Fifty-ninth Actuarial Report for State Fiscal Year Ending June 30, 2013 and System Plan Year Beginning July 1, 2011

#### **December 2011**

Submitted By:
Buck Consultants
1200 Seventeenth Street, Suite 1200
Denver, CO 80202



#### **TABLE OF CONTENTS**

#### **LETTER OF CERTIFICATION**

#### **SUMMARY OF ACTUARIAL REPORT**

#### **EXECUTIVE SUMMARY**

Exhibit <u>Number</u>	<u>Title</u>	<u>Page</u>
1	System Assets	1
2	Actuarial Contribution Requirement	4
3	Actuarial (Gain)/Loss	7
4	Actuarial Balance Sheet	9
5	Accounting Information	10
6	Summary of Member Data	13
7	Forecast of Expected Disbursements	17
8	Summary of Plan Provisions	18
9	Summary of Actuarial Methods and Procedures as of July 1, 2011 $\_$	23
10	Summary of Actuarial Assumptions as of July 1, 2011	26
11	Glossary of Terms	31





December 7, 2011

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, 2011, 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, 2011.

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.

Based on the results of our actuarial valuation, an additional contribution to the School Retirement System will keep it actuarially sound. 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 2012/2013 fiscal year, an additional contribution of \$23,465,817 is necessary to meet the actuarially required contribution for the Nebraska School Retirement System, and a contribution of \$1,030,017 is required to fund the Omaha Service Annuity.

The undersigned are Enrolled Actuaries, 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
David H. Slaskinsku

David H. Slishinsky, A.S.A., E.Å., M.A.A.A.

Principal and Consulting Actuary

Douglas J. Fiddler, A.S.A., E.A., M.A.A.A.

Director, Retirement Actuary

### SUMMARY OF ACTUARIAL REPORT FOR CONTRIBUTION REQUIREMENTS AND FUNDED STATUS FOR PLAN YEAR 2011/2012

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, 2013;
- 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, 2010 and ending June 30, 2011.

The 2011 actuarial valuation is based upon the plan provisions as of July 1, 2011, as described in Exhibit 8. The actuarial methods and assumptions are described in Exhibits 9 and 10.

Highlights from the current valuation:

- 1. Under Legislative Bill 382 passed during the 2011 Legislative session, the member contribution rate increased from 8.28% to 8.88% on September 1, 2011. Effective September 1, 2012, the member contribution rate increases to 9.78%. Effective September 1, 2017, the member contribution rate decreases to 7.28%. The employer contribution rate match remains unchanged at 101% of the member contribution rate. The current State of Nebraska contribution rate of 1% remains in effect until July 1, 2017, at which time it decreases to 0.7%.
- 2. An additional State contribution of \$23,465,817 is required for the 2012/2013 fiscal year to pay the normal cost and amortize any unfunded liabilities for the Nebraska School System. A contribution of \$1,030,017 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 \$892,080,392 in funding. This is an increase of \$35,436,726 over last year's liability of \$856,643,666.
- 3. The annual rate of return on Market Value was 23.3%, resulting in a Market Value of \$7,263,954,832 as of July 1, 2011. A loss was experienced on the Actuarial Value of Assets during the 2010/2011 plan year. The rate of return on Actuarial Value of 4.0% fell short of the 8.0% assumed investment return rate by 4.0%, resulting in a decrease to the Actuarial Value of \$280,093,290, and an Actuarial Value of \$7,267,497,259 as of July 1, 2011. The funded ratio based on disclosure requirements under GASB No. 25 using the Actuarial Value of Assets and the Actuarial Accrued Liability decreased from 82.4% as of July 1, 2010 to 80.4% as of July 1, 2011 (see page 12). The reconciliation of these asset values can be found in Exhibit 1 on page 3.
- 4. The plan experienced a decremental gain over the period, primarily due to salary increases less than assumed. The actuarial accrued liability decreased by \$17,051,745 as a result of favorable decremental experience.
- 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, 2010 actuarial valuation, the funded percentage on Actuarial Value decreased from 88.9% to 86.6%.



