Judges' Retirement System II
Actuarial Valuation
as of
June 30, 2012

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Actuarial Certification

Actuarial Certification

To the best of our knowledge, this report is complete and accurate and contains sufficient information to fully and fairly disclose the actuarial funded condition of the Judges' Retirement System II. This valuation is based on the member and financial data as of June 30, 2012 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. In our opinion, this valuation has been performed in accordance with generally accepted actuarial principles, and in accordance with the standards of practice prescribed by the Actuarial Standards Board. The assumptions and methods are internally consistent and reasonable for this plan, as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employee's Retirement Law.

The undersigned are actuaries for CalPERS, who are members of the American Academy of Actuaries and the Society of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

FRITZIE ARCHULETA, ASA, MAAA
Senior Pension Actuary

ALAN MILLIGAN, MAAA, FCA, FSA, FCIA
Chief Actuary

Highlights and Executive Summary

Contents

This section contains the following topics:

Highlights and Executive Summary

Introduction

This is the actuarial valuation report as of June 30, 2012 for the Judges' Retirement System II. The actuarial valuation is used to set the 2013-14 required employer contribution rates. This is the eighteenth annual actuarial valuation of the Judges' Retirement System II. The System began on November 9, 1994 to provide retirement and ancillary benefits to judges elected or appointed on or after that date. The employer contribution rate from the inception of the plan until June 30, 1996 was set by State statute. Subsequently, the employer contribution rate was determined through an actuarial valuation process.

Please note that the pension information as of June 30, 2012 to be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement Number 27 has been moved from Appendix C to the body of the report. In addition, the Risk Analysis section formerly in Appendix D, that contained information showing the impact on contribution rates under different investment return scenarios, and also contained a sensitivity analysis showing the impact on current results of a plus or minus 1% change in discount rate was moved to the body of the report. Participant Data was moved from the body of the report to Appendix C.

Purpose of the Report

This actuarial valuation of the Judges' Retirement System II of the State of California was performed by CalPERS staff actuaries as of June 30, 2012 in order to:

- Set forth the funded status, reflecting the assets and funding liabilities of this plan as of June 30, 2012.
- Establish the actuarially required employer contribution rate for this plan for the fiscal year July 1, 2013 through June 30, 2014.
- Provide actuarial information as of June 30, 2012, to the CalPERS Board of Administration and other interested parties; and
- Provide pension information as of June 30, 2012 under Governmental Accounting Standards Board (GASB) Statement Number 27.

The use of this report for other purposes may be inappropriate.

Development of the Employer Contribution Rate

The following table illustrates total recommended employer contribution over the course of 2013-14. The amount of money is illustrated in dollars and then is shown as a percentage of the projected payroll that is expected over the course of the year.

	Fiscal Year 2012/2013	Fiscal Year 2013/2014
Employer Contribution (in Dollars)		
Payment for Normal Cost	$ 52,203,825	$ 52,656,400
Payment on Amortization Bases	3,434,875	2,881,414
Total Employer Contribution	$ 55,638,700	$ 55,537,815
Projected Annual Payroll for Contribution Year	$ 243,635,717	$ 244,788,249
Employer Contribution (Percentage of Projected Payroll)		
Payment for Normal Cost	21.427%	21.511%
Payment on Amortization Bases	1.410%	1.176%
Total Employer Contribution	22.837%	22.687%
Employee Contribution (Percentage)	8.000%	8.000%

Funded Status of the Plan

The tables below summarize the funded status of the Judges' Retirement System II as of June 30.

	June 30, 2011	June 30, 2012
Present Value of Projected Benefits	$ 1,173,657,436	$ 1,241,622,833
Entry Age Normal Accrued Liability	609,562,110	702,732,271
Actuarial Value of Assets (AVA)*	561,475,530	667,556,907
Unfunded Liability	$ 48,086,580	$ 35,175,364
Market Value of Assets (MVA)	$ 575,978,052	$ 655,383,900
Funded Status (on an MVA basis)	94.5%	93.3%

*The Actuarial Value of Assets is used to establish funding requirements, while the funded ratio based on the Market Value of Assets is a better indicator of the solvency of the plan.

Changes Since Prior Valuation

Actuarial Assumptions
No changes were made since the prior valuation.

Plan Provisions
No changes were made since the prior valuation.

Assets

Contents

This section contains the following topics:

Assets

Reconciliation of the Market Value of Assets

The following displays the change in the Market Value of Assets from the prior valuation to the current valuation by type of transaction.

		Market Value
1.	Beginning Balance as of June 30, 2011	$ 575,978,052
2.	Prior Period Adjustment[1]	(144,000)
3.	Adjusted Beginning Balance as of 6/30/2011	$ 575,834,052
4.	Member Contributions	18,756,847
5.	Employer Contributions	53,711,258
6.	Benefit Payments	(3,536,166)
7.	Refunds	(2,603,970)
8.	Administration Costs	(930,575)
9.	Investment Earnings[2]	14,152,455
10.	Ending Balance as of June 30, 2012	$ 655,383,900

[1]Payments amounting to $144,000 were transferred from the Member Contribution account to the Unapplied Remittances account resulting in an adjustment, which reduced the Fund Balance on June 30, 2011.
[2]Fund return for the 2011-2012 fiscal year is 2.48%

Development of the Actuarial Value of Assets

The development of the Actuarial Value of Assets for the current valuation date is shown below. This is the amount of asset used in the determination of the contribution rate.

