



Cavanaugh Macdonald
CONSULTING, LLC

The experience and dedication you deserve

***NEBRASKA PUBLIC EMPLOYEES
RETIREMENT SYSTEM***

SCHOOL RETIREMENT SYSTEM

**ACTUARIAL VALUATION REPORT
as of July 1, 2014**

**Sixty-second Actuarial Report for
State Fiscal Year Ending June 30, 2016
and
System Plan Year Beginning July 1, 2014**







TABLE OF CONTENTS

<u>Sections</u>	<u>Page</u>
Actuarial Certification Letter	
Section 1 – Board Summary	1
Section 2 – Scope of the Report	9
Section 3 – Assets	10
Table 1 – Market Value of Assets by Investment Category	11
Table 2 – Change in Market Value of Assets	12
Table 3 – Development of Actuarial Value of Assets	13
Section 4 – System Liabilities	15
Table 4 – Present Value of Future Benefits.....	16
Table 5 – Actuarial Accrued Liability	17
Table 6 – Actuarial Balance Sheet	18
Table 7 – Actuarial Gain/(Loss)	19
Table 8 – Gain/(Loss) by Source.....	20
Table 9 – Projected Benefit Payments.....	21
Section 5 – Employer Contributions	22
Table 10 – Schedule of Amortization Bases	23
Table 11 – Actuarial Required Contribution Rate and Development of Additional State Contribution.....	24
Section 6 – Other Information	25
Table 12 – Schedule of Funding Progress	26
Table 13 – Schedule of Contributions from Employer and Other Contributing Entities	27
Appendix A – Membership Data	28
Appendix B – Summary of Plan Provisions	39
Appendix C – Summary of Actuarial Assumptions.....	43
Appendix D – Glossary of Terms	50





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

November 12, 2014

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 performed an actuarial valuation of the School Retirement System as of July 1, 2014 for the purpose of determining the actuarial required contribution rate for the plan year ending June 30, 2015. It is our understanding that any required State contributions for this plan year will be made on July 1, 2015 (State fiscal year end 2016). The major findings of the valuation are contained in this report, which reflects the benefit provisions in place on July 1, 2014. There were no changes to the actuarial assumptions and methods or the plan provisions from the prior valuation. However, due to the effective date of the benefit structure for Tier Two members (July 1, 2013), this is the first valuation to include such members.

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 the information received in prior years. 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 School 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.

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.

3906 Raynor Pkwy, Suite 106, Bellevue, NE 68123
Phone (402) 905-4461 • Fax (402) 905-4464
www.CavMacConsulting.com

Offices in Englewood, CO • Kennesaw, GA • Bellevue, NE • Hilton Head Island, SC



The 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 calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. 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. For example, actuarial computations for purposes of fulfilling financial accounting requirements for the System under Governmental Accounting Standard No. 67 will be presented in a completely separate report.

The consultants who worked on this assignment are pension actuaries. Cavanaugh Macdonald'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' in a cursive script.

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

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

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, 2014 actuarial valuation of the School Retirement System. The primary purposes of performing actuarial valuations are to:

- Determine whether the employer, member and State contribution rates defined in the Nebraska State Statutes are sufficient to fund the total Formula Annuity for the Nebraska School System, and whether additional State contributions are required along with the State contribution for the Omaha Service Annuity for the plan year ending June 30, 2015;
- 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, 2014; and
- Analyze and report on trends in System contributions, assets and liabilities over the past several years.

The Nebraska statutes require the State to make an additional contribution if the regular, payroll-related contributions by members, employers, and the State are insufficient to meet the actuarial required contribution for the plan year. Based on the results of the July 1, 2014 actuarial valuation, no additional State contribution is necessary for this plan year.

The actuarial valuation results provide a “snapshot” view of the System’s financial condition on July 1, 2014. The System’s unfunded actuarial accrued liability (UAAL) decreased from \$2.282 billion last year to \$1.804 billion this year and the funded ratio increased from 77.1% to 82.7%. In addition, the actuarial required contribution rate decreased from 19.94% of pay last year to 18.39% of pay in this year’s valuation, a decrease of 1.55% of pay.

The valuation results reflect net favorable experience for the past plan year as demonstrated by an UAAL that was lower than expected. The UAAL on July 1, 2014 is \$1.804 billion as compared to an expected UAAL of \$2.280 billion. The favorable experience was largely due to the combined impact of an experience gain of \$398.5 million on the actuarial value of assets and an experience gain of \$77.5 million on System liabilities. The rate of return on the actuarial value of assets for FY 2014 of 13.2% is the result of favorable investment experience in recent years, including a rate of return on the market value of assets for FY 2014 of 18.0%. The market value of assets now exceeds the actuarial value and an \$829 million deferred asset gain exists. If all assumptions are met, these deferred gains will be recognized over the next four years and will improve the System’s funded status.

The current member contribution rate of 9.78% was scheduled to drop to 7.28% on September 1, 2017. LB 553, which was passed by the 2013 Legislature, extended the current contribution rate of 9.78% indefinitely and also increased the State’s payroll related contribution from 1% to 2% of pay, effective July 1, 2014. These changes served to strengthen the System’s long term funding by increasing the total statutory contribution rate. LB 553 also made some changes to the benefit structure for members hired on or after July 1, 2013 (Tier Two), including changing final average salary to the highest 60 months rather than the current highest 36 months of service and changing the maximum cost of living adjustment from 2.5% to 1%. The results contained in the July 1, 2014 valuation are the first to be impacted by reflecting members in the new benefit tier. There were 3,333 members in Tier Two as of July 1, 2014, about 8% of the active membership.



SECTION 1 – BOARD SUMMARY

A summary of the key results from the July 1, 2014 actuarial valuation, excluding the Omaha State Service annuity, is shown in the following table. As the table indicates, the statutory contribution rates are sufficient to meet the actuarial required contribution rate and no additional State appropriation is required. Further detail on the valuation results can be found in the following sections of this Board Summary.

	July 1, 2014 Valuation Results	July 1, 2013 Valuation Results
Unfunded Actuarial Accrued Liability (\$M)	\$1,804	\$2,282
Funded Ratio (Actuarial Assets)	82.70%	77.15%
Normal Cost Rate	11.82%	11.86%
UAAL Amortization Rate	6.57%	8.08%
Total Actuarial Required Contribution	18.39%	19.94%
Member Contribution Rate	(9.78%)	(9.78%)
Employer Contribution Rate	(9.88%)	(9.88%)
State Contribution Rate	(2.00%)	(2.00%)
Total Contribution Rate	(21.66%)	(21.66%)
Shortfall/(Margin)	(3.27%)	(1.72%)
Additional State Contribution Amount	\$0	\$0

EXPERIENCE FOR THE LAST PLAN YEAR

Numerous factors contributed to the change in the System's assets, liabilities, and the actuarial contribution rate between July 1, 2013 and July 1, 2014. The components are examined in the following discussion.

ASSETS

As of June 30, 2014, the System had net assets of \$9.45 billion, when measured on a market value basis. This was an increase of \$1.36 billion 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 \$8.62 billion, an increase of \$0.92 billion from the prior year. The components of change in the asset values are shown in the following table:

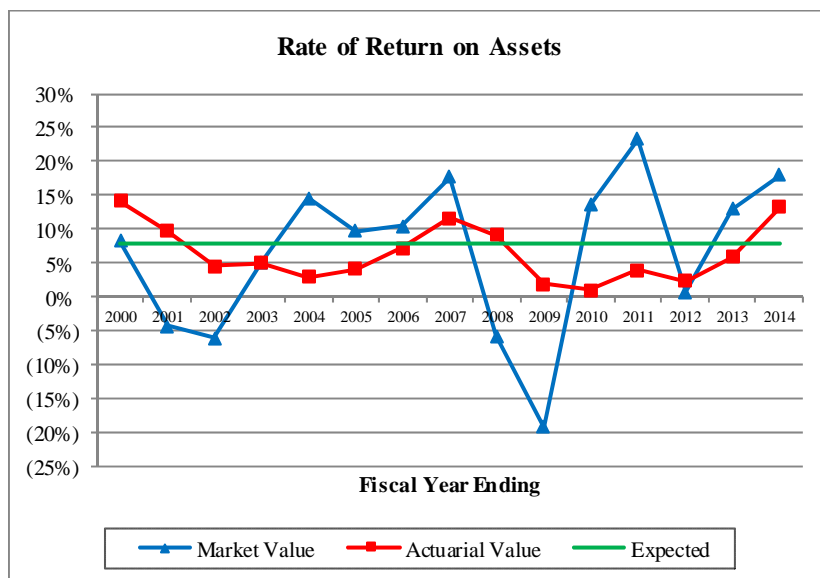


SECTION 1 – BOARD SUMMARY

	Market Value (\$M)	Actuarial Value (\$M)
Net Assets, June 30, 2013	\$ 8,092.95	\$ 7,703.08
- Employer and Member Contributions	+ 372.52	+ 372.52
- Benefit Payments	- 466.16	- 466.16
- Net Investment Income	+ 1,451.67	+ 1,012.58
Net Assets, June 30, 2014	\$ 9,450.98	\$ 8,622.02
Estimated Rate of Return	18.0%	13.2%

The rate of return on the actuarial value of assets was 13.2%, which exceeds the 8% assumption. As a result, there was an experience gain on assets of \$398.5 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 benefit 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.



SECTION 1 – BOARD SUMMARY

The unfunded actuarial accrued liability is shown as of July 1, 2014 in the following table:

	Actuarial Value of Assets	Market Value of Assets
Actuarial Accrued Liability	\$10,426,112,609	\$10,426,112,609
Value of Assets	<u>8,622,023,999</u>	<u>9,450,981,723</u>
Unfunded Actuarial Accrued Liability	\$1,804,088,610	\$975,130,886
Funded Ratio	82.70%	90.65%

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, 2013 to July 1, 2014 was a decrease of \$477.7 million. The components of this net change are shown in the following table (in millions):

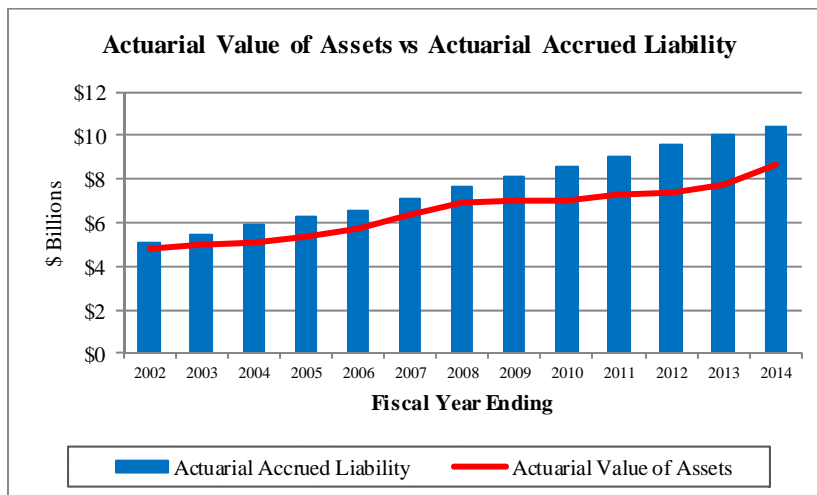
	(\$ Millions)
Unfunded Actuarial Accrued Liability, July 1, 2013	\$2,281.8
- Expected increase from amortization method	36.6
- Actual vs. Expected Contributions	(26.5)
- Investment experience	(398.5)
- Liability experience	(77.5)
- Other experience	(11.8)
Unfunded Actuarial Accrued Liability, July 1, 2014	\$1,804.1

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 total actuarial gain of \$476.0 million. The actuarial gain may largely be explained by considering the separate experience of assets and liabilities. As noted earlier, there was a \$398.5 million gain on the actuarial value of assets. There was also an experience gain of \$77.5 million on the System's liabilities. The liability gain was the net 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 School Retirement System liabilities have steadily increased while the assets, especially since the 2008 market downturn, have grown more slowly. Since the assets are growing more slowly than the liabilities, the funded ratio has generally declined.



