# Nebraska Public Employees Reti EMENT Systems School Reti rement System 2008 

Fifty-sixth Actuarial Report for State Fiscal Year Ending J une 30, 2010
and
System Plan Year Beginning July 1, 2008

December 2008

Submitted By:
Buck Consultants
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# Nebraska Public Employees Reti rement Systems <br> SCHOOL SYSTEM 

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# buckconsultants <br> an mAcs company $\mathbf{A} \mathbf{c}$ s. 

December 9, 2008

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, 2008, 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, 2008.

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, current statutory contributions are sufficient to meet the plan's funding policy. The contributions paid by members, school employers, and the State defined by statute 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 2009/2010 fiscal year, no additional contribution is necessary to meet the actuarially required contribution for the Nebraska School Retirement System, and a contribution of $\$ 772,674$ is required to fund the Omaha Service Annuity.

We are available to answer any questions on the material contained in this report, or to provide explanations to further details as may be appropriate.

Respectfully submitted,

## BUCK CONSULTANTS, LLC



David H. Slishinsky, A.S.A., E.A., M.A.A.A.
Principal and Consulting Actuary

Nebraska Public Employees Reti rement Systems<br>School System

## Summary of Actuarial Report for Contribution Requirements and Funded Status for Plan Year 2008/ 2009

The main purposes of this report are:

1. 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, 2010;
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, 2007 and ending June 30, 2008.

The 2008 actuarial valuation is based upon the plan provisions as of July 1,2008 , as described in Exhibit 8. The actuarial methods and assumptions are described in Exhibits 9 and 10.

Highlights from the current valuation:

1. No additional State contribution is required for the 2009/2010 fiscal year to pay the normal cost and amortize any unfunded liabilities for the Nebraska School System. A contribution of $\$ 772,674$ 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 $\$ 168,562,017$ in funding. This is a decrease of $\$ 4,126,702$ over last year's liability of $\$ 172,688,719$.
2. A gain was experienced on the actuarial value of assets during the 2007/2008 plan year. The annual rate of return on Market Value was (5.8\%). The rate of return on Actuarial Value of 9.1\% exceeded the $8.0 \%$ assumed investment return rate by $1.1 \%$, resulting in an increase to the Actuarial Value by $\$ 69,971,082$.
3. The plan experienced a decremental loss over the period, primarily due to more retirements than expected. The actuarial accrued liability increased by $\$ 72,702,319$ as a result of decremental experience.
4. The funded status of the system as measured by the ratio of the system assets over the Pension Benefit Obligation (PBO) increased. 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, 2007 actuarial valuation, the funded percentage on Actuarial Value increased from $97.2 \%$ to $97.7 \%$.

# Nebraska Public Employees Reti rement Systems <br> SCHOOL SYSTEM 

## EXECUTI VE SUMMARY

## Basic Actuarial Valuation Results

The 2008 actuarial valuation results are based upon the plan provisions as of July 1, 2008 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 $7.28 \%$ of pay. The School District's funding of liabilities is equal to $101 \%$ of the employee contribution rate. The State contributes $0.7 \%$ of covered pay and an annual appropriation of $\$ 5,639,235$, as well as any additional required funding.

The minimum total required contribution rate decreased from $15.64 \%$ to $15.46 \%$ of pay from the 2007/2008 plan year to the 2008/2009 plan year. A history of required contribution rates is shown below. For fiscal years 1998/1999 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 <br> and Additional State Funding |  |  |
| :---: | :---: | :---: |
| Fiscal Year | Total | Additional State <br> Contributions* |
| $2009 / 2010$ | $15.46 \%$ | $\$$ |
| $2008 / 2009$ | $15.64 \%$ | 0 |
| $2007 / 2008$ | $16.58 \%$ | 0 |
| $2006 / 2007$ | $17.95 \%$ | 0 |
| $2005 / 2006$ | $16.97 \%$ | $12,847,537$ |
| $2004 / 2005$ | $15.26 \%$ | $15,415,949$ |
| $2003 / 2004$ | $13.45 \%$ | 0 |
| $2002 / 2003$ | $11.98 \%$ | 0 |
| $2001 / 2002$ | $9.15 \%$ | 0 |
| $2000 / 2001$ | $11.92 \%$ | 0 |
| $1999 / 2000$ | $5.69 \%$ | 0 |
| $1998 / 1999$ | $8.86 \%$ | 0 |

*Excludes funding of Omaha Service Annuity.

## Nebraska Public Employees Reti rement Systems <br> School SYstem

## EXECUTI VE SUMMARY

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

Based on the 2008 actuarial valuation, the net required contribution rate of $15.03 \%$ is less than the actual contribution rate of $15.33 \%$. Therefore, no additional State contributions are required for the 2009/2010 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 1,2007 | July 1, 2008 | Annual Rate <br> of Return |
| :---: | :---: | :---: | :---: |
| (a) Market value | $\$ 7,024,856,413$ | $\$$ | $6,578,300,402$ |
| (b) Actuarial value, an adjusted <br> value intended to reduce the <br> effect of market fluctuations <br> (Exhibit 1B) | $\$ 0,396,336,863$ | $\$$ | $6,932,918,638$ |

