CalPERS

Judges' Retirement System
Actuarial Valuation
as of
June 30, 2013

Table of Contents

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. This valuation is based on the member and financial data as of June 30, 2013 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. It is our opinion that the valuation has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that 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 Employees' 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.

[redacted]

Barbara Ware, FSA, MAAA
Senior Pension Actuary, CalPERS

[redacted]

Alan Milligan, FSA, FCIA, MAAA, FCA
Chief Actuary, CalPERS

Highlights and Executive Summary

Contents

This section contains the following topics:

Introduction

This is the actuarial valuation report as of June 30, 2013 for the Judges' Retirement System. This actuarial valuation is used to recommend the 2014-15 employer contributions. The Judges' Retirement System provides retirement and ancillary benefits to judges elected or appointed prior to November 9, 1994. The employer contribution rate for the System is set by State statute and equals eight percent (8%) of payroll. The member contribution rate is set by State statute and equals eight percent (8%) of payroll. The State currently funds the System using a pay-as-you-go approach since the eight percent (8%) of payroll contributions made by both the State and members **are not adequate to meet the System's current benefit payouts.**

Consistent with the decision made by the CalPERS Board of Administration for plans participating in the Public Employees' Retirement Fund (PERF), the mortality assumption was changed in this valuation. The mortality table used in last year's valuation was developed from the 1997-2007 experience study and included 5 years of projected on-going mortality improvement using the Scale AA table published by the Society of Actuaries. The new mortality table used in this valuation was developed from the February 2014 experience study and includes 20 years of projected on-going mortality improvement using the Scale BB table published by the Society of Actuaries.

Purpose of the Report

This actuarial valuation of the Judges' Retirement System of the State of California was performed by CalPERS staff actuaries as of June 30, 2013 in order to:

- Set forth the funded status, the actuarial assets, and accrued liabilities of the System as of June 30, 2013;
- Provide expected benefit payouts and funding alternatives;
- Provide actuarial information as of June 30, 2013, to the CalPERS Board of Administration and other interested parties, and to;
- Provide pension information as of June 30, 2013 to be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement Number 27 for a Single Employer Defined Benefit Pension Plan.

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

Employer Contribution

The employer's annual required contribution (ARC) for the System, according to Statement No. 27 of the Governmental Accounting Standards Board (GASB 27), is determined under the entry age normal actuarial cost method, with the Unfunded Liability amortized on a level dollar basis over the average future service of the active members.

A comparison of the pay-as-you-go costs, currently used to fund the System, and the ARC is shown below for the prior and current valuations.

	FY 2013-14	FY 2014-15
Estimated Employer Pay-as-You-Go Cost (PAYG)	$ 213,556,754	$ 217,464,586
GASB Actuarial Required Contribution (ARC)	$1,569,629,928	$1,884,554,707

A pay-as-you-go approach is easy to understand. However, from an accounting viewpoint, pensions in the aggregate are considered a form of deferred wages and should generally be charged over the period of employment. Also, from the member's point of view, it is generally not satisfactory that his/her future benefit payments are dependent upon the continued willingness and ability of the employer to cover the benefit payments each year.

As can be seen in the above table, the difference between the PAYG cost and the ARC is extremely large. This is because no pre-funding has occurred under this plan and the average remaining service for current actives is only about 1.9 years. Under any actuarial funding method, the money for all future benefits should be invested by that time.

CalPERS recognizes that making payments equal to the ARC may not be realistic at this time. However, the lack of any accumulation of assets is a serious concern. Advance funding of the System's benefits enables the pension assets to grow with investment earnings and would reduce future contribution requirements needed on a pay-as-you-go basis. It is recommended that the State consider some form of advanced funding.

In the following table, we have shown two possible funding amounts, equal to the Normal Cost plus a 20-year and a 10-year level dollar amortization of the UAL, in addition to the PAYG and ARC amounts as discussed above. We also show the total amount of payments expected to be made over the life of the plan. This demonstrates the amount of earnings that can be realized when assets are invested.

	Pay-as-you-go	Funding, 20-year amortization	Funding, 10-year amortization	ARC
Normal Cost		$ 28,408,535	$ 28,408,535	$ 28,408,535
Amortization of UAL		255,710,243	424,360,686	1,856,146,172
Total		$ 284,118,778	$ 452,769,221	$1,884,554,707
PAYG	$ 217,464,586			
Total Payout over Life of the Plan	$5,936,829,650	$5,184,133,475	$4,313,535,475	$3,685,646,233

Employer Contribution (continued)

CalPERS will be happy to work with the Administration in establishing an acceptable advance-funding basis that satisfies both the recommendation for advanced funding and current fiscal limitations.

