Stanford University • November 2010

SIEPR policy brief

Stanford Institute for Economic Policy Research

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The Funding Status of Independent Public Employee Pension Systems in California

By Joe Nation, PhD

Introduction

In April, SIEPR issued *Going for Broke: Reforming California's Public Employee Pension Systems.* That policy brief identified the funding shortfall for three state pension systems: California Public Employees' Retirement System (CalPERS), California State Teachers' Retirement System (CalSTRS), and the University of California Retirement System (UCRS). Using a risk-free discount rate for future liabilities, the report concluded that these three systems in June 2008 (i.e., prior to the onset of the financial crisis) were underfunded by $425 billion, equivalent to about five state general fund budgets. The study also identified policies that could prevent future shortfalls.

Going for Broke provided a useful summary of the status of state pension systems, but it did not include an assessment of the funding status of independent or local pension systems. These include public employee pension systems operating under the County Employees' Retirement Law of 1937 and systems operated by cities and special districts. This policy brief examines independent pension systems with assets or liabilities greater than $500 million for the latest year available. These 24 systems account for approximately 91 percent of the total assets and liabilities for independent systems. This policy brief asks these questions:

- What are the current funded status and current funding shortfalls, if any, for these independent systems?
- How do the shortfalls for independent systems compare with identified shortfalls for state systems, such CalPERS? And how do independent systems compare with each other?
- How do funding shortfalls for pension systems compare with local government

continued on inside...

About The Author

Joe Nation, Professor of the Practice of Public Policy, Stanford University and former Assemblyman. He directs the graduate student Practicum in public policy and teaches policy courses on climate change, health care, and California state issues. He is also a Principal at his own consulting firm, where his clients include RAND, PG&E, the Sonoma County Water Agency, the North Bay Leadership Council, and others. Nation represented Marin and Southern Sonoma Counties in the California State Assembly from 2000-2006. He has a B.A. in Economics, German and French from Colorado University and a Masters in Foreign Service from Georgetown University. While at Georgetown, Nation worked for both Madeleine Albright and Henry Kissinger. He received a Ph.D. in Public Policy Analysis at the Pardee RAND Graduate School. During his tenure, Nation authored 50 bills that were enacted into law. In 2005, he was named Legislator of the Year by the California County Boards of Education. Nation was the principal co-author of AB 32, California's Global Warming Solutions Act.

funding shortfalls for Other Post Employment Benefits (OPEB)?

- What policy options might local pension systems consider to reduce identified shortfalls? In particular, what options might be considered in light of recent state reforms resulting from the 2010-2011 budget agreement?

Funding Shortfalls for Independent Pension Systems

Assessing the funded status of independent systems suggests strongly that obligations for future payments be discounted at risk-free rates.[1] That requirement is unique to pension systems with defined benefits since case law has interpreted those benefits to be guaranteed and legally equivalent to compensation.[2]

Public employee pension systems routinely recognize this guarantee in communications with employees. (See Figure 1 for a recent message from the San Mateo County Employees' Retirement Fund, or SamCERA.)

Table 1 illustrates June 2008[4] Unfunded Actuarial Accrued Liabilities (UAAL)[5] as reported

1 For additional discussion, see Howard Bornstein, et al., *Going for Broke: Reforming California's Public Employee Pension Systems,* Stanford Institute for Economic Policy Research, April 2010 and Robert Novy-Marx and Joshua Rauh, *The Liabilities and Risks of State-Sponsored Pension Plans, Journal of Economic Perspectives* 23(4), 2009, 191-210.

2 *Betts v. Board of Administration* (1978) 21 Cal.3d 859.

Figure 1
Recent San Mateo County Employees' Retirement Association Communication[3]

The Economy, SamCERA and You.

Should I be concerned for my benefits or my member account due to the current economic crisis?

NO.

Both your SamCERA benefits and your SamCERA account balance are protected against any declines due to the economic crisis.

SamCERA benefits are NOT based on investment earnings.

At retirement your benefit will be calculated based on a formula that uses your **years of service** as a member of the system, your **final average salary**, and **your age**.

(Go to *SamCERA.org* to estimate your benefit at various **years of service**, final average salaries and ages.)

Your benefits are guaranteed by your employer, the county of San Mateo. They do not fluctuate with the earnings or losses in the stock market or the strength or weakness of the economy.

Your SamCERA account balance cannot be reduced.

Your account earns interest based on the earnings of the fund and the fund's assumed earnings rate. No matter what happens to the markets, your account will never decline nor will it be credited with more than the assumed rate (currently *7.75%*) for any fiscal year. Your account will always be equal to your contributions plus the interest credited. The main use of account balances is for payouts to members who terminate. If you earn a lifetime retirement benefit, it will not be based on your account balance (see above).

But doesn't SamCERA need investment earnings to pay benefits?

SamCERA's goal is to earn an average of *7.75%* over a long period of years. So while the fund lost value (*-7.65%*) in the 2007-2008 fiscal year and more during the first few months of the current fiscal year, over the three previous fiscal years the fund has had an average investment return of more than 14%.

The Retirement Board maintains a diversified portfolio of domestic and international equities along with fixed income and real estate investments. The board, investment staff and investment and actuarial consultants expect the fund to continue to earn its assumed return of *7.75%* over the long term.

But to reiterate the main point of this flyer, your retirement benefits are guaranteed by your employer, regardless of the earnings or losses of the retirement fund.