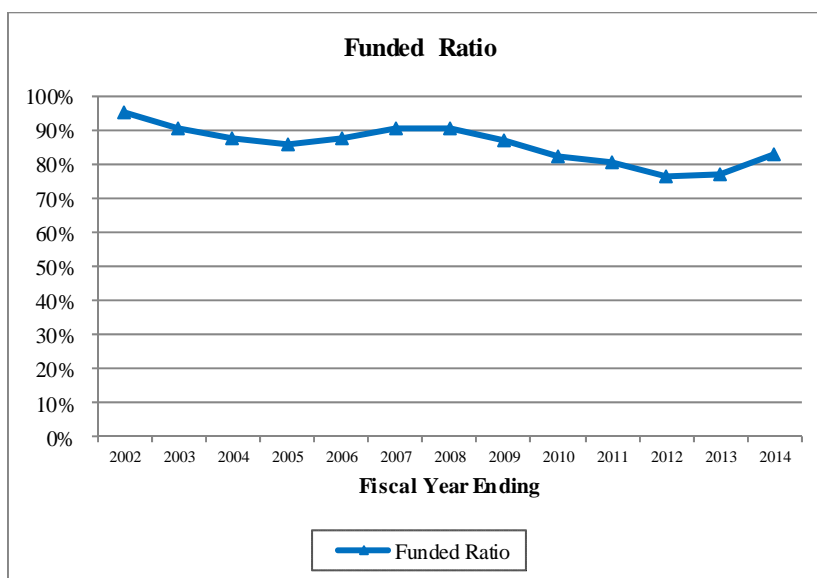
SECTION 1 – BOARD SUMMARY



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).

	7/1/2010	7/1/2011	7/1/2012	7/1/2013	7/1/2014
Funded Ratio (using Actuarial Assets)	82.4%	80.4%	76.6%	77.1%	82.7%
Unfunded Actuarial Accrued Liability (\$M)	\$1,501.2	\$1,772.2	\$2,250.2	\$2,281.8	\$1,804.1

The funded ratio over a longer period is shown in the following graph:





SECTION 1 – BOARD SUMMARY

ACTUARIAL REQUIRED CONTRIBUTION RATE

The System is funded by statutory contribution rates for members (9.78% of pay), employers (101% of the member rate) and the State (2% of pay). State statutes require the State to make an additional contribution if the regular, payroll-related contributions by employees, employers and the State are insufficient to meet the actuarial required contribution for the plan year. The State contributions for the plan year are made on the July 1 following the plan year end. Based on the results of the July 1, 2014 actuarial valuation, no additional State contribution is necessary for the current plan year.

Under the Entry Age Normal cost method, the actuarial 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.

Effective with the 2013 valuation, the UAAL contribution rate is determined by calculating the amortization payments as a level percentage of payroll rather than as a level dollar amount. 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 as payroll increases.

See Section 5 of the report for the detailed development of these rates, which are summarized in the following table:

Contribution Rates	July 1, 2014	July 1, 2013
Normal Cost Rate	11.82%	11.86%
UAAL Amortization Rate	6.57%	8.08%
Total Actuarial Required Contribution	18.39%	19.94%
Member Contribution Rate	(9.78%)	(9.78%)
Employer Contribution Rate	(9.88%)	(9.88%)
State Contribution Rate	(2.00%)	(2.00%)
Total Contribution Rate	(21.66%)	(21.66%)
Shortfall/(Margin)	(3.27%)	(1.72%)

Note: Contribution rates exclude State funding of Omaha Service Annuity.

The actuarial required contribution rate for the current plan year is 18.39%. The member contribution rate of 9.78%, School District contributions of 9.88% (101% of 9.78%), and State contributions of 2.00% of pay result in total statutory contributions of 20.66% of pay. As a result, there is a contribution margin of 3.27%.



SECTION 1 – BOARD SUMMARY

A history of actuarial required contribution rates and any resulting additional required State contributions, whether or not actually contributed, is shown below

History of Required Contribution Rates and Additional State Funding		
Fiscal Year	Total	Additional State Contributions*
2015/2016	18.39%	\$ 0
2014/2015	19.94%	0
2013/2014	23.27%	48,092,426
2012/2013	20.45%	23,465,817
2011/2012	19.21%	18,871,705
2010/2011	17.24%	0
2009/2010	15.46%	0
2008/2009	15.64%	0
2007/2008	16.58%	0
2006/2007	17.95%	12,847,537
2005/2006	16.97%	15,415,949
2004/2005	15.26%	0
2003/2004	13.45%	0

* Excludes funding of Omaha Service Annuity.

Note: Information before Fiscal Year 2014/2015 was produced by 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, 2014, will change each year as the deferred investment experience is recognized and other experience (both investment and demographic) impacts the System. While there is a contribution margin for the current plan year, this should not be viewed as unnecessary or excess contribution. In order for the financing of the System on a fixed contribution rate basis to succeed, contributions above the actuarial required contribution rate must be made to offset years where the fixed contribution rate will be below the actuarial required contribution rate.



SECTION 1 – BOARD SUMMARY

SUMMARY OF PRINCIPAL RESULTS

	7/1/2014 Valuation	7/1/2013 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	40,462	40,314	0.37%
Retired Members and Beneficiaries	20,551	19,461	5.60%
Disabled Members	338	329	2.74%
Inactive Members	20,700	20,388	1.53%
Total Members	82,051	80,492	1.94%
Projected Annual Salaries of Active Members	\$ 1,774,679,549	\$ 1,735,175,956	2.28%
Annual Retirement Payments for Retired Members, Disabled Members and Beneficiaries	\$ 462,313,114	\$ 425,631,676	8.62%
2. ASSETS AND LIABILITIES			
a. Market Value of Assets	\$ 9,450,981,723	\$ 8,092,953,030	16.78%
b. Actuarial Value of Assets	8,622,023,999	7,703,084,507	11.93%
c. Total Actuarial Accrued Liability	10,426,112,609	9,984,898,998	4.42%
d. Unfunded Actuarial Accrued Liability [c - b]	\$ 1,804,088,610	\$ 2,281,814,491	(20.94%)
e. Funded Ratio (Actuarial Value of Assets) [b / c]	82.70%	77.15%	7.19%
f. Funded Ratio (Market Value of Assets) [a / c]	90.65%	81.05%	11.84%
3. CONTRIBUTION RATES AS A PERCENT OF PAYROLL (excluding Omaha Service Annuity)			
Normal Cost	11.82%	11.86%	(0.34%)
Amortization of Unfunded Actuarial Accrued Liability	6.57%	8.08%	(18.69%)
Actuarial Required Contribution Rate	18.39%	19.94%	(7.77%)
Member Contribution Rate	(9.78%)	(9.78%)	0.00%
Employer Contribution Rate*	(9.88%)	(9.88%)	0.00%
State Contribution Rate	(2.00%)	(2.00%)	0.00%
Shortfall/(Margin)	(3.27%)	(1.72%)	90.12%
Additional State Contribution Amount	\$ 0	\$ 0	0.00%

* 101% of employee contribution rate



SECTION 2 – SCOPE OF THE REPORT

This report presents the actuarial valuation results of the School Retirement System as of July 1, 2014. 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 some historical funding information that was required by the Governmental Accounting Standards Board (GASB) in the past.

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, 2014.
- 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

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, 2014. 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, 2014, and July 1, 2013, in total and by investment category. Table 2 summarizes the change in the market value of assets from July 1, 2013 to July 1, 2014.

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

TABLE 1
SCHOOL RETIREMENT SYSTEM
MARKET VALUE OF ASSETS
by Investment Category

	<u>June 30, 2014</u>	<u>June 30, 2013</u>
1. Cash and Equivalents	\$ 6,855,429	\$ 6,594,098
2. Investments	9,742,976,375	8,193,626,827
3. Capital Assets	5,203	6,477
4. Receivables and Prepaids	457,666,517	607,661,994
5. Accounts Payable	<u>(756,521,801)</u>	<u>(714,936,366)</u>
6. Net Assets Available for Pension Benefits [1 + 2 + 3 + 4 + 5]	\$ 9,450,981,723	\$ 8,092,953,030



SECTION 3 – ASSETS

TABLE 2
SCHOOL RETIREMENT SYSTEM
CHANGE IN MARKET VALUE OF ASSETS

	Nebraska School System Formula <u>Annuity</u>	Omaha Service <u>Annuity</u>	<u>Total</u>
1. Market Value of Assets as of July 1, 2013	\$ 8,082,403,508	\$ 10,549,522	\$ 8,092,953,030
2. Contributions			
(a) Member (includes purchased service)	\$ 169,200,529	\$ 0	\$ 169,200,529
(b) Employer	167,710,406	0	167,710,406
(c) State appropriations	34,703,519	909,638	35,613,157
(d) Total	\$ 371,614,454	\$ 909,638	\$ 372,524,092
3. Expenditures			
(a) Benefit payments	\$ 464,655,676	\$ 1,505,548	\$ 466,161,224
(b) Expenses and fees	2,861,508	0	2,861,508
(c) Total	\$ 467,517,184	\$ 1,505,548	\$ 469,022,732
4. Investment Return, Net of Expenses			
(a) Investment income	\$ 109,026,402	\$ 140,733	\$ 109,167,135
(b) Securities lending income	2,035,344	2,353	2,037,697
(c) Securities lending expense	(381,512)	(441)	(381,953)
(d) Net appreciation/(depreciation) in fair value of investments	1,342,011,510	1,662,383	1,343,673,893
(e) Other	30,561	0	30,561
(f) Investment return for 2013/2014 [(a) + (b) + (c) + (d) + (e)]	\$ 1,452,722,305	\$ 1,805,028	\$ 1,454,527,333
5. Market Value of Assets as of July 1, 2014 [1 + 2(d) - 3(c) + 4(f)]	\$ 9,439,223,083	\$ 11,758,640	\$ 9,450,981,723
6. Rate of Return on Market Value of Assets			18.0%



