



Update on Funding Policy Discussion for Local Governmental Employees' Retirement System

Board of Trustees Meeting
Larry Langer and Mike Ribble
January 15, 2015

Agenda

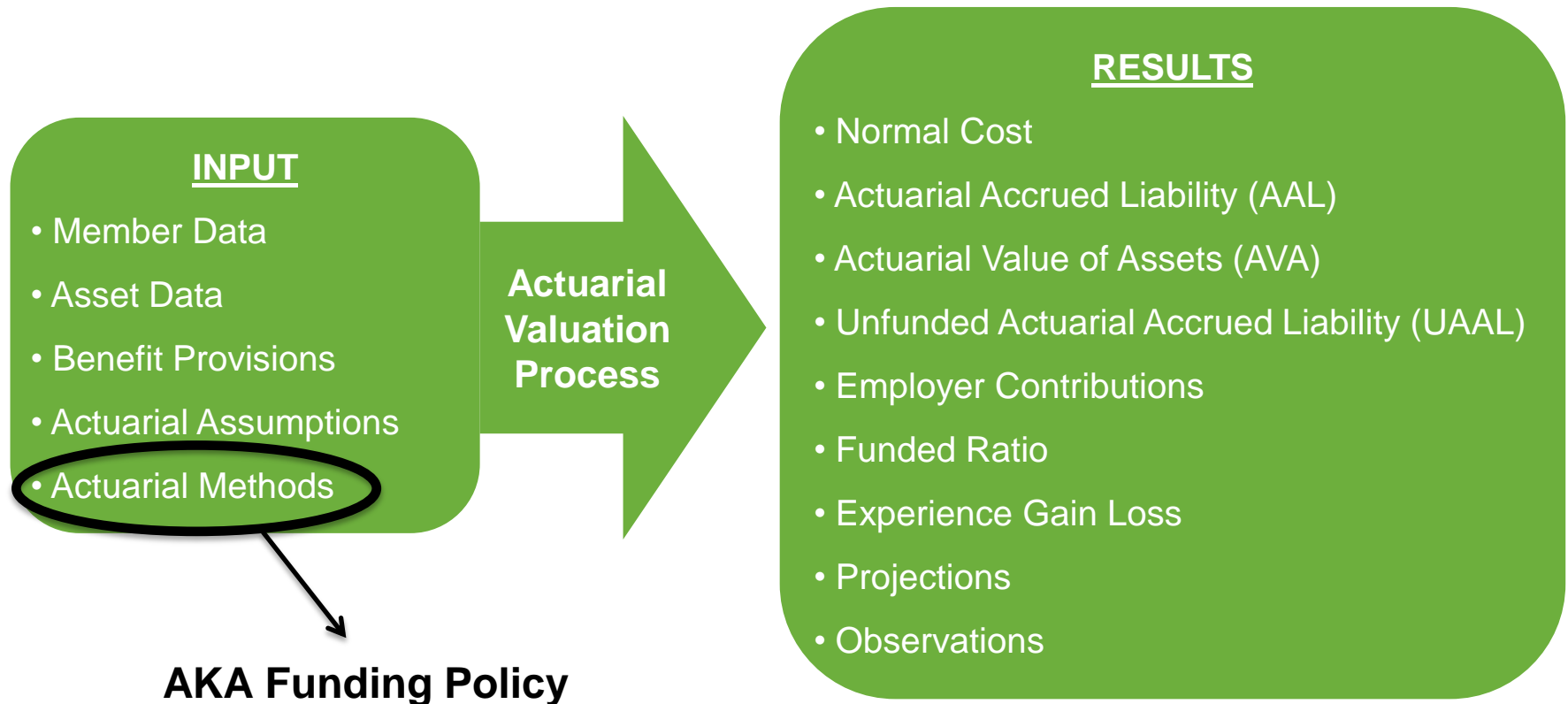
- Actuarial 101 review
- Current Funding Policy Landscape
- Stable Contribution Funding Policy
- Update on timing and transition

Note: this presentation is the same as the October presentation to the Board except for the inclusion of timing and transition slide. Let's head to slides 15 and 16.