Plan's Funded Status

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

	June 30, 2012	June 30, 2013
1. Present Value of Projected Benefits	$ 3,245,198,783	$ 3,444,236,895
2. Entry Age Normal Accrued Liability	29,648,357	27,250,393
3. Value of Assets (MVA)	72,693,177	53,819,947
4. Unfunded Liability [(2) – (3)]	$ 3,099,582,909	$ 3,329,490,017
5. Funded Ratio [(3) / (2)]	2.3%	1.6%

Changes Since Prior Valuation

Actuarial Assumptions — Consistent with the decision made by the CalPERS Board of Administration for plans participating in the Public Employees' Retirement Fund (PERF), the mortality assumption was changed in this valuation. The mortality table used in last year's valuation was developed from the 1997-2007 experience study and included 5 years of projected on-going mortality improvement using the Scale AA table published by the Society of Actuaries. The new mortality table used in this valuation was developed from the February 2014 experience study and includes 20 years of projected on-going mortality improvement using the Scale BB table published by the Society of Actuaries.

Actuarial Methods – There were no changes in the actuarial funding methods since the prior valuation. A complete description of the actuarial methods used in the valuation may be found in Appendix A of this report.

Plan Provisions – There were no plan changes since the prior valuation. A description of the principal plan provisions may be found in Appendix B of this report.

Subsequent Events

Discount Rate and GASB 68 – For this valuation, we assumed a 4.25% discount rate to reflect the short-term nature of the assets. To date, the GASB requirement has been the primary impetus for providing funding numbers, since employer contributions have been based solely on pay-as-you-go costs (no pre-funding). Next year, GASB Statement Number 68 will take effect. As part of the new statement, plans that are not sufficiently funded must use a tax-exempt, high-quality 20-year general obligation bond index rate to determine the liability for projected benefits. We will consider GASB 68 in setting the discount rate to be used in future valuations. It is likely that the discount rate will be lowered. It is also possible that the discount rate will be changed each year to reflect the applicable bond index rate as long as no pre-funding occurs for this plan.

Other Actuarial Assumptions – The retirement rates currently used has resulted in a significantly lower number of retirements as compared to the prior year projections. We will analyze this assumption for this group and possibly recommend a change for subsequent valuations.

Pending Lawsuit – A lawsuit was filed in January 2014, to provide judges with retroactive pay increases. There is no way of knowing how or when this will be decided, but there is a possibility that a large actuarial loss would occur if the decision is in favor of the plaintiff.

Assets

Contents

This section contains the following topics:

Reconciliation of the Market Value of Assets

The following displays the change in the market value of assets from the prior valuation date to June 30, 2013.

			Market Value
1.	Beginning Balance as of 6/30/2012	$	72,693,177
2.	Prior Year Adjustments		0
3.	Adjusted Beginning Balance as of 6/30/12	$	72,693,177
4.	Statutory Member Contributions		4,908,997
5.	Statutory Employer Contributions		6,893,976
6.	Additional Employer Contributions		
	(Transfer from General Fund)		155,051,000
7.	Other Income		2,694,677
8.	Interest Income		80,954
9.	Benefit Payments		(187,084,455)
10.	Contribution Refund		0
11.	Administrative Expenses *		(1,413,055)
12.	Less Other Expenses		(5,324)
13.	Ending Balance as of 6/30/2013**	$	53,819,947

* OPEB expenses of $102,000 are also paid from this fund.

**As of June 30, 2013, assets of the fund are invested in short term domestic securities, with the cost and market values of the fund the same value. This information was received from the CalPERS Fiscal Services Division.

Asset Allocation

Shown below is the market value of assets, by asset type, as of the valuation date.

Cash	$	112,965
Investments at Market Value		
Investments Short Term Domestic Securities	$	52,635,928
Accounts Receivable		
Member, Agency, State, School, Other		1,849,946
Due from PERF		37,424
Accrued Interest Receivable		7,853
Subtotal of Accounts Receivable	$	1,895,223
Accounts Payable		
Retirement Benefits in Process of Payment		(9,684)
Due to General Fund		(24,363)
Due to Other Funds		(128,098)
Other Program Liabilities		(662,024)
Subtotal of Accounts Receivable	$	(824,169)
Fund Balance at Market Value on 6/30/2013*	$	53,819,947

* Market value equals book value. This information was received from the CalPERS Fiscal Services Division.

