Annual Review of Funding Levels and Risk Report

Finance & Administration Committee November 14, 2018

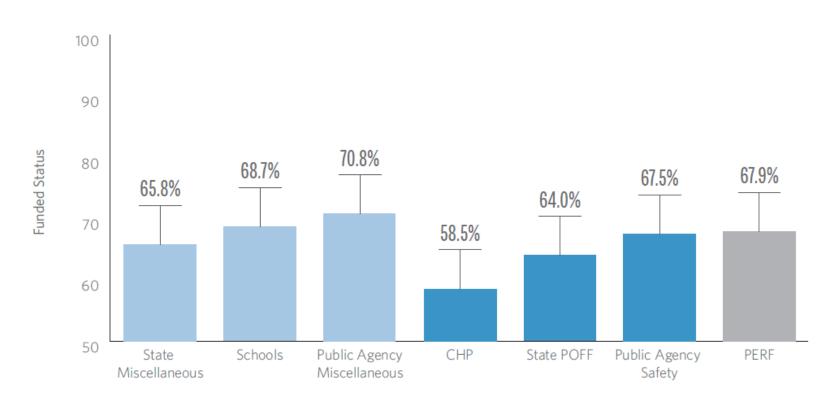
Overview

- Recent trends
 - Improved funded status
 - Lower risk for future low funding levels
- Important risk drivers
 - Discount rate
 - Plan maturity
 - Employer financial pressures
 - Contribution levels
 - Contribution volatility



Recent Trends

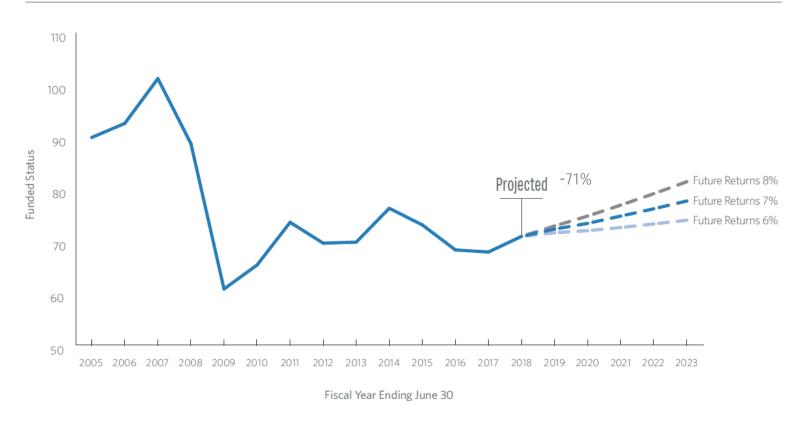
Funded Status Based on June 30, 2017 Funding Valuations using a 7.00% Discount Rate





Recent Trends

PERF Funded Status based on Market Value of Assets (June 30, 2005 to June 30, 2018)





Recent Trends

Probability of Falling Below Given Funding Level (at any point in the next 30 years)

	40%		50%		60%	
Plan	2017	2018	2017	2018	2017	2018
State Misc.	< 1%	< 1%	6%	1%	48%	24%
Schools	< 1%	< 1%	3%	1%	33%	22%
CHP	< 1%	< 1%	15%	2%	100%	100%
POFF	< 1%	< 1%	6%	1%	52%	26%
PA Misc.	< 1%	< 1%	5%	2%	38%	27%
PA Safety	< 1%	< 1%	9%	4%	54%	43%



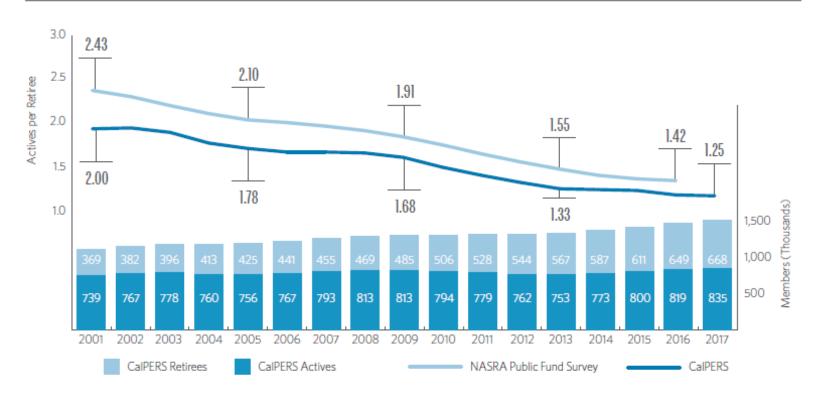
Discount Rate

- Scheduled to reduce to 7.0% for June 30, 2018 valuations
- Further reductions may be necessary if:
 - Capitol market assumptions continue to decrease, or
 - Higher asset allocation toward lower risk investments, or
 - The board chooses to lower the assumption to reflect a margin for adverse deviation