Purpose of the Annual Actuarial Valuation

- Each year, the actuary determines the amount of contributions to be made to the Retirement System during each member's career, which, when combined with investment return, will be sufficient to pay for retiree benefits
- This contribution is determined through the annual actuarial valuation, which is summarized in the annual actuarial valuation report
- In addition, the annual actuarial valuation is performed to
 - Determine progress on funding the Retirement Systems
 - Explore why the results of the current valuation differ from the result of the valuation of the previous year
 - Satisfy regulatory and accounting requirements

Actuarial Valuation Process



Actuarial Methods

Actuarial Methods describe the funding policy for the Retirement System. Actuarial Methods generally are comprised of the three components below:

- **Actuarial Cost Methods:** allocate costs to the past, current and future to allow for systematic payment of the costs over a member's career
- **Amortization Payment for UAAL Methods:** determine the payment schedule for unfunded actuarial accrued liability
- **Asset Valuation Methods:** smooth or average the market value returns over time to alleviate contribution volatility that results from market returns that differ from the investment return assumption used in the actuarial valuation

Actuarial methods allow for a considerable amount of flexibility in paying the costs of a Retirement System. The funding policy selected by the Retirement Board should strike a balance between contributions that are stable from year to year but satisfy the actuarial needs of the Retirement System.

Funding Policy

There are three broad considerations when establishing a funding policy for a pension plan

- Sufficiency - The funding target should be the value of benefits accrued to date
- Intergenerational equity – taxpayers should pay for workers' pensions while those workers are providing their services – fund for benefits over the worker's career.
- Stability of contributions – while stable contributions are easy to budget for, stability should not be achieved at the expense of the first two

Funding Policy

- There is no mandated funding policy within the public sector
- For years, the accounting standards under GASB 25 and 27 served as the de facto funding policy of public plans: pay for the cost of benefits accruing and pay off the pension debt over a perpetual period of 30 years or less.
- There are some nice papers on this topic which have been issued in the past few years given the passing of the GASB 25 and 27 standards
- These papers are not binding
- See the appendix for links to some of these papers

Funding Policy

The current Actuarial Methods used to develop contributions for the North Carolina Retirement Systems are well within the recommendations contained in these white papers

- **Actuarial Cost Method:** for most of the systems is entry age normal, which was and continues to be the public sector retirement system gold standard
- **Method of Amortizing Payment of Unfunded Actuarial Accrued Liability (UAAL):** for most of the systems pays down the UAAL in 12 years – a shorter period than the 15 to 20 year period indicated in these white papers
- **Asset Valuation Methods:**
 - 20% of market value plus 80% of the expected actuarial value
 - Asset corridor: not greater than 120% of market value and not less than 80% of market value
 - Is a recommended practice and helps alleviate contribution volatility

Even more important, the contributions recommended by the actuaries have consistently been made to the North Carolina Retirement Systems since inception, resulting in one of the best funded public systems in the country

Funding Policy for Local Governmental Employees' Retirement System

The current Actuarial Methods used to develop contributions for the Local Governmental Employees' Retirement System are slightly different but still well within the recommendations contained in these white papers

- Actuarial Cost Method used is **frozen entry age**, a variation of entry age normal, which requires new units to pay down an initial UAAL over no more than 24 years
- Indirect Method of Amortizing Payment of remaining UAAL pays down the UAAL over the expected future salaries of members (effectively, about 14.9 years) – a shorter period than the 15 to 20 year period indicated in these white papers
- Asset Valuation Method
 - 20% of market value plus 80% of the expected actuarial value
 - Asset corridor: not greater than 120% of market value and not less than 80% of market value
 - Is a recommended practice and helps alleviate contribution volatility

Funding Policy

- This is all good news – right? Well...
- All else being equal, year to year contribution volatility is higher for North Carolina Retirements System
 - Missing the assumed rate of return of 7.25% by just 1.00% increases the contribution by 1.4% in year 1, accumulating to 7.0% over five years as the difference is reflected in the contribution rates