Liabilities and Rates

Contents

This section contains the following topics:

Comparison of Current and Prior Year Results

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

	June 30, 2012	June 30, 2013	
		Prior Year Assumptions	New Mortality Assumptions
1. Members Included in the Valuation			
a. Active Members	376	328	328
b. Deferred Vested Terminated Members & QDRO's	42	34	34
c. Receiving Payments	1,876	1,889	1,889
d. Total	2,294	2,251	2,251
2. Payroll			
a. Covered Annual Payroll	$69,227,033	$60,593,543	$60,593,543
b. Projected Covered Annual Payroll	$57,675,812	$49,287,241	$49,287,241
c. Average Covered Annual Payroll [(2) /(1a)]	$184,114	$184,736	$184,736
3. Age and Service for Actives			
a. Average Attained Age for Actives	65.14	66.17	66.17
b. Average Service for Actives	23.61	24.82	24.82
c. Average Future Service for Actives	2.10	1.86	1.87
4. Present Value of Benefits at Valuation Date			
a. Active Members	$804,010,017	$695,031,156	$752,911,105
b. Deferred Vested Terminated Members & QDRO's	$64,999,031	$52,853,624	$56,824,025
c. Receiving Benefits	$2,376,189,735	$2,404,761,385	$2,634,501,765
d. Total	$3,245,198,783	$3,152,646,165	$3,444,236,895
5. Accrued Actuarial Liability			
a. Active Members	$731,087,320	$638,511,839	$691,984,174
b. Deferred Vested Terminated Members & QDRO's	64,999,031	52,853,624	56,824,025
c. Receiving Benefits	2,376,189,735	2,404,761,385	2,634,501,765
d. Total	$3,172,276,086	$3,096,126,848	$3,383,309,964
6. Assets (Market Value)	$72,693,177	$53,819,947	$53,819,947
7. Unfunded Accrued Actuarial Liability [(5d) - (6)]	$3,099,582,909	$3,042,306,901	$3,329,490,017
8. Normal Cost	$29,648,357	$25,324,070	$27,250,393
9. Employer Contributions	**FY 13/14**	**FY 14/15**	
GASB Actuarial Required Contribution (ARC)			
a. Normal Cost [(8)*1.0425]	$30,908,412	$26,400,343	$28,408,535
b. Payment on Unfunded Liability [(7) / (3c)*1.0425]	1,538,721,516	1,705,163,948	1,856,146,172
c. Total [(9a) + (9b)]	$1,569,629,928	$1,731,564,291	$1,884,554,707
10. Estimated Pay-as-You-Go Costs (PAYG)			
a. Estimated Benefit Payments	$216,525,363	$217,530,604	$219,822,871
b. Estimated Employee Contributions	2,968,609	2,347,277	2,358,285
c. Estimated Employer Contributions [(10a) - (10b)]	$213,556,754	$215,183,327	$217,464,586

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 liabilites

A.	**Total (Gain)/Loss for the Year**		
	1. Unfunded Accrued Liability (UAL) as of 6/30/12	$	3,099,582,909
	2. Expected Normal Cost during 2012/2013		29,648,357
	3. Contributions during 2012/2013		(169,548,650)
	4. Interest through 6/30/13		129,426,908
	5. Expected UAL before all other changes[A1+A2+A3+A4]	$	3,089,109,524
	6. Change due to revised actuarial methods		0
	7. Change due to new actuarial assumptions		287,183,116
	8. Expected UAL after all changes [A5 + A6 + A7]		3,376,292,640
	9. Actual Unfunded Accrued Liability as of 6/30/13		3,329,490,017
	10. Total (Gain)/Loss for 2012/2013 [A9 – A8]	$	(46,802,623)
B.	**Contribution (Gain)/Loss for the Year**	$	47,964,582
C.	**Asset (Gain)/Loss for the Year**	$	2,615,356
D.	**Liability (Gain)/Loss for the Year [A.10. – B. – C.]**	$	(97,382,561)

Analysis of Liability (Gain)/Loss

1.	Active (gain)/loss due to delayed service retirements	$	(29,819,651)
2.	Active (gain)/loss due to lower than expected salary increases		(20,160,255)
3.	Active (gain)/loss due to data correction for service		(3,676,995)
4.	Retiree (gain)/loss due to lower than expected benefit increases		(57,964,836)
5.	Retired (gain)/loss due to fewer deaths than expected		33,056,601
6.	Beneficiary (gain)/loss due to mortality and other factors		(14,400,936)
7.	Other		(4,416,489)
8.	Total Liability (Gain)/Loss	$	(97,382,561)

Note: Since the contributions are on a pay-as-you-go basis, the contribution loss, shown in B. above, reflects the facts that there were fewer retirements than expected and no pay or COLA increases were given. These facts are also reflected in the liability gain. The contribution loss does not imply that benefits for the year were not paid. However, a portion of the benefits (over $20 million) were paid from assets that existed at the end of the prior fiscal year, as can be seen in the Reconciliation of Assets from the Prior Year on page 9.