SECTION 3 – ASSETS

TABLE 3
SCHOOL RETIREMENT SYSTEM
DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

	Year End			
	6/30/2011	6/30/2012	6/30/2013	6/30/2014
1. Actuarial Value of Assets, Beginning of Year	\$ 7,040,908,599	\$ 7,267,497,259	\$ 7,358,964,135	\$ 7,703,084,507
2. Unrecognized Return Beginning of Year	\$ (1,100,506,954)	\$ (3,542,427)	\$ (112,652,354)	\$ 389,868,523
3. Contributions During Year				
(a) Member	\$ 137,301,890	\$ 147,046,053	\$ 164,077,967	\$ 169,200,529
(b) Employer	135,328,339	145,582,040	161,922,831	167,710,406
(c) State appropriations	22,875,093	23,430,550	17,843,931	35,613,157
(d) Total	\$ 295,505,322	\$ 316,058,643	\$ 343,844,729	\$ 372,524,092
4. Benefit Payments During Year	\$ 351,083,806	\$ 391,133,707	\$ 427,885,060	\$ 466,161,224
5. Expected Investment Income on (1), (2), (3) and (4) at 8%	\$ 474,219,878	\$ 579,472,525	\$ 577,831,647	\$ 645,313,812
6. Actual Return on Market Value, Net of All Expenses	\$ 1,379,131,671	\$ 57,432,013	\$ 930,681,580	\$ 1,451,665,825
7. Return to be Spread, End of Year	\$ 904,911,793	\$ (522,040,512)	\$ 352,849,933	\$ 806,352,013

[6 - 5]

Note: Information before 2013 was produced by prior actuary.



SECTION 3 – ASSETS

**TABLE 3
(continued)**

SCHOOL RETIREMENT SYSTEM

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>
2014	806,352,013	80%	\$645,081,610
2013	352,849,933	60%	211,709,960
2012	(522,040,512)	40%	(208,816,205)
2011	904,911,793	20%	180,982,359
			<hr/> \$828,957,724

9. Total Market Value of Assets as of July 1, 2014 \$9,450,981,723

10. Total Actuarial Value of Assets as of July 1, 2014 \$8,622,023,999
[9 - 8]

11. Asset Ratios

(a) Actuarial Value to Market Value [10 / 9] 91.23%
(b) Market Value to Actuarial Value [9 / 10] 109.61%



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 School Retirement System as of the valuation date, July 1, 2014. 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, 2014.

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
SCHOOL RETIREMENT SYSTEM
PRESENT VALUE OF FUTURE BENEFITS (PVFB)
AS OF JULY 1, 2014

	Nebraska School System Formula <u>Annuity</u>	Omaha Service <u>Annuity</u>	<u>Total</u>
1. Active Employees			
(a) Retirement	\$ 5,994,653,568	\$ 16,465,231	\$ 6,011,118,799
(b) Withdrawal	517,184,976	1,918,134	519,103,110
(c) Death	73,591,085	159,622	73,750,707
(d) Disability	41,100,533	189,038	41,289,571
(e) Total	<u>\$ 6,626,530,162</u>	<u>\$ 18,732,025</u>	<u>\$ 6,645,262,187</u>
2. Inactive Vested Members	311,713,396	981,415	312,694,811
3. Inactive Nonvested Members	36,497,882	0	36,497,882
4. Disabled Members	42,302,505	0	42,302,505
5. Retirees	5,031,108,337	0	5,031,108,337
6. Beneficiaries	<u>183,683,368</u>	<u>0</u>	<u>183,683,368</u>
7. Total Present Value of Future Benefits [1(e) + 2 + 3 + 4 + 5 + 6]	<u>\$ 12,231,835,650</u>	<u>\$ 19,713,440</u>	<u>\$ 12,251,549,090</u>



SECTION 4 – SYSTEM LIABILITIES

TABLE 5
SCHOOL RETIREMENT SYSTEM
ACTUARIAL ACCRUED LIABILITY
AS OF JULY 1, 2014

	Nebraska School System Formula <u>Annuity</u>	Omaha Service <u>Annuity</u>	<u>Total</u>
1. Present Value of Future Benefits for Active Members	\$ 6,626,530,162	\$ 18,732,025	\$ 6,645,262,187
2. Present Value of Future Normal Costs for Active Members			
(a) Retirement benefit	\$ 1,323,628,934	\$ 3,658,741	\$ 1,327,287,675
(b) Termination benefit	462,418,834	1,305,309	463,724,143
(c) Pre-Retirement death benefit	21,424,948	42,244	21,467,192
(d) Disability benefit	12,887,860	69,611	12,957,471
(e) Total	\$ <u>1,820,360,576</u>	\$ <u>5,075,905</u>	\$ <u>1,825,436,481</u>
3. Actuarial Accrued Liability for Active Members [1 - 2(e)]	\$ 4,806,169,586	\$ 13,656,120	\$ 4,819,825,706
4. Actuarial Accrued Liability for Inactive Members	5,605,305,488	981,415	5,606,286,903
5. Total Actuarial Accrued Liability [3 + 4]	10,411,475,074	14,637,535	10,426,112,609
6. Actuarial Value of Assets	8,611,296,724	10,727,275	8,622,023,999
7. Unfunded Actuarial Accrued Liability [5- 6]	\$ 1,800,178,350	\$ 3,910,260	\$ 1,804,088,610



SECTION 4 – SYSTEM LIABILITIES

TABLE 6
SCHOOL RETIREMENT SYSTEM
ACTUARIAL BALANCE SHEET

<u>ASSETS</u>	
Actuarial Value of Assets	\$ 8,622,023,999
Unfunded Actuarial Accrued Liability	1,804,088,610
Present Value of Future Normal Costs	\$ <u>1,825,436,481</u>
Total Assets	\$ 12,251,549,090
<u>LIABILITIES</u>	
Present Value of Future Benefits	
Active members	
Retirement	\$ 5,994,653,568
Withdrawal	517,184,976
Death	73,591,085
Disability	<u>41,100,533</u>
Total	\$ 6,626,530,162
Inactive members	348,211,278
Retirees, disabilities and beneficiaries	<u>5,257,094,210</u>
Omaha Service Annuity	\$ 5,605,305,488
Active	18,732,025
Deferred vested	<u>981,415</u>
Total	\$ <u>19,713,440</u>
Total Liabilities	\$ 12,251,549,090



SECTION 4 – SYSTEM LIABILITIES

TABLE 7
SCHOOL RETIREMENT SYSTEM
ACTUARIAL GAIN/(LOSS)

Liabilities

1. Actuarial Accrued Liability as of July 1, 2013	\$ 9,984,898,998
2. Normal Cost for Plan Year Ending June 30, 2014	195,148,035
3. Benefit Payments During Plan Year Ending June 30, 2014	466,161,224
4. Interest at 8.0%	<u>789,710,940</u>
5. Expected Actuarial Accrued Liability as of July 1, 2014 [1 + 2 - 3 + 4]	10,503,596,749
6. Actuarial Accrued Liability as of July 1, 2014	\$ 10,426,112,609

Assets

7. Actuarial Value of Assets as of July 1, 2013	\$ 7,703,084,507
8. Contributions During Plan Year Ending June 30, 2014	372,524,092
9. Benefit Payments During Plan Year Ending June 30, 2014	466,161,224
10. Interest at 8.0%	<u>614,124,330</u>
11. Expected Actuarial Value of Assets as of July 1, 2014 [7 + 8 - 9 + 10]	8,223,571,705
12. Actuarial Value of Assets as of July 1, 2014	\$ 8,622,023,999

Gain / (Loss)

13. Actuarial Gain / (Loss) on Liabilities [5 - 6]	\$ 77,484,140
14. Actuarial Gain / (Loss) on Assets [12 - 11]	\$ 398,452,294
15. Total Actuarial Gain / (Loss) for Plan Year Ending June 30, 2014 [13 + 14]	\$ 475,936,434



SECTION 4 – SYSTEM LIABILITIES

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

Liability Sources	Gain/(Loss)
Retirement	\$ (1,495,145)
Termination	(41,934,227)
Disability	(757,562)
Mortality	(5,373,347)
Salary	101,719,281
New Entrants/Rehires	(17,682,124)
COLA	21,964,305
Miscellaneous	21,042,959
Total Liability Gain/(Loss)	\$ 77,484,140
Asset Gain/(Loss)	\$ 398,452,294
Net Actuarial Gain/(Loss)	\$ 475,936,434



SECTION 4 – SYSTEM LIABILITIES

TABLE 9
SCHOOL RETIREMENT SYSTEM
PROJECTED BENEFIT PAYMENTS
AS OF JULY 1, 2014

Plan Year	Retired and Disabled		
Ending June 30	Active Employees	Members and Beneficiaries	Total
2015	\$ 46,319,000	\$ 459,835,000	\$ 506,154,000
2016	81,685,000	464,680,000	546,365,000
2017	117,700,000	468,964,000	586,664,000
2018	154,414,000	472,735,000	627,149,000
2019	192,031,000	476,004,000	668,035,000
2020	229,778,000	478,554,000	708,332,000
2021	268,685,000	480,153,000	748,838,000
2022	308,762,000	480,907,000	789,669,000
2023	350,450,000	480,527,000	830,977,000
2024	393,686,000	479,166,000	872,852,000
2025	438,392,000	476,894,000	915,286,000
2026	484,953,000	473,203,000	958,156,000
2027	533,170,000	468,039,000	1,001,209,000
2028	582,500,000	461,417,000	1,043,917,000
2029	633,477,000	453,238,000	1,086,715,000
2030	686,092,000	444,675,000	1,130,767,000
2031	739,749,000	434,939,000	1,174,688,000
2032	794,889,000	423,730,000	1,218,619,000
2033	851,340,000	411,034,000	1,262,374,000
2034	907,291,000	396,841,000	1,304,132,000
2035	962,431,000	381,150,000	1,343,581,000
2036	1,017,482,000	364,013,000	1,381,495,000
2037	1,073,058,000	345,514,000	1,418,572,000
2038	1,128,529,000	325,746,000	1,454,275,000
2039	1,183,401,000	304,862,000	1,488,263,000
2040	1,236,965,000	283,076,000	1,520,041,000
2041	1,288,412,000	260,624,000	1,549,036,000
2042	1,337,103,000	237,795,000	1,574,898,000
2043	1,382,919,000	214,874,000	1,597,793,000
2044	1,424,664,000	192,188,000	1,616,852,000

