Sixtieth Actuarial Report for State Fiscal Year Ending June 30, 2014 and System Plan Year Beginning July 1, 2012

#### **December 2012**

Submitted By:
Buck Consultants
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Denver, CO 80202



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#### **LETTER OF CERTIFICATION**

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December 3, 2012

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

Re: Certification of Actuarial Valuation School Retirement System

Ladies and Gentlemen:

This report summarizes the results of the actuarial valuation of the School Retirement System as of July 1, 2012, performed by Buck Consultants, LLC.

The actuarial valuation is based on unaudited financial and member data provided to us by the Nebraska Public Employees Retirement Systems and summarized in this report. The benefits considered are those delineated in Nebraska State Statutes, effective as amended July 1, 2012.

All costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures. This report fully and fairly discloses the actuarial position of the plan. The actuarial assumptions were changed from the prior valuation based on the experience analysis performed on the population experience for the period July 1, 2006 through June 30, 2011.

Based on the results of our actuarial valuation, an additional contribution to the School Retirement System is necessary to meet the System's funding policy defined by the statutes. The contributions paid by members, school employers, and the State defined by statute do not currently exceed the actuarially required contribution, which is equal to the sum of the annual normal cost and the annual payment necessary to amortize any unfunded liabilities over 30 years. In accordance with Nebraska State Statutes Section 79-916(b), a state contribution is required to fund the Omaha Service Annuity. For the 2013/2014 fiscal year, an additional contribution of \$48,092,426 is necessary to meet the actuarially required contribution for the Nebraska School Retirement System, and a contribution of \$1,106,265 is required to fund the Omaha Service Annuity.

The undersigned are Enrolled Actuaries and/or Associates of the Society of Actuaries and Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all Applicable Standards of Practice. 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.

Respectfully submitted,

BUCK CONSULTANTS, LLC

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### SUMMARY OF ACTUARIAL REPORT FOR CONTRIBUTION REQUIREMENTS AND FUNDED STATUS FOR PLAN YEAR 2012/2013

The main purposes of this report are:

- To determine the actuarial soundness of the School District and member contributions defined under Nebraska State Statutes to fund the total Formula Annuity for the Nebraska School System and the Omaha Service Annuity, and whether additional contributions are required for the fiscal year ending June 30, 2014;
- 2. To review the current funded status of the System; and
- 3. To compare actual and expected experience under the plan during the plan year beginning July 1, 2011 and ending June 30, 2012.

The 2012 actuarial valuation is based upon the plan provisions as of July 1, 2012, as described in Exhibit 8. The actuarial methods and assumptions are described in Exhibits 9 and 10.

Highlights from the current valuation:

- 1. An additional State contribution of \$48,092,426 is required for the 2013/2014 fiscal year to pay the normal cost and amortize any unfunded liabilities for the Nebraska School System. A contribution of \$1,106,265 by the State is required to fund the Omaha Service Annuity. The present value of future Formula Annuity benefits is greater than the sum of the Actuarial Value of Assets and the present values of future member and employer contributions and State appropriations, resulting in a liability of \$1,396,810,416 in funding. This is an increase of \$504,730,024 over last year's liability of \$892,080,392.
- 2. The annual rate of return on Market Value was 0.8%, resulting in a Market Value of \$7,246,311,781 as of July 1, 2012. A loss was experienced on the Actuarial Value of Assets during the 2011/2012 plan year. The rate of return on Actuarial Value of 2.3% fell short of the 8.0% assumed investment return rate by 5.7%, resulting in a decrease to the Actuarial Value of \$413,213,980, and an Actuarial Value of \$7,358,964,135 as of July 1, 2012. The funded ratio based on disclosure requirements under GASB No. 25 using the Actuarial Value of Assets and the Actuarial Accrued Liability decreased from 80.4% as of July 1, 2011 to 76.6% as of July 1, 2012 (see page 12). The reconciliation of these asset values can be found in Exhibit 1 on page 3.
- 3. The plan experienced a decremental gain over the period, primarily due to salary increases less than assumed. The actuarial accrued liability decreased by \$85,818,107 as a result of favorable decremental experience.
- 4. As the result of an experience analysis conducted on actual plan experience from July 1, 2006 through June 30, 2011, revised actuarial assumptions were proposed and adopted by the Nebraska Public Employees Retirement Board (PERB) in August 2012, to be used for the July 1, 2012 actuarial valuation. The impact of the changes to the actuarial assumptions resulted in a \$142,799,595 increase in the actuarial accrued liability as of July 1, 2012.
- 5. The funded status of the system as measured by the ratio of the system assets over the Pension Benefit Obligation (PBO) decreased. The PBO is calculated using the Projected Unit Credit Method, which determines the benefit by using service at the valuation date and projecting salary to assumed termination or retirement. Since the July 1, 2011 actuarial valuation, the funded percentage on Actuarial Value decreased from 86.6% to 82.3%.



#### **EXECUTIVE SUMMARY**

#### **Basic Actuarial Valuation Results**

The 2012 actuarial valuation results are based upon the plan provisions as of July 1, 2012 as described in Exhibit 8. The key findings of the actuarial valuation are summarized below.

#### 1. Funding of Total Formula Annuity

The total actuarially required contribution is equal to the normal cost plus an amortization payment for unfunded liabilities. Unfunded liabilities created due to experience gains or losses, plan changes or assumption changes are amortized over 30 years.

The member contribution rate is 8.88% of pay as of July 1, 2012, increasing to 9.78% of pay as of September 1, 2012. The School District's funding of liabilities is equal to 101% of the employee contribution rate. The State contributes 1.0% of covered pay as well as any additional required funding. On September 1, 2017, the member contribution rate will decrease to 7.28% and on July 1, 2017 the State match will decrease to 0.7%.

The minimum total required contribution rate increased from 20.45% to 23.27% of pay from the 2011/2012 plan year to the 2012/2013 plan year. A history of required contribution rates is shown below. For fiscal year 2002/2003, this contribution rate is the rate required to cover the excess formula annuity only. For fiscal years 2003/2004 and thereafter, this contribution rate is the rate required to cover the entire formula annuity.