Funding History

The Funding History below shows the recent history of the actuarial accrued liability, the market value of assets, funded ratios, the annual covered payroll, and the Actuarial Required Contribution (ARC) under GASB Statement 27 and Pay-As-You-Go Cost (PAYG). The funded ratio based on the Market Value of Assets is an indicator of the short-term solvency of the plan.

Valuation Date	Accrued Liability	Assets	Unfunded Accrued Liability	Funded Ratio	Payroll	ARC	PAYG
6/30/09	$3,582,992,463	$41,390,491	$3,541,601,972	1.2%	$96,648,907	$1,262,446,956	$206,226,920
6/30/10	$3,429,380,904	$63,828,344	$3,365,552,560	1.9%	$85,947,377	$1,366,702,281	$210,566,972
6/30/11	$3,296,537,803	$54,383,026	$3,242,154,777	1.6%	$75,919,674	$1,467,053,208	$212,005,561
6/30/12	$3,172,276,086	$72,693,177	$3,099,582,909	2.3%	$69,227,033	$1,569,629,928	$213,556,754
6/30/13	$3,383,309,964	$53,819,947	$3,329,490,017	1.6%	$60,593,543	$1,884,554,707	$217,464,586

Projections of Contributions & Payouts

Contents

This section contains the following topics:

10-Year Projection of Contributions and Benefits

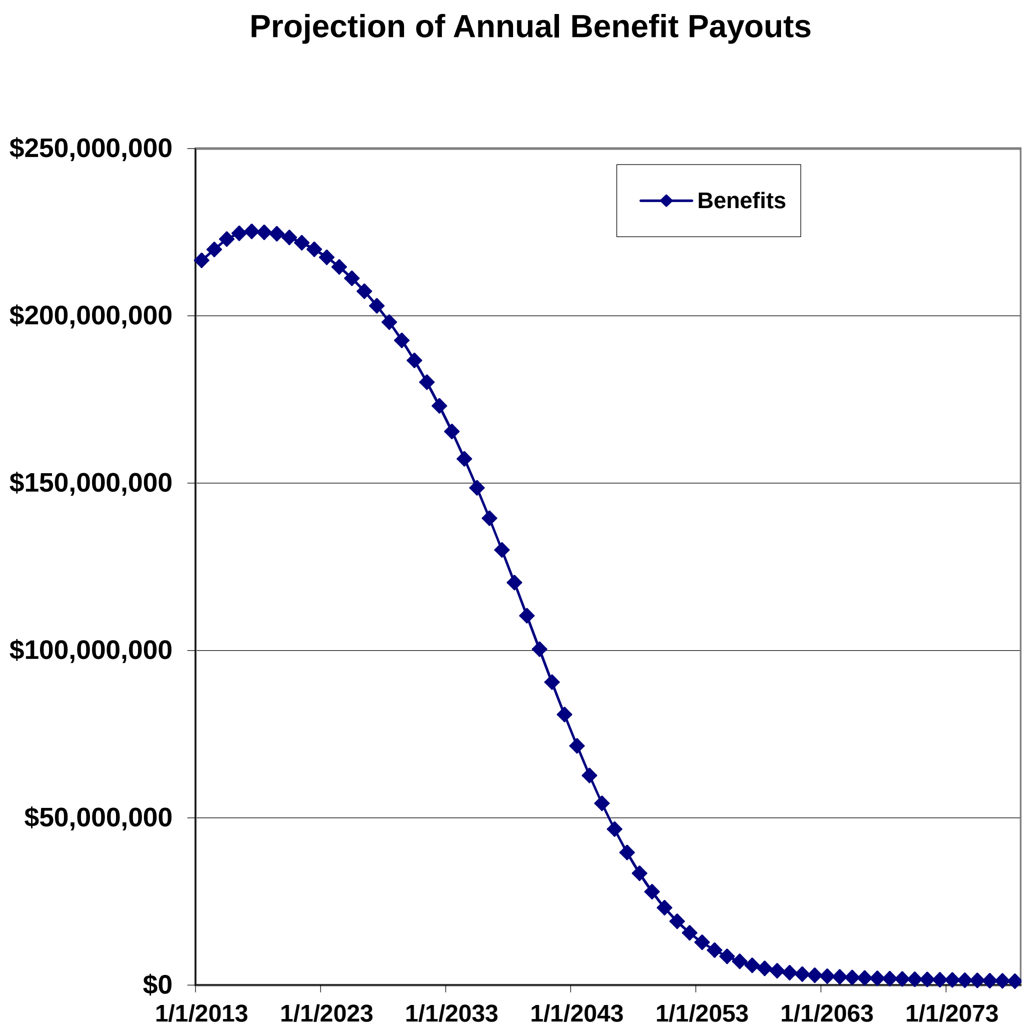
Shown below is a 10-year projection of expected State and member statutory contributions and expected benefit payouts.