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



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, 2014 actuarial valuation will be used to determine the actuarial required employer contribution rate to the School Retirement System for the plan year ending June 30, 2015. Any State contributions are expected to be deposited on July 1, 2015 (State fiscal year 2016). 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, 2014, is developed. Table 11 develops the actuarial required contribution rate for the System and the amount of 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
SCHOOL RETIREMENT SYSTEM
SCHEDULE OF AMORTIZATION BASES

Amortization Bases	Original Amount	July 1, 2014 Remaining Payments	Date of Last Payment	Outstanding Balance as of July 1, 2014	Annual Contribution*
2006 Unfunded Actuarial Accrued Liability Base	\$ 845,226,412	22	7/1/2036	\$ 787,264,267	\$ 53,719,391
2007 Unfunded Actuarial Accrued Liability Base	(163,793,512)	23	7/1/2037	(155,156,622)	(10,292,593)
2008 Unfunded Actuarial Accrued Liability Base	54,258,200	24	7/1/2038	52,194,621	3,372,067
2009 Unfunded Actuarial Accrued Liability Base	370,759,908	25	7/1/2039	361,713,965	22,795,909
2010 Unfunded Actuarial Accrued Liability Base	427,955,512	26	7/1/2040	422,927,009	26,039,000
2011 Unfunded Actuarial Accrued Liability Base	287,237,896	27	7/1/2041	287,233,465	17,300,352
2012 Unfunded Actuarial Accrued Liability Base	497,977,442	28	7/1/2042	503,391,612	29,698,468
2013 Unfunded Actuarial Accrued Liability Base	57,652,106	29	7/1/2043	58,861,363	3,405,431
2014 Unfunded Actuarial Accrued Liability Base	(514,341,070)	30	7/1/2044	(514,341,070)	(29,212,907)
Total				\$ 1,804,088,610	\$ 116,825,118

* Contribution amount reflects mid-year timing.

1. Total UAAL Amortization Payments	\$ 116,825,118
2. Projected Payroll for FYE 2015	\$ 1,774,679,549
3. UAAL Amortization Payment Rate	6.58%

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
SCHOOL RETIREMENT SYSTEM
ACTUARIAL REQUIRED CONTRIBUTION
and
DEVELOPMENT OF ADDITIONAL STATE CONTRIBUTION

1. Normal Cost - Nebraska School System Formula Annuity		
(a) Amount	\$	198,091,010
(b) Expected pay for current actives		1,676,500,711
(c) Normal Cost Rate as % of pay		11.82%
2. Amortization Cost - Nebraska School System Formula Annuity		
(a) Amount		116,571,906
(b) Expected pay for all actives		1,774,679,549
(c) Amortization Rate as % of pay		6.57%
3. Total Actuarial Required Contribution Rate - Nebraska School System Formula Annuity		18.39%
[1(c) + 2(c)]		
4. Statutory Contribution Rates - Nebraska School System Formula Annuity		
(a) Member		9.78%
(b) Employer (101% of Member)		9.88%
(c) State		2.00%
(d) Total		<u>21.66%</u>
5. Shortfall/(Margin) - Nebraska School System Formula Annuity		(3.27%)
[3 - 4(d)]		
6. Expected pay for all actives for FYE 15		1,774,679,549
7. Additional Required State Contribution payable July 1, 2015		
[5 * 6 , but not less than 0%]	\$	0
8. State Contribution due July 1, 2015		
(a) State Statutory Amount due July 1, 2015	\$	35,493,591
[2% x Expected pay]		
(b) Omaha Service Annuity due July 1, 2015		
(i) Normal Cost amount	\$	734,712
(ii) Amortization amount		<u>263,146</u>
(iii) Total amount		997,858
(d) Additional Contribution		0
(e) Total	\$	<u>36,491,449</u>



SECTION 6 – OTHER INFORMATION

HISTORICAL FUNDING AND OTHER INFORMATION

This section of the report provides a historical perspective on the System’s funding and contribution history.

In the past, Governmental Accounting Standards Board (GASB) Statements No. 25, *Financial Reporting for Defined Benefit Pension Plans*, and Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers*, applied to the preparation of financial reports of pension plans for state and local governments and sponsoring employers.

GASB 67, which is effective for fiscal year end 2014, replaces GASB 25 and represents a significant departure from the requirements of that older statement. GASB 25 was issued as a “funding friendly” statement that required pension plans to report items consistent with the results of the plan’s actuarial valuations, as long as those valuations met certain parameters. GASB 67 basically separates accounting from funding by creating disclosure and reporting requirements that may or may not be consistent with the basis used for funding the System. A separate report that contains all of the information and exhibits of an actuarial nature that are necessary for the System’s financial reporting under GASB 67 will be issued.

GASB Statement No. 27 establishes standards for the measurement, recognition, and display of pension expense and related liabilities. Annual pension cost is measured and disclosed on the accrual basis of accounting. GASB 68 replaces GASB 27, but will not be effective until fiscal year end 2015 for the State of Nebraska.



SECTION 6 – OTHER INFORMATION

TABLE 12
SCHOOL RETIREMENT SYSTEM
HISTORICAL FUNDING INFORMATION
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Actuarial Accrued Liability (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b - a) / c]
June 30, 2014	\$8,622,023,999	\$10,426,112,609	\$1,804,088,610	82.7%	\$1,774,679,549	101.7%
June 30, 2013	7,703,084,507	9,984,898,998	2,281,814,491	77.1%	1,735,175,956	131.5%
June 30, 2012	7,358,964,135	9,609,157,134	2,250,192,999	76.6%	1,593,184,929	141.2%
June 30, 2011	7,267,497,259	9,039,744,995	1,772,247,736	80.4%	1,590,225,983	111.4%
June 30, 2010	7,040,908,599	8,542,119,000	1,501,210,401	82.4%	1,543,930,532	97.2%
June 30, 2009	7,007,581,825	8,092,339,318	1,084,757,493	86.6%	1,481,568,432	73.2%
June 30, 2008	6,932,918,638	7,654,536,359	721,617,721	90.6%	1,389,124,819	51.9%
June 30, 2007	6,396,336,863	7,070,308,583	673,971,720	90.5%	1,325,616,322	50.8%
June 30, 2006	5,739,048,994	6,584,275,406	845,226,412	87.2%	1,247,684,378	67.7%
June 30, 2005	5,335,197,409	6,234,657,830	899,460,421	85.6%	1,214,227,197	74.1%
June 30, 2004	5,118,011,165	5,868,266,970	750,255,805	87.2%	1,170,601,127	64.1%
June 30, 2003	4,952,902,870	5,464,572,876	511,670,006	90.6%	1,138,776,241	44.9%

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



SECTION 6 – OTHER INFORMATION

TABLE 13

SCHOOL RETIREMENT SYSTEM

HISTORICAL FUNDING INFORMATION

**SCHEDULE OF CONTRIBUTIONS FROM EMPLOYERS
AND OTHER CONTRIBUTING ENTITIES**

Plan Year Ending	Annual Required Contributions*			Percent Contributed
	School	State	Total	
June 30, 2014	\$167,710,406	\$35,613,157	\$203,323,563	100%
June 30, 2013	161,922,831	66,073,226	227,996,057	79%
June 30, 2012	145,582,040	46,896,367	192,478,407	88%
June 30, 2011	135,328,339	41,746,797	177,075,136	89%
June 30, 2010	128,845,427	21,380,352	150,225,779	100%
June 30, 2009	110,028,942	20,620,548	130,649,490	100%
June 30, 2008	105,977,554	15,832,941	121,810,495	100%
June 30, 2007	107,573,519	15,219,871	122,793,390	100%
June 30, 2006	102,089,105	28,056,703	130,145,808	100%
June 30, 2005	90,147,174	29,816,737	119,963,911	90%
June 30, 2004	87,438,804	14,154,879	101,593,683	100%
June 30, 2003	84,467,330	13,119,888	97,587,218	100%

* Excludes Omaha appropriations.

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

<u>Actuarial Assumptions and Methods</u>	
Valuation Date	June 30, 2014
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	26 years
Asset Valuation Method	5 year smoothed market
Actuarial Assumptions	
Investment rate of return*	8.0%
Projected Salary increases*	4.0% - 9.0%
*Includes inflation at	3.25%
Cost-of-living adjustment	2.50% with a floor benefit equal to 75% purchasing power of original benefit.



APPENDIX A – MEMBERSHIP DATA

MEMBER DATA RECONCILIATION

	Active Members	Inactive Vested	Inactive Non-vested	Retirees and Beneficiaries	Disabled Members	Total
As of July 1, 2013	40,314	5,610	14,778	19,461	329	80,492
Changes in status						
a) Retirement	(1,137)	(298)	0	1,435	0	0
b) Death	(45)	(15)	(30)	(431)	(11)	(532)
c) Non-vested terminations	(1,368)	0	1,368	0	0	0
d) Vested terminations	(846)	846	0	0	0	0
e) Contribution refund	(837)	(228)	(1,083)	0	0	(2,148)
f) Beneficiaries in receipt	0	0	0	129	0	129
g) Disability retirements	(16)	(3)	0	0	19	0
h) Return to active service	535	(159)	(375)	(1)	0	0
i) Expired benefits	0	0	0	(56)	0	(56)
j) Data adjustments	0	(4)	(4)	14	1	7
Total changes in status	(3,714)	139	(124)	1,090	9	(2,600)
New entrants	3,862	0	297	0	0	4,159
Net Change	148	139	173	1,090	9	1,559
As of July 1, 2014	40,462	5,749	14,951	20,551	338	82,051