History of Required Contribution Rates and Additional State Funding						
Fiscal Year	Total	Additional State Contributions*				
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				
2002/2003	11.98%	0				

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<sup>\*</sup>Excludes funding of Omaha Service Annuity.

#### **EXECUTIVE SUMMARY**

#### 1. Funding of Total Formula Annuity (cont'd)

Based on the 2012 actuarial valuation, the net required contribution rate of 23.21% is greater than the statutory contribution rate of 20.36%. Therefore, an additional State contribution is required for the 2013/2014 Fiscal Year.

#### 2. Asset Values

The total assets of the system as of the current and prior valuation date at both market value and actuarial value, and the rate of return during the period is as follows:

	July 1, 2011	July 1, 2012	Annual Rate of Return
(a) Market value	\$ 7,263,954,832	\$ 7,246,311,781	0.8%
(b) Actuarial value, an adjusted value intended to reduce the effect of market fluctuations (Exhibit 1B)	\$ 7,267,497,259	\$ 7,358,964,135	2.3%

#### **EXECUTIVE SUMMARY**

#### 3. Actuarial Liability/(Reserve)

The actuarial liability of the total Formula Annuity benefits is the excess of the total benefit obligation (present value of future benefits) over the projected financial resources (sum of (i) the actuarial value of assets and (ii) the present value of future member, employer, State contributions and PPSF Appropriations). If the projected financial resources exceed the total benefit obligation, the system has a Reserve. The actuarial position of the system as of the current and prior valuation dates are as follows:

		July 1, 2011	July 1, 2012
(a)	Present value of future benefits	\$ 10,594,771,409	\$ 11,321,282,241
(b)	Net actuarial value of assets	7,267,497,259	7,358,964,135
(c)	Present value of future member contributions	1,148,813,343	1,216,375,276
(d)	Present value of future employer contributions	1,160,301,476	1,228,539,029
(e)	Present value of future State contributions	116,022,690	120,593,385
(f)	Present value of future PPSF contributions	 10,056,249	 0
(g)	Actuarial Liability/(Reserve) [(a) - (b) - (c) - (d) - (e) - (f)]	\$ 892,080,392	\$ 1,396,810,416

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#### **EXECUTIVE SUMMARY**

#### 4. Pension Benefit Obligation (PBO)

The Pension Benefit Obligation represents a standardized disclosure measure of the present value of pension benefits payable in the future, which incorporates the effects of projected salary increases, based on service earned at the valuation date. The measure is intended to provide information regarding the Plan's funded status on an ongoing-concern basis, progress made in accumulating sufficient assets to pay benefits when due, and comparability to other plans.

Funded Status	July 1, 2011	July 1, 2012
(a) Pension Benefit Obligation i) retirees, disabled members and beneficiaries receiving benefits and deferred vested members not yet receiving benefits ii) active members iii) total pension benefit obligation	\$ 4,319,145,056	\$ 4,925,040,077
(b) Net assets available for benefits (actuarial value)		7,358,964,135
(c) Unfunded Pension Benefit Obligation/(Reserve)	\$ 1,127,004,571	\$ 1,586,592,244
(d) Funded percentage on actuarial value of assets [(b) ÷ (a)(iii)]	86.6%	82.3%

#### **EXECUTIVE SUMMARY**

#### 5. Benefit Accrual Cost

The cost of benefits accruing over an active member's working career can be expressed as a level percentage of compensation or a level dollar amount. This cost represents the true cost of accruing benefits since it is not adjusted for any overfunding or underfunding which may exist on the valuation date. It is determined using the Entry Age Actuarial Cost Method and is also called the Normal Cost. The level benefit accrual cost determined during the current and prior valuation dates are as follows:

For	mula Annuity Benefit	July 1, 2011	July 1, 2012
(a)	Benefit accrual cost amount	\$ 187,088,193	\$ 194,362,609
(b)	Annual compensation before assumed normal retirement age	\$ 1,676,129,777	\$ 1,687,453,538
(c)	Benefit accrual cost rate as a level percentage of compensation [(a) ÷ (b)]	11.162%	11.518%

Ser	Service Annuity Benefit		uly 1, 2011	J	luly 1, 2012
(a)	Annual Actuarial Contribution Amount Allocated to the Service Annuity				
	(i) NPERS members	\$	0	\$	0
	(ii) Omaha members		1,030,017		1,106,265
	(iii) Total	\$	1,030,017	\$	1,106,265
(b)	Number of active members before assumed retirement age				
	(i) NPERS members		39,344		39,445
	(ii) Omaha members		7,39 <u>5</u>		7,211
	(iii) Total		46,739		46,656
(c)	Benefit accrual cost per active member as a level dollar amount				
	(i) NPERS members	\$	63.39	\$	66.74
	(ii) Omaha members	\$	72.25	\$	75.24
	(iii) Total	\$	64.79	\$	68.05

#### **EXECUTIVE SUMMARY**

#### 6. Forecast of Disbursements

A forecast of the annual benefit disbursements expected over the next thirty years is presented in Exhibit 7. This forecast is based on the same actuarial assumptions with respect to salary increases and decrement rates used to determine the funding requirements. The forecast should be a useful guide in discussing the cash-flow needs of the system with investment managers and in projecting the future financing needs of the system.

#### 7. Actuarial Methods and Assumptions

The required contributions developed in this report are estimates of the amounts necessary to provide ongoing benefits to plan members assuming the system is funded in a systematic manner. These estimates are based upon the actuarial method defined under State Statutes to allocate the total cost of the plan to various years and actuarial assumptions regarding the return on investments, salary rates, employee termination rates, mortality rates and other risk factors.

The actuarial method used to determine the actuarial contribution requirement necessary to fund current and future benefits is the Entry Age Actuarial Cost Method. A description of this method can be found in Exhibit 9.

The actuarial assumptions represent the expected long-term experience of the system on an explicit basis for each risk area considered. The experience is reviewed periodically. Where necessary, changes are recommended by the actuary and adopted by the Public Employees Retirement Board. Summaries of the actuarial methods and assumptions used in the current valuation are presented in Exhibits 9 and 10, respectively.

