CalPERS

Judges' Retirement System
Actuarial Valuation
as of
June 30, 2014

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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. This valuation is based on the member and financial data as of June 30, 2014 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.

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Highlights and Executive Summary

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Introduction

This is the actuarial valuation report as of June 30, 2014 for the Judges' Retirement System. This actuarial valuation is used to recommend the 2015-16 employer contributions. The Judges' Retirement System provides retirement and ancillary benefits to judges elected or appointed prior to November 9, 1994. The employer and member contribution rates for the System are set by State statute and are each equal to 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.**

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, 2014 in order to:

- Set forth the funded status, the actuarial assets, and accrued liabilities of the System as of June 30, 2014;
- Provide expected benefit payouts and funding alternatives and to;
- Provide actuarial information as of June 30, 2014, to the CalPERS Board of Administration and other interested parties.

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

California Actuarial Advisory Panel Recommend-ations

This report includes all the basic disclosure elements as described in the *Model Disclosure Elements for Actuarial Valuation Reports* recommended in 2011 by the California Actuarial Advisory Panel (CAAP), that would be applicable to a pay-as-you-go plan.

Employer Contribution

The State contributes to the plan on a pay-as-you-go basis. In other words, member contributions plus employer contributions are designed to cover only benefit payments and expenses each year, with nothing left over for pre-funding. 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.

A comparison of the pay-as-you-go costs for the prior and current valuations, is shown below.

	FY 2014-15	FY 2015-16
Estimated Employer Pay-as-You-Go Cost (PAYG)	$ 217,464,586	$ 225,157,030

The average remaining service for current actives is only about 1.7 years. Some believe that pensions should be funded over a period similar to the remaining service life. CalPERS recognizes that making contributions equal to the entire Unfunded Actuarial Liability (UAL) within 2 years is not 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 three possible funding amounts, equal to the Normal Cost plus a 15-year, a 10-year and a 5-year level dollar amortization of the UAL, in addition to the PAYG amount. We would recommend at least a 10-year amortization, since most, if not all, active members would be expected to retire within that time and the duration of benefit payments is 10.8. We have also shown the expected total amount of payments expected to be made over the life of the plan under each scenario. This demonstrates the amount of earnings that can be realized when assets are invested.

	Pay-as-you-go	Funding, 15-year amortization	Funding, 10-year amortization	Funding, 5-year amortization
Normal Cost		$ 26,133,140	$ 26,133,140	$ 26,133,140
Amortization of UAL		320,346,956	436,940,162	791,787,578
Total		$ 346,480,096	$ 463,073,302	$ 817,920,718
PAYG	$ 225,157,030			
Expected Total Payout over Life of the Plan	$5,882,880,282	$4,852,463,174	$4,416,660,460	$4,006,196,730

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, 2013		June 30, 2014
1. Present Value of Projected Benefits	$	3,444,236,895	$	3,467,143,251
2. Entry Age Normal Accrued Liability		3,383,309,964		3,414,779,730
3. Value of Assets (MVA)		53,819,947		57,198,659
4. Unfunded Liability [(2) – (3)]	$	3,329,490,017	$	3,357,581,071
5. Funded Ratio [(3) / (2)]		1.6%		1.7%

Changes Since Prior Valuation

Actuarial Assumptions — There were no changes to the actuarial assumptions since the prior valuation. Changes to the mortality assumptions and other assumptions adopted by the Board in February, 2014 were implemented in the prior valuation. A complete description of the actuarial assumptions used in the valuation may be found in Appendix A of this report.

Actuarial Methods – There were no changes in the actuarial funding methods since the prior valuation except for the following revisions we made based on an audit of the prior valuation made by Cheiron:

1. The maximum benefit allowable for active members was corrected to 75% of pay. It was discovered during the audit that a factor of 65% was incorrectly used in the previous valuation.
2. The benefit payable for a termination was changed from being equal to a retirement benefit to one equal to a percent (generally 3.75%) times years of service, as described in Appendix B.
3. For QDRO's (Qualified Domestic Relations Order) not yet receiving benefits, we changed from using the allocated service for the non-member spouse to the full service for the member in order to determine both eligibility and the benefit multiplier.

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.