Fiscal Years Beginning July 1	State Statutory Contributions *	Member Statutory Contributions *	Future Benefit Payouts
2014	$2,358,285	$2,358,285	219,822,871
2015	1,395,335	1,395,335	222,958,374
2016	802,923	802,923	224,675,242
2017	471,083	471,083	225,263,803
2018	287,925	287,925	224,935,764
2019	180,466	180,466	224,502,476
2020	109,838	109,838	223,424,970
2021	67,416	67,416	221,847,408
2022	43,956	43,956	219,884,953
2023	26,656	26,656	217,514,389

* **Statutory state contributions and statutory member contributions both equal eight percent (8%) of pay.**

Graph of Projected Benefit Payouts

The graph below shows a projection of future annual benefit payouts from the System. Total benefit payments from the System are projected to increase from $217 million during the 2013-14 fiscal year to a high of approximately $225 million in the 2017-18 fiscal year as active members retire. After 2018, benefit payouts are expected to begin to decline.



GASB Statement No. 27

Contents

This section contains the following topics:

GASB Statement No. 27

Information for Compliance with 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, 2014 to June 30, 2015 has been determined by an actuarial valuation of the plan as of June 30, 2013 and is equal to $1,884,554,707. 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.

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, 2013
Actuarial Cost Method	Entry Age Normal Cost Method
Amortization Method	Level Dollar
Average Remaining Period	1.87 Years
Asset Valuation Method	Market Value
Actuarial Assumptions	
Investment Rate of Return	4.25%
Inflation	2.75%
Salary Growth	3.00%

Schedule of Funding Progress

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

Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b – a) / c]
6/30/2009	$ 41,390,491	$ 3,582,992,463	$ 3,541,601,972	1.2%	$ 96,648,907	3664.4%
6/30/2010	$ 63,828,344	$ 3,429,380,904	$ 3,365,552,560	1.9%	$ 85,947,377	3915.8%
6/30/2011	$ 54,383,026	$ 3,296,537,803	$ 3,242,154,777	1.6%	$ 75,919,674	4270.5%
6/30/2012	$ 72,693,177	$3,172,276,086	$ 3,099,582,909	2.3%	$ 69,227,033	4477.4%
6/30/2013	$ 53,819,947	$3,383,309,964	$ 3,329,490,017	1.6%	$ 60,593,543	5494.8%

Appendices

Contents

This section contains the following topics:

Appendix A –
Actuarial Methods and Assumptions

Actuarial Funding Method

The method used to determine the GASB Actuarial Required Contribution (ARC) was the Entry Age Normal actuarial cost method.

Under this funding method the actuarial present value of projected pension, termination, death and disability benefits for members and beneficiaries are determined as of the valuation date using the actuarial assumptions set forth below.

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 over the average remaining service for current active members.

Amortization Period

The annual required contribution (ARC) according to GASB 27 has been determined using an amortization period equal to the current average future working lifetime of the active members, 1.87 years as of June 30, 2013.

We have also included a recommended contribution using an amortization period of 10 years.

Asset Valuation Method

As of June 30, 2013, the actuarial value of assets equals the market value of the fund plus accrued interest.

Actuarial Assumptions

The actuarial assumptions used in the June 30, 2013 actuarial valuation are shown below.

Economic Assumptions:

Investment Return	4.25% per annum, compounded annually.
Salary Increases	3.00% per annum compounded annually.
Inflation	2.75% per annum compounded annually.
Cost-of-Living Adjustment	Benefits are fully adjusted for increases in wages for the active judges of the same court from which the member retired.

ESIP Interest Crediting Rate:

Based on the rate for 30-year U.S. Treasuries, or their equivalent, for the month of June of the valuation year. This rate for June 2013 equals 3.40% (a change from 2.70% as of June 2012).

Demographic Assumptions:

(a) Assumed rates of decrement for disability, termination and retirement.

The following decrements apply to all members.

Probability of Termination and Disability

Age	Non-vested Withdrawal	Disability	Vested Termination
40	0.012	0.0008	0.0030
45	0.010	0.0014	0.0043
50	0.012	0.0024	0.0085
55	0.015	0.0041	0.0150
60	0.000	0.0064	0.0180
65	0.000	0.0092	0.0250
70	0.000	0.0000	0.0000

Actuarial Assumptions (continued)

Probability of Service Retirement

Age	Rate	Age	Rate
60	.30	66	.40
61	.60	67	.40
62	.70	68	.45
63	.60	69	.50
64	.60	70	.75
65	.50	71-79	.50
		80	1.00

(b) Mortality

The mortality assumptions have changed in this valuation.