#### **EXECUTIVE SUMMARY**

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

The 2011 actuarial valuation results are based upon the plan provisions as of July 1, 2011 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 September 1, 2011. The School District's funding of liabilities is equal to 101% of the employee contribution rate. The State contributes 1.0% of covered pay and an annual appropriation of \$5,639,235, as well as any additional required funding. On September 1, 2012, the member contribution rate will increase to 9.78%. 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 19.21% to 20.45% of pay from the 2010/2011 plan year to the 2011/2012 plan year. A history of required contribution rates is shown below. For fiscal years 2001/2002 through 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*				
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			
2001/2002	9.15%		0			

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

#### **EXECUTIVE SUMMARY**

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

Based on the 2011 actuarial valuation, the net required contribution rate of 20.05% is greater than the actual contribution rate of 18.65%. Therefore, an additional State contribution is required for the 2012/2013 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, 2010	July 1, 2011	Annual Rate of Return
(a) Market value	\$ 5,940,401,645	\$ 7,263,954,832	23.3%
(b) Actuarial value, an adjusted value intended to reduce the effect of market fluctuations (Exhibit 1B)	\$ 7,040,908,599	\$ 7,267,497,259	4.0%

#### **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, 2010	July 1, 2011
(a)	Present value of future benefits	\$ 10,042,768,975	\$ 10,594,771,409
(b)	Net actuarial value of assets	7,040,908,599	7,267,497,259
(c)	Present value of future member contributions	1,006,601,685	1,148,813,343
(d)	Present value of future employer contributions	1,016,667,702	1,160,301,476
(e)	Present value of future State contributions	107,414,467	116,022,690
(f)	Present value of future PPSF contributions	 14,532,856	 10,056,249
(g)	Actuarial Liability/(Reserve) [(a) - (b) - (c) - (d) - (e) - (f)]	\$ 856,643,666	\$ 892,080,392

#### **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, 2010	July 1, 2011
(a) Pension Benefit Obligation i) retirees, disabled members and beneficiaries receiving benefits and deferred vested members not yet receiving benefits	\$ 3,961,410,868	\$ 4,319,145,056
ii) active members iii) total pension benefit obligation	3,962,057,337 \$ 7,923,468,205	4,075,356,774 \$ 8,394,501,830
(b) Net assets available for benefits (actuarial value)	<u>7,040,908,599</u>	<u>7,267,497,259</u>
(c) Unfunded Pension Benefit Obligation/(Reserve)	\$ 882,559,606	\$ 1,127,004,571
(d) Funded percentage on actuarial value of assets [(b) ÷ (a)(iii)]	88.9%	86.6%

#### **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:

Formula Annuity Benefit	July 1, 2010	July 1, 2011		
(a) Benefit accrual cost amount	\$ 181,308,721	\$ 187,088,193		
(b) Annual compensation before assumed normal retirement age	\$ 1,626,871,154	\$ 1,676,129,777		
(c) Benefit accrual cost rate as a level percentage of compensation [(a) ÷ (b)]	11.145%	11.162%		

Ser	Service Annuity Benefit		luly 1, 2010	July 1, 2011
(a)	Annual Actuarial Contribution Amount Allocated to the Service Annuity			
	(i) NPERS members	\$	0	\$ 0
	(ii) Omaha members		967,14 <u>5</u>	 1,030,017
	(iii) Total	\$	967,145	\$ 1,030,017
(b)	Number of active members before assumed retirement age			
	(i) NPERS members		39,227	39,344
	(ii) Omaha members		7,35 <u>4</u>	 7, <u>395</u>
	(iii) Total		46,581	46,739
(c)	Benefit accrual cost per active member as a level dollar amount			
	(i) NPERS members	\$	63.50	\$ 63.39
	(ii) Omaha members	\$	72.36	\$ 72.25
	(iii) Total	\$	64.90	\$ 64.79

#### **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 actuarial assumptions since the last actuarial valuation as of July 1, 2010.

The following plan provision changes were reflected as of July 1, 2011:

Under Legislative Bill 382 passed during the 2011 Legislative session, the member contribution rate increased from 8.28% to 8.88% on September 1, 2011. Effective September 1, 2012, the member contribution rate increases to 9.78%. Effective September 1, 2017, the member contribution rate decreases to 7.28%. The employer contribution rate match remains unchanged at 101% of the member contribution rate. The current State of Nebraska contribution rate of 1% remains in effect until July 1, 2017, at which time it decreases to 0.7%.



#### **SYSTEM ASSETS**

A.	Summary of Assets	 arket Value as June 30, 2010		arket Value as June 30, 2011
1.	Cash and Equivalents	\$ 4,719,289	\$	2,295,137
2.	Investments	5,926,977,688		7,282,678,697
3.	Capital Assets	2,503,973		1,066,420
4.	Receivables and Prepaids	247,232,258		545,856,545
5.	Accounts Payable	(241,031,563)		(567,941,967)
6.	Net Assets Considered [1 + 2 + 3 + 4 + 5]	\$ 5,940,401,645	\$ 7	7,263,954,832

