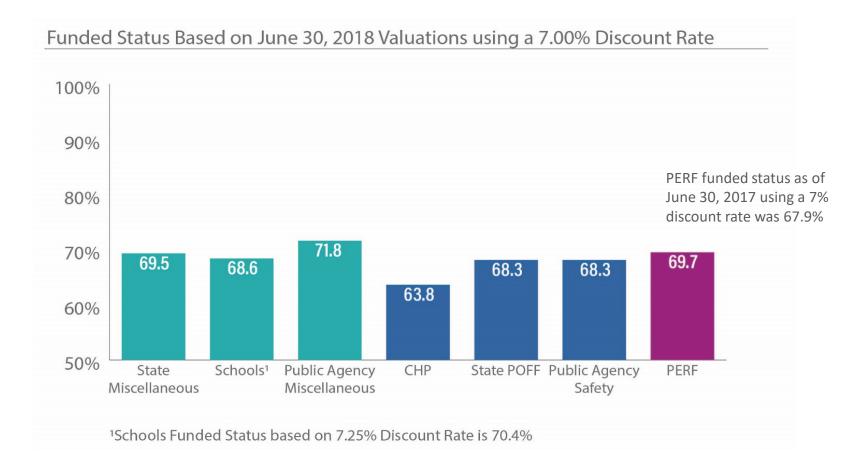
Annual Review of Funding Levels and Risk Report

Finance & Administration Committee
November 19, 2019

Overview

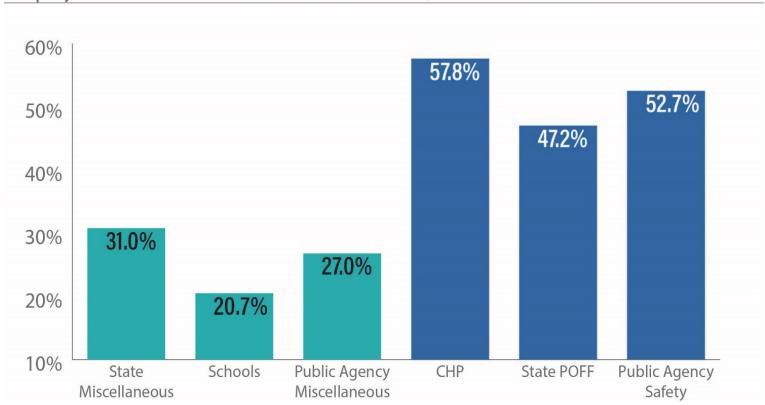
- Recent trends
 - Slowly improving funded status
 - Increasing employer contributions
- Important risk drivers
 - Investment return
 - Plan maturity
 - Employer financial pressures
 - Contribution levels
 - Contribution volatility
 - Discount rate



