



TOWN OF APPLE VALLEY

TOWN COUNCIL STAFF REPORT

To: Honorable Mayor and Town Council **Date:** September 25, 2012

From: Marc Puckett, Asst. Town Manager of Finance & Administrative Services **Item No:** 18

Subject: DISCUSSION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

T.M. Approval: _____ **Budgeted Item:** Yes No N/A

RECOMMENDED ACTION:

Receive and file report.

SUMMARY:

At a previous Council meeting, members of Council had requested that staff prepare a report discussing and explaining the Town's unfunded actuarial accrued liability with respect to its employee pension plan offered through the California Public Employee Retirement System (CalPERS).

An "unfunded liability" represents when a pension plan or "pooled" (multi-employer) pension plans' actuarial value of assets is less than its accrued liability. The difference is the plan or pool's unfunded liability.

Also, it is important to underscore that this is an *actuarially* determined number comparing the entry age normal accrued liability to the actuarial value of assets. This point is often misunderstood.

There are many reasons that an unfunded liability may exist. Some reasons include creation of a new plan, a recession affecting the market value of plan assets, not contributing in accordance with the actuarially determined funding schedule (pension contribution holidays), or a change in participants' benefits. If an unfunded liability exists due to a decline in the market value of the plan assets, it will cause a temporary increase in contributions to the plan.

BACKGROUND AND ANALYSIS:

The Town of Apple Valley has offered a defined benefit pension plan to its employees through CalPERS since the Town's formation in 1988. The Town is part of the CalPERS Miscellaneous Plan "Pool." All employers with less than 100 employees must be a member of the pool so that plan experience does not distort the annual required contribution (ARC) calculation. The funded status as reported for the Miscellaneous Plan reflects the aggregated funded status of all members of the pool. There are over 180 separate public agencies that are members of the CalPERS "Pool."

Within the Miscellaneous pool, the unfunded liability as of the last actuarial valuation dated June 30, 2010 (June 30, 2011 valuation will be released in October) was \$296,982,470 (297 million). However, the actuarial value of assets as of June 30, 2010 was \$2,000,888,875 (2 billion). Many times the unfunded liability is reported in the news without also stating the value of plan assets in the trust to fund future liabilities.

Also, although much has been made about CalPERS most recent 2011 calendar year rate of return of 1.1% please note that the historical rates of return for the last 22 years outlined in the attached CalPERS "Facts At A Glance" (Facts) publication for August, 2012, that is available on their website, indicated that for the last 22 fiscal years (as of the year ended June 30), CalPERS' rates of return have averaged 8.95%. For the past 22 calendar years (as of the year ended December 31), CalPERS' rates of return have averaged 8.51%. Both of these rates of return covering the last 22 years of plan experience are more than 100 basis points (1.00%) above the plan's investment rate of return assumption of 7.50.

Funded status of the plan has fluctuated greatly as a result of the recession. The market value of assets in the CalPERS trust was affected similarly to all 401ks when the economy entered the most recent recession in 2007. This is illustrated by the Funding Status table within the Facts which indicates that the funded status of all public agency plans as of June 30, 2007 was 102.0% or 2% overfunded. As a result of recession and meltdown in the financial markets, plan assets lost 40% of their value over the next two years but has now began to recover market value. In fact, the DJIA stock index just past a four year high which is a significant indicator of the direction of the broader market economy. Further, it is anticipated that when the CalPERS actuarial valuation report is received in October, the funded status will be as much as 10% higher.

To highlight some particular facts of interest noted in the publication, the average entry age for miscellaneous members is 35. The average entry age for safety members is 30. This is significant as it relates to pension liabilities. For example, much has been said about safety members retiring at age 50 with 90% of their pension benefit. Based upon all plan experience, safety members enter public service on average at age 30 meaning that when first eligible, the safety member would have 20 years of service. Attainment of benefit eligibility of 90% at age 50 is not possible because an officer must first be POST certified

prior to entering the public service. An individual interested in becoming POST certified may not enter the academy prior to attainment of 21 years of age. Further, the current average years of service for all CalPERS service retirees is 20.3 years and the average attained age at retirement is age 60.

Of particular note, the average annual pension benefit for all CalPERS retirees is **\$27,984 per year or \$2,332 per month** before any applicable taxes. The average annual pension benefit for retirees in the most recent year was \$36,780 or \$3,065 per month before any applicable taxes.

In Apple Valley, there have been a total of 24 retirees. For these retirees, the average annual pension benefit is **\$25,548 per year or \$2,129 per month** before any applicable taxes. The average years of service for active members is 7.06 years and the average attained age is 44.3 years.

Most commonly, the focus on public employee pensions has been on those individuals receiving pensions in excess of \$100,000. In fact, there is a website dedicated to tracking these individuals and reporting their names to the public. In total, there have been 536,234 retirees from CalPERS. Of these retirees, 9,111 or 1.6% of the retirees were receiving a pension benefit of greater than \$100,000. To put it in perspective, for an agency with 200 employees, 3.2 of those employees would retire with a pension benefit greater than \$100,000. This would most likely include a City Manager, Assistant City Manager, Police Chief, Fire Chief or Public Works Director that has worked their entire career in the public sector in California and in agencies served by the CalPERS system. More commonly, most public employees (98.4%) are retiring with pension benefits at a far lower level which is evidenced by the average pension benefit for all retirees.

Pension Reform Act of 2013 (AB 340)

A summary of the actuarial cost analysis of the Pension Reform Act recently signed into law is attached. This law will significantly reduce pension costs for employers and pension benefits for all future public employees. While the exact cost savings has not yet been determined, it is estimated that the savings due to the pension benefit formula will be approximately 1.3-1.5% of payroll.

As a reminder, the Town had previously adopted a two-tier plan reducing benefits for future retirees as a budget-balancing measure during the 2010-2011 Fiscal Year. Therefore, there will be limited benefit or budgetary savings as a result of the adoption of the Act.

CONCLUSION

Unfunded liabilities in a Pension system must be discussed in context with the actuarial value of assets in the trust to gain a full understanding of the funded status of the plan. Funded levels vary, in part, due to cyclical economic activity within the capital markets. The funded status of the Trust was impacted by the recession. However, the funded status is showing signs of returning to the pre-recession levels. The average entry age for safety employees is 30. The average entry age for miscellaneous members is 35. The average pension benefit being paid to all CalPERS retirees is \$27,984 per year or \$2,332 per month before any applicable taxes. The average annual pension benefit for retirees in the most recent year was \$36,780 or \$3,065 per month before any applicable taxes. In Apple Valley, there have been a total of 24 retirees. For these retirees, the average annual pension benefit is \$25,548 per year or \$2,129 per month before any applicable taxes.

Budgetary savings for the Town as a result of passage of the Pension Reform Act will be limited due to the Town's adoption of a second tier plan as a budget balancing measure during FY 2010-2011.

MARC R. PUCKETT
Assistant Town Manager of
Finance & Administrative Services

ATTACHMENTS: 1) CalPERS Facts At A Glance, August, 2012
2) Actuarial Cost Analysis of PEPR of 2013
3) Preliminary Summary of Pension Reform Provisions



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FACTS AT A GLANCE

August 2012

Facts at a Glance is a monthly compilation of information of interest to Board Members, staff, and the general public. Information is current as of July 31, 2012, unless otherwise noted. Every effort has been made to verify the accuracy of the information, which is intended for general use only.