1.	Actuarial Value of Assets as of June 30, 2011	$ 561,475,530
2.	Member Contributions	18,756,847
3.	Employer Contributions	53,711,258
4.	Benefit Payments	(3,536,166)
5.	Refunds	(2,603,970)
6.	Administration Costs	(930,575)
7.	Expected Investment Return	41,553,483
8.	Expected Actuarial Value of Assets	668,426,407
9.	Market Value of Assets as of 6/30/2012	655,383,900
10.	One-Fifteenth of the Difference Between Market Value of Assets and Expected Actuarial Value of Assets [(9) – (8)] x 1/15	(869,500)
11.	Preliminary Actuarial Value of Assets [(8) + (10)]	667,556,907
12.	Preliminary Actuarial Value to Market Value Ratio [(11) / (9)]	101.86%
13.	Final Actuarial Value to Market Value Ratio (Minimum 80%, Maximum 120%)	101.86%
14.	Final Actuarial Value of Assets as of 6/30/2012	$ 667,556,907

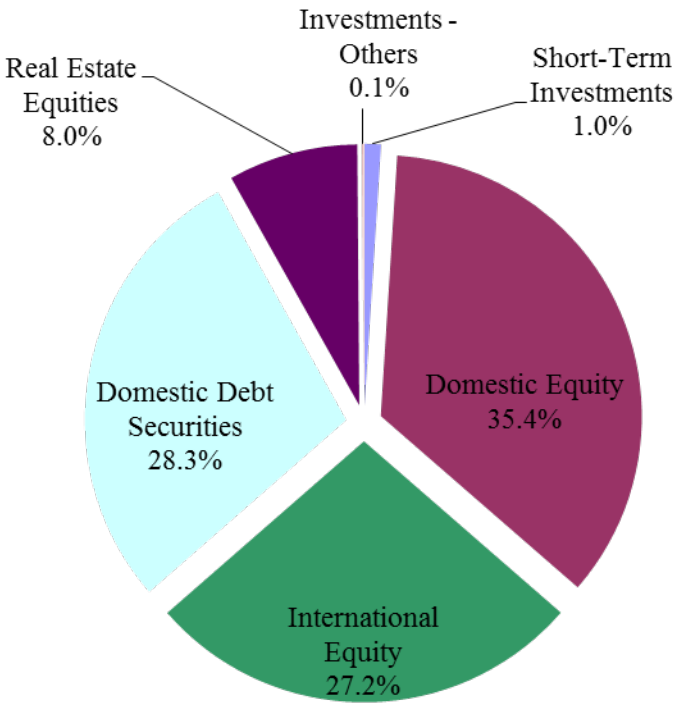
Asset Allocation

Shown below is the Market Value of Assets, by asset type, as of the valuation date.

Cash	$	181,730
Investments at Market Value		
Surplus Money Investment Fund		6,521,000
Short-term Investment Fund		14,599
Domestic Equity		229,947,596
Domestic Debt Securities		196,581,449
International Equity		176,595,516
Real Estate Equities		39,265,819
Investments - Other		795,029
Subtotal of Investments	$	649,721,007
Accounts Receivable		
Acct Recv-Reimbursements		69
Member, Agency, State, School		5,700,660
Accounts Receivable - Other		65,969
Accrued Interest Receivable		6,145
Retirement Contribution Receivable		3,233
Due From General Fund		3,063
Due From Negative Carrier-Emp		571
Due From PERF		33,989
Due From CRF		245
Subtotal of Accounts Receivable	$	5,813,944
Accounts Payable		(332,779)
Fund Balance at Market Value on 6/30/2012	$	655,383,902

Asset Allocation Chart

This is the graphical representation of how the money contained in the Judges' Retirement II Fund is allocated for investment.



Receivables and payables are not included.

Liabilities and Rates

Contents This section contains the following topics:

Liabilities and Rates

Comparison of Current and Prior Year Results

The table below is a comparison of key valuation results for the current valuation date to the corresponding values from the prior valuation date.

Results Comparison	June 30, 2011	June 30, 2012
Members Included in the Valuation		
Active Members	1,280	1,286
Inactive Members	0	1
Receiving Benefits	30	37
Total	1,310	1,324
Annual Covered Payroll	$ 229,650,030	$ 230,736,402
Projected Annual Payroll for Contribution Year	$ 243,635,717	$ 244,788,249
Average Annual Pay	$ 179,414	$ 179,422
Average Attained Age for Actives	56.36	57.16
Average Entry Age for Actives	49.18	49.14
Present Value of Benefits		
Active Members	$ 1,142,061,600	$ 1,200,480,607
Inactive Members	0	11,300
Receiving Benefits	31,595,836	41,130,926
Total	$ 1,173,657,436	$ 1,241,622,833
Accrued Liability		
Active Members	$ 577,966,274	$ 661,590,045
Inactive Members	0	11,300
Receiving Benefits	31,595,836	41,130,926
Total		$ 702,732,271
Present Value of Future Employee Contributions	$ 158,644,697	$ 151,146,346
Present Value of Future Employer Normal Cost	$ 405,450,629	$ 87,744,216
Actuarial Value of Assets	$ 561,475,530	$ 667,556,907
Unfunded Liability/ (Excess Assets)	$ 48,086,580	$ 35,175,364
Employer Contribution Required (in Projected Dollars)		
Payment for Normal Cost	$ 52,203,825	$ 52,656,400
Payment on Amortization Bases	3,434,875	2,881,414
Total	$ 55,638,700	$ 55,537,815
Employer Contribution Required (Percent of Projected Payroll)		
Payment for Normal Cost	21.427%	21.511%
Payment on Amortization Bases	1.410%	1.176%
Total	22.837%	22.687%

Gain/Loss Analysis

Shown below is an analysis of the (Gain)/Loss for the fiscal year ending on the valuation date. The Gain or Loss is shown separately for assets, contributions, and liabilities.

