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***NEBRASKA PUBLIC EMPLOYEES  
RETIREMENT SYSTEM***

**JUDGES RETIREMENT SYSTEM**

**ACTUARIAL VALUATION REPORT  
AS OF JULY 1, 2013**

**Forty-eighth Actuarial Report for  
State Fiscal Year Ending June 30, 2015  
and  
System Plan Year Beginning July 1, 2013**







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# Cavanaugh Macdonald

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November 18, 2013

Public Employees Retirement Board  
Nebraska Public Employees Retirement System  
Post Office Box 94816  
Lincoln, NE 68509

Dear Members of the Board:

At your request, we have performed an actuarial valuation of the Judges Retirement System as of July 1, 2013 for the purpose of determining the actuarial required contribution for the plan year ending June 30, 2014. It is our understanding that any required State contribution for this plan year will be made on July 1, 2014 (State fiscal year end 2015). The major findings of the valuation are contained in this report, which reflects the benefit provisions in place on July 1, 2013. Although there was no change to the actuarial assumptions from the prior valuation, there was one change to the actuarial methods. The amortization of the unfunded actuarial accrued liability was changed from a level dollar payment to a level percent of payroll payment in Legislative Bill 553. This change resulted in a lower contribution rate in the current valuation.

This is the first actuarial valuation report prepared by Cavanaugh Macdonald Consulting, LLC (CMC). As part of our transition work, we replicated the July 1, 2012 actuarial valuation. Results were within acceptable limits, but as is typical in a takeover situation, there were differences in the key valuation results. Based on our experience, these differences are neither unusual nor significant. The details of the replication results are discussed in the Board Summary of this report.

In preparing our report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, member data and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete, our results may be different and our calculations may need to be revised.

We further certify that all costs, liabilities, rates of interest and other factors for the Judges Retirement System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer the best estimate of anticipated experience affecting the System. Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions. The Public Employees Retirement Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix C.

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Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Actuarial computations presented in this report are for purposes of determining the funding amounts for the System as set out in the Nebraska state statutes. The computations presented in this report under GASB Statement No. 25 are for purposes of fulfilling financial accounting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals and our understanding of GASB Statement No. 25. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

The consultants who worked on this assignment are pension actuaries. CMC's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

We respectfully submit the following report and look forward to discussing it with you.

Sincerely,

A handwritten signature in blue ink that reads 'Patrice Beckham'.

Patrice A. Beckham, FSA, EA, FCA, MAAA  
Principal and Consulting Actuary

A handwritten signature in blue ink that reads 'Brent A. Banister'.

Brent A. Banister Ph.D., FSA, EA, MAAA, FCA  
Chief Pension Actuary



## SECTION 1 – BOARD SUMMARY

---

This report presents the results of the July 1, 2013 actuarial valuation of the Judges Retirement System. The primary purposes of performing actuarial valuations are to:

- Determine the level of State contributions for the plan year ending June 30, 2014 which are sufficient to meet the funding policy set out in Nebraska statutes.
- Disclose asset and liability measurements as well as the current funded status of the System on the valuation date.
- Compare actual and expected experience under the System during the plan year ended June 30, 2013.
- Analyze and report on trends in System contributions, assets and liabilities over the past several years.

The Nebraska statutes require the State to make any additional payments necessary to meet the actuarial required contribution amount in excess of court fees, member contributions, and any other State appropriations. Based on the results of the July 1, 2013 valuation, the additional State contribution for the plan year ending June 30, 2014 is \$803,383 (expected to be paid July 1, 2014).

The actuarial valuation results provide a “snapshot” view of the System’s financial condition on July 1, 2013. The System’s unfunded actuarial accrued liability (UAAL) increased from \$11.5 million last year to \$18.3 million this year and the funded ratio declined from 92% to 88%. In addition, the actuarial required contribution rate increased from 25.63% of pay last year to 27.03% of pay in this year’s valuation. Numerous factors impacted the July 1, 2013 actuarial valuation results, including:

- Differences in valuation procedures as identified in the letter to the Board about the replication of the July 1, 2012 actuarial valuation. These changes increased the UAAL by \$4.3 million and increased the normal cost rate by 1.06% with a total increase in the actuarial required contribution rate of 2.70% of pay.
- Legislative Bill 553 (LB 553) changed the amortization of the unfunded actuarial accrued liability to be based on payments determined as a level percent of payroll instead of a level dollar amount. This change reduced the actuarial required contribution rate by 2.59% of pay.
- Legislation passed in the 2013 session removed the sunset provision in July 2014 to reduce the employee contribution rate by 1% and also maintains the current level of court fees of six dollars per transaction. These changes did not impact the actuarial required contribution rate.
- Actual experience on both System assets and liabilities. The net impact of all experience was an increase in the actuarial required contribution rate of 1.29%.

The 2013 valuation reflects an increase in the actuarial required contribution rate. The Judges Retirement System is funded by employee contributions, court fees, and contributions from the State, if needed, to meet the actuarial required contribution. Total expected funding from court fees is down from \$3.4M last year to \$3.2M this year. This amount will be insufficient to meet the employer actuarial required contribution for plan year ending June 30, 2014, which results in an additional State required contribution of \$803,383 (to be paid in fiscal year end 2015).



## SECTION 1 – BOARD SUMMARY

The valuation results reflect net unfavorable experience for the past plan year as demonstrated by an UAAL that was higher than expected. The UAAL on July 1, 2013 is \$18.3 million as compared to an expected UAAL of \$16.5 million. The unfavorable experience was due to the net impact of an experience loss of \$2.8 on the actuarial value of assets, and an experience gain of about \$1.0 million on System liabilities. While there was a loss on the actuarial value of assets, it is worth noting that the investment return on a market value basis of 13% was high enough to move the System from a deferred loss of \$2.0 million last year to a deferred gain of \$6.7 million this year. This is a significant improvement which will be fully recognized in the asset smoothing method over the next four years.

This is the first actuarial valuation report prepared by Cavanaugh Macdonald Consulting, LLC (CMC). As part of our transition work, we replicated the July 1, 2012 actuarial valuation. Results were within acceptable limits, but as is typical in a takeover situation, there were some differences in the key valuation results. Based on our experience, these differences are neither unusual nor significant. During the replication we identified several changes that we believe will result in a better estimate of future liabilities and costs. As a result of implementing these changes, our final liability measurements and normal cost rate were higher than those in the 2012 valuation. For additional information on the replication of the 2012 valuation and the changes implemented, please refer to our letter to the Board dated September 6, 2013. A summary of the key actuarial measurements in the replication, using CMC’s preferred methodology, is shown in the following table:

	July 1, 2012 Valuation Results (\$M)		
	CMC	Buck	CMC/Buck
Present Value of Future Benefits	\$171.9	\$166.2	103.4%
Actuarial Accrued Liability	\$141.7	\$137.5	103.1%
Normal Cost Rate	21.49%	20.43%	105.2%
UAAL Contribution Rate	<u>6.84%</u>	<u>5.20%</u>	131.6%
Actuarial Contribution Rate	28.33%	25.63%	110.5%

There was no change in the actuarial assumptions since the last valuation, but there was one change to the actuarial methods. Legislative Bill 553 (LB 553) changed the amortization of the unfunded actuarial accrued liability from a level dollar payment to a level percent of payroll payment. Under the new methodology, the dollar amount of the UAAL payment increases with the assumed payroll growth each year in the future so payments are lower in the earlier years of the amortization period and higher in the later years. This change lowered the UAAL payment in the current valuation from 7.83% of payroll to 5.24%, which lowered the actuarial required contribution rate by 2.59%, or about \$520,000.

There were also two legislative bills in the 2013 session of the Nebraska Unicameral that impacted the Judges Retirement System. The court fee designated for the Judges Retirement System was scheduled to decrease from six to five dollars on July 1, 2014. Legislative Bill 306 (LB 306) removed the language to decrease the court fees so the court fee in future years remains at six dollars. The passage of Legislative Bill 414 (LB 414) in 2009 increased the member contribution rate by 1 percent, but this increase was scheduled to be removed July 1, 2014. Legislative Bill 306 (LB 306) removed the sunset provision on the increase in the member contribution rate, thereby retaining the higher contribution rates. Both of these changes served to strengthen the long term funding of the Judges Retirement System.





## SECTION 1 – BOARD SUMMARY

A summary of the key results from the July 1, 2013 actuarial valuation is shown in the following table. As the table indicates an additional State contribution is necessary to meet the actuarial required contribution amount. Further detail on the valuation results can be found in the following sections of this Executive Summary.

	Valuation Results	
	July 1, 2013	July 1, 2012
Unfunded Actuarial Accrued Liability	\$18,272,857	\$11,537,138
Funded Ratio (Actuarial Assets)	87.70%	91.61%
Normal Cost Rate	21.79%	20.43%
UAAL Amortization Rate	5.24%	5.20%
Total Actuarial Required Contribution	27.03%	25.63%
Member Contribution Rate	(7.21%)	(7.26%)
Additional Required Contribution Rate	19.82%	18.37%
Additional Required Contribution	\$3,983,750	\$3,491,193
Estimated Court Fees	\$3,180,367	\$3,411,370
Additional Required State Contribution	\$803,383	\$79,823

### **EXPERIENCE FOR THE LAST PLAN YEAR**

Numerous factors contributed to the change in the System's assets, liabilities, and actuarial contribution rate between July 1, 2012 and July 1, 2013. The components are examined in the following discussion.

### **ASSETS**

As of June 30, 2013, the System had net assets of \$137.0 million, when measured on a market value basis. This was an increase of \$13.1 million from the prior year.