OVERVIEW

OVERALL MEMBERSHIP (AS OF JUNE 30, 2011)

Retirees/beneficiaries/survivors receiving a monthly allowance:	536,234
Active & Inactive members:	1,103,426
Total members:	1,639,660

MEMBERSHIP TOTALS BY CATEGORY (ACTIVE/INACTIVE MEMBERS AS OF JUNE 30, 2011)

State employees	30.5 percent
School employees	38.5 percent
Local public agency employees	31 percent

\$3.4 billion in employee contributions \$6.9 billion in employer contributions

PENSION INFORMATION (AS OF JUNE 30, 2011)

Average monthly service retirement allowance all retirees:	\$2,332
Average years of service, all service retirees:	20.3
Average monthly service retirement for 2010-11 retirees:	\$3,065
Average monthly service retirement allowance for school miscellaneous members:	\$1,251
Average years of service school miscellaneous retirees:	16.9
Average monthly service retirement allowance for State misc. members:	\$2,598
Average years of service State miscellaneous retirees:	23.2
Average age at retirement, all members:	Service: 60
	Disability: 50
	Industrial Disability: 46

SERVICE RETIREES BY EMPLOYER TYPE (AS OF JUNE 30, 2011)

FISCAL YEAR	EMPLOYER			TOTAL	% CHANGE FROM PRIOR YEAR'S TOTAL
	STATE	SCHOOLS	PUBLIC AGENCY		
FY 2006-07	7,528	7,581	7,834	22,943	-6.8%
FY 2007-08	8,105	7,348	7,847	23,300	1.6%
FY 2008-09	8,502	7,690	8,366	24,558	5.4%
FY 2009-10	10,734	9,449	9,936	30,119	22.6%
FY 2010-11	11,566	10,334	10,730	32,630	8.3%

CALPERS EMPLOYERS (AS OF JUNE 30, 2011)

Public Agencies	1,573 (2,044 separate retirement plans)
School Districts	1,530
Total:	3,103

BOARD OF ADMINISTRATION

CalPERS is governed by a 13-member Board of Administration. Visit CalPERS On-Line for [Board structure, composition and responsibilities](#).

NUMBER OF EMPLOYEES (AS OF JULY 1, 2011)

2,366

TOTAL CALPERS ADMINISTRATIVE EXPENSES

2007-08 (actual)	\$530,550,190
2008-09 (actual)	\$566,913,372
2009-10 (actual)	\$427,149,512
2010-11 (actual)	\$306,379,733
2011-12 (budgeted)	\$334,196,000

FUNDING STATUS

ACTUARIAL INFORMATION

Each year, CalPERS actuaries calculate a funded ratio—the ratio of market value of assets in the fund to the liabilities for each retirement plan. The funded ratios vary from year to year.

Funded Status of Retirement Plans by Member Category

Member Category	6/30/05	6/30/06	6/30/07	6/30/08	6/30/09	6/30/10
State	85.5%	88.6%	96.6%	84.9%	58.4%	62.8%
School	96.2%	98.7%	107.8%	93.8%	65.0%	69.5%
Public Agency	90.2%	92.7%	102.0%	89.6%	60.0%	65.8%

Notes

- The funded ratios are based on the Market Value of Assets.
- There were five plans in the State category with funded ratios between 57 percent and 69 percent as of June 30, 2010. The funded ratio for the State is an aggregate of all five plans.
- As of June 30, 2009, there were 2,039 plans with active members in the public agency category. There were 1,590 plans in one of nine risk pools and 449 public agencies in non-pooled plans. For non-pooled plans: about 98 percent of the plans were below 75 percent funded; about 2 percent of the plans was between 75 and 100 percent funded; and 0 percent of the plans were 100 percent funded or better. All risk pools were between 57 percent and 70 percent funded.

INCOME TOTALS OVER THE PAST 10 FISCAL YEARS

YEAR	MEMBER CONTRIBUTIONS	EMPLOYER CONTRIBUTIONS	INVESTMENT AND OTHER INCOME
2010-2011	\$3,600,089,338	\$7,465,397,498	\$43,907,435,683
2009-2010	\$3,378,866,892	\$6,955,049,078	\$25,577,529,796
2008-09	\$3,882,355,341	\$6,912,376,563	-\$57,363,897,989
2007-08	\$3,512,074,936	\$7,242,802,001	-\$12,492,908,035
2006-07	\$3,262,699,076	\$6,442,383,868	\$40,757,380,692
2005-06	\$3,080,878,521	\$6,095,029,424	\$22,041,265,666
2004-05	\$3,176,780,369	\$5,774,120,281	\$21,894,201,526
2003-04	\$2,266,445,429	\$4,261,347,422	\$24,272,573,281
2002-03	\$1,887,925,497	\$1,925,043,858	\$5,482,731,568
2001-02	\$2,154,742,532	\$800,964,553	-\$9,699,792,798

INVESTMENTS

PORTFOLIO MARKET VALUE

\$226.6 Billion (As of May 31, 2012)

ASSET CLASS BY MARKET VALUE & ALLOCATION

ASSET CLASS	ACTUAL INVESTMENT (\$BILLIONS)	ACTUAL INVESTMENT %	INTERIM STRATEGIC TARGET %*	% PASSIVE VS. ACTIVE	
				PASSIVE	ACTIVE
Growth	\$142.1	63.0%	64.0%	53.0%	47.0%
Public Equity	\$107.8	48.0%	50.0%	70.0%	30.0%
Private Equity	\$34.3	15.0%	14.0%	0.0%	100.0%
Income	\$41.9	19.0%	17.0%	0.0%	100.0%
Liquidity	\$8.6	4.0%	4.0%	0.0%	100.0%
Real	\$21.8	10.0%	11%	6.0%	94.0%
Real Estate	\$18.8	8.0%	9%	7.0%	93.0%
Forestland/ Infrastructure	\$2.9	1.0%	2%	0.0%	100.0%
Inflation	\$7.1	3.0%	4.0%	0.0%	100.0%
Absolute Return Strategy	\$5.1	2.0%	n/a%	0.0%	100.0%
Total Fund	\$226.6	100.0%	100.0%	34.0%	66.0%

*Target allocation effective July 2011.

GROWTH OF FUND

YEAR	YEAR-END 6/30	YEAR-END 12/31
1985	\$28.6 billion	\$32.7 billion
1990	\$58.2 billion	\$57.5 billion
1995	\$87.8 billion	\$96.9 billion
1996	\$100.7 billion	\$108.0 billion
1997	\$119.7 billion	\$128.2 billion
1998	\$143.3 billion	\$150.6 billion
1999	\$159.1 billion	\$171.9 billion
2000	\$172.2 billion	\$165.2 billion
2001	\$156.0 billion	\$151.8 billion
2002	\$143.4 billion	\$133.8 billion
2003	\$144.8 billion	\$161.4 billion
2004	\$166.3 billion	\$182.8 billion
2005	\$189.8 billion	\$200.9 billion
2006	\$208.2 billion	\$230.3 billion
2007	\$251.4 billion	\$253.0 billion
2008	\$237.9 billion	\$183.3 billion
2009	\$181.0 billion	\$203.3 billion
2010	\$200.0 billion	\$225.7 billion
2011	\$237.5 billion	\$225.0 billion

TOTAL RETURNS¹

Fiscal year to date ended 4/30/2012	2.1%
3 years for period ended 4/30/2012	8.9%
5 years for period ended 4/30/2012	0.6%
10 years for period ended 4/30/2012	5.4%

HISTORICAL RATES OF RETURNS¹

YEAR	YEAR END 6/30 (%)	YEAR END 12/31 (%)
1990	8.9	-0.8
1991	6.7	23.0
1992	13.9	6.5
1993	14.6	13.4
1994	2.0	-1.0
1995	16.4	25.3
1996	15.4	12.8
1997	20.2	19.0
1998	19.6	18.5
1999	12.6	16.0
2000	10.8	-1.4
2001	-7.1	-6.2
2002	-6.0	-9.5
2003	3.9	23.3
2004	16.7	13.4
2005	12.6	11.1
2006	12.3	15.7
2007	19.1	10.2
2008	-4.9	-27.8
2009	-23.4	12.1
2010	11.6	12.6
2011	20.9	1.1

¹ Beginning 9/31/2011 performance figures are reported as net of fees. All performance figures reported before 9/31/2011 are as gross of fees.

