



BLUE RIBBON PANEL ON PUBLIC PENSION PLAN FUNDING

RESOURCE GUIDE



Letter From The SOA President

Dear Society of Actuaries member:

The Society of Actuaries is proud to announce publication of the report of the Blue Ribbon Panel on Public Pension Plan Funding. The SOA recognizes the vital role actuaries serve in the funding of public sector plans. The SOA commissioned this multidisciplinary, independent panel to:

- Identify the primary factors influencing current funded status; and
- Recommend prospective solutions to improve funding, including where actuaries play an important role.

The Panel is comprised of economists, a labor union specialist, a former head of the Pension Benefit Guaranty Corporation, a former state lieutenant governor, a former state pension plan executive, the president of a life insurance company, and actuaries. The chair, Bob Stein, is a fellow of the Society of Actuaries and former managing partner of a major accounting firm.

I thank the panel for their time and efforts in the preparation of this groundbreaking report. Their recommendations focus on improvements in risk measurement and disclosure practices with the intention of helping to ensure that stakeholders have the information necessary to make informed decisions about public pension funding. For actuaries, the Blue Ribbon Panel Report recommends that actuaries opine on the reasonableness of assumptions and methods and advises on the use of actuarial methods and assumptions in funding plans. Additionally, certain recommendations are made with respect to the governance over public plans.

We invite you to read the report and related resources. Once you have done so, please contact me and the SOA with your questions, comments and perspectives. Your input will be indispensable as we move forward with engaging all stakeholders on the panel's recommendations.

Sincerely,

Mark Freedman, FSA, MAAA
President, Society of Actuaries

Talking Points For Members

The Society of Actuaries (SOA) commissioned the multidisciplinary, independent Blue Ribbon Panel on Public Pension Plan Funding to identify the primary factors influencing current funding status and to recommend prospective solutions to improve funding, including where actuaries play an important role.

Overview

During the last few years, the funding of U.S. public sector pension plans has received growing attention as states and local government entities have responded to the effects of:

- The 2008 financial crisis;
- Changing demographics of plan membership; and
- A perceived increase in the level of risk in plan funding and programs

The Panel's recommendations focus on improvements in risk measurement and disclosure practices with the intension of helping ensure that stakeholders have the information necessary to make informed decisions on public pension funding. The Panel also makes recommendations about the role of the actuary and plan governance. The recommendations represent the consensus of the Panel.

Panel Charter

In April 2013 the SOA commissioned the Blue Ribbon Panel on Public Pension Plan Funding.

The Panel's charter was to:

- Develop recommendations for plan trustees, legislators and plan advisors on how to improve plan financial management and strengthen plan funding going forward; and
- Assess the principal factors influencing the changing funding status of plans.

Participants

The multidisciplinary, independent panel consists of economists, a labor union specialist, a former head of the Pension Benefit Guaranty Corporation, a former state lieutenant governor, a former executive from a state pension plans, the president of a life insurance company, and actuaries from public pension. The chair is a retired managing partner of a major accounting firm. For a list of participants and their biographies go to page 10 of this resource guide.

Approach

To develop the recommendations, the Panel obtained extensive input from public plan trustees, administrators, actuaries and other key constituencies. The Panel's survey included the following:

- The survey was distributed in June 2013 to selected public sector plan actuaries and organizations representing public plans. Approximately 170 responses were received for the survey.
- The Panel met with 22 individuals during July 2013. The interviewees included actuaries, members of the Actuarial Standards Board, economists, an investment advisor, plan administrators, public sector pension plan organizations, a rating agency, trustees and unions.
- The Panel conducted a series of face-to-face deliberation meetings between May 2013 and January 2014.

Actuarial Work Product

The recommendations in the report are the Panel's recommendations. Nothing in the recommendations is binding to actuarial practice. Actuaries practicing with public plans are bound by the Code of Professional Conduct and the Actuarial Standards of Practice.

About the Panel's Report

The Blue Ribbon Panel on Public Pension Plan Funding report provides recommendations for information and practices that can help stakeholders improve public pension plan funding practices.

The report includes the Panel's background, funding principles, recommendations to improve decision making on plan funding and additional materials such as notes, references and appendices include survey instruments and glossary.

The Panel's report is available for download on the SOA website at <http://www.soa.org/brpreport>.

Questions and/or feedback? Please email the SOA at feedback@soa.org.



Letter From The Panel Chair

To the Society of Actuaries (SOA's) Board of Directors and Members:

On behalf of the SOA's Blue Ribbon Panel on Public Pension Plan Funding ("the Panel"), I am pleased to submit the attached report of our findings and recommendations. Consistent with our charter, the Panel focused on the development of recommendations for strengthening public plan funding. From my perspective, the Panel's principal objective was to identify effective and practical recommendations for enhancing the ability of plan sponsors to keep the contractual benefit promises that they negotiated with plan participants.