APPENDIX A – MEMBERSHIP DATA

SUMMARY OF MEMBERSHIP DATA

NEBRASKA SCHOOLS

A. ACTIVE MEMBERS	July 1, 2014	July 1, 2013	% Change
1. Number of Active Members			
(a) Before assumed retirement age	40,420	40,273	0.4%
(b) Beyond assumed retirement age	42	41	2.4%
(c) Total	<u>40,462</u>	<u>40,314</u>	0.4%
2. Reported Prior Year Earnings for Current Actives			
(a) Before assumed retirement age	\$ 1,674,222,718	\$ 1,637,216,300	2.3%
(b) Beyond assumed retirement age	590,724	567,079	4.2%
(c) Total	<u>\$ 1,674,813,442</u>	<u>\$ 1,637,783,379</u>	2.3%
3. Accumulated Contributions	\$ 1,551,264,633	\$ 1,509,787,328	2.7%
4. Active Member Averages			
(a) Age	45.7	46.0	(0.7%)
(b) Service	11.6	11.6	0.0%
(c) Compensation	\$ 41,392	\$ 40,626	1.9%
B. INACTIVE MEMBERS			
1. Number of Inactive Members			
(a) System vested	5,749	5,610	2.5%
(b) System nonvested (refund only)	14,951	14,778	1.2%
(d) Total	<u>20,700</u>	<u>20,388</u>	1.5%
2. Accumulated Member Contributions (excluding Omaha)	\$ 186,522,027	\$ 181,357,248	2.8%
3. Inactive Members Averages (excluding Omaha)			
(a) Age (vesteds only)	52.1	52.5	(0.8%)
(b) Accumulated member contributions	\$ 9,011	\$ 8,895	1.3%
C. RETIREES, DISABLEDS, AND BENEFICIARIES			
1. Number of Members			
(a) Retired	19,322	18,285	5.7%
(b) Disabled	338	329	2.7%
(c) Beneficiaries	1,229	1,176	4.5%
(d) Total	<u>20,889</u>	<u>19,790</u>	5.6%
2. Annual Benefits			
(a) Retired	\$ 436,486,954	\$ 401,922,750	8.6%
(b) Disabled	4,558,870	4,356,520	4.6%
(c) Beneficiaries	21,267,290	19,352,406	9.9%
(d) Total	<u>\$ 462,313,114</u>	<u>\$ 425,631,676</u>	8.6%



APPENDIX A – MEMBERSHIP DATA

SUMMARY OF MEMBERSHIP DATA

OMAHA SCHOOLS

A. ACTIVE MEMBERS	September 1, 2013	September 1, 2012	% Change
1. Number of Active Members	7,372	7,315	0.8%
2. Average Age	44.9	44.9	0.0%
3. Average Service	10.1	11.6	(12.9%)

B. INACTIVE VESTED MEMBERS			
1. Number of Inactive Members	818	728	12.4%
2. Average Age	45.7	46.0	(0.7%)
3. Average Service	8.8	8.8	0.0%

Note: Data was provided by the Omaha Schools Employee Retirement System (OSERS) for use in estimating the Service Annuity obligation. The data provided is from the prior OSERS valuation.

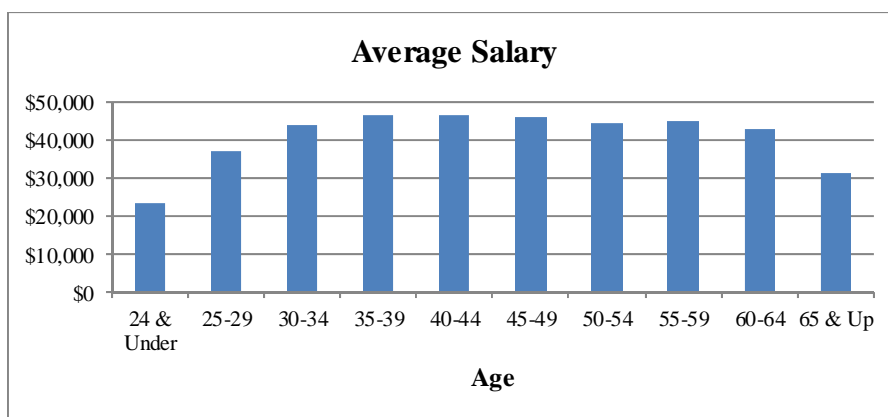
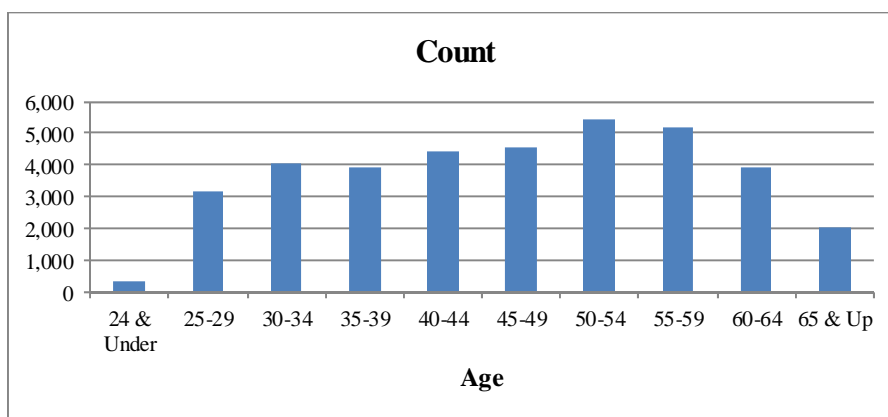


APPENDIX A – MEMBERSHIP DATA

ACTIVE MEMBERS AS OF JULY 1, 2014

Tier 1 Members

Age	Count of Members			Reported 2013 Earnings for Current Actives		
	Male	Female	Total	Male	Female	Total
24 & Under	94	264	358	\$ 2,253,293	\$ 6,034,494	\$ 8,287,787
25-29	769	2,416	3,185	30,120,876	87,887,360	118,008,236
30-34	1,052	2,992	4,044	51,472,264	125,731,245	177,203,509
35-39	990	2,958	3,948	55,916,974	127,710,090	183,627,064
40-44	1,054	3,362	4,416	63,858,251	141,945,143	205,803,394
45-49	1,029	3,539	4,568	63,309,915	146,296,733	209,606,648
50-54	1,232	4,193	5,425	72,015,902	168,120,296	240,136,198
55-59	1,226	3,937	5,163	67,407,206	162,862,176	230,269,382
60-64	1,013	2,949	3,962	49,774,585	119,352,634	169,127,219
65 & Up	<u>761</u>	<u>1,299</u>	<u>2,060</u>	<u>24,777,109</u>	<u>39,032,006</u>	<u>63,809,115</u>
Total	9,220	27,909	37,129	\$ 480,906,375	\$ 1,124,972,177	\$ 1,605,878,552



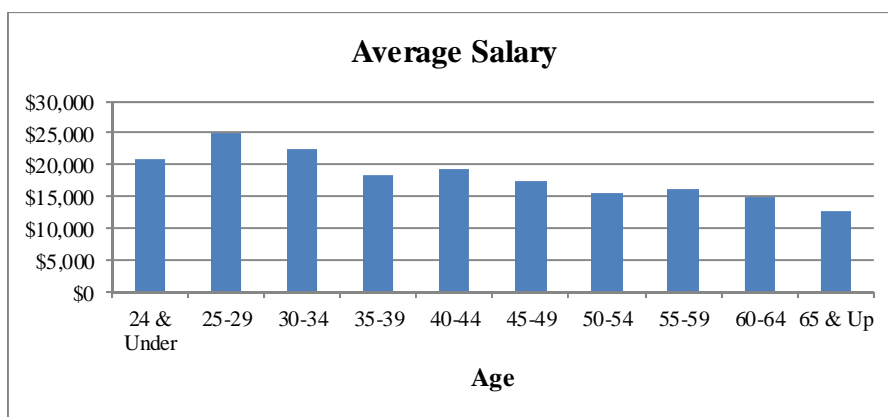
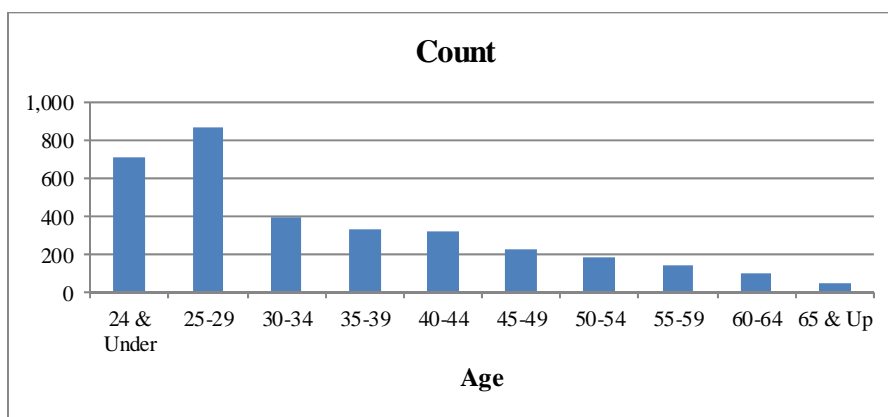


APPENDIX A – MEMBERSHIP DATA

**ACTIVE MEMBERS
AS OF JULY 1, 2014**

Tier 2 Members

<u>Age</u>	<u>Count of Members</u>			<u>Reported 2013 Earnings for Current Actives</u>		
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
24 & Under	135	573	708	\$ 2,893,325	\$ 11,879,248	\$ 14,772,573
25-29	226	640	866	5,900,246	15,611,394	21,511,640
30-34	89	306	395	2,650,483	6,273,755	8,924,238
35-39	47	288	335	1,419,658	4,709,825	6,129,483
40-44	62	260	322	1,784,222	4,454,711	6,238,933
45-49	45	182	227	1,072,088	2,879,919	3,952,007
50-54	42	142	184	919,774	1,971,537	2,891,311
55-59	40	103	143	851,424	1,486,384	2,337,808
60-64	48	56	104	836,949	719,505	1,556,454
65 & Up	<u>18</u>	<u>31</u>	<u>49</u>	<u>288,282</u>	<u>332,161</u>	<u>620,443</u>
Total	752	2,581	3,333	\$ 18,616,451	\$ 50,318,439	\$ 68,934,890



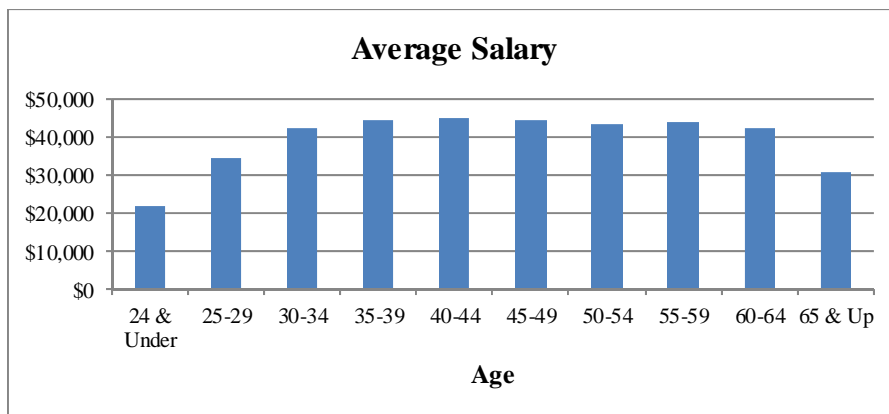
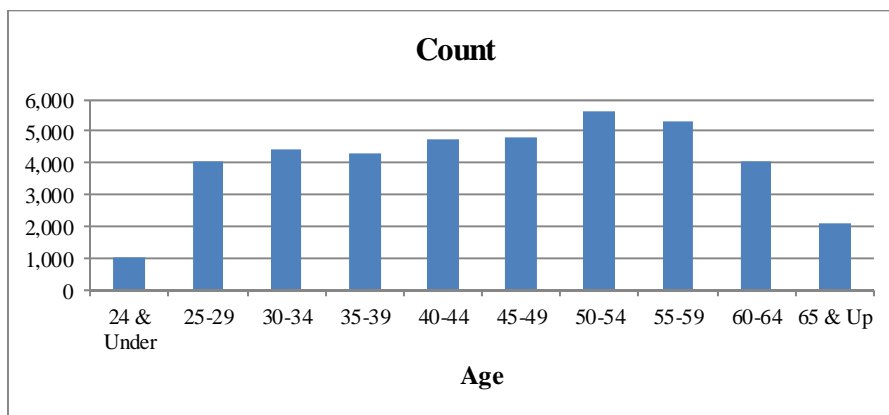


