



Finance and Administration Committee Agenda Item 3f

April 18, 2017

Item Name: Actuarial Valuation Report for the 1959 Survivor Benefit Program

Program: Actuarial Office

Item Type: Action Consent

Recommendation

1. Approve the 1959 Survivor Benefit Program Actuarial Valuation Report as of June 30, 2016 and the corresponding transmittal letter to the Governor and Legislature.
2. Adopt the employer and employee monthly premiums for Fiscal Year 2017-18 as set forth in the table on Page 2 of this agenda item and in Attachment 2.

Executive Summary

The following table summarizes the key results and funded status from the valuation:

<u>Plan</u>	<u>Accrued Liability</u>	<u>Market Value of Assets (MVA)</u>	<u>Funded Ratio</u>
State 5 th Level Pool	\$ 146,264,802	\$ 104,309,600	71.3%
Schools 5 th Level Pool	\$ 12,856,706	\$ 70,543,063	548.7%
PA 1 st Level Pool	\$ 2,727,022	\$ 43,713,899	1,603.0%
PA 2 nd Level Pool	\$ 2,487,505	\$ 10,495,726	421.9%
PA 3 rd Level Pool	\$ 28,559,335	\$ 104,701,900	366.6%
PA 4 th Level Pool	\$ 130,143,117	\$ 138,750,170	106.6%
PA Indexed Level Pool	\$ 19,296,481	\$ 22,719,925	117.7%
Total	\$ 342,334,968	\$ 495,234,282	144.7%

The Funded status of all pools have decreased slightly from the previous valuation predominantly due to net investment returns of approximately 0.3% for the year ending June 30, 2016 being less than the assumed 7.50% return. The Funded status of Schools 5th Level Pool has increased slightly from the previous valuation because the total number of active members has decreased slightly.

The resulting 2017-18 Employer and Employee Premium levels and a comparison with the premiums for the previous year are as follows. :

Plan	2016-17 Premium			2017-18 Premium		
	Employer	Employee	Total	Employer	Employee	Total
State 5 th Level Pool*	\$5.15	\$5.15	\$10.30	\$5.20	\$5.20	\$10.40
Schools 5 th Level Pool*	\$0.00	\$2.00	\$2.00	\$0.00	\$2.00	\$2.00
PA 1 st Level Pool	\$0.00	\$2.00	\$2.00	\$0.00	\$2.00	\$2.00
PA 2 nd Level Pool	\$0.00	\$2.00	\$2.00	\$0.00	\$2.00	\$2.00
PA 3 rd Level Pool	\$0.00	\$2.00	\$2.00	\$0.00	\$2.00	\$2.00
PA 4 th Level Pool	\$4.30	\$2.00	\$6.30	\$5.20	\$2.00	\$7.20
PA Indexed Level Pool*	\$2.75	\$2.75	\$5.50	\$3.50	\$3.50	\$7.00

* Section 21581 of the California Public Employees' Retirement Law requires mandatory cost sharing when the total premium exceeds \$4.00.

A Mandatory premium of \$2.00 per member per month is required for each plan.

Strategic Plan

This action item is being presented as part of the regular and ongoing workload of the Actuarial Office and supports the Strategic Plan Goal A: Improve long-term pension and health benefit stability.

Background

The 1959 Survivor Benefit program provides six different levels of survivor benefits for employees who die while actively employed and without Social Security coverage. The program is intended to serve as a replacement for the survivor benefits that would otherwise be provided by Social Security.

All levels of the 1959 Survivor Program are "pooled" benefits. For all levels other than the Indexed Level, participating employers contribute a monthly amount per member as determined by the Term Insurance Method. The use of this method is specified by State Statute Sections 21574.7(f), 21574(e), 21573(h), 21572(i), and 21571(g).

For the Public Agency Indexed Level of the 1959 Survivor benefit, participating employers contribute a monthly amount per member as determined by the Entry Age Normal Method. The use of this method was determined by the Board as specified by State Statute 21574.5(f). In all cases contributions are billed to employers apart from the employer's contribution rate for retirement and disability benefits. For those employers in each pool as of the valuation date, the employer Normal Cost is adjusted by an amortization of the surplus or unfunded liability.

Consistent with the Board's decision to lower the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations, the valuation discount rate in this annual valuation was lowered from 7.50 percent to 7.375 percent. This change has not had a significant impact on the level of recommended employer and employee premiums for the Fiscal Year 2017-18. This is mainly due to the large surpluses in the various pools.

Analysis

On December 21, 2016, the CalPERS Board of Administration lowered the discount rate from 7.50 percent to 7.00 percent using a three year phase-in beginning with the June 30, 2016 actuarial valuations. As a result, the discount rate for the valuation of the 1959 Survivor Program liabilities was also decreased to 7.375 percent and resulted in the following increases in liabilities by pool.