A. Total (Gain)/Loss for the Year		
1.	Unfunded Accrued Liability (UAL) as of 6/30/11	$ 48,086,579
2.	Expected Payment on UAL during 2011/2012	4,763,906
3.	Interest through 6/30/12 [0.0700 x A1 – $(1.0700^{½} - 1)$ x A2]	3,202,144
4.	Expected UAL before all other changes[A1 - A2 + A3]	$ 46,524,817
5.	Change due to revised actuarial methods	0
6.	Change due to new actuarial assumptions	0
7.	Expected UAL after all changes [A4 + A5 + A6]	46,524,817
8.	Actual Unfunded Accrued Liability as of 6/30/12	35,175,364
9.	Total (Gain)/Loss for 2011/2012 [A8 – A7]	$ (11,349,453)
B. Contribution (Gain)/Loss for the Year		
1.	Expected Contribution (Employer and Employee)	$ 74,370,394
2.	Interest on Expected Contributions [$(1.0700^{1/2} – 1)$ x B1]	2,558,940
3.	Actual Contribution	72,468,105
4.	Interest on Actual Contributions [$((1.0700)^{1/2} – 1)$ x B3]	2,493,486
5.	Contribution (Gain)/Loss [(B1 + B2) – (B3 + B4)]	$ 1,967,743
C. Asset (Gain)/Loss for the Year		
1.	Actuarial Value of Assets as of 6/30/11	$ 561,475,530
2.	Contributions Received	72,468,105
3.	Benefits, Refunds Paid and Administrative Costs	(7,070,711)
4.	Expected Interest [0.0700 x C1 + $((1.0700)^{½} - 1)$ x (C2 + C3)]	41,553,483
5.	Expected Assets as of 6/30/12 [C1 + C2 + C3 + C4]	$ 668,426,407
6.	Actual Actuarial Value of Assets as of 6/30/12	667,556,907
7.	Asset (Gain)/Loss [C5 - C6]	$ 869,500
D. Liability (Gain)/Loss for the Year		
1.	Total (Gain)/Loss (A9)	$ (11,349,453)
2.	Contribution (Gain)/Loss (B5)	1,967,743
3.	Asset (Gain)/Loss (C7)	869,500
4.	Liability (Gain)/Loss [D1 - D2 - D3]*	$ (14,186,696)

* Liability gain is almost entirely due to 0% salary increase

Schedule of Amortization Bases

The schedule below shows the development of the proposed payment on the Amortization Bases. The rate smoothing method requires that gains and losses be combined into a single base and amortized over 30 years. Please refer to Appendix A for an explanation of how amortization periods are determined.

Reason For Base	Date Established	Period	Balance on 6/30/12	Expected Payment on UAL 12-13	Balance on 6/30/13	Scheduled Payment Fiscal Year 2013-2014
Fresh Start	6/30/07	25	$31,336,454	$1,927,581	$31,536,100	$1,985,409
Assumption Change	6/30/09	17	21,710,179	1,691,520	21,480,169	1,742,266
Method Change	6/30/09	17	8,830,034	687,981	8,736,484	708,620
Assumption Change	6/30/11	19	(41,514)	(3,010)	(41,306)	(3,101)
(Gain)/Loss	6/30/12	30	(26,659,789)	(1,152,720)	(27,333,591)	(1,551,779)
Total			$35,175,364	$3,151,352	$34,377,856	$2,881,414

*The unfunded liability contribution rate of 1.176% is the scheduled payment $2,881,414 divided by the projected payroll for the 2013-14 fiscal year.

Reconciliation of Employer Contribution Rates

This table illustrates how the contribution rate is calculated and, more importantly, why the Employer Contribution Rate differs this year from the previous year.

	Percentage of Projected Payroll	Estimated $ Based on Projected Payroll
1. 2012-13 Employer Rate (from prior year annual report)	22.837%	$ 55,638,700
2. Effect of changes since the prior annual valuation		
a) Effect of change in payroll	-	263,204
b) Effect of change in actuarial assumptions	-	0
c) Effect of new actuarial methods	-	0
d) Effect of unexpected changes in demographics	-0.150%	(364,089)
e) Net effect of the changes above [Sum of a through d]	-0.150%	(100,885)
3. 2013-14 Estimated Employer Contribution	22.687%	$ 55,537,815

Employer Contribution Rate History

This table provides the employer contribution rates for the Judges' Retirement System II from its inception to the rate established by this valuation.

Fiscal Year	Contribution Rate	Fiscal Year	Contribution Rate
1995-96	18.800%	2005-06	19.848%
1996-97	19.170%	2006-07	19.917%
1997-98	21.920%	2007-08	19.916%
1998-99	21.540%	2008-09	20.227%
1999-00	18.567%	2009-10	20.358%
2000-01	18.130%	2010-11	24.041%
2001-02	18.508%	2011-12	23.441%
2002-03	19.231%	2012-13	22.837%
2003-04	19.217%	2013-14	22.687%
2004-05	20.252%		

Funding History

Shown below is the history of funding progress for the plan.

Valuation Date	Entry Age Normal Accrued Liability	Actuarial Value Of Assets (AVA)	Funded Ratio (AVA)	Market Value of Assets (MVA)	Funded Ratio (MVA)	Projected Annual Covered Payroll
6/30/95	$ 70,657	$ 239,474	338.9%	$ 239,474	338.9%	$ 3,944,181
6/30/96	2,812,567	2,387,870	84.9%	2,387,870	84.9%	11,762,307
6/30/97	7,906,056	7,242,314	91.6%	7,242,314	91.6%	21,220,469
6/30/98	15,043,465	15,120,408	100.5%	16,256,101	108.1%	32,960,219
6/30/99	26,921,274	27,154,854	100.9%	28,372,726	105.4%	41,448,759
6/30/00	41,619,162	40,503,417	97.3%	41,354,371	99.4%	48,450,504
6/30/01	60,933,072	55,954,506	91.8%	51,981,931	85.3%	69,937,653
6/30/02	76,459,252	71,928,890	94.1%	65,389,900	85.5%	80,237,849
6/30/03	105,116,289	96,107,358	91.4%	90,713,575	86.3%	95,612,128
6/30/04	137,703,630	129,152,543	93.8%	129,315,504	93.9%	108,842,477
6/30/05	177,760,708	167,556,473	94.3%	171,875,047	96.7%	122,280,588
6/30/06	220,134,685	212,903,528	96.7%	218,986,736	99.5%	136,602,126
6/30/07	294,982,560	267,604,460	90.7%	290,733,043	98.6%	174,473,271
6/30/08	366,513,989	334,903,486	91.4%	325,451,000	88.8%	190,413,674
6/30/09*	450,547,115	378,691,893	84.1%	315,576,578	70.0%	211,942,734
6/30/10	520,687,470	461,071,403	88.6%	422,100,782	81.1%	226,710,927
6/30/11	609,562,110	561,475,530	92.1%	575,978,052	94.5%	243,635,717
6/30/12	702,732,271	667,556,907	95.0%	655,383,900	93.3%	244,788,249

*New funding method used since 6/30/09 valuation. Please refer to Appendix A for an explanation of funding method.