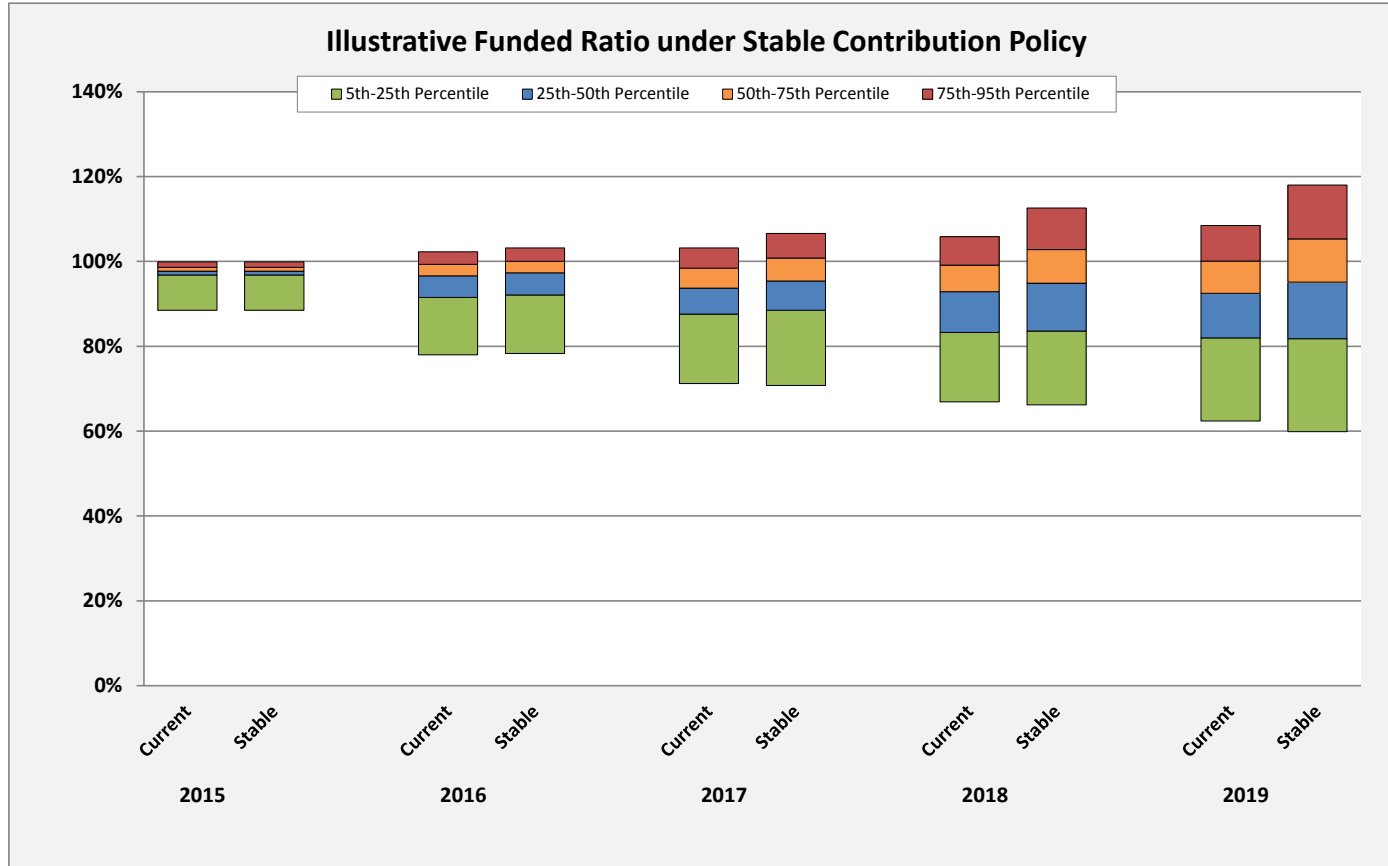
Stable Contribution Funding Policy

- Throughout much of the last decade, the contribution rate was fixed at 4.80% of pay
- Based on the valuation, the contribution rate was less than 4.80%, even zero
- With the market downturn in 2008, the contribution rate based on the valuation began to increase, and contribution stability was set aside in favor of contribution sufficiency
- Effectively this policy was the greater of 4.80% and the contribution rates developed by the actuarial valuation
- Contributions could unexpectedly increase under the previous policy if the markets dropped, which of course happened