APPENDIX A – MEMBERSHIP DATA

**ACTIVE MEMBERS
AS OF JULY 1, 2014**

All Members

Age	Count of Members			Reported 2013 Earnings for Current Actives		
	Male	Female	Total	Male	Female	Total
24 & Under	229	837	1,066	\$ 5,146,618	\$ 17,913,742	\$ 23,060,360
25-29	995	3,056	4,051	36,021,122	103,498,754	139,519,876
30-34	1,141	3,298	4,439	54,122,747	132,005,000	186,127,747
35-39	1,037	3,246	4,283	57,336,632	132,419,915	189,756,547
40-44	1,116	3,622	4,738	65,642,473	146,399,854	212,042,327
45-49	1,074	3,721	4,795	64,382,003	149,176,652	213,558,655
50-54	1,274	4,335	5,609	72,935,676	170,091,833	243,027,509
55-59	1,266	4,040	5,306	68,258,630	164,348,560	232,607,190
60-64	1,061	3,005	4,066	50,611,534	120,072,139	170,683,673
65 & Up	<u>779</u>	<u>1,330</u>	<u>2,109</u>	<u>25,065,391</u>	<u>39,364,167</u>	<u>64,429,558</u>
Total	9,972	30,490	40,462	\$ 499,522,826	\$ 1,175,290,616	\$ 1,674,813,442





APPENDIX A – MEMBERSHIP DATA

**AGE AND SERVICE DISTRIBUTION
AS OF JULY 1, 2014**

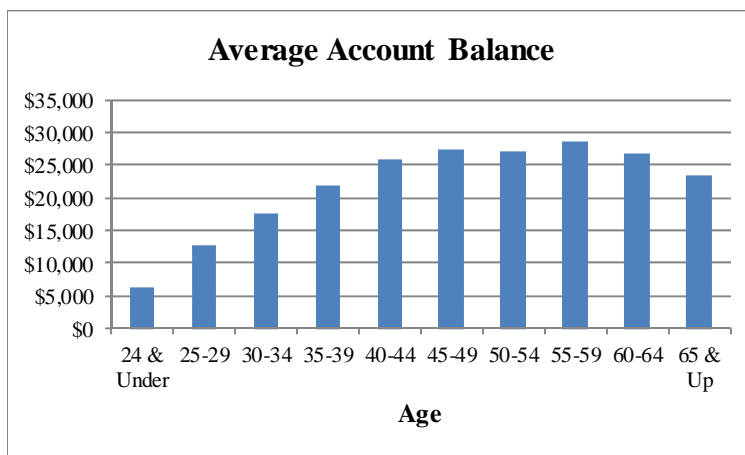
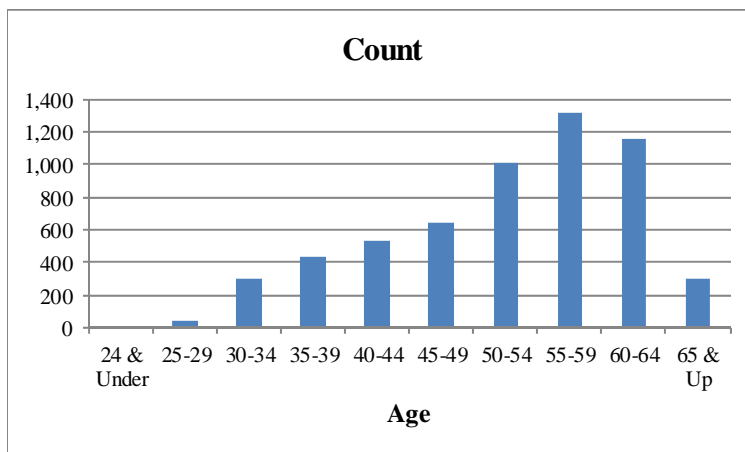
Age		0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
20-24	Number	1,058	8	0	0	0	0	0	0	1,066
	Total Salary	\$ 22,861,418	\$ 198,942	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 23,060,360
	Average Sal.	\$ 21,608	\$ 24,868	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 21,633
25-29	Number	3,265	782	4	0	0	0	0	0	4,051
	Total Salary	\$ 106,834,786	\$ 32,582,653	\$ 102,437	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 139,519,876
	Average Sal.	\$ 32,721	\$ 41,666	\$ 25,609	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 34,441
30-34	Number	1,549	2,407	482	1	0	0	0	0	4,439
	Total Salary	\$ 46,304,598	\$ 113,675,895	\$ 26,107,825	\$ 39,429	\$ 0	\$ 0	\$ 0	\$ 0	\$ 186,127,747
	Average Sal.	\$ 29,893	\$ 47,227	\$ 54,166	\$ 39,429	\$ 0	\$ 0	\$ 0	\$ 0	\$ 41,930
35-39	Number	1,268	1,127	1,522	365	1	0	0	0	4,283
	Total Salary	\$ 32,292,261	\$ 49,057,609	\$ 85,883,530	\$ 22,469,463	\$ 53,684	\$ 0	\$ 0	\$ 0	\$ 189,756,547
	Average Sal.	\$ 25,467	\$ 43,529	\$ 56,428	\$ 61,560	\$ 53,684	\$ 0	\$ 0	\$ 0	\$ 44,305
40-44	Number	1,263	1,033	822	1,323	296	1	0	0	4,738
	Total Salary	\$ 30,096,911	\$ 38,216,832	\$ 42,475,593	\$ 81,480,992	\$ 19,738,493	\$ 33,506	\$ 0	\$ 0	\$ 212,042,327
	Average Sal.	\$ 23,830	\$ 36,996	\$ 51,673	\$ 61,588	\$ 66,684	\$ 33,506	\$ 0	\$ 0	\$ 44,754
45-49	Number	1,013	1,056	752	698	1,009	267	0	0	4,795
	Total Salary	\$ 22,921,876	\$ 34,603,148	\$ 33,669,314	\$ 38,856,315	\$ 65,930,607	\$ 17,577,395	\$ 0	\$ 0	\$ 213,558,655
	Average Sal.	\$ 22,628	\$ 32,768	\$ 44,773	\$ 55,668	\$ 65,343	\$ 65,833	\$ 0	\$ 0	\$ 44,538
50-54	Number	938	1,096	936	722	646	944	324	3	5,609
	Total Salary	\$ 20,105,769	\$ 33,694,709	\$ 35,685,786	\$ 32,422,837	\$ 37,775,250	\$ 61,839,285	\$ 21,334,285	\$ 169,588	\$ 243,027,509
	Average Sal.	\$ 21,435	\$ 30,743	\$ 38,126	\$ 44,907	\$ 58,476	\$ 65,508	\$ 65,847	\$ 56,529	\$ 43,328
55-59	Number	782	720	798	760	651	577	752	266	5,306
	Total Salary	\$ 17,593,971	\$ 20,781,382	\$ 28,499,917	\$ 31,002,832	\$ 33,138,833	\$ 33,784,808	\$ 50,081,682	\$ 17,723,765	\$ 232,607,190
	Average Sal.	\$ 22,499	\$ 28,863	\$ 35,714	\$ 40,793	\$ 50,905	\$ 58,553	\$ 66,598	\$ 66,631	\$ 43,839
60-64	Number	651	581	502	489	620	428	305	490	4,066
	Total Salary	\$ 15,586,549	\$ 17,796,147	\$ 17,309,032	\$ 20,088,198	\$ 28,403,316	\$ 21,248,279	\$ 17,926,052	\$ 32,326,100	\$ 170,683,673
	Average Sal.	\$ 23,942	\$ 30,630	\$ 34,480	\$ 41,080	\$ 45,812	\$ 49,646	\$ 58,774	\$ 65,972	\$ 41,978
65 & Up	Number	548	444	288	203	207	159	102	158	2,109
	Total Salary	\$ 8,525,556	\$ 10,806,603	\$ 7,739,250	\$ 6,952,419	\$ 8,351,897	\$ 7,176,824	\$ 4,788,092	\$ 10,088,917	\$ 64,429,558
	Average Sal.	\$ 15,558	\$ 24,339	\$ 26,872	\$ 34,248	\$ 40,347	\$ 45,137	\$ 46,942	\$ 63,854	\$ 30,550
Total	Number	12,335	9,254	6,106	4,561	3,430	2,376	1,483	917	40,462
	Total Salary	\$ 323,123,695	\$ 351,413,920	\$ 277,472,684	\$ 233,312,485	\$ 193,392,080	\$ 141,660,097	\$ 94,130,111	\$ 60,308,370	\$ 1,674,813,442
	Average Sal.	\$ 26,196	\$ 37,974	\$ 45,443	\$ 51,154	\$ 56,383	\$ 59,621	\$ 63,473	\$ 65,767	\$ 41,392



APPENDIX A – MEMBERSHIP DATA

**INACTIVE VESTED MEMBERS
AS OF JULY 1, 2014**

<u>Age</u>	<u>Count of Members</u>			<u>Account Balances</u>		
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
24 & Under	0	1	1	\$ 0	\$ 6,295	\$ 6,295
25-29	8	37	45	110,311	461,922	572,233
30-34	48	251	299	873,364	4,373,466	5,246,830
35-39	90	348	438	2,349,478	7,289,588	9,639,066
40-44	107	428	535	3,571,621	10,275,897	13,847,518
45-49	133	514	647	5,024,270	12,781,921	17,806,191
50-54	173	833	1,006	7,596,564	19,503,268	27,099,832
55-59	213	1,107	1,320	8,821,657	29,022,679	37,844,336
60-64	159	999	1,158	6,664,810	24,301,220	30,966,030
65 & Up	<u>57</u>	<u>243</u>	<u>300</u>	<u>2,001,835</u>	<u>4,993,979</u>	<u>6,995,814</u>
Total	988	4,761	5,749	\$ 37,013,910	\$ 113,010,235	\$ 150,024,145