#### 8. Changes Since the Last Actuarial Valuation

There have been no changes in the actuarial cost method or plan provisions since the last actuarial valuation as of July 1, 2011. The changes in actuarial assumptions are a result of the most recent experience analysis concluded in August 2012 based on experience from July 1, 2006 through June 30, 2011. The actuarial assumptions were changed to more accurately reflect expected future experience. The changes are effective as of July 1, 2012 and are listed below:

- The interest rate on employee contributions was lowered to 4.25% from 5.50%.
- Salary increases were changed to rates grading down from 9.0% for less than one year of service to 4.0% at 40 years of service. Prior valuation rates graded from 7.46% for less than one year to 4.55% at 40 years of service.
- Retirement rates are based on age and retirement eligibility. 100% retirement age was extended to age 80 from age 70. Unreduced rates were decreased at age 63.
- Pre- and post-retirement healthy mortality assumptions were changed from the 1994 Group Annuity Mortality (GAM) table projected to 2010 (for pre-retirement males rates were 65% of rates and female rates were 50% of rates) to the 1994 GAM table, with a 1 year setback, projected to 2015 (pre-retirement rates are adjusted by 55% for males and 40% for females). This change was made to reflect the most recent experience and expected future mortality improvements as required by Actuarial Standards of Practice (ASOP) No. 35.



- Disabled mortality was change to the 1983 Railroad Retirement Board Disabled Annuitants Mortality setback one year from the 1983 Railroad Retirement Board Disabled Annuitants Mortality. The prior assumption was based on the same table with no setback.
- Termination rates are service based and were decreased from the prior valuation based on actual experience.
- Disability rates were decreased by 50% from the prior valuation.
- Consumer price inflation was lowered to 3.25% from 3.50%.
- Economic productivity was lowered to 0.75% from 1.00%.

#### SYSTEM ASSETS

A.	Summary of Assets		ket Value as ine 30, 2011	_	orket Value as June 30, 2012
1.	Cash and Equivalents	\$	2,295,137	\$	1,763,724
2.	Investments	•	7,282,678,697		7,308,681,411
3.	Capital Assets		1,066,420		7,751
4.	Receivables and Prepaids		545,856,545		518,661,208
5.	Accounts Payable		(567,941,967)		(582,802,313)
6.	Net Assets Considered [1 + 2 + 3 + 4 + 5]	\$ 7,	263,954,832	\$ 7	,246,311,781

В.	Development of Actuarial Value of Assets	Amount
1.	Actuarial Value of Assets as of July 1, 2011	\$ 7,267,497,259
2.	Unrecognized Return as of July 1, 2011	\$ (3,542,427)
3.	Contributions	
	(a) Member (includes purchased service)	\$ 147,046,053
	(b) Employer	145,582,040
	(c) State appropriations*	 23,430,55 <u>0</u>
	(d) Total $[(a) + (b) + (c)]$	\$ 316,058,643
4.	Benefit Payments (including transfers to Omaha)	\$ 391,133,707
5.	Expected Return at 8% on:	
	(a) Item 1	\$ 581,399,780
	(b) Item 2	(283,394)
	(c) Item 3(d)	12,399,134
	(d) Item 4	 14,042,995
	(e) Total $[(a) + (b) + (c) - (d)]$	\$ 579,472,525
6.	Actual Return on Market Value for 2011/2012 Plan Year,	
	net of expenses	\$ 57,432,013
7.	Return to be Spread for 2011/2012 Plan Year [6 - 5(e)]	\$ (522,040,512)

<sup>\*</sup> Net of Omaha transfers.

#### SYSTEM ASSETS

B.	Development of Actuarial Value of Assets (cont'd)	Amount
8.	Total Market Value of Assets as of July 1, 2012	\$ 7,246,311,781

#### 9. Return to be Spread

Plan Year	Return to be Spread	Unrecognized Percent	Unrecognized Return
2011/2012	\$ (522,040,511)	80%	\$ (417,632,410)
2010/2011	904,911,793	60%	542,947,076
2009/2010	294,240,835	40%	117,696,334
2008/2009	(1,778,316,770)	20%	(355,663,354)
		Total	\$ (112,652,354)

#### 10. Total Actuarial Value of Assets at July 1, 2012 [8 - 9]

\$7,358,964,135

11. Asset Ratios

(a) Actuarial Value to Market Value [10  $\div$  8]

101.6%

(b) Market Value to Actuarial Value [8  $\div$  10]

98.5%

### System Assets

C. Change in Asset Values During 2011/2012	Actuarial Value	Market Value
1. Total asset value as of July 1, 2011  (a) Reported last year  (b) Adjustment  (c) Reported this year [(a) + (b)]	\$ 7,267,497,259 N/A \$ 7,267,497,259	\$ 7,263,954,832 - \$ 7,263,954,832
2. Contributions for 2011/2012  (a) Member contributions paid during the year  (b) Employer contributions paid during the year  (c) State appropriations for the year*  (d) Contributions for 2011/2012 [(a) + (b) + (c)]	\$ 147,046,053 145,582,040 27,348,851 \$ 319,976,944	\$ 147,046,053 145,582,040 27,348,851 \$ 319,976,944
3. Disbursements for 2011/2012  (a) Benefit payments**  (b) Expenses and fees  (c) Transferred Omaha appropriation  (d) Disbursements for 2011/2012 [(a) + (b) + (c)]	\$ 391,133,707 21,575,072 3,918,301 \$ 416,627,080	\$ 391,133,707 21,575,072 3,918,301 \$ 416,627,080
4. Investment return for 2011/2012  (a) Investment income  (b) Securities lending income  (c) Securities lending expense  (d) Net appreciation/(depreciation) in fair value	\$ 104,225,448 2,474,429 (540,380)	\$ 104,225,448 2,474,429 (540,380)
of investments (e) Other (f) Unrecognized return including adjustment (g) Investment return for 2011/2012 [(a) + (b) + (c) + (d) + (e) + (f)]	(27,177,132) 24,720 109,109,927 \$ 188,117,012	(27,177,132) 24,720 <u>N/A</u> \$ 79,007,085
5. Total asset value as of July 1, 2012 [1(c) + 2(d) - 3(d) + 4(g)]	\$ 7,358,964,135	\$ 7,246,311,781
Approximate rate of investment return,     net of expenses	2.3%	0.8%

<sup>\*</sup> Includes Omaha appropriation.