B.	Development of Actuarial Value of Assets	Amount
1.	Actuarial Value of Assets as of July 1, 2010	\$ 7,040,908,599
2.	Unrecognized Return as of July 1, 2010	\$ (1,100,506,954)
3.	Contributions	
	(a) Member (includes purchased service)	\$ 137,301,890
	(b) Employer	135,328,339
	(c) State appropriations*	 <u>22,875,093</u>
	(d) Total $[(a) + (b) + (c)]$	\$ 295,505,322
4.	Benefit Payments (including transfers to Omaha)	\$ 351,083,806
5.	Expected Return at 8% on:	
	(a) Item 1	\$ 563,272,688
	(b) Item 2	(88,040,556)
	(c) Item 3(d)	11,592,817
	(d) Item 4	 12,605,071
	(e) Total $[(a) + (b) + (c) - (d)]$	\$ 474,219,878
6.	Actual Return on Market Value for 2010/2011 Plan Year,	
	net of expenses	\$ 1,379,131,671
7.	Return to be Spread for 2010/2011 Plan Year [6 - 5(e)]	\$ 904,911,793

<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, 2011	\$ 7,263,954,832

#### 9. Return to be Spread

Plan Year	Return to be Spread	Unrecognized Percent	Unrecognized Return
2010/2011	\$ 904,911,793	80%	\$ 723,929,434
2009/2010	294,240,835	60%	176,544,501
2008/2009	(1,778,316,770)	40%	(711,326,708)
2007/2008	(963,448,268)	20%	(192,689,654)
Total			\$ (3,542,427)

#### 10. Total Actuarial Value of Assets at July 1, 2011 [8 – 9]

\$7,267,497,259

11. Asset Ratios

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

100.0%

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

100.0%

### System Assets

C. Change in Asset Values During 2010/2011	Actuarial Value	Market Value
1. Total asset value as of July 1, 2010  (a) Reported last year  (b) Adjustment  (c) Reported this year [(a) + (b)]	\$ 7,040,908,599 N/A \$ 7,040,908,599	\$ 5,940,401,645 2 \$ 5,940,401,647
2. Contributions for 2010/2011  (a) Member contributions paid during the year  (b) Employer contributions paid during the year  (c) State appropriations for the year*  (d) Contributions for 2010/2011 [(a) + (b) + (c)]	\$ 137,301,890 135,328,339 26,793,772 \$ 299,424,001	\$ 137,301,890 135,328,339 26,793,772 \$ 299,424,001
3. Disbursements for 2010/2011  (a) Benefit payments**  (b) Expenses and fees  (c) Transferred Omaha appropriation  (d) Disbursements for 2010/2011 [(a) + (b) + (c)]	\$ 351,083,806 23,001,155 3,918,679 \$ 378,003,640	\$ 351,083,806 23,001,155 3,918,679 \$ 378,003,640
4. Investment return for 2010/2011 (a) Investment income (b) Securities lending income (c) Securities lending expense (d) Net appreciation/(depreciation) in fair value	\$ 113,544,103 2,272,101 (738,481)	\$ 113,544,103 2,272,101 (738,481)
of investments (e) Other (f) Unrecognized return including adjustment (g) Investment return for 2010/2011 [(a) + (b) + (c) + (d) + (e) + (f)]	1,287,025,866 29,235 (1,096,964,525) \$ 305,168,299	1,287,025,866 29,235 <u>N/A</u> \$ 1,402,132,824
5. Total asset value as of July 1, 2011 [1(c) + 2(d) - 3(d) + 4(g)]	\$ 7,267,497,259	\$ 7,263,954,832
Approximate rate of investment return,     net of expenses	4.0%	23.3%

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

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

### **ACTUARIAL CONTRIBUTION REQUIREMENT**

	July 1, 2011		
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	\$ 6,257,998,235 371,422,158 3,947,029,052 \$ 10,576,449,445	\$ 17,628,118 693,846 0 \$ 18,321,964	\$ 6,275,626,353 372,116,004 3,947,029,052 \$ 10,594,771,409
2. Present Value of Future Normal Costs	1,552,586,027	2,440,387	<u>1,555,026,414</u>
3. Total Actuarial Accrued Liability [1(d) - 2]	\$ 9,023,863,418	\$ 15,881,577	\$ 9,039,744,995
4. Actuarial Value of Assets	7,257,256,381	10,240,878	7,267,497,259
5. Unfunded Actuarial Accrued Liability [3 - 4]	\$ 1,766,607,037	\$ 5,640,699	\$ 1,772,247,736
6. Annual Contribution to Amortize Unfunded Actuarial Accrued Liability Bases (see page 6) (a) Amount (b) Amount as % of Pay	\$ 155,207,951 9.26%	\$ 495,716 0.03%	\$ 155,703,667 9.29%
7. Annual Normal Cost (a) Amount (b) Amount as % of Pay	\$ 186,553,892 11.13%	\$ 534,301 0.03%	\$ 187,088,193 11.16%
8. Total Annual Actuarially Required Contribution (a) Amount [6(a) + 7(a)] (b) Amount as % of Pay	\$ 341,761,843 20.39%	\$ 1,030,017 0.06%	\$ 342,791,860 20.45%

