# Nebraska Public Employees Reti rement Systems School Reti rement System 2002 <br> Fiftieth Actuarial Report for <br> State Fiscal Year Ending June 30, 2004 and <br> System Plan Year Beginning July 1, 2002 

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

## TABLE OF CONTENTS

## Letter of Certification

## Summary of Actuari al Report

## Executive Summary

Exhibit
Number Title Page
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, 2002 ..... 23
10
Summary of Actuarial Assumptions as of July 1, 2002 ..... 26

June 13, 2008

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

## 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, 2002, performed by Buck Consultants, Inc.

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, 2002.

All costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures, including the use of the Entry Age Actuarial Cost Method, as defined in LB407, effective July 1, 2002. This report fully and fairly discloses the actuarial position of the plan.

An actuarial experience analysis was completed in parallel with the July 1, 2002, valuation. A number of revised actuarial assumptions regarding salary increases, mortality, and expected number of retirements, terminations and disabilities were implemented for the July 1, 2002, valuation as directed by the Nebraska Public Employees Retirement Board. In our opinion, the assumptions represent reasonable expectations and our best estimate of the anticipated experience under the plan. A summary of the actuarial assumptions used in this actuarial valuation are shown in Exhibit 10.

Based on the results of our actuarial valuation, the School Retirement System is actuarially sound. The contributions paid by members, school employers, and the State defined by statute are more than sufficient to meet 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 25 years. For the 2003-2004 fiscal year, that amount is $\$ 0$.

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.
Respectively submitted,
BUCK CONSULTANTS, INC.

David H. Slishinsky, A.S.A., E.A., M.A.A.A.
Koren L. Holden, 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 Requi rements and Funded Status for Plan Year 2002/ 2003

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, and whether additional contributions are required for the fiscal year ending J une 30, 2004;
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, 2001 and ending J une 30, 2002.

The 2002 actuarial valuation is based upon the plan provisions as of July 1, 2002, as described in Exhibit 8. The actuarial methods and assumptions are described in Exhibit 9 and 10.

Highlights from the current valuation:

1. Under Legislative Bill 407, the separate funding under the Aggregate and Frozen Entry Age Actuarial Cost Methods for the Excess Annuity and the Service Annuity pieces of the Formula Annuity, respectively, were replaced by the Entry Age Actuarial Cost Method for funding the total Formula Annuity.
2. No additional State contribution is required for the 2003-2004 fiscal year to pay the normal cost and amortize any unfunded liabilities for the system. The present value of future Formula Annuity benefits is less than the Actuarial Value of Assets and the present values of future member and employer contributions and State appropriations, resulting in a reserve of $(\$ 88,762,910)$ in funding.
3. An actuarial experience analysis was completed in parallel with the July 1, 2002 actuarial valuation. Under direction of the Nebraska Public Employees Retirement Board, revised assumptions affecting salary increases, mortality and expected rates of retirement, termination and disability were adopted effective July 1, 2002. These changes in assumptions increased the unfunded actuarial accrued liability by $\$ 73,471,973$.
4. A loss was experienced on the actuarial value of assets during the 2001/2002 plan year. The annual rate of return on Market Value was $-6.1 \%$. The rate of return on Actuarial Value of $4.6 \%$ fell short of the $8 \%$ assumed investment return rate by $3.4 \%$, resulting in an increase to the unfunded actuarial accured liability by $\$ 143,345,747$.
5. The plan experienced a decremental loss over the period, primarily due to salary increases greater than expected. The unfunded acutarial accrued liability increased by \$48,369,356 as a result of decremental experience.
6. The funded status of the system as measured by the ratio of the system assets over the Pension Benefit Obligation (PBO) decreased, primarily due to asset and liability losses. 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, 2001 actuarial valuation, the funded percentage on Actuarial Value decreased from 107.1\% to $102.7 \%$. This decrease was primarily due to salary and asset losses, and assumption changes.

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

## EXECUTI VE SUMMARY

## Basic Actuarial Valuation Results

The 2002 actuarial valuation results are based upon the plan provisions as of July 1, 2002 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 25 years.

The member contribution rate is a fixed rate equal to $7.25 \%$ of pay. The School District's funding of liabilities is equal to $101 \%$ of the employee contribution rate, or $7.32 \%$ of pay. The State contributes $.7 \%$ of covered pay and an annual appropriation of $\$ 5,639,235$, as well as any additional required funding.