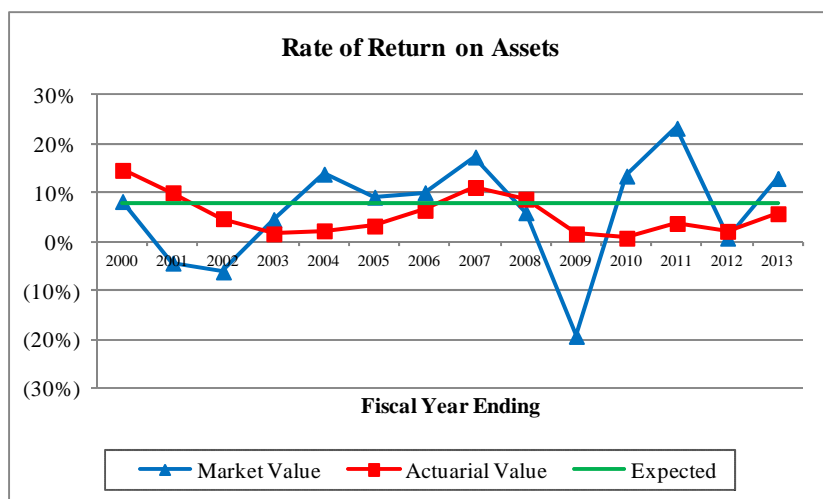
The market value of assets is not used directly in the calculation of the unfunded actuarial accrued liability and the actuarial required contribution rate. An asset valuation method, which smoothes the effect of market fluctuations, is used to determine the value of assets used in the valuation. The resulting amount is called the actuarial value of assets. In this year's valuation, the actuarial value of assets is \$130.3 million, an increase of \$4.4 million from the prior year. The components of change in the asset values are shown in the following table:



## SECTION 1 – BOARD SUMMARY

	Market Value (\$M)		Actuarial Value (\$M)	
<b>Net Assets, June 30, 2012</b>	\$	123.91	\$	125.93
- Employer and Member Contributions	+	4.60	+	4.60
- Benefit Payments	-	7.44	-	7.44
- Net Investment Income	+	15.95	+	7.22
<b>Net Assets, June 30, 2013</b>	\$	137.02	\$	130.31
Estimated Rate of Return		13.0%		5.8%

The rate of return on the actuarial value of assets was 5.8%, less than the 8% assumption. As a result, there was an experience loss on assets of \$2.8 million. Please see Section 3 of this report for more detailed information on the market and actuarial value of assets.



*The rate of return of the actuarial value of assets has been less volatile than the market value return, illustrating the benefits of using an asset smoothing method.*

## LIABILITIES

The actuarial accrued liability is that portion of the present value of future benefits that will not be paid by future normal costs. The difference between this liability and the actuarial value of assets as of the valuation date is called the unfunded actuarial accrued liability (UAAL). The dollar amount of unfunded actuarial accrued liability is reduced if the contributions to the System exceed the normal cost for the year plus interest on the prior year's UAAL.

The unfunded actuarial accrued liability is shown as of July 1, 2013 in the following table:



## SECTION 1 – BOARD SUMMARY

	Actuarial Value of Assets	Market Value of Assets
Actuarial Accrued Liability	\$148,581,812	\$148,581,812
Value of Assets	<u>130,308,955</u>	<u>137,021,979</u>
Unfunded Actuarial Accrued Liability	\$18,272,857	\$11,559,833
Funded Ratio	87.70%	92.22%

See Section 4 of the report for the detailed development of the unfunded actuarial accrued liability.

The net change in the UAAL from July 1, 2012 to July 1, 2013 was \$6.73 million. The components of this net change are shown in the following table (in millions):

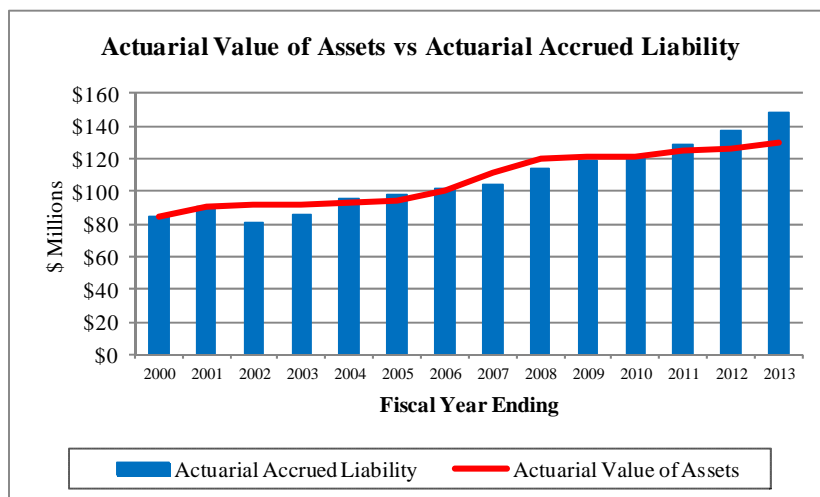
	(\$ Millions)
<b>Unfunded Actuarial Accrued Liability, July 1, 2012</b>	\$11.54
- Expected decrease from amortization method	(0.10)
- Actual versus expected contributions	0.27
- Investment experience	2.79
- Liability experience	(0.98)
- Other experience	0.49
- Changes identified in replication process	4.26
<b>Unfunded Actuarial Accrued Liability, July 1, 2013</b>	\$18.27

As shown above, various components impacted the UAAL. Actuarial gains (losses), which result from actual experience that is more (less) favorable than anticipated based on the actuarial assumptions, are reflected in the UAAL and are measured as the difference between the expected UAAL and the actual UAAL, taking into account any changes due to actuarial assumptions and methods, or benefit provision changes. Overall, the System experienced a net actuarial loss of \$1.81 million. The net actuarial loss may be explained by considering the separate experience of assets and liabilities. As noted earlier, there was a \$2.79 million loss on the actuarial value of assets. This loss was partially offset by a \$0.98 million experience gain on the System's liabilities. The liability gain was a result of various components of actuarial gains and losses, the largest of which were a gain from salary increases that were lower than expected and a cost of living adjustment that was lower than expected based on the actuarial assumptions.

As the following graph of historical actuarial assets and accrued liabilities shows, the Judges Retirement System has generally been very well funded over this period with many years at or above the fully funded level. In the last three years, the System's funding has dropped, largely due to the recognition of investment losses that occurred in fiscal year 2009.



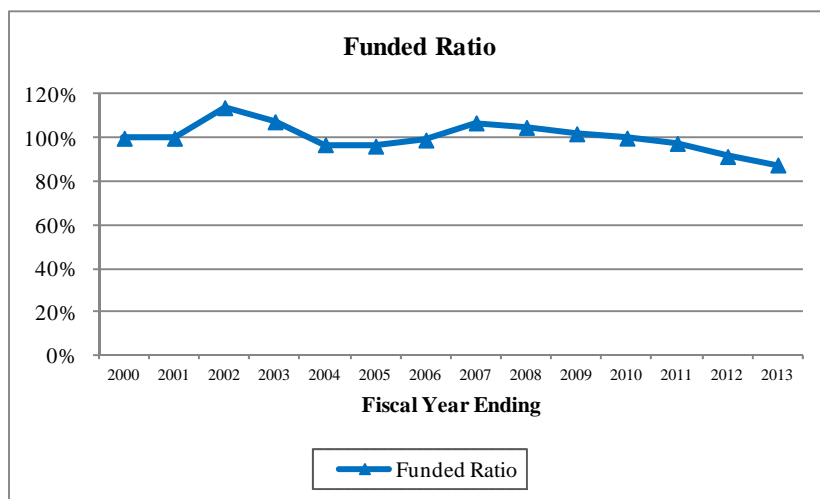
## SECTION 1 – BOARD SUMMARY



An evaluation of the UAAL on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both very large numbers) is reflected. Another way to evaluate the UAAL and the progress made in its funding is to track the funded ratio, the ratio of the actuarial value of assets to the actuarial accrued liability. The funded status information is shown below (in millions).

	7/1/2009	7/1/2010	7/1/2011	7/1/2012	7/1/2013
Funded Ratio	102.05%	100.08%	97.60%	91.61%	87.70%
UAAL/(Surplus)	(\$2.43)	(\$0.10)	\$3.07	\$11.54	\$18.27

The funded ratio over a longer period of years is shown in the following graph. As mentioned earlier, the System has generally been at or above 100% funded other than the last few years.





## SECTION 1 – BOARD SUMMARY

### ACTUARIAL REQUIRED CONTRIBUTION RATE

The State’s funding policy is to contribute any additional payments necessary to meet the actuarial required contribution in excess of court fees, member contributions and other State appropriations. The State contributions for the plan year are made on the July 1 following the plan year end. The actuarial required contribution rate consists of two components:

- A “normal cost” for the portion of projected liabilities allocated by the actuarial cost method to service of members during the year following the valuation date.
- An “unfunded actuarial accrued liability contribution” for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets.

As a result of LB 553, the UAAL contribution rate is now determined by calculating the amortization payments as a level percentage of payroll rather than as a level dollar amount. This change results in payments that are lower in the initial years of the amortization period, but increase each year in the future with the assumed payroll growth assumption of 4%. Because the UAAL contribution rate is determined as a level percent of payroll, the dollar amount of the UAAL contribution is scheduled to increase 4% each year in the future even if all actuarial assumptions are met. The actuarial required contribution rate was reduced by 2.60% due to this change in amortization methodology, lowering the contribution by \$500,000. Likewise, the additional state required contribution is also reduced by the same amount.

Total expected funding from court fees is \$3,180,367, which along with expected member contributions is not sufficient to meet the total actuarial required contribution. As a result, the additional State actuarial required contribution for the plan year ending June 30, 2014 is \$803,383. See Section 5 of the report for the detailed development of these rates which are summarized in the following table:

Contribution Rates	July 1, 2013	July 1, 2012
1. Normal Cost Rate	21.79%	20.43%
2. UAAL Contribution Rate	5.24%	5.20%
3. Total Actuarial Required Contribution Rate	27.03%	25.63%
4. Member Contribution Rate	(7.21%)	(7.26%)
5. Additional Required Contribution Rate [3 + 4]	19.82%	18.37%
6. Estimated Payroll	\$20,099,647	\$19,005,478
7. Additional Required Contribution [5 * 6]	3,983,750	3,491,193
8. Estimated Court Fees	3,180,367	3,411,370
9. Additional State Required Contribution [7 - 8]	\$ 803,383	\$ 79,823



## SECTION 1 – BOARD SUMMARY

The significant increase in the additional State required contribution from the prior valuation is the combined impact of the increase in the actuarial required contribution rate and lower expected court fees. Because the additional required contribution by the State is the amount remaining after subtracting all other funding sources, the lower court fees and the higher actuarial contribution rate both served to increase the additional required State contribution. The following table shows the breakdown of non-member contributions by source in recent years.

Plan Year	Total Contributions	Court Fees and State Appropriation	Additional State Contribution
2013/2014	\$3,983,750	\$3,180,367	\$803,383
2012/2013	3,491,193	3,411,370	79,823*
2011/2012	3,579,661	3,579,661	0
2010/2011	3,615,291	3,615,291	0
2009/2010	4,160,906	4,160,906	0
2008/2009	3,353,208	3,353,208	0
2007/2008	3,207,953	3,207,953	0
2006/2007	3,120,253	3,120,253	0
2005/2006	2,877,273	2,877,273	0
2004/2005	2,718,959	2,074,397	644,562
2003/2004	2,691,913	2,691,913	0
2002/2003	1,291,663	564,857	726,806

\* Contribution not made.