## Nebraska Public Employees Reti rement Systems SCHOOL SYSTEM

## EXECUTI VE 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:

|  |  | uly 1, 2007 | July 1, 2008 |  |
| :---: | :---: | :---: | :---: | :---: |
| (a) Present value of future benefits | \$ | 8,427,374,246 | \$ | 9,010,570,709 |
| (b) Net actuarial value of assets |  | 6,396,336,863 |  | 6,932,918,638 |
| (c) Present value of future member contributions |  | 873,530,631 |  | 899,534,097 |
| (d) Present value of future employer contributions |  | 882,265,937 |  | 908,529,438 |
| (e) Present value of future State contributions |  | 83,874,234 |  | 86,493,663 |
| (f) Present value of future PPSF contributions |  | 18,677,862 |  | 14,532,856 |
| (g) Actuarial Liability/(Reserve) $[(\mathrm{a})-(\mathrm{b})-(\mathrm{c})-(\mathrm{d})-(\mathrm{e})-(\mathrm{f})]$ | \$ | 172,688,719 | \$ | 168,562,017 |

## Nebraska Public Employees Reti rement Systems School SYstem

## EXECUTI VE 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 |  | J uly 1, 2007 |  | July 1, 2008 |
| :---: | :---: | :---: | :---: | :---: |
| (a) Pension Benefit Obligation <br> i) retirees, disabled members and beneficiaries receiving benefits and deferred vested members not yet receiving benefits <br> ii) active members <br> iii) total pension benefit obligation | \$ | $\begin{array}{r} 3,114,535,345 \\ 3,464,995,138 \\ \hline 6,579,530,483 \end{array}$ | \$ | $\begin{array}{r} 3,506,258,919 \\ 3,590,301,350 \\ \hline 7,096,560,269 \end{array}$ |
| (b) Net assets available for benefits (actuarial value) |  | 6,396,336,863 |  | 6,932,918,638 |
| (c) Unfunded Pension Benefit Obligation/(Reserve) | \$ | 183,193,620 | \$ | 163,641,631 |
| (d) Funded percentage on actuarial value of assets [(b) $\div(\mathrm{a})$ (iii)] |  | 97.2\% |  | 97.7\% |

## Nebraska Public Employees Reti rement Systems <br> SCHOOL SYSTEM

## EXECUTI VE 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, 2007 | July 1, 2008 |
| :--- | ---: | ---: |
| (a) Benefit accrual cost amount | $\$ 160,613,173$ | $\$$ |
| (b)Annual compensation before assumed <br> normal retirement age | $\$ 1,390,116,274$ | $\$ 1,465,102,720$ |
| (c)Benefit accrual cost rate as a level <br> percentage of compensation [(a) $\div$ (b)] | $11.480 \%$ | $11.172 \%$ |


| Service Annuity Benefit | J uly 1, 2007 | J uly 1, 2008 |
| :---: | :---: | :---: |
| (a) Annual Actuarial Contribution Amount Allocated to the Service Annuity <br> (i) NPERS members <br> (ii) Omaha members <br> (iii) Total | \$ 0 <br>  643,494 <br> $\$$ 643,494 | \$ 0 <br>  772,674 <br> $\$$ 772,674 |
| (b) Number of active members before assumed retirement age <br> (i) NPERS members <br> (ii) Omaha members <br> (iii) Total | $\begin{array}{r} 36,738 \\ 6,908 \\ \hline 43,646 \end{array}$ | $\begin{array}{r} 37,383 \\ 6,976 \\ \hline 44,359 \end{array}$ |
| (c) Benefit accrual cost per active member as a level dollar amount <br> (i) NPERS members <br> (ii) Omaha members <br> (iii) Total | \$ 67.01 <br> $\$$ 73.55 <br> $\$$ 68.04 | $\$$ 63.12 <br> $\$$ 71.14 <br> $\$$ 64.38 |

## EXECUTI VE 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, actuarial assumptions, or plan provisions since the last actuarial valuation as of July 1, 2007.

## Nebraska Public Employees Reti rement Systems <br> SCHOOL SYSTEM

## System Assets

| A. Summary of Assets | Market Value as of J une 30, 2007 | Market Value as of J une 30, 2008 |
| :---: | :---: | :---: |
| 1. Cash and Equivalents | \$ 3,472,567 | \$ 2,367,993 |
| 2. Investments | 7,258,587,065 | 6,650,082,507 |
| 3. Capital Assets | 2,617,988 | 1,591,815 |
| 4. Receivables and Prepaids | 124,802,810 | 432,655,235 |
| 5. Accounts Payable | $(364,624,017)$ | $(508,397,148)$ |
| 6. Net Assets Considered [1+2+3+4+5] | \$ 7,024,856,413 | \$ 6,578,300,402 |


| B. Development of Actuarial Value of Assets | Amount |  |
| :---: | :---: | :---: |
| 1. Actuarial Value of Assets as of July 1, 2007 | \$ | 6,396,336,863 |
| 2. Unrecognized Return as of July 1, 2007 | \$ | 628,519,550 |
| 3. Contributions <br> (a) Member (includes purchased service) <br> (b) Employer <br> (c) State appropriations* <br> (d) Total $[(\mathrm{a})+(\mathrm{b})+(\mathrm{c})]$ | \$ | $\begin{array}{r} 107,352,709 \\ 105,977,554 \\ 15,832,941 \\ \hline 229,163,204 \end{array}$ |
| 4. Benefit Payments (including transfers to Omaha) | \$ | 273,432,511 |
| 5. Expected Return at $8 \%$ on: <br> (a) Item 1 <br> (b) Item 2 <br> (c) Item 3(d) <br> (d) Item 4 <br> (e) Total $[(\mathrm{a})+(\mathrm{b})+(\mathrm{c})+(\mathrm{d})]$ | \$ | $\begin{array}{r} 511,706,949 \\ 50,281,564 \\ 8,990,184 \\ (9,817,133) \\ \hline 561,161,564 \end{array}$ |
| 6. Actual Return on Market Value for 2007/2008 Plan Year, net of expenses | \$ | $(402,286,704)$ |
| 7. Return to be Spread for 2007/2008 Plan Year [6-5(e)] | \$ | $(963,448,268)$ |

* Net of Omaha transfers.


## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

## System Assets



## Nebraska Public Employees Reti rement Systems

## System Assets

## C. Change in Asset Values During 2007/ 2008

1. Total asset value as of July 1,2007
(a) Reported last year
(b) Adjustment
(c) Reported this year [(a) + (b)]
2. Contributions for 2007/2008
(a) Member contributions paid during the year
(b) Employer contributions paid during the year
(c) State appropriations for the year*
(d) Contributions for 2007/2008 [(a) + (b) + (c)]
3. Disbursements for 2007/2008
(a) Benefit payments**
(b) Expenses and fees
(c) Transferred Omaha appropriation
(d) Disbursements for 2007/2008 [(a) + (b) + (c)]
4. Investment return for 2007/2008
(a) Investment income
(b) Securities lending income
(c) Securities lending expense
(d) Net appreciation/(depreciation) in fair value of investments
(e) Other
(f) Unrecognized return including adjustment
(g) Investment return for 2007/2008
$[(\mathrm{a})+(\mathrm{b})+(\mathrm{c})+(\mathrm{d})+(\mathrm{e})+(\mathrm{f})]$
5. Total asset value as of July 1,2008
[1(c) + 2(d) - 3(d) + 4(g)]
6. Approximate rate of investment return, net of expenses
9.1\%
(5.8\%)

* Includes Omaha appropriation.
** Includes transfers to Omaha for service annuities.


## Nebraska Public Employees Reti rement Systems <br> School System

## Actuarial Contribution Requirement



## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

## Actuarial Contribution Requirement

| B. Development of Additional State Contributions for Nebraska School System Fiscal Year 2009/ 2010 | Annual Amount as a \% of Pay |
| :---: | :---: |
| 1. Actuarially Required Contribution <br> a. Amount <br> b. State PPSF appropriation <br> c. Net amount [(a) - (b)] <br> d. Net Amount as \% of Pay | $\begin{array}{rr} \$ & 225,790,552 \\ & 5,639,235 \\ \hline \$ & 220,151,317 \\ & 15.03 \% \end{array}$ |
| 2. Statutory Contribution Rates <br> a. Employee Contribution Rate <br> b. Employer Contribution Rate <br> c. State Contribution Rate <br> d. Total Contribution Rate $[(a)+(b)+(c)]$ | $7.28 \%$ <br> $7.35 \% *$ <br> $0.70 \%$ <br> $15.33 \%$ |
| 3. Additional Required State Contribution <br> a. Additional Required State Contribution Rate [1(d) - 2(d), not less than 0\%] <br> b. Additional Required State Contribution Amount | $\begin{array}{lr}  & 0.00 \% \\ \$ & 0 \end{array}$ |

* $101 \%$ of employee contribution


## Nebraska Public Employees Reti rement Systems SCHOOL SYSTEM

## Actuarial Contribution Requirement

| C. Schedule of Amortization Bases | Original Amount | July 1, 2008 Remaining Payments | Date of Last Payment | Outstanding Balance as of July 1, 2008 | Annual Contribution |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2006 Unfunded Actuarial Accrued Liability Base | \$ 845,226,412 | 28 | 07/01/2036 | \$ 829,707,157 | \$ 72,245,083 |
| 2007 Unfunded Actuarial Accrued Liability Base | \$(163,793,512) | 29 | 07/01/2037 | $(162,347,636)$ | $(14,000,125)$ |
| 2008 Unfunded Actuarial Accrued Liability Base | \$ 54,258,200 | 30 | 07/01/2038 | 54,258,200 | 4,637,678 |
| Total |  |  |  | \$ 721,617,721 | \$ 62,882,636 |

## NebrAska Public Employees Reti rement Systems <br> SCHOOL SYSTEM

## Actuarial (Gain)/ Loss

## A. Change in Actuarial Accrued Liability

1. Actual Actuarial Accrued Liability as of July 1, 2007
\$ 7,070,308,583
2. Benefits accrued during the 2007/2008 plan year

160,613,173
3. Benefit payments during the $2007 / 2008$ plan year* 273,432,511
4. Interest at $8 \%$

562,108,487
5. Expected Actuarial Accrued Liability as of

July 1, 2008 [1 + 2-3 + 4]
6. Decremental (Gain)/Loss by Source
(a) Retirement
\$ 64,549,855
(b) Termination
19,206,228
(c) Disability
(d) Pre-retirement mortality
(e) Post-retirement mortality 1,597,082
753,004
(f) Salary
6,665,617
(g) New entrants / Rehires
$(23,413,902)$
(h) Data changes/miscellaneous 27,753,917
$(24,409,482)$
(i) Total decremental (gain)/loss
\$ $72,702,319$
7. Change in Omaha Service Annuity, Methods and Assumptions

62,236,308
8. Actual Actuarial Accrued Liability as of July 1, 2008
[5 + 6(i) +7$]$
\$ 7,654,536,359

* Net of transfer to Omaha.