Maturity Measures

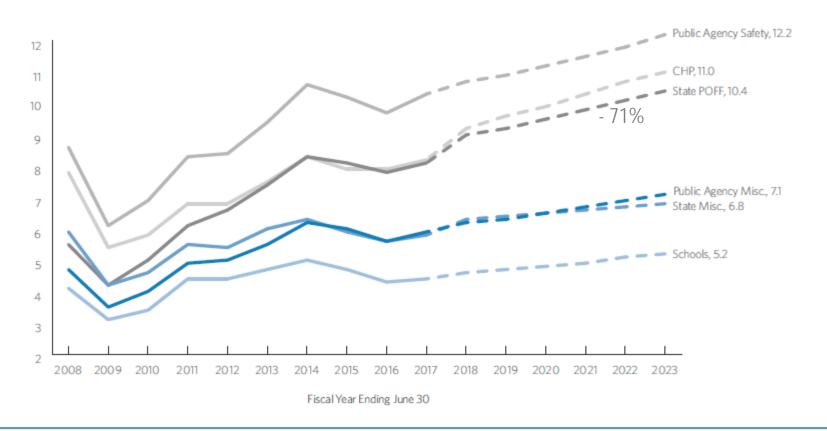
Ratio of Actives to Retirees





Maturity Measures

Asset Volatility Ratio (MVA to Payroll)

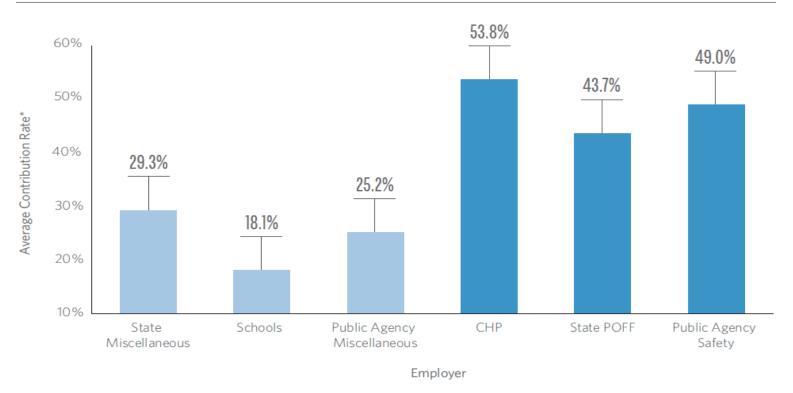




- Average public agency employer contribution rates
 - Miscellaneous plans: 25.2% of payroll
 - Safety plans: 49.0% of payroll
- Required contributions expected to increase over next several years
- Additional discretionary payment (ADPs) have helped
- Risk of increased contribution volatility due to plan maturity and to a lesser extent modifications to the amortization policy



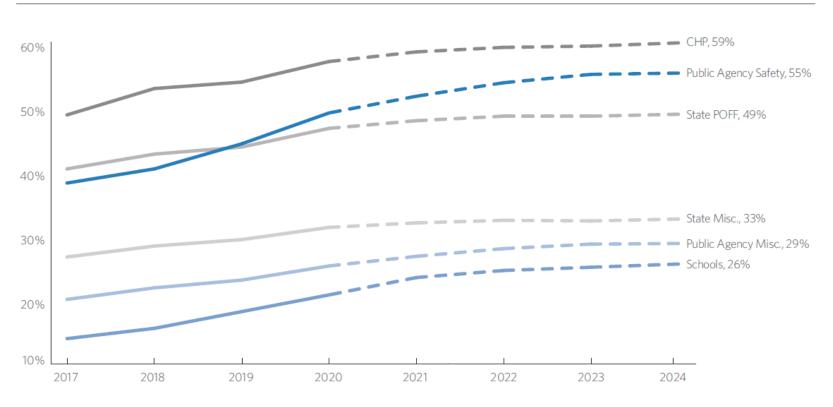
Employer Contribution Rates Based on the June 30, 2017 Valuations*



*June 30, 2017 valuations set rates for FY 2019-20 public agency contribution rates and FY 2018-19 state and schools contribution rates. The contribution rates are based on a 7.25 percent discount rate for state and public agency plans and a 7.375 percent discount rate for the schools pool.



Recent and Projected Employer Contribution Rates





ADP's by Fiscal Year



 $^{\star}\,\text{ADP's}$ from July 1, 2018 through August 31, 2018



Average Funded Ratio of CalPERS Public Agency Miscellaneous Plans by County as of June 30, 2017 Valuations



Average Funded Ratio of CalPERS Public Agency Safety Plans by County as of June 30, 2017 Valuations