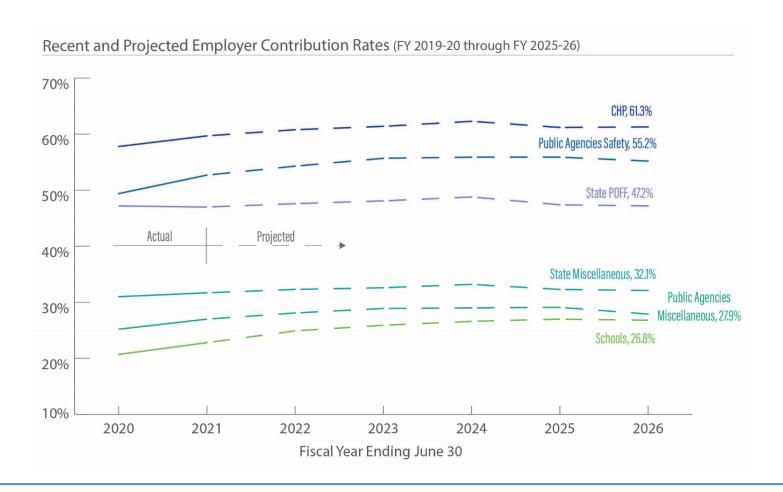




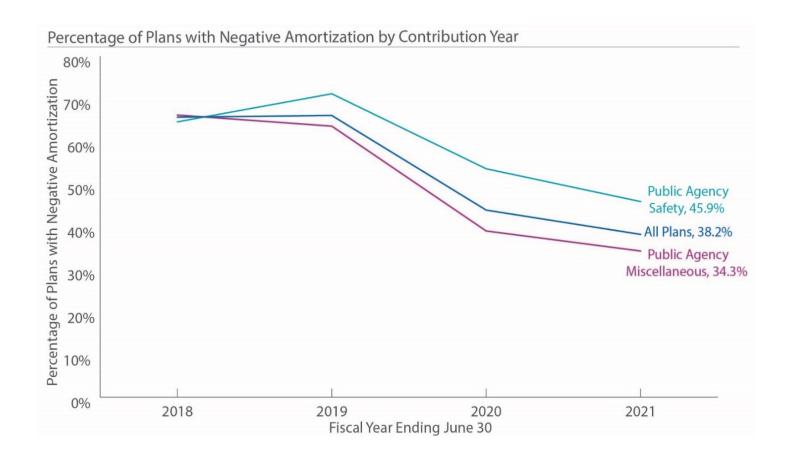




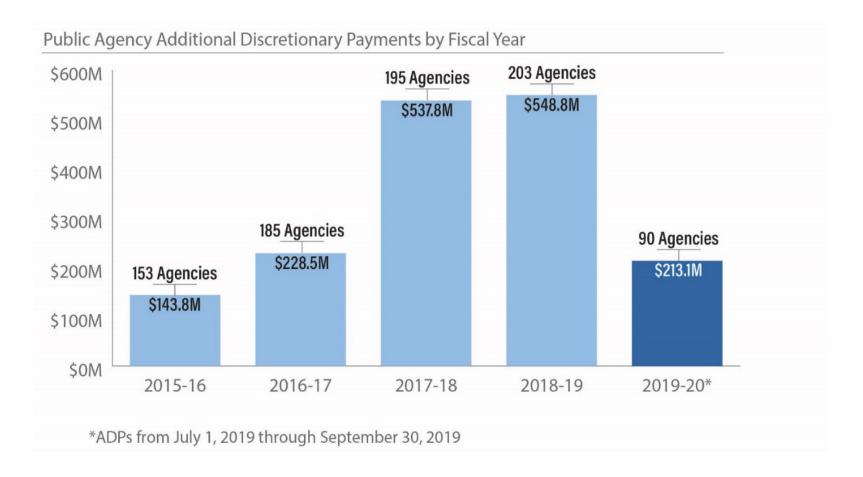






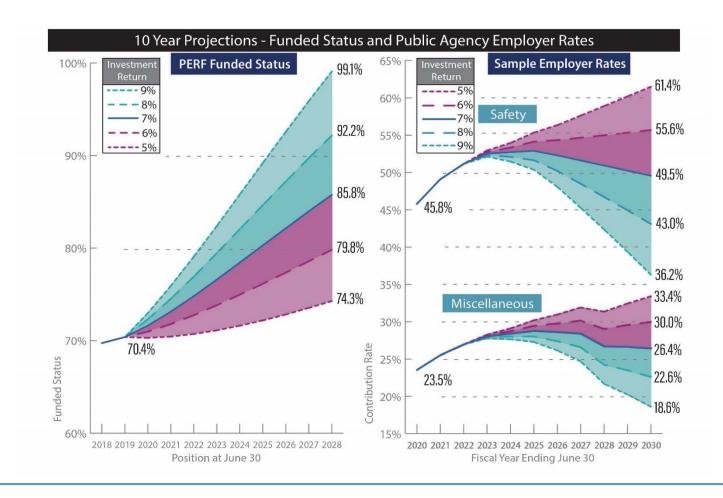






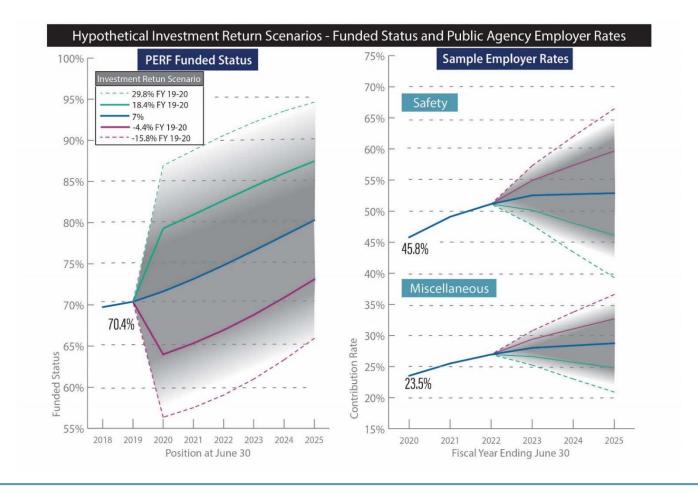


Risk Drivers – Investment Return





Risk Drivers – Investment Return





Risk Drivers – Investment Return

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

Plan	40%	50%	60%
State Misc.	<1%	1%	24%
Schools	<1%	1%	21%
СНР	<1%	2%	39%
POFF	<1%	1%	19%
PA Misc.	<1%	2%	29%
PA Safety	<1%	5%	43%

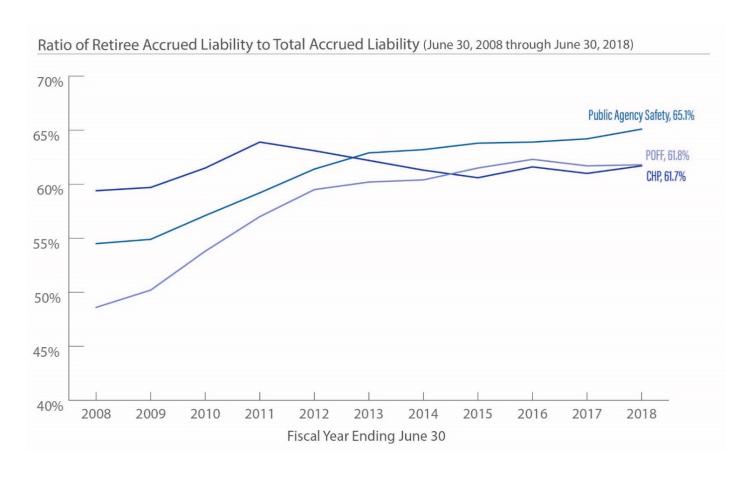


Maturity Measures



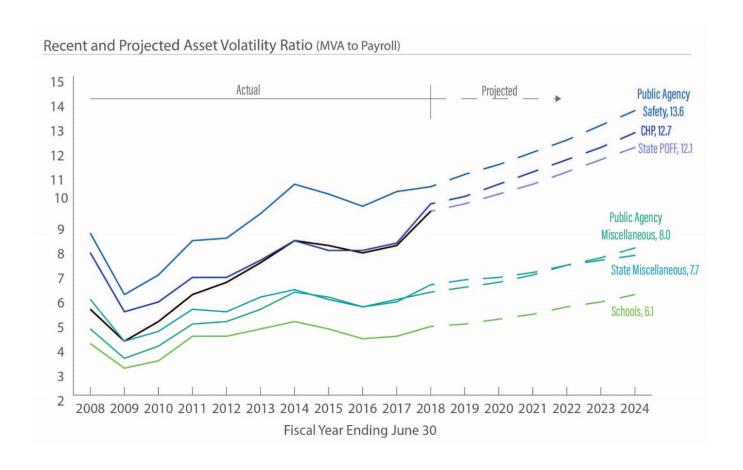


Maturity Measures





Maturity Measures





Employer Financial Pressures

- Average public agency employer contribution rates
 - Miscellaneous plans: 27.0% of payroll (25.2% last year)
 - Safety plans: 52.7% of payroll (49.0% last year)
- 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 Financial Pressures

<u>Probability of Employer Contribution Rate Increases of Selected Magnitudes</u> (at any point in the next 30 years)

Plan	3% of Payroll	5% of Payroll	7% of Payroll
State Misc.	57%	14%	7%
Schools	38%	9%	5%
PA Misc.	43%	11%	6%
Plan	5% of Payroll	7% of Payroll	9% of Payroll
Plan CHP	5% of Payroll 64%	7% of Payroll 32%	9% of Payroll 16%
	,		

Discount Rate

- Reduced 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



Average Funded Ratio of CalPERS Public Agency Plans by Region as of June 30, 2018 Valuations