The minimum total required contribution rate increased from $11.98 \%$ (excess formula only) to $13.45 \%$ (total formula annuity) of pay from the 2001/2002 plan year to the 2002/2003 plan year. A history of required contribution rates is shown below. For fiscal years 1994/1995 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 |
| $2003-2004$ | $13.45 \%$ | $\$$ |
| $2002-2003$ | 11.98 | 0 |
| $2001-2002$ | 9.15 | 0 |
| $2000-2001$ | 11.92 | 0 |
| $1999-2000$ | 5.69 | 0 |
| $1998-1999$ | 8.86 | 0 |
| $1997-1998$ | 13.94 | 0 |
| $1996-1997$ | $14.53^{*}$ | 0 |
| $1995-1996$ | $14.69^{*}$ | 809,350 |
| $1994-1995$ | $14.59^{*}$ | $4,413,418$ |

*Includes a 0.3\% COLA contribution made to the School Employees Retirement System Reserve Fund.

## Nebraska Public Employees Reti rement Systems SCHOOL SYSTEM

## EXECUTI VE SUMMARY

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

Based on the 2002 actuarial valuation, the total required contribution rate of $13.45 \%$ is below the actual contribution rate of $15.77 \%$. For the current participant group, the present value of the additional funding is $\$ 88,762,910$. This amount is referenced as an actuarial reserve on the plan's balance sheet, and will be available to offset actuarial losses or plan changes, or to allow for reduced contribution rates in the future.
2. Asset Values

The total assets of the system as of the current and prior valuation date including the Retirement System Reserve Fund (RSRF) at both market value and actuarial value, and the rate of return during the period is as follows:

|  | July 1, 2001 | July 1, 2002 | Annual Rate <br> of Return |
| :---: | :---: | :---: | :---: |
| (a) Market value | $\$ 4,270,376,860$ | $\$ 4,041,641,782$ | $-6.1 \%$ |
| (b) Actuarial value, an adjusted <br> value intended to reduce the <br> effect of market fluctuations <br> (Exhibit 1B) | $\$ 4,579,772,296$ | $\$ 4,825,628,742$ | $4.6 \%$ |

## 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:

|  | $\begin{aligned} & \text { July 1, } 2001 \\ & \text { Excess Formula } \\ & \text { Annuity Only } \end{aligned}$ | July 1, 2002 Total Formula Annuity |
| :---: | :---: | :---: |
| (a) Present value of future benefits | \$ 4,163,779,970 | \$ 6,011,009,010 |
| (b) Net actuarial value of assets (excluding RSRF, and Service Annuity funds for July 1, 2001 only) | 3,067,857,238 | 4,799,789,893 |
| (c) Present value of future member contributions | 626,870,131 | 600,489,138 |
| (d) Present value of future employer contributions | 632,922,671 | 606,286,964 |
| (e) Present value of future State contributions | 60,525,392 | 57,978,262 |
| (f) Present value of future PPSF contributions | N/A | 35,227,663 |
| (g) Actuarial Liability/(Reserve) (a) - (b) -(c) -(d) - (e) - (f) | \$ (224,375,462) | \$ $(88,762,910)$ |

## Nebraska Public Employees Reti rement Systems <br> 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, 2001 |  | July 1, 2002 |
| :---: | :---: | :---: | :---: | :---: |
| (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 <br> (b) Net assets available for benefits (actuarial value) <br> (c) Unfunded Pension Benefit Obligation/(Reserve) <br> (d) Funded percentage on actuarial value of assets: (b) $\div(\mathrm{a})$ (iii) | \$ $\$$ $\$$ | $\begin{array}{r} 1,606,064,525 \\ 2,643,985,618 \\ \hline 4,250,050,143 \\ 4,553,865,903 \\ \hline \end{array}$ | \$ | $\begin{array}{r} 1,836,865,187 \\ 2,837,279,509 \\ \hline 4,674,144,696 \\ 4,799,789,893 \\ \hline \\ (125,645,197) \\ 102.7 \% \end{array}$ |

## 5. School Employees Retirement System Reserve Fund

Effective July 1, 1993, members began contributing .3\% of covered pay into this fund, with school districts matching at $101 \%$ of this amount. This fund is used to provide periodic ad-hoc COLA increases to retirees. Contributions ceased when sufficient funds were available to provide a one-time 3\% COLA benefit. For members ceasing employment prior to April 10, 1996 and receiving benefits as of September 1996, a one-time 3\% COLA increase was approved by the Board effective September 1996.