Note: Information before 2013 was produced by the prior actuary.

The actuarial required contribution rate, which is determined based on the snapshot of the System taken on the valuation date of July 1, 2013, will change each year as the deferred investment experience is recognized and other experience (both investment and demographic) impacts the System.

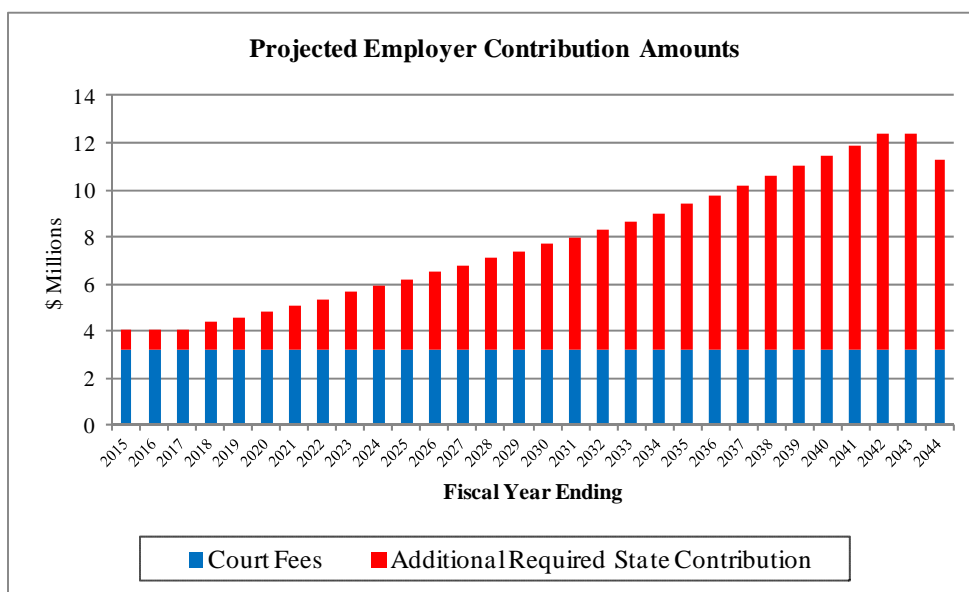
The major source of funding for the Judges Retirement System, other than member contributions, is court fees. As the following table shows, the amount of court fees has been declining in recent years:

Plan Year Ending	Court Fees
June 30, 2007	\$3,135,709
June 30, 2008	\$3,280,964
June 30, 2009	\$3,419,091
June 30, 2010	\$3,543,047
June 30, 2011	\$3,507,417
June 30, 2012	\$3,411,370
June 30, 2013	\$3,180,367



## SECTION 1 – BOARD SUMMARY

The trend on the dollar amount of court fees creates a concern about the long term funding of the System. Specifically, the actuarial contribution rate is developed to fund the System’s liabilities as a level percentage of payroll, with an assumption that payroll will increase 4% each year in the future. That means that, even if all actuarial assumptions are met, the dollar amount of the actuarial required contribution will increase each year as payroll increases. While the amount of member contributions will automatically increase as payroll increases, the court fees may not. Therefore, even if the court fees remain level rather than decline, the gap between the actuarial required contribution and the funding sources (member contributions and court fees) will result in an increasing amount of State appropriations in the future to meet the actuarial funding requirements. The following graph illustrates the relationship of increasing payroll versus recent court fees.



If the State wants to avoid this trend of increasing contribution amounts, the financing mechanism for the Judges Retirement System should be reevaluated.



## SECTION 1 – BOARD SUMMARY

### SUMMARY OF PRINCIPAL RESULTS

	7/1/2013 Valuation	7/1/2012 Valuation	% Change
<b>1. PARTICIPANT DATA</b>			
Number of:			
Active Members	149	150	(0.67%)
Retired Members and Beneficiaries	167	161	3.73%
Disabled Members	5	5	0.00%
Inactive Vested Members	5	7	(28.57%)
Total Members	326	323	0.93%
Projected Annual Salaries of Active Members	\$ 20,099,647	\$ 19,005,478	5.76%
Annual Retirement Payments for Retired Members and Beneficiaries	\$ 7,936,386	\$ 7,170,739	10.68%
<b>2. ASSETS AND LIABILITIES</b>			
a. Market Value of Assets	\$ 137,021,979	\$ 123,907,003	10.58%
b. Actuarial Value of Assets	130,308,955	125,927,523	3.48%
c. Total Actuarial Accrued Liability	148,581,812	137,464,661	8.09%
d. Unfunded Actuarial Accrued Liability [c - b]	\$ 18,272,857	\$ 11,537,138	58.38%
e. Funded Ratio (Actuarial Value of Assets) [b / c]	87.70%	91.61%	(4.26%)
f. Funded Ratio (Market Value of Assets) [a / c]	92.22%	90.14%	2.31%
<b>3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL</b>			
Normal Cost	21.79%	20.43%	6.66%
Amortization of Unfunded Actuarial Accrued Liability	5.24%	5.20%	0.77%
Actuarial Required Contribution Rate	27.03%	25.63%	5.46%
Member Contribution Rate	(7.21%)	(7.26%)	(0.69%)
Employer Required Contribution Rate	19.82%	18.37%	7.89%
Employer Required Contribution Amount	\$ 3,983,750	\$ 3,491,193	14.11%
Expected Court Fees	3,180,367	3,411,370	(6.77%)
Additional Required State Contribution Amount	\$ 803,383	\$ 79,823	906.46%

Note: Results for 7/1/12 were prepared by the prior actuary





## SECTION 2 – SCOPE OF THE REPORT

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This report presents the actuarial valuation results of the Judges Retirement System as of July 1, 2013. This valuation was prepared at the request of the Public Employees Retirement Board of the Nebraska Public Employees Retirement System.

Please pay particular attention to our actuarial certification letter, where the guidelines employed in the preparation of this report are outlined. We also comment on the sources and reliability of both the data and the actuarial assumptions upon which our findings are based. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

A summary of the findings which result from this valuation is presented in the previous section. Section 3 describes the assets and investment experience of the System. Sections 4 and 5 describe how the obligations of the System are to be met under the actuarial cost method in use. Section 6 includes the information required for the financial reporting standards established by the Governmental Accounting Standards Board (GASB).

This report includes several appendices:

- Appendix A Schedules of valuation data classified by various categories of members.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law on July 1, 2013.
- Appendix C A summary of the actuarial methods and assumptions used to estimate liabilities and determine contribution rates.
- Appendix D A glossary of actuarial terms.



## SECTION 3 – ASSETS

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In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is July 1, 2013. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System, which are generally in excess of assets. The actuarial process then leads to a method of determining the contributions needed by members and the employer in the future to balance the System assets and liabilities.

### **Market Value of Assets**

The current market value represents the "snapshot" or "cash-out" value of System assets as of the valuation date. In addition, the market value of assets provides a basis for measuring investment performance from time to time. Table 1 is a comparison, at market values, of System assets as of July 1, 2013, and July 1, 2012, in total and by investment category. Table 2 summarizes the change in the market value of assets from July 1, 2012 to July 1, 2013.

### **Actuarial Value of Assets**

Neither the market value of assets, representing a "cash-out" value of System assets, nor the book values of assets, representing the cost of investments, may be the best measure of the System's ongoing ability to meet its obligations.

To arrive at a suitable value of assets for the actuarial valuation, a technique for determining the actuarial value of assets is used which dampens swings in the market value while still indirectly recognizing market values. Under the asset smoothing methodology, the difference between the actual and assumed investment return on the market value of assets is recognized evenly over a five year period.

Table 3 shows the development of the actuarial value of assets (AVA) as of the valuation date.



**SECTION 3 – ASSETS**

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**TABLE 1**  
**JUDGES RETIREMENT SYSTEM**  
**MARKET VALUE OF ASSETS**  
**by Investment Category**

	<u>June 30, 2013</u>	<u>June 30, 2012</u>
1. Cash and Equivalents	\$ 163,621	\$ 69,189
2. Investments	139,106,386	125,334,480
3. Capital Assets	89	106
4. Receivables and Prepaids	9,811,470	8,435,524
5. Accounts Payable	<u>(12,059,587)</u>	<u>(9,932,296)</u>
6. Net Assets Available for Pension Benefits [1 + 2 + 3 + 4 + 5]	\$ 137,021,979	\$ 123,907,003



## SECTION 3 – ASSETS

**TABLE 2**  
**JUDGES RETIREMENT SYSTEM**  
**CHANGE IN MARKET VALUE OF ASSETS**

	2013	2012
1. Market Value of Assets, Beginning of Year	\$ 123,907,003	\$ 124,852,333
2. Contributions		
(a) Member	\$ 1,424,374	\$ 1,400,161
(b) Court fees	3,180,367	3,411,370
(c) State appropriations	0	72,244
(d) Total	\$ 4,604,741	\$ 4,883,775
3. Expenditures		
(a) Benefit payments	\$ 7,393,972	\$ 6,834,551
(b) Expenses and fees	43,380	56,704
(c) Total	\$ 7,437,352	\$ 6,891,255
4. Investment Return, Net of Expenses		
(a) Investment income	\$ 1,853,518	\$ 1,791,600
(b) Securities lending income	45,835	42,433
(c) Securities lending expense	(11,043)	(9,267)
(d) Net appreciation/(depreciation) in fair value of investments	14,059,277	(762,616)
(e) Other	0	0
(f) Investment return for 2012/2013 [(a) + (b) + (c) + (d) + (e)]	\$ 15,947,587	\$ 1,062,150
5. Market Value of Assets, End of Year [1 + 2(d) - 3(c) + 4(f)]	\$ 137,021,979	\$ 123,907,003
6. Approximate Rate of Return, Net of Expenses	13.0%	0.8%



## SECTION 3 – ASSETS

**TABLE 3**  
**JUDGES RETIREMENT SYSTEM**  
**DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS**

	Year End			
	6/30/2010	6/30/2011	6/30/2012	6/30/2013
1. Actuarial Value of Assets, Beginning of Year	\$ 120,992,600	\$ 121,406,463	\$ 125,190,720	\$ 125,927,523
2. Unrecognized Return Beginning of Year	\$ (30,546,483)	\$ (19,454,552)	\$ (338,387)	\$ (2,020,520)
3. Contributions During Year				
(a) Member	\$ 1,391,111	\$ 1,378,654	\$ 1,400,161	\$ 1,424,374
(b) Court fees	3,543,047	3,507,417	3,411,370	3,180,367
(c) State appropriations	72,244	72,244	72,244	0
(d) Total	\$ 5,006,402	\$ 4,958,315	\$ 4,883,775	\$ 4,604,741
4. Benefit Payments	\$ 5,576,749	\$ 5,801,195	\$ 6,834,551	\$ 7,393,972
5. Expected Investment Income on (1), (2), (3) and (4) at 8%	\$ 7,231,869	\$ 8,142,388	\$ 9,934,397	\$ 9,827,738
6. Actual Return on Market Value , Net of All Expenses	\$ 12,076,141	\$ 23,743,302	\$ 1,005,446	\$ 15,904,207
7. Return to be Spread, End of Year	\$ 4,844,272	\$ 15,600,914	\$ (8,928,951)	\$ 6,076,469

[6 - 5]

Note: Information before 2013 was produced by the prior actuary.