Risk Analysis

Contents This section contains the following topics:

Risk Analysis

Volatility Ratios

The actuarial calculations supplied in this communication are based on a number of assumptions about very long term demographic and economic behavior. Unless these assumptions (terminations, deaths, disabilities, retirements, salary growth, and investment return) are exactly realized each year, there will be differences on a year to year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise the employer's rates from one year to the next. Therefore, the rates will inevitably fluctuate, especially due to the ups and downs of investment returns.

Asset Volatility Ratio

Plans that have higher asset to payroll ratios produce more volatile employer rates due to investment return. For example, a plan with an asset to payroll ratio of 8 may experience twice the contribution volatility due to investment return volatility than a plan with an asset to payroll ratio of 4. Below we have shown your asset volatility ratio, a measure of the plan's current rate volatility. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as the plan matures.

Liability Volatility Ratio

Plans that have higher liability to payroll ratios produce more volatile employer rates due to investment return and changes in liability. For example, a plan with a liability to payroll ratio of 8 is expected to have twice the contribution volatility of a plan with a liability to payroll ratio of 4. The liability volatility ratio is also included in the table below. It should be noted that this ratio indicates a longer-term potential for contribution volatility and the asset volatility ratio, described above, will tend to move closer to this ratio as the plan matures.

Rate Volatility		**As of June 30, 2012**
1. Market Value of Assets	$	655,383,900
2. Payroll		230,736,402
3. Asset Volatility Ratio (1. / 2.)		2.8
4. Accrued Liability	$	702,732,271
5. Liability Volatility Ratio (4. / 2.)		3.0

The ratios for this plan indicate this plan has a lower risk of large changes to employer rates when it comes to investment returns and changes in liability.

Analysis of Future Investment Return Scenarios

As of February 2013, the investment return for fiscal year 2012-13 was 12.00%. Note that this return is before the close of the fiscal year and does not take into account administrative expenses that must be paid from the fund. The final return information for the fund will not be available until October 2013. The preliminary 12.00% return for the 2012-13 fiscal year is higher than the assumed rate of return. However, the higher return is not anticipated to lower the employer contribution rate for 2014-15. For purposes of projecting future employer rates, this report assumes a 12.00% investment return for fiscal year 2012-13.

The investment return realized during a fiscal year first affects the contribution rate for the fiscal year one year later. Specifically, the investment return for 2012-13 will first be reflected in the June 30, 2013 actuarial valuation that will be used to set the 2014-15 employer contribution rates, the 2013-14 investment return will first be reflected in the June 30, 2014 actuarial valuation that will be used to set the 2015-16 employer contribution rates and so forth.

Based on a 12.00% investment return for fiscal year 2012-13 and assuming that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur between now and the beginning of the fiscal year 2014-15, the effect on the 2014-15 Employer Rate is as follows:

Estimated 2014-15 Employer Rate	Estimated Increase in Employer Rate between 2013-14 and 2014-15
22.7%	0.0%

As part of this report, a sensitivity analysis was performed to determine the effects of various investment returns during fiscal years 2013-14, 2014-15 and 2015-16 on the 2015-16, 2016-17 and 2017-18 employer rates. Once again, the projected rate increases assume that all other actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur.

Analysis of Future Investment Return Scenarios (con't)

Five different 2013-16 investment return scenarios were selected.

- The first scenario is what one would expect if the markets were to give us a 5th percentile return from July 1, 2013 through June 30, 2016. The 5th percentile return corresponds to a -4.00% return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- The second scenario is what one would expect if the markets were to give us a 25th percentile return from July 1, 2013 through June 30, 2016. The 25th percentile return corresponds to a 2.00% return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- The third scenario assumed the return for 2013-14, 2014-15 and 2015-16 would be our assumed 7.00% investment return which represents about a 54th percentile event.
- The fourth scenario is what one would expect if the markets were to give us a 75th percentile returns from July 1, 2013 through June 30, 2016. The 75th percentile return corresponds to a 11.00% return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.
- Finally, the last scenario is what one would expect if the markets were to give us a 95th percentile return from July 1, 2013 through June 30, 2016. The 95th percentile return corresponds to a 17.50% return for each of the 2013-14, 2014-15 and 2015-16 fiscal years.

The table below shows the estimated changes in the Employer rate for 2015-16, 2016-17 and 2017-18 fiscal years under the five different scenarios.

2013-2016 Investment Return Scenario	Estimated Change in Employer Rate Between Year Shown and Preceding Year			Total Estimated Increase in Employer Rate between 2014-15 and 2017-18
	2015-16	2016-17	2017-18	
-4.00% (5th percentile)	23.0%	23.1%	25.1%	2.1%
2.00% (25th percentile)	22.8%	22.8%	23.0%	0.2%
7.00%	22.7%	22.6%	22.6%	-0.1%
11.00% (75th percentile)	22.6%	22.5%	22.3%	-0.3%
17.50% (95th percentile)	22.5%	22.2%	21.5%	-1.0%

These projections are based on the current amortization and asset smoothing policy. In March of this year, the CalPERS Board approved a first reading in favor of a new policy. Final action will take place at the April Board meeting. If a new amortization and asset smoothing policy is adopted, these projections must be recalculated.

The actuarial value of assets used in the June 30, 2012 report is 101.9 percent of the market value of assets. A portion of the corridor still exists which can be used to smooth future rates. This is why the rates are expected to remain stable despite the wide variation in investment returns.