CALIFORNIA INVESTMENTS AND COMMITMENTS

Approximately \$23.7 billion—or 10.5 percent of total fund as of May 31, 2012

Growth	\$14.6 billion
Income	\$3.8 billion
Real Assets	\$5.2 billion
Inflation	\$0.0 billion
Absolute Return Strategy	\$0.0 billion
Liquidity	\$0.0 billion

HEALTH BENEFITS

CalPERS HEALTH PROGRAM

Covers more than 1.3 million active and retired state, local government, and school employees and their family members

Purchases health benefits for the State of California and more than 1,100 local and government agency and school employers

Largest employer purchaser of health benefits in California and the second largest employer purchaser in the nation after the federal government

Spent more than \$6.67 billion in 2011 to purchase health benefits

HEALTH CARE PLANS

Three Health Maintenance Organization (HMO) plans – Blue Shield of California (“Blue Shield”) NetValue, Blue Shield Access+, and Kaiser Permanente

Three self-funded Preferred Provider Organization (PPO) plans administered by Blue Cross – PERS Select, PERS Choice and PERSCare

Three plans for Association members – California Association of Highway Patrolmen (CAHP) Health Benefits Trust, (California Correctional Peace Officers Association (CCPOA) and Peace Officers Research Association of California (PORAC)

HEALTH PLAN MEMBERSHIP

ENROLLMENT	EMPLOYEES	DEPENDENTS	TOTAL MEMBERS
State Employees – 59.11%			
State Active	211,034	334,025	545,059
State Retired	157,105	106,039	263,144
State Total	368,139	440,064	808,203
Public Agencies (Local Government & School Employees) – 40.89%			
Public Agency Active	178,619	243,090	421,709
Public Agency Retired	89,349	48,021	137,370
Public Agency Total	267,968	291,111	559,079
Active – 70.71%	389,653	577,115	966,768
Retired – 29.29%	246,454	154,060	400,514
HMO – 67.26%	414,969	504,700	919,669
PPO – 25.66%	188,643	162,217	350,860
Associations – 7.08%	32,503	64,258	96,761
Total Program	636,115	731,175	1,367,290

ANNUAL HEALTH PROGRAM SPENDING (PER DAY)

2012	\$19.3 million
2011	\$18.5 million
2010	\$16.8 million

TOTAL HEALTH PREMIUM				STATE PREMIUM SHARE ESTIMATES			
Estimates (in Billions)	Total Program	Public Agencies and Schools	State	Actives		Retirees	
				Employer	Member	Employer	Member
2012	\$7.03	\$2.94	\$4.09	\$2.234	\$0.587	\$1.218	\$0.049
2011	\$6.75	\$2.82	\$3.93	\$2.153	\$0.547	\$1.190	\$0.046
2010	\$6.12	\$2.52	\$3.60	\$2.003	\$0.496	\$1.054	\$0.047
State contribution amounts to monthly premiums for single, 2-party and family plan tiers, respectively			2012	\$452/\$905/\$1,177*		\$566/\$1,074/\$1,382	
			2011	\$433/\$866/\$1,129*		\$542/\$1,030/\$1,326	
			2010	\$393/\$787/\$1,024*		\$493/\$936/\$1,202	

*State Active Health Premium Contribution for many State Members, but not all. Please check specific contract for exact detail.

HEALTH PREMIUM CHANGES — 2004 TO 2012

PLAN PRODUCT & TYPE	2004	2005*	2006*	2007*	2008*	2009*	2010*	2011*	2012*
Overall	16.4%	9.9%	8.9%	11.9%	6.8%	4.8%	3.2%	9.9%	4.6%
Basic Plans									
HMOs	18.0%	11.4%	8.7%	11.6%	7.4%	6.6%	3.4%	10.6%	5.3%
PPOs	13.2%	6.4%	9.5%	12.6%	4.2%	0.0%	3.3%	8.7%	3.0%
Associations	11.6%	6.8%	8.3%	12.8%	10.8%	5.0%	0.9%	7.2%	2.7%
Medicare									
Overall	10.0%	-11.3%	7.0%	13.5%	3.0%	0.7%	1.1%	3.4%	0.0%
HMOs	26.8%	-10.7%	-7.0%	25.0%	-1.6%	1.6%	0.5%	0.2%	-0.9%
PPOs	-1.2%	-12.5%	18.6%	6.8%	6.7%	0.0%	1.7%	5.6%	0.7%
Associations	15.0%	0.5%	0.0%	0.2%	-2.3%	1.3%	2.5%	4.2%	0.9%

*Premium changes for public agencies vary depending on geographic location.

CalPERS LONG-TERM CARE PROGRAM

- Provides financial protection from the high cost of extended care, including nursing home care. CalPERS program is not-for-profit and self-funded; began in January 1995
- All California public employees, retirees, their spouses, parents and parents-in-law, and adult siblings (age 18-79) are eligible to apply during enrollment periods
- Members enrolled as of May 31, 2012: 150,710
- More than \$1.0 billion in benefits paid since the program’s inception through May 31, 2012
- Benefits paid in current fiscal year through May 31, 2012: \$154.5 million
- Benefits paid during 2011 through December 31, 2011: \$160 million
- Benefits paid during 2012 through May 31, 2012: \$72 million
- Annual Premiums as of May 31, 2012: \$326.5 million
- Average Annualized Premium as of May 31, 2012: \$2,166.71

SYSTEM AND FUNDS

LEGISLATORS' RETIREMENT SYSTEM (LRS)

The LRS is available to members of the California Legislature serving prior to November 7, 1990; all elected constitutional officers and legislative statutory officers. (This system was closed to Legislators after November 7, 1990, by virtue of an initiative passed by the electorate.)

Active Membership: (as of July 31, 2012)

Members of the Legislature:	2
Constitutional officers:	10
Legislative statutory officers:	1
Total:	13

Retirees, Survivors, & Beneficiaries: (as of July 31, 2012)

Members of the Legislature:	208
Constitutional officers:	29
Legislative statutory officers:	5
Total:	242

JUDGES' RETIREMENT SYSTEM (JRS)

The JRS provides benefits for State Supreme and Appellate Court justices, and Superior Court and Municipal Court judges who were appointed or elected before November 9, 1994.

Membership (as of July 31, 2011)

Active:	400
Deferred retirement:	31
Total:	431

JUDGES' RETIREMENT SYSTEM II (JRS II)

Established in 1994, JRS II provides benefits for State Supreme and Appellate Court justices, Superior Court judges, and Municipal Court judges who were appointed or elected after November 9, 1994.

Membership (as of July 31, 2012)

Active Members	1,273
Retirees, Survivors & Beneficiaries	37

CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST FUND

The California Employers' Retiree Benefit Trust Fund was established by CalPERS in March 2007 to provide California public agencies with a cost-efficient, professionally managed investment vehicle for prefunding other post-employment benefits (OPEB) such as retiree health benefits. Prefunding reduces an agency's long-term OPEB liability. Participating agencies can use investment earnings to pay future OPEB liabilities, similar to the CalPERS pension fund in which three out of four dollars paid in retirement benefits come from investment earnings.

Assets under management in trust fund (as of July 31, 2012): \$2.1 billion

Participating public agencies: 338

CalPERS 457 Plan

The CalPERS Supplemental Income 457 Plan is a deferred compensation retirement savings plan that public agency and school employers may adopt and offer to their employees to help them reach their retirement income goals. As of June 30, 2012:

- 26,460 participants
- \$977.4 million in total assets
- 729 contracting agencies

PEACE OFFICERS' AND FIREFIGHTERS' (POFF) DC PLAN

The State Peace Officers' & Firefighters (POFF) Supplemental Plan is an employer-provided retirement benefit negotiated between the State of California and employee groups. As of June 30, 2012:

- 37,833 participants
- \$467 million in total assets

SUPPLEMENTAL CONTRIBUTION PROGRAM

Supplemental Contributions Plan: The Supplemental Contributions Plan is an after-tax supplemental contributions program available to State employees, and members of the Judges' Retirement System I and II. As of June 30, 2012:

- 592 participants
- \$18.6 million in total assets invested
- \$13,943 total monthly contributions

CalPERS GLOBAL GOVERNANCE PROGRAM

For global governance and additional investment information, please visit the Global Governance area of our website.

STATE LEGISLATION

CalPERS Governmental Affairs Office provides bill analyses and tracks current status of important State Legislation. Visit our legislation information page for more details.



ACTUARIAL COST ANALYSIS California Public Employees' Pension Reform Act of 2013

Executive Summary

This is an actuarial cost analysis of the California Public Employees' Pension Reform Act of 2013 (PEPRA). This cost analysis was prepared by CalPERS as part of its preliminary assessment of the PEPRA for the purpose of estimating the cost impact of the proposed benefit changes. It provides estimates only, based on the limited information available to CalPERS at the time it was prepared and the short timeframe which CalPERS had with the draft legislation, and for these reasons the cost analysis is subject to change. It is not intended to be relied upon as a complete analysis of the actuarial impact of the PEPRA. Further, this cost analysis does not attempt to address any design, implementation, administration or legal issues that may exist. It also only attempts to quantify the financial impact for employers whose pension plans are currently administered by CalPERS i.e. the State of California plans, the schools pool for non-teaching school employees and the more than 2,200 local agency plans.