Projections: Employer Contribution Rates and Funded Status

- What might a Stable Contribution Funding Policy look like?
 - Instead of resetting the contribution rate with each valuation, reset the rate less frequently, say every 3 to 5 years at predetermined intervals
 - Monitor the impact of the policy annually with the actuarial valuation
- Use Asset Liability Modeling to project the funded ratio based on current provisions, census and portfolio using:
 - The current funding policy
 - Various Stable Contribution Rates
- Set the Stable Contribution Rate at a level such that the funded ratio is projected to be higher than the current policy of resetting the contribution rate annually more than 50% of the time (or preferably higher)

Stable Contribution Funding Policy

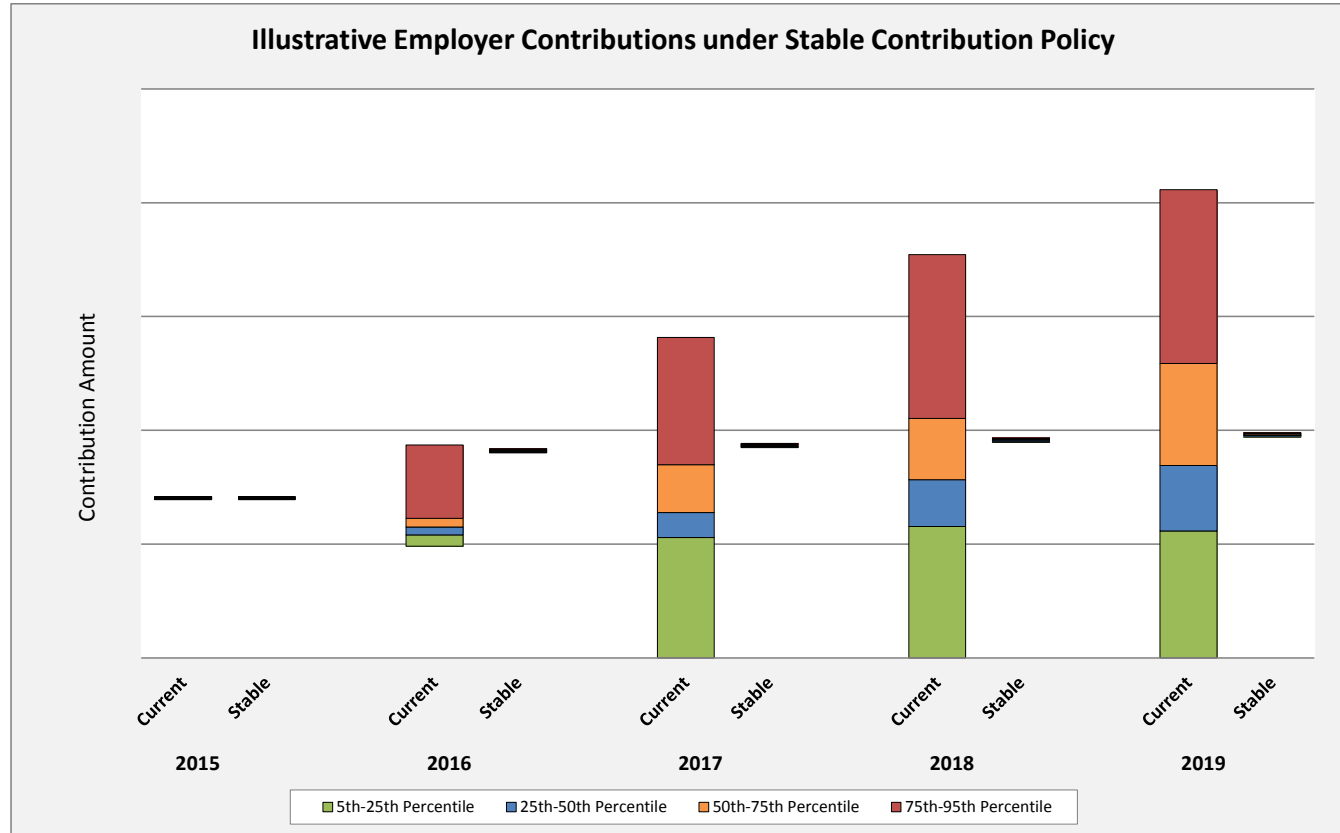


Stable contribution Funding Policy has higher funded ratio in stronger markets...

but lower funded ratio in weak markets.

NOTE: The above is not based on LGERS. Actual results will vary.