### **ACTUARIAL CONTRIBUTION REQUIREMENT**

В.	Development of Additional State Contributions for Nebraska School System Fiscal Year 2012/2013		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	\$ \$	342,791,860 5,639,235 1,030,017 336,122,608 20.05%
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 \$1,676,129,777]	<del></del>	8.78% 8.87%* 1.00% 18.65% 16,761,298
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	\$	1.40% 23,465,817
4.	Total State Contributions $[1(b) + 1(c) + 2(e) + 3(b)]$ **	\$	46,896,367

<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, 2011 Remaining Payments	Date of Last Payment	Outstanding Balance as of July 1, 2011	Annual Contribution
2006 Unfunded Actuarial Accrued Liability Base	\$ 845,226,412	25	07/01/2036	\$ 801,454,645	\$ 72,245,083
2007 Unfunded Actuarial Accrued Liability Base	\$(163,793,512)	26	07/01/2037	\$ (157,278,232)	\$ (14,000,125)
2008 Unfunded Actuarial Accrued Liability Base	\$ 54,258,200	27	07/01/2038	\$ 52,703,301	\$ 4,637,678
2009 Unfunded Actuarial Accrued Liability Base	\$ 370,759,908	28	07/01/2039	\$ 363,952,363	\$ 31,690,420
2010 Unfunded Actuarial Accrued Liability Base	\$ 427,955,512	29	07/01/2040	\$ 424,177,763	\$ 36,579,171
2011 Unfunded Actuarial Accrued Liability Base	\$ 287,237,896	30	07/01/2041	\$ 287,237,896	\$ 24,551,440
Total				\$1,772,247,736	\$ 155,703,667

### ACTUARIAL (GAIN)/LOSS

A.	Change in Actuarial Accrued Liability			
1.	Actual Actuarial Accrued Liability as of July 1, 2010		\$	8,542,119,000
2.	Benefits accrued during the 2010/2011 plan year			181,308,721
3.	Benefit payments during the 2010/2011 plan year*			351,083,806
4.	Interest at 8%		_	677,877,278
5.	Expected Actuarial Accrued Liability as of July 1, 2011 $[1 + 2 - 3 + 4]$		\$	9,050,221,193
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	\$ (14,724) 39,925,277 1,176,926 (491,851) 7,532,343 (76,772,522) 13,274,225 (1,681,419)	\$	(17,051,745)
7.	Change in Plan Provisions			6,575,547
8.	Actual Actuarial Accrued Liability as of July 1, 2011 [5 + 6(i) + 7]		\$	9,039,744,995

<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, 2010	\$ 7,040,908,599
2.	Contributions (a) Member (b) Employer (c) State appropriation* (d) Total	\$  137,301,890 135,328,339 22,875,093 295,505,322
3.	Benefit Payments*	\$ 351,083,806
4.	Expected Return at 8% on: (a) Item 1 (b) Item 2(d) (c) Item 3 (d) Total [(a) + (b) - (c)]	\$ 563,272,688 11,592,817 12,605,071 562,260,434
5.	Expected Total Actuarial Value of Assets at June 30, 2011 [1 + 2(d) - 3 + 4(d)]	\$ 7,547,590,549
6.	Actual Total Actuarial Value of Assets at June 30, 2011	7,267,497,259
7.	Actuarial (Gain)/Loss on Asset Sources [5 – 6]	\$ 280,093,290
8.	Total Actuarial (Gain)/Loss for the 2010/2011 plan year [A(6)(i) + B(7)]	\$ 263,041,545

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

### ACTUARIAL BALANCE SHEET

A.	Financial Resources	July 1, 2011
1.	Total Actuarial Value of Assets	\$ 7,267,497,259
2.	(b) Employer 1,10 (c) State 1	48,813,343 60,301,476 16,022,690 10,056,249 2,435,193,758
3.	Actuarial Liability/(Reserve)	<u>892,080,392</u>
4.	Total Assets [1 + 2(e) + 3]	\$ 10,594,771,409

B.	Benefit Obligations		July 1, 2011
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	\$6,257,998,235 371,422,158 3,947,029,052 17,628,118 693,846 0	\$10,576,449,445 \$ 18,321,964 \$10,594,771,409