Analysis of Discount Rate Sensitivity

The following analysis looks at the 2013-14 employer contribution rates under two different discount rate scenarios. Shown below are the employer contribution rates assuming discount rates that are 1% lower and 1% higher than the current valuation discount rate. This analysis gives an indication of the potential required employer contribution rates if the fund were to realize investment returns of 6.00% or 8.00% over the long-term.

This type of analysis gives the reader a sense of the long-term risk to the employer contribution rates.

2013-14 Employer Contribution Rate			
As of June 30, 2012	**6.00% Discount Rate (-1%)**	**7.00% Return (assumed rate)**	**8.00% Discount Rate (+1%)**
Normal Cost	27.0%	21.5%	17.0%
UAL Payment	4.2%	1.2%	-1.8%
Total	31.2%	22.7%	15.2%

This plan is highly sensitive to fluctuations in the discount rate. The high sensitivity is due to the larger benefits offered by the plan.

Information for Compliance with GASB Statement No. 27

Contents This section contains the following topics:

Information for Compliance with GASB Statement No. 27

GASB Statement No. 27

Under GASB 27, an employer reports an annual pension cost (APC) equal to the annual required contribution (ARC) plus an adjustment for the cumulative difference between the APC and the employer's actual plan contributions for the year. The cumulative difference is called the net pension obligation (NPO). The ARC for the period July 1, 2013 to June 30, 2014 has been determined by an actuarial valuation of the plan as of June 30, 2012. The contribution rate for the indicated period is 22.687% of payroll. In order to calculate the dollar value of the ARC for inclusion in financial statements prepared as of June 30, 2014, this contribution rate, as modified by any amendments for the year, would be multiplied by the payroll of covered employees that was actually paid during the period July 1, 2013 to June 30, 2014. The employer and the employer's auditor are responsible for determining the NPO and the APC.

Retirement Program Assumptions

A summary of principal assumptions and methods used to determine the ARC is shown below.

Initial unfunded liabilities are amortized over a closed period that depends on the plan's date of entry into CalPERS. Subsequent plan amendments are amortized as a level percentage of pay over a closed 20-year period. Gains and losses that occur in the operation of the plan are amortized over a 30-year rolling period, which results in an amortization of about 6% of unamortized gains and losses each year. If the plan's accrued liability exceeds the actuarial value of plan assets, then the amortization payment on the total unfunded liability may not be lower than the payment calculated over a 30-year amortization period. More complete information on assumptions and methods is provided in Appendix A of this report. Appendix B contains a description of benefits included in the valuation.

	Retirement Program
Valuation Date	June 30, 2012
Actuarial Cost Method	Entry Age Normal Cost Method
Amortization Method	Level Percent of Payroll
Average Remaining Period	17 Years as of the Valuation Date
Asset Valuation Method	15 Year Smoothed Market
Actuarial Assumptions	
Investment Rate of Return	7.00% (net of administrative expenses)
Projected Salary Increases	3.00%
Inflation	2.75%
Payroll Growth	3.00%
Individual Salary Growth	3.00%.

Schedule of Funding Progress

The Schedule of Funding Progress below shows the recent history of the actuarial value of assets, actuarial accrued liability, their relationship, and the relationship of the unfunded actuarial accrued liability to payroll.

Valuation Date	Accrued Liability (a)	Actuarial Value of Assets (AVA) (b)	Annual Covered Payroll (c)
06/30/12	$ 702,732,271	$ 667,556,907	$ 230,736,402
06/30/11	609,562,110	561,475,530	229,650,030
06/30/10	520,687,470	461,071,403	212,663,194
06/30/09	450,547,115	378,691,893	198,793,201
06/30/08	366,513,989	334,903,486	175,346,032
06/30/07	294,982,560	267,604,460	156,251,856

Valuation Date	Funded Ratios		Unfunded Liability (UL) (a)-(b)	UL As a % of Payroll [(a)-(b)]/(c)
	AVA (b)/(a)	MVA		
06/30/12	95.0%	93.3%	35,175,364	15.2%
06/30/11	92.1%	94.5%	48,086,580	20.9%
06/30/10	88.6%	81.1%	59,616,067	28.0%
06/30/09	84.1%	70.0%	71,855,222	36.1%
06/30/08	91.4%	88.8%	31,610,503	18.0%
06/30/07	90.7%	98.6%	27,378,100	17.5%

Appendices

Contents This section contains the following topics:

Appendix A – Actuarial Data, Methods and Assumptions

Actuarial Data

As stated in the Actuarial Certification, the data, which serves as the basis of this valuation, has been obtained from the various CalPERS databases. We have reviewed the valuation data and believe that it is reasonable and appropriate in aggregate.

Actuarial Funding Method

The actuarial funding method used for the Retirement Program is the Entry Age Normal Cost Method. Under this method, projected benefits are determined for all members and the associated liabilities are spread in a manner that produces level annual cost as a percent of pay in each year from the age of hire (entry age) to the assumed retirement age. The cost allocated to the current fiscal year is called the normal cost.

The actuarial accrued liability for active members is then calculated as the portion of the total cost of the plan allocated to prior years. The actuarial accrued liability for members currently receiving benefits, for active members beyond the assumed retirement age, and for members entitled to deferred benefits, is equal to the present value of the benefits expected to be paid. No normal costs are applicable for these participants.

The excess of the total actuarial accrued liability over the actuarial value of plan assets is called the unfunded actuarial accrued liability. Funding requirements are determined by adding the normal cost and an amortization of the unfunded liability as a level percentage of assumed future payrolls. All changes in liability due to plan amendments, changes in actuarial assumptions, or changes in actuarial methodology are amortized separately over a 20-year period. In addition, all gains or losses are tracked and amortized over a rolling 30-year period. Finally, if a plan's accrued liability exceeds the actuarial value of assets, the annual contribution with respect to the total unfunded liability may not be less than the amount produced by a 30-year amortization of the unfunded liability.