<sup>\*\*</sup> Includes transfers to Omaha for service annuities.

### **ACTUARIAL CONTRIBUTION REQUIREMENT**

	July 1, 2012			
A. Development of Actuarially Required Funding Rate	Nebraska School System Formula Annuity	Omaha Service Annuity	Total	
Actuarial present value of benefits     (a) Active members     (b) Inactive members     (c) Retired members, disabilities and beneficiaries     (d) Total	\$ 6,378,064,960 339,503,518 4,584,703,061 \$ 11,302,271,539	\$ 18,177,204 833,498 0 \$ 19,010,702	\$ 6,396,242,164 340,337,016 4,584,703,061 \$ 11,321,282,241	
2. Present Value of Future Normal Costs	1,709,453,253	2,671,854	1,712,125,107	
3. Total Actuarial Accrued Liability [1(d) - 2]	\$ 9,592,818,286	\$ 16,338,848	\$ 9,609,157,134	
4. Actuarial Value of Assets	7,348,997,352	9,966,783	<u>7,358,964,135</u>	
5. Unfunded Actuarial Accrued Liability [3 - 4]	\$ 2,243,820,934	\$ 6,372,065	\$ 2,250,192,999	
6. Annual Contribution to Amortize Unfunded Actuarial Accrued Liability Bases (see page 6) (a) Amount (b) Amount as % of Pay	\$ 197,704,218 11.72%	\$ 563,691 0.03%	\$ 198,267,909 11.75%	
7. Annual Normal Cost (a) Amount (b) Amount as % of Pay	\$ 193,820,035 11.49%	\$ 542,574 0.03%	\$ 194,362,609 11.52%	
8. Total Annual Actuarially Required Contribution (a) Amount [6(a) + 7(a)] (b) Amount as % of Pay	\$ 391,524,253 23.21%	\$ 1,106,265 0.06%	\$ 392,630,518 23.27%	

### **ACTUARIAL CONTRIBUTION REQUIREMENT**

В.	Development of Additional State Contributions for Nebraska School System Fiscal Year 2013/2014		nual Amount s a % of Pay
1.	Actuarially Required Contribution  a. Amount  b. State PPSF appropriation  c. Omaha Service Annuity Required Contribution  d. Net amount [(a) - (b) - (c)]  e. Net Amount as % of Pay	\$ \$	392,630,518 0 1,106,265 391,524,253 23.21%
2.	Statutory Contribution Rates  a. Employee Contribution Rate  b. Employer Contribution Rate  c. State Contribution Rate  d. Total Contribution Rate [(a) + (b) + (c)]  e. State Contribution Amount [2(c) x \$1,687,453,538]	<del></del>	9.63% 9.73%* <u>1.00%</u> 20.36% 16,874,535
3.	Additional Required State Contribution  a. Additional Required State Contribution Rate [1(e) - 2(d), not less than 0%]  b. Additional Required State Contribution Amount	\$	2.85% 48,092,426
4.	Total State Contributions $[1(b) + 1(c) + 2(e) + 3(b)]$ **	\$	66,073,226

<sup>\* 101%</sup> of employee contribution.

<sup>\*\*</sup> Excludes PPSF and 1% of pay appropriations which are transferred to Omaha.

### **ACTUARIAL CONTRIBUTION REQUIREMENT**

C. Schedule of Amortization Bases	Original Amount	July 1, 2012 Remaining Payments	Date of Last Payment	Outstanding Balance as of July 1, 2012	Annual Contribution
2006 Unfunded Actuarial Accrued Liability Base	\$ 845,226,412	24	07/01/2036	\$ 790,491,724	\$ 72,245,083
2007 Unfunded Actuarial Accrued Liability Base	\$(163,793,512)	25	07/01/2037	\$ (155,311,133)	\$ (14,000,125)
2008 Unfunded Actuarial Accrued Liability Base	\$ 54,258,200	26	07/01/2038	\$ 52,099,948	\$ 4,637,678
2009 Unfunded Actuarial Accrued Liability Base	\$ 370,759,908	27	07/01/2039	\$ 360,134,901	\$ 31,690,420
2010 Unfunded Actuarial Accrued Liability Base	\$ 427,955,512	28	07/01/2040	\$ 420,097,794	\$ 36,579,171
2011 Unfunded Actuarial Accrued Liability Base	\$ 287,237,896	29	07/01/2041	\$ 284,702,323	\$ 24,551,440
2012 Unfunded Actuarial Accrued Liability Base	\$ 497,977,442	30	07/01/2042	\$ 497,977,442	\$ 42,564,242
Total				\$2,250,192,999	\$ 198,267,909

### ACTUARIAL (GAIN)/LOSS

A.	Change in Actuarial Accrued Liability		
1.	Actual Actuarial Accrued Liability as of July 1, 2011		\$ 9,039,744,995
2.	Benefits accrued during the 2011/2012 plan year		187,088,193
3.	Benefit payments during the 2011/2012 plan year*		391,133,707
4.	Interest at 8%		 716,476,165
5.	Expected Actuarial Accrued Liability as of July 1, 2012 $[1 + 2 - 3 + 4]$		\$ 9,552,175,646
6.	Decremental (Gain)/Loss by Source (a) Retirement (b) Termination (c) Disability (d) Pre-retirement mortality (e) Post-retirement mortality (f) Salary (g) New entrants / Rehires (h) Data changes/COLA/miscellaneous (i) Total decremental (gain)/loss	\$ 16,736,744 34,442,089 1,585,634 (590,099) 9,329,347 (121,672,215) 17,000,655 (42,650,262)	\$ (85,818,107)
7.	Change in Actuarial Assumptions		 142,799,595
8.	Actual Actuarial Accrued Liability as of July 1, 2012 [5 + 6(i) + 7]		\$ 9,609,157,134

<sup>\*</sup> Net of transfer to Omaha.

