CalPERS

Finance and Administration Committee
Agenda Item 7b

September 17, 2019

Item Name: Pension Modeling Tool – "Pension Navigator"

Program: Actuarial Office

Item Type: Information

Executive Summary

This agenda item presents a new modeling tool that stakeholders will be able to use to generate projected funded status and contribution results under various scenarios. Information generated by the tool can be used for educational and planning purposes.

Strategic Plan

This item is presented as part of the regular ongoing workload of the Actuarial Office and supports the Fund Sustainability Goal of the CalPERS 2017-2022 Strategic Plan.

Background

The funding of CalPERS is a long-term and complex process. Economic assumptions used in the actuarial valuations are based on long-term best estimates based on the analysis provided during the 2017 ALM Workshop. Other actuarial assumptions such as mortality, pay increases, etc. are based on the results of the 2017 Experience Study. Cost projections for the next 5 years are provided in the annual valuation reports based on these baseline assumptions. Additionally, the valuation reports include short-term contribution projections under alternate investment return scenarios.

The Actuarial Office with help from the Enterprise Solutions Development Division has developed a new tool called "Pension Navigator" which will allow stakeholders to model the funded status of the pension system as a whole or a specific non-pooled plan using baseline or alternate assumptions over 10, 20 or 30 years. In addition, projections of annual employer contribution requirements are provided for the desired period for specified non-pooled plans.

Analysis

The following items can be modeled by the user to project funded ratio's, assets, liabilities, unfunded liabilities, and employer contributions into the future (10, 20 or 30 years) and compare these to the baseline projections set by the most recent valuation reports:

- Investment Returns - user specified returns can be input or random investment return scenarios from the 2017 ALM Workshop can be utilized.
- Discount Rate – rates ranging from 6% to 8% can be modelled by the user, providing the estimated impact on future contribution requirements.
- PEPRA – modeling the impact on potential cost savings due to the transition from Classic members to PEPRA members can be done over 10, 15 or 20 years.
- Additional Discretionary Payments (ADP's) – users can choose the amount and number of years of payments to see the potential savings of making ADP's.

Within the Pension Navigator application, there is also a Budgeting tab that can assist agencies with the projection of employer contribution requirements under alternative modelling scenarios. These budget forecasts can be used by agencies for planning purposes or to demonstrate the need for contingency reserves.

Budget and Fiscal Impacts

This section is not applicable to this agenda item.

Benefits and Risks

The Pension Navigator tool will allow agencies to create funded status and contribution projections under multiple scenarios, providing valuable information for budgeting and planning purposes. In addition, by demonstrating the financial benefits of additional discretionary payments (ADPs), we anticipate broader use of these which will improve funded statuses and benefit security for members.

There are potential risks of agencies misunderstanding results, possibly leading to actions that result in perceived unfavorable outcomes. In addition, due to the broad availability of the tool, projection scenarios can be created by individuals who may unintentionally or intentionally use them in a detrimental fashion by mischaracterizing results or not disclosing information important to the understanding of the results.

Attachments

Attachment 1 – Introduction to Pension Navigator - Power Point Presentation

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