust funds and for postemployment healthcare plans administered by defined benefit pension plans. (See Sections Pe5, “Pension Plans—Defined Benefit,” paragraph .107, and Po50, “Postemployment Healthcare Plans Administered by Defined Benefit Pension Plans,” paragraph .105.) [GASBS 14, ¶51; GASBS 25, ¶15; GASBS 26, ¶7]

.906 [Delete subparagraph d.]

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**NOTES TO FINANCIAL STATEMENTS**

**SECTION 2300**

.106g [Change “Pension plan obligations” to “Annual pension cost and net pension obligations (NPO).”]

\* \* \*

**PENSION ACTIVITIES—EMPLOYER REPORTING**

**SECTION P20**

[Revise entire section as follows:]

Sources: GASB Statement 14  
GASB Statement 27

**Scope and Applicability of This Section**

.101–.102 [GASBS 27, ¶3–¶4] [Change “Statement” to “section” and insert footnote 1.]

.103–.104 [GASBS 27, ¶6–¶7] [Change “Statement” to “section” and change cross-references.]

**Employers with Defined Benefit Pension Plans**

.105–.120 [GASBS 27, ¶8–¶23] [Change “Statement” to “section” and change cross-references.]

**Employers with Defined Contribution Plans**

.121–.123 [GASBS 27, ¶25–¶27] [Change “Statement” to “section.”]

***Component Units’ Pension Information in the Reporting Entity’s Financial Reports***

.124 [Insert current Codification paragraph .130, omitting the last two sentences.]  
[GASBS 14, ¶11 and ¶63]

## **Special Funding Situations**

.125 [GASBS 27, ¶28] [Change “Statement” to “section.”]

## **Pension Liabilities (Assets) at Transition (Defined Benefit Pension Plans)**

.126–.133 [GASBS 27, ¶30–¶37] [Change “Statement” to “section” and change cross-references.]

## **EQUIVALENT SINGLE AMORTIZATION PERIOD—CALCULATION METHOD**

.501 [GASBS 27, ¶38] [Change “Statement” to “section” and change cross-references.]

## **DEFINITIONS**

.502–.503 [GASBS 27, ¶39–¶40] [Change “Statement” to “section” and change cross-references.]

## **NONAUTHORITATIVE DISCUSSION**

.901 [GASBS 27, Appendix C] [Change “Statement” to “section” and change cross-references.]

.902 [GASBS 27, Appendix D] [Change “Statement” to “section” and change cross-references.]

\* \* \*

[Change section title and section as follows:]

**POSTEMPLOYMENT BENEFITS OTHER THAN  
PENSION BENEFITS—EMPLOYER REPORTING**

**SECTION P50**

Sources: [Add the following:] GASB Statement 27

.106 [Revise paragraph as follows and renumber remaining footnotes:] Some employers advance-fund postemployment healthcare benefits, on an actuarially determined basis, through a defined benefit pension plan. Those employers may elect to apply Section P20 to those postemployment healthcare benefits. Sole or agent employers that apply the measurement and recognition requirements of Section P20 to health care also should provide the notes to the financial statements required by that section instead of the note disclosures required by paragraph .105 of this section. Employers that elect this option also should disclose the healthcare inflation assumption. If the postemployment healthcare benefits are administered through a defined benefit pension plan and both the plan and the employer provide the supplementary information described in Section P20, paragraph .119, for postemployment healthcare assets and benefits, the information should be measured in the same manner by both entities. All information provided on postemployment healthcare benefits should be disclosed separately from information on pension benefits.<sup>6</sup> [GASBS 12, ¶11; GASBS 27, ¶24]

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<sup>6</sup>Section P50, “Postemployment Healthcare Plans Administered by Defined Benefit Pension Plans,” requires application of the same measurement methods and assumptions by the plan and the employer, when the pension plan reporting standards are applied to similar or related postemployment healthcare information reported by both entities. [GASBS 27, fn18]

\* \* \*

Sources: [Revise as follows:] NCGA Interpretation 8  
GASB Statement 27

.101 [Revise paragraph and related footnotes as follows:] The requirements of FASB Statement No. 74, *Accounting for Special Termination Benefits Paid to Employees*,<sup>1</sup> apply to accounting by state and local governments for special termination benefits. Changes in pension benefits as a result of special termination benefits should not be included in measuring termination expenditures/expense. Accounting for pension benefits is addressed in Section P20, “Pension Activities—Employer Reporting.” As discussed below, application of the provisions of FASB Statement 74<sup>2</sup> is subject to the accounting and financial reporting distinctions of governmental funds and expendable trust funds.<sup>3</sup> [NCGAI 8, ¶12, as amended by GASBS 27, ¶5]

<sup>1</sup>Although FASB Statement 74 was superseded by the FASB, it was continued in force by GASB Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers*, except for the applicability to pension benefits. [GASBS 27, ¶5]

<sup>2</sup>FASB Statement 74, paragraphs 2 and 3, provides:

An employer that offers for a short period of time special termination benefits to employees shall recognize a liability and an expense when the employees accept the offer and the amount can be reasonably estimated. The amount recognized shall include any lump-sum payments and the present value of any expected future payments.

The termination of employees under a special termination benefit arrangement may affect the estimated costs of other employee benefits, such as [compensated absences], because of differences between past assumptions and actual experience. If reliably measurable, the effects of any such changes on an employer’s previously accrued expenses for those benefits that result directly from the termination of employees shall be included in measuring the termination expense. [NCGAI 8, ¶7, as amended by GASBS 27]

<sup>3</sup>[Insert current Codification footnote 1.]

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## COLLEGES AND UNIVERSITIES

## SECTION Co5

Sources: [Revise as follows:] GASB Statements 2 through 3  
GASB Statements 6 through 10  
GASB Statements 12 through 16  
GASB Statements 18 through 23  
GASB Statement 25  
GASB Statement 27  
GASB Interpretation 1  
GASB Technical Bulletin 92-1

.102 [Add the following to the list, replacing the current listing for Pe6, as follows:]

Pe5, "Pension Plans—Defined Benefit"  
Pe6, "Pension Plans—Defined Contribution."

[GASBS 2–3, 6–9, 12–16, 25, 27; GASBI 1]