An exception to the funding rules above is used whenever the application of such rules results in inconsistencies. In these cases a "fresh start" approach is used. This simply means that the current unfunded actuarial liability is projected and amortized over a set number of years. As mentioned above, if the annual contribution on the total unfunded liability was less than the amount produced by a

30-year amortization of the unfunded liability, the plan actuary would implement a 30-year fresh start. However, in the case of a 30-year fresh start, just the unfunded liability not already in the (gain)/loss base (which already is amortized over 30 years) will go into the new fresh start base. In addition, a fresh start is needed in the following situations:

- When a positive payment would be required on a negative unfunded actuarial liability (or conversely a negative payment on a positive unfunded actuarial liability); or

- When there are excess assets, rather than an unfunded liability. In this situation a 30-year fresh start is used, unless a longer fresh start is needed to avoid a negative total rate.

It should be noted that the actuary may choose to use a fresh start under other circumstances. In all cases, the fresh start period is set by the actuary at what he deems appropriate, and will not be less than five years nor greater than 30 years.

Asset Valuation Method

In order to dampen the effect of short term market value fluctuations on employer contribution rates, the following asset smoothing technique is used. First an Expected Value of Assets is computed by bringing forward the prior year's Actuarial Value of Assets, the contributions received, and benefits paid during the year at the assumed actuarial rate of return. The Actuarial Value of Assets is then computed as the Expected Value of Assets plus one-fifteenth of the difference between the actual Market Value of Assets and the Expected Value of Assets as of the valuation date. However in no case will the Actuarial Value of Assets be less than 80% or greater than 120% of the actual Market Value of Assets.

Actuarial Assumptions

The actuarial assumptions used in the valuation are shown below. These assumptions are based upon recommendations from both CalPERS actuarial staff and outside consulting actuaries.

Economic Assumptions

The following table identifies the economic assumptions used in the valuation.

June 30, 2012	
Gross Investment Return:	7.25%
Less Administrative Expense:	0.25%
Net Investment Return, compounded annually:	7.00%
Individual Salary Increases, compounded annually:	3.00%
Overall Payroll Growth, compounded annually*	3.00%
Inflation:	2.75%

*The Overall Payroll Growth assumption is used in projecting the payroll over which the unfunded liability is amortized.

Demographic Assumptions

Service Retirement

The table below illustrates the assumptions used in the valuation to determine the probability of a judge retiring out of the system.

Service Greater than 20 years	
Age	**Rate**
Below 65	0.000
65	0.750
66	0.400
67	0.300
68	0.350
69	0.500
70*	1.000

* For Judges age 70 and older with 5 or more years of service the probability of retirement is 100%.

Withdrawal

Rates vary by age and years of service as shown in the table below.

Entry Age	Years of Service					
	0-1	1-2	2-3	3-4	4-5	5 or more
35	0.00525	0.00525	0.00525	0.00525	0.00525	0.00225
40	0.00450	0.00450	0.00450	0.00450	0.00450	0.00375
45	0.00375	0.00375	0.00375	0.00375	0.00375	0.00750
50	0.00375	0.00375	0.00375	0.00375	0.00375	0.00900
55	0.00000	0.00000	0.00000	0.00000	0.00000	0.00825
60	0.00000	0.00000	0.00000	0.00000	0.00000	0.00750

Pre-Retirement Non-Industrial Mortality and Disability

Rates vary by age as shown in the table below.

Attained Age	Pre-Retirement Mortality		Non-Industrial Disability	
	Male	Female	Male	Female
35	0.00067	0.00046	0.00000	0.00000
40	0.00087	0.00065	0.00100	0.00100
45	0.00120	0.00093	0.00190	0.00190
50	0.00176	0.00126	0.00320	0.00320
55	0.00260	0.00176	0.00540	0.00540
60	0.00395	0.00266	0.00850	0.00850
65	0.00608	0.00419	0.01220	0.01220
70	0.00914	0.00649	0.00000	0.00000

Post Retirement Mortality

2009 CalPERS Optional Settlement Assumption for Judges

Attained Age	Standard		Non-Industrial Disability	
	Male	Female	Male	Female
35	0.00075	0.00043	0.00984	0.00548
40	0.00093	0.00062	0.01666	0.00674
45	0.00133	0.00085	0.01646	0.00985
50	0.00239	0.00125	0.01632	0.01245
55	0.00474	0.00243	0.01936	0.01580
60	0.00720	0.00431	0.02293	0.01628
65	0.01069	0.00775	0.03174	0.01969
70	0.01675	0.01244	0.03870	0.03019
75	0.03080	0.02071	0.06001	0.03915
80	0.05270	0.03749	0.08388	0.05555
85	0.09775	0.07005	0.14035	0.09577
90	0.16747	0.12404	0.21554	0.14949
95	0.25659	0.21556	0.31025	0.23055
100	0.34551	0.31876	0.45905	0.37662
105	0.58527	0.56093	0.67923	0.61523
110	1.00000	1.00000	1.00000	1.00000

Industrial Mortality

Rates are zero.

Industrial Disability

Rates are zero.

Marital Status

Probability of being married at service retirement or disability retirement is 90%.

Age of Spouse

Assumes that female spouses are three years younger than male spouses are.

Internal Revenue Code Section 415

The limitations on benefits imposed by Internal Revenue Code Section 415 were taken into account in this valuation. The effect of these limitations has been deemed immaterial on the overall results of this valuation.

Internal Revenue Code Section 401(a)(17)	The limitations on compensation imposed by Internal Revenue Code Section 401(a) (17) were taken into account in this valuation. It was determined that this change generally had minimal impact on the employer rates and no special amortization base has been created.

Appendix B – Principal Plan Provisions

Background

Judges' Retirement System II (JRS II) was established in 1994 to create a fully funded, actuarially sound retirement system for judges appointed or elected on or after November 9, 1994. This system provides a unique combination of two basic types of retirement allowances: a defined benefit plan and a monetary credit plan. The defined benefit plan provides a lifetime monthly retirement allowance of up to 75 percent of final compensation. The monetary credit plan allows for a refund of member contributions, employer contributions (see below) and interest at retirement.

Membership

The JRS II provides retirement, death, withdrawal and disability benefits for Supreme and Appellate Court Justices, Superior Court Judges, and Municipal Court Judges who are appointed or elected on or after November 9, 1994, and their beneficiaries.