Other Comments

Discount Rate and GASB 68 – For this valuation, we assumed a 4.25% discount rate to reflect the short-term nature of the assets. This year, GASB Statement Number 68 takes 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. It was determined that a discount rate of 4.25% is appropriate for GASB 68 purposes.

Retirement Assumptions – The actual experience has resulted in a significantly lower number of retirements as compared to the actuarial assumptions. We will continue to monitor this assumption and possibly recommend a change for subsequent valuations.

Subsequent Events

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

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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, 2014.

			Market Value
1.	Beginning Balance as of 6/30/2013	$	53,819,947
2.	Prior Year Adjustments		0
3.	Contributions		11,791,181
4.	Other Income		2,528,413
5.	Transfer from General Fund		184,081,000
6.	Investment Earnings Credited		59,175
7.	Less Other Investment Expenses		(5,074)
8.	Contribution Refund		(10,351)
9.	Administrative Costs		(1,141,227)
10.	Benefit Payments		(193,924,406)
11.	Ending Balance as of 6/30/2014*	$	57,198,658

* OPEB expenses of $93,555 are also paid from this fund.

**As of June 30, 2014, assets of the fund are invested in short term domestic securities, with the cost and market values of the fund the same value.

Asset Allocation

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

Cash	$	442
Investments at Market Value		
Investments Short Term Domestic Securities	$	55,087,087
Accounts Receivable		
Member, Agency, State, School, Other		2,926,190
Due from PERF		65,456
Accrued Interest Receivable		16,628
Subtotal of Accounts Receivable	$	3,008,274
Accounts Payable		
Retirement Benefits in Process of Payment		(9,684)
Due to General Fund		(49,513)
Due to Other Funds		(52,672)
Other Program Liabilities		(785,275)
Subtotal of Accounts Receivable	$	(897,144)
Fund Balance at Market Value on 6/30/2014	$	57,198,659

Liabilities and Rates

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Comparison of Current and Prior Year Results

		June 30, 2013	June 30, 2014
1.	**Members Included in the Valuation**		
	a. Active Members	328	279
	b. Deferred Vested Terminated Members & QDRO's	34	25
	c. Receiving Payments	1,889	1,912
	d. **Total**	2,251	2,216
2.	**Payroll**		
	a. Covered Annual Payroll	$60,593,543	$52,335,325
	b. Projected Covered Annual Payroll	$49,287,241	$41,377,787
	c. Average Covered Annual Payroll [(2) /(1a)]	$184,736	$187,582
3.	**Age and Service for Actives**		
	a. Average Attained Age for Actives	66.17	67.09
	b. Average Service for Actives	24.82	26.04
	c. Average Future Service for Actives	1.87	1.69
4.	**Present Value of Benefits at Valuation Date**		
	a. Active Members	$752,911,105	$733,053,390
	b. Deferred Vested Terminated Members & QDRO's	$56,824,025	$37,404,993
	c. Receiving Benefits	$2,634,501,765	$2,696,684,868
	d. **Total**	$3,444,236,895	$3,467,143,251
5.	**Present Value of Future Normal Costs at Valuation Date**		
	a. Member Contributions	$8,986,879	$7,031,302
	b. Employer Normal Costs	$51,940,052	$47,258,838
6.	**Unfunded Accrued Actuarial Liability**		
	a. Accrued Actuarial Liability		
	i. Active Members	$691,984,174	$680,689,869
	ii. Deferred Vested Terminated Members & QDRO's	56,824,025	$37,404,993
	iii. Receiving Benefits	2,634,501,765	$2,696,684,868
	iv. **Total**	$3,383,309,964	$3,414,779,730
	b. **Assets (Market Value)**	$53,819,947	$57,198,659
	c. **Unfunded Accrued Actuarial Liability [(6 a iv) - (6 b)]**	$3,329,490,017	$3,357,581,071
	d. **Funded Ratio [(6 b) / (6 a iv)]**	1.6%	1.7%
7.	**Normal Cost**	$27,250,393	$25,067,760
8.	**Employer Contributions**	**FY 14/15**	**FY 15/16**
	a. Recommended 10-Year Funding		
	i. Normal Cost [(8)*1.0425]	$28,408,535	$26,133,140
	ii. Payment on Unfunded Liability	424,360,686	436,940,162
	iii. **Total [(9 a i) + (9 a ii)]**	$452,769,221	$463,073,302
	b. **Estimated Pay-as-You-Go Costs (PAYG)**		
	i. Estimated Benefit Payments	$219,822,871	$226,977,086
	ii. Estimated Employee Contributions	2,358,285	1,820,056
	iii. Estimated Employer Contributions [(10 b i) - (10 b ii)]	$217,464,586	$225,157,030