### ACTUARIAL (GAIN)/LOSS

В.	Change in Net Actuarial Value of Assets	Amount
1.	Total Actuarial Value of Assets as of July 1, 2011	\$ 7,267,497,259
2.	Contributions (a) Member (b) Employer (c) State appropriation* (d) Total	\$  147,046,053 145,582,040 23,430,550 316,058,643
3.	Benefit Payments*	\$ 391,133,707
4.	Expected Return at 8% on:  (a) Item 1  (b) Item 2(d)  (c) Item 3  (d) Total [(a) + (b) - (c)]	\$ 581,399,781 12,399,134 14,042,995 579,755,920
5.	Expected Total Actuarial Value of Assets at June 30, 2012 [1 + 2(d) - 3 + 4(d)]	\$ 7,772,178,115
6.	Actual Total Actuarial Value of Assets at June 30, 2012	7,358,964,135
7.	Actuarial (Gain)/Loss on Asset Sources [5 – 6]	\$ 413,213,980
8.	Total Actuarial (Gain)/Loss for the 2011/2012 plan year [A(6)(i) + B(7)]	\$ 327,395,873

<sup>\*</sup> Net of transfers to Omaha.

### **ACTUARIAL BALANCE SHEET**

A.	Financial Resources		July 1, 2012
1.	Total Actuarial Value of Assets		\$ 7,358,964,135
2.	(b) Employer 1,22	16,375,276 28,539,029 20,593,385 0	2,565,507,690
3.	Actuarial Liability/(Reserve)		<u>1,396,810,416</u>
4.	Total Assets $[1 + 2(e) + 3]$		\$ 11,321,282,241

В.	Benefit Obligations	•	July 1, 2012
1.	Present Value of Future Benefits  (a) Active members  (b) Inactive members  (c) Retirees, disabilities and beneficiaries  (d) Omaha  (i) active  (ii) deferred vested  (iii) retired  (e) Total	\$6,378,064,960 339,503,518 4,584,703,061 18,177,204 833,498 0	\$11,302,271,539 \$ 19,010,702 \$11,321,282,241

#### **ACCOUNTING INFORMATION**

#### A. Pension Benefit Obligation under the Projected Unit Credit Cost Method

	July 1, 2011	July 1, 2012
Pension Benefit Obligation (PBO)		
Vested PBO		
(a) members currently receiving payments (b) other members	\$ 3,947,029,052	\$ 4,584,703,061
(i) accumulated member contributions	1,640,158,182	1,629,436,024
(ii) employer financed vested	2,675,934,333	<u>2,617,882,526</u>
Total Vested PBO	\$ 8,263,121,567	\$ 8,832,021,611
Nonvested PBO	131,380,263	113,534,768
Total PBO	\$ 8,394,501,830	\$ 8,945,556,379
Total Actuarial Value of Assets	7,267,497,259	7,358,964,135
Unfunded Pension Benefit Obligation (Reserve)	\$ 1,127,004,571	\$ 1,586,592,244
Funded Percentage		
(a) on vested PBO	88.0%	83.3%
(b) on total PBO	86.6%	82.3%

#### B. Change in Pension Benefit Obligation from July 1, 2011 to July 1, 2012

Pension Benefit Obligation at July 1, 2011	\$ 8,394,501,830
Increase/(Decrease) during Period Assumption Changes Benefits Accumulated Benefits Paid* Interest Cost Plan Experience Total Change	\$ 131,897,910 227,230,828 (391,133,707) 675,695,617 (92,636,099) 551,054,549
Pension Benefit Obligation at July 1, 2012	\$ 8,945,556,379

<sup>\*</sup> Excludes transfer of Omaha appropriations.

Exhibits 9 and 10 in the July 1, 2012 and July 1, 2011 valuation reports provide a more detailed summary of the underlying actuarial methods and assumptions used in the calculations of the Pension Benefit Obligation. The benefits valued are those in effect on July 1, 2012 and 2011, respectively, as outlined in Exhibit 8 in the respective valuation report. The determination of the Pension Benefit Obligation has been made in accordance with generally accepted actuarial principles and practices.

#### **ACCOUNTING INFORMATION**

### C. Schedule of Contributions from Employers and other Contributing Entities - Disclosure Requirements under GASB No. 25

	Annual			
Plan Year Ending	School	State	Total	Percentage Contributed
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%

<sup>\*</sup> Includes funding for the Excess Formula Annuity, the Service Annuity, and supplemental funds. Excludes Omaha appropriations.

#### D. Actuarial Assumptions, Method and Additional Information under GASB No. 25

Valuation Date	June 30, 2012
Actuarial Cost Method	Entry Age
Amortization Method	Level dollar amount, closed
Equivalent Single Amortization Period	27 years
Asset Valuation Method	5 year smoothed market
Actuarial Assumptions: Investment rate of return* Projected salary increases*	8.0% 4.0% - 9.0%
*Includes inflation at	3.25%
Cost-of-living adjustment	2.5% with a floor benefit equal to 75% purchasing power of original benefit

#### **ACCOUNTING INFORMATION**

#### E. Schedule of Funding Progress under GASB No. 25

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Accrued Liabilities (UAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAL as a % of Covered Payroll [(b-a)/c]
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%