3 SamCERA, *Highlights*, *http://www.samcera.org* (retrieved on November 2, 2010); emphasis added by SamCERA.

by independent systems throughout California after using a 4 percent risk-free discount rate for future liabilities. That 4 percent rate is comparable to the 4.14 percent rate used in *Going for Broke,* and it is slightly higher than recently reported daily 10-year Treasury rates of

Table 1
Reported and Estimated UAAL, June 2008 ($ millions)

Pension System	Reported, 2008	2008 (6% discount rate)	2008 (4% discount rate)
Alameda County Employees' Retirement Association	893.9	3,109.0	6,279.8
City of Fresno, All Systems	(527.7)[a]	170.7	1,078.0
City of Los Angeles Fire and Police Employees' System	125.8	5,837.2	14,012.9
City of Los Angeles City Employees' Retirement System	1,748.1	6,222.4	12,627.4
City of Los Angeles Water and Power Employees' System	371.3	3,418.7	7,781.2
City of Los Angeles, All Systems	2,245.2	15,478.4	34,421.5
City of San Jose, All Systems	733.9	2,640.9	5,245.0
Contra Costa County Employees' Retirement Association	690.0	2,804.5	6,111.9
East Bay Municipal Utility District Retirement System	344.1	916.1	1,659.3
Fresno County Employees' Retirement Association	617.6	1,989.5	3,953.4
Kern County Employees' Retirement Association	1,017.2	2,275.7	4,291.9
Los Angeles County Employees' Retirement Association	2,313.3	16,701.8	39,753.7
Marin County Employees' Retirement Association	283.7	991.5	2,004.7
Merced County Employees' Retirement Association	203.9	507.0	914.0
Orange County Employees' Retirement System	3,112.3	6,835.2	12,799.6
Sacramento County Employees' Retirement System	432.6	2,794.0	6,362.3
San Bernardino County Employees' Retirement Association	432.1	3,141.4	7,019.8
San Diego City Employees' Retirement System	1,303.2	3,347.4	6,622.4
San Diego County Employees' Retirement Association	485.4	4,493.0	9,699.4
San Francisco City and County Employees' Retirement System	(582.6)[a]	5,560.7	14,354.6
San Joaquin County Employees' Retirement Association	304.6	1,238.3	2,575.0
San Mateo County Employees' Retirement Association	587.3	1,549.2	3,090.3
Santa Barbara County Employees' Retirement System	244.5	1,177.1	2,433.1
Sonoma County Employees' Retirement Association	301.9	1,038.9	2,093.8
Stanislaus County Employees' Retirement Association	231.7	909.7	1,820.5
Tulare County Employees' Retirement Association	67.4	424.0	956.9
Ventura County Employees' Retirement Association	290.0	1,628.3	3,544.0
Sub-total	**16,025.2**	**81,722.1**	**179,084.9**
Small independent systems (9% of total)	1,442.3	7,355.0	16,117.6
Grand total	**17,467.5**	**89,077.1**	**195,202.5**

a Negative values reflect surpluses.

4 Public pension fund systems typically report UAAL for June 30 of each year. About one-half of the independent systems have reported data for 2009, but the other one-half have reported only through June 2008. Given the recent decline in asset values, one would expect 2009 UAALs for many of these systems to increase.

5 UAAL is equal to AAL (Actuarially Accrued Liabilities) less AVA (Actuarial Value of Assets).

3.49 percent.[6] For illustrative purposes, Table 1 also presents UAAL using a 6 percent discount rate for future liabilities.

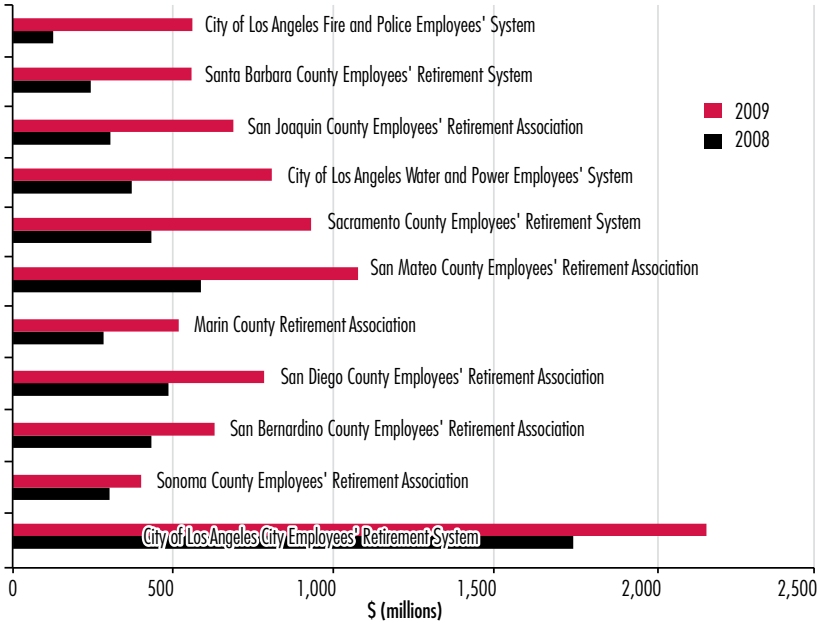
As indicated, these 24 systems[7] reported a $16.0 billion UAAL in 2008.[8] The unfunded liability for remaining independent systems (i.e., those with less than $500 million in assets or liabilities) is estimated at $1.4 billion, or a total for all independent systems of $17.5 billion. At a 4 percent risk-free discount rate, the UAAL increases to $195.2 billion. This excludes system losses in assets during 2008-2009 and any subsequent increases during 2009-2010. Given market performance during that two-year period, it is likely that current UAAL for these independent systems remains at roughly $200 billion.

Table 2 lists 2008 funded levels (assets divided by liabilities) for independent systems and for CalPERS based on reported data[9] and using 4 percent and 6 percent discount rates. Generally, pension systems seek funding levels of 100 percent.[10] As indicated, the highest funded levels are found for the City of Fresno and San Francisco. The lowest are for East Bay Municipal Utilities District, Orange County, and Kern County. The average funded level for all systems at a 4 percent discount rate is 44.7 percent, virtually identical to 44.6 percent for CalPERS. The average funded level for all systems at a 6 percent discount rate is 63.0 percent, also virtually identical to the 62.8 percent figure for CalPERS.

As noted above, these figures do not include the decline in assets reported by several systems between June 2008 and June 2009, nor do they include any subsequent increases between June 2009 and June 2010.