## EXECUTI VE SUMMARY

## 6. 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, 2001 | July 1, 2002 |
| :--- | ---: | ---: |
| (a) | Benefit accrual cost amount: | $\$$ |
| $128,257,557$ | $\$$ | $127,964,984$ |
| (b)Annual compensation before assumed <br> normal retirement age: | $\$ 1,049,876,059$ | $\$ 1,123,295,414$ |
| (c)Benefit accrual cost rate as a level <br> percentage of compensation (a) $\div$ (b): | $12.216 \%$ | $11.392 \%$ |


| Service Annuity Benefit* | J uly 1, 2001 |  | J uly 1, 2002 |  |
| :---: | :---: | :---: | :---: | :---: |
| (a) Benefit accrual cost amount: | \$ | 2,389,108 | \$ | 2,360,880 |
| (b) Number of active members before assumed retirement age: |  | 35,361 |  | 35,714 |
| (c) Benefit accrual cost per active member as a level dollar amount $[(a) \div(b)]$ | \$ | 67.56 | \$ | 66.11 |

*Excludes Omaha members.

## 7. 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.
8. 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.

## Nebraska Public Employees Reti rement Systems SCHOOL SYSTEM

## EXECUTI VE SUMMARY

## 8. Actuarial Methods and Assumptions (cont'd)

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.

## 9. Changes Since the Last Actuarial Valuation

There have been changes in the actuarial cost method and assumptions since the last valuation as of July 1, 2001. The following is a summary of these changes that have been adopted, effective July 1, 2002:

- The actuarial cost method has been changed to the Entry Age Actuarial Cost Method.
- Salary increase assumptions have been increased at earlier ages grading down to $4.5 \%$ at age 65.
- Retirement rates have been decreased at ages 55 to 58 and 66 to 69 and increased at ages 59 to 65 .
- Healthy mortality has been improved, using 1994 Group Annuity Mortality with a 2 -year setback.
- Ultimate withdrawal rates and select loading have been increased.
- Disability rates have been reduced by $50 \%$ at each age.


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

## System Assets

| A. Summary of Assets | Market Value as of J une 30, 2001 | Market Value as of J une 30, 2002 |
| :---: | :---: | :---: |
| 1. Cash and Equivalents | \$ 5,767,554 | \$ 2,134,662 |
| 2. Investments | 4,233,273,034 | 4,170,449,073 |
| 3. Receivables and Prepaids | 34,767,633 | $(128,453,171)$ |
| 4. Accounts Payable | $(3,431,361)$ | $(2,488,782)$ |
| 5. Total Assets Before Adjustment ( $1+2+3+4$ ) | \$ 4,270,376,860 | \$ 4,041,641,782 |
| 6. Retirement System Reserve Fund | \$ 24,156,236 | included above |
| 7. Net Assets Considered (5-6) | \$ 4,246,220,624 | \$ 4,041,641,782 |


| B. Development of Actuarial Value of Assets | Amount |  |
| :---: | :---: | :---: |
| 1. Actuarial Value of Assets as of July 1, 2001 | \$ | 4,579,772,296 |
| 2. Unrecognized Return as of July 1, 2001 | \$ | $(309,395,436)$ |
| 3. Contributions <br> (a) Member <br> (b) Employer <br> (c) State appropriations <br> (d) Total $(a+b+c)$ | \$ | $\begin{array}{r} 81,515,860 \\ 80,201,908 \\ 12,659,281 \\ \hline 174,377,049 \\ \hline \end{array}$ |
| 4. Benefit Payments (including transfers to Omaha) | \$ | 139,927,582 |
| 5. Expected Return at $8 \%$ on: <br> (a) Item 1 <br> (b) Item 2 <br> (c) Item 3(e) <br> (d) Item 4 <br> (e) Total $(a+b+c-d)$ | \$ | $\begin{gathered} 366,381,784 \\ (24,751,635) \\ 6,840,896 \\ 5,023,864 \\ \hline 343,447,181 \end{gathered}$ |
| 6. Actual Return on Market Value for 2001/2002 Plan Year, net of expenses | \$ | $(263,184,545)$ |
| 7. Return to be Spread for 2001/2002 Plan Year [6-5(e)] | \$ | $(606,631,726)$ |