The timing of this undertaking was appropriate as the information considered by the Panel suggests that the financial condition of public pension trusts has weakened during the last 15 years, while its exposure to future financial and other risks has increased, possibly materially. Self-reported funded ratios, the history of sponsors' payment of recommended contributions, greater levels of investment risk taking, and funding analyses that may not have adequately captured the changing economic outlook support this view and have been noted in the Panel's report. The Panel's deliberations were also informed by the challenges facing selected pension systems and the fiscal pressures facing many sponsors. These challenges are significant and if not resolved will impact not only the strength of public pension trusts, but will affect sponsors' ability to provide the broad range of public services that citizens are expecting. In this context, I believe that the failure to adopt these or other recommendations for improving plan funding will exacerbate an already fragile situation. I am optimistic that the Panel's recommendations will be seriously considered by the actuarial profession and other parties interested in assuring the future health of public pension programs.

I would like to thank the many people that responded to our survey and to those that took the time to discuss their views with the Panel. Your input was greatly appreciated. Panel members, I have immense respect for your expertise and energy and I would like to thank each of you for your true passion and commitment to this effort, your hard work, and the spirited debate that shaped our recommendations. I believe that, together, we have made an important contribution to the public dialogue over how to strengthen the public pension plan system.

Bob Stein, FSA, MAAA, CPA

Summary of Recommendations

The funding of U.S. public sector pension plans has received heightened attention in recent years as states and local government entities have responded to the effects of the 2008 financial crisis and several cities have faced high-profile financial challenges. Some observers react with alarm to the current situation, noting the downward trend of reported funded ratios, the increased propensity of sponsors to not pay all of the recommended contribution, growing risk levels in asset portfolios, and the increased risk that funding assumptions will not be achieved. Others note that today's funded levels are similar to funded levels in 1990 and that sponsors and trustees have taken action to respond to the recent turmoil. Nonetheless, these trends raise a fundamental question: What changes in plan funding practices, governance and other matters help ensure that public plans can deliver on the benefit promises their sponsors have made to public employees?

In April 2013, the Society of Actuaries commissioned the SOA Blue Ribbon Panel ("the Panel") to address these questions. This paper reports on the results of the Panel's work.

Plan trustees and those responsible for funding pension plans (funding entities) face many challenges in managing the current and future financial health of pension plans. This report provides a set of principles to help guide sponsors and trustees in their plan funding decisions and to ensure that other stakeholders are informed of those decisions and how they have been made. The report does not address the appropriateness of current financial

reporting for public plans nor whether those requirements should be re-examined. The report does not address the most appropriate means of assessing the economic value of pension benefits. The report recommends actions to strengthen financial and risk management practices by providing new information to trustees, funding entities and their elected officials, employees and their unions, taxpayers and other stakeholders. This information will help stakeholders better understand the risks being taken and borne by plans and how best to develop a long-term funding program. In addition, the Panel makes recommendations about the actuary's role in developing funding recommendations and calls for improvements in plan governance, both of which can foster more effective decision making.

Funding Principles

The Panel believes that pension obligations should be pre-funded in a rational and sustainable manner by funding benefits for employees over their public service career. An effective funding program should follow three principles:

- **Adequacy.** Funding entities and plan trustees should strive to fund 100 percent of the obligation for benefits using assumptions that are consistent with median expectations about future economic conditions, i.e., the assumptions are estimated to be realizable 50 percent of the time. Financial resources, including both

current assets and future contributions, should be adequate to fund benefits over a broad range of expected future economic outcomes. Programs should be funded at levels that will enable them to respond to changing conditions and maintain a high degree of resilience in order to cope with uncertain future conditions. The stress testing recommended herein will provide information that will help to develop the requisite financial flexibility.

- **Intergenerational equity.** Intergenerational equity refers to the desire for the full cost of public services, including pensions earned by public employees, to be paid by those receiving the benefits of those services. The Panel believes that fully funding pension benefits over the average future service period of public employees reasonably aligns the cost of today's public services with the taxpayers who benefit from those services.
- **Cost stability and predictability.** The Panel believes that cost stability (i.e., level or nearly level costs over an intermediate period) is often at odds with the goals of adequacy and intergenerational equity. The Panel also recognizes that predictability of costs in the short-term is important for public budgeting processes. Allocating a significant portion of investments to higher-risk, more volatile assets will tend to undermine the goal of cost stability, especially for plans with a rising retiree population compared to active employees. To support the objective of "keeping the pension promise," the Panel believes that adequacy and intergenerational equity should take

precedence over the goal of cost stability and predictability.