## Actuarial (Gain)/ Loss

| B. Change in Net Actuarial Value of Assets | Amount |  |
| :---: | :---: | :---: |
| 1. Total Actuarial Value of Assets as of July 1, 2007 | \$ | 6,396,336,863 |
| 2. Contributions | \$ | 107,352,709 |
| (a) Member |  | 105,977,554 |
| (b) Employer |  | 15,832,941 |
| (c) State appropriation* | \$ | 229,163,204 |
| (d) Total |  |  |
| 3. Benefit Payments* | \$ | 273,432,511 |
| 4. Expected Return at $8 \%$ on: <br> (a) Item 1 | \$ | 511,706,949 |
| (b) Item 2(d) |  | 8,990,184 |
| (c) Item 3 |  | 9,817,133 |
| (d) Total [(a) + (b) - (c)] | \$ | 510,880,000 |
| 5. Expected Total Actuarial Value of Assets at June 30, 2008 $[1+2(d)-3+4(d)]$ | \$ | 6,862,947,556 |
| 6. Actual Total Actuarial Value of Assets at June 30, 2008 |  | 6,932,918,638 |
| 7. Actuarial (Gain)/Loss on Asset Sources [5-6] | \$ | $(69,971,082)$ |
| 8. Total Actuarial (Gain)/ Loss for the 2007/ 2008 plan year [A(6)(i) + B(7)] | \$ | 2,731,237 |

* Net of transfers to Omaha.


## NebrAska Public Employees Reti rement Systems <br> SCHOOL SYSTEM

## Actuarial Balance Sheet

## A. Financial Resources

July 1, 2008

1. Total Actuarial Value of Assets
\$ 6,932,918,638
2. Present Value of Future Contributions
(a) Member
\$ 899,534,097
(b) Employer
908,529,438
(c) State
86,493,663
(d) State PPSF Appropriations 14,532,856
(e) Total

1,909,090,054
3. Actuarial Liability/(Reserve)
$\underline{168,562,017}$
4. Total Assets $[1+2(e)+3]$
\$ 9,010,570,709
B. Benefit Obligations

July 1, 2008

1. Present Value of Future Benefits
(a) Active members
\$ 5,488,146,110
(b) Inactive members
395,079,068
(c) Retirees, disabilities and beneficiaries
3,109,583,957 \$8,992,809,135
(d) Omaha
(i) active
16,165,680
(ii) deferred vested
623,897
(iii) retired
(e) Total
971,997
$\frac{\$ \quad 17,761,574}{\$ 9,010,570,709}$

## Nebraska Public Employees Reti rement Systems SCHOOL SYStem

## Accounting Information

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


B. Change in Pension Benefit Obligation from J uly 1, 2007 to J uly 1, 2008

| Pension Benefit Obligation at J uly 1, 2007 | \$ | 6,579,530,483 |
| :---: | :---: | :---: |
| Increase/(Decrease) during Period |  |  |
| Omaha Service Annuity, Method and Assumption Changes | \$ | 9,997,048 |
| Benefits Accumulated |  | 188,095,673 |
| Benefits Paid* |  | $(273,432,511)$ |
| Interest Cost |  | 531,592,960 |
| Plan Experience |  | 60,776,616 |
| Total Change | \$ | 517,029,786 |
| Pension Benefit Obligation at J uly 1, 2008 | \$ | 7,096,560,269 |

* 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, 2008 and 2007, 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.

## Nebraska Public Employees Reti rement Systems

## SCHOOL SYstem

## Accounting Information

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

| Plan Year Ending | Annual Required Contributions* |  |  | Percentage Contributed |
| :---: | :---: | :---: | :---: | :---: |
|  | School | State | Total |  |
| June 30, 2008 | \$ 105,977,554 | \$ 15,832,941 | \$ 121,810,495 | 100\% |
| June 30, 2007 | 107,573,519 | 15,219,871 | 122,793,390 | 100\% |
| June 30, 2006 | 102,089,105 | 28,056,703 | 130,145,808 | 100\% |
| June 30, 2005 | 90,147,174 | 29,816,737 | 119,963,911 | 90\% |
| June 30, 2004 | 87,438,804 | 14,154,879 | 101,593,683 | 100\% |
| June 30, 2003 | 84,467,330 | 13,119,888 | 97,587,218 | 100\% |

* Includes funding for the Excess Formula Annuity, the Service Annuity, and supplemental funds. Excludes Omaha appropriations.
D. Actuarial Assumptions, Method and Additional I nformation under GASB No. 25

| Valuation Date | June 30, 2008 |
| :--- | :--- |
| Actuarial Cost Method | Entry Age |
| Amortization Method | Level dollar amount, closed |
| Equivalent Single Amortization Period | 28 years |
| Asset Valuation Method | 5 year smoothed market |
| Actuarial Assumptions: |  |
| $\quad$ Investment rate of return* | $8.0 \%$ |
| $\quad$ Projected salary increases* | $4.5 \%-7.46 \%$ |
| *Includes inflation at | $3.5 \%$ |
| Cost-of-living adjustment | $2.5 \%$ with a floor benefit equal to $75 \%$ |
|  | purchasing power of original benefit |