Slightly more than one-half of these independent systems have reported 2009 funding levels, including UAAL (Figure 2). As indicated, all systems reported substantial increases in unfunded liabilities, ranging from 24 percent to 346 percent.

Figure 2
Reported UAAL, 2008-2009



Sources: Comprehensive Annual Financial Reports

Note: Fresno city UAAL is not shown since Fresno reported surpluses in both years. San Francisco is not shown since the San Francisco system moved from a surplus to a shortfall. San Francisco reported a 2008 surplus of $583 million and a 2009 shortfall of $494 million, a nearly $1 billion change.

6 U.S. Dept. of the Treasury, *Daily Treasury Long-Term Rates, http://www.ustreas.gov/offices/domestic-finance/debt-management/interest-rate/ltcompositeindex.sbtml* (retrieved November 2, 2010).

7 Table 1 provides UAAL for each Los Angeles system (Fire and Police, City Employees, and Water and Power), as well as an aggregate for all city of Los Angeles pension systems.

8 Two systems, the City of Fresno (reflecting the combined UAAL for both City Employees and Fresno Fire and Police) and San Francisco City and County reported funding surpluses, but these surpluses become shortfalls at both 4 percent and 6 percent discount rates.

9 Generally, public employee pension systems in California use 7.75 percent or 8.0 percent discount rates.

10 Because public employee pension systems guarantee payments to retirees, a funding level of 100 percent is insufficient. Instead, public employee systems should seek funded ratios of closer to 130 percent unless they assume risk-free discount rates for liabilities. See *Going for Broke,* esp. pages 2-4.

Table 2
Reported and Estimated Funded Levels, June 2008

System	Reported, 2008	2008 (6% discount rate)	2008 (4% discount rate)
Alameda County Employees' Retirement Association	83.9%	59.9%	42.5%
City of Fresno, All Systems	134.7%	92.3%	65.5%
City of Los Angeles Fire and Police Employees' System	99.1%	70.8%	50.2%
City of Los Angeles City Employees' Retirement System	84.4%	60.3%	42.8%
City of Los Angeles Water and Power Employees' System	95.1%	67.9%	48.2%
City of Los Angeles, All Systems	93.2%	66.6%	47.3%
City of San Jose, All Systems	83.5%	58.5%	41.5%
Contra Costa County Employees' Retirement Association	88.5%	65.3%	46.4%
East Bay Municipal Utility District Retirement System	72.4%	49.6%	35.2%
Fresno County Employees' Retirement Association	82.0%	58.6%	41.6%
Kern County Employees' Retirement Association	72.3%	53.8%	38.2%
Los Angeles County Employees' Retirement Association	94.5%	70.4%	49.9%
Marin County Employees' Retirement Association	84.0%	60.0%	42.6%
Merced County Employees' Retirement Association	70.5%	49.1%	34.8%
Orange County Employees' Retirement System	71.3%	53.1%	37.7%
Sacramento County Employees' Retirement System	93.2%	68.0%	48.2%
San Bernardino County Employees' Retirement Association	93.6%	66.9%	47.5%
San Diego City Employees' Retirement System	78.2%	58.2%	41.3%
San Diego County Employees' Retirement Association	94.4%	64.7%	45.9%
San Francisco City and County Employees' Retirement System	103.8%	74.1%	52.6%
San Joaquin County Employees' Retirement Association	87.0%	62.1%	44.1%
San Mateo County Employees' Retirement Association	79.1%	58.9%	41.8%
Santa Barbara County Employees' Retirement System	88.6%	61.7%	43.8%
Sonoma County Employees' Retirement Association	83.6%	59.7%	42.4%
Stanislaus County Employees' Retirement Association	95.7%	59.1%	42.0%
Tulare County Employees' Retirement Association	92.9%	67.5%	47.9%
Ventura County Employees' Retirement Association	91.3%	65.2%	46.3%
CalPERS	84.3%	62.8%	44.6%
Average	88.3%	63.0%	44.7%

Sources: Comprehensive Annual Financial Reports and author's estimates.

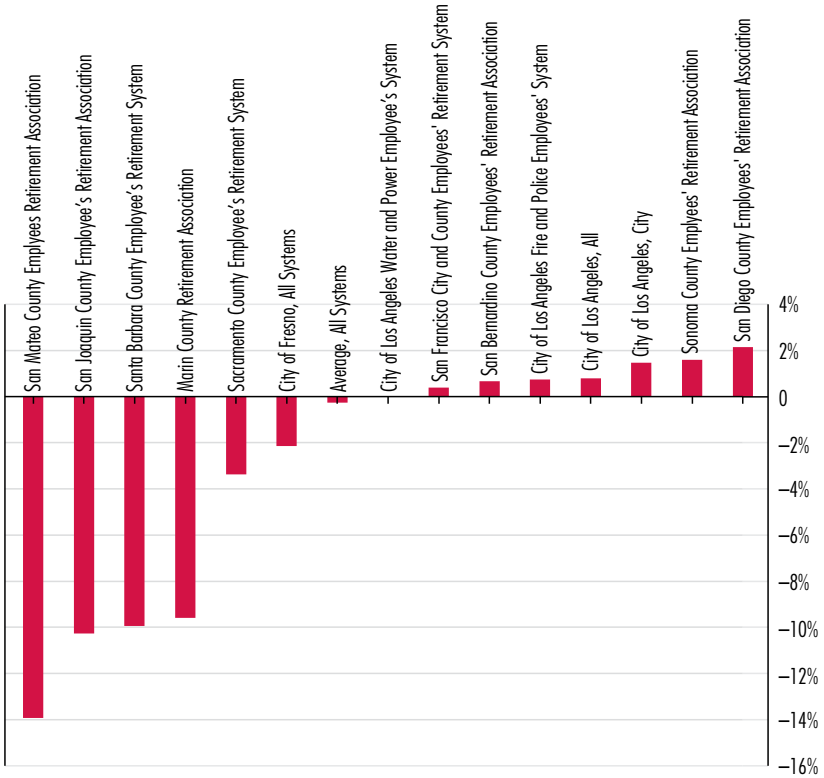
On average, UAAL increased more than 100 percent.[11] These increases in UAAL occurred in part because of both decreases in asset values and increases in liabilities. These observed changes in UAAL suggest that non-reporting systems will also report substantial increases in UAAL when they release 2009 data in the next few months.