Recommended Risk Measures, Analyses And Disclosures

The Panel believes that the risk management practices of public pension plans should be strengthened to provide stakeholders with the information they need to make more informed and effective decisions about plan funding, including more comprehensive information about the current and expected future financial position of the trust and of the nature and extent of risks facing public pension plans. The Panel recommends that the following information be disclosed:

- **Trends in financial and demographic measures.** To support an assessment of the implications of trends in the plan's financial position and participant profile, actuarial funding reports should contain, for the past 10 years, information presenting the relationship of benefit payments, funding liabilities, and assets to payroll; the relationship between the recommended contribution to payroll and to the sponsor's budget or revenue source; and the ratio of contributions made to the recommended contribution.
- **Measures of risk to the plan's financial position.** To understand current risk levels, three benchmarks should be disclosed: 1) the expected standard deviation of investment returns of the asset portfolio on the report date; 2) the plan liability and normal cost

Summary of Recommendations continued

calculated at the risk-free rate, which estimates the investment risk being taken in the investment earnings assumption; and 3) a standardized plan contribution for assessing the aggregate risks to the adequacy of the recommended contribution.

- **Stress testing.** Stress tests of future financial positions should be disclosed in an effort to measure investment and contribution risks. Such tests, constituting 30-year financial projections, should be conducted using the following assumptions: 1) returns at a standardized baseline and at returns of 3 percentage points more and less than the baseline assumption and 2) funding entities making 80 percent of recommended contributions.
- **Undiscounted cash flows.** Users of plans' and funding entities' financial statements should be able to develop their own calculation of plan obligations. Therefore, the Panel recommends that two sets of benefit payment projections be provided for current employees, one on an accrued (earned-to-date) basis and one on a projected benefits basis.

Recommendations Regarding The Role Of The Actuary

The Panel urges the Actuarial Standards Board (ASB) to require the financial and risk measures outlined above be disclosed in actuarial reports. It also urges the ASB to require actuaries to include in their actuarial reports an opinion

on the reasonableness of funding methods and assumptions. Finally, the Panel makes specific recommendations on methods and assumptions used by plans for the purposes of funding calculations; specifically, discount rates, amortization periods, asset smoothing, and the use of direct rate smoothing or alternative funding methods:

- **Discount rates.** The Panel recognizes that historical returns, adjusted for expected changes in future conditions, are a common reference point. However, the Panel believes that the rate of return assumption should be based primarily on the current risk-free rate plus explicit risk premia or on other similar forward-looking techniques.
- **Amortization periods.** Amortization of gains/losses should be completed over a period of no more than 15 to 20 years.
- **Asset smoothing.** Asset smoothing periods should be limited to five years or less
- **Direct rate smoothing methods.** The Panel encourages the consideration of direct rate smoothing and other asset and liability cash flow modeling techniques. Such approaches can provide greater transparency into the current financial position of the trust, the level of risk in funding assumptions, and enhanced flexibility to sponsors in the development of sustainable funding programs. The Panel notes that care must be exercised in the use of such approaches to avoid deferring contributions that would reduce the ability of

the funding program to meet adequacy and intergenerational equity goals.

Recommendations Regarding Plan Governance

The Panel considered governance in its broadest definition: how stakeholders responsible for plan funding make and implement funding decisions. Each pension system structure is unique and the Panel makes no specific recommendations on the best governance structure. However, several characteristics of good governance that all systems should adopt are recommended, including:

- Maximizing the likelihood that funding objectives outlined by the Panel will be achieved. This includes ensuring that recommended contributions are paid, disclosing complete information about the plan's finances to all stakeholders, and not using funding instruments and other financial instruments that delay cash contributions.
- Ensuring trustees have sufficient information and institutional structures to analyze risk, including establishing guidelines for the amount of risk that can be appropriately assumed.
- Provide proper and timely training of trustees.
- Careful consideration of plan changes, such as requiring that consideration and adoption of plan changes be completed over two legislative sessions (or their equivalent), adopting a formal process for evaluating the emerging cost and participant implications

of adopted plan changes and avoiding certain high-risk plan features while actively considering plan features that enhance plans' flexibility for responding to unexpected experience.

The Panel's recommendations were developed following an extensive information gathering and analysis process. The Panel's recommendations are those of the Panel and are consensus recommendations, with the exception of Mr. Musuraca. Mr. Musuraca was an active and valuable participant in the Panel's discussions and deliberations, but concluded that he could not fully support this report's findings and recommendations.