## Exhibit 5

## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

## Accounting Information

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

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial <br> Accrued <br> Liability <br> (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, 2008 | \$ 6,932,918,638 | \$ 7,654,536,359 | \$ 721,617,721 | 90.6\% | \$ 1,389,124,819 | 51.9\% |
| June 30, 2007 | 6,396,336,863 | 7,070,308,583 | 673,971,720 | 90.5\% | 1,325,616,322 | 50.8\% |
| June 30, 2006 | 5,739,048,994 | 6,584,275,406 | 845,226,412 | 87.2\% | 1,247,684,378 | 67.7\% |
| June 30, 2005 | 5,335,197,409 | 6,234,657,830 | 899,460,421 | 85.6\% | 1,214,227,197 | 74.1\% |
| June 30, 2004 | 5,118,011,165 | 5,868,266,970 | 750,255,805 | 87.2\% | 1,170,601,127 | 64.1\% |
| June 30, 2003 | 4,952,902,870 | 5,464,572,876 | 511,670,006 | 90.6\% | 1,138,776,241 | 44.9\% |

# Nebraska Public Employees Retirement Systems <br> SCHOOL SYSTEM 

## Summary of Member Data



* Prior year pay is increased by the salary scale for each member. Total prior year compensation for 2007 and 2008 was $1,325,616,322$ and 1,389,124,819, respectively.


## SUMMARY of MEMBER DATA

D. Distribution of Retired Members and Beneficiaries as of July 1, 2008

| Age <br> Range | Number | Annual Benefit | Average Annual <br> Benefit |  |
| :---: | :---: | :---: | :---: | :---: |
| $59 \&$ Under | 1,254 | $\$$ | $38,683,857$ | $\$$ |
| $60-64$ | 2,761 | $71,165,507$ | 30,848 |  |
| $65-69$ | 3,342 | $63,662,856$ | 25,775 |  |
| $70-74$ | 2,824 | $44,241,382$ | 19,049 |  |
| $75-79$ | 2,273 | $29,066,030$ | 15,666 |  |
| $80-84$ | 1,435 | $17,014,341$ | 12,788 |  |
| $85-89$ | 869 | $7,786,812$ | 11,857 |  |
| $90 \&$ Over | 581 |  | $3,170,216$ | 8,961 |
| Total | 15,339 | $\$$ | $274,791,001$ | $\$$ |

## E. Member Data Reconciliation

|  | Active Members | I nactive Members |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | With Deferred Benefits | Terminated with Balance | Retired Members and Beneficiaries |  |
| As of July 1, 2007 | 37,152 | 5,988 | 12,159 | 14,408 | 69,707 |
| Changes in status |  |  |  |  |  |
| a) Normal \& early retirements | (962) | 0 | 0 | 962 | 0 |
| b) Became payable | 0 | (315) | (7) | 322 | 0 |
| c) Deaths | (27) | (23) | (26) | (394) | (470) |
| d) Nonvested terminations | $(1,344)$ | 0 | 1,344 | 0 | 0 |
| e) Vested terminations | (791) | 791 | 0 | 0 | 0 |
| f) Contribution refunds | (625) | (177) | (700) | 0 | $(1,502)$ |
| g) Beneficiaries in receipt | 0 | 0 | 0 | 118 | 118 |
| h) Disability retirements | (8) | (7) | 0 | 15 | 0 |
| i) Return to active service | 641 | (217) | (424) | 0 | 0 |
| j) Expired benefits | 0 | 0 | 0 | (103) | (103) |
| k) Data corrections | (3) | 81* | (40) | 0 | 38 |
| Total changes in status | $(3,119)$ | 133 | 147 | 920 | $(1,919)$ |
| New entrants |  |  |  |  |  |
| a) Without prior service | 3,388 | 1 | 469 | 0 | 3,858 |
| b) With prior service | 411 | 37 | 61 | 11 | 520 |
| Total new members | 3,799 | 38 | 530 | 11 | 4,378 |
| Net change | 680 | 171 | 677 | 931 | 2,459 |
| As of July 1, 2008 | 37,832 | 6,159** | 12,836 | 15,339 | 72,166 |

* Includes increase of 41 Omaha deferred vested members.
** Includes 483 Omaha deferred vested members eligible for a service annuity benefit.