Reported Changes in Asset Values

Independent pension systems that have published 2009 data report a wide range of changes to their actuarial value of assets. Systems reporting declines in their asset values (Figure 3) include San Mateo County (-14 percent), San Joaquin County (-10 percent), and Santa Barbara County (-10 percent). Surprisingly, several systems reported increases in asset values between June 2008 and June 2009, despite the financial crisis. For example, the San Diego County Employees' Retirement system reported a more than 2 percent increase in assets, as did Sonoma County. These increases are surprising for several reasons. First, during the same period, major stock market indexes fell substantially, e.g., the Dow Jones Industrial average fell 27 percent; NASDAQ declined 20 percent. Real estate assets fell considerably during this period, as well. Perhaps most striking, during the same period, CalPERS reported a 25 percent decline in the market value of assets.[12]

This surprisingly strong showing for AVA in a period of decline in asset values may be related to lengthy amortization periods[13] or to recent changes in accounting guidelines that convert Market Value of Assets (MVA) to AVA.[14] For example, in mid-2009, CalPERS modified the "corridor" around MVA that it uses to report AVA.[15] Prior to mid-2009, CalPERS permitted AVA to range from plus or minus 20 percent of MVA. However, in 2009, CalPERS adjusted this

Figure 3
Reported Change in Asset Values, 2008-2009



Sources: Comprehensive Annual Financial Reports

11 On an unweighted basis.

12 Provided by CalPERS California Public Employees' Retirement System External Affairs Branch, Office of Public Affairs. CalPERS is expected to release its June 2009 AVA figure at the end of November.

13 Some systems amortize losses up to 33 years, for example.

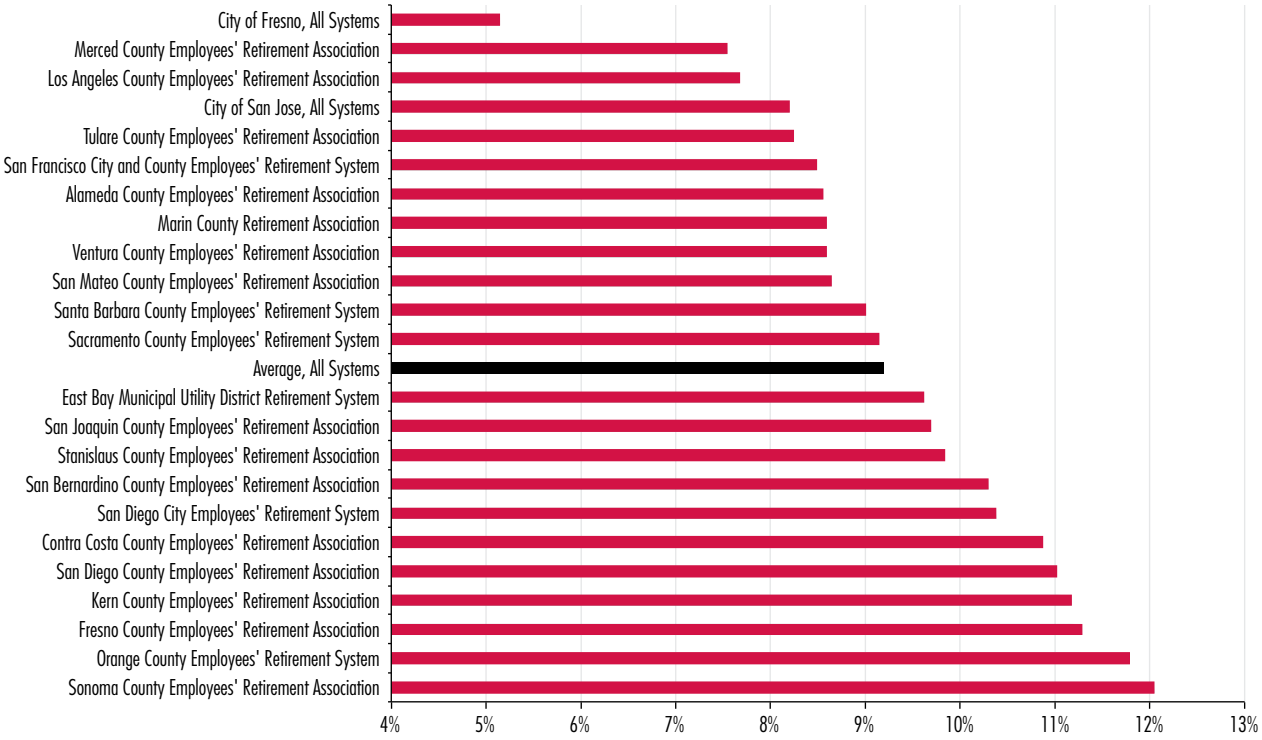
14 Unlike most public employee pension systems, CalPERS reports both MVA and AVA to provide a more realistic assessment of its ability to meet future obligations.

15 For a description of this expansion in corridor limits, see *CalPERS Memorandum to Members of the Board of Administration, Agenda Item 14,* May 13, 2009.

corridor to minus 20 percent and plus 40 percent.[16] It is unclear how many independent systems might have also adjusted the corridor around MVA, but increases in AVA during a period of asset decline suggest that at least some may have adopted this more flexible accounting guideline.

The increase in liabilities for independent pension systems has also played a role in increasing unfunded liabilities. For example, AAL for the 24 independent pension systems highlighted in this report increased at an average annual rate of slightly more than 9 percent between 1996 and 2008 (Figure 4). This increase in liabilities has occurred due to both increases in the number of employees and increases in benefit levels. Somewhat surprisingly, the annual growth rates in the second half of this period (2003-2008) are similar to the first half of this period (1996-2002) for most systems.[17]

Figure 4
Average Annual Changes in Liabilities, 1996-2008



Sources: Comprehensive Annual Financial Reports

Note: Reflects 1997-2008 for all City of Los Angeles systems.