The mortality assumptions are based on mortality rates resulting from the most recent CalPERS Experience Study adopted by the CalPERS Board. For purposes of the post-retirement mortality rates, the revised rates include 20 years of projected on-going mortality improvement using Scale BB published by the Society of Actuaries. For more details, please refer to the experience study report that can be found at the following link:
http://www.calpers.ca.gov/eip-docs/about/pubs/employer/2014-experience-study.pdf

Pre-Retirement Mortality

Rates vary by age as shown in the table below.

Attained Age	Pre-Retirement Mortality	
	Male	**Female**
35	0.00057	0.00035
40	0.00075	0.00050
45	0.00106	0.00071
50	0.00155	0.00100
55	0.00228	0.00138
60	0.00308	0.00182
65	0.00400	0.00257
70	0.00524	0.00367

Actuarial Assumptions (continued)

Post-Retirement Mortality

Sample rates are shown in the following table.

Attained Age	Standard		Disability	
	Male	**Female**	**Male**	**Female**
35	0.00060	0.00046	0.00788	0.00492
40	0.00110	0.00091	0.00949	0.00605
45	0.00227	0.00200	0.01221	0.00804
50	0.00501	0.00466	0.01680	0.01158
55	0.00599	0.00416	0.01973	0.01149
60	0.00710	0.00436	0.02289	0.01235
65	0.00829	0.00588	0.02451	0.01607
70	0.01305	0.00993	0.02875	0.02211
75	0.02205	0.01722	0.03990	0.03037
80	0.03899	0.02902	0.06083	0.04725
85	0.06969	0.05243	0.09731	0.07762
90	0.12974	0.09887	0.14804	0.12890
95	0.22444	0.18489	0.22444	0.21746
100	0.32536	0.30017	0.32536	0.30017
105	0.58527	0.56093	0.58527	0.56093
110	1.00000	1.00000	1.00000	1.00000

(c) Proportion of members with spouses and form of payment –

90% of non-retired members are assumed to be married; wives assumed to be four years younger than their husbands were. For retired members receiving some form of joint and survivor annuity, the spouse's actual date of birth was used in the valuation if such information was furnished. Otherwise, wives were assumed to be four years younger than their husbands were.

For retired members for whom no optional form of payment was elected, the assumed form of payment was 1) 50% joint and survivor if beneficiary information was provided or 2) a life annuity if no beneficiary information was provided.

(d) Administrative Expense - The administrative expense for the year is set equal to the amount of administrative expenses paid from the System's fund during the fiscal year ending on the valuation date.

Appendix B –
Principal Plan Provisions

Eligibility of Membership

All Supreme Court, District Court of Appeal, Superior Court, and Municipal Court Judges and Justices were immediately eligible for membership, if elected or appointed before November 9, 1994.

Member Contributions

8% of pay. Withdrawal of contributions results in forfeiture of all other benefits.

Service Retirement

Eligibility – A member who has met the age and service qualifications in one of the following subdivisions shall be eligible for Service Retirement upon specifying the date upon which his or her retirement is to be effective.

Age at Retirement	Service Qualifications	Pre-Retirement Time Limit for Accrual of Service
70 or older	20 years	*
70 or older	10 years	15 years
69	12 years	16 years
68	14 years	18 years
67	16 years	20 years
66	18 years	22 years
65	20 years	24 years
60	20 years	No Limit

* At least 5 years of service must immediately precede retirement.

Benefit - Members retiring after age 60 with at least 20 years of service receive 75% of pay of the last judicial office held. With less than 20 years of service, the benefit percentage is 65%.

Form of Payment - 50% of the retirement allowance will automatically be continued to the spouse upon the death of the retiree, without a reduction in the retiree's allowance. For post-January 1, 1980 judges, there is a one year marriage requirement at benefit commencement. The remaining 50%, often referred to as the option portion, is paid to the retiree as an annuity for as long as he or she is alive. The retiree may choose to provide for some, or all, of the option portion to be paid to any designated beneficiary after the retiree's death, paid for by a reduction to the option portion of the allowance.

Termination Benefit

Eligibility - Completion of 5 years of service.

Benefit - 3.75% of pay of last judicial office held multiplied by years of service to a maximum of 20 years. Benefit percentage is reduced by 0.25% for each year of service less than 12 years. Benefit begins at the earliest age that member would have been eligible for service retirement had he remained in service; and, the member is at least age 63, or age 60 with 20 years of service.

Minimum benefit for pre-January 1, 1974 judges - 5% of pay of last judicial office held multiplied by years of service, to a maximum of 8 years. Benefit is payable at age 65.