Member Contributions

Members of the system contribute 8% of their annual compensation to the plan.

Monetary Credit Account

Members accrue monthly monetary credits equal to 18% of monthly salary. These monetary credits are accumulated in a Monetary Credit Account for each member and also credited with earnings monthly at a rate, not less than zero, equal to the annual net earnings rate achieved by the Fund. The Monetary Credit Account provides an optional benefit at eligible retirement ages (described below) if the member chooses this option. If a member withdraws from the system before he or she has vested (accumulated at least 5 years of service), the member is paid the amount of his or her 8% of salary contributions to the system, but not the full Monetary Credit Account. After 5 years of service however, the Monetary Credit Account becomes the property of the member upon withdrawal.

Service Retirement

Eligibility - Judges must be at least age 65 with 20 years or more of service or age 70 with a minimum of 5 years of service. Two types of service retirement are available: Defined Benefit Plan or Monetary Credit Plan. Election of a plan must be made within 30 days after retirement.

Defined Benefit Plan - This option provides a "defined benefit" of 3.75% of the highest 12-month average salary per year of service, up to 75% of final average pay for judges reaching age 65 with at least 20 years of service. The normal form of payment is a joint and 50% contingent annuity with the spouse as contingent annuitant. This provides a surviving spouse with a monthly allowance equal to 50% of the judge's allowance. Optional settlements are available which reduce a judge's normal retirement benefit.

Monetary Credit Plan - This option provides a cash payment in a single lump sum or the member may elect to receive an annuity at retirement based on the value of his or her Monetary Credit Account.

Non-Industrial Disability Retirement (Non-Work Related)

Eligibility - Judges who have five years of service who become permanently disabled because of a mental or physical disability may apply to the Commission On Judicial Performance for disability retirement.

Benefit - An allowance, based upon the judge's age, equal to the lesser of the following:

3.75% of final compensation multiplied by the number of years of service the judge would have been credited had he or she continued to work until the age he or she would have first been eligible to retire, or

65% of the judge's average monthly salary during the 12 months preceding the retirement date.

The normal form of payment is a joint and 50% contingent annuity with the spouse as the contingent annuitant.

Industrial Disability Retirement (Work Related)

Benefit - Judges receive 65% of the judge's average monthly salary during the 12 months preceding the retirement date regardless of age or length of service.

The normal form of payment is a joint and 50% contingent annuity with the spouse as the contingent annuitant.

Non-Industrial Pre-Retirement Death Benefit	If Eligible for Service Retirement - Spouses receive either the monthly retirement allowance equal to one-half of the judge's "defined benefit" plan allowance or the judge's monetary credits. If Not Eligible for Service Retirement - Spouses receive the judge's monetary credits or three times the annual salary at the time of death paid in 36 monthly installments, whichever is greater.
Industrial Pre-Retirement Death Benefit	If a judge dies in office, is age 65 or older with a minimum of 20 years of service and elects to have this provision apply (one time irrevocable election while judge is in office) then a payment to the surviving spouse is payable upon death. The spouse would receive a monthly allowance equal to the allowance paid to the judge had he or she retired immediately preceding death.
Post Retirement Death Benefit	**If the Judge elected the Defined Benefit Plan -** The surviving spouse of a retired judge who elected an Optional Settlement in the defined benefit plan receives one of four options: • Option 1 - return of unused accumulated contributions; • Option 2 - 4 - the Optional Settlement Benefit, the amount varies based on the option chosen by the member. **If the Judge elected the Monetary Credit Plan -** If the full amount of monetary credits was received in a lump sum, there are no survivor benefits. If the judge elected the Monetary Credit Plan with benefits paid as an annuity, the spouse receives the amount based on the option chosen at retirement.
Cost-Of-Living Adjustments (COLA)	**If the Judge elected the Defined Benefit Plan -** The retirement allowance of retired judges who have elected the defined benefit plan will be adjusted every January after the judge has been retired six months. The adjustment is based on the United States city average of the "Consumer Price Index For All Urban Consumers," as published by the United States Bureau Of Statistics. No adjustment shall be made unless the cost-of-living increase equals or exceeds one percent (1%). Further, the allowance shall not be increased more than three percent (3%) in a single year. Increases shall be compounded.

Appendix C - Participant Data

Reconciliation of Participants

The table below illustrates a reconciliation of the participant data over the course of the valuation year. It identifies numerically who entered the plan, who left the plan and who remained in the plan in the same status as on the previous valuation date or who moved to a new status over the course of the year.

Reconciliation of Participants
For the Fiscal Year Ending June 30, 2012

	Actives	Inactive	Retirees and Beneficiaries	Total
As of June 30, 2011	1,280	0	30	1,310
1. New Entrants	22	0	0	22
2. Non-Vested Terminations				
• Refund Paid	(2)	0	0	(2)
• Refund Pending	(1)	1	0	0
3. Vested Terminations				
• Monetary Credit Paid	(4)	0	0	(4)
• Monetary Credit Pending	0	0	0	0
4. Disabilities	0	0	0	0
5. Retirements	(8)	0	8	0
6. Death with Beneficiary	0	0	0	0
7. Active Death Benefit	(1)	0	0	(1)
8. Benefits Ceasing (Beneficiaries)	0	0	(1)	(1)
As of June 30, 2012	**1,286**	**1**	**37**	**1,324**

Distribution of Active Members

The following table displays the number of active participants by age and service as of June 30, 2012.

Attained Age	Years of Service at Valuation Date 0-4	5-9	10-14	15-19	20+	Total
15-34	0	0	0	0	0	0
35-39	2	0	0	0	0	2
40-44	57	8	0	0	0	65
45-49	97	56	4	0	0	157
50-54	87	97	48	13	0	245
55-59	90	111	77	42	0	320
60-64	86	84	75	39	0	284
65+	22	42	89	60	0	213
All Ages	441	398	293	154	0	1286

Distribution of Average Annual Salaries

The following table displays the average salaries of active participants by age and service as of June 30, 2012.

