

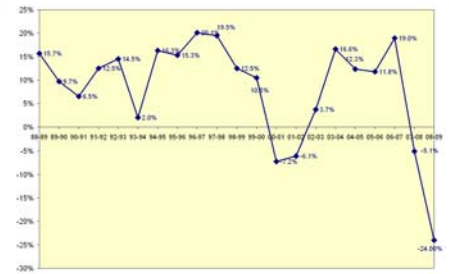


## Impact of Economic Downturn on Employer Contributions and Changes to the CalPERS Smoothing Methods

*Ron Seeling*  
Chief Actuary, CalPERS



## Investment Returns Earned by CalPERS



### Impact of recent market returns

- To maintain the current funded status (whether 60% funded or 100% funded) the trust must meet the long term investment return assumption of 7.75%.
- The 18 months period ending June 30, 2009 provided significant investment market volatility and asset value declines for all investors, CalPERS included.
- CalPERS Return for FY 2007-08 was negative 5.1%. This lowered the funded status by the difference between positive 7.75% and negative 5.1%, i.e. by 12.85%.
- CalPERS Return for FY 2008-09 was negative 24%. This further lowered the funded status by the difference between positive 7.75% and negative 24%, i.e. by another 31.75%.
- CalPERS Return for FY 2009-10 was positive 10% as of October 16, 2009. This is 2.25% greater than the 7.75% assumed. While this is encouraging, the fund is still more than 40% below 100% funding.



### Investment Returns Earned by CalPERS

- CalPERS assumes its long term return will be 7.75%.
  - 1 Year Return: -24%
  - 5 Year Return: 1.5%
  - 10 Year Return: 2.3%
  - 15 Year Return: 6.9%
  - 20 Year Return: 7.4%



- Shared values.  
CalPERS Educational Trust 2008
- ### Is CalPERS Sustainable?
- YES
  - CalPERS has more than enough money to pay benefits for many years into the future. The funded status of plans at CalPERS has decreased. However, the ability to pay benefits remains intact.
  - Nevertheless, many employers may consider their future costs to be unsustainable.
  - Current employer rates are the highest in more than 25 years - currently at levels similar to the rates in the early 1980s. With the decline in investment markets in 2008-2009, rates are expected to be the highest they have ever been.

Shared values.  
CalPERS Educational Trust 2008

### Investment Return Needed for CalPERS to be 100% Funded

- With a -24% return in FY 2008-2009, the funded status of CalPERS is expected to drop near 60%.
- In order for CalPERS to be 100% funded again, the following returns must be achieved in the future:

Time Horizon	Annual Investment Return Needed
By June 30, 2012	27%
By June 30, 2019	13%
By June 30, 2029	10%
By June 30, 2039	9%

- Shared values.  
CalPERS Educational Trust 2008
- ### Perfect Storm
- The public sector is being hit with the "perfect storm."
    - Increase in the number of employees and the associated payroll increases.
    - Employer pension rates will soon be at their highest levels ever.
    - Rising health care costs.
    - Employers are faced with decreasing revenues
    - Solutions will have to result from negotiations between labor and employers



### Investment Return for July 1, 2007 – July 30, 2008 Employer Rates Beginning July 1, 2010

- Investment Return for the fiscal year ending June 30, 2008 was -5.1%.
- Prior 5 years of investment gain build up a cushion of 14% of the entire CalPERS fund to help offset this negative return.
- Public agencies employer rates for fiscal year July 1, 2010 through June 30, 2011 would actually go down if due only to investment return. Other changes may cause some employer rates to go up.



### Cost Increases Caused by More than Benefit Improvements

- Many newspapers blame the benefits provided by SB 400 and other benefit improvements that took place in the last 10 years.
- The reality is that this is only partially true.
- Growth in government has a lot to do with increases in dollars being contributed to CalPERS.



### Investment Return for July 1, 2008 – June 30, 2009 Employer Rates Beginning July 1, 2011

- CalPERS Return for FY 2008-09 was -24%.
  - An estimated -28% return was used in June 30, 2008 actuarial valuations to estimate the 2011-2012 rates
  - Actual rate is likely to be lower than projected in your valuation report
- Nevertheless, the -24% will have a significant impact on the funded status of plans at CalPERS and on the contribution rates that employers will have to pay in the future.