**SECTION 3 – ASSETS**

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**TABLE 3  
(continued)**

**JUDGES RETIREMENT SYSTEM**

**DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS**

8. Return to be Spread

<u>Plan Year</u> <u>Ending</u>	<u>Return to be</u> <u>Spread</u>	<u>Unrecognized</u> <u>Percent</u>	<u>Unrecognized</u> <u>Return</u>
2013	\$6,076,469	80%	\$4,861,175
2012	(8,928,951)	60%	(5,357,371)
2011	15,600,914	40%	6,240,366
2010	4,844,272	20%	968,854
			<hr/> \$6,713,024

9. Total Market Value of Assets as of July 1, 2013 \$137,021,979

10. Total Actuarial Value of Assets as of July 1, 2013 \$130,308,955  
[9 - 8]

11. Asset Ratios

(a) Actuarial Value to Market Value [10 / 9] 95.10%  
(b) Market Value to Actuarial Value [9 / 10] 105.15%



## SECTION 4 – SYSTEM LIABILITIES

---

In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of assets of the Judges Retirement System as of the valuation date, July 1, 2013. In this section, the discussion will focus on the commitments (future benefit payments) of the System, which are referred to as its liabilities.

Table 4 contains an analysis of the actuarial present value of all future benefits (PVFB) for contributing members, inactive members, retirees and their beneficiaries.

The liabilities summarized in Table 4 include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes the measurement of both benefits already earned and future benefits to be earned. For all members, active and retired, the value extends over benefits earnable and payable for the rest of their lives and for the lives of the surviving beneficiaries.

All liabilities reflect the benefit provisions in place as of July 1, 2013.

### **Actuarial Accrued Liability**

A fundamental principle in financing the liabilities of a retirement program is that the cost of its benefits should be related to the period in which benefits are earned, rather than to the period of benefit distribution. An actuarial cost method is a mathematical technique that allocates the present value of future benefits into annual costs. In order to do this allocation, it is necessary for the funding method to "breakdown" the present value of future benefits into two components:

- (1) that which is attributable to the past and
- (2) that which is attributable to the future.

Actuarial terminology calls the part attributable to the past the "past service liability" or the "actuarial accrued liability." The portion allocated to the future is known as the present value of future normal costs, with the specific piece of it allocated to the current year being called the "normal cost." Table 5 contains the calculation of actuarial accrued liability for the System. The Entry Age Normal actuarial cost method is used to develop the actuarial accrued liability.



**SECTION 4 – SYSTEM LIABILITIES**

---

**TABLE 4**

**JUDGES RETIREMENT SYSTEM**

**PRESENT VALUE OF FUTURE BENEFITS (PVFB)  
AS OF JULY 1, 2013**

1. Active Employees		
(a) Retirement	\$	94,702,344
(b) Death		2,999,049
(c) Total	\$	<u>97,701,393</u>
2. Inactive Vested Members		2,743,652
3. Inactive Nonvested Members		0
4. Disabled Members		3,569,052
5. Retirees		64,372,296
6. Beneficiaries		<u>11,736,992</u>
7. Total Present Value of Future Benefits	\$	180,123,385
[1(c) + 2 + 3 + 4 + 5 + 6]		





**SECTION 4 – SYSTEM LIABILITIES**

---

**TABLE 5**  
**JUDGES RETIREMENT SYSTEM**  
**ACTUARIAL ACCRUED LIABILITY**  
**AS OF JULY 1, 2013**

1. Present Value of Future Benefits for Active Members	\$	97,701,393
2. Present Value of Future Normal Costs for Active Members		
(a) Retirement	\$	30,265,767
(b) Death		1,275,806
(c) Total	\$	<u>31,541,573</u>
3. Actuarial Accrued Liability for Active Members [1 - 2(c)]	\$	66,159,820
4. Actuarial Accrued Liability for Inactive Members	\$	82,421,992
5. Total Actuarial Accrued Liability [3 + 4]	\$	148,581,812
6. Actuarial Value of Assets	\$	130,308,955
7. Unfunded Actuarial Accrued Liability [5 - 6]	\$	18,272,857



**SECTION 4 – SYSTEM LIABILITIES**

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**TABLE 6**  
**JUDGES RETIREMENT SYSTEM**  
**ACTUARIAL BALANCE SHEET**

<u>ASSETS</u>	
Actuarial Value of Assets	\$ 130,308,955
Unfunded Actuarial Accrued Liability	18,272,857
Present Value of Future Normal Costs	<u>31,541,573</u>
Total Assets	\$ 180,123,385
<u>LIABILITIES</u>	
Present Value of Future Benefits	
Active members	
Retirement	\$ 94,702,344
Death	<u>2,999,049</u>
Total	97,701,393
Inactive members	2,743,652
Retirees, disabilities and beneficiaries	<u>79,678,340</u>
Total	\$ 180,123,385



## SECTION 4 – SYSTEM LIABILITIES

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**TABLE 7**  
**JUDGES RETIREMENT SYSTEM**  
**ACTUARIAL GAIN/(LOSS)**

**Liabilities**

1. Actuarial Accrued Liability as of July 1, 2012	\$ 137,464,661
2. Normal Cost for Plan Year Ending June 30, 2013	3,882,367
3. Benefit Payments During Plan Year Ending June 30, 2013	7,393,972
5. Changes Identified in Replication Process	4,259,270
4. Interest at 8.0%	<u>11,352,460</u>
6. Expected Actuarial Accrued Liability as of July 1, 2013 [1 + 2 - 3 + 4 + 5]	149,564,786
7. Actuarial Accrued Liability as of July 1, 2013	\$ 148,581,812

**Assets**

8. Actuarial Value of Assets as of July 1, 2012	\$ 125,927,523
9. Contributions During Plan Year Ending June 30, 2013	4,604,741
10. Benefit Payments During Plan Year Ending June 30, 2013	7,393,972
11. Interest at 8.0%	<u>9,964,779</u>
12. Expected Actuarial Value of Assets as of July 1, 2013 [8 + 9 - 10 + 11]	133,103,071
13. Actuarial Value of Assets as of July 1, 2013	\$ 130,308,955

**Gain / (Loss)**

14. Actuarial Gain / (Loss) on Liabilities [6 - 7]	\$ 982,974
15. Actuarial Gain / (Loss) on Assets [13 - 12]	(2,794,116)
16. Total Actuarial Gain / (Loss) for Plan Year Ending June 30, 2013 [14 + 15]	\$ (1,811,143)



**SECTION 4 – SYSTEM LIABILITIES**

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**TABLE 8**  
**JUDGES RETIREMENT SYSTEM**  
**GAIN/(LOSS) ANALYSIS BY SOURCE**

<b>Liability Sources</b>	<b>Gain/(Loss)</b>
Retirement	\$ (218,513)
Termination	0
Disability	0
Mortality	(425,605)
Salary	1,231,629
New Entrants/Rehires	(123,168)
Miscellaneous/COLA	518,631
Total Liability Gain/(Loss)	\$ 982,974
Asset Gain/(Loss)	\$ (2,794,116)
Net Actuarial Gain/(Loss)	\$ (1,811,143)



## SECTION 4 – SYSTEM LIABILITIES

TABLE 9

### JUDGES RETIREMENT SYSTEM PROJECTED BENEFIT PAYMENTS

<u>Plan Year</u> <u>Ending June 30</u>	<u>Active Employees</u>	<u>Retired and Disabled</u> <u>Members and</u> <u>Beneficiaries</u>	<u>Total</u>
2014	\$ 1,162,000	\$ 7,917,000	\$ 9,079,000
2015	1,954,000	7,891,000	9,845,000
2016	2,670,000	7,922,000	10,592,000
2017	3,719,000	7,897,000	11,616,000
2018	4,682,000	7,834,000	12,516,000
2019	5,670,000	7,819,000	13,489,000
2020	6,620,000	7,727,000	14,347,000
2021	7,475,000	7,614,000	15,089,000
2022	8,282,000	7,496,000	15,778,000
2023	8,928,000	7,362,000	16,290,000
2024	9,872,000	7,214,000	17,086,000
2025	10,702,000	7,053,000	17,755,000
2026	11,379,000	6,843,000	18,222,000
2027	12,286,000	6,646,000	18,932,000
2028	12,857,000	6,434,000	19,291,000
2029	13,445,000	6,206,000	19,651,000
2030	13,926,000	5,961,000	19,887,000
2031	14,450,000	5,702,000	20,152,000
2032	14,815,000	5,428,000	20,243,000
2033	15,124,000	5,142,000	20,266,000
2034	15,559,000	4,841,000	20,400,000
2035	15,881,000	4,529,000	20,410,000
2036	15,937,000	4,207,000	20,144,000
2037	15,936,000	3,878,000	19,814,000
2038	16,020,000	3,544,000	19,564,000
2039	15,893,000	3,210,000	19,103,000
2040	15,983,000	2,879,000	18,862,000
2041	15,730,000	2,556,000	18,286,000
2042	15,407,000	2,245,000	17,652,000
2043	14,957,000	1,949,000	16,906,000

Note: Cash flows are the expected future non-discounted payments to current members. These numbers exclude refund payouts to any current nonvested inactive members and assume future retirees elect the normal form of payment.