## Summary of Member Data

F. Age and Service Distribution of Active Members as of July 1, 2008

| 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 |  | 363,074 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 363,074 |
|  | Average Salary | \$ | 9,813 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 9,813 |
| 20-24 | Number |  | 1,089 |  | 5 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 1,094 |
|  | Total Salary | \$ | 23,809,104 | \$ | 137,701 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 23,946,805 |
|  | Average Salary | \$ | 21,863 | \$ | 27,540 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 21,889 |
| 25-29 | Number |  | 2,661 |  | 714 |  | 2 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 3,377 |
|  | Total Salary | \$ | 81,859,940 | \$ | 27,946,568 | \$ | 72,334 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 109,878,842 |
|  | Average Salary | \$ | 30,763 | \$ | 39,141 | \$ | 36,167 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 32,537 |
| 30-34 | Number |  | 1,276 |  | 1,712 |  | 510 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 3,498 |
|  | Total Salary | \$ | 32,790,623 | \$ | 71,599,801 | \$ | 24,000,346 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 128,390,770 |
|  | Average Salary | \$ | 25,698 | \$ | 41,822 | \$ | 47,060 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 36,704 |
| 35-39 | Number |  | 1,367 |  | 976 |  | 1,322 |  | 384 |  | 0 |  | 0 |  | 0 |  | 1 |  | 4,050 |
|  | Total Salary | \$ | 29,389,438 | \$ | 36,247,779 | \$ | 64,258,292 | \$ | 20,403,702 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 69,308 | \$ | 150,368,519 |
|  | Average Salary | \$ | 21,499 | \$ | 37,139 | \$ | 48,607 | \$ | 53,135 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 69,308 | \$ | 37,128 |
| 40-44 | Number |  | 1,439 |  | 962 |  | 645 |  | 1,035 |  | 380 |  | 1 |  | 0 |  | 0 |  | 4,462 |
|  | Total Salary | \$ | 27,711,024 | \$ | 29,956,080 | \$ | 28,555,709 | \$ | 54,224,057 | \$ | 20,330,879 | \$ | 41,950 | \$ | 0 | \$ | 0 | \$ | 160,819,699 |
|  | Average Salary | \$ | 19,257 | \$ | 31,139 | \$ | 44,272 | \$ | 52,390 | \$ | 53,502 | \$ | 41,950 | \$ | 0 | \$ | 0 | \$ | 36,042 |
| 45-49 | Number |  | 1,418 |  | 1,293 |  | 774 |  | 715 |  | 929 |  | 525 |  | 3 |  | 0 |  | 5,657 |
|  | Total Salary | \$ | 28,348,276 | \$ | 37,067,633 | \$ | 27,544,531 | \$ | 33,358,479 | \$ | 50,437,049 | \$ | 29,027,158 | \$ | 131,595 | \$ | 0 | \$ | 205,914,721 |
|  | Average Salary | \$ | 19,992 | \$ | 28,668 | \$ | 35,587 | \$ | 46,655 | \$ | 54,292 | \$ | 55,290 | \$ | 43,865 | \$ | 0 | \$ | 36,400 |
| 50-54 | Number |  | 960 |  | 997 |  | 812 |  | 782 |  | 634 |  | 1,017 |  | 682 |  | 2 |  | 5,886 |
|  | Total Salary | \$ | 19,039,460 | \$ | 28,627,606 | \$ | 27,340,658 | \$ | 31,927,466 | \$ | 30,767,814 | \$ | 57,381,007 | \$ | 40,003,861 | \$ | 99,164 | \$ | 235,187,036 |
|  | Average Salary | \$ | 19,833 | \$ | 28,714 | \$ | 33,671 | \$ | 40,828 | \$ | 48,530 | \$ | 56,422 | \$ | 58,657 | \$ | 49,582 | \$ | 39,957 |
| 55-59 | Number |  | 845 |  | 678 |  | 670 |  | 845 |  | 797 |  | 678 |  | 820 |  | 355 |  | 5,688 |
|  | Total Salary | \$ | 18,904,794 | \$ | 19,123,079 | \$ | 22,138,319 | \$ | 33,655,086 | \$ | 37,474,353 | \$ | 35,786,302 | \$ | 49,162,810 | \$ | 21,940,195 | \$ | 238,184,938 |
|  | Average Salary | \$ | 22,373 | \$ | 28,205 | \$ | 33,042 | \$ | 39,829 | \$ | 47,019 | \$ | 52,782 | \$ | 59,955 | \$ | 61,803 | \$ | 41,875 |
| 60-64 | Number |  | 526 |  | 401 |  | 333 |  | 417 |  | 437 |  | 308 |  | 193 |  | 275 |  | 2,890 |
|  | Total Salary | \$ | 12,115,135 | \$ | 11,127,117 | \$ | 10,594,806 | \$ | 15,389,740 | \$ | 18,767,571 | \$ | 13,978,011 | \$ | 10,552,832 | \$ | 16,782,464 | \$ | 109,307,676 |
|  | Average Salary | \$ | 23,033 | \$ | 27,748 | \$ | 31,816 | \$ | 36,906 | \$ | 42,946 | \$ | 45,383 | \$ | 54,678 | \$ | 61,027 | \$ | 37,823 |
| 65-69 | Number |  | 406 |  | 273 |  | 141 |  | 116 |  | 106 |  | 67 |  | 45 |  | 39 |  | 1,193 |
|  | Total Salary | \$ | 5,295,571 | \$ | 4,908,534 | \$ | 3,201,184 | \$ | 3,418,483 | \$ | 3,195,629 | \$ | 2,441,444 | \$ | 1,827,533 | \$ | 2,474,361 | \$ | 26,762,739 |
|  | Average Salary | \$ | 13,043 | \$ | 17,980 | \$ | 22,703 | \$ | 29,470 | \$ | 30,147 | \$ | 36,439 | \$ | 40,612 | \$ | 63,445 | \$ | 22,433 |
| TOTAL | Number |  | 12,024 |  | 8,011 |  | 5,209 |  | 4,294 |  | 3,283 |  | 2,596 |  | 1,743 |  | 672 |  | 37,832 |
|  | Total Salary |  | 279,626,439 |  | 266,741,898 |  | 207,706,179 |  | 192,377,013 |  | 60,973,295 |  | 138,655,872 |  | 101,678,631 | \$ | 41,365,492 |  | 389,124,819 |
|  | Average Salary | \$ | 23,256 | \$ | 33,297 | \$ | 39,874 | \$ | 44,801 | \$ | 49,032 | \$ | 53,411 | \$ | 58,335 | \$ | 61,556 | \$ | 36,718 |

Total salary is reported annualized prior year pay.