### Growth in State government over the last 10 years

Plan	Active Membership on June 30, 1998	Active Membership on June 30, 2008	% Increase
State Miscellaneous	144,889	158,482	9%
State Industrial	8,093	10,010	24%
State Safety	10,801	24,961	131%
POFF	31,810	47,140	48%
CHP	6,370	7,027	10%
<b>Total for State</b>	<b>201,963</b>	<b>247,620</b>	<b>23%</b>



Growth in State government over the last 10 years (Dollars in Millions)

Plan	Payroll on June 30, 1998	Payroll on June 30, 2008	% Increase
State Miscellaneous	\$6,124	\$9,607	57%
State Industrial	\$276	\$489	78%
State Safety	\$474	\$1,795	278%
POFF	\$1,431	\$3,366	135%
CHP	\$341	\$633	86%
<b>Total for State</b>	<b>\$8,646</b>	<b>\$15,890</b>	<b>84%</b>



Growth in School employees over the past 10 years

	June 30, 1998	June 30, 2008	Percent Change
Covered active employees	214,094	297,278	39%
Covered payroll	5,058,180,681	10,447,573,688	107%
Average pay	23,626	35,144	49%



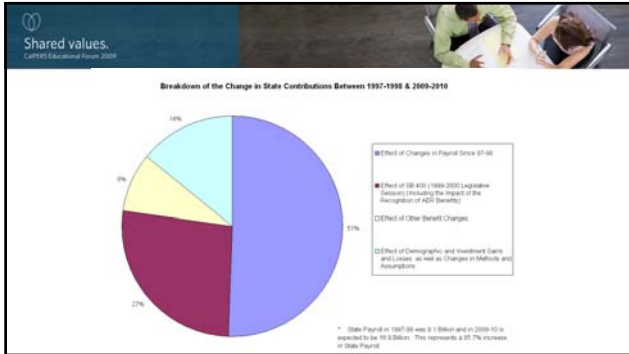
Growth in State government over the last 10 years

Plan	Average Salary on June 30, 1998	Average Salary on June 30, 2008	% Increase
State Miscellaneous	\$42,269	\$60,617	43%
State Industrial	\$34,042	\$48,875	44%
State Safety	\$43,910	\$71,915	64%
POFF	\$44,989	\$71,413	59%
CHP	\$53,521	\$90,065	68%
<b>Total for State</b>	<b>\$42,810</b>	<b>\$64,172</b>	<b>50%</b>



Growth in Local Agencies Over the Last 10 Years

	June 30, 1998	June 30, 2008	Percent Change
Number of contracting agencies	1,290	1,482	15%
Covered active misc. employees	161,191	216,000	34%
Payroll for misc. employees	\$6,178,000,000	\$13,216,000,000	114%
Average pay for misc. employees	\$38,326	\$61,185	60%
Covered active safety employees	43,395	52,576	21%
Payroll for safety employees	\$2,292,000,000	\$4,682,000,000	104%
Average pay for safety employees	\$52,804	\$89,056	69%



Shared values.  
CAPERS Educational from 2008

### Approved Temporary Smoothing Method

- The approach approved by the Board is as follows:
  - Increase the corridor to 140% of market value of assets on June 30, 2009
  - Reduce the corridor to 130% of market value of assets on June 30, 2010
  - Return to the 80%-120% corridor on June 30, 2011 and thereafter
  - Isolate and amortize all gains and losses during fiscal years 2008-2009, 2009-2010 and 2010-2011 over fixed and declining 30 year period (as oppose to the current rolling 30 year amortization)



### Approved Temporary Smoothing Method

- The CalPERS Board approved the use of a temporary smoothing method change to phase in the impact of the 2008-2009 investment return on employer rates.
- The impact of the negative 24% return will be phased in over a three year period.
- The change has been adopted for local agencies and schools.
- The State is considering paying faster. The Board will set a methodology for the State at the December Board meeting.