## SCHOOL SYSTEM

## System Assets



## System Assets



[^0]
## Nebraska Public Employees Retirement Systems <br> SCHOOL SYSTEM

## Actuarial Contribution Requi rement

A. Development of Actuarially Required Funding Rate

J uly 1, 2002

1. Actuarial present value of benefits
(a) Active members
(b) Inactive members
(c) Retired members, disabilities and beneficiaries
(d) Total
2. Present Value of Future Normal Costs
3. Total Actuarial Accrued Liability [1(d) - 2]
4. Net Actuarial Value of Assets*
5. Unfunded Actuarial Accrued Liability [3-4]
6. 25-Year Amortization of the Unfunded Actuarial Accrued Liability
(a) Amount
(b) Amount as \% of Pay
7. Normal Cost
(a) Amount
(b) Amount as \% of Pay
8. Total Actuarially Required Contribution
(a) Amount
(b) Amount as \% of Pay

955,141,017
\$ 4,174,143,823
268,822,301
1,568,042,886
\$ 6,011,009,010
\$ 5,055,867,993
$4,799,789,893$
\$ 256,078,100
\$ 23,083,507
2.05\%
\$ 127,964,984
11.40\%
\$
151,048,491
13.45\%

[^1]
## Actuarial Contribution Requi rement

| B. | Development of Additional State Contributions for 2003/ 2004 | Annual Amount as a \% of Pay |
| :---: | :---: | :---: |
|  | Actuarially Required Contribution |  |
|  | a. Amount | \$151,048,491 |
|  | b. State PPSF appropriation | 5,639,235 |
|  | c. Net amount [(a)-(b)] | 145,409,256 |
|  | d. Net Amount as \% of Pay | 12.94\% |
| 2. | Statutory Contribution Rates |  |
|  | a. Employee Contribution Rate | 7.25\% |
|  | b. Employer Contribution Rate | 7.32\% |
|  | c. State Contribution Rate | .70\% |
|  | d. Total Contribution Rate [(a) + (b) + (c)] | 15.27\% |
| 3. | Additional Required State Contribution |  |
|  | a. Additional Required State Contribution Rate [1(d)-2(d), not less than 0\% ] | 0.00\% |
|  | b. Additional Required State Contribution Amount | \$ 0 |

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

## Actuarial Contribution Requi rement

| C. Schedule of State Amortization Bases | July 1, 2002 Remaining Payments | Date of Last Payment |  | Outstanding Balance as of uly 1, 2002 | Annual Contribution |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. 2002 Initial Unfunded Actuarial Accrued Liability base | 25 | 07/01/2027 |  | 256,078,100 | \$ | 23,083,507 |
| Total |  |  | \$ | 256,078,100 | \$ | 23,083,507 |

## 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, 2001*
\$ 4,576,862,702
2. Benefits accrued during the 2001/2002 plan year
3. Benefit payments during the 2001/2002 plan year**

137,343,144
4. Interest at 8\%

371,091,214
5. Expected Actuarial Accrued Liability as of July 1, 2002 (1+2-3+4) \$ 4,934,026,664
6. Decremental (Gain)/Loss by Source:
(a) Retirement
\$ $(19,804,463)$
(b) Termination
$(27,387,018)$
(c) Disability
(d) Pre-retirement mortality
$(1,901,912)$
$(3,885,574)$
5,279,968
(e) Post-retirement mortality
(f) Salary
(g) New entrants
(h) Retiree Cola
(i) Data changes/miscellaneous
(j) Total decremental (gain)/loss 116,823,728
22,258,780
$(40,972,085)$
$(2,042,068)$
\$ 48,369,356
7. Change in Actuarial Assumptions
\$ 73,471,973
8. Change in Plan Provisions
9. Actual Actuarial Accrued Liability as of July 1, 2002 $(5+6+7+8)$
\$ 5,055,867,993

* Determined under the Entry Age Actuarial Cost Method.
** Excludes transfer to Omaha and distributions from RSRF.