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 6/30/13	$	3,329,490,017
2.	Expected Normal Cost during 2013/2014		27,250,393
3.	Contributions during 2013/2014		(198,400,324)
4.	Interest through 6/30/14		138,489,323
5.	Expected UAL before all other changes[A1+A2+A3+A4]	$	3,296,829,139
6.	Change due to revised actuarial methods		87,170,594
7.	Change due to new actuarial assumptions		0
8.	Expected UAL after all changes [A5 + A6 + A7]		3,383,999,733
9.	Actual Unfunded Accrued Liability as of 6/30/14		3,357,581,071
10.	Total (Gain)/Loss for 2013/2014 [A9 – A8]	$	(26,418,662)
B.	**Contribution (Gain)/Loss for the Year**		
1.	Expected Contribution (Employer and Employee)	$	219,822,871
2.	Interest on Expected Contributions [$(1.0425^{1/2} – 1)$ x B1]		4,622,632
3.	Actual Contribution		198,400,594
4.	Interest on Actual Contributions [$((1.0425)^{1/2} – 1)$ x B3]		4,172,145
5.	Contribution (Gain)/Loss [(B1 + B2) – (B3 + B4)]	$	21,872,764
C.	**Asset (Gain)/Loss for the Year**		
1.	Value of Assets as of 6/30/13	$	53,819,947
2.	Contributions Received		198,400,594
3.	Benefits, Refunds Paid and Administrative Costs		(195,065,633)
4.	Expected Interest [0.0425 x C1 + $((1.0425)^{½} - 1)$ x (C2 + C3)]		2,357,478
5.	Expected Assets as of 6/30/14 [C1 + C2 + C3 + C4]	$	59,512,386
6.	Actual Market Value of Assets as of 6/30/14		57,198,659
7.	Asset (Gain)/Loss [C5 - C6]	$	2,313,727
D.	**Liability (Gain)/Loss for the Year**		
1.	Total (Gain)/Loss (A10)	$	(26,418,662)
2.	Contribution (Gain)/Loss (B5)		21,872,764
3.	Asset (Gain)/Loss (C7)		2,313,727
4.	Liability (Gain)/Loss [D1 - D2 - D3]	$	(50,605,153)

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 a 1.4% pay and COLA increase 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.

Funding History

The Funding History below shows the recent history of the actuarial accrued liability, the market value of assets, funded ratio, the annual covered payroll and the Pay-As-You-Go Cost (PAYG).

Valuation Date	Accrued Liability	Assets	Unfunded Accrued Liability	Funded Ratio	Payroll	PAYG
6/30/09	$3,582,992,463	$41,390,491	$3,541,601,972	1.2%	$96,648,907	$206,226,920
6/30/10	$3,429,380,904	$63,828,344	$3,365,552,560	1.9%	$85,947,377	$210,566,972
6/30/11	$3,296,537,803	$54,383,026	$3,242,154,777	1.6%	$75,919,674	$212,005,561
6/30/12	$3,172,276,086	$72,693,177	$3,099,582,909	2.3%	$69,227,033	$213,556,754
6/30/13	$3,383,309,964	$53,819,947	$3,329,490,017	1.6%	$60,593,543	$217,464,586
6/30/14	$3,414,779,730	$57,198,659	$3,357,581,071	1.7%	$52,335,325	$225,157,030

Projections of Contributions & Payouts

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10-Year Projection of Contributions and Benefits