#### SUMMARY OF MEMBER DATA

A.	Active Members		July 1, 2011	July 1, 2012		
1.	Number of Active Members  (a) Before assumed retirement age  (b) Beyond assumed retirement age  (c) Total		39,344 <u>542</u> 39,886		39,445 <u>32</u> 39,477	
2.	Annual Considered Compensation*  (a) Before assumed retirement age  (b) Beyond assumed retirement age  (c) Total	\$	1,676,129,777 10,607,939 1,686,737,716	\$	1,687,453,538 450,245 1,687,903,783	
3.	Accumulated Contributions	\$	1,461,491,516	\$	1,448,358,354	
4.	Active Member Averages (a) Age (b) Service (c) Compensation (d) Accumulated Contributions	<b>\$</b>	46.1 11.8 42,289 36,642	<b>\$</b>	46.0 11.6 42,757 36,689	
B.	Inactive Members					
1.	Number of inactive members  (a) System inactives  (b) Omaha inactives  (c) Total		19,761 565 20,326		20,291 680 20,971	
2.	Accumulated member contributions (excluding Omaha)	\$	178,666,667	\$	181,077,670	
3.	Inactive member averages (excluding Omaha) (a) Age (vesteds only) (b) Accumulated member contributions	\$	52.8 9,041	\$	52.5 8,924	
C.	Retired Members and Beneficiaries	T		<del>-</del>		
1.	Number of members (a) System retirees (b) Omaha retirees		17,814 0		19,097 0	
2.	Annual benefits - regular  (a) System retirees  (b) Omaha retirees  (c) Total	\$	304,262,698 0 304,262,698	\$	343,981,733 0 343,981,733	
3.	Annual benefits-supplemental (a) System retirees (b) Omaha retirees (c) Total	\$ \$	49,172,462 0 49,172,462	\$	53,633,501 0 53,633,501	

<sup>\*</sup> Annualized prior year pay is increased by the salary scale for each member. Total annualized prior year compensation for 2011 and 2012 was \$1,590,225,983 and \$1,593,184,929, respectively.

#### SUMMARY OF MEMBER DATA

#### D. Distribution of Retired Members and Beneficiaries as of July 1, 2012

Age Range	Number	Annual Benefit	Average Annual Benefit
59 & Under	1,217	\$ 35,376,562	\$ 29,069
60-64	3,733	109,613,666	29,363
65-69	4,645	106,154,271	22,853
70-74	3,431	63,625,816	18,544
75-79	2,540	40,400,050	15,906
80-84	1,896	25,837,725	13,627
85-89	990	11,637,643	11,755
90 & Over	645	4,969,501	7,705
Total	19,097	\$ 397,615,234	\$ 20,821

#### E. Member Data Reconciliation

		]	S		
	Active Members	With Deferred Benefits	Terminated with Balance	Retired Members and Beneficiaries	Total
As of July 1, 2011	39,886	6,111	14,215	17,814	78,026
Changes in status  a) Normal & early retirements b) Became payable c) Deaths d) Nonvested terminations e) Vested terminations f) Contribution refunds g) Beneficiaries in receipt h) Disability retirements i) Return to active service j) Expired benefits k) Data corrections	(1,426) 0 (39) (1,352) (690) (642) 0 (13) 510 0 (2)	0 (228) (25) (86) 692 (174) 0 (5) (148) 0	0 (4) (25) 1,438 (2) (856) 0 (1) (362) 0 (19)	1,426 232 (449) 0 0 0 138 19 0 (93)	0 0 (538) 0 0 (1,672) 138 0 0 (93)
Total changes in status  New entrants	(3,654)	140	169	1,271	(2,074)
a) Without prior service b) With prior service Total new members	3,121 124 3,245	0 3 3	333 0 333	0 <u>12</u> 12	3,454 139 3,593
Net change	(409)	143	502	1,283	1,519
As of July 1, 2012	39,477	6,254**	14,717	19,097	79,545

<sup>\*</sup> Includes increase of 115 Omaha deferred vested members.

<sup>\*\*</sup> Includes 680 Omaha deferred vested members eligible for a service annuity benefit.

#### (cont'd)

#### SUMMARY OF MEMBER DATA

#### F. Age and Service Distribution of Active Members as of July 1, 2012

Age Last Birthday		0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
15-19	Number	41	0	0	0	0	0	0	0	41
	Total Salary	\$ 406,533	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 406,533
	Average Salary	\$ 9,915	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 9,915
20-24	Number	1,180	13	0	0	0	0	0	0	1,193
	Total Salary	\$ 27,461,856	\$ 265,958	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 27,727,814
	Average Salary	\$ 23,273	\$ 20,458	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 23,242
25-29	Number	2,868	1,011	1	0	0	0	0	0	3,880
	Total Salary	\$ 93,404,525	\$ 42,438,913	\$ 21,549	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 135,864,987
	Average Salary	\$ 32,568	\$ 41,977	\$ 21,549	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 35,017
30-34	Number	1,417	2,055	571	3	0	0	0	0	4,046
	Total Salary	\$ 42,386,047	\$ 94,822,551	\$ 30,230,283	\$ 118,263	\$ 0	\$ 0	\$ 0	\$ 0	\$ 167,557,144
	Average Salary	\$ 29,913	\$ 46,142	\$ 52,943	\$ 39,421	\$ 0	\$ 0	\$ 0	\$ 0	\$ 41,413
35-39	Number	1,227	959	1,559	389	0	0	0	0	4,134
	Total Salary	\$ 30,161,382	\$ 39,659,581	\$ 85,283,942	\$ 23,203,064	\$ 0	\$ 0	\$ 0	\$ 0	\$ 178,307,969
	Average Salary	\$ 24,581	\$ 41,355	\$ 54,704	\$ 59,648	\$ 0	\$ 0	\$ 0	\$ 0	\$ 43,132
40-44	Number	1,292	954	892	1,193	366	1	0	0	4,698
	Total Salary	\$ 29,287,102	\$ 33,995,029	\$ 42,876,696	\$ 71,864,863	\$ 23,064,746	\$ 37,049	\$ 0	\$ 0	\$ 201,125,485
	Average Salary	\$ 22,668	\$ 35,634	\$ 48,068	\$ 60,239	\$ 63,018	\$ 37,049	\$ 0	\$ 0	\$ 42,811
45-49	Number	1,122	1,065	873	606	944	367	1	0	4,978
	Total Salary	\$ 24,945,337	\$ 32,424,215	\$ 35,533,341	\$ 32,434,474	\$ 58,462,931	\$ 23,536,931	\$ 51,948	\$ 0	\$ 207,389,177
	Average Salary	\$ 22,233	\$ 30,445	\$ 40,703	\$ 53,522	\$ 61,931	\$ 64,133	\$ 51,948	\$ 0	\$ 41,661
50-54	Number	991	1,040	1,047	688	661	952	560	1	5,940
	Total Salary	\$ 20,871,099	\$ 30,971,908	\$ 37,920,948	\$ 30,524,572	\$ 36,085,071	\$ 59,052,130	\$ 36,203,752	\$ 41,576	\$ 251,671,056
	Average Salary	\$ 21,061	\$ 29,781	\$ 36,219	\$ 44,367	\$ 54,592	\$ 62,030	\$ 64,650	\$ 41,576	\$ 42,369
55-59	Number	784	691	814	695	731	552	686	346	5,299
	Total Salary	\$ 17,380,337	\$ 20,561,146	\$ 29,568,142	\$ 27,489,652	\$ 34,693,292	\$ 30,726,422	\$ 44,625,752	\$ 22,729,102	\$ 227,773,845
	Average Salary	\$ 22,169	\$ 29,756	\$ 36,325	\$ 39,553	\$ 47,460	\$ 55,664	\$ 65,052	\$ 65,691	\$ 42,984
60-64	Number	639	532	436	468	543	369	273	412	3,672
	Total Salary	\$ 14,881,591	\$ 16,072,986	\$ 15,049,941	\$ 18,689,817	\$ 25,134,204	\$ 19,175,950	\$ 15,579,571	\$ 27,614,015	\$ 152,198,075
	Average Salary	\$ 23,289	\$ 30,212	\$ 34,518	\$ 39,936	\$ 46,288	\$ 51,967	\$ 57,068	\$ 67,024	\$ 41,448
65-69	Number	512	324	226	140	135	115	73	71	1,596
	Total Salary	\$ 7,891,841	\$ 7,355,268	\$ 5,886,399	\$ 4,458,913	\$ 5,029,544	\$ 4,928,235	\$ 2,999,082	\$ 4,613,562	\$ 43,162,844
TOTAL	Average Salary	\$ 15,414	\$ 22,701	\$ 26,046	\$ 31,849	\$ 37,256	\$ 42,854	\$ 41,083	\$ 64,980	\$ 27,044
TOTAL	Number	12,073	8,644	6,419	4,182	3,380	2,356	1,593	830	39,477
	Total Salary	\$ 309,077,650	\$ 318,567,555	\$ 282,371,241	\$ 208,783,618	\$ 182,469,788	\$ 137,456,717	\$ 99,460,105	\$ 54,998,255	\$ 1,593,184,929
	Average Salary	\$ 25,601	\$ 36,854	\$ 43,990	\$ 49,924	\$ 53,985	\$ 58,343	\$ 62,436	\$ 66,263	\$ 40,357