## Summary of Member Data

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

|  | Active Members | I nactive Members | Retired Members, Beneficiaries, and Disabled | Total |
| :---: | :---: | :---: | :---: | :---: |
| Number of Data Records Submitted By NPERS | 38,646 | 17,899 | 15,321 | 71,866 |
| Additions <br> a) 2008 Active <br> b) 2007 Balance Only <br> c) 2007 Deferred Vested <br> d) 2007 Retired <br> e) Omaha <br> Total | $\begin{array}{r} 15 \\ 1 \\ 0 \\ 0 \\ 0 \\ \hline 16 \end{array}$ | $\begin{array}{r} 0 \\ 104 \\ 25 \\ 0 \\ 483 \\ \hline 612 \end{array}$ | $\begin{array}{r} 19 \\ 0 \\ 3 \\ 9 \\ 0 \\ \hline 31 \end{array}$ | $\begin{array}{r} 34 \\ 105 \\ 28 \\ 9 \\ 483 \\ \hline 659 \end{array}$ |
| Subtractions <br> a) Also Listed as Deaths <br> b) Also Listed as Inactives or Retirees <br> c) Also Listed as Contribution Refunds <br> d) Benefits Expired <br> e) Not a member <br> f) Also Listed as Active <br> g) Assumed Terminated based on Date of Last Contribution <br> Total | $\begin{gathered} 0 \\ (297) \\ \\ (1) \\ 0 \\ (1) \\ 0 \\ \\ (531) \\ \hline(830) \end{gathered}$ | $\begin{gathered} 0 \\ \\ (25) \\ \\ (4) \\ 0 \\ (2) \\ (16) \\ \\ 531 \\ \hline 484 \end{gathered}$ | $\begin{array}{r} 0 \\ 0 \\ 0 \\ 0 \\ (12) \\ (1) \\ \hline \underline{0} 13) \end{array}$ | $\begin{array}{r} 0 \\ (322) \\ (5) \\ 0 \\ (15) \\ (17) \\ \\ \frac{0}{(359)} \end{array}$ |
| Net change | (814) | 1,096 | 18 | 300 |
| Number of Members Included in the Valuation as of July 1, 2008 | 37,832 | 18,995 | 15,339 | 72,166 |

## Nebraska Public Employees Reti rement Systems SCHOOL SYSTEM

Forecast of Expected Disbursements

| Plan Year Ending <br> June 30 | Active Employees | Retired and Disabled <br> Members and <br> Beneficiaries | Total |
| :---: | ---: | ---: | ---: |
| 2009 | $\$ 23,114,204$ | $\$ 273,124,239$ | $\$ 296,238,443$ |
| 2010 | $50,440,201$ | $276,037,908$ | $32,478,109$ |
| 2011 | $79,782,456$ | $278,796,732$ | $358,579,188$ |
| 2012 | $111,317,532$ | $281,198,599$ | $392,516,131$ |
| 2013 | $145,904,696$ | $282,857,415$ | $428,762,111$ |
| 2014 | $182,483,388$ | $283,399,481$ | $465,882,869$ |
| 2015 | $220,579,270$ | $283,811,253$ | $504,390,523$ |
| 2016 | $259,523,743$ | $283,749,897$ | $543,273,640$ |
| 2017 | $299,332,905$ | $283,049,319$ | $582,382,224$ |
| 2018 | $340,476,360$ | $281,681,780$ | $622,158,140$ |
| 2019 | $382,621,368$ | $279,882,504$ | $662,503,872$ |
| 2020 | $425,403,426$ | $277,427,406$ | $702,830,832$ |
| 2021 | $468,626,199$ | $274,180,360$ | $742,806,559$ |
| 2022 | $512,590,464$ | $270,058,081$ | $782,648,545$ |
| 2023 | $556,961,014$ | $264,918,715$ | $821,879,729$ |
| 2024 | $601,556,803$ | $259,759,121$ | $861,315,924$ |
| 2025 | $645,794,904$ | $254,171,374$ | $899,966,278$ |
| 2026 | $690,431,003$ | $247,762,945$ | $938,193,948$ |
| 2027 | $735,108,648$ | $240,560,240$ | $975,668,888$ |
| 2028 | $779,176,471$ | $232,544,744$ | $1,011,721,215$ |
| 2029 | $823,334,600$ | $223,808,180$ | $1,047,142,780$ |
| 2030 | $867,982,188$ | $214,271,265$ | $1,082,253,453$ |
| 2031 | $911,782,571$ | $204,091,069$ | $1,115,873,640$ |
| 2032 | $955,017,597$ | $193,275,745$ | $1,148,293,342$ |
| 2033 | $997,751,440$ | $182,101,624$ | $1,179,853,064$ |
| 2034 | $1,037,295,691$ | $170,634,403$ | $1,207,930,094$ |
| 2035 | $1,073,414,177$ | $158,685,123$ | $1,232,099,300$ |
| 2036 | $1,107,994,812$ | $146,727,120$ | $1,254,721,932$ |
| 2037 | $1,140,760,850$ | $134,511,963$ | $1,275,272,813$ |
| 2038 | $1,169,987,927$ | $122,199,985$ | $1,292,187,912$ |

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.

# Nebraska Public Employees Reti rement Systems <br> SCHOOL SYSTEM 

## Summary of Plan Provisions

Member

## Participation Date

## Definitions

Final average earnings

Fiscal year
Member contributions

Monthly pension benefit

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.

