How Public Pension Plans Can Develop and Maintain Actuarially Responsible Funding Policies: FOUR PERSPECTIVES

By Paul Angelo and Brad Ramirez

As HR managers for governmental entities know, the funding of U.S. public sector pension plans has become a high-profile topic. This has been due to many factors, including historically high volatility of investment returns, budgeting pressures experienced by sponsoring entities and increased scrutiny of plans that have not properly funded their obligations. Another important influence has been a clarification from the Governmental Accounting Standards Board (GASB) that financial reporting standards do not constitute funding policy guidance, which left something of a regulatory vacuum when it comes to public pension funding policies.

This is leading many public pension plan administrators and sponsors to review their existing funding policies and—in many cases for the first time—to record them in comprehensive statements of funding policies used for setting actuarially determined contributions. Organizations within the public pension industry, including three of the major professional actuarial groups, have responded to these developments by issuing guidance for establishing and maintaining actuarially responsible funding policies. While this effort is ongoing, the guidance published to date includes:

- An October 2014 Conference of Consulting Actuaries' Public Plans Community white paper titled "Actuarial Funding Policies and Practices for Public Pension Plans" (referred to subsequently as the CCA PPC White Paper)
- A February 2014 American Academy of Actuaries issue brief titled "Objectives and Principles for Funding Public Sector Pension Plans" (the AAA Issue Brief)
- A "Report of the Blue Ribbon Panel on Public Pension Plan Funding" published in February 2014 by an independent panel commissioned by the Society of Actuaries (the BRP/SOA Report)
- A March 2013 Government Finance Officers Association best practice report titled "Core Elements of a Funding Policy" (the GFOA Best Practice).

This article discusses the similarities among these policy papers and points out notable differences. It is important for HR managers to understand the issues that affect retirement plans for the people they serve.

Considerable Consensus Exists

For the most part, the recommendations outlined in each of the reports agree and are in line with current actuarial practice in the public sector. When comparing the reports, though, it is helpful to consider funding policy objectives separately from specific funding policy elements.

Recognize Key Funding Policy Objectives

The greatest area of consensus among the reports comes in listing the objectives of an actuarial funding policy. The most important policy objectives common to all the documents are that a public sector plan should be funded in accordance with an actuarially determined funding policy and that a plan's funding policy should aim for covering 100 percent of the plan's actuarial liabilities over a reasonable period. There is

Table 1: Considerable Consensus on Funding Policy Objectives: How the Three Actuarial Organizations Compare to One Another and to the GFOA Best Practice

Objective	CCA PPC White Paper	AAA Issue Brief	BRP/SOA Report	GFOA Best Practice
Fund the expected cost of all promised benefits (*i.e.*, fund normal cost plus 100% of any unfunded actuarial liabilities).	✓	✓	✓	✓
Match annual contributions to fund the cost of benefits to years of service (*i.e.*, target demographic matching or generational equity).	✓	✓	✓	✓
Have costs emerge stably and predictably (*i.e.*, manage contribution volatility).	✓	✓	✓	✓
Balance competing funding-policy objectives.	✓[1]	✓	✓	✓
Identify risks[2] that could make it difficult to achieve funding objectives.	✓	✓	✓	
Communicate how the funding-policy objectives will be achieved by the contribution allocation procedure (accountability and transparency).	✓	✓		✓
Establish an enforcement mechanism for making contributions on a consistent, actuarially determined basis: actually fund the "actuarially determined contribution" (ADC).	✓[3]	✓	✓	✓

[1] The CCA PPC White Paper talks specifically about a balance between targeting generational equity and managing contribution volatility.

[2] The CCA PPC White Paper focuses on agency risk, which refers to the possibility that interested parties (agents) may try to "influence cost calculations in directions viewed as consistent with their particular interests." The AAA Issue Brief also cites agency risk, but adds investment, demographic and "other" risks. The BRP/SOA Report focuses primarily on investment risk and related disclosures.