General plan provisions provided by the PEPRA are a 2% at age 62 formula for non-safety members and non-teaching school employees. For safety members, PEPRA provides three formulas: 2% at age 57; 2.5% at age 57; and 2.7% at age 57. PEPRA also requires that final compensation be defined for all new employees as the highest average annual compensation over a three-year period.

PEPRA establishes a cap on the amount of compensation that can be used to calculate a retirement benefit for all new members of a public retirement system equal initially to the Social Security wage index limit for employees who participate in Social Security or 120% of that limit if they do not participate in Social Security.

PEPRA would require all new members to contribute at least 50 percent of the total annual normal cost of their pension benefit as determined by the actuary and aims to have all current members of CalPERS pay at least 50 percent of the total annual normal cost within the next five years.

Overall, PEPRA is expected to generate savings. These savings will gradually occur over time as new employees are hired. Over the next 30 years, the

savings are expected to range between \$42 and \$55 billion for all State, schools and local agency plans.

A very important thing to keep in mind is that reductions in one element of compensation – such as pensions – often results in salary or other compensation increases due to the competitive nature of the workforce. As was pointed out by the Legislative Analysts' Office recently, if a one-time lowering of compensation occurs by reducing pensions, higher salaries and other benefits probably will need to be offered over the long term. These higher costs will offset an unknown portion of the savings disclosed in this analysis.

Results and Analysis

This is an actuarial cost analysis of the California Public Employees' Pension Reform Act of 2013 (PEPRA). The purpose of this analysis is to provide information regarding the cost impact of the proposed benefit changes.

PEPRA would require that all new public employees in California be covered by one of the four benefit formulas created by PEPRA. PEPRA creates one formula for all miscellaneous (non-safety) members and 3 formulas for safety members as well as requiring all new hires be subject to a benefit based on 3 year final compensation.

The following table summarizes ranges of estimated savings as a percentage of payroll for the various state plans and the schools pool. Please refer to the full analysis below for **important disclosures** on how the estimated savings were derived.

State Plans and Schools Plan

Plan	Estimated Employer Normal Cost ¹ Savings for New hires
State Miscellaneous (Non-CSU) (77% of current members)	1.1% of payroll
State Miscellaneous (CSU) (23% of current members)	2.6% of payroll
State Industrial	1.3% of payroll
State Safety (60% of current members)	0.6% of payroll
State Safety (40% of current members)	2.7% of payroll
POFF (90% of current members)	1.1% of payroll
POFF (10% of current members)	3.8% of payroll
CHP	2.9% of payroll
Schools	2.6% of payroll

¹ The plan total normal cost is the annual cost of providing benefits for the upcoming fiscal year. The employer normal cost is the employer's share of the plan total normal cost.

The following table summarizes ranges of estimated savings as a percentage of payroll for the local agency plans broken down by existing benefit formula. These savings reflect only the impact of the new benefit formula provided under PEPPRA. The estimated cost savings associated with the requirement that all new hires be subject to 3 year final compensation follows below.

Local Agency Plans (Formula Change Only)

Current Benefits for New Hires	Estimated Employer Normal Cost Savings for New Hires
Miscellaneous	
2% at Age 60	1.3% of payroll
2% at Age 55	2.5% of payroll
2.5% at Age 55	4.7% of payroll
2.7% at Age 55	5.8% of payroll
3% at Age 60	6.4% of payroll
Safety	
2% at Age 55	0.2% of payroll
2% at Age 50	2.0% of payroll
3% at Age 55	3.9% of payroll
3% at Age 50	6.2% of payroll

The tables below show the proportion of local agency miscellaneous new hires expected in each of the current miscellaneous formulas as well as the proportion of local agency safety new hires expected in each of the current safety formulas.

Miscellaneous Benefit Formula	Percentage of Local Agency Miscellaneous Membership
2% @ 60	16%
2% @ 55	35%
2.5% @ 55	22%
2.7% @ 55	18%
3% @ 60	9%

Safety Benefit Formula	Percentage of Local Agency Safety Membership
2% @ 55	1%
2% @ 50	10%
3% @ 55	37%
3% @ 50	52%

The employer normal cost savings due to reducing the benefit from one-year final compensation to three-year final compensation for miscellaneous plans range from 0.2% to 0.7% of payroll and from 0.4% to 1.0% of payroll for safety plans. Approximately 72% of local agency miscellaneous members and 74% of local agency safety members have one-year final compensation. The breakdown of local agency plans by benefit formula and final compensation was based on information as of June 2012.

The tables below provide the estimated future dollar savings over the next 30 years. See the disclosures about dollar savings in the Results and Analysis section for a description of how the “low” and “high” values were calculated.

Main Savings²

State Plans

	Estimated Total Dollar Savings Over 30 Years	Estimated Present Value of the Dollar Savings
Low	\$10.3 Billion	\$3.2 Billion
High	\$12.6 Billion	\$3.7 Billion

Schools Plan

	Estimated Total Dollar Savings Over 30 Years	Estimated Present Value of the Dollar Savings
Low	\$8.6 Billion	\$2.3 Billion
High	\$10.8 Billion	\$2.9 Billion

Local Agency Plans

	Estimated Total Dollar Savings Over 30 Years	Estimated Present Value of the Dollar Savings
Low	\$24.4 Billion	\$6.5 Billion
High	\$32.4 Billion	\$8.4 Billion

Total Savings (State, Schools, Local Agency)

	Estimated Total Dollar Savings Over 30 Years	Estimated Present Value of the Dollar Savings
Low	\$43.3 Billion	\$12.0 Billion
High	\$55.8 Billion	\$15.0 Billion

² These savings include the effect of benefit formula changes, member contribution rate changes, change to final compensation period and imposition of a compensation cap. Savings due to contribution rate changes reflect contribution applicable to new members for all categories and existing State members. See caveats, methods and assumptions section for more additional information on savings due to contribution changes.

The savings in the tables above reflect savings over a 30-year period. See Attachment 1 for a display of how the estimated dollar savings would emerge over time. Attachment 2 includes a comparison of the current benefits and the proposed benefits for new hires.

Other Savings/Costs

PEPRA implicitly provides for the elimination of the existing Alternate Retirement Program (ARP). The program was implemented by the State of California in 2004 to generate savings. The elimination of this program is expected to reduce the above savings by about \$0.5 billion to \$1 billion over the next 30 years.

PEPRA also provides for an improved industrial disability retirement (IDR) benefit for safety members. This benefit improvement is expected to reduce the above savings by about \$0.5 billion to \$1 billion over the next 30 years.

Under PEPRA, new Judges hired after January 1, 2013 would be required to contribute an additional 6.4% toward their pension benefit in order to contribute 50% of the plan total normal cost. This is expected to generate savings of \$0.6 billion over the next 30 years.

Overall Savings

Overall, taking into account the information provided in the tables above and the other cost increases/savings from the elimination of ARP, the IDR benefit changes and the increase in Judges member contribution, the overall savings over the next 30 years for all employers in CalPERS are expected to be between \$42 and \$55 billion.

Caveats, Methods and Assumptions

This section includes important information about the methods and assumptions used for this actuarial cost analysis of PEPRA. Note that throughout this document, non-safety employees are referred to as miscellaneous employees.

Methods and Assumptions

The assumptions used in this analysis reflect those in place for the June 30, 2011 actuarial valuations unless noted below.

Generally, lower benefits would tend to increase the average retirement age. Retirement rates were adjusted to reflect this. See Attachment 3 for estimated retirement rates used for the proposed benefit formulas. To the extent the actual retirement experience is different than assumed in this cost analysis, the savings

could be higher or lower than shown in this analysis. All other demographics assumptions such as termination incidence and mortality remained unchanged.

For this analysis, we have assumed the incidence of application for disability retirements would remain unchanged. When retirement benefits are lowered, there is a potential for an increase in the incidence of application for disability retirements. If such increase were to occur, the cost savings presented in this analysis would be lower.

The present value of savings was calculated using a discount rate of 7.5% for all groups except Judges where 7% was used.

The Entry Age Normal Cost actuarial method was used to compare the cost of service accrual (i.e. normal cost) under the proposed benefits and the current benefits in place today. An important feature of this method is that the cost of service accrual is dependent on the age of hire for an employee. Younger hire ages allow for more time to prefund benefits and to accumulate investment earnings. Therefore, the younger the employee is at the time of hire the lower the cost of service accrual.