## SECTION 5 – EMPLOYER CONTRIBUTIONS

---

The previous two sections were devoted to a discussion of the assets and liabilities of the System. A comparison of Tables 3 and 4 indicates that current assets fall short of meeting the present value of future benefits (total liability). This is expected in all but a completely closed fund, where no further contributions are anticipated. In an active system, there will almost always be a difference between the actuarial value of assets and total liabilities. This deficiency has to be made up by future contributions and investment returns. An actuarial valuation sets out a schedule of future contributions that will deal with this deficiency in an orderly fashion.

The method used to determine the incidence of the contributions in various years is called the actuarial cost method. Under an actuarial cost method, the contributions required to meet the difference between current assets and current liabilities are allocated each year between two elements: (1) the normal cost rate and (2) the unfunded actuarial accrued liability contribution rate.

The term "fully funded" is often applied to a system in which contributions at the normal cost rate are sufficient to pay for the benefits of existing employees as well as for those of new employees. More often than not, systems are not fully funded, either because of past benefit improvements that have not been completely funded or because of actuarial deficiencies that have occurred because experience has not been as favorable as anticipated by the actuarial assumptions. Under these circumstances, an unfunded actuarial accrued liability (UAAL) exists. Likewise, when the actuarial value of assets is greater than the actuarial accrued liability, a surplus exists.

### **Description of Contribution Rate Components**

The Entry Age Normal (EAN) actuarial cost method is used for the valuation. Under that method, the normal cost for each year from entry age to assumed exit age is a constant percentage of the member's year by year projected compensation. The portion of the present value of future benefits not provided by the present value of future normal costs is the actuarial accrued liability. The unfunded actuarial accrued liability/ (surplus) represents the difference between the actuarial accrued liability and the actuarial value of assets as of the valuation date. The unfunded actuarial accrued liability is calculated each year and reflects experience gains and losses.

In general, contributions are computed in accordance with a level percent-of-payroll funding objective. The contribution rate based on the July 1, 2013 actuarial valuation will be used to determine the actuarial required employer contribution rate to the Judges Retirement System for the plan year ending June 30, 2014. Any State contributions are expected to be deposited on July 1, 2014 (State fiscal year 2015). In this context, the term "contribution rate" means the percentage, which is applied to a particular active member payroll to determine the actual employer contribution amount (i.e., in dollars) for the group.

### **Contribution Rate Summary**

In Table 10 the amortization payment related to the unfunded actuarial accrued liability/(surplus), as of July 1, 2013, is developed. Table 11 develops the actuarial contribution rate for the System and the amount of any additional required state contributions.

The contribution rates shown in this report are based on the actuarial assumptions and cost methods described in Appendix C.



**SECTION 5 – EMPLOYER CONTRIBUTIONS**

**TABLE 10**  
**JUDGES RETIREMENT SYSTEM**  
**SCHEDULE OF AMORTIZATION BASES**

<b>Amortization Bases</b>	<b>Original Amount</b>	<b>July 1, 2013 Remaining Payments</b>	<b>Date of Last Payment</b>	<b>Outstanding Balance as of July 1, 2013</b>	<b>Annual Contribution*</b>
2011 Unfunded Actuarial Accrued Liability Base	\$ 3,073,897	28	7/1/2041	\$ 3,017,457	\$ 178,020
2012 Unfunded Actuarial Accrued Liability Base	\$ 8,490,376	29	7/1/2042	\$ 8,415,428	\$ 486,876
2013 Unfunded Actuarial Accrued Liability Base	\$ 6,839,972	30	7/1/2043	\$ 6,839,972	\$ 388,488
<b>Total</b>				<b>\$ 18,272,857</b>	<b>\$ 1,053,384</b>

\* Contribution amount reflects mid-year timing.

- 1. Total UAAL Amortization Payments \$ 1,053,384
- 2. Projected Payroll for FY 2014 \$ 20,099,647
- 3. UAAL Amortization Payment Rate 5.24%

Note: Beginning with the July 1, 2013 valuation, the payments on each UAAL base are determined as a level percent of payroll using a 4% payroll growth assumption.



## SECTION 5 – EMPLOYER CONTRIBUTIONS

---

**TABLE 11**

**JUDGES RETIREMENT SYSTEM**

**ACTUARIAL REQUIRED CONTRIBUTION RATE**

1. Normal Cost		
(a) Amount	\$	4,096,493
(b) Expected pay for current actives		18,800,284
(c) Normal Cost Rate as % of pay		21.79%
2. UAAL Amortization Rate (see Table 10)		5.24%
3. Total Actuarial Required Contribution Rate [1(c) + 2]		27.03%
4. Statutory Member Contribution Rate		7.21%
5. Employer Required Contribution Rate [3 - 4]		19.82%
6. Actuarial Required Employer Contribution		
(a) Projected pay for FYE 2014	\$	20,099,647
(b) Total required contribution [5 * 6(a)]		3,983,750
(c) Expected court fees		3,180,367
(d) Additional required state contribution amount as of July 1, 2014 [6(b) - 6(c)]	\$	803,383





## SECTION 6 – ACCOUNTING INFORMATION

---

The actuarial accrued liability is a measure intended to help the reader assess (i) a retirement system's funded status on a going concern basis and (ii) progress being made toward accumulating the assets needed to pay benefits as due. Allocation of the actuarial present value of projected benefits between past and future service was based on service using the Entry Age Normal actuarial cost method. Assumptions, including projected pay increases, were the same as used to determine the System's level percent of payroll annual required contribution between entry age and assumed exit age. Entry age was established by subtracting credited service from current age on the valuation date. The Entry Age Normal actuarial accrued liability was determined as part of an actuarial valuation of the plan as of July 1, 2013. The actuarial assumptions used in determining the actuarial accrued liability can be found in Appendix C.

The preceding methods comply with the financial reporting standards established by the Governmental Accounting Standards Board.

GASB Statement No. 25 establishes financial reporting standards for defined benefit pension plans. In addition to two required statements regarding plan assets, the statement requires two schedules and accompanying notes disclosing information relative to the funded status of the plan and historical contribution patterns.

- The Schedule of Funding Progress provides information about whether the financial strength of the Plan is improving or deteriorating over time.
- The Schedule of Contributions from Employers and Other Contributing Entities provides historical information about the annual required contribution (ARC) and the percentage of the ARC that was actually contributed.

In 2012, GASB issued the final version of GASB Statements Number 67 and 68 which will supersede the current GASB standards, Numbers 25 and 27. GASB 67, which applies to the retirement system, will be effective for the plan year ending June 30, 2014. GASB 68, which applies to employer reporting, is first effective for fiscal years beginning after June 15, 2014.



**SECTION 6 – ACCOUNTING INFORMATION**

**TABLE 12**  
**JUDGES RETIREMENT SYSTEM**  
**SCHEDULE OF FUNDING PROGRESS**  
**Under GASB No. 25**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded Actuarial Accrued Liability (UAAL) (b - a)</b>	<b>Funded Ratio (a / b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a % of Covered Payroll [(b - a) / c]</b>
June 30, 2013	\$130,308,955	\$148,581,812	\$18,272,857	87.7%	\$20,099,647	90.9%
June 30, 2012	125,927,523	137,464,661	11,537,138	91.6%	19,005,478	60.7%
June 30, 2011	125,190,720	128,264,617	3,073,897	97.6%	18,182,238	16.9%
June 30, 2010	121,406,463	121,309,682	(96,781)	100.1%	18,773,203	(0.5%)
June 30, 2009	120,992,600	118,558,418	(2,434,182)	102.1%	18,373,339	(13.2%)
June 30, 2008	119,961,758	114,251,081	(5,710,677)	105.0%	17,990,072	(31.7%)

Note: Information before 2013 was produced by the prior actuary.



**SECTION 6 – ACCOUNTING INFORMATION**

**TABLE 13**

**JUDGES RETIREMENT SYSTEM**

**SCHEDULE OF CONTRIBUTIONS FROM EMPLOYER  
AND OTHER CONTRIBUTING ENTITIES  
Disclosure Requirement under GASB No. 25**

Plan Year Ending	Annual Required Contributions			Percent Contributed
	State	Court Fees	Total	
June 30, 2013	\$ 0	\$3,180,367	\$3,180,367	100%
June 30, 2012	72,244	3,411,370	3,483,614	100%
June 30, 2011	72,244	3,507,417	3,579,661	100%
June 30, 2010	72,244	3,543,047	3,615,291	100%
June 30, 2009	72,244	3,419,091	3,491,335	100%
June 30, 2008	72,244	3,280,964	3,353,208	100%

Note: Information prior to 2013 was produced by the prior actuary.

<u>Actuarial Assumptions and Methods</u>	
Valuation Date	June 30, 2013
Actuarial Cost Method	Entry Age
Amortization Method	Level dollar amount, closed for valuations before July 1, 2013. Level percent of payroll, closed effective July 1, 2013.
Equivalent Single Amortization Period	28 years
Asset Valuation Method	5 year smoothed market
Actuarial Assumptions	
Investment rate of return*	8.0%
Projected Salary increases*	4.0%
*Includes inflation at	3.25%
Cost-of-living adjustment	2.50% with a floor benefit equal to 60% purchasing power of original benefit.



## APPENDIX A – MEMBERSHIP DATA

### MEMBER DATA RECONCILIATION

	Active Members	Inactive Vested	Retirees and Beneficiaries	Disabled Members	Total
As of July 1, 2012	150	7	161	5	323
Changes in status					
a) Retirement	(10)	(2)	12	0	0
b) Death	0	0	(6)	0	(6)
c) Nonvested terminations	0	0	0	0	0
d) Vested terminations	0	0	0	0	0
e) Contribution refund	0	0	0	0	0
f) Beneficiaries in receipt	0	0	0	0	0
g) Disability retirements	0	0	0	0	0
h) Return to active service	0	0	0	0	0
i) Expired benefits	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total changes in status	(10)	(2)	6	0	(6)
New entrants					
a) Without prior service	9	0	0	0	9
b) With prior service	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total new members	9	0	0	0	9
Net Change	(1)	(2)	6	0	3
As of July 1, 2013	149	5	167	5	326

Note: Excludes any nonvested inactive members.