### Number of Employers and Active Members by Benefit Formula

Formula	Number of Employers	Number of Active Members
Miscellaneous 2% at Age 60	262	9,490
Miscellaneous 2% at Age 55	534	71,046
Miscellaneous 2.5% at Age 55	226	51,133
Miscellaneous 2.7% at Age 55	264	53,616
Miscellaneous 3% at Age 60	114	28,844
Safety 2% at Age 55	44	456
Safety 2% at Age 50	72	3,074
Safety 3% at Age 55	122	6,334
Safety 3% at Age 50	336	42,670



### Impact of Approved Temporary Method on Employer Rates

- The approved method will phase in the impact of the investment loss in 2008-2009 over 3 fiscal years.
- Estimated impact of the -24% investment return in 2008-2009 on employer rates commencing July 1, 2010 for State and Schools and July 1, 2011 for Public Agencies is:

Volatility Index on June 30, 2007	Estimated Increase in Employer Rates (as a Percentage of Payroll)
4	0.4%
6	0.6%
8	0.9%
10	1.1%
15	1.6%



### Projected Employer Contribution Rate

Typical 2% at Age 60 and 2% at Age 55 Miscellaneous Plan with an Asset to Payroll Ratio of 4  
Based on a -24% return in 2008 – 2009 and 7.75% thereafter

Valuation	Current Method	Proposed Method
30-Jun-08 Valuation - Rate in 2009-2010 for State and Schools and 2010-2011 for Public Agencies	9.7%	N/A
30-Jun-09 Valuation - Rate in 2010-2011 for State and Schools and 2011-2012 for Public Agencies	13.8%	10.7%
30-Jun-10 Valuation - Rate in 2011-2012 for State and Schools and 2012-2013 for Public Agencies	14.0%	12.3%
30-Jun-11 Valuation - Rate in 2012-2013 for State and Schools and 2013-2014 for Public Agencies	14.2%	14.0%
30-Jun-12 Valuation - Rate in 2013-2014 for State and Schools and 2014-2015 for Public Agencies	14.3%	14.4%

Shared values.  
CAPERS Educational Forum 2010

**Projected Employer Contribution Rate**  
Typical 2% at Age 55 and 3% at Age 60 Miscellaneous Plan with an Asset to Payroll Ratio of 6  
Based on a -24% return in 2008 – 2009 and 7.75% thereafter

Valuation	Current Method	Proposed Method
30-Jun-08 Valuation - Rate in 2009-2010 for State and Schools and 2010-2011 for Public Agencies	12.0%	N/A
30-Jun-09 Valuation - Rate in 2010-2011 for State and Schools and 2011-2012 for Public Agencies	18.2%	13.5%
30-Jun-10 Valuation - Rate in 2011-2012 for State and Schools and 2012-2013 for Public Agencies	18.5%	16.0%
30-Jun-11 Valuation - Rate in 2012-2013 for State and Schools and 2013-2014 for Public Agencies	18.8%	18.7%
30-Jun-12 Valuation - Rate in 2013-2014 for State and Schools and 2014-2015 for Public Agencies	19.0%	19.1%

Shared values.  
CAPERS Educational Forum 2010

**Historical and Projected Average Employer Rates For Local Agency Miscellaneous Plans by Benefit Formula**

Formula	Percent of Members Under Each Formula
Miscellaneous 2% at Age 60	4%
Miscellaneous 2% at Age 55	34%
Miscellaneous 2.5% at Age 55	24%
Miscellaneous 2.7% at Age 55	25%
Miscellaneous 3% at Age 60	13%

Shared values.  
CAPERS Educational Forum 2010

**Projected Employer Contribution Rate**  
Typical 3% at Age 50 Safety Plan with an Asset to Payroll Ratio of 10  
Based on a -24% return in 2008 – 2009 and 7.75% thereafter

Valuation	Current Method	Proposed Method
30-Jun-08 Valuation - Rate in 2009-2010 for State and Schools and 2010-2011 for Public Agencies	28.4%	N/A
30-Jun-09 Valuation - Rate in 2010-2011 for State and Schools and 2011-2012 for Public Agencies	35.2%	29.2%
30-Jun-10 Valuation - Rate in 2011-2012 for State and Schools and 2012-2013 for Public Agencies	35.3%	31.7%
30-Jun-11 Valuation - Rate in 2012-2013 for State and Schools and 2013-2014 for Public Agencies	35.5%	35.5%
30-Jun-12 Valuation - Rate in 2013-2014 for State and Schools and 2014-2015 for Public Agencies	35.7%	35.9%

Shared values.  
CAPERS Educational Forum 2010

**Historical and Projected Average Employer Rates For Local Agency Safety Plans by Benefit Formula**

Formula	Percent of Members Under Each Formula
Safety 2% at Age 55	1%
Safety 2% at Age 50	6%
Safety 3% at Age 55	12%
Safety 3% at Age 50	81%



**Projection of Future Contribution Rates  
 90% Probability Graph**



**Historical and Projected Future Contribution Rates  
 Over the Next 20 Years for Schools**