In performing this analysis, we assumed new hires will have an average age at hire similar to the average age at hire of current employees. We also assumed that all local agencies will behave similar to a sample local agency chosen for purposes of this analysis. Due to the fact that CalPERS administers over 2,200 separate plans for local agencies, actual savings will vary.

Below is a table comparing the average age at hire for the various groups valued in the analysis.

Groups	Average Age at Hire
State Miscellaneous	35
State Industrial	37
State Safety	40
California Peace Officer Fire Fighter (POFF)	30
California Highway Patrol (CHP)	27
Schools	37
Local Agency - Miscellaneous Plan	35
Local Agency - Safety Plan	30

See Attachment 4 for a comparison of the total normal cost for benefits currently applicable to new hires and for the proposed benefits.

The estimated dollar savings figures in this analysis are provided as a range of savings that may be achieved. These are indicated by a low and high savings value. The "low" savings represents the savings using the estimated number of new hires that would be expected if the active population was to remain stable

(0% growth). The "high" savings represents the savings using the estimated number of new hires that would be expected if the active population were to grow by 1% per year.

Calculations for local agency savings due to a benefit reduction from one-year final compensation to three-year final compensation were estimated using the average prevalence of one-year final compensation over all miscellaneous plans and safety plans. Note that the results may differ slightly had the analysis be performed using the prevalence of one-year final compensation by benefit formula.

Caveats and Other Information

In several areas, assumptions were made about how to interpret provisions of PEPRA based on our current understanding and preliminary analysis of the draft legislation. These interpretations may change as we become more familiar with PEPRA and/or if the Legislature makes changes to the current draft. These interpretations can have a significant impact on the estimated savings. The first such interpretation was with respect to the member contribution rate for new member. For this cost analysis, it was assumed that new members will be required to contribute an amount equal to the greater of half the normal cost or the current contribution rate of existing members. If the intent of the legislation is to have new members only pay half the plan total normal cost, it would result in lower member contributions than we have assumed in our estimate and the savings would be reduced by \$13 to \$17 billion.

Another interpretation has to do with whether members contribute on earnings up to the compensation cap or on all of their compensation. It was assumed that members only contribute on earnings up to the cap. If members contribute on all earnings, the savings would be greater than provided in this analysis.

We have not included any savings with respect to the Legislators' systems. By not including this system, we have understated the savings. Because this system is much smaller than the plans in the PERF, the impact would not be material.

The legislation includes some changes to the State Miscellaneous and Industrial second tier. We have not been able to assess how this will impact the savings that are to be expected. The impact is not expected to be material.

PEPRA targets having both current and new members pay half of the normal cost. For current State employees, the contribution increases are laid out in the legislation and have been included in the estimated savings. This cost analysis does not include any potential savings that would occur over time if current California State University (CSU) employees were to contribute more toward

pension benefits. Note that current CSU members pay less than 50% of the plan total normal cost toward pension benefits. To the extent current CSU employees begin contributing more toward pension, additional savings will occur.

School members (that is, non-teaching school employees) already pay approximately half of the plan total normal cost. Therefore, the requirement for members to pay at least 50% of the plan total normal cost does not result in any savings in respect of school members except to the extent that employers are picking up the member contribution.

For public agency employers the legislation provides the authority to impose contribution increases if collective bargaining has not resulted in members paying at least 50% of the plan total normal cost within five years. We have not included any savings in respect of changes to current member contribution rates for public agency members. To the extent that public agency employers impose higher member contribution rates under this provision for current members, there will be additional savings. We have estimated that, if all current local agency member start paying at least 50% of the plan normal cost (but no more than the 8% and 12% of member contribution rate maximum) in 2018, the savings over the next 30 years would amount to about \$1.9 Billion.

PEPRA will provide more flexibility for bargaining increased cost sharing between employers and existing employees. To the extent cost sharing agreements are reached between employees and employers, additional savings will emerge over time.

The legislation includes restrictions on what is included in pensionable compensation. This reflects, and appears to be modeled on, the restrictions on pensionable earnings that were included in the Public Employees' Retirement Law over a decade ago. The focus of these changes appears to be on other retirement systems covered by other laws that do not have these same restrictions. Nevertheless, the wording is not exactly the same and there may be additional restrictions included in the legislation that do not currently exist in the Public Employees' Retirement Law. We have not reviewed or been able to assess the potential impact of any such changes. To the extent that savings are realized as a result of additional restrictions on pensionable compensation, the savings will be greater than quoted in this analysis.

PEPRA permits employers to provide contributions to a defined contribution plan for earnings in excess of the compensation cap. To the extent employers contribute to a defined contribution plan for the excess earnings, the savings shown in this analysis will be less.

PEPRA also calls for the elimination of the Replacement Benefit Fund currently administered by CalPERS and prohibits the creation of any replacement plans in

the future. Due to the compensation cap included in PEPRA, this is not expected to result in any additional savings.

PEPRA prohibits the purchase of non-qualified time (“airtime”) on and after January 1, 2013. Such purchases are currently intended to be cost neutral to employers. The member pays the full present value cost of the additional service credit. That cost is an estimate that includes assumptions with respect to the age at retirement, salary at retirement, age at death, and the retirement system’s investment return. While service purchases on a present value method are not expected to increase employer contributions, they do increase the risk to employer in the form of higher volatility in employer rates if events do not occur as expected. As such, PEPRA would appear to create neither a cost nor savings to the employer. It would however result in a lowering of risk to employers.

Certification

This actuarial cost analysis was based on the participant, benefits, and asset data used in the June 30, 2011 annual valuations for the State, Schools and Judges plans and June 30, 2010 annual valuation for the local agency plan selected for the analysis, with the exception of the benefits and assumptions that were modified for estimating the impact of the proposed changes in benefits. The valuation has been performed in accordance with standards of practice prescribed by the Actuarial Standards Board, and the assumptions and methods are internally consistent and reasonable for this analysis.



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ATTACHMENT 1

The table below shows how the estimated dollar savings for the State and School Plans would emerge over the next 30 years beginning July 1, 2013 under the low and high savings scenarios. See the main document for descriptions of these scenarios.

Fiscal Year	State Plans \$ (millions)		School Plan \$ (millions)	
	Low Savings	High Savings	Low Savings	High Savings
2013-2014	\$74.7	\$ 76.7	\$16.1	\$18.2
2014-2015	\$131.9	\$136.2	\$32.2	\$36.5
2015-2016	\$144.8	\$151.6	\$48.5	\$55.3
2016-2017	\$158.0	\$167.6	\$65.4	\$75.0
2017-2018	\$171.8	\$184.4	\$83.0	\$95.6
2018-2019	\$185.8	\$201.7	\$101.2	\$117.0
2019-2020	\$200.2	\$219.6	\$119.8	\$139.1
2020-2021	\$214.9	\$238.2	\$138.8	\$161.9
2021-2022	\$229.9	\$257.3	\$158.2	\$185.2
2022-2023	\$245.4	\$277.3	\$177.8	\$209.1
2023-2024	\$261.2	\$297.8	\$197.5	\$233.4
2024-2025	\$277.4	\$318.9	\$217.5	\$258.2
2025-2026	\$293.6	\$340.5	\$237.5	\$283.4
2026-2027	\$310.2	\$362.8	\$257.5	\$308.9
2027-2028	\$326.9	\$385.6	\$277.5	\$334.7
2028-2029	\$343.7	\$408.9	\$297.5	\$360.8
2029-2030	\$360.9	\$432.8	\$317.2	\$387.1
2030-2031	\$378.1	\$457.2	\$336.8	\$413.5
2031-2032	\$395.5	\$482.3	\$356.3	\$440.2
2032-2033	\$413.2	\$508.0	\$375.6	\$467.2
2033-2034	\$431.0	\$534.3	\$394.8	\$494.5
2034-2035	\$449.0	\$561.4	\$413.9	\$522.1
2035-2036	\$467.2	\$589.1	\$433.0	\$550.1
2036-2037	\$485.6	\$617.5	\$451.9	\$578.5
2037-2038	\$504.1	\$646.5	\$470.9	\$607.4
2038-2039	\$522.9	\$676.4	\$489.8	\$636.8
2039-2040	\$541.8	\$707.0	\$508.8	\$666.8
2040-2041	\$561.0	\$738.5	\$527.9	\$697.4
2041-2042	\$580.4	\$770.9	\$547.0	\$728.6
2042-2043	\$600.0	\$804.1	\$566.2	\$760.5

The table below shows how the estimated dollar savings for local agency plans would emerge over the next 30 years beginning July 1, 2013 under the low and high savings scenarios. See the main document for descriptions of these scenarios.

