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Designing an Adaptive Funding Policy

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After reading this article, you will be positioned to lead the discussion of:

1) **What is a funding policy?**
2) **What are the core elements of a funding policy?**
3) **Why is a funding policy important?**
4) **What steps are needed to develop a funding policy?**
5) **What events and timeframes should trigger a review of the existing funding policy?**
6) **What pension risks should be identified and monitored?**

In 2012, the Governmental Accounting Standards Board (GASB) made significant changes to the accounting and financial reporting standards for state and local government pension plans and their sponsoring governments. Prior to these changes, GASB Statements No. 25 and No. 27 provided a de facto funding policy by setting certain parameters related to: 1) the actuarial cost method; 2) the asset smoothing method; and 3) the maximum period for amortizing the unfunded actuarial accrued liability.

However, because of the GASB's changes, the new standards under GASB Statements No. 67 and No. 68 do not establish any prescriptive disclosures regarding the funding policy. Consequently, public pension plans and participating employers have been left to develop and document their own funding policies.

What Is a Funding Policy?

A funding policy for a pension plan is a systematic set of procedures used to determine the annual contributions to be made by the employer(s) in a specific year or series of years. Under a "typical" funding policy, the total contribution requirement equals the Normal Cost (i.e., the cost of benefits that will accrue for active employees over that year), plus the scheduled amortization payment of the unfunded actuarial accrued liability for that year. The employer's contribution requirement equals the total contribution (Normal Cost plus amortization) minus any required employee contributions. In addition, a funding policy should address how, when, and by whom administrative and investment expenses are paid.

A funding policy is not intended to be changed on an annual basis, but neither is it intended to be overly restrictive. Therefore, a good funding policy should be adaptive. Given the current intense scrutiny of public-sector defined benefit pension plans (and of funding in particular), Retirement Boards and committees responsible for administering these plans should put the development of a funding policy very high on their list of governance issues.

What Are the Core Elements of a Funding Policy?

Generally, the core elements of a funding policy are: 1) the actuarial cost method; 2) the asset smoothing method; and 3) the amortization method(s).

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- The **actuarial cost method** is the technique used to allocate the existing total present value of future benefits over the current employees' working careers. A funding policy will include a description of how the actuarial accrued liabilities and the present value of future normal costs are determined. In cases where there are insufficient assets to fund retiree liabilities, the funding policy should address this issue.

- The **asset smoothing method** is the technique used to recognize gains and losses in pension assets over time. If the market value of assets is used, contributions may be more volatile. Phasing in market value gains and losses reduces this volatility to help stabilize contributions. A funding policy will specify the asset smoothing period, whether it is open or closed, and the market corridor (which is the allowable amount of deviation between the funding value of assets and the market value of assets).

- The **amortization method(s)** establishes the length of time and the structure selected for determining contributions to systematically pay down any unfunded actuarial accrued liability (or credit any overfunded liability). A funding policy will stipulate:
  - Whether unfunded liabilities are pooled, layered or separated by source (e.g., changes in benefits; gains/losses due to actuarial experience; and changes in assumptions);
  - What period each is to be amortized over;
  - Whether the level dollar or level percentage-of-pay method is used;
  - Whether a base is open or closed; and
  - Whether an unfunded liability is amortized differently than an overfunded liability.

In addition, to implement the core elements, it is necessary to have a set of actuarial assumptions. These assumptions are essential to the operation of an adaptive funding policy, even though they are not typically considered a core element.

As recommended in the Government Finance Officers Association's Best Practice on the "Core Elements of a Funding Policy"[1]:

The **actuarial cost method** should conform to actuarial standards of practice and allocate normal costs for employees over a period beginning no earlier than the date of employment and ending no later than the last assumed retirement age. Moreover, it should be designed to fully fund the long-term costs of promised benefits, consistent with the objective of: 1) keeping contributions relatively stable; and 2) equitably allocating the costs over the employees' period of service. The Entry Age actuarial cost method is especially well suited for this, since it results in normal costs that are a level percent of pay. Targeting costs which are a level percentage of pay over time is prudent since it automatically adjusts for inflation over time.

The **asset smoothing method** should be unbiased with regard to the investment markets (i.e., the same smoothing period should be used for both gains and losses). Moreover, market corridors (the range beyond which gains and losses are not smoothed) should be symmetrical. The appropriate corridor will depend on the length of the smoothing period, with longer smoothing periods requiring narrower corridors. Ideally, the smoothing period would be five years or less, and not more than 10 years. The description should also delineate how smoothing for the year(s) immediately following application of the corridor will be calculated.