16 As an example, assume MVA of $100 million. Under pre-2009 accounting guidelines, AVA could range from $80 million to $120 million. After the 2009 adjustment, AVA could range from $80 million to $140 million, inflating (perhaps inappropriately) both the reported value of assets and funded ratios. Increased funded ratios result directly in lower required employee and employer contributions, a change that itself has enormous short-term political benefits.

17 The passage of Senate Bill 400 in 1999 increased benefit levels for members of state pension systems, notably CalPERS. Some local governments matched these increased benefit levels, which should have resulted in a higher average growth rate in the second half of this 13-year period. The observed lower growth rate in AAL may have occurred because of compensatory actions, such as lowering total employment and/or the number of members covered by pension benefits.

Pensions and Other Post Employment Benefits

In addition to the challenges faced by independent systems meeting pension obligations, associated local governments face funding challenges for Other Post Employment Benefits, which are typically dominated by health care costs (Table 3).[18] Although unfunded pension obligations generally are much larger, the relative funding status of pension systems to OPEB varies somewhat by jurisdiction. For example, the County of Los Angeles reports unfunded OPEB that is about one-half its unfunded pension liability. San Francisco's OPEB UAAL is also a substantial share of its total unfunded liability. On average, the pension share of total unfunded liabilities is 91 percent.[19]

These reported OPEB values likely understate actual unfunded obligations, but for somewhat different reasons than unfunded pension obligations. First, OPEB obligations do not have the same legal standing or guarantee as pension obligations. Local governments can reduce OPEB, albeit with substantial political difficulty. As such, OPEB liabilities should probably be discounted at a rate greater than risk free, but less than the expected investment rate of return. In short, the figures in Table 3 understate OPEB liabilities since they assume greater flexibility than likely exists.

OPEB obligations are also likely understated since virtually all governments use optimistic assumptions about health care cost increases. For example, most assume initial medical inflation rates of 9 percent to 10 percent per year, but they further assume steep and quick decreases in medical inflation rates. For example, Alameda County assumed a 9 percent medical inflation rate in 2008, falling to 5 percent by 2016.[20] Contra Costa County assumes a decline in this inflation rate to 5 percent by 2013,[21] and Kern County assumes a current rate of only 6.5 percent.[22] Recent medical inflation rates and discussions with public sector actuaries suggest that higher rates than those assumed are more likely.

Pension and OPEB Share of Covered Payroll

The ratio of unfunded liabilities to covered payroll is one useful metric for assessing pension system financial health. A ratio of one indicates that unfunded pension obligations are equal to one year's payroll. Combining unfunded pension and unfunded OPEB shares of covered payroll also provides a useful aggregate measure of the financial health of pension systems and associated local government(s).[23]

Table 4 lists pension system and OPEB UAAL share of covered payroll for large independent public employee pension systems. Pension liabilities are based on a risk-free, 4 percent discount rate; OPEB liabilities are listed as reported. Pension UAAL share of covered payroll ranges from 4.22 (Tulare County) to 12.36 (City of San Diego); the average pension UAAL share of covered payroll is 7.87. Pension UAAL share of covered payroll for CalPERS is 5.86, suggesting that—at least according to this metric—CalPERS is in better financial health than independent pension systems on average.[24]

Reported OPEB share of covered payroll ranges from a low of .05 (Tulare County) to a high of 3.57 (Los Angeles

18 Table 3 lists UAAL for pension systems based on a risk-free discount rate and for OPEB as reported by local government entities since OPEB can generally be reduced more easily. See the main body below for additional discussion.

19 The pension share of total UAAL is 83 percent when weighted by the dollar value of pension and OPEB UAAL, a higher figure due in part to the relative size of Los Angeles County's liabilities.

20 County of Alameda, *Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2009*, p. 69.

21 Contra Costa County, *Comprehensive Annual Financial Report: Fiscal Year Ended June 30, 2009,* p. 85.

22 Kern County, *Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2009,* p. 109.

23 Most local governments have a fiduciary responsibility for both pension and OPEB. For example, consider Marin County, which has a responsibility to county workers and retirees as part of the Marin County Employees' Retirement Association. The county has a separate obligation to those same workers and retirees to whom the county has promised OPEB.

24 This reflects pension UAAL only and excludes any OPEB liabilities.

Table 3
Pension and OPEB UAAL, 2008 ($ millions)

System/Governmental Entity	Pension UAAL (4% discount rate)	OPEB reported, 2008	Pension/Total
Alameda County	6,279.8	221.5	96.6%
City of Fresno	1,078.0	128.8	89.3%
City of Los Angeles Fire and Police	14,012.9	1,069.2	92.9%
City of Los Angeles City Employees	12,627.4	585.1	95.6%
City of Los Angeles Water and Power	7,781.2	638.5	92.4%
City of Los Angeles, Total	34,421.5	2,292.8	93.8%
City of San Jose	5,245.0	1,141.0[a]	82.1%
Contra Costa County	6,111.9	1,859.0	76.7%
East Bay Municipal Utility District	1,659.3	130.0[a]	92.7%
Fresno County	3,953.4	NA	NA
Kern County	4,291.9	103.3	97.7%
Los Angeles County	39,753.7	21,863.6	64.5%
Marin County	2,004.7	378.2[b]	84.1%
Merced County	914.0	97.3[c]	90.4%
Orange County	12,799.6	408.3	96.9%
Sacramento County	6,362.3	245.6	96.3%
San Bernardino County	7,019.8	NA	NA
San Diego City	6,622.4	1,206.1	84.6%
San Diego County	9,699.4	199.4	98.0%
San Francisco City and County	14,354.6	4,036.3[c]	78.1%
San Joaquin County	2,575.0	28.1	98.9%
San Mateo County	3,090.3	102.4[c]	96.8%
Santa Barbara County	2,433.1	173.4[c]	93.3%
Sonoma County	2,093.8	258.7[c]	89.0%
Stanislaus County	1,820.5	39.8	97.9%
Tulare County	956.9	12.4	98.7%
Ventura County	3,544.0	34.4	99.0%
Total	**179,084.9**	**37,253.2**	**91.1%** [d]