#### **ACCOUNTING INFORMATION**

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

	July 1, 2010	July 1, 2011
Pension Benefit Obligation (PBO)		
Vested PBO		
(a) members currently receiving payments (b) other members	\$ 3,585,655,502	\$ 3,947,029,052
(i) accumulated member contributions	1,611,665,624	1,640,158,183
(ii) employer financed vested	<u>2,597,102,802</u>	<u>2,675,934,332</u>
Total Vested PBO	\$ 7,794,423,928	\$ 8,263,121,567
Nonvested PBO	129,044,277	131,380,263
Total PBO	\$ 7,923,468,205	\$ 8,394,501,830
Total Actuarial Value of Assets	7,040,908,599	7,267,497,259
Unfunded Pension Benefit Obligation (Reserve)	\$ 882,559,606	\$ 1,127,004,571
Funded Percentage		
(a) on vested PBO	90.3%	88.0%
(b) on total PBO	88.9%	86.6%

#### B. Change in Pension Benefit Obligation from July 1, 2010 to July 1, 2011

Pension Benefit Obligation at July 1, 2010	\$ 7,923,468,205
Increase/(Decrease) during Period Plan Provision Changes Benefits Accumulated Benefits Paid* Interest Cost Plan Experience Total Change	\$ 551,731 219,921,044 (351,083,806) 638,866,069 (37,221,413) 471,033,625
Pension Benefit Obligation at July 1, 2011	\$ 8,394,501,830

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

Exhibits 9 and 10 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, 2011 and 2010, respectively, as outlined in Exhibit 8. 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 Required Contributions*					
Plan Year Ending	9	School		State		Total	Percentage Contributed
June 30, 2011	\$ 13	5,328,339	\$	41,746,797	\$	177,075,136	89%
June 30, 2010	12	8,845,427		21,380,352		150,225,779	100%
June 30, 2009	11	0,028,942		20,620,548		130,649,490	100%
June 30, 2008	10	5,977,554		15,832,941		121,810,495	100%
June 30, 2007	10	7,573,519		15,219,871		122,793,390	100%
June 30, 2006	10	2,089,105		28,056,703		130,145,808	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, 2011
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% 4.5% - 7.46%
*Includes inflation at	3.5%
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, 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%

#### SUMMARY OF MEMBER DATA

A.	Active Members		July 1, 2010		July 1, 2011
1.	Number of Active Members  (a) Before assumed retirement age  (b) Beyond assumed retirement age  (c) Total		39,227 <u>537</u> 39,764		39,344 <u>542</u> 39,886
2.	Annual Considered Compensation*  (a) Before assumed retirement age  (b) Beyond assumed retirement age  (c) Total	\$	1,626,871,154 10,821,529 1,637,692,683	\$	1,676,129,777 10,607,939 1,686,737,716
3.	Accumulated Contributions	\$	1,432,712,186	\$	1,461,491,516
4.	Active Member Averages (a) Age (b) Service (c) Compensation (d) Accumulated Contributions	\$ \$	46.1 11.7 41,185 36,030	\$ \$	46.1 11.8 42,289 36,642
В.	Inactive Members				
1.	Number of inactive members (including Omaha)		19,762		20,326
2.	Accumulated member contributions	\$	178,953,438	\$	178,666,667
3.	Inactive member averages (excluding Omaha) (a) Age (vesteds only) (b) Accumulated member contributions	\$	52.6 9,316	\$	52.8 9,041
C.	Retired Members and Beneficiaries				
1.	Number of members (a) System retirees (b) Omaha retirees		16,912 0		17,814 0
2.	Annual benefits - regular  (a) System retirees  (b) Omaha retirees  (c) Total	\$	277,828,150 0 277,828,150	\$	304,262,698 0 304,262,698
3.	Annual benefits-supplemental (a) System retirees (b) Omaha retirees (c) Total	\$	42,036,958 0 42,036,958	\$	49,172,462 0 49,172,462

<sup>\*</sup> Annualized prior year pay is increased by the salary scale for each member. Total annualized prior year compensation for 2010 and 2011 was \$1,543,930,532 and \$1,590,225,983, respectively.

#### SUMMARY OF MEMBER DATA

#### D. Distribution of Retired Members and Beneficiaries as of July 1, 2011

Age Range	Number	Δ	nnual Benefit	Ave	rage Annual Benefit
59 & Under	1,237	\$	34,165,420	\$	27,620
60-64	3,489		98,350,163		28,189
65-69	4,104		88,175,753		21,485
70-74	3,139		57,179,238		18,216
75-79	2,486		37,516,283		15,091
80-84	1,777		22,795,468		12,828
85-89	956		10,690,041		11,182
90 & Over	626		4,562,794		7,289
Total	17,814	\$	353,435,160	\$	19,840