**Local Agency Plans
\$ (millions)**

Fiscal Year	Low Savings	High Savings
2013-2014	\$ 43.6	\$ 51.5
2014-2015	\$ 87.9	\$ 104.5
2015-2016	\$ 133.4	\$ 159.6
2016-2017	\$ 180.4	\$ 216.9
2017-2018	\$ 229.0	\$ 276.8
2018-2019	\$ 279.0	\$ 338.9
2019-2020	\$ 330.2	\$ 403.0
2020-2021	\$ 382.3	\$ 468.8
2021-2022	\$ 435.1	\$ 536.3
2022-2023	\$ 488.8	\$ 605.5
2023-2024	\$ 543.1	\$ 676.3
2024-2025	\$ 598.1	\$ 748.7
2025-2026	\$ 653.7	\$ 822.7
2026-2027	\$ 710.0	\$ 898.4
2027-2028	\$ 766.9	\$ 975.9
2028-2029	\$ 824.4	\$1,055.1
2029-2030	\$ 882.4	\$1,136.0
2030-2031	\$ 940.9	\$1,218.6
2031-2032	\$ 999.9	\$1,303.0
2032-2033	\$1,059.6	\$1,389.4
2033-2034	\$1,119.4	\$1,477.2
2034-2035	\$1,179.5	\$1,566.9
2035-2036	\$1,239.5	\$1,657.9
2036-2037	\$1,299.5	\$1,750.6
2037-2038	\$1,359.4	\$1,844.6
2038-2039	\$1,418.8	\$1,939.8
2039-2040	\$1,478.0	\$2,036.5
2040-2041	\$1,536.7	\$2,134.6
2041-2042	\$1,595.0	\$2,234.1
2042-2043	\$1,653.0	\$2,335.2

For local agencies, the timing of the savings remains unclear and could be delayed with the first savings occurring in fiscal year 2015-2016 for some local agencies.

ATTACHMENT 2

The following tables provide a comparison of the benefits currently in place for new hires and those under the proposed benefit formula for Scenario 2. The table below is for the State Plans and Schools.

Plan	Minimum Retirement	Benefit Multiplier								Final Average Compensation
	Age	Age 50	Age 52	Age 55	Age 57	Age 60	Age 62	Age 65	Age 67	
<u>State Miscellaneous Tier 1</u>										
Proposed:	52	-	1.000%	1.300%	1.500%	1.800%	2.000%	2.300%	2.500%	3 year
Current	50	1.092%	1.224%	1.460%	1.650%	2.000%	2.272%	2.418%	2.418%	3 year
<u>State Industrial</u>										
Proposed:	52	-	1.000%	1.300%	1.500%	1.800%	2.000%	2.300%	2.500%	3 year
Current	50	1.092%	1.224%	1.460%	1.650%	2.000%	2.272%	2.418%	2.418%	3 year
<u>State Safety (60% of Plan)</u>										
Proposed	50	1.426%	1.590%	1.836%	2.000%	2.000%	2.000%	2.000%	2.000%	3 year
Current	50	1.426%	1.628%	2.000%	2.000%	2.000%	2.000%	2.000%	2.000%	3 year
<u>State Safety (40% of Plan)</u>										
Proposed	50	1.426%	1.590%	1.836%	2.000%	2.000%	2.000%	2.000%	2.000%	3 year
Current	50	1.426%	1.628%	2.000%	2.200%	2.500%	2.500%	2.500%	2.500%	3 year
<u>Peace Officers and Firefighters (90% of Plan)</u>										
Proposed	50	2.000%	2.143%	2.357%	2.500%	2.500%	2.500%	2.500%	2.500%	3 year
Current	50	2.000%	2.200%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	3 year
<u>Peace Officers and Firefighters (10% of Plan)</u>										
Proposed	50	2.000%	2.200%	2.500%	2.700%	2.700%	2.700%	2.700%	2.700%	3 year
Current	50	2.400%	2.640%	3.000%	3.000%	3.000%	3.000%	3.000%	3.000%	3 year
<u>California Highway Patrol</u>										
Proposed	50	2.000%	2.200%	2.500%	2.700%	2.700%	2.700%	2.700%	2.700%	3 year
Current	50	2.400%	2.640%	3.000%	3.000%	3.000%	3.000%	3.000%	3.000%	3 year
<u>Schools</u>										
Proposed	52	-	1.000%	1.300%	1.500%	1.800%	2.000%	2.300%	2.500%	3 year
Current	50	1.100%	1.460%	2.000%	2.126%	2.314%	2.438%	2.500%	2.500%	1 year

The table below shows a benefit comparison for local agencies.

Local Agency	Minimum Retirement	Benefit Multiplier								Final Average Compensation
	Age	Age 50	Age 52	Age 55	Age 57	Age 60	Age 62	Age 65	Age 67	
Currently 2% @ 60										
Proposed:	52	-	1.000%	1.300%	1.500%	1.800%	2.000%	2.300%	2.500%	3 year
Current	50	1.092%	1.224%	1.460%	1.650%	2.000%	2.272%	2.418%	2.418%	1 or 3 year
Currently 2% @ 55 Miscellaneous										
Proposed:	52	-	1.000%	1.300%	1.500%	1.800%	2.000%	2.300%	2.500%	3 year
Current	50	1.426%	1.628%	2.000%	2.104%	2.262%	2.366%	2.418%	2.418%	1 or 3 year
Currently 2.5% @ 55										
Proposed	52	-	1.000%	1.300%	1.500%	1.800%	2.000%	2.300%	2.500%	3 year
Current	50	2.000%	2.200%	2.500%	2.500%	2.500%	2.500%	2.500%	2.500%	1 or 3 year
Currently 2.7% @ 55										
Proposed	52	-	1.000%	1.300%	1.500%	1.800%	2.000%	2.300%	2.500%	3 year
Current	50	2.000%	2.280%	2.700%	2.700%	2.700%	2.700%	2.700%	2.700%	1 or 3 year
Currently 3% @ 60										
Proposed	52	-	1.000%	1.300%	1.500%	1.800%	2.000%	2.300%	2.500%	3 year
Current	50	2.000%	2.200%	2.500%	2.700%	3.000%	3.000%	3.000%	3.000%	1 or 3 year
Currently 2% @ 55 Safety										
Proposed	50	1.426%	1.590%	1.836%	2.000%	2.000%	2.000%	2.000%	2.000%	3 year
Current	50	1.426%	1.628%	2.000%	2.000%	2.000%	2.000%	2.000%	2.000%	1 or 3 year
Currently 2% @ 50										
Proposed	50	2.000%	2.200%	2.500%	2.700%	2.700%	2.700%	2.700%	2.700%	3 year
Current	50	2.000%	2.280%	2.700%	2.700%	2.700%	2.700%	2.700%	2.700%	1 or 3 year
Currently 3% @ 55										
Proposed	50	2.000%	2.200%	2.500%	2.700%	2.700%	2.700%	2.700%	2.700%	3 year
Current	50	2.400%	2.640%	3.000%	3.000%	3.000%	3.000%	3.000%	3.000%	1 or 3 year
Currently 3% @ 50										
Proposed	50	2.000%	2.200%	2.500%	2.700%	2.700%	2.700%	2.700%	2.700%	3 year
Current	50	3.000%	3.000%	3.000%	3.000%	3.000%	3.000%	3.000%	3.000%	1 or 3 year

ATTACHMENT 3

ACTUARIAL DISCLOSURE

Membership Data

The membership data used to determine the normal cost analysis is identical to the data used in the June 30, 2011 State and Schools actuarial valuation and data used for a sample of June 30, 2010 Local Agency annual valuations.

Actuarial Methods and Assumptions

The assumptions used in this analysis reflect those in place for the June 30, 2011 actuarial valuations with the exception of the service retirement assumption as noted below.

The service retirement rates were modified to estimate the cost under the proposed benefit formula. Generally, lower benefits would tend to increase the average retirement age. Retirement rates were adjusted to reflect this assumption that to reflect that by reducing the retirement benefits for new hires, these new hires would be expected to work longer before electing to file for service retirement.

To the extent the actual retirement experience is different than assumed in this cost analysis, the savings could be higher or lower than shown in this analysis.