Attained Age	Years of Service at Valuation Date 0-4	5-9	10-14	15-19	20+	Average
15-34	$ -	$ -	$ -	$ -	$ -	$ -
35-39	$ 178,789	$ -	$ -	$ -	$ -	$ 178,789
40-44	$ 171,509	$ 178,789	$ -	$ -	$ -	$ 172,405
45-49	$ 173,413	$ 180,025	$ 178,789	$ -	$ -	$ 175,908
50-54	$ 177,059	$ 178,938	$ 179,392	$ 180,774	$ -	$ 178,457
55-59	$ 172,162	$ 179,747	$ 178,822	$ 180,154	$ -	$ 177,445
60-64	$ 173,179	$ 179,441	$ 179,670	$ 182,840	$ -	$ 178,072
65+	$ 178,789	$ 178,789	$ 179,659	$ 181,181	$ -	$ 179,826
Average	$ 173,878	$ 179,404	$ 179,386	$ 181,287	$ -	$ 177,730

Distribution of Retired Members and Beneficiaries

The following table displays the number of recipients by age and retirement type as of June 30, 2012.

Attained Age	Service Retirement	Non-Industrial Disability	Industrial Disability	Total
40-44	0	1	0	1
45-49	0	0	0	0
50-54	0	1	0	1
55-59	1	1	0	2
60-64	2	3	0	5
65-69	1	5	0	6
70-74	10	3	0	13
75-79	7	0	0	7
80-84	1	0	0	1
85 and Over	0	0	0	0
All Ages	22	14	0	36*

*Does not include beneficiary receiving 36 month pre-retirement death benefit

Appendix D – Glossary of Actuarial Terms

Accrued Liability	The total dollars needed as of the valuation date to fund all benefits earned in the past for *current* members.
Actuarial Assumptions	Assumptions made about certain events that will affect pension costs. Assumptions generally can be broken down into two categories: demographic and economic. Demographic assumptions include such things as mortality, disability and retirement rates. Economic assumptions include investment return, salary growth and inflation.
Actuarial Methods	Procedures employed by actuaries to achieve certain goals of a pension plan. These may include things such as funding method, setting the length of time to fund the past service liability and determining the actuarial value of assets.
Actuarial Valuation	The determination, as of a valuation date of the normal cost, actuarial accrued liability, actuarial value of assets and related actuarial present values for a pension plan. These valuations are performed annually or when an employer is contemplating a change to their plan provisions.
Actuarial Value of Assets	The actuarial value of assets used for funding purposes is obtained through an asset smoothing technique where investment gains and losses are partially recognized in the year they are incurred, with the remainder recognized in subsequent years. This method helps to dampen large fluctuations in the employer contribution rate.

Amortization Bases

Separate payment schedules for different portions of the unfunded liability. The total unfunded liability (or side fund) can be segregated by "cause," creating "bases" and each such base will be separately amortized and paid for over a specific period of time. This can be likened to a home mortgage that has 24 years of remaining payments and a second on that mortgage that has 10 years left. Each base or each mortgage note has its own terms (payment period, principal, etc.)

Generally in an actuarial valuation, the separate bases consist of changes in liability (principal) due to amendments, actuarial assumption changes, or methodology changes and gains and losses. Payment periods are determined by Board policy and vary based on the cause of the change.

Amortization Period

The number of years required to pay off an amortization base.

Annual Required Contributions (ARC)

The employer's periodic required annual contributions to a defined benefit pension plan, calculated in accordance with the plan assumptions. The ARC is determined by multiplying the employer contribution rate by the payroll reported to CalPERS for the applicable fiscal year. However, if this contribution is fully prepaid in a lump sum, then the dollar value of the ARC is equal to the Lump Sum Prepayment.

Entry Age

The earliest age at which a plan member begins to accrue benefits under a defined benefit pension Plan or risk pool. In most cases, this is the same as the date of hire.

(The assumed retirement age less the entry age is the amount of time required to fund a member's total benefit. Generally, the older a member is at hire, the greater the entry age normal cost. This is mainly because there is less time to earn investment income to fund the future benefits.)

Excess Assets

When a plan or pool's actuarial value of assets is greater than its accrued liability, the difference is the plan or pool's excess assets. A plan with excess assets is said to be overfunded. The result is that the plan or pool can temporarily reduce future contributions.

Entry Age Normal Cost Method	An actuarial cost method designed to fund a member's total plan benefit over the course of his or her career. This method is designed to produce stable employer contributions in amounts that increase at the same rate as the employer's payroll (i.e. level % of payroll).
Fresh Start	When multiple amortization bases are collapsed into one base and amortized over a new funding period. At CalPERS, fresh starts are used to avoid inconsistencies that would otherwise occur.
Funded Status	A measure of how well funded a plan or risk pool is. Or equivalently, how "on track" a plan or risk pool is with respect to assets vs. accrued liabilities. We calculate a funded ratio by dividing the actuarial value of assets by the accrued liabilities. A ratio greater than 100% means the plan or risk pool has more assets than liabilities and a ratio less than 100% means liabilities are greater than assets.
Normal Cost	The annual cost of service accrual for the upcoming fiscal year for active employees. The normal cost plus surcharges should be viewed as the long-term contribution rate.
Pension Actuary	A person who is responsible for the calculations necessary to properly fund a pension plan.
Prepayment Contribution	A payment made by the employer to reduce or eliminate the current year required employer contribution.
Present Value of Benefits	The total dollars needed as of the valuation date to fund all benefits earned in the past or expected to be earned in the future for current members.

Rolling Amortization Period	An amortization period that remains the same each year or does not decline.
Superfunded	A condition existing when the actuarial value of assets exceeds the present value of benefits. When this condition exists on a given valuation date for a given plan, employee contributions for the rate year covered by that valuation may be waived.
Unfunded Liability	When a plan or pool's actuarial value of assets is less than its accrued liability, the difference is the plan or pool's unfunded liability. The plan or pool will have to temporarily increase contributions.