#### E. Member Data Reconciliation

		]			
	Active Members	With Deferred Benefits	Terminated with Balance	Retired Members and Beneficiaries	Total
As of July 1, 2010	39,764	6,117	13,645	16,912	76,438
Changes in status					
a) Normal & early retirements	(965)	0	0	965	0
b) Became payable	0	(243)	(2)	245	0
c) Deaths	(38)	(17)	(19)	(449)	(523)
d) Nonvested terminations	(1,357)	0	1,357	0	0
e) Vested terminations	(604)	604	0	0	0
f) Contribution refunds	(674)	(209)	(808)	0	(1,691)
g) Beneficiaries in receipt	0	0	0	161	161
h) Disability retirements	(4)	(4)	0	8	0
i) Return to active service	<del>4</del> 71	(147)	(324)	0	0
j) Expired benefits	0	0	0	(39)	(39)
k) Data corrections	0	1 <u>0</u> *	10	0	20
Total changes in status	(3,171)	(6)	214	891	(2,072)
New entrants					
<ul> <li>a) Without prior service</li> </ul>	3,249	0	356	0	3,605
b) With prior service	<u>44</u>	0	0	11	<u>55</u>
Total new members	3,293	0	356	11	3,660
Net change	122	(6)	570	902	1,588
As of July 1, 2011	39,886	6,111**	14,215	17,814	78,026

<sup>\*</sup> Includes increase of 12 Omaha deferred vested members.

<sup>\*\*</sup> Includes 565 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, 2011

Age Last Birthday		0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
15-19	Number	37	0	0	0	0	0	0	0	37
	Total Salary	\$ 421,523	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 421,523
	Average Salary	\$ 11,393	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 11,393
20-24	Number	1,142	13	0	0	0	0	0	0	1,155
	Total Salary	\$ 26,758,023	\$ 311,731	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 27,069,754
	Average Salary	\$ 23,431	\$ 23,979	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 23,437
25-29	Number	2,912	952	3	0	0	0	0	0	3,867
	Total Salary	\$ 94,201,945	\$ 39,947,346	\$ 65,826	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 134,215,117
	Average Salary	\$ 32,350	\$ 41,962	\$ 21,942	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 34,708
30-34	Number	1,496	1,820	622	3	0	0	0	0	3,941
	Total Salary	\$ 44,395,455	\$ 82,119,514	\$ 32,705,595	\$ 116,432	\$ 0	\$ 0	\$ 0	\$ 0	\$ 159,336,996
	Average Salary	\$ 29,676	\$ 45,121	\$ 52,581	\$ 38,811	\$ 0	\$ 0	\$ 0	\$ 0	\$ 40,431
35-39	Number	1,247	967	1,509	399	1	0	0	0	4,123
	Total Salary	\$ 30,132,763	\$ 38,235,108	\$ 80,262,337	\$ 23,539,222	\$ 15,961	\$ 0	\$ 0	\$ 0	\$ 172,185,391
	Average Salary	\$ 24,164	\$ 39,540	\$ 53,189	\$ 58,996	\$ 15,961	\$ 0	\$ 0	\$ 0	\$ 41,762
40-44	Number	1,406	927	852	1,120	389	1	0	0	4,695
	Total Salary	\$ 31,844,070	\$ 33,716,270	\$ 40,873,420	\$ 66,107,336	\$ 24,196,885	\$ 28,416	\$ 0	\$ 0	\$ 196,766,397
	Average Salary	\$ 22,649	\$ 36,371	\$ 47,974	\$ 59,024	\$ 62,203	\$ 28,416	\$ 0	\$ 0	\$ 41,910
45-49	Number	1,259	1,093	845	651	932	411	2	0	5,193
	Total Salary	\$ 26,837,358	\$ 32,418,249	\$ 32,202,112	\$ 33,744,196	\$ 56,153,599	\$ 25,685,456	\$ 76,161	\$ 0	\$ 207,117,131
	Average Salary	\$ 21,316	\$ 29,660	\$ 38,109	\$ 51,834	\$ 60,251	\$ 62,495	\$ 38,081	\$ 0	\$ 39,884
50-54	Number	1,046	1,002	1,033	707	633	903	667	0	5,991
	Total Salary	\$ 22,666,510	\$ 29,386,080	\$ 37,021,577	\$ 30,964,881	\$ 34,183,322	\$ 54,998,102	\$ 42,763,822	\$ 0	\$ 251,984,294
	Average Salary	\$ 21,670	\$ 29,327	\$ 35,839	\$ 43,798	\$ 54,002	\$ 60,906	\$ 64,114	\$ 0	\$ 42,060
55-59	Number	795	663	807	733	789	591	761	381	5,520
	Total Salary	\$ 18,166,863	\$ 19,741,798	\$ 28,321,155	\$ 29,228,652	\$ 37,002,789	\$ 33,546,194	\$ 48,634,589	\$ 24,807,936	\$ 239,449,976
	Average Salary	\$ 22,851	\$ 29,776	\$ 35,094	\$ 39,875	\$ 46,898	\$ 56,762	\$ 63,909	\$ 65,113	\$ 43,379
60-64	Number	691	527	413	488	570	404	282	459	3,834
	Total Salary	\$ 15,398,035	\$ 16,457,670	\$ 14,251,176	\$ 19,948,444	\$ 26,888,231	\$ 20,572,874	\$ 16,547,891	\$ 30,849,964	\$ 160,914,285
CF CC	Average Salary	\$ 22,284 488	\$ 31,229 315	\$ 34,506 200	\$ 40,878	\$ 47,172 143	\$ 50,923 102	\$ 58,680 81	\$ 67,211	\$ 41,970
65-69	Number				125			V-	76	1,530
	Total Salary	\$ 7,898,425	\$ 6,686,753 \$ 21.228	\$ 5,038,053 \$ 25,190	\$ 3,798,697 \$ 30,390	\$ 5,030,009 \$ 35,175	\$ 3,876,876	\$ 3,268,615 \$ 40,353	\$ 5,167,691 \$ 67.996	\$ 40,765,119
TOTAL	Average Salary Number	\$ 16,185 12,519	\$ 21,228 8,279	\$ 25,190 6,284	\$ 30,390 4,226	\$ 35,175 3,457	\$ 38,009 2,412	\$ 40,353 1,793	\$ 67,996 916	\$ 26,644
IOIAL	Total Salary	\$ 318,720,970	\$,279 \$ 299,020,519	\$ 270,741,251	4,226 \$ 207,447,860	3,457 \$ 183,470,796	2,412 \$ 138,707,918	\$ 111,291,078	\$ 60,825,591	39,886 \$ 1,590,225,983
	•									
	Average Salary	\$ 25,459	\$ 36,118	\$ 43,084	\$ 49,088	\$ 53,072	\$ 57,507	\$ 62,070	\$ 66,403	\$ 39,869