## APPENDIX A – MEMBERSHIP DATA

### SUMMARY OF MEMBERSHIP DATA

<b>A. ACTIVE MEMBERS</b>	<b>July 1, 2013</b>	<b>July 1, 2012</b>	<b>% Change</b>
1. Number of Active Members			
(a) Before assumed retirement age	146	147	(0.7%)
(b) Beyond assumed retirement age	3	3	0.0%
(c) Total*	<u>149</u>	<u>150</u>	(0.7%)
2. Annual Considered Compensation			
(a) Before assumed retirement age	\$ 18,904,302	\$ 18,591,476	1.7%
(b) Beyond assumed retirement age	422,282	414,002	2.0%
(c) Total	<u>\$ 19,326,584</u>	<u>\$ 19,005,478</u>	1.7%
3. Accumulated Contributions	\$ 16,737,878	\$ 17,249,027	(3.0%)
4. Active Member Averages			
(a) Age	58.5	58.7	(0.3%)
(b) Service	13.5	14.0	(3.6%)
(c) Compensation	\$ 129,709	\$ 126,703	2.4%
<b>B. INACTIVE MEMBERS</b>			
1. Number of Inactive Members	5	7	(28.6%)
2. Accumulated Member Contributions	\$ 655,612	\$ 882,368	(25.7%)
3. Inactive Member Averages			
(a) Age	60.8	61.2	(0.7%)
(b) Accumulated member contributions	\$ 131,122	\$ 126,053	4.0%
<b>C. RETIREES, DISABLED, AND BENEFICIARIES</b>			
1. Number of Members			
(a) Retired	128	119	7.6%
(b) Disabled	5	5	0.0%
(c) Beneficiaries	39	42	(7.1%)
(d) Total	<u>172</u>	<u>166</u>	3.6%
2. Annual Benefits			
(a) Retired	\$ 6,220,296	\$ 5,434,173	14.5%
(b) Disabled	332,244	326,536	1.7%
(c) Beneficiaries	<u>1,383,840</u>	<u>1,410,030</u>	(1.9%)
(d) Total	<u>\$ 7,936,380</u>	<u>\$ 7,170,739</u>	10.7%

\* As of July 1, 2012, 112 active members receive the new benefit and contribution provisions under LB 1097 and 38 active members remained covered under the prior benefit and contribution provisions. As of July 1, 2013, these counts were 112 and 37, respectively.

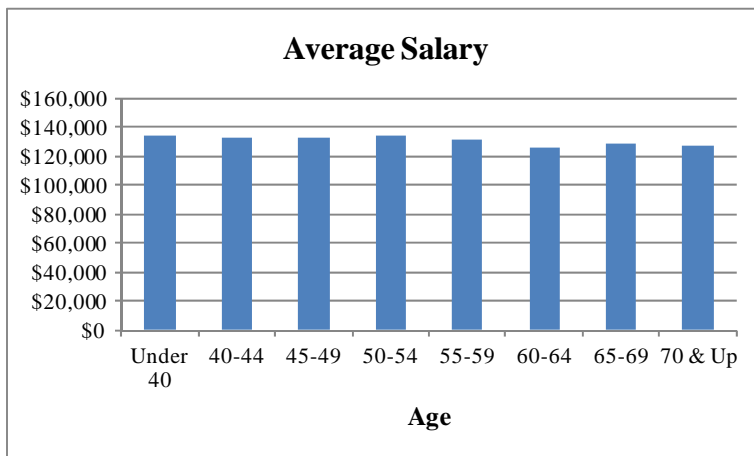
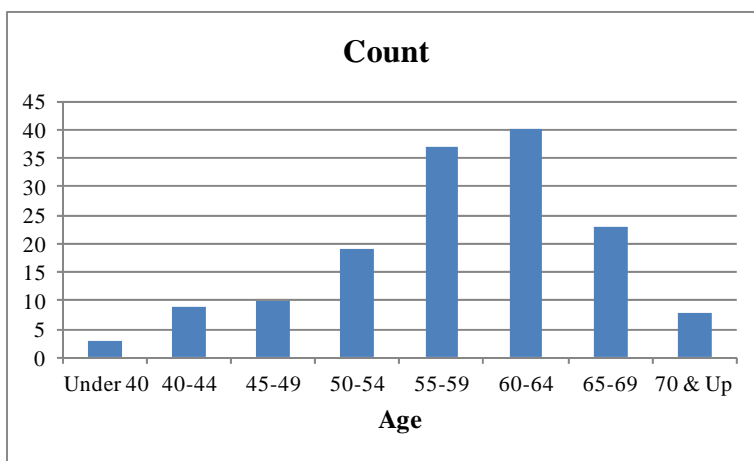
Note: Information prior to 2013 was produced by the prior actuary.



**APPENDIX A – MEMBERSHIP DATA**

**ACTIVE MEMBERS  
AS OF JULY 1, 2013**

Age	Count of Members			Reported Salary		
	Male	Female	Total	Male	Female	Total
Under 40	2	1	3	\$ 269,387	\$ 131,053	\$ 400,440
40-44	6	3	9	793,599	400,440	1,194,039
45-49	7	3	10	921,013	404,080	1,325,093
50-54	11	8	19	1,467,068	1,066,627	2,533,695
55-59	28	9	37	3,742,298	1,116,571	4,858,869
60-64	32	8	40	4,203,960	837,451	5,041,411
65-69	19	4	23	2,573,739	387,683	2,961,422
70 & Up	8	0	8	1,011,615	0	1,011,615
<b>Total</b>	<b>113</b>	<b>36</b>	<b>149</b>	<b>\$ 14,982,679</b>	<b>\$ 4,343,905</b>	<b>\$ 19,326,584</b>





**APPENDIX A – MEMBERSHIP DATA**

**AGE AND SERVICE DISTRIBUTION  
AS OF JULY 1, 2013**

Age		0-4	5-9	10-14	15-19	20-24	Over 24	Total
<b>Under 40</b>	Number	3	0	0	0	0	0	3
	Total Salary	\$ 400,440	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 400,440
	Average Sal.	\$ 133,480	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 133,480
<b>40-44</b>	Number	6	3	0	0	0	0	9
	Total Salary	\$ 797,239	\$ 396,800	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,194,039
	Average Sal.	\$ 132,873	\$ 132,267	\$ 0	\$ 0	\$ 0	\$ 0	\$ 132,671
<b>45-49</b>	Number	5	4	1	0	0	0	10
	Total Salary	\$ 662,545	\$ 531,494	\$ 131,053	\$ 0	\$ 0	\$ 0	\$ 1,325,092
	Average Sal.	\$ 132,509	\$ 132,873	\$ 131,053	\$ 0	\$ 0	\$ 0	\$ 132,509
<b>50-54</b>	Number	11	5	3	0	0	0	19
	Total Salary	\$ 1,467,068	\$ 662,547	\$ 404,081	\$ 0	\$ 0	\$ 0	\$ 2,533,696
	Average Sal.	\$ 133,370	\$ 132,509	\$ 134,694	\$ 0	\$ 0	\$ 0	\$ 133,352
<b>55-59</b>	Number	7	11	10	4	5	0	37
	Total Salary	\$ 928,294	\$ 1,470,709	\$ 1,328,734	\$ 531,494	\$ 599,638	\$ 0	\$ 4,858,869
	Average Sal.	\$ 132,613	\$ 133,701	\$ 132,873	\$ 132,873	\$ 119,928	\$ 0	\$ 131,321
<b>60-64</b>	Number	2	4	5	12	17	0	40
	Total Salary	\$ 273,028	\$ 531,494	\$ 666,187	\$ 1,605,402	\$ 1,965,300	\$ 0	\$ 5,041,411
	Average Sal.	\$ 136,514	\$ 132,873	\$ 133,237	\$ 133,784	\$ 115,606	\$ 0	\$ 126,035
<b>65-69</b>	Number	0	1	3	5	14	0	23
	Total Salary	\$ 0	\$ 145,615	\$ 404,081	\$ 677,108	\$ 1,734,618	\$ 0	\$ 2,961,422
	Average Sal.	\$ 0	\$ 145,615	\$ 134,694	\$ 135,422	\$ 123,901	\$ 0	\$ 128,757
<b>70 &amp; Up</b>	Number	0	0	2	3	3	0	8
	Total Salary	\$ 0	\$ 0	\$ 265,747	\$ 411,361	\$ 334,507	\$ 0	\$ 1,011,615
	Average Sal.	\$ 0	\$ 0	\$ 132,873	\$ 137,120	\$ 111,502	\$ 0	\$ 126,452
<b>Total</b>	Number	34	28	24	24	39	0	149
	Total Salary	\$ 4,528,614	\$ 3,738,659	\$ 3,199,883	\$ 3,225,365	\$ 4,634,063	\$ 0	\$ 19,326,584
	Average Sal.	\$ 133,195	\$ 133,523	\$ 133,328	\$ 134,390	\$ 118,822	\$ 0	\$ 129,709



**APPENDIX A – MEMBERSHIP DATA**

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**INACTIVE VESTED MEMBERS  
AS OF JULY 1, 2013**

<u>Age</u>	<u>Count of Members</u>			<u>Monthly Benefits</u>		
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
59 & Under	3	0	3	\$ 14,751	\$ 0	\$ 14,751
60-64	0	1	1	0	6,066	6,066
65-69	1	0	1	2,124	0	2,124
70-74	0	0	0	0	0	0
75-79	0	0	0	0	0	0
80-84	0	0	0	0	0	0
85-89	0	0	0	0	0	0
90 & Over	0	0	0	0	0	0
Total	4	1	5	\$ 16,875	\$ 6,066	\$ 22,941

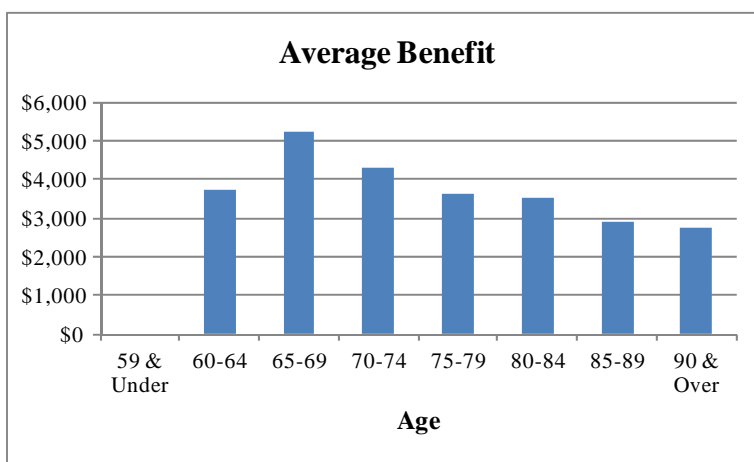
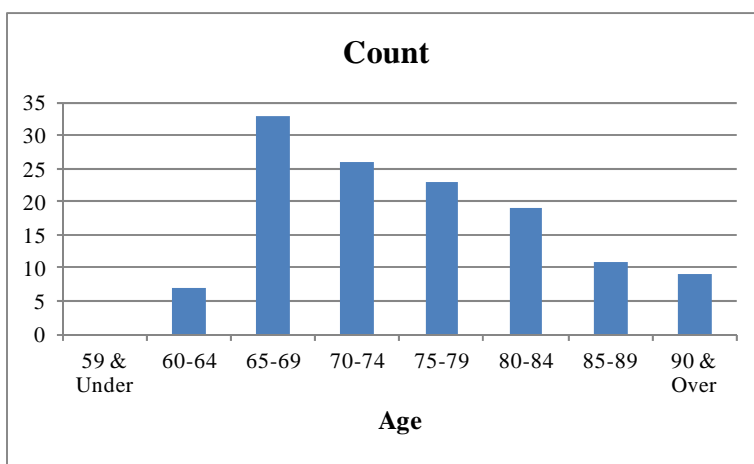