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

## Actuarial (Gain)/ Loss

| B. Change in Net Actuarial Value of Assets | Amount |
| :---: | :---: |
| 1. Net Actuarial Value of Assets as of July 1, 2001 | \$ 4,540,918,438 |
| 2. Contributions <br> (a) Member <br> (b) Employer <br> (c) State appropriation* <br> (d) Total |  |
| 3. Benefit Payments** | \$ 137,343,144 |
| 4. Expected Return at $8 \%$ on: <br> (a) Item 1 <br> (b) Item 2(e) <br> (c) Item 3 <br> (d) Total (a) + (b) - (c) | $\begin{array}{r} \$ \\ \$ 63,273,475 \\ 6,840,896 \\ 4,931,074 \\ \hline \end{array} \begin{array}{r} 365,183,297 \\ \hline \end{array}$ |
| 5. Expected Net Actuarial Value of Assets at June 30, 2002 $[1+2(e)-3+4(d)]$ <br> 6. Actual Net Actuarial Value of Assets at June 30, 2002 | $\begin{array}{r} \$ 4,943,135,640 \\ 4,799,789,893 \end{array}$ |
| 7. Actuarial (Gain)/Loss on Asset Sources (5-6) | \$ 143,345,747 |

* Excludes transfers to Omaha.
**Benefit payments exclude transfer to Omaha and distributions from RSRF.
C. Total Actuarial (Gain)/ Loss for the 2001/ 2002 plan year [A(6)(j) + B(7)]


## Nebraska Public Employees Retirement Systems

## SCHOOL SYSTEM

## Actuarial BaLANCE Sheet

| A. | Financial Resources |  |  | J uly 1, 2002 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net Actuarial Value of Assets |  |  | \$ | 4,799,789,893 |
| 2. | Present Value of Future Contributions |  |  |  |  |
|  | (a) Member | \$ | 600,489,138 |  |  |
|  | (b) Employer |  | 606,286,964 |  |  |
|  | (c) State |  | 57,978,262 |  |  |
|  | (d) State PPSF Appropriations |  | 35,227,663 |  |  |
|  | (e) Total |  |  |  | 1,299,982,027 |
|  | Actuarial Liability/(Reserve) |  |  |  | $(88,762,910)$ |
|  | Total Assets [1 + 2(e) + 3] |  |  | \$ | 6,011,009,010 |

## B. Benefit Obligations <br> July 1, 2002

1. Present Value of Future Benefits
(a) Active members
\$ 4,159,344,250
(b) Inactive members 268,822,301
(c) Retirees, disabilities and beneficiaries
1,567,986,453
(d) Omaha
(i) active
14,799,573
(ii) retired
(e) Total
56,433
\$ 6,011,009,010

## Nebraska Public Employees Reti rement Systems School System

## Accounting Information

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

|  |  | J uly 1, 2001 |  | J uly 1, 2002 |
| :---: | :---: | :---: | :---: | :---: |
| Pension Benefit Obligation (PBO): |  |  |  |  |
| Vested PBO <br> (a) members currently receiving payments <br> (b) other members <br> (i) accumulated member contributions <br> (ii) employer financed vested |  | $\begin{aligned} & 1,355,423,875 \\ & 1,137,561,776 \\ & 1,584,717,814 \\ & \hline \end{aligned}$ | \$ | $\begin{aligned} & 1,568,042,886 \\ & 1,196,831,186 \\ & \underline{1,787,668,385} \\ & \hline \end{aligned}$ |
| Total Vested PBO | \$ | 4,077,703,465 | \$ | 4,552,542,457 |
| Nonvested PBO |  | 172,346,678 |  | 121,602,239 |
| Total PBO | \$ | 4,250,050,143 | \$ | 4,674,144,696 |
| Net Actuarial Value of Assets* |  | 4,553,865,903 |  | 4,799,789,893 |
| Unfunded Pension Benefit Obligation (Reserve) |  | $(303,815,760)$ | \$ | $(125,645,197)$ |
| Funded Percentage |  |  |  |  |
| (a) on vested PBO |  | 111.7\% |  | 105.4\% |
| (b) on total PBO |  | 107.1\% |  | 102.7\% |

* Per LB 674, the PPSF assets were transferred to the School Annuity Reserve Account during the 2000/2001 Plan year.
B. Change in Pension Benefit Obligation from July 1, 2001 to J uly 1, 2002

| Pension Benefit Obligation at J uly 1, 2001 | $\$ 4,250,050,143$ |  |
| :--- | :--- | ---: |
| Increase/(Decrease) during Period: |  |  |
| Plan Provision Changes | $\$$ | 0 |
| Assumption Changes |  | $48,295,045$ |
| Benefits Accumulated |  | $(147,798,821$ |
| Benefits Paid* |  | $346,896,144)$ |
| Interest Cost |  | $18,446,988$ |
| Plan Experience | $\$$ | $424,094,553$ |
| Total Change | $\$$ | $4,674,144,696$ |
| Pension Benefit Obligation at J uly 1, 2002 |  |  |

* Excludes transfer to Omaha and distributions from RSRF.