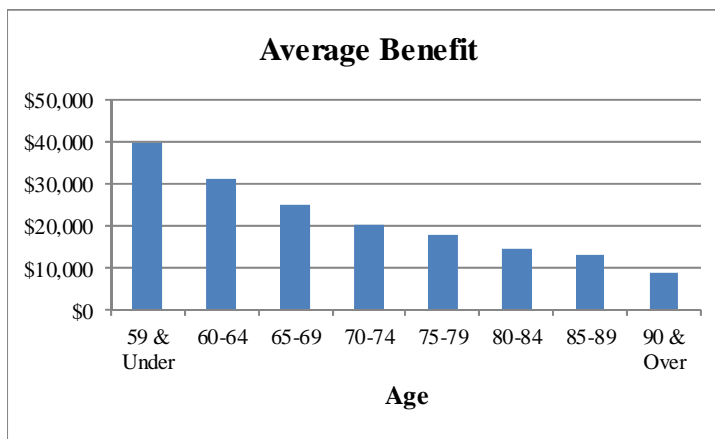
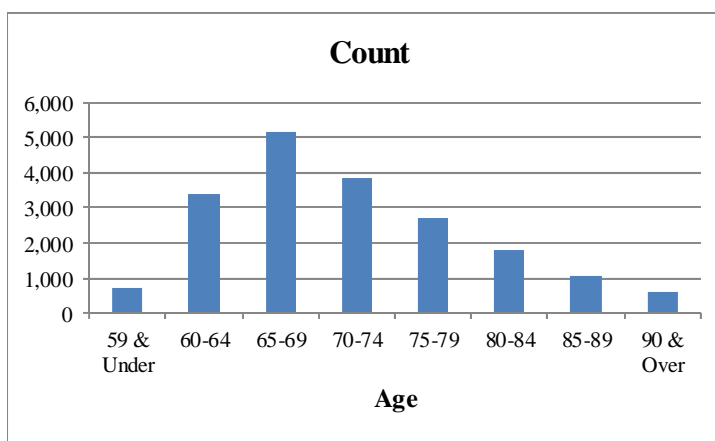




APPENDIX A – MEMBERSHIP DATA

**RETIRED MEMBERS
AS OF JULY 1, 2014**

<u>Age</u>	<u>Count of Members</u>			<u>Annual Benefits</u>		
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
59 & Under	233	477	710	\$ 9,841,699	\$ 18,334,636	\$ 28,176,335
60-64	937	2,438	3,375	36,656,062	68,979,346	105,635,408
65-69	1,677	3,499	5,176	52,345,451	77,915,061	130,260,512
70-74	1,312	2,519	3,831	35,692,652	42,032,185	77,724,837
75-79	877	1,834	2,711	21,101,338	26,744,209	47,845,547
80-84	544	1,285	1,829	10,882,171	16,175,069	27,057,240
85-89	286	778	1,064	5,169,558	8,956,316	14,125,874
90 & Over	<u>91</u>	<u>535</u>	<u>626</u>	<u>1,164,801</u>	<u>4,496,400</u>	<u>5,661,201</u>
Total	5,957	13,365	19,322	\$ 172,853,732	\$ 263,633,222	\$ 436,486,954

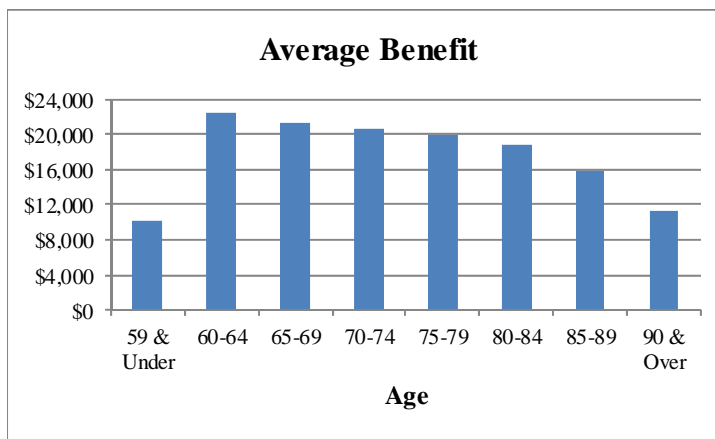
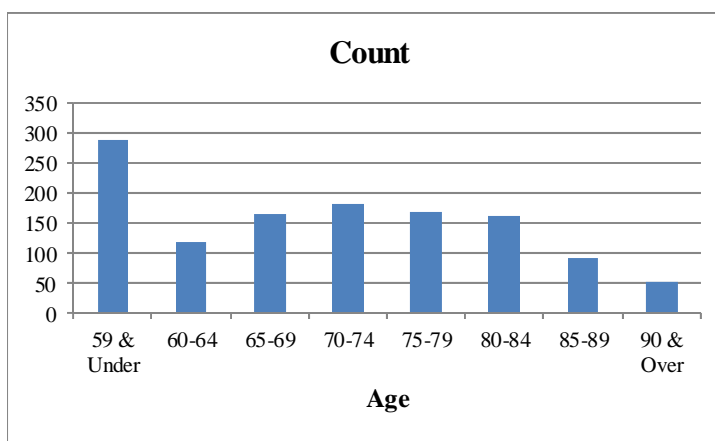




APPENDIX A – MEMBERSHIP DATA

**BENEFICIARIES RECEIVING BENEFITS
AS OF JULY 1, 2014**

<u>Age</u>	<u>Count of Members</u>			<u>Annual Benefits</u>		
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
59 & Under	140	146	286	\$ 1,286,816	\$ 1,588,832	\$ 2,875,648
60-64	44	76	120	979,360	1,700,194	2,679,554
65-69	66	99	165	1,216,832	2,305,707	3,522,539
70-74	63	119	182	1,167,856	2,576,623	3,744,479
75-79	52	116	168	809,607	2,523,058	3,332,665
80-84	39	124	163	564,647	2,500,467	3,065,114
85-89	19	73	92	217,632	1,233,773	1,451,405
90 & Over	<u>9</u>	<u>44</u>	<u>53</u>	<u>102,604</u>	<u>493,282</u>	<u>595,886</u>
Total	432	797	1,229	\$ 6,345,354	\$ 14,921,936	\$ 21,267,290

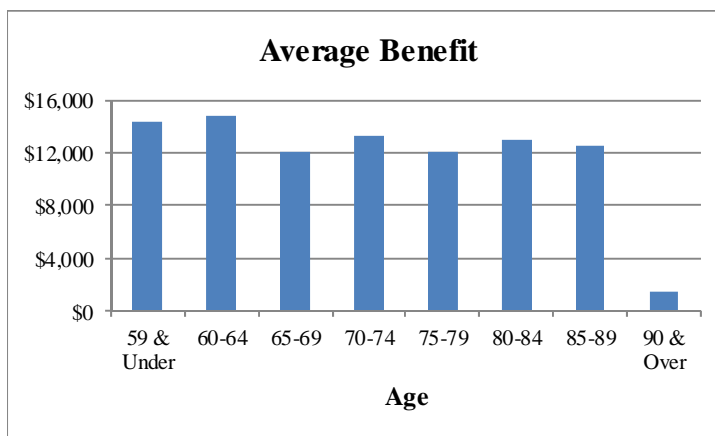
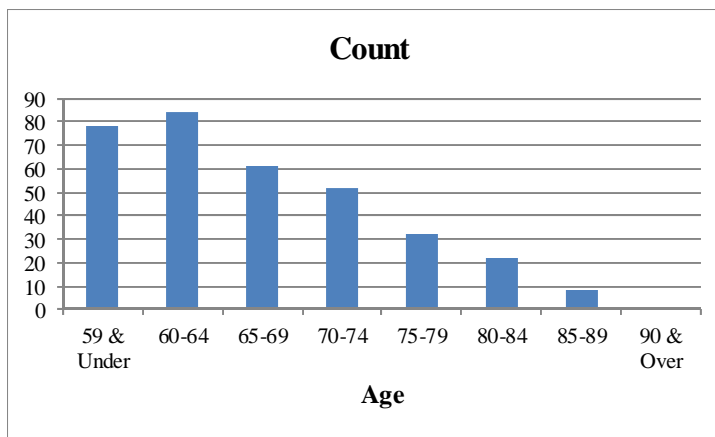




APPENDIX A – MEMBERSHIP DATA

**DISABLED MEMBERS
AS OF JULY 1, 2014**

<u>Age</u>	<u>Count of Members</u>			<u>Annual Benefits</u>		
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
59 & Under	20	58	78	\$ 313,939	\$ 806,070	\$ 1,120,009
60-64	16	68	84	207,258	1,032,288	1,239,546
65-69	27	34	61	304,876	428,409	733,285
70-74	20	32	52	269,329	423,080	692,409
75-79	11	21	32	123,095	262,693	385,788
80-84	7	15	22	120,297	166,074	286,371
85-89	3	5	8	48,733	51,305	100,038
90 & Over	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>1,424</u>	<u>1,424</u>
Total	104	234	338	\$ 1,387,527	\$ 3,171,343	\$ 4,558,870





APPENDIX B – SUMMARY OF PLAN PROVISIONS

Member	Any person employed by a public school 15 or more hours per week shall be a member of the system. Employees at the date of establishment could have elected not to participate, and those covered under another system do not participate. The Tier Two benefit structure covers members joining the System on or after July 1, 2013.
Participation Date	Date of becoming a member.
Definitions	
Final average earnings	The average of the three highest twelve month periods of service during the period ending on the earlier of the participant's termination date or retirement date. For employees who become a member on or after July 1, 1996, earnings will be capped at the maximum earning defined in Code 401(a) (17). For Tier Two members, it is the average of the five highest twelve month periods of service.
Fiscal year	Twelve month period ending June 30.
Contributions	Members contribute 9.78% of pay. 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. The School Districts contribute at a rate equal to 101% of the members' rate. The State contributes 2% of pay, effective July 1, 2014 (previously 1%).
Monthly pension benefit	The greater of (1) or (2). (1) Amount: A monthly benefit equal to the sum of: (a) A savings annuity which is the actuarial equivalent of the member's accumulated contributions, and (b) A service annuity equal to \$3.50 per year of service. (2) Amount: Members employed by a class I, II, III, IV, or VI School District may receive a formula annuity. The formula annuity is a monthly amount equal to the product of 2.00% of final average earnings times total years of service for those members who are employed on or after July 1, 2001. To receive this benefit, retirement must occur after meeting the Rule of 85 requirements (minimum age 55) or attaining age 65.