Date of becoming a member.

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).

Twelve month period ending June 30 .
Members contribute 7.28\% of pay. The School Districts contribute at a rate equal to $101 \%$ of the members' rate. Such contributions are credited with interest in accordance with State Statutes.

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.

## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

## 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.

Normal Retirement Date (NRD)

Service

Pensionable pay

## Eligibility for Benefits

Deferred vested

Disability retirement
Early retirement

Normal retirement

First of month coinciding with or next following the attainment of age 65 and one-half year of service.
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.

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 halftime 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.

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

Retirement by reason of disability.
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).

Retire on NRD.

## SCHOOL SYSTEM

## Summary of PLAN Provisions

| Postponed retirement | Retire after NRD. |
| :--- | :--- |
| Pre-retirement spouse benefit | Death prior to retire |
| 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 |

Death with pre-retirement benefits Survivor portion of $100 \%$ J oint 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.

## Exhibit 8

## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

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

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

## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

## 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.

## 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 J uly 1, 2008

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 plan provisions since the last actuarial valuation as of July 1, 2007, except for revisions to the Service Annuity under LB 1147 enacted in 2008. The service annuity is payable on an unreduced basis for members who are disabled or retire with at least 35 years of service who were hired before July 19, 1996.

# Nebraska Public Employees Reti rement Systems SCHOOL SYSTEM 

## Summary of Actuarial Methods and Procedures as ofj uly 1, 2008

## A. ACTUARI AL METHODS

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

## Entry Age Actuarial Cost Method

Projected pension and preretirement spouse's death benefits were determined for all active members under age 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 25year 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.

## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

## Summary of Actuarial Methods and Procedures as ofJ uly 1, 2008

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, 2008

## 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 $130 \%$ to estimate the value of deferred benefit payments.

## Changes in Methods and Procedures Since the Prior Year

The compensation amounts used in the projection of benefits and liabilities for active members are now determined only from the prior plan year compensation. Actual historical compensation is no longer included for calculations.

Projected benefits were not limited by the dollar limitation required by the Internal Revenue Code Section 415.

## Summary of Actuarial Assumptions as of July 1, 2008

## ECONOMIC ASSUMPTI ONS

1. Investment Return
2. Inflation
3. Salary Increases
4. Interest on Employee Contributions
5. Increase on Compensation

## DEMOGRAPHIC ASSUMPTI ONS

1. Mortality
a. Healthy lives - Active members
b. Healthy lives - Retired members and beneficiaries
c. Disabled lives
$8 \%$ per annum, compounded annually, net of expenses.
$3.5 \%$ per annum, compounded annually.
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 |

5.5\% per annum, compounded annually.
$3.5 \%$ per annum on the 401(a)(17) compensation limit

1994 Group Annuity Mortality Table, projected to 2010 using scale AA ( $65 \%$ of male rates for males, $50 \%$ of female rates for females)

1994 Group Annuity Mortality Table, projected to 2010 using scale AA (sex distinct)

1983 Railroad Retirement Board Disabled Annuitants Mortality (unisex)

## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

## Summary of Actuarial Assumptions as of July 1, 2008

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

|  | Pre-retirement Mortality |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Sample Age | Mortality Rate |  | Life Expectancy (Years) |  |
|  | Males | Females | Males | Females |
|  | $0.02 \%$ | $0.01 \%$ | 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 Expectancy (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 <br> (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 |

## Nebraska Public Employees Reti rement Systems

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## Summary of Actuarial Assumptions as of July 1, 2008

2. Retirement

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

| Retirement Rates When Eligible <br> 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 <br> for Reduced Benefits |  |  |
| :---: | :---: | :---: |
| Age | Male | Female |
| 60 | $10 \%$ | $10 \%$ |
| 61 | 12 | 12 |
| 62 | 15 | 15 |
| 63 | 15 | 15 |
| 64 | 18 | 18 |

## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

## Summary of Actuarial Assumptions as of July 1, 2008

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 |

## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

## Summary of Actuarial Assumptions as of July 1, 2008

## OTHER ASSUMPTIONS

1. Form of Payment
2. Marital Status
a. Percent married
b. Spouse's age
3. Administrative Expense
4. Commencement age for deferred vested benefit
5. Cost of Living Adjustment

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

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

Investment return is assumed to be net of expenses.

Age 62.

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, 2007.

## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

## Glossary of Terms

Actuarial Accrued Liability

Actuarial Cost Method

Actuarial Present Value
of Future Benefits
Actuarial Valuation

Actuary

Annual Required Contribution
GASB 25 and GASB 27

Normal Cost

Unfunded Actuarial
Accrued Liability
Vested Benefits

Total accumulated cost to fund pension benefits arising from service in all prior years.

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.

Amount which, together with future interest, is expected to be sufficient to pay all future benefits.

Study of probable amounts of future pension benefits and the necessary amount of contributions to fund those benefits.

Person who performs mathematical calculations pertaining to pension and insurance benefits based on specific procedures and assumptions.

Disclosure measure of annual pension cost.
Governmental Accounting Standards Board Statement numbers 25 and 27 which specify how the Net Pension Obligation and Annual Required Contribution are to be calculated.

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.

The portion of the actuarial accrued liability not offset by plan assets.

Benefits which are unconditionally guaranteed regardless of employment status.