Total salary is reported annualized prior year pay.

#### 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	40,305	19,546	17,721	77,572
Additions a) 2011 Active b) 2010 Balance Only c) 2010 Deferred Vested d) 2010 Retired e) 2010 Death with Beneficiary f) Omaha	11 0 0 0 0 0 0	0 0 0 0 0 <u>565</u>	77 0 1 0 15 <u>0</u>	88 0 1 0 15 <u>565</u>
Total	11	565	93	669
Subtractions a) Also Listed as Deaths b) Also Listed as Inactives or Retirees	(1)	0 (3)	0	(1) (180)
c) Also Listed as Contribution Refunds d) Benefits Expired e) Not a member f) Also Listed as Active g) Assumed Terminated	0 0 0 0	(2) 0 (21) (11)	0 0 0 0	(2) 0 (21) (11)
based on Date of Last Contribution Total	<u>(252)</u> (430)	<u>252</u> 215	_ <u>0</u> 0	<u>0</u> (215)
Net change	(419)	780	93	454
Number of Members Included in the Valuation as of July 1, 2011	39,886	20,326	17,814	78,026

### FORECAST OF EXPECTED DISBURSEMENTS

		Retired and Disabled	
Plan Year Ending	A -ti F	Members and	Tatal
June 30	Active Employees	Beneficiaries	Total
2012	\$ 29,410,732	\$ 351,492,246	\$ 380,902,978
2013	64,354,211	354,833,398	419,187,609
2014	100,706,010	357,290,602	457,996,612
2015	137,977,680	359,659,222	497,636,902
2016	176,931,376	361,317,900	538,249,276
2017	216,560,916	362,426,032	578,986,9 <del>4</del> 8
2018	257,656,740	362,885,856	620,542,596
2019	299,328,889	362,721,104	662,049,993
2020	341,926,705	361,744,227	703,670,932
2021	385,521,434	359,833,735	745,355,169
2022	429,987,388	357,154,717	787,142,105
2023	475,476,950	353,427,508	828,904,458
2024	521,863,096	348,848,099	870,711,195
2025	568,371,851	343,147,925	911,519,776
2026	615,848,324	336,072,852	951,921,176
2027	663,929,098	328,689,499	992,618,597
2028	712,161,421	320,711,996	1,032,873,417
2029	761,322,652	311,710,584	1,073,033,236
2030	812,016,238	301,617,734	1,113,633,972
2031	862,859,942	290,499,580	1,153,359,522
2032	914,271,688	278,394,543	1,192,666,231
2033	966,367,747	265,274,716	1,231,642,463
2034	1,016,504,264	251,292,887	1,267,797,151
2035	1,064,430,512	236,442,036	1,300,872,548
2036	1,111,887,329	220,900,233	1,332,787,562
2037	1,159,443,203	205,144,415	1,364,587,618
2038	1,205,129,809	188,899,018	1,394,028,827
2039	1,248,961,729	172,489,973	1,421,451,702
2040	1,290,137,544	156,129,333	1,446,266,877
2041	1,327,332,506	140,158,621	1,467,491,127

**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.

Member contributions Members contribute 8.28% of pay. 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, 2011, the member contribution rate will increase to 8.88%. Effective September 1, 2012, the member contribution rate will increase to 9.78%. 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.