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

## Accounting Information

Exhibit 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, 2002 and 2001, 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.
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, 2002 | \$ 80,201,908 | \$ 14,971,170 | \$ 95,173,078 | 100\% |
| June 30, 2001 | 77,062,239 | 14,451,658 | 91,513,897 | 100\% |
| June 30, 2000 | 69,945,377 | 14,102,170 | 84,047,547 | 100\% |
| June 30, 1999 | 69,983,866 | 27,637,589 | 97,621,455** | 100\% |
| June 30, 1998 | 65,135,713 | 13,511,201 | 78,646,914 | 100\% |
| June 30, 1997 | 63,187,899 | 13,271,330 | 76,459,229 | 100\% |

* Includes funding for the Excess Formula Annuity, the Service Annuity, supplemental funds, and Omaha
appropriations.
** Includes accrued School and State contributions of $\$ 2,920,270$ and $\$ 13,882,513$, respectively.


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

| Valuation Date | June 30, 2002 |
| :--- | :--- |
| Actuarial Cost Method | Entry Age |
| Amortization Method | Level dollar amount, closed |
| Amortization Period | 25 years |
| Asset Valuation Method | 5 year smoothing |
| Actuarial Assumptions: |  |
| $\quad$ Investment rate of return* | $8.0 \%$ |
| $\quad$ Projected salary increases* | $4.5 \%-9.1 \%$ |
| *Includes inflation at | $3.5 \%$ |
| Cost-of-living adjustment | $2.5 \%$ with a floor benefit equal to $75 \%$ |
|  | purchasing power of original benefit |

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

## 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, 2002 | \$ 4,799,789,893 | \$ 5,055,867,993 | \$ 256,078,100 | 94.9\% | \$ 1,065,515,857 | 24.0\% |
| June 30, 2001 | 1,486,008,665 | 1,704,201,512 | 218,192,847 | 87.2 | 995,348,331 | 21.9 |
| June 30, 2000 | 1,348,542,467 | 1,526,061,507 | 177,519,040 | 88.4 | 933,339,432 | 19.0 |
| June 30, 1999 | 1,129,546,860 | 1,345,494,742 | 215,947,882 | 84.0 | 893,801,152 | 24.2 |
| June 30, 1998 | 892,780,966 | 865,412,669 | $(27,368,297)$ | 103.2 | 882,963,179 | (3.1) |
| June 30, 1997 | 742,015,212 | 771,343,623 | 29,328,411 | 96.2 | 853,842,959 | 3.4 |

The Schedule of Funding Progress prior to June 30, 2002 excluded liabilities and assets for the Excess Formula Annuity benefit because funding for this benefit was based on the Aggregate Actuarial Cost Method. As of June 30, 2002, per LB407, the cost method was changed to the Entry Age Actuarial Cost Method for the total Formula Annuity, and thus, from June 30, 2002 onward, the Schedule of Funding Progress under GASB No. 25 will include total liabilities and assets for the School Retirement System.

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

## SUMMARY of MEMBER DATA

| A. | Active Members |  | J uly 1, 2001 |  | J uly 1, 2002 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Number of Active Members |  |  |  |  |
|  | (a) Before assumed retirement age |  | 35,361 |  | 35,714 |
|  | (b) Beyond assumed retirement age |  | 228 |  | 260 |
|  | (c) Total |  | 35,589 |  | 35,974 |
| 2. | Annual Considered Compensation* |  |  |  |  |
|  | (a) Before assumed retirement age | \$ | 1,049,876,059 | \$ | 1,123,295,414 |
|  | (b) Beyond assumed retirement age |  | 2,834,050 |  | 3,447,905 |
|  | (c) Total | \$ | 1,052,710,109 | \$ | 1,126,743,319 |
| 3. | Accumulated Contributions | \$ | 938,051,273 | \$ | 1,057,037,368 |
| 4. | Active Member Averages |  |  |  |  |
|  | (a) Age |  | 45.0 |  | 45.3 |
|  | (b) Service |  | 11.5 |  | 11.7 |
|  | (c) Compensation | \$ | 29,580 | \$ | 31,321 |
|  | (d) Accumulated Contributions | \$ | 27,019 | \$ | 29,383 |