Form of Payment - 50% contingent annuity with spouse as contingent annuitant. Minimum benefit is paid as life annuity only.

Disability Retirement

Eligibility - 4 years of service (no service requirement is necessary for a work-related disability), 2 years of service for pre-January 1, 1989 judges. No service requirement for pre-January 1, 1980 judges.

Benefit - With 20 years of service, 75% of pay of last judicial office held, payable immediately. With less than 20 years of service, the benefit is 65% of pay.

Pre-retirement Death Benefits

Spouse's Benefit - 25% of pay of last judicial office held, payable for spouse's lifetime if not eligible for retirement. If a member dies after being eligible to retire, the surviving spouse will receive a monthly allowance equal to 50% of the monthly allowance the member would have received, had he/she retired, for life.

Contributory Benefit - After 10 years of service, spouse or minor child receives 1.625% of pay of last judicial office held multiplied by years of service, to a maximum of 20 years. Spouse's benefit is payable for life. Child's benefit ceases at age 18, or at age 22 if a full-time student. Requires $2 monthly contribution.

Benefit with No Spouse or Children - Refund of accumulated member contributions plus one month's pay multiplied by years of service, to a maximum of 6 years.

Post-Retirement Adjustments

The retirement allowances of retired judges, beneficiaries and individuals receiving benefits under domestic relation orders will increase proportionately according to increases in judicial salary increases for the judicial office last held by the member.

Extended Service Incentive Program (ESIP)

- Eligibility – An active member shall automatically participate in the program if he/she has 20 or more years of creditable service and has attained the age of 60 or more on or after January 1, 2001.

- Vesting – 36 months of creditable service after the later of January 1, 2001 or the date the judge first becomes eligible to participate in the program. However, the 36 months of creditable service requirement is waived in the event of the member's death, disability, or because he/she was unsuccessful in his/her efforts to be reelected or retained in office.

- Benefit – For the first 60 months of participation in the program, 20% of the judge's monthly salaries and 8% of the judge's monthly salaries for the 61^{st} to the 120^{th} months of participation plus interest based on 30-year U.S. Treasury Bonds shall be credited to the judge. The benefit shall be paid in the form of a single, lump sum payment.

Summary of Plan Changes

There have been no significant changes in the plan provisions for the Judges' Retirement System since the prior valuation.

Appendix C –

Participant Data

Reconciliation of Participants

The table below provides a reconciliation of the member data over the course of the valuation year.

						QDRO*		
	Active Judges	**Vested Terminated Judges**	**Disabled Judges**	**Retired Judges**	**Benefi-ciaries**	**Receiving Benefits**	**Not Receiving Benefits**	**Total Participants**
June 30, 2012	376	30	46	1,211	518	101	12	2,294
1. New Entrants	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
2. Rehires	0	0	0	0	N/A	N/A	N/A	0
3. Disability Retirements	0	N/A	0	N/A	N/A	N/A	N/A	0
4. Service Retirements	(44)	(8)	N/A	51	N/A	0	0	(1)
5. Vested Terminations	(4)	4	N/A	N/A	N/A	N/A	N/A	0
6. Termination with Refund	0	0	0	0	0	0	0	0
7. Died, With Beneficiaries' Benefit Payable	0	0	0	(21)	21	0	N/A	0
8. Divorce Settlements	0	0	0	0	0	13	(3)	10
9. Died, Without Beneficiary; and Other Terminations	0	0	(1)	(21)	N/A	(1)	(1)	(24)
10. Beneficiary Deaths	N/A	N/A	N/A	N/A	(30)	N/A	N/A	(30)
11. Data Corrections	0	0	0	0	2	0	0	2
June 30, 2013	328	26	45	1,220	511	113	8	2,251

* Qualified Domestic Relations Order

Distribution of Active Participants

The following table displays the number of active members by age and service as of June 30, 2013.

Attained Age	--Years of Service at Valuation Date-- 0-4	5-9	10-14	15-19	20-29	30+	Total No.	Total Valuation Payroll
15-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0
50-54	0	0	0	2	2	0	4	765,223
55-59	0	0	0	13	21	0	34	6,156,255
60-64	0	0	1	25	72	4	102	18,597,813
65-69	0	0	1	15	67	18	101	18,664,952
70-74	0	0	1	6	35	10	52	9,673,469
75+	0	0	0	2	17	16	35	6,735,831
Total	**0**	**0**	**3**	**63**	**214**	**48**	**328**	**$60,593,543**

Distribution of Average Annual Payroll

The following table displays the average annual payroll of active members by age and service as of June 30, 2013.