Miscellaneous Plans

New Estimated Assumptions for the Proposed 2% at Age 62 Formula

State Miscellaneous Tier 1

Service Retirement

Rates vary by age and service. See sample rates in table below.

Attained Age	Years of Service						
	5	10	15	20	25	30	35
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
55	0.0126	0.0336	0.0469	0.0574	0.0707	0.0826	0.0952
60	0.0208	0.0560	0.0784	0.0968	0.1184	0.1384	0.1600
65	0.0486	0.1305	0.1836	0.2250	0.2763	0.3231	0.3735
70	0.0500	0.1340	0.1880	0.2310	0.2840	0.3310	0.3830

State Industrial

Service Retirement

Rates vary by age and service. See sample rates in table below.

Attained Age	Years of Service						
	5	10	15	20	25	30	35
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
55	0.0196	0.0364	0.0567	0.0840	0.0987	0.1050	0.1246
60	0.0304	0.0560	0.0872	0.1296	0.1528	0.1616	0.1920
65	0.0747	0.1377	0.2142	0.3177	0.3744	0.3978	0.4707
70	0.0890	0.1630	0.2540	0.3760	0.4440	0.4720	0.5590

Schools

Service Retirement

Rates vary by age and service. See sample rates in table below.

Attained Age	Years of Service						
	5	10	15	20	25	30	35
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
55	0.0168	0.0336	0.0469	0.0553	0.0616	0.0693	0.0812
60	0.0296	0.0584	0.0816	0.0968	0.1072	0.1200	0.1408
65	0.0819	0.1620	0.2259	0.2673	0.2979	0.3330	0.3915
70	0.0660	0.1310	0.1830	0.2160	0.2410	0.2700	0.3160

Public Agencies

Service Retirement

Rates vary by age and service. See sample rates in table below.

Attained Age	Years of Service						
	5	10	15	20	25	30	35
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
55	0.0440	0.0560	0.0680	0.0800	0.0920	0.1040	0.1160
60	0.0616	0.0784	0.0952	0.1120	0.1288	0.1456	0.1624
65	0.1287	0.1638	0.1989	0.2340	0.2691	0.3042	0.3393
70	0.1254	0.1596	0.1938	0.2280	0.2622	0.2964	0.3306

Safety Plans

New Estimated Assumptions for State Plans and Public Agency Plans

CHP – Safety Option Plan 2 (2.7%@57)

Service Retirement

Rates vary by age and service. See sample rates in table below.

Attained Age	Years of Service						
	5	10	15	20	25	30	35
50	0.0030	0.0030	0.0030	0.0030	0.00924	0.0175	0.0201
52	0.0108	0.0108	0.0108	0.0108	0.03262	0.0618	0.0712
54	0.0242	0.0242	0.0242	0.0242	0.07272	0.1380	0.1590
56	0.0230	0.0230	0.0230	0.0230	0.06910	0.1310	0.1510
58	0.0206	0.0206	0.0206	0.0206	0.06174	0.1170	0.1349
60	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

POFF – Safety Option Plan 1 (2.5%@57)

Service Retirement

Rates vary by age and service. See sample rates in table below.

Attained Age	Years of Service						
	5	10	15	20	25	30	35
50	0.0042	0.0140	0.0189	0.0217	0.0364	0.0574	0.0665
52	0.0056	0.0182	0.0245	0.0287	0.0469	0.0742	0.0861
54	0.0120	0.0405	0.0548	0.0630	0.1043	0.1643	0.1905
56	0.0168	0.0560	0.0752	0.0872	0.1448	0.2272	0.2640
58	0.0180	0.0594	0.0801	0.0927	0.1530	0.2403	0.2790
60	0.0190	0.0637	0.0865	0.0998	0.1653	0.2594	0.3012

POFF – Safety Option Plan 2 (2.7%@57)

Service Retirement

Rates vary by age and service. See sample rates in table below.

Attained Age	Years of Service						
	5	10	15	20	25	30	35
50	0.0042	0.0140	0.0189	0.0217	0.0364	0.0574	0.0665
52	0.0060	0.0195	0.0263	0.0308	0.0503	0.0795	0.0923
54	0.0128	0.0432	0.0584	0.0672	0.1112	0.1752	0.2032
56	0.0179	0.0595	0.0799	0.0927	0.1539	0.2414	0.2805
58	0.0200	0.0660	0.0890	0.1030	0.1700	0.2670	0.3100
60	0.0200	0.0670	0.0910	0.1050	0.1740	0.2730	0.3170

State Safety – Basic Safety Plan (2%@57)

Service Retirement

Rates vary by age and service. See sample rates in table below.

Attained Age	Years of Service						
	5	10	15	20	25	30	35
50	0.0102	0.0179	0.0238	0.0281	0.0315	0.0408	0.0485
52	0.0068	0.0119	0.0162	0.0196	0.0213	0.0281	0.0332
54	0.0180	0.0308	0.0413	0.0480	0.0540	0.0698	0.0833
56	0.0285	0.0480	0.0645	0.0758	0.0848	0.1095	0.1305
58	0.0320	0.0544	0.0736	0.0856	0.0960	0.1240	0.1472
60	0.0387	0.0648	0.0882	0.1035	0.1152	0.1494	0.1773

Public Agencies

Safety Option Plan 2 (2.7%@57)

Service Retirement

Rates vary by age and service. See sample rates in table below.

Attained Age	Years of Service						
	5	10	15	20	25	30	35
50	0.0138	0.0138	0.0138	0.0138	0.0253	0.0451	0.0535
52	0.0249	0.0249	0.0249	0.0249	0.0456	0.0812	0.0963
54	0.0662	0.0662	0.0662	0.0662	0.1211	0.2160	0.2559
56	0.0606	0.0606	0.0606	0.0606	0.1108	0.1975	0.2340
58	0.0628	0.0628	0.0628	0.0628	0.1149	0.2049	0.2427
60	0.1396	0.1396	0.1396	0.1396	0.1719	0.2506	0.2969

Basic Safety Plan (2%@57)

Service Retirement

Rates vary by age and service. See sample rates in table below.

Attained Age	Years of Service						
	5	10	15	20	25	30	35
50	0.0110	0.0110	0.0110	0.0110	0.0202	0.0361	0.0428
52	0.0183	0.0183	0.0183	0.0183	0.0336	0.0599	0.0710
54	0.0488	0.0488	0.0488	0.0488	0.0893	0.1592	0.1886
56	0.0447	0.0447	0.0447	0.0447	0.0816	0.1455	0.1724
58	0.0471	0.0471	0.0471	0.0471	0.0862	0.1537	0.1820
60	0.1047	0.1047	0.1047	0.1047	0.1289	0.1880	0.2227

ATTACHMENT 4

The tables below show a comparison of the total normal cost as a percentage of payroll for benefits applicable to current new hires and for the proposed benefits.

	Total Normal Cost for current new hire	Total Normal Cost for proposed benefit
State Misc (Non-CSU) (77% of current members)	13.2%	12.1%
State Misc (CSU) (23% of current members)	13.2%	12.1%
Industrial	15.5%	14.4%
State Safety (60% of current members)	18.2%	18.1%
State Safety (40% of current members)	20.8%	18.1%
POFF (90% of current members)	21.1%	20.8%
POFF (10% of current members)	24.3%	21.8%
CHP	21.6%	19.4%
Schools	14.4%	11.9%

Current Local Agency Benefit Formula	Proposed Local Agency Benefit Formula	Total Normal Cost for current new hire*	Total Normal Cost for proposed benefit
2% at age 60	2% at age 62	13.2%	11.9%
2% at age 55	2% at age 62	14.4%	11.9%
2.5% at age 55	2% at age 62	16.5%	11.9%
2.7% at age 55	2% at age 62	17.7%	11.9%
3% at age 60	2% at age 62	18.3%	11.9%
2% at age 50	2.7% at age 57	21.5%	21.0%
2% at age 55	2.0% at age 57	17.0%	16.8%
3% at age 55	2.7% at age 57	23.4%	21.0%
3% at age 50	2.7% at age 57	25.7%	21.0%

*Normal Costs for local agencies vary. The normal costs presented above are based on a large local agency.



Preliminary Summary of Pension Reform Provisions

These preliminary comments of CalPERS staff are based on its current understanding of AB 340 as set forth in Conference Report. These comments are not intended to address all issues that could arise if the bill becomes law.