Sources: Annual Comprehensive Annual Financial Reports

Note: OPEB for Fresno and San Bernardino counties are not available. OPEB figures reflect only those post-employment benefits promised to employees in associated local governments. For example, a county-based retirement association provides retirement benefits for county employees. But it may also administer retirement benefits for non-county members, but typically not OPEB, which remains the responsibility of a different government agency.

a 2007 b 2005 c 2009 d Average

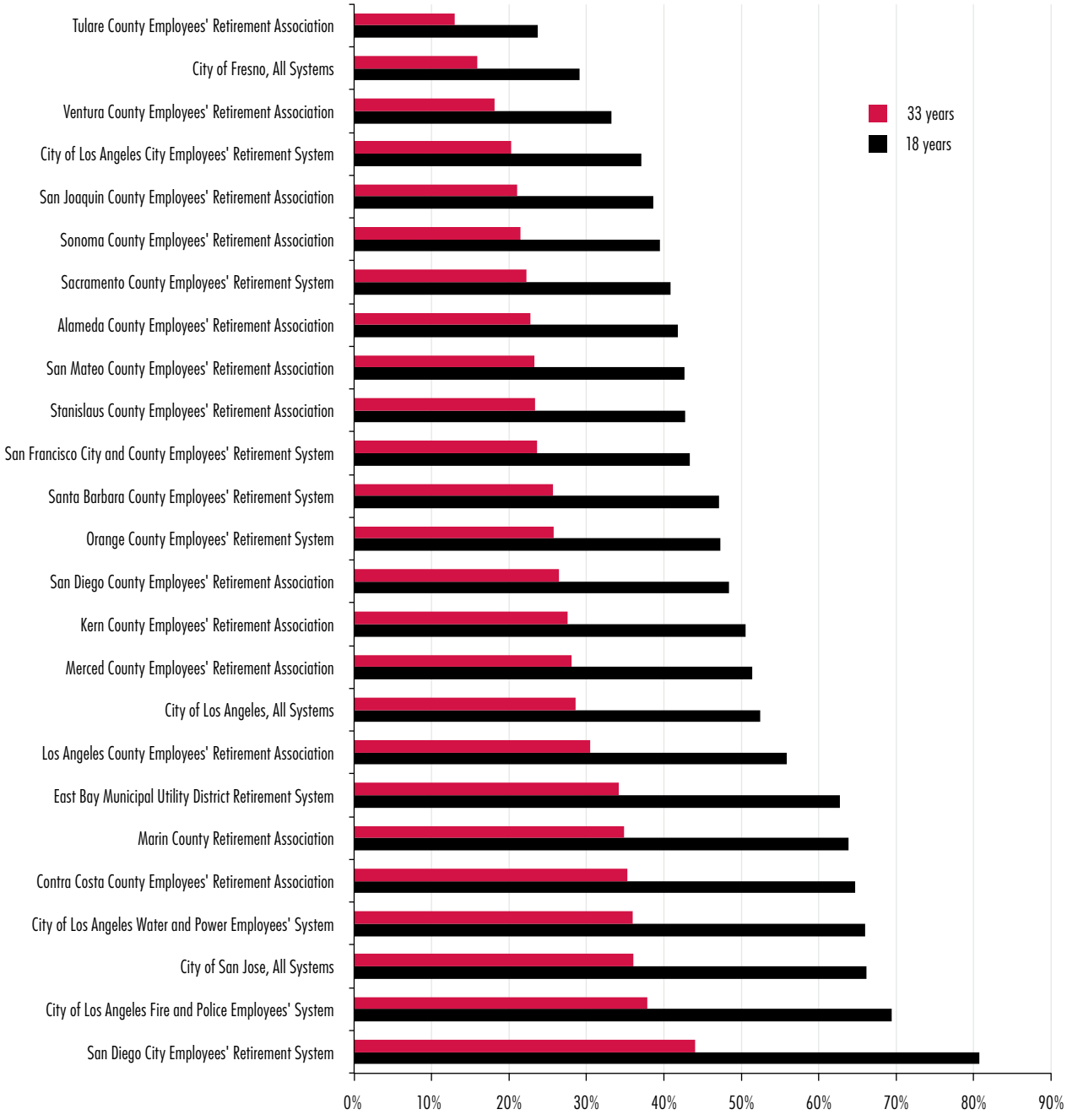
Table 4
2008 Pension, OPEB UAAL Share of Covered Payroll

	Pension UAAL (4% discount rate) share of covered payroll	Reported OPEB UAAL share of covered payroll	OPEB plus Pension UAAL share of covered payroll total
Alameda County Employees' Retirement Association	7.27	0.26	7.52
City of Fresno, All Systems	4.65	0.60	5.24
City of Los Angeles Fire and Police Employees' System	11.61	0.89	12.50
City of Los Angeles City Employees' Retirement System	6.39	0.30	6.68
City of Los Angeles Water and Power Employees' System	10.98	0.90	11.88
City of Los Angeles, All Systems	8.84	0.59	9.43
City of San Jose, All Systems	9.66	2.25[a]	11.91
Contra Costa County Employees' Retirement Association	8.67	2.97	11.64
East Bay Municipal Utility District Retirement System	10.47	0.82[a]	11.29
Kern County Employees' Retirement Association	8.89	0.21	9.10
Los Angeles County Employees' Retirement Association	6.49	3.57	10.06
Marin County Retirement Association	9.35	2.15	11.50
Merced County Employees' Retirement Association	8.37	0.89[c]	9.26
Orange County Employees' Retirement System	8.15	0.35	8.51
Sacramento County Employees' Retirement System	7.05	0.30	7.35
San Diego City Employees' Retirement System	12.36	2.17	14.53
San Diego County Employees' Retirement Association	8.54	0.18	8.72
San Francisco City and County Employees' Retirement System	5.84	1.95[a]	7.79
San Joaquin County Employees' Retirement Association	6.82	0.13	6.95
San Mateo County Employees' Retirement Association	7.42	0.25[c]	7.67
Santa Barbara County Employees' Retirement System	7.92	0.57[c]	8.48
Sonoma County Employees' Retirement Association	6.26	0.84[c]	7.10
Stanislaus County Employees' Retirement Association	7.52	0.18	7.70
Tulare County Employees' Retirement Association	4.22	0.05	4.27
Ventura County Employees' Retirement Association	5.91	0.07	5.99
Average	**7.99**	**0.92**	**8.91**