Total salary is reported annualized prior year pay. Totals may not add due to rounding.

#### SUMMARY OF MEMBER DATA

#### H. Reconciliation of Data Submitted By NPERS and Valuation Data

	Active Members	Inactive Members	Retired Members, Beneficiaries, and Disabled	Total
Number of Data Records Submitted By NPERS	40,160	19,874	18,831	78,865
Additions a) 2012 Active b) 2011 Balance Only c) 2011 Deferred Vested d) 2011 Retired e) 2011 Beneficiary f) 2011 Death with Beneficiary g) Refund/Death after Valuation Date h) Omaha Total	7 0 0 0 0 0 0 0	0 0 0 0 0 0 119 680 799	176 0 0 87 1 2 0 0	183 0 0 87 1 2 119 680 1,072
Subtractions	,	799	200	1,072
a) Also Listed as Deaths     b) Also Listed as Inactives     or Retirees	(2) (358)	0	0	(2) (358)
<ul> <li>c) Also Listed as Contribution Refunds</li> <li>d) Benefits Expired</li> <li>e) Not a member</li> <li>f) Also Listed as Active</li> <li>g) Assumed Terminated</li> </ul>	0 0 (6) 0	0 0 (19) (7)	0 0 0 0	0 0 (25) (7)
based on Date of Last Contribution	<u>(324)</u>	<u>324</u>	_0	_0
Total	(690)	298	0	(392)
Net change	(683)	1,097	266	680
Number of Members Included in the Valuation as of July 1, 2012	39,477	20,971	19,097	79,545

#### FORECAST OF EXPECTED DISBURSEMENTS

		Retired and Disabled	
Plan Year Ending	Active Employees	Members and	Total
June 30	Active Employees	Beneficiaries	Total
2013	\$ 25,485,332	\$ 395,740,449	\$ 421,225,781
2014	57,270,382	399,801,978	457,072,360
2015	90,493,900	404,093,366	494,587,266
2016	125,077,970	407,588,116	532,666,086
2017	161,301,441	410,577,310	571,878,751
2018	199,542,284	413,014,863	612,557,147
2019	238,939,310	414,865,892	653,805,202
2020	279,547,794	416,027,805	695,575,599
2021	321,600,567	416,304,172	737,904,739
2022	365,143,604	415,646,530	780,790,134
2023	410,392,883	414,032,325	824,425,208
2024	457,226,583	411,684,586	868,911,169
2025	505,301,654	408,239,141	913,540,795
2026	554,904,552	403,390,756	958,295,308
2027	605,791,273	397,126,076	1,002,917,349
2028	657,565,229	390,250,430	1,047,815,659
2029	710,836,864	382,803,694	1,093,640,558
2030	765,742,849	374,120,887	1,139,863,736
2031	821,447,929	364,187,068	1,185,634,997
2032	878,392,082	352,982,357	1,231,374,439
2033	936,569,522	340,504,549	1,277,074,071
2034	993,788,022	326,771,604	1,320,559,626
2035	1,049,850,121	311,830,041	1,361,680,162
2036	1,106,193,302	295,741,707	1,401,935,009
2037	1,163,243,666	278,604,834	1,441,848,500
2038	1,219,609,552	260,558,657	1,480,168,209
2039	1,274,909,936	241,756,121	1,516,666,057
2040	1,328,475,701	222,417,368	1,550,893,069
2041	1,379,045,677	202,756,824	1,581,802,501
2042	1,426,090,683	183,049,671	1,609,140,354

**Note:** These amounts exclude distributions for vested inactive members eligible to receive future benefit payments. Benefit amounts for these members have not yet been determined.