Additional Liabilities due to the Change in Discount Rate

Pool	June 30, 2016
State 5 th Level Pool	\$ 1,458,901
Schools 5 th Level Pool	\$ 121,359
PA 1 st Level Pool	\$ 28,143
PA 2 nd Level Pool	\$ 25,391
PA 3 rd Level Pool	\$ 299,361
PA 4 th Level Pool	\$ 1,344,105
PA Indexed Level Pool	\$ 321,475
Total	\$ 3,598,736

The next exhibit below shows a 4-year history of the funded status between valuation dates for each pool on a market value basis. Overall, it can be seen that the recent investment losses negatively impacted the funded status of the 1959 Survivor Program.

Market Value Funded Status 2013-2016

Pool	2013	2014	2015	2016
State 5 th Level Pool	73.1%	81.7%	76.7%	71.3%
Schools 5 th Level Pool	451.6%	566.2%	529.9%	548.7%
PA 1 st Level Pool	1,495.8%	1,736.4%	1,687.9%	1,603.0%
PA 2 nd Level Pool	377.1%	449.7%	428.0%	421.9%
PA 3 rd Level Pool	338.4%	389.1%	380.0%	366.6%
PA 4 th Level Pool	108.6%	119.4%	113.6%	106.6%
PA Indexed Level Pool	113.6%	129.9%	127.3%	117.7%
Total	139.4%	158.3%	152.0%	144.7%
Fund Return	12.7%	17.4%	2.0%	0.3%

All pools in the 1959 Survivor program realized a return of approximately 0.3 percent for Fiscal Year 2015-16, which was below our assumed long-term rate of return on assets of 7.50 percent. With the provided funded statuses at June 30, 2016, we would expect the pools other than State to continue to be very adequately funded with the current level of employer and employee premiums, even with the reduction in the valuation discount rate.

Budget and Fiscal Impacts

Not applicable.



Benefits and Risks

It is essential that all risk transfer/pooling systems, including both pension and insurance, be regularly reviewed and premium levels, contribution requirements and/or reserve levels be adjusted to ensure the ongoing financial soundness of the systems.

The 1st, 2nd 3rd and Schools 5th Level are all extremely well-funded and hence there is a very low risk in those levels. The 4th and Indexed Levels have a healthy level of assets but are subject to significant market risk and should continue to be monitored. The State 5th Level has an unfunded liability and hence is at greater risk than the other levels. The premiums are set at a level to address the unfunded liability but further action may be needed and this level should be closely monitored in the future.

An important risk is the risk that the PERF does not earn the assumed 7.375 percent return over the long term. A discount rate sensitivity analysis reflects the premiums that would be required for 2017-18 assuming a valuation discount rate of 1 percent lower (6.375 percent) and 1 percent higher (8.375 percent) than the assumed discount rate of 7.375 percent. This analysis gives an indication of the potential required contributions if the PERF was expected to achieve investment returns of 6.375 percent or 8.375 percent over the long term.

6.375% Discount Rate (-1%)

	2017-18 Employer Premium	2017-18 Employee Premium
State 5 th Level	\$5.65	\$5.65
Schools 5 th Level	\$0.00	\$2.00
PA 1 st Level	\$0.00	\$2.00
PA 2 nd Level	\$0.00	\$2.00
PA 3 rd Level	\$0.00	\$2.00
PA 4 th Level	\$6.70	\$2.00
PA Indexed Level	\$4.85	\$4.85

Increase in Premium

2017-18 Employer Premium	2017-18 Employee Premium
\$0.45	\$0.45
\$0.00	\$0.00
\$0.00	\$0.00
\$0.00	\$0.00
\$0.00	\$0.00
\$1.50	\$0.00
\$1.35	\$1.35

8.375% Discount Rate (+1%)

	2017-18 Employer Premium	2017-18 Employee Premium
State 5 th Level	\$4.85	\$4.85
Schools 5 th Level	\$0.00	\$2.00
PA 1 st Level	\$0.00	\$2.00
PA 2 nd Level	\$0.00	\$2.00
PA 3 rd Level	\$0.00	\$2.00
PA 4 th Level	\$3.60	\$2.00
PA Indexed Level	\$2.25	\$2.25

Decrease in Premium

2017-18 Employer Premium	2017-18 Employee Premium
(\$0.35)	(\$0.35)
\$0.00	\$0.00
\$0.00	\$0.00
\$0.00	\$0.00
\$0.00	\$0.00
(\$1.60)	\$0.00
(\$1.25)	(\$1.25)

The foregoing analysis reinforces the statement made above that the 1st, 2nd, 3rd and Schools 5th Levels are low-risk for changes in premium levels due to asset returns differing from assumed while the 4th, Indexed and State 5th Levels are more sensitive to premium changes with varying asset returns.



The very high funded status of the 2nd, 3rd and Schools 5th Levels and most especially the excessive funded status of the 1st Level may result in a reputational risk. It would be reasonable for stakeholders and others to question the appropriateness of continuing contributions in these circumstances.

This report is required to be filed with the Governor and the Legislature and CalPERS would not be in compliance with law if not done.

Attachments

Attachment 1 – Transmittal Letter to the Governor and Legislature

Attachment 2 – 1959 Survivor Benefit Program Actuarial Valuation as of June 30, 2016

Kerry Worgan
Senior Pension Actuary

Scott Terando
Chief Actuary