Stable Contribution Funding Policy



To achieve the higher funded ratios in down markets under the current policy, contributions would have to rise.

While a Stable Contribution Funding Policy would not eliminate the need for rising contributions in down markets, it would remove the need for annual contribution increases.

NOTE: The above is not based on LGERS. Actual results will vary.

Stable Contribution Funding Policy

- Other considerations
 - Projected contribution rate decreases make this an opportunistic time to consider a Stable Contribution Funding Policy
 - Legislative authority would be needed
 - Timing with experience review
 - Impact on January Board decisions concerning ARC, ad hoc COLA and multiplier
 - Perception when Stable Contribution Rate is lower or higher than the current funding policy
 - Impact on GASB
 - Next steps?

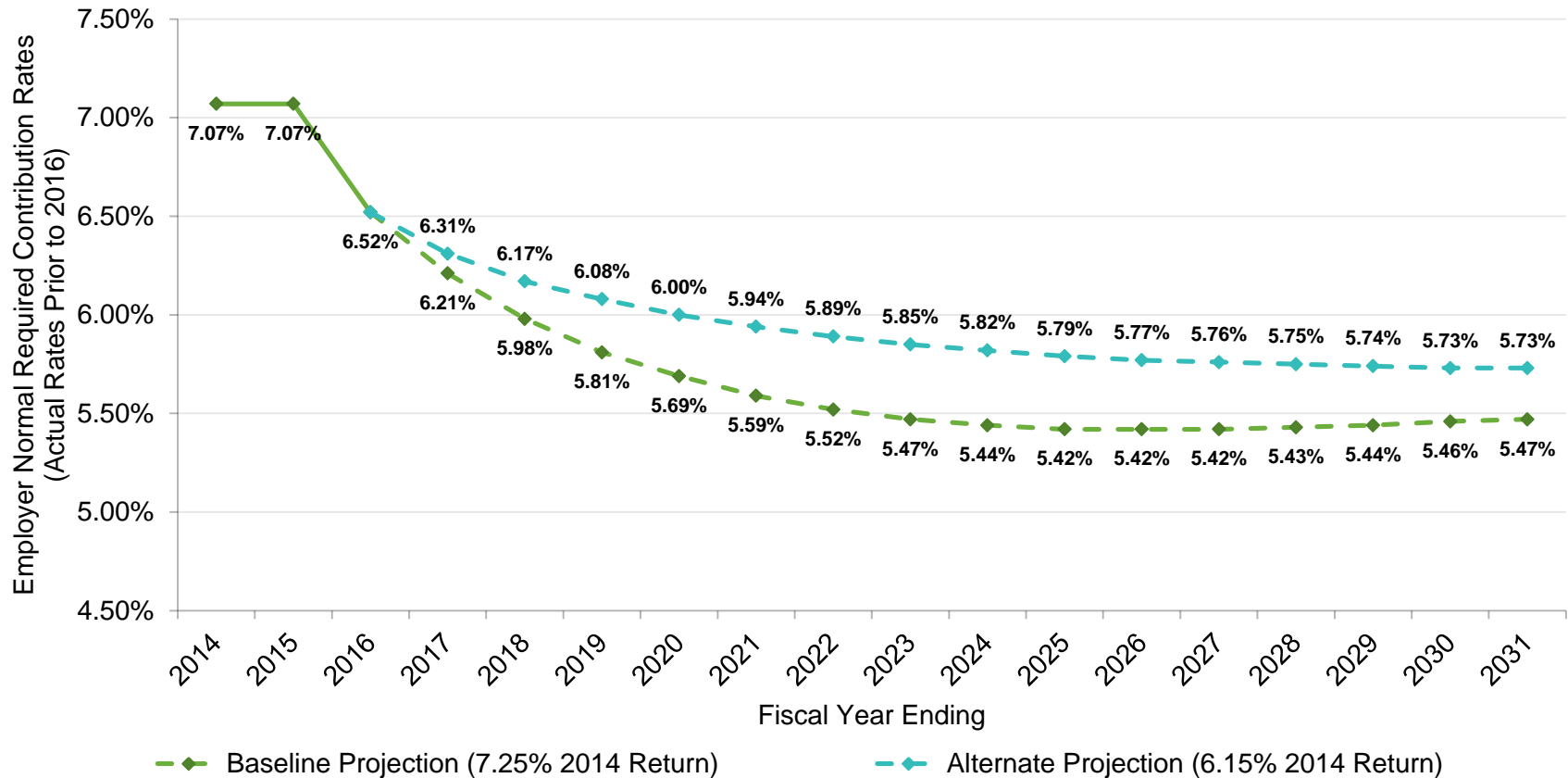
Timing and transition

- Timing
 - Buck Consultants will be performing the Five Year Experience Review during 2015
 - This Experience Review will serve as the basis for the assumptions to be used for the December 31, 2015 through December 31, 2019 Actuarial Valuations
 - These valuations are the basis for the employer contribution rates for fiscal years ending June 30, 2018 through June 30, 2022.
 - The recommended changes in assumptions from the Experience Review could materially impact the employer contributions rates
 - We recommend that the Stable Contribution Policy Rate not be set until after the results of the Experience Review has been implemented
 - The first Stable Contribution Policy Rate would be effective fiscal year ending June 30, 2018

Timing and transition

- Transition
 - How could we bridge the gap from July 1, 2015 to June 30, 2017
 - Based on the results of the December 31, 2013 Actuarial Valuation presented at the last Board meeting:
 - The Preliminary Employer Normal Rate for fiscal year ending June 30, 2016 is 6.52%
 - This is a reduction from the 7.07% rate currently in effect
 - Based on our projections presented at the October Board meeting, if all assumptions are met – including a 7.25% return from January 1, 2014 forward, we project that the Employer rate will decrease by about 1% over the next several years
 - We have updated those projections based on estimated 2014 returns. We now project a decrease of about 0.75% over the next several years
 - This projected decrease provides for some cushion when establishing the stable contribution rate