Panel Biographies

Bradley Belt

Bradley Belt is Vice Chairman of Orchard Global Capital Group and Chairman of Palisades Capital Management. He previously served under President George W. Bush as the Chief Executive Officer of Pension Benefit Guaranty Corporation (PBGC), where he helped shape the Administration's retirement security policy. He was also appointed by the President to the Social Security Advisory Board and earlier served in senior staff positions in Congress, including as counsel to the Senate Banking Committee, and at the Securities and Exchange Commission.

Andrew G. Biggs – Panel Co-Vice Chair

Andrew G. Biggs is a Resident Scholar at the American Enterprise Institute (AEI), where he studies Social Security reform, state and local government pensions, and public sector pay and benefits. Biggs was the Principal Deputy Commissioner of the Social Security Administration, where he oversaw policy research efforts. Additionally, he worked on Social Security reform as an Associate Director of the White House National Economic Council.

Dana K. Bilyeu

Dana K. Bilyeu previously served as the Executive Officer of the Public Employees' Retirement System of Nevada. She was responsible for all aspects of fund management including analysis of plan funding, investment oversight, operational and strategic planning, and fiduciary and governance issues. She is currently the Executive Director of NASRA, the National Association of State Retirement Administrators. Bilyeu is in her second term on the Federal Retirement Thrift Investment Board (FRTIB).

David Crane

David Crane is a lecturer in the Public Policy Program at Stanford University and President of Govern For California. He served as Special Advisor to Governor Arnold Schwarzenegger and was appointed by Schwarzenegger as a trustee for the California State Teachers' Retirement System for 2005 to 2006. Crane was a partner at financial services company Babcock & Brown from 1979 to 2003.

Douglas J. Elliott – Panel Co-Vice Chair

Douglas J. Elliott is a Fellow in Economic Studies at The Brookings Institution. He was a financial institutions investment banker for two decades, principally at J.P. Morgan. He was the Founder and Principal Researcher for the Center on Federal Financial Institutions (COFFI), a think tank devoted to the analysis of federal insurance and lending activities. He has worked extensively with pension issues both as an investment banker and in his in-depth analyses of the Pension Benefit Guaranty Corporation and the defined benefit system while at COFFI.

Malcolm Hamilton, FSA, FCIA

Malcolm Hamilton was a Partner with Mercer from 1979 until his retirement in 2012. He specialized in the design and funding of pension plans in both the private and public sectors and served as the actuary to several major pension funds, including the Ontario Teachers' Pension Plan. He is currently a Senior Fellow with the C.D. Howe Institute.

Laurence Msall

Laurence Msall is President of the Civic Federation, an independent, non-partisan government research organization founded in 1894 whose membership includes business and professional leaders from a wide range of Chicago area corporations, professional service firms and institutions. Prior to joining the Civic Federation, Msall was the Senior Advisor for Economic Development for Illinois Governor George H. Ryan.

Mike Musuraca

Mike Musuraca is Managing Director of Blue Wolf Capital Partners LLC, a private equity firm. He was an Assistant Director in the Department of Research and Negotiations, District Council 37 of the American Federation of State, County, and Municipal Employees (AFSCME), AFL-CIO. He was a Designated Trustee to the New York City Employees Retirement System (NYCERS).

Bob North, FSA, FSPA, FCA, MAAA, EA

Bob North is Chief Actuary for the New York City Retirement Systems. In this capacity he serves as Technical Advisor to the Boards of Trustees of these Retirement Systems. He previously served as Director of Forecasting and Planning Services with Buck Consultants, Inc., as a Consultant with Towers Perrin Forster & Crosby, Inc. and as Chief Administrative Officer with A. Foster Higgins & Co., Inc. He also served as Senior Vice President responsible for a subsidiary corporation and for corporate-wide human resource and administrative functions for Ocwen Financial Corporation.

Richard Ravitch

Richard Ravitch is Co-Chair of the State Budget Crisis Task Force. He previously served as Lieutenant Governor of the State of New York. He served as Chairman of the New York State Urban Development Corporation, the Metropolitan Transportation Authority of New York, the Bowery Savings Bank, and HRH Construction Corporation.

Bob Stein, FSA, MAAA, CPA – Panel Chair

Bob Stein served as Global Managing Partner of Actuarial Services of Ernst & Young prior to his retirement. He held a number of managing partner roles including actuarial, insurance and financial services practices in the United States and globally. He is Non-Executive Director of Aviva Plc and Non-Executive Director and Chair of the Audit Committee of Assurant, Inc.

Larry D. Zimpleman, FSA, MAAA

Larry D. Zimpleman is the Chairman, President and Chief Executive Officer of the Principal Financial Group since May 2008. He is responsible for the overall management of the company. Zimpleman joined the company in 1971 as an actuarial intern. From 1976 to 2006, he served in various management and leadership positions at the officer level in the pension department.

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