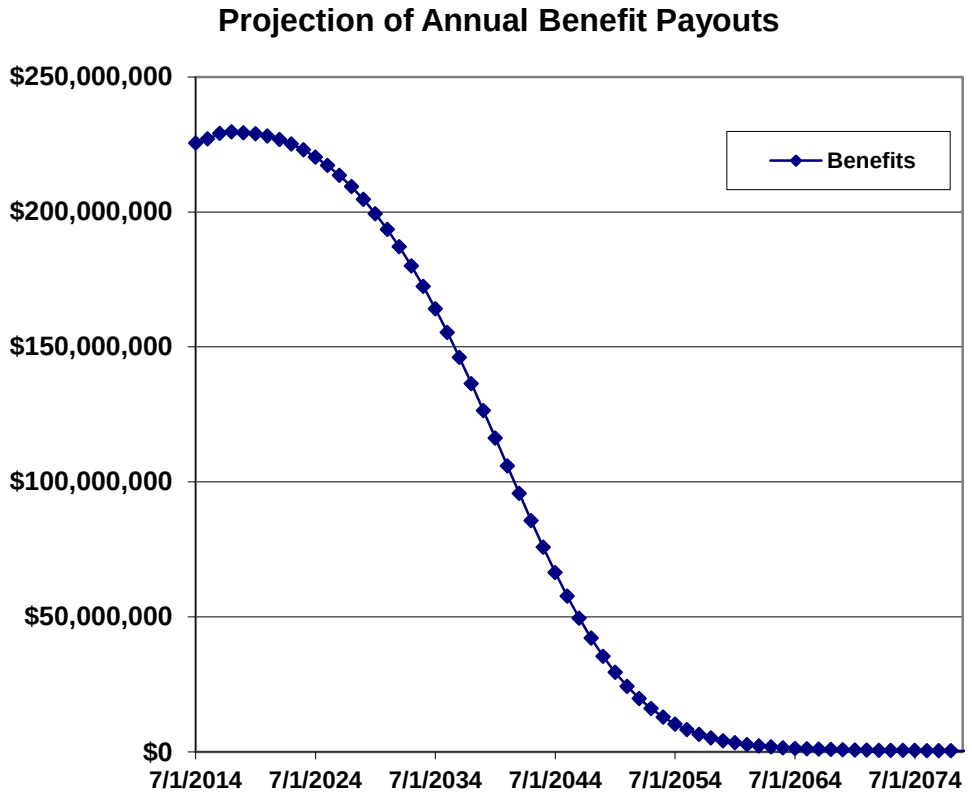
Shown below is a 10-year projection of expected State and member statutory contributions and expected benefit payouts.

Fiscal Years Beginning July 1	State Statutory Contributions *	Member Statutory Contributions *	Future Benefit Payouts
2015	1,820,056	1,820,056	226,977,086
2016	1,019,458	1,019,458	229,067,159
2017	580,249	580,249	229,659,088
2018	340,252	340,252	229,279,258
2019	205,219	205,219	228,975,972
2020	121,294	121,294	228,107,041
2021	72,560	72,560	226,826,660
2022	46,241	46,241	225,111,109
2023	27,685	27,685	222,993,072
2024	13,762	13,762	220,315,268

*** 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 $225 million during the 2014-15 fiscal year to a high of approximately $230 million in the 2017-18 fiscal year as active members retire. After 2018, benefit payouts are expected to begin to decline.



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Appendix A –
Actuarial 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 method used to determine the optional funding schedules 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 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

No formal amortization of the unfunded liability is currently in use, since contributions are being made on a pay-as-you-go basis. However, we have included a recommended contribution using an amortization period of 10 years.

Asset Valuation Method

As of June 30, 2014, the value of assets equals the market value of the fund plus accrued interest.

Actuarial Assumptions

The actuarial assumptions used in the June 30, 2014 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. Therefore, we assume that benefits will increase by 3% per annum compounded annually.

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 2014 equals 3.42% (a change from 3.40% as of June 2013).

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.

Demographic Assumptions

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

Demographic 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

Mortality:

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

Demograhic 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

Marital Status: 90% of non-retired members are assumed to be married.

Age of Spouse: Female spouses are assumed to be four years younger than male spouses. 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.

Form of Payment: 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.

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 61st to the 120th 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

Summary of Valuation Data

The table below illustrates counts of records processed by the valuation.