[3] Although the CCA PPC White Paper does not mention an explicit enforcement mechanism, all of its guidance is developed under the presumption that the plan will be funded in accordance with its actuarial funding policy.

Source: Segal Consulting

Table 2: Specific Actuarial Funding Policy Recommendations for Actuarial Cost Method: How Two of the Actuarial Organizations Compare to Each Other and to the GFOA Best Practice

	Actuarial Cost Method
CCA PPC White Paper	Entry Age cost method with level percentage of pay Normal Cost.* For multiple tiers, Normal Cost is based on each participant's benefit (not "Ultimate Entry Age"). For benefit formula changes within a tier (generally after a fixed date), Normal Cost is based on current benefit structure ("Replacement Life" Entry Age). Entry Age Normal Cost averaged over career is also "acceptable." Aggregate, Frozen Initial Liability and Projected Unit Credit are "acceptable with conditions."
BRP/SOA Report	Individual Entry Age method used for "Standardized Contribution Benchmark."
GFOA Best Practice	Entry Age cost method with level percentage of pay Normal Cost is "especially well suited" to achieving the policy objectives.

* Normal Costs are level even if benefit accrual or eligibility changes with age or service. All types and incidences of benefits are funded over a single measure of expected future service. The Normal Cost for a tier of benefits is the sum of the individually determined Normal Costs for all participants in that tier. For plans with benefits unrelated to compensation, the Entry Age method with level dollar Normal Cost may be more appropriate.

Source: Segal Consulting

also agreement among the recommendations that funding policy should be structured so that annual contributions reasonably match the costs of benefits to the years in which the benefits are earned and that contributions should be stable and predictable for budgeting purposes.

Table 1 highlights several of the key policy objectives common to two or more of the reports. Each report uses its own terms to describe the objectives, and the descriptions in Table 1 reflect composites of those terms.

Emphasize Specific Funding Policy Elements

In addition to general policy objectives, there is also significant agreement regarding the specific funding policy elements of actuarial cost method, asset smoothing and unfunded liability amortization. For instance, using the entry age actuarial cost method, which is sometimes called the entry age normal method, is recommended by the three reports that discuss specific funding policies: the CCA PPC White Paper, the BRP/SOA Report and the GFOA Best Practice. In addition, all three reports approve of asset smoothing for periods of five years. The reports are also consistent on approving the use of a level percent of pay method for amortization of unfunded liabilities.

Some areas where the documents differ are in the structure and length of amortization periods by source of unfunded liability and the application of market value corridors (i.e., corridors that constrain the difference between the smoothed values of assets and the market values). For asset smoothing, the CCA PPC White Paper specifies the maximum corridors that should be used for various smoothing periods. The GFOA Best Practice specifies that a market corridor should be used if the asset smoothing period is longer than five years. The BRP/SOA Report does not discuss market value corridors at all and recommends that asset smoothing—if used—should be limited to five years.

As to the amortization of unfunded actuarial accrued liability (UAAL), all three reports agree that 15-20 years is the preferred range. Both the GFOA Best Practice and the CCA PPC White Paper prefer fixed period "layered" amortization (i.e., amortize each portion of the UAAL over a separate fixed period as it emerges), while the BRP/SOA report provides limited guidance on the structure of UAAL amortization payments.

As discussed below, the BRP/SOA report also recommends a standardized contribution benchmark that employs a rolling 15-year UAAL amortization period.

Tables 2–4 highlight the specific actuarial funding policy elements recommended in the reports except for the AAA Issue Brief, which does not include detailed policy recommendations. Table 2 compares

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Table 3: Specific Actuarial Funding Policy Recommendations for Asset Smoothing: How Two of the Actuarial Organizations Compare to Each Other and to the GFOA Best Practice

	Asset Smoothing
CCA PPC White Paper	Deferrals based on total return gain/loss relative to assumed earnings rate and recognized over fixed smoothing periods not less than three years. Maximum market value corridors for various smoothing periods: 5 years: 50%/150% corridor 7 years: 60%/140% corridor 10 years with 70%/130% corridor is "acceptable." Combine smoothing amounts only to manage "tail volatility."*
BRP/SOA Report	Asset smoothing periods should be limited to five years or less. No discussion of market value corridors. Five-year smoothing with no corridor used for "Standardized Contribution Benchmark." Encourages the consideration of "direct rate smoothing" and other asset and liability cash flow modeling techniques.
GFOA Best Practice	Fixed period asset smoothing with periods of ideally 5 years or less but never longer than 10 years. Smoothing periods longer than 5 years should include a market value corridor.