Note: OPEB for Fresno and San Bernardino counties are not available. In some cases, covered payroll for OPEB and pensions vary and/or are missing. In these cases, covered payroll for OPEB and pensions are assumed to be equal.

a 2007 b 2005 OPEB, estimated 2005 covered payroll. c 2009 d Average

Figure 5
Estimated Share of Covered Payroll Required for Unfunded Pension, OPEB Liabilities



Sources: Comprehensive Annual Financial Reports
Note: Reflects 1997-2008 for all City of Los Angeles systems.

County). The highest combined ratio, i.e., unfunded pension plus OPEB liabilities, occurs in the city of San Diego (14.53), while the lowest is in Tulare County (4.27).

Typically, pension systems attempt to amortize and eliminate any unfunded liabilities over a defined period of time. Those efforts are similar to a consumer using an extended period to eliminate credit card debt or a home buyer who takes out a long-term mortgage.

It is not feasible in this policy brief to examine the amortization periods and other specific accounting assumptions for each independent system. Instead, this report uses 18-year and 33-year periods to approximate the share of covered payroll necessary to reduce unfunded liabilities to zero (Figure 5).[25] As indicated, the unfunded pension and OPEB share of covered payroll for the city of San Diego is 81 percent in the 18-year scenario, falling to 44 percent in the 33-year scenario. At the other end of the spectrum, the estimated covered payroll required to fund UAAL for Tulare County is 24 percent under the 18-year scenario, falling to 13 percent under the 33-year scenario.

The average for all systems in the 18-year scenario is 50 percent, suggesting that one-half of future covered payroll will be required to meet *unfunded* pension and OPEB obligations. It is important to emphasize that this estimated share of covered payroll reflects only that required to eliminate unfunded obligations; contributions to fund ongoing pension and OPEB costs are additional.

Local governments generally contribute a significant share of payroll to cover ongoing pension costs.[26] For example, in 2009 the contribution rate for the city of San Diego was 22.85 percent and 41.03 percent for general and public safety employees, respectively.[27] About one-half of the total rate reflected ongoing, or Normal Cost, and the balance reflected catch-up for prior losses. Similarly, in 2009 San Jose contributed 20.89 percent and 23.32 percent for the Police and Fire members, respectively. The contribution rate for miscellaneous employees was 17.63 percent.[28] For Los Angeles County, the Normal Cost contribution rate in the most recent year was 10.09 percent.[29] In short, the contribution rate for ongoing pension costs currently ranges from 10 percent to 15 percent.

Thus, in the 18-year scenario, local government contribution rates on average will reach 60 percent to 65 percent (i.e., 50 percent to cover unfunded pension and OPEB costs plus 10 percent to 15 percent to cover ongoing pension costs), or nearly two-thirds of covered payroll.[30] This required share of covered payroll may be somewhat optimistic since it 1) excludes ongoing OPEB contributions, 2) understates medical inflation rates, and 3) assumes unchanged Normal Cost contributions, which are unlikely.[31]

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25 This is intended to set reasonable bounds for the amortization of unfunded liabilities: 18 years reflects the approximate number of years that pension benefits are paid to retirees; 33 years is arguably too long (i.e., the amortization of unfunded liabilities should not extend into the next "generation" of retirees), but it reflects the amortization period assumed by many public pension systems in California. This measure is an approximation for several additional reasons: 1) future covered payroll may not follow current covered payroll; 2) OPEB obligations may be higher since most local governments assume discount rates equal to the investment rate of return; and 3) reported OPEB almost certainly understates medical cost inflation.

26 Conversely, most local governments dedicate very little funding to OPEB or retiree health care. In fact, it is not uncommon for municipal governments to completely forgo OPEB contributions.

27 City of San Diego, *Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2009*, p. 139. Of the 22.85 percent rate for General Members, 9.89 percent reflected Normal Cost (i.e., the funding of current benefits) and 13.86 percent reflected catch-up for prior losses. For Safety Members, the Normal Cost was 18.41 percent, and 24.23 percent reflected prior losses. Thus, the average combined Normal Cost was 14.15 percent.

28 City of San Jose, *Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2009,* p. 94. These contribution rate figures do not disclose the relative amount of Normal Cost compared with the amortization of losses.

29 *Los Angeles County Employees' Retirement Association, Comprehensive Annual Financial Report 2009,* p. 39.

30 A 6 percent discount rate for future pension liabilities in the same 18-year scenario suggests a total contribution rate of about 40 percent of covered payroll, consisting of 27 percent to cover unfunded obligations, plus 10 percent to 15 percent to cover ongoing pension costs.

31 For example, CalPERS recently increased employer contribution rates 0.6 percent to 1.0 percent of covered payroll for miscellaneous groups and 1.0 percent to 1.8 percent for safety plans due to changes in post-employment mortality. See CalPERS Circular Letter to Public Agencies 200-028-10, May 12, 2010.

Reforms Going Forward

With substantial challenges looming for local, independent pension systems, one obvious question involves the prospects for reform. Recent reforms at the state level, enacted as part of the current state budget agreement, provide some possible avenues for local efforts. Recent election results also suggest that many California local governments are indeed heading toward significant pension reform (Table 5), with 9 of 10[32] measures winning, in all cases by wide margins.