#### 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.

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

**Definitions** 

Final average earnings

The average of the highest three fiscal years after July 1, 1968

of pensionable pay 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 earnings defined in

Code 401(a)(17).

Fiscal year Twelve month period ending June 30.

Members contribute 8.88% of pay, increasing to 9.78% of pay

as of September 1, 2012. The School Districts contribute at a rate equal to 101% of the members' rate. 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. Effective September 1, 2017, the member contribution rate will

decrease to 7.28%.

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.

#### SUMMARY OF PLAN PROVISIONS

(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.

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. Also provided is a minimum floor benefit equal to 75% of the purchasing power of the original benefit.

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.

#### SUMMARY OF PLAN PROVISIONS

Postponed retirement Retire after NRD.

Pre-retirement spouse benefit Death prior to retirement.

#### **Monthly Benefits Paid Upon the Following Events**

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 precedes age 65 (member 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 Sur

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:

- (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.

#### **SUMMARY OF PLAN PROVISIONS**

Forms of payment

Pre-retirement death benefits are payable only as described above.

Monthly pension benefits are paid under the form of payment elected by the retiree at retirement. Payment forms include: life annuity, five 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.

#### **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.

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

- 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.
- 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. <u>Expense Fund</u> 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.



#### SUMMARY OF PLAN PROVISIONS

#### **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. 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.

#### **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, 2012

No future changes in plan provisions were recognized in determining the GASB 25 funded status and in determining the actuarial soundness of statutory contribution levels.

#### **Changes in Plan Provisions Since the Prior Year**

There have been no changes in the plan provisions since the last actuarial valuation as of July 1, 2011.



#### Summary of Actuarial Methods and Procedures as of July 1, 2012

#### A. ACTUARIAL METHODS

 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 under age 80. The actuarial assumptions shown in Exhibit 10 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.

Under this 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.

#### SUMMARY OF ACTUARIAL METHODS AND PROCEDURES AS OF JULY 1, 2012

- **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 at 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 on Actuarial Value. The Actuarial Value is determined using the total assets of the System, and is then allocated on a pro-rata basis to each reserve fund and account using Market Value. Effective July 1, 2000, the expected return on Actuarial Value includes interest on the previous year's unrecognized return.

**3.** Calculation of Pension Benefit Obligation: The method used to determine the Pension Benefit Obligation was the Projected Unit Credit Actuarial Cost Method without service proration. Under this method, the benefit is based on salary projected to assumed termination or retirement and service as of the valuation date.



#### Summary of Actuarial Methods and Procedures as of July 1, 2012

#### **B. VALUATION PROCEDURES**

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

The compensation amounts used in the projection of benefits and liabilities for active members were determined from the prior plan year compensation increased one year with the salary scale. Compensation for new members with under a year of service were annualized by dividing reported salary by the portion of year worked. In computing accrued benefits, average compensation was determined by applying the salary scale assumption to most recent compensation to construct past salary history.

Projected benefits were limited by the dollar limitation required by the Internal Revenue Code Section 415 as it applies to governmental plans. Compensation was limited by Section 401(a)(17).

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.

#### **Changes in Methods and Procedures Since the Prior Year**

There have been no changes in the actuarial methods or procedures since the last actuarial valuation as of July 1, 2011.



#### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2012

#### **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. Interest on Employee Contributions 4.25% per annum, compounded annually.

6. Increase on Compensation 3.25% per annum on the 401(a)(17) compensation limit

#### **DEMOGRAPHIC ASSUMPTIONS**

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

moutolity improvement

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 1994 Group Annuity Mortality Table, projected to

and beneficiaries 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)

#### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2012

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

	Pre-retirement Mortality					
	Mortal	ity Rate	Life Expecta	ncy (Years)		
Sample Age	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		

	Post-retirement Mortality			
	Mortality Rate		Life Expecta	ancy (Years)
Sample Age	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:

	Disabled Mortality		
Sample Age	Mortality Rate	Life Expectancy (Years)	
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	

#### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2012

2. Retirement

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

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

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

#### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2012

3. Termination

Rates vary by service. Sample rates are as follows:

Rates by Service			
Years	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

#### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2012

#### **OTHER ASSUMPTIONS**

1. Form of Payment Service annuity - Life annuity

Formula annuity - Five year certain and life

annuity.

2. Marital Status

a. Percent married 85% married

b. Spouse's age 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 – 2.5% per annum,

compounded annually, and 3.25% per annum, compounded annually, after reaching 75%

purchasing power floor benefit.

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

See Executive Summary, item 8, for changes made as a result of the experience analysis concluded in August 2012 based on experience from July 1, 2006 through June 30, 2011. These changes affected healthy and disabled mortality, salary increases, inflation, retirement rates, withdrawal rates, disability rates and assumed interest credited on employee contributions. The changes were made to more accurately reflect expected future experience.



#### **GLOSSARY OF TERMS**

Actuarial Accrued Liability Total accumulated cost to fund pension benefits arising

from service in all prior years.

Actuarial Cost Method Technique used to assign or allocate, in a systematic and

consistent manner, the expected cost of a pension plan for a group of participants to the years of service that give rise

to that cost.

Actuarial Present Value

of Future Benefits

Amount which, together with future interest, is expected to

be sufficient to pay all future benefits.

Actuarial Valuation Study of probable amounts of future pension benefits and

the necessary amount of contributions to fund those

benefits.

Actuary Person who performs mathematical calculations pertaining

to pension and insurance benefits based on specific

procedures and assumptions.

Annual Required Contribution Disclosure measure of annual pension cost.

GASB 25 and GASB 27 Governmental Accounting Standards Board Statement

numbers 25 and 27 which specify how the Net Pension Obligation and Annual Required Contribution are to be

calculated.

Normal Cost That portion of the actuarial present value of benefits

assigned to a particular year in respect to an individual

participant or the plan as a whole.

Unfunded Actuarial

Accrued Liability

The portion of the actuarial accrued liability not offset by

plan assets.

Vested Benefits Benefits which are unconditionally guaranteed regardless

of employment status.