Brief Summary	PROPOSED STATUTE	IMPACTS CURRENT MEMBERS	IMPACTS FUTURE MEMBERS																
<p>Reduced Benefit Formulas & Increased Retirement Ages Would create a new defined benefit formula of 2% at age 62 for all new non-safety employees with an early retirement age of 52 and a maximum benefit factor of 2.5% at age 67, and three new defined benefit formulas for safety public employees with a normal retirement age at 50 and a maximum retirement age at 57 as follows:</p> <table border="0"> <tr> <td>Basic Formula</td> <td>1.426% at Age 50</td> <td>Maximum Benefit Factor</td> <td></td> </tr> <tr> <td>Option Plan 1</td> <td>2% at Age 50</td> <td>2% at Age 57 and older</td> <td></td> </tr> <tr> <td>Option Plan 2</td> <td>2% at Age 50</td> <td>2.5% at Age 57 and older</td> <td></td> </tr> <tr> <td></td> <td></td> <td>2.7% at Age 57 and older</td> <td>X</td> </tr> </table> <p>Also would require the formula offered be the closest to the formula presently offered to the same classification and that provides a lower benefit at 55 years of age.</p> <p>Cap Compensation that Counts Toward Pension Benefits Would cap the annual salary that counts towards final compensation for all new employees, excluding judges, at \$110,100 (2012 Social Security Contribution and Benefit Base) for employees that participate in Social Security or \$132,120 (120% of the Contribution and Benefit Base) for those employees that do not participate in Social Security. This compensation cap would adjust annually based on the CPI for All Urban Consumers.</p>	Basic Formula	1.426% at Age 50	Maximum Benefit Factor		Option Plan 1	2% at Age 50	2% at Age 57 and older		Option Plan 2	2% at Age 50	2.5% at Age 57 and older				2.7% at Age 57 and older	X	<p>7522.10 7522.15 7522.20 7522.25</p>		
Basic Formula	1.426% at Age 50	Maximum Benefit Factor																	
Option Plan 1	2% at Age 50	2% at Age 57 and older																	
Option Plan 2	2% at Age 50	2.5% at Age 57 and older																	
		2.7% at Age 57 and older	X																
<p>Eliminate Replacement Benefit Plans Would prohibit a public employer from offering a plan of replacement benefits for new members whose retirement benefits are limited by IRC Section 415. Also would prohibit</p>	7522.43	*	X																

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* Although these provisions would not impact current members directly, they would prohibit public employers from offering such a benefit or option to current members in the future.

September 7, 2012



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<p>a public employer from offering a replacement benefit plan for any employee if the employer does not offer a plan of replacement benefits prior to January 1, 2013.</p> <p>Federal Compensation Limit for Determining Retirement Benefits (1) Would require all public retirement systems in California to adhere to the federal compensation limit when calculating retirement benefits for new members; and (2) would prohibit a public employer from making contributions to any qualified public retirement plan based on any portion of compensation that exceeds this limit. <i>(Note: CalPERS already adheres to the federal compensation limit)</i></p> <p>Actuarially Reduced IDR Benefits for Public Safety Would allow a safety member, who qualifies for an IDR, to receive the greater of: 1) 50% of the member's final compensation plus any annuity purchased with his/her accumulated contributions, if any; 2) A service retirement, if the member qualifies for service retirement; or 3) An actuarially reduced retirement formula, as determined by the actuary, for each quarter year of service age less than age 50, if that amount would be higher than 50% of salary.</p> <p>Equal Sharing of Normal Cost</p> <ul style="list-style-type: none"> For new and current employees, the bill provides that "the standard shall be that employees pay at least 50% of the normal costs and that that employers not pay any of the required employee contribution." For new employees of contracting agencies and schools, the initial employee contribution rate may not be less than 50% of the total annual normal cost of pension benefits. 	7522.42	X	X
	7522.66 21400	X	X
	7522.30 20516.5 20683.2	X	X



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<ul style="list-style-type: none"> For employees of contracting agencies and schools, the employer and employee organization may mutually agree to pay cost sharing agreement for pension benefits between January 1, 2013 and December 31, 2017. Beginning on January 1, 2018 the employer may unilaterally require employees to pay 50% of the total annual normal cost up to an 8% contribution rate for miscellaneous employees and an 11 or 12 percent contribution rate for safety employees. For state employees, contribution rates increase by a fixed percentage at specific dates beginning July 1, 2013. Rates increase and vary by bargaining unit and classification. 			
<p>Close LRS For New Members Would prohibit new members from participating in the LRS. However, new statewide constitutional and legislative statutory officers would still be eligible for optional membership in CalPERS.</p>	9355.4		X
<p>Equal Health Benefits and Health Benefit Vesting Schedule for Non-Represented and Represented Employees Would eliminate the ability of an employer to provide better health benefits or a better health benefit vesting schedule to non-represented employees than it does for represented employees.</p>	7522.40	X	X
<p>Prohibit Purchases of Airtime Would eliminate the ability of any public employee to purchase nonqualified service or "airtime," unless an official application was received by the system prior to January 1, 2013.</p>	7522.46	X	X



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Brief Summary	PROPOSED STATUTE	IMPACTS CURRENT MEMBERS	IMPACTS FUTURE MEMBERS
<p>Prohibit Retroactive Pension Increases Would prohibit public employers from granting retroactive pension benefit enhancements that would apply to service performed prior to the date of the enhancement. This would apply to current and future employees.</p>	7522.44	X	X
<p>Prohibit Pension Holiday Would require the combined employer and employee contributions, in any fiscal year, to cover that year's normal cost.</p>	7522.52	X	X
<p>Calculate Benefits Based on Regular or Base Pay to Stop Spiking: New Employees Would require that pensionable compensation for all new employees be defined as the normal monthly rate of pay or base pay of the member paid in cash to similarly situated members of the same group for services rendered on a full-time basis during normal working hours, pursuant to a publicly available pay schedule. Would also exclude all bonuses, overtime, pay for additional services outside normal working hours, cash payouts for unused leave (vacation, annual, sick leave, CTO, etc.), severance pay and various other types of pay as specified. Also would exclude any compensation determined by the retirement board to have been paid to increase a member's retirement benefit and any other form of compensation determined to be inconsistent with the statutory definition.</p>	7522.40		X
<p>Require Three-Year Final Compensation Would require that final compensation for new employees of all California public agencies be defined as the highest average annual final compensation during a consecutive 36 month period, subject to the cap. Also would prohibit a public employer</p>	7522.33	*	X

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* Although these provisions would not impact current members directly, they would prohibit public employers from offering such a benefit or option to current members in the future.

September 7, 2012



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Brief Summary	PROPOSED STATUTE	IMPACTS CURRENT MEMBERS	IMPACTS FUTURE MEMBERS
<p>in the future from modifying a benefit plan to provide a final compensation period of less than a three year period for existing employees.</p>			
<p>Felons Forfeit Pension Benefits Would require both current and future public officials and employees to forfeit certain specified pension and related benefits if they are convicted of a felony in carrying out their official duties, in seeking an elected office or appointment, or in connection with obtaining salary or pension benefits, subject to certain requirements.</p>	<p>7522.70 7522.72 7522.74</p>	<p>X</p>	<p>X</p>
<p>Limit Post-Retirement Public Employment</p> <ul style="list-style-type: none"> • Would limit all employees who retire from public service from working more than 960 hours or 120 days per year for any public employer in the same public retirement system without reinstating from retirement. • Would require a 180-day "sit-out" period before a retiree could return to work without reinstating from retirement except under certain circumstances. • Would require a 180-day "sit-out" period for retirees who received either a golden handshake or some other employer incentive to retire. • Would require a public retiree appointed to a full-time position on a state board or commission to suspend his or her retirement allowance and become a member of CalPERS. 	<p>7522.56</p>	<p>X</p>	<p>X</p>
<p>Contracting Agency Liability for Excessive Compensation Would require CalPERS (for plans it administers) to define a "significant increase" in actuarial liability for a former employer caused by increased compensation paid to a nonrepresented employee by a subsequent public employer. Would also require</p>	<p>20791</p>	<p>X</p>	<p>X</p>



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Brief Summary	PROPOSED STATUTE	IMPACTS CURRENT MEMBERS	IMPACTS FUTURE MEMBERS
CalPERS develop a plan to assess the cost of that excess liability to the employer who paid the excessive compensation and the provision would apply to any significant increase that is determined after January 1, 2013 regardless of when that increase occurred.			