Further local reforms are likely—either via initiative—or as a result of state pension system reforms gained by Governor Schwarzengger in the recent budget process. Schwarzenegger signed two measures, SBX6 22 and SB 867, that increase transparency for state pension systems and decrease employee benefits, respectively.

SB 867 requires systems to submit a report to the legislature, the governor, and the treasurer describing the investment return assumptions, discount rates, and amortization periods utilized by the board in the calculations of the contribution rates and to include recalculations of those rates based on specified adjustments of the investment return assumptions, amortization periods, and discount rates utilized by the board any time it calculates the contribution rates.[33]

SB X6 22 requires pension benefits for new hires to be based on the average salary in the final three years of employment (compared with one year today). It also requires new state miscellaneous workers, who until late 2010 were able to retire under a 2 percent at age 55 formula, to retire under a 2 percent at age 60 formula. The law provides that newly hired peace officer/firefighter members of two bargaining units and the state, legislative, judicial branch and California State University peace officers are subject to a 2.5 percent at 55 rather than a 3 percent at 50 retirement formula. This law also provides that newly hired safety members hired by the state and CSU are subject to a 2 percent at age 55 retirement formula.[34]

It is very likely that local governments will push for similar reforms. However, the magnitude of California's pension woes are so deep that even Governor Schwarzenegger and his staff—and most observers—acknowledge that these initial reforms are only the first steps in a long process to getting the state and its finances back on track.

Reforms advanced by independent local pension systems are likely to include reductions in benefits, increased employee contributions, and further restrictions on pension "spiking," in which employees retire with income based on their final one-year salary. Local governments will likely push for substantial increases in contributions given the asymmetry currently between employer and employee contribution rates. State law currently limits employee contributions, generally to 9 percent, while many local government agencies contribute many times that amount.

Conclusions

This policy brief estimated the aggregate unfunded liability for California's independent public employee pension systems at nearly $200 billion in June 2008. This excludes both losses in AVA during 2008-2009 and subsequent increases during 2009-2010. Given market performance during that two-year period, it is likely that current UAAL for these independent systems remains at roughly $200 billion. The average funded level for all independent systems is 44.7 percent, virtually identical to 44.6 percent for CalPERS.

Local governments associated with independent pension systems also report substantial

32 Two measures appeared on the Riverside County ballot—one placed by the Sheriff's Association and a response by the Board of Supervisors. Both measures passed, but the BOS measure prevailed since it received a higher number of votes.

33 See SB 867, *http://senate.ca.gov* (accessed November 4, 2010).

34 See SB X6 22, *http://senate.ca.gov* (accessed November 4, 2010).

Table 5
November 2, 2010 Election Results for Pension Reform Measures

Jurisdiction	Measure	Result	Description
Carlsbad	G	Passed 64-36%	Gives residents control over future increases in the pension benefits for safety employees. Locks in place benefit reductions for new safety employees negotiated by the City Council in July 2010.
Pacific Grove	R	Passed 74-26	Conforms "Sustainable Retirement Benefit Reform Initiative" passed by the City Council in July 2010. Caps city contributions to employee pension benefits at 10% of workers' salaries.
Bakersfield	D	Passed 55-45	Changes public safety benefit formula for employees hired after 1/1/2011 from 3% at 50 to 2% at 50. Requires public safety employees to pay 100% of retirement contributions in all years, as opposed to current requirement of first five.
Redding	A	Passed 64-36	Advisory measure that authorizes City of Redding to negotiate with city workers over whether they should pay a portion of the City's pension contributions to CalPERS. Currently, City pays 9% of the base salary of police officers and fire fighters to CalPERS, and 7% for all other workers.
	B	Passed 70-30	Advisory measure that requires city workers to work for a minimum of five years before City would start contributing to retiree health insurance premium costs.
Riverside County	L	Passed 52-48	Requires a public vote to raise or lower public safety workers' retirement benefits.
	M	Passed 61-39	Put on ballot by Riverside County Supervisors in response to Measure L. Would require public to vote on increases in public safety workers' retirement benefits, but Riverside County Supervisors would retain the ability to reduce benefits without voter approval.
Menlo Park	L	Passed 72-28	Raises the retirement age for newly hired city employees from 55 to 60. Will also cap employee pension benefits at 2% of an employee's highest average base salary earned over three consecutive years for up to 30 years of service. Employees currently receive 2.7% of highest annual salary for up to 30 years of service. This reform does not apply to police officers.
San Francisco	B	Failed 58-42	Increases employee contributions to the Retirement System for retirement benefits; decreases employer contributions to the Health Service System for health benefits for employees, retirees and their dependents; and change rules for arbitration proceedings about City collective bargaining agreements.
San Jose	V	Passed 67-33	Limits the use of outside arbitrators in settling police and fire contracts.
	W	Passed 72-28	Will remove language from the San Jose City Charter that defines the rules for the age at which city employees can retire, as well as how much the City must pay into their pension fund. The San Jose City Council will then have the flexibility to make decisions on these rules.

underfunding for Other Post Employment Benefits. However, the level of OPEB underfunding—expressed as a share of total underfunding—varies. These reported OPEB obligations are almost certainly optimistic since virtually all of the governmental entities use optimistic assumptions about health care cost increases.

Municipal governments appear likely to devote on average about one-half of covered payroll over the next 18 years to meet *unfunded* pension and OPEB obligations. When added to ongoing costs for pensions and OPEB, this figure climbs to nearly two-thirds of covered payroll, leaving little room for other budget priorities.

Recent reform at the state level, enacted as part of the current state budget agreement, and recent election results provide some possible avenues for reform at the local level. That reform is likely to include increased transparency, reductions in benefits, increased employee contributions, and further restrictions on pension spiking.

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SIEPR *policy brief*

A publication of the
Stanford Institute for Economic Policy Research
Stanford University
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