	June 30, 2013	June 30, 2014
1. **Active Members**		
a) Counts	328	279
b) Average Attained Age	66.17	67.09
c) Average Entry Age to Rate Plan	41.35	41.05
d) Average Years of Service	24.82	26.04
e) Average Annual Covered Pay	184,736	187,582
f) Annual Covered Payroll	60,593,543	52,335,325
g) Projected Annual Payroll	49,287,241	41,377,787
h) Present Value of Future Payroll	112,336,028	87,891,503
2. **Vested Terminated Members and QDRO's**		
a) Counts	34	25
3. **Receiving Payments**		
a) Counts	1,889	1,912
b) Average Attained Age	76.46	76.75
c) Average Annual Benefits	97,529	99,341
4. **Active to Retired Ratio** [(1a) / (3)]	0.17	0.15

Reconciliation of Participants

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

	Active Judges	Vested Terminated Judges	Disabled Judges	Retired Judges	Benefi-ciaries	QDRO* Receiving Benefits	QDRO* Not Receiving Benefits	Total Participants
June 30, 2013	328	26	45	1,220	511	113	8	2,251
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	(46)	(8)	N/A	54	N/A	0	0	0
5. Vested Terminations	(1)	1	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	(2)	0	(1)	(27)	30	0	N/A	0
8. Divorce Settlements	0	0	0	0	0	10	(2)	8
9. Died, Without Beneficiary; and Other Terminations	0	0	(1)	(13)	N/A	(4)	0	(18)
10. Beneficiary Deaths	N/A	N/A	N/A	N/A	(27)	N/A	N/A	(27)
11. Data Corrections	0	0	0	0	4	(2)	0	2
June 30, 2014	279	19	43	1,234	518	117	6	2,216

* 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, 2014.

Attained Age	--Years of Service at Valuation Date--						Total	
	0-4	5-9	10-14	15-19	20-29	30+	No.	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	0	2	0	2	362,584
55-59	0	0	0	3	14	0	17	3,132,732
60-64	0	0	1	8	70	4	83	15,387,459
65-69	0	0	2	8	61	25	96	17,941,281
70-74	0	0	0	4	28	13	45	8,552,192
75+	0	0	0	0	19	17	36	6,959,077
Total	**0**	**0**	**3**	**23**	**194**	**59**	**279**	**$52,335,325**

Distribution of Average Annual Payroll

The following table displays the average annual payroll of active members by age and service as of June 30, 2014.

	--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	0	181,292	0	0	0	181,292
55-59	0	0	0	181,292	184,918	0	0	0	184,278
60-64	0	0	181,292	181,292	184,018	187,240	200,920	0	185,391
65-69	0	0	181,292	184,563	184,563	188,182	190,714	0	186,888
70-74	0	0	0	181,292	183,037	193,485	192,924	207,463	190,049
75+	0	0	0	0	190,526	195,831	194,378	193,188	193,308
All Ages	**$0**	**$0**	**$181,292**	**$181,292**	**$184,659**	**$189,843**	**$191,555**	**$197,649**	**$187,582**

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, 2014.

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	0	1
55-59	0	0	0	0	6	0	1	7
60-64	0	0	1	3	4	2	0	10
65-69	0	0	0	5	2	0	0	7
70-74	0	0	0	0	0	0	0	0
75+	0	0	0	0	0	0	0	0
Totals	**0**	**0**	**1**	**8**	**13**	**2**	**1**	**25**

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, 2014.

Attained Age	Service & Disability Retired Judges	Beneficiaries & QDRO's	Total
Under 30	0	2	2
30-34	0	2	2
35-39	0	0	0
40-44	0	3	3
45-49	0	5	5
50-54	0	4	4
55-59	2	18	20
60-64	84	39	123
65-69	237	63	300
70-74	292	88	380
75-79	226	87	313
80-84	215	102	317
85+	221	222	443
Total	**1,277**	**635**	**1,912**

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, 2014.

Attained Age	Service & Disability Retired Judges	Beneficiaries & QDRO's	Total
Under 30	$ 0	$ 9,472	$ 9,472
30-34	0	27398	27398
35-39	0	-	-
40-44	0	109,408	109,408
45-49	0	224,711	224,711
50-54	0	57,341	57,341
55-59	235,178	755,762	990,940
60-64	10,260,927	2,728,658	12,989,585
65-69	28,770,275	3,516,428	32,286,703
70-74	34,208,492	5,524,376	39,732,868
75-79	27,022,965	5,407,827	32,430,792
80-84	24,631,334	6,399,641	31,030,975
85+	26,746,328	13,303,822	40,050,150
Total	**$ 151,875,499**	**$ 38,064,844**	**$ 189,940,343**
Average	**118,931**	**59,945**	**99,341**

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.

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.

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.