**APPENDIX A – MEMBERSHIP DATA**

**RETIRED MEMBERS  
AS OF JULY 1, 2013**

Age	Count of Members			Monthly Benefits		
	Male	Female	Total	Male	Female	Total
59 & Under	0	0	0	\$ 0	\$ 0	\$ 0
60-64	3	4	7	9,161	17,019	26,180
65-69	27	6	33	152,984	19,444	172,428
70-74	16	10	26	87,263	24,534	111,797
75-79	16	7	23	70,026	13,921	83,947
80-84	13	6	19	58,549	8,606	67,155
85-89	8	3	11	28,568	3,554	32,122
90 & Over	7	2	9	22,926	1,803	24,729
<b>Total</b>	<b>90</b>	<b>38</b>	<b>128</b>	<b>\$ 429,477</b>	<b>\$ 88,881</b>	<b>\$ 518,358</b>

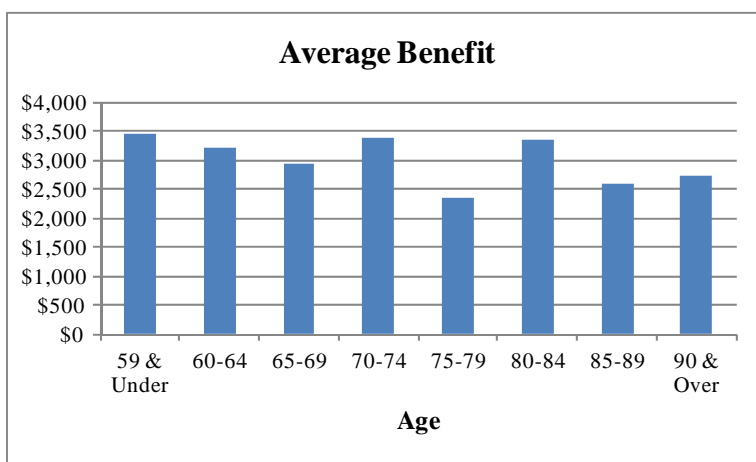
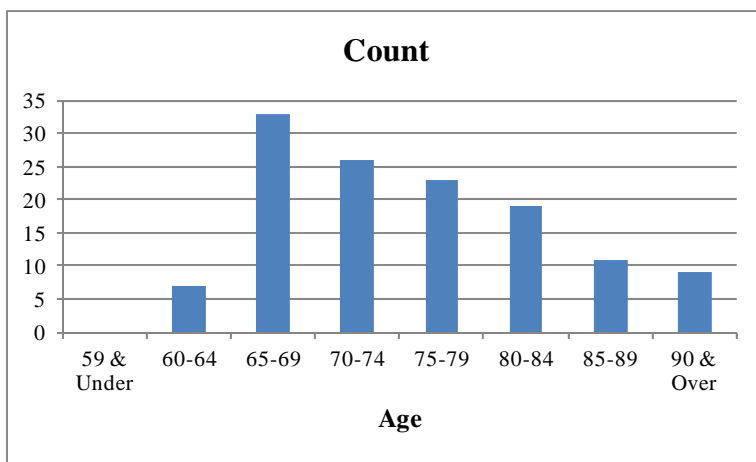




**APPENDIX A – MEMBERSHIP DATA**

**BENEFICIARIES RECEIVING BENEFITS  
AS OF JULY 1, 2013**

Age	Count of Members			Monthly Benefits		
	Male	Female	Total	Male	Female	Total
59 & Under	1	2	3	\$ 915	\$ 9,479	\$ 10,394
60-64	0	4	4	0	12,857	12,857
65-69	0	1	1	0	2,940	2,940
70-74	0	4	4	0	13,545	13,545
75-79	0	7	7	0	16,419	16,419
80-84	0	9	9	0	29,995	29,995
85-89	0	5	5	0	12,875	12,875
90 & Over	0	6	6	0	16,295	16,295
<b>Total</b>	<b>1</b>	<b>38</b>	<b>39</b>	<b>\$ 915</b>	<b>\$ 114,405</b>	<b>\$ 115,320</b>





**APPENDIX A – MEMBERSHIP DATA**

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**DISABLED MEMBERS  
AS OF JULY 1, 2013**

<u>Age</u>	<u>Count of Members</u>			<u>Monthly Benefits</u>		
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
59 & Under	0	0	0	\$ 0	\$ 0	\$ 0
60-64	1	0	1	6,987	0	6,987
65-69	1	0	1	7,366	0	7,366
70-74	1	1	2	6,992	666	7,658
75-79	1	0	1	5,676	0	5,676
80-84	0	0	0	0	0	0
85-89	0	0	0	0	0	0
90 & Over	0	0	0	0	0	0
<b>Total</b>	<b>4</b>	<b>1</b>	<b>5</b>	<b>\$ 27,021</b>	<b>\$ 666</b>	<b>\$ 27,687</b>



## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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### Member

*Original* A judge who first serves prior to December 25, 1969, and who does not elect to become a Future member on or before November 1, 1981.

*Future* A judge who first serves on or after December 25, 1969, or who elects to become a Future member on or before November 1, 1981.

**Participation Date** Date of becoming a member.

### Definitions

*Final average earnings* The average of the highest three 12-month periods of covered pay, ending on the earlier of the participant's termination date or retirement date.

*Fiscal year* Twelve month period ending June 30.

*Member contributions* All members hired after July 1, 2004, and members that elected an enhanced Joint and Survivor Benefit under LB 1097 contribute 9% of pensionable pay up to 20 years of service, and 5% of pensionable pay thereafter. All other members contribute 7% of pensionable pay during the first twenty years of service, and 1% of pensionable pay thereafter. Such contributions are credited with interest based on the 1-year Treasury yield curve on July 1 of each year, as determined by State Statutes.

*Monthly pension benefit* A monthly benefit equal to one-twelfth of 3.5% of final average salary times total years of service, subject to a maximum of 70% of final average salary. Effective July 1, 2001, an automatic annual cost-of-living adjustment (COLA) equal to the CPI-W index, with a maximum increase of 2.5% in any one year is provided for current and future retirees by LB 711. Also provided is a minimum floor benefit equal to 75% of the purchasing power of the original benefit.

*Normal Retirement Date (NRD)* Attainment of age 65.

*Pension service* Length of service includes all service as a Supreme Court, District Court, Worker's compensation Court, separate Juvenile Court, County Court, Municipal Court, or Appeals Court judge in Nebraska, computed to the nearest one-twelfth year and includes declared emergency service in the armed forces.



## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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### Eligibility for Benefits

<i>Deferred vested</i>	Termination for reasons other than death, disability, or retirement. No service requirement for vesting.
<i>Disability retirement</i>	Retirement by reason of permanent disability as determined by the Commission of Judicial qualifications.
<i>Early retirement</i>	Retirement before NRD and after attaining age 55.
<i>Normal retirement</i>	Retire on NRD.
<i>Postponed retirement</i>	Retire after NRD.
<i>Pre-retirement spouse benefit</i>	Death prior to retirement.

### Monthly Benefits Paid Upon the Following Events

<i>Normal retirement</i>	Monthly pension benefit determined as of NRD.
<i>Early retirement</i>	Monthly pension benefit determined as of early retirement date, reduced by 3% if the member retires at age 64, 6% at age 63, or 9% at age 62, and actuarially reduced for each month that commencement of payment precedes age 62. The actuarial reduction is based on the 1994 Group Annuity Mortality Table, 25% female, 75% male and 8% interest.
<i>Postponed retirement</i>	Monthly pension benefit determined as of actual retirement date.
<i>Termination with deferred vested benefit</i>	Members may elect to receive either (i) a refund of their contributions with regular interest, or (II) a deferred normal retirement benefit payable at age 65 and calculated based upon service and salary at the date of termination.
<i>Disability retirement</i>	Monthly pension benefit determined as of disability retirement date.
<i>Pre-retirement spouse benefits</i>	<ol style="list-style-type: none"><li><b>1) With 5 or more years of service:</b> A life annuity is payable to the surviving spouse in the amount which would have been payable had the member retired on the date of death and elected a joint and 100% survivor annuity.</li><li><b>2) With less than 5 years of service:</b> A lump sum equal to the member's contributions plus regular interest.</li></ol>



## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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### *Forms of payment*

All members hired after July 1, 2004, and members who elected increased contributions under LB 1097 are eligible to receive benefits paid in the normal form of an enhanced 50% Joint and Survivor Annuity. All other members receive benefits paid in the normal form of a modified cash refund annuity. Optional forms are: life annuity, life annuity with period certain, contingent annuity and join annuity. Pre-retirement spouse benefits are payable only as described above.

### **Funding Arrangement**

The Nebraska Retirement Fund for Judges is established in the State Treasury. The fund receives member contributions and pays benefits and expenses. Additional funds are received as follows:

#### *Court Fees*

A fee of six dollars is taxed for each cause of action in district and county courts and a fee of 10% of court costs in county courts are contributed.

#### *State*

The State makes any additional contributions that are necessary each year to pay the excess of the normal cost plus an amortization payment to fund unfunded actuarial accrued liability bases, over member contributions, court fees, and state appropriations.

### **State Appropriations**

LB 700, passed in 1996, provided for annual cost of living increases of 0.3%, beginning in the sixth year after retirement for members ceasing employment on or after April 10, 1996. Funding for these benefits shall be made by the State into the Judges Purchasing Power stabilization Fund (PPSF). Beginning with the 1996/1997 fiscal years, the funding equal to 1.04778% of \$6,895,000, or \$72,244, will be made for each year through the 2012/2011 fiscal year. LB 950, passed in 2010, extended this contribution through the 2012/2013 fiscal year. This appropriation is no longer applicable as of the July 1, 2012 valuation.