 - A rate in the range of 6.52% to 7.07% after implementation of COLAs would be reasonable for fiscal year ending June 30, 2017.
 - All else being equal, maintaining a higher rate now will lower the likelihood of an increase in contributions when the Stable Contribution Policy Rate is set for fiscal year ending June 30, 2018.

Projections: Projected Employer Normal Required Contribution Rates for General Employees and Firefighters



Estimated returns were 1.1% lower than expected. As a result, we are projecting that the unfunded accrued liability will be higher resulting in higher contributions.

Conclusion

A Stable Funding Contribution Policy can be constructed that achieves stable and predictable contribution levels and maintains the actuarial integrity of the North Carolina Retirement Systems.

Certification

The results were prepared under the direction of Michael Ribble and Larry Langer who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. These results have been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions about them.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law.

Michael A. Ribble, FSA, EA, MAAA
Principal, Consulting Actuary

Larry Langer, ASA, EA, MAAA
Principal, Consulting Actuary

Public Sector Retirement System Funding Policy Resources

- Conference of Consulting Actuaries Public Plans Community White Paper "Actuarial Funding Policies and Practices for Public Pension Plans"
<http://www.ccactuaries.org/publications/news/cca-ppc-white-paper.cfm>
- American Academy of Actuaries Issue Brief "Objectives and Principles for Funding Public Sector Pension Plans" http://www.actuary.org/files/Public-Plans_IB-Funding-Policy_02-18-2014.pdf
- California Actuarial Advisory Panel White Paper "Model Actuarial Funding Policies and Practices for Public Pension and OPEB Plans" http://www.sco.ca.gov/Files-ARD/BudLeg/CAAP_Funding_Policies_w_letter.pdf
- Report from the Pension Funding Task Force 2013 (convened by the Center for State and Local Government Excellence) "Pension Funding: A Guide for Elected Officials"
http://www.nctr.org/pdf/PensionFundingGuideBrief_Final.pdf
- GFOA Best Practice "Funding Defined Benefit Pensions" <http://www.gfoa.org/funding-defined-benefit-pensions> (no PDF)
- GFOA Best Practice "Core Elements of a Pension Funding Policy" <http://www.gfoa.org/core-elements-funding-policy> (no PDF)
- Society of Actuaries Blue Ribbon Panel on Public Pension Plan Funding "Report of the Blue Ribbon Panel on Public Pension Plan Funding" (report, summary, video and guide)
<https://www.soa.org/blueribbonpanel/>

Questions?

THANK YOU