Gross earnings subject to contributions.

**Eligibility for Benefits** 

Pensionable pay

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).

uge c

Monthly pension benefit determined as of disability retirement

date.

Death with pre-retirement benefits

Disability retirement

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.
- 2. <u>Contingent Account</u> 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.

#### **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, 2011

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**

Under Legislative Bill 382 passed during the 2011 Legislative session, the member contribution rate increased from 8.28% to 8.88% on September 1, 2011. Effective September 1, 2012, the member contribution rate increases to 9.78%. Effective September 1, 2017, the member contribution rate decreases to 7.28%. The employer contribution rate match remains unchanged at 101% of the member contribution rate. The current State of Nebraska contribution rate of 1% remains in effect until July 1, 2017, at which time it decreases to 0.7%.



#### Summary of Actuarial Methods and Procedures as of July 1, 2011

#### 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 70. 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 70 and determining an average normal cost rate which is then related to the total payroll of active members under age 70. 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 70 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, 2011

- **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, 2011

#### **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. Actual historical compensation is not included in our calculations.

In computing accrued benefits, average compensation was determined by applying the salary scale assumption to most recent compensation to construct any salary history.

Projected benefits were not 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 125% 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, 2010.



### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2011

#### **ECONOMIC ASSUMPTIONS**

1. Investment Return 8% per annum, compounded annually, net of expenses.

2. Inflation 3.5% per annum, compounded annually.

3. Salary Increases Rates vary by service. Sample rates are as follows:

Rates by Service					
Years	Rate				
<1	7.46%				
1	7.27				
5	6.76				
10	6.18				
15	5.71				
20	5.45				
25	5.24				
30	5.07				
35	4.82				
40+	4.55				

4. Interest on Employee Contributions 5.5% per annum, compounded annually.

6. Increase on Compensation 3.5% 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

mortality improvement.

a. Healthy lives – Active members 1994 Group Annuity Mortality Table, projected to

2010 using scale AA (65% of male rates for males,

50% of female rates for females)

b. Healthy lives – Retired members

and beneficiaries

1994 Group Annuity Mortality Table, projected to

2010 using scale AA (sex distinct)

c. Disabled lives 1983 Railroad Retirement Board Disabled Annuitants

Mortality (unisex)

### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2011

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

	Pre-retirement Mortality					
	Mortal	ity Rate	Life Expecta	ancy (Years)		
Sample Age	Males	Females	Males	Females		
20	0.02%	0.01%	65.6	71.7		
30	0.05	0.02	55.8	61.8		
40	0.06	0.03	46.1	51.9		
50	0.13	0.05	36.4	42.1		
60	0.40	0.20	27.1	32.5		
70	1.21	0.63	18.7	23.5		

	Post-retirement Mortality			
	Mortality Rate		Life Expecta	ncy (Years)
Sample Age	Males	Females	Males	Females
50	0.19%	0.11%	32.4	35.7
60	0.62	0.41	23.3	26.3
70	1.86	1.27	15.4	17.9
80	5.28	3.52	8.9	10.7
90	14.34	11.08	4.6	5.5

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

	Disabled Mortality		
Sample Age	Mortality Rate	Life Expectancy (Years)	
30	1.06%	30.5	
40	1.35	23.6	
50	3.16	17.7	
60	4.25	13.6	
70	6.75	9.6	
80	10.77	6.3	

### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2011

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	100	100	

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

### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2011

3. Termination

Rates vary by service. Sample rates are as follows:

Rates by Service			
Years	Male	Female	
<1	27.5%	31.7%	
1	18.7	20.3	
5	7.3	8.4	
10	4.7	5.6	
15	2.8	3.7	
20	1.8	2.9	
25	2.0	4.0	
30	5.5	5.5	
35+	10.0	6.5	

4. Disability

Rates vary by age. Sample rates are as follows:

Age	Rate
25	.00%
30	.00
35	.03
40	.03
45	.06
50	.09
55	.13
60	.18

#### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2011

#### **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 three 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 3.5% per annum, compounded annually, after reaching 75%

purchasing power floor benefit.

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

No changes were made to the actuarial assumptions since the last actuarial valuation performed July 1, 2010.



#### **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.