The **amortization method** pays down the unfunded actuarial accrued liability over time using one of several amortization methods. The amortization method selected should balance the goals of: 1) demographic matching (i.e., the equitable allocation of cost among generations); and 2) volatility management (i.e., limiting contribution volatility). An immutable goal should be to target a 100% funded ratio. Generally, the length of the amortization period should fall in the 15- to 20-year range and should not exceed 25 years. If there is a lag or timing delay for new amortization payments, then the funding policy should address this as well. There can be multiple amortization bases. A layered amortization method is one where a new base is established each year. The initial amortization period can be different depending on the source of what is being amortized.

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[1] GFOA, March, 2013 http://www.gfoa.org/sites/default/files/GFOABPCoreElementsofPensionFundingPolicy.pdf

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If a layered amortization method is not used, it is a good idea to consider setting a minimum period during which the core elements of the funding policy do not change. This can help ensure that the funding policy is consistently applied each year, and does not change due to expediency.

The funding policy should also be specific as to the budgeted payroll used to determine the contributions and the way the contribution results are to be applied. Some factors to consider include:

- Is the contribution ***rate*** being applied? If so, to which payroll (e.g., biweekly, monthly, etc.)?
- Is a projected contribution ***dollar*** amount to be budgeted and contributed? If so, how often (e.g., biweekly, monthly, quarterly, etc.)? Will early or late contributions be credited or charged with interest? If so, at what rate?
- If the contributions received are greater than the amount determined by the funding policy, how will they be treated (e.g., used to pay down the unfunded liability, establish a prepaid employer contribution reserve, etc.)?
- If the contributions received are less that the amount determined by the funding policy, how will the shortfall(s) be collected (e.g., will a payable amount be added to a subsequent contribution requirement, or amortized as part of an existing unfunded liability, etc.)?

It would also be good to include other items in the funding policy, such as the frequency of experience studies and actuarial audits. An actuarial experience study examines the differences between the plan's actuarial assumptions and actual experience over time (often five years) in order to review the trends and, if necessary, recommend changes to the assumptions. In an actuarial audit, the plan hires an outside actuary to examine the work of the current actuary to monitor the quality of actuarial services. Actuarial audits are a useful tool for due diligence.

Why Is a Funding Policy Important?

Funding a pension plan requires careful consideration of the above methods in order to establish appropriate funding levels and work toward lessening contribution volatility. Without a clear understanding of how the methods work together, the required contributions may be too low or too high. Establishing a funding policy is an excellent way to discuss the methods with your actuary, and fine tune them. Moreover, a funding policy is important because it:

- Defines a clear plan for accumulating sufficient assets to pay benefits;
- Helps with budgeting employer contributions to the pension plan;
- Demonstrates good governance and prudent financial management;
- Reassures bond rating agencies; and
- Shows plan members and taxpayers how the pensions will be funded.

In addition, under the new GASB pension accounting rules, employers must disclose whether they have a formal, written funding policy in place.[2] If a formal written funding policy is not in place, the GASB requires the actuary to project certain cash flows using the average of contributions over the most recent five years. These projected cash flows are used to determine whether the assets of the plan are sufficient to pay the benefits. If they are not sufficient, the plan has a "crossover point" and must adjust its discount rate downward to reflect the exhausting of assets for accounting purposes. Having a formal funding policy provides greater flexibility in projecting contributions, and so lessens the likelihood of projecting insufficient assets.

What Steps Are Needed to Develop a Funding Policy?

The following steps are key in developing a funding policy:

1) Form a committee comprised of representatives from the plan sponsor, plan trustees, actuary and legal counsel.
2) Conduct an education session for committee members on funding policy goals and components.
3) Review and understand the current funding policy, including: a) relevant state and local statutes and ordinances; b) formal and informal policies of the Board and plan sponsor; c) collective bargaining agreements; and d) de facto plan funding.
4) Review funding policy goals and determine the extent to which the current funding policy (written or unwritten) meets funding goals.
5) Have the funding policy reviewed by qualified legal counsel.

[2] GASB Statement No. 68, paragraphs 28 and 66.

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6) Get all parties to agree to the formal funding policy to the extent possible.
7) Prepare or amend the written funding policy covering the: a) actuarial cost method; b) actuarial asset method; and c) amortization method(s), along with other changes.
8) Communicate the formal funding policy to all stakeholders.
9) Monitor compliance with the funding policy each year through the actuarial valuation.
10) Review and revise the funding policy, as necessary.