--Years of Service at Valuation Date--

Attained Age	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Average Valuation Payroll
15-19	$0	$0	$0	$0	$0	$0	$0	$0	$0
20-24	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0
50-54	0	0	0	178,789	203,822	0	0	0	191,306
55-59	0	0	0	178,789	182,864	178,789	0	0	181,066
60-64	0	0	178,789	178,789	181,886	187,001	185,241	0	182,332
65-69	0	0	178,789	180,510	183,951	185,986	187,898	204,599	184,802
70-74	0	0	178,789	178,789	182,928	192,799	183,091	198,146	186,028
75+	0	0	0	191,694	190,680	194,275	193,128	193,538	192,452
All Ages	**$0**	**$0**	**$178,789**	**$179,649**	**$183,548**	**$187,835**	**$187,177**	**$196,657**	**$184,736**

Distribution of Terminated Vested Members & QDRO's Not Receiving Benefits

The following table displays the number of terminated vested members and QDRO's not receiving benefits by age and service as of June 30, 2013.

Attained Age	--Years of Service at Valuation Date --							
	0-4	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30+**	**Total**
15-19	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0
50-54	0	0	0	0	1	0	1	2
55-59	0	0	0	2	4	2	0	8
60-64	0	0	0	12	7	0	1	20
65-69	0	0	0	3	1	0	0	4
70-74	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0
Totals	**0**	**0**	**0**	**17**	**13**	**2**	**2**	**34**

Distribution of Retired Judges, Beneficiaries & QDRO's Receiving Benefits

The following table displays the distribution of retired judges, beneficiaries & QDRO's receiving benefits by age as of June 30, 2013.

Attained Age	Service & Disability Retired Judges	Beneficiaries & QDRO's	Total
Under 30	0	3	3
30-34	0	1	1
35-39	0	0	0
40-44	0	4	4
45-49	0	5	5
50-54	0	5	5
55-59	2	17	19
60-64	97	37	134
65-69	235	61	296
70-74	287	88	375
75-79	226	85	311
80-84	206	103	309
85+	212	215	427
Total	**1,265**	**624**	**1,889**

Distribution of Annual Benefits for Retired Judges, Beneficiaries & QDRO's

The following table displays the distribution of annual benefits for retirees, beneficiaries & QDRO's by age as of June 30, 2013.

Attained Age	Service & Disability Retired Judges	Beneficiaries & QDRO's	Total
Under 30	$ 0	$ 14,013	$ 14,013
30-34	0	22,349	22,349
35-39	0	0	0
40-44	0	109,867	109,867
45-49	0	221,609	221,609
50-54	0	83,318	83,318
55-59	231,931	674,623	906,554
60-64	11,684,173	2,212,296	13,896,469
65-69	27,778,765	3,334,982	31,113,747
70-74	32,902,446	5,302,729	38,205,175
75-79	26,318,549	5,261,719	31,580,268
80-84	23,763,871	6,376,344	30,140,215
85+	25,291,357	12,647,060	37,938,417
Total	**$ 147,971,092**	**$ 36,260,909**	**$ 184,232,001**
Average	**116,973**	**58,110**	**97,529**

Appendix D –

Glossary of Actuarial Terms

Accrued Liability The portion of the actuarial present value of projected benefits allocated to service before the valuation date in accordance with the actuarial cost method.

Actuarial Assumptions Assumptions made about the occurrence of future 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 Cost Method A procedure employed by actuaries for the allocation of the actuarial present value of projected benefits to time periods, usually in the form of a normal cost and an actuarial accrued liability to achieve certain funding goals for a pension plan. Sometimes this is referred to as the "funding method."

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.

Actuarial Value of Assets The value of assets used for funding purposes. The actuarial value of assets may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses 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 in accordance with an asset valuation method. The actuarial value of assets has been set to equal the fair market value of assets for this System.

Amortization Period The period of time used for determining the amount, timing, and pattern of recognition of contributions. The period for determining the employer's annual required contributions (ARC) under GASB 27 equals the average future working period for the active members in the plan as of the valuation date.

Annual Required Contributions (ARC) The employer's periodic required contributions to a defined benefit pension plan, calculated in accordance with the parameters of GASB 27.

Normal Cost The portion of the actuarial present value of projected benefits that is allocated to a period, typically twelve months, under the actuarial cost method. The normal cost may include a provision for expenses.

Pension Actuary A person who is responsible for the calculations necessary to properly fund a pension plan.

Present Value of Benefits	Sometimes called the "actuarial present value of benefits," the total dollars needed as of the valuation date to make future payments of all benefits, earned in the past or expected to be earned in the future, for current members by application of a particular set of actuarial assumptions.
Statement No. 27 of the Governmental Accounting standards Board (GASB 27)	The accounting standard governing a state or local governmental employer's accounting for pensions.