LB 674, passed in 1999 (effective July 1, 2000), provides for an annual cost-of-living increase equal to the CPI –W index, with a maximum of 2% in any one year, a minimum floor benefit equal to 75% of the purchasing power of the original benefit and the elimination of the Judges purchasing Power Stabilization Fund. The existing assets in the Judges PPSF were transferred to the Nebraska Judges Retirement Fund. LB 711, passed in 2001, increased the maximum annual cost-of-living increase in any one year from 2% to 2.5%.

### **Benefits Reflected in Valuation**

All benefits were valued, including future cost of living increases as provided for by LB 711.

### **Plan Provision Effective After July 1, 2013**

No future changes in plan provisions were recognized in determining the GASB 25 funded status or in determining the State's contribution amount.



## **APPENDIX B – SUMMARY OF PLAN PROVISIONS**

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### **Changes since the Prior Year**

While there were no changes to the benefit provisions since the prior valuation, there were several legislative changes that impacted the Judges Retirement System.

The court fee designated for the Judges Retirement System was scheduled to decrease from six to five dollars on July 1, 2014. Legislative Bill 306 (LB 306) removed the language to decrease the court fees so the court fee in future years remains at six dollars.

The passage of Legislative Bill 414 (LB 414) in 2009 increased the member contribution rate by 1 percent, but this increase was scheduled to be removed July 1, 2014. Legislative Bill 306 (LB 306) removed the sunset provision on the increase in the member contribution rate, thereby retaining the higher contribution rates.



## APPENDIX C – SUMMARY OF ACTUARIAL ASSUMPTIONS

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### ACTUARIAL METHODS

- 1. Calculation of Normal cost and Actuarial Accrued Liability:** The method used to determine the normal cost and actuarial accrued liability was the Entry Age Actuarial Cost Method described below.

#### Entry Age Actuarial Cost Method

Projected pension and preretirement spouse's death benefits were determined for all active members under age 72. Cost factors designed to produce annual costs as a level percentage of each member's expected compensation in each year from the assumed entry age to the assumed retirement age were applied to the projected benefits to determine the normal cost (the portion of the total cost of the plan allocated to the current year under the method). The normal cost is determined by summing intermediate results for active members under age 72 and determining an average normal cost rate which is then related to the total payroll of active members under age 72. The actuarial assumptions shown in Appendix C were used in determining the projected benefits and cost factors. The actuarial accrued liability for active members (the portion of the total cost of the plan allocated to prior years under the method) was determined as the excess of the actuarial present value of projected benefits over the actuarial present value of future normal costs.

The actuarial accrued liability for retired members and their beneficiaries currently receiving benefits, active members age 72 and over, terminated vested members and disabled members not yet receiving benefits was determined as the actuarial present value of the benefits to be paid. No future normal costs are payable for these members.

The actuarial accrued liability under this method at any point in time is the theoretical amount of the fund that would have been accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of plan assets measured on the valuation date. The initial unfunded actuarial accrued liability established July 1, 2004, is amortized with a level dollar payment amount over 25 years. At subsequent valuation dates, amortization bases equal to changes in the unfunded actuarial accrued liability are established and amortized with a level dollar payment over a 25-year period. The unfunded actuarial accrued liability was reinitialized as of July 1, 2006 and amortized over a 30-year period. At subsequent valuation dates, amortization bases equal to changes in the unfunded actuarial accrued liability are established and amortization over a level dollar payment over a 30-year period. If the unfunded actuarial accrued liability was \$0 or less as of the prior valuation date, all previous amortization bases are considered fully amortized. Effective with the July 1, 2013 valuation, amortization payments were recalculated to amortize the remaining bases as a level percentage of expected payroll, per LB 553.

Under the Entry Age Normal method, experience gains or losses, i.e., decreases or increases in actuarial accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.





## APPENDIX C – SUMMARY OF ACTUARIAL ASSUMPTIONS

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**2. Calculation of the Actuarial Value of Assets:** The actuarial value of assets is based on a five-year smoothing method and is determined by spreading the effect of each year's investment return in excess of or below the expected return. The Market Value of assets as the valuation date is reduced by the sum of the following:

- i. 80% of the return to be spread during the first year preceding the valuation date,
- ii. 60% of the return to be spread during the second year preceding the valuation date,
- iii. 40% of the return to be spread during the third year preceding the valuation date, and
- iv. 20% of the return to be spread during the fourth year preceding the valuation date.

The return to be spread is the difference between (1) the actual investment return on Market Value and (2) the expected return of Actuarial Value. Effective July 1, 2000, the expected return on Actuarial Value includes interest on the previous year's unrecognized return.

The passage of Legislative Bill 553 (LB 553) changed the amortization of the unfunded actuarial accrued liability (UAAL) from a level dollar payment to a level percent of payroll payment, where the dollar amount of the payment increases with the assumed payroll growth each year in the future. This change lowered the dollar amount of the UAAL payment in the 2013 valuation, but creates a payment schedule where the dollar amount of UAAL contribution increases 4% each year in the future. If actual payroll increases at the assumed rate of 4%, the UAAL contribution rate will remain level. If payroll increases are less than the 4% assumption, the UAAL contribution rate will increase.



## APPENDIX C – SUMMARY OF ACTUARIAL ASSUMPTIONS

### ACTUARIAL ASSUMPTIONS

#### Economic Assumptions

1. Investment Return 8.0% per annum, compounded annually, net of all expenses.
2. Inflation 3.25% per annum, compounded annually.
3. Salary Increases Salaries are assumed to increase 4.0% each year.
4. Payroll Growth 4.0% per year
5. Interest on Employee Contributions 4.25% per annum, compounded annually.
6. Increases in Compensation And Benefit Limits 3.25% per annum on the 401(a)(17) compensation limit and 415 benefit limit

#### Demographic Assumptions

1. Mortality
 

The mortality assumption includes an appropriate level of conservatism that reflects expected future mortality improvement.

  - a. Active Members 1994 Group Annuity Mortality Table, projected to 2015 using scale AA, set-back 1 year (sex distinct with 55% of male rates for males and 40% of female rates for females)
  - b. Retired Members 1994 Group Annuity Mortality Table, projected to 2015 using scale AA, set-back 1 year (sex distinct)
  - c. Mortality rates and life expectancies under the mortality tables are shown below at sample ages:

Pre-Retirement Mortality				
Sample Age	Mortality Rate		Life Expectancy (years)	
	Males	Females	Males	Females
20	0.02%	0.01%	68.3	74.7
30	0.04	0.01	58.5	64.8
40	0.05	0.02	48.7	54.9
50	0.09	0.04	39.0	45.0
60	0.28	0.14	29.5	35.3
70	0.87	0.46	20.8	26.1



## APPENDIX C – SUMMARY OF ACTUARIAL ASSUMPTIONS

Sample Age	Post-Retirement Mortality			
	Mortality Rate		Life Expectancy (years)	
	Males	Females	Males	Females
50	0.16%	0.09%	33.4	36.4
60	0.51	0.35	24.1	26.9
70	1.62	1.14	16.0	18.4
80	4.43	3.05	9.2	11.0
90	12.55	9.82	4.5	5.4

2. Retirement Rates vary by age. Rates are as follows:

Rates by Age	
Age	Rate
55-59	1.5%
60-61	3.0
62-64	10.0
65	20.0
66-69	10.0
70-71	15.0
72	100.0

3. Termination None.

4. Disability None.

### Other Assumptions

1. Form of Payment Modified Cash Refund Annuity under prior plan benefit provisions. A 50% Joint & Survivor Benefit for members electing this provision under LB 1097, and new members hired after July 1, 2004. Deferred vesteds are assumed to take the greater of the present value of an annuity at age 63 or a refund of contributions.

2. Marital Status

a. Percent married 100% married

b. Spouse's age Females assumed to be three years younger than males.

3. Administrative Expense Investment return is assumed to be net of expenses.

4. Cost of Living Adjustment 2.50% per annum, compounded annually, and 3.25% per annum, compounded annually, after reaching 75% purchasing power floor benefit.



## APPENDIX C – SUMMARY OF ACTUARIAL ASSUMPTIONS

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5. State Contribution                      State contributions for the current plan year are assumed to be contributed in a lump sum on the July 1 following the plan year end. These amounts from the prior plan year are treated as a contribution receivable on the plan's financial statements.

### **Changes in Assumptions Since the Prior Year**

There were no changes in the assumptions from the prior year.

### **TECHNICAL VALUATION PROCEDURES**

#### **Data Procedures**

Client data caps active service at 20 years. While capping the benefit amount at 20 years of service, we keep a record of actual service beyond 20 years in order to remain consistent with the Entry Age Method.

Salaries for first year members are annualized.

#### **Other Valuation Procedures**

Salary increases are assumed to apply to annual amounts.

Decrements are assumed to occur mid-year, except that immediate retirement is assumed for those who are at or above the age at which retirement rates are 100%. Standard adjustments are made for multiple decrements.



## **APPENDIX D – GLOSSARY OF TERMS**

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<b>Actuarial Accrued Liability</b>	The difference between the actuarial present value of system benefits and the actuarial value of future normal costs. Also referred to as “accrued liability” or “actuarial liability”.
<b>Actuarial Assumptions</b>	Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.
<b>Accrued Service</b>	Service credited under the system which was rendered before the date of the actuarial valuation.
<b>Actuarial Equivalent</b>	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate assumptions.
<b>Actuarial Cost Method</b>	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of retirement system benefit between future normal cost and actuarial accrued liability. Sometimes referred to as the “actuarial funding method”.
<b>Experience Gain (Loss)</b>	The difference between actual experience and actuarial assumptions anticipated experience during the period between two actuarial valuation dates.
<b>Actuarial Present Value</b>	The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest and by probabilities of payment.
<b>Amortization</b>	Paying off an interest-discounted amount with periodic payments of interest and principal, as opposed to paying off with lump sum payment.
<b>Normal Cost</b>	The actuarial present value of retirement system benefits allocated to the current year by the actuarial cost method.



## APPENDIX D – GLOSSARY OF TERMS

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**Unfunded Actuarial Accrued Liability** The difference between actuarial accrued liability and the valuation assets. Sometimes referred to as “unfunded actuarial liability” or “unfunded accrued liability”.

Most retirement systems have unfunded actuarial accrued liability. They arise each time new benefits are added and each time an actuarial loss is realized.

The existence of unfunded actuarial accrued liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liability does not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liability and the trend in its amount (after due allowance for devaluation of the dollar).