* Appropriate when the net deferral amount is relatively small (*i.e.*, the smoothed and market values are very close together). The net deferral amount and the period over which the net deferral amount is fully recognized are unchanged as of the date of the adjustment. Avoid using frequent restart of smoothing to achieve *de facto* rolling smoothing. Avoid restarting smoothing only to accelerate recognition of deferred gains (*i.e.*, only when the market value is greater than the smoothed value).

Source: Segal Consulting

Table 4: Specific Actuarial Funding Policy Recommendations for UAAL Amortization: How Two of the Actuarial Organizations Compare to Each Other and to the GFOA Best Practice

	UAAL Amortization
CCA PPC White Paper	Layered fixed period amortization by source of UAAL; level percent of pay. Model amortization periods: 15 to 20 years for gains and losses 15 to 25 for assumption or method changes Demographic* for plan changes; or 15 for actives, 10 for retirees Combine gain/loss (and other) layers** or restart amortization only to avoid "tail volatility."
BRP/SOA Report	Amortization of gains/losses should be completed over a period of no more than 15 to 20 years. 15-year rolling, level percent of pay amortization used for "Standardized Contribution Benchmark."
GFOA Best Practice	Layered fixed period amortization by source of UAAL; level percent of pay or level dollar. Ideally use a 15 to 20 year range, but never exceed 25 years. Special considerations (*e.g.*, longer periods) for amortizing a surplus.

* Use average future service for actives or average life expectancy for retirees. The amortization period should also be short enough to avoid negative cash flow, where the additional amortization payments are less than the additional benefit payments.

** Combining layers should result in substantially the same current amortization payment. Avoid using restart of amortization to achieve *de facto* rolling amortization. Restart amortization layers when moving from surplus to UAAL condition.

Source: Segal Consulting

recommendations for the actuarial cost method. Table 3 summarizes the recommendations for asset smoothing. Table 4 focuses on recommendations for UAAL amortization.

Notable Differences Lie in the Details

Some differences among the recommendations can be attributed to scope. As noted, the AAA Issue Brief is more general and does not present specific policy details. It is, however, consistent in principle with the other documents. The CCA PPC White Paper includes the most comprehensive and detailed discussion of specific policy alternatives by far, with recommendations that are generally consistent with the GFOA Best Practice.

One notable difference is that the BRP/SOA Report recommends that public pension plans disclose to outside entities a variety of standardized 30-year projections under alternative actuarial assumptions, investment returns and even contribution amounts relative to the actuarially determined contribution. Perhaps the most controversial recommendation would be to disclose current and projected results using a standardized contribution benchmark based on a discount rate specified in the BRP/SOA Report. The specified rate would be substantially lower than even the more conservative public pension plan investment return assumptions currently in use.

While some additional sensitivity and risk-related disclosures may be appropriate, Segal does not support the disclosure of uniformly standardized contribution benchmarks by all public pension plans. Standardized financial reporting based on a discount rate that is adjusted to reflect the projected funding of future benefits is already required by the GASB.

Actuarial funding policy is a crucial part of pension fund governance, and policymakers and administrators of public pension systems should be prepared to respond to inquiries regarding recent funding policy guidance. Many plan managers will find that several of the recommendations are already in place. Sponsors of plans that are not following all of the recommendations may benefit from considering the guidance summarized in this article and from clearly stating why the differences in their own policies are justifiable. Knowing how their plans' funding policies compare with the recommendations will help sponsors and administrators respond to any questions that may arise and to identify possible policy changes.

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