Regarding item 4, reviewing funding policy goals and objectives, most people can agree on which funding policy objectives are important. However, it may be difficult to agree on which objectives are the most important. A worthwhile exercise at this point may be to prioritize some competing funding objectives, including:

- Benefit security;
- Contribution stability;
- Intergenerational equity;
- Accountability and transparency; and
- Budgetary resources.

What Events and Timeframes Should Trigger a Review of the Existing Funding Policy?

After a funding policy is established, it should be reviewed as part of the presentation of the actuarial valuation report, no less frequently than every two years. A more thorough review should be part of every experience study. The regular revision of the assumptions and methods is necessary because things change, and our understanding of things change.

In addition, certain situations should trigger an immediate review. These situations may include: 1) a reduction in the workforce (e.g., due to attrition, substantial layoffs, or hiring freezes); 2) the closing of the plan to new members; 3) assets falling below the value of five times last year's net cash flows; 4) the funded ratio falling below 50%; and 5) if the employer falls out of compliance with the funding policy. In addition, an actuarial audit should be performed at least every five years.

What Pension Risks Should Be Identified and Monitored?

A logical starting point for a discussion of pension risk would be to understand the risk tolerance of all the stakeholders, especially the Board of Trustees and the plan sponsor(s). However, this may be difficult to assess without identifying and monitoring the many known pension risks. This assessment can be made using historical information in order to initiate this important step.

Pension risks are numerous. Key drivers of pension risks include:

1) Investment volatility;
2) Contribution rate volatility;
3) Mortality improvements;
4) Employer contribution shortfalls;
5) Legislative influences impacting funding;
6) Declining payroll; and
7) Budget contractions.

Other sources of pension risks include: 1) changes to benefit provisions; 2) dramatic changes in hiring patterns; and 3) closing the plan to new members. Other influences could include external events such as a proposed reduction in post-retirement health care benefits. This could influence the pension plan in a way that is like an early retirement incentive, since employees near retirement may retire earlier than expected in order to keep their post-retirement health care benefits. This could temporarily increase contributions and negative cash flows. These risks to the plan and others that are identified as influential should be monitored on a regular basis.

Some useful risk measures to consider for monitoring pension risks include historical *and* projected:

1) Actuarially determined contribution requirements;
2) Unfunded actuarial accrued liabilities;
3) Funded ratios;
4) Ratio of assets to payroll measures;
5) Ratio of assets to liability measures; and
6) Cash flows.

Conclusion

Have we piqued your interest? Determining and communicating the appropriate amount and timing of contributions is one of the most important aspects of our work at GRS, since it is essential to protecting the financial well-being of all the members of your pension plan. Therefore, we have summarized some thought-provoking questions for each funding policy element as shown on page 5. Please contact a GRS consultant for further information on how to create an adaptive funding policy.

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Summary of Funding Policy Elements

Element	Issues to Address
Actuarial Cost Method	• Is the actuarial cost method appropriate for the plan? • Does the cost method produce normal costs that are reasonably stable and consistent with the budgeting process? • Does the cost method account for all of the liability?
Actuarial Assumptions	• Does the long-term expected investment return accurately reflect likely investment returns? • How might actual investment returns vary from the assumed return over time? • Do the demographic assumptions, including the mortality assumptions, accurately reflect the expected experience of the plan? • How often should studies be done to evaluate the actuarial assumptions?
Asset Valuation Method	• Should the market value of assets be smoothed? If so, over what period? • What asset corridor/collar should be applied to prevent the smoothed value of assets from diverging too far from the market value? • What happens the year after the corridor/collar is hit?
Amortization Method	• Should the amortization period be open or closed? • Should it be on a level-dollar basis or level-percentage-of-pay basis? • Should there be separate amortization bases for different components of the unfunded accrued liability? • What should be the length of the amortization period(s)? • Does the amortization method produce payment costs that are reasonably stable and consistent with the budgeting process?
Risk Management	• How should risks be monitored with regard to investments, demographics and plan design? • What actions should be taken to address the risks? • How should favorable investment experience be treated? • How should unfavorable investment experience be treated?
Governance	• What administrative structures should be in place to monitor compliance with the funding policy and ensure actuarially determined contributions are made? • What governance structures should be in place so that the long-term costs of benefit changes are determined before legislative action is taken? • Does the contribution setting process address current and expected future administrative and investment expenses?

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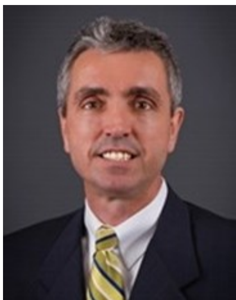

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