APPENDIX B – SUMMARY OF PLAN PROVISIONS

An automatic annual cost-of-living adjustment (COLA) equal to the change in the CPI-W index, with a maximum increase of 2.5% in any one year is provided for current and future retirees. Also provided is a minimum floor benefit equal to 75% of the purchasing power of the original benefit. For Tier Two members, whom are hired on or after July 1, 2013, an automatic cost-of-living adjustment (COLA) equal to the change in the CPI-W index, not to exceed 1.0% in any one year. No purchasing power COLA applies.

Normal Retirement Date (NRD) First of month coinciding with or next following the attainment of age 65 and one-half year of service.

Service Length of service includes all service as a school employee for which contributions have been made. This service only includes years for which the member was employed on at least a half-time basis, and includes declared emergency service in the armed forces, provided certain conditions are met. Special provisions allow credit for service prior to 1945 and for up to ten years of service in another State upon payment of the actuarial cost of the additional benefit granted.

Pensionable pay Gross earnings subject to contributions.

Eligibility for Benefits

Deferred vested Termination for reasons other than death or disability retirement after completing five years of service.

Disability retirement Retirement by reason of disability.

Early retirement Retirement before NRD and on or after both attaining age 60 and completing five years of service, or attaining 35 years of service regardless of age, or attaining age 55 and age plus service equals at least 85 (Rule of 85).

Normal retirement Retire on NRD.

Postponed retirement Retire after NRD.

Pre-retirement spouse benefit Death prior to retirement.

Monthly Benefits Payable

Normal retirement Monthly pension benefit determined as of NRD.

Early retirement Monthly pension benefit determined as of early retirement date, reduced by 3% for each year that commencement of payment



APPENDIX B – SUMMARY OF PLAN PROVISIONS

precedes age 65 (members must be age 60 with five years of service). Unreduced benefits are available to members who have attained age 55 and whose age plus service is greater than or equal to 85. Benefits payable upon retirement prior to age 60 (based on the 35 year service rule) are actuarially reduced from age 65. The service annuity is a life annuity actuarially reduced before age 65 using 8% interest and the 1994 Group annuity Mortality Table, 25% male, 75% female.

Postponed retirement	Monthly pension benefit determined as of actual retirement date.
Termination with deferred vested benefit	Monthly pension benefit determined as of termination date, reduced by 3% for each year that commencement of payment precedes age 65 (Early Commencement requires attainment of age 60).
Disability retirement	Monthly pension benefit determined as of disability retirement date.
Death with pre-retirement benefits	<p>Survivor portion of 100% Joint and Survivor Annuity paid to spouse assuming retirement by member at death if the member is age 65 or has 20 years of service at death. If the member has met the 5-year vesting service requirement, has less than 20 years of service and is under age 65, the spouse may choose between the following two options:</p> <ol style="list-style-type: none">(1) a lump sum equal to the member's contributions with interest plus 101% of the member's contributions with interest, and(2) an annuity which equals the survivor portion of the 100% Joint and Survivor value of the member's accrued benefit, payable immediately, reduced for commencement before age 65 and the 100% joint and survivor form of payment.
Forms of payment	<p>Pre-retirement death benefits are payable only as described above.</p> <p>Monthly pension benefits are paid under the form of payment elected by the retiree at retirement. Payment forms include: life annuity, 5-year certain and life annuity, 100% joint and survivor annuity (spouse only), 10-year certain and life annuity, 15-year certain and life annuity, or a modified cash refund annuity. The normal form of payment for the formula annuity is a 5-year certain and life annuity.</p>

Funding Arrangement

Pursuant to LB 407 enacted in 2002, the School Retirement Fund is created. Balances existing on June 30, 2002 in the School Employers Deposit Account, the School Employees Savings Account, the Service Annuity Account, the Annuity Reserve Account, and the School Employees Retirement System Reserve Fund (RSRF) shall be combined and transferred into the School Retirement Fund.



APPENDIX B – SUMMARY OF PLAN PROVISIONS

There are four funds established in the State Treasury, which receive monies and pay the expenses and benefits of the retirement system, as follows:

1. School Retirement Fund – receives required deposits of the employers, the State, and employees. Upon retirement, the fund pays all savings annuities, service annuities, and formula annuities.
2. Contingent Account – receives all interest, dividends, and miscellaneous income, pays all regular interest allocated to the other accounts or funds, and meets any deficiencies occurring in the other accounts or funds.
3. Expense Fund – pays all expenses connected with the operation and administration of the system, and receives annual contributions to cover anticipated expenses.
4. Omaha Service Annuity Fund – pays service annuity benefits to Omaha members.

State Appropriation

LB 700, passed in 1996, established a separate fund to provide for cost-of-living benefit adjustments to members ceasing employment on or after April 10, 1996. The COLA increases are 0.3% per year, beginning six years after retirement. This benefit is funded by State contributions. Beginning with the 1996/1997 fiscal year, the funding shall be 81.7873% of \$6,895,000 or \$5,639,235 annually, for each year through the 2010/2011 fiscal year.

Benefits Reflected in Valuation

All benefits were valued, including future cost-of-living increases as provided for by LB 674 and LB 711.

Plan Provisions Effective after July 1, 2014

No future changes in plan provisions were recognized in determining the funded status or in determining the sufficiency of statutory contribution levels.

Changes in Plan Provisions Since the Prior Year

There have been no changes to plan provisions since the prior year.



APPENDIX C – SUMMARY OF ACTUARIAL ASSUMPTIONS

A. 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 80. Cost factors designed to produce annual costs as a constant 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 80 and determining an average normal cost rate which is then related to the total payroll of active members. The actuarial assumptions shown on the following page 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 80 and over, terminated vested members and disabled members not yet receiving benefits was determined as the actuarial present value of the benefits expected 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. Beginning July 1, 2006, the unfunded 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 amortized over a level dollar payment over a 30-year period. If the unfunded actuarial accrued liability is \$0 or less on the 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 this Entry Age method, experience gains or losses, i.e., decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.



APPENDIX C – SUMMARY OF ACTUARIAL ASSUMPTIONS

- 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 on 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.

Changes in Methods and Procedures since the Prior Year

There have been no changes to the methods and procedures since last year.



APPENDIX C – SUMMARY OF ACTUARIAL ASSUMPTIONS

ACTUARIAL ASSUMPTIONS

Economic Assumptions

1. Investment Return 8.00% per annum, compounded annually, net of expenses.
2. Inflation 3.25% per annum, compounded annually
3. Salary Increases Rates vary by service. Sample rates are as follows:

Rates by Service	
Years	Rate
<1	9.00%
1	8.50
5	6.96
10	5.68
15	5.21
20	4.95
25	4.74
30	4.57
35	4.32
40+	4.00

4. Payroll Growth 4.00% per annum
5. Investment on Employee Contributions 4.25% per annum compounded annually.
6. Increase 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. Healthy lives - Active members 1994 Group Annuity Mortality Table, projected to 2015 using scale AA, set-back 1 year (55% of male rates for males, 40% of female rates for females)
 - b. Healthy lives – Retired members and beneficiaries 1994 Group Annuity Mortality Table, projected to 2015 using scale AA, set-back 1 year (sex distinct)
 - c. Disabled lives 1983 Railroad Retirement Board Disabled Annuitants Mortality set-back 1 year (unisex)



APPENDIX C – SUMMARY OF ACTUARIAL ASSUMPTIONS

d. Healthy mortality rates and life expectancies are shown below at sample ages:

Sample Age	Pre-retirement Mortality			
	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	0.89	0.46	20.8	26.1

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

e. Disabled mortality rates and life expectancies are shown below at sample ages:

Sample Age	Mortality Rate	Life Expectancy
30	1.02%	30.7
40	1.29	23.8
50	3.00	17.7
60	4.14	13.5
70	6.38	9.5
80	9.97	6.2



APPENDIX C – SUMMARY OF ACTUARIAL ASSUMPTIONS

2. Retirement

Rates vary by age and eligibility for benefits.
Rates are as follows:

Retirement Rates When Eligible for Unreduced Benefits	
Age	Rate
55	25%
56	20
57	20
58	20
59	20
60	25
61	25
62	30
63	25
64	25
65	30
66	25
67	20
68	20
69	20
70	20
71	20
72	20
73	20
74	25
75	25
76	25
77	25
78	35
79	35
80	100

Retirement Rates When Eligible for Reduced Benefits	
Age	Rate
60	10%
61	12
62	15
63	12
64	18



APPENDIX C – SUMMARY OF ACTUARIAL ASSUMPTIONS

3. Termination

Rates vary by service.
Sample rates are as follows:

Years	Rates by Service	
	Male	Female
<1	27.5%	31.7%
1	17.0	20.3
5	6.7	8.4
10	4.3	4.7
15	2.5	3.1
20+	2.0	2.0

4. Disability

Rates vary by age.
Sample rates are as follows:

Age	Rate
25	.00%
30	.00
35	.02
40	.02
45	.03
50	.04
55	.07
60	.09

Other Assumptions

1. Form of Payment

Service annuity – Life annuity
Formula annuity – Five year certain and life annuity.

2. Marital Status

- a. Percent married
- b. Spouse's age

85% married
Females assumed to be two years younger than males.

3. Administrative Expense

Investment return is assumed to be net of expenses.

4. Commencement age for deferred vested benefit

Age 62

5. Cost of Living Adjustment

Service annuity – none
Formula annuity – For members hired before January 1, 2013, it is 2.5% per annum, compounded annually and 3.25% per annum, compounded annually, after reaching 75% purchasing power floor benefit. For members hired on or after January 1, 2013, it is 1.0% per annum, compounded annually, and there is no floor for the purchasing power of the benefit.



APPENDIX C – SUMMARY OF ACTUARIAL ASSUMPTIONS

6. 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.

TECHNICAL VALUATION PROCEDURES

Data Procedures

Salaries for first year members are annualized.

Other Valuation Procedures

Salary increases are assumed to apply to annual amounts.

Decrement rates 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.

No actuarial liability is included for participants who terminated without being vested prior to the valuation date, except those due a refund of contributions.

Future monthly benefit amounts are not calculated or available for deferred vested members. The benefit liability for deferred vested members was calculated by loading the accumulated member contribution balances for deferred vested members by 100% to estimate the value of deferred benefit payments.



APPENDIX D – GLOSSARY OF TERMS

Actuarial Accrued Liability	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”.
Actuarial Assumptions	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.
Accrued Service	Service credited under the system which was rendered before the date of the actuarial valuation.
Actuarial Equivalent	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.
Actuarial Cost Method	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”.
Experience Gain (Loss)	The difference between actual experience and actuarial assumptions anticipated experience during the period between two actuarial valuation dates.
Actuarial Present Value	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.
Amortization	Paying off an interest-discounted amount with periodic payments of interest and principal, as opposed to paying off with lump sum payment.
Normal Cost	The actuarial present value of retirement system benefits allocated to the current year by the actuarial cost method.



APPENDIX D – GLOSSARY OF TERMS

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).