B. I nactive Members

1. Number of inactive members
2. Accumulated member contributions
3. Inactive member averages
(a) Age
(b) Accumulated member contributions

|  | 15,158 |  |
| :---: | ---: | ---: |
| $\$$ | $133,643,951$ | $\$$ |
|  |  | $139,793,818$ |
|  | 50.0 |  |
|  | 8,817 | $\$$ |

C. Retired Members and Beneficiaries

1. Number of members
(a) System retirees
(b) Omaha retirees
2. Annual benefits - regular
(a) System retirees
(b) Omaha retirees
(c) Total
3. Annual benefits-supplemental
(a) System retirees
(b) Omaha retirees
(c) Total

|  | 10,925 4 |  | 11,360 3 |
| :---: | :---: | :---: | :---: |
| \$ | 108,264,586 | \$ | 120,709,781 |
|  | 3,027 |  | 3,319 |
| \$ | 108,267,613 | \$ | 120,713,100 |
| \$ | 9,513,920 | \$ | 10,083,770 |
|  | 4,036 |  | 0 |
| \$ | 9,517,956 | \$ | 10,083,770 |

## Summary of Member Data

D. Distribution of Retired Members and Beneficiaries as of July 1, 2002

| Age <br> Range | Number | Annual Benefit | Average Annual <br> Benefit |
| :---: | :---: | :---: | :---: |
| $59 \&$ Under | 688 | $\$$ | $16,718,783$ |
| $60-64$ | 1,687 | $\$ 1,220,493$ | 24,301 |
| $65-69$ | 2,392 | $33,414,884$ | 18,507 |
| $70-74$ | 2,324 | $23,700,599$ | 13,969 |
| $75-80$ | 1,659 | $13,510,868$ | 10,198 |
| $80-84$ | 1,210 | $7,046,439$ | 8,144 |
| $85-89$ | 789 | $3,031,488$ | 5,824 |
| $90 \&$ Over | 611 | $2,149,997$ | 3,842 |
| Total | 11,360 | $\$$ | $130,793,551$ |
| 3,519 |  |  |  |

## E. Member Data Reconciliation

|  | Active Members | I nactive Members |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | With Deferred Benefits | Terminated with Balance | Retired Members and Beneficiaries |  |
| As of July 1, 2001 | 35,589 | 4,801 | 10,357 | 10,925 | 61,672 |
| Changes in status |  |  |  |  |  |
| a) Normal \& early retirements | (579) | 0 | 0 | 579 | 0 |
| b) Became payable | 0 | (127) | 0 | 127 | 0 |
| c) Deaths | (34) | (19) | (18) | (352) | (423) |
| d) Nonvested terminations | $(1,319)$ | 0 | 1,319 | 0 | 0 |
| e) Vested terminations | (660) | 660 | 0 | 0 | 0 |
| f) Contribution refund | (969) | (238) | $(2,272)$ | (12) | $(3,491)$ |
| g) Beneficiaries in receipt | 0 | 0 | 0 | 83 | 83 |
| h) Disability retirements | (11) | (4) | 0 | 15 | 0 |
| i) Return to active service | 521 | (210) | (311) | 0 | 0 |
| j) Expired benefits | 0 | 0 | 0 | (76) | (76) |
| Total changes in status | $(3,051)$ | 62 | $(1,282)$ | 364 | $(3,907)$ |
| New entrants |  |  |  |  |  |
| a) Without prior service | 3,436 | 0 | 0 | 0 | 3,436 |
| b) With prior service | 0 | 3 | 361 | 71 | 435 |
| Total new members | 3,436 | 3 | 361 | 71 | 3,871 |
| Net change | 385 | 65 | (921) | 435 | (36) |
| As of July 1, 2002 | 35,974 | 4,866 | 9,436 | 11,360 | 61,636 |

## Summary of Member Data

## F. Reconciliation Between 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 | 36,000 | 14,351 | 11,419 | 61,770 |
| Additions <br> a) Active \& Retired <br> b) 2001 Active <br> c) 2001 Balance Only <br> d) 2001 Deferred Vested <br> e) 2001 Retirees <br> f) 2001 Beneficiaries <br> Total Additions |  | $\begin{array}{r}0 \\ 0 \\ 2 \\ 3 \\ 0 \\ 0 \\ \hline 5\end{array}$ | 0 <br> 0 <br> 0 <br> 0 <br> 1 <br> 7 <br> 8 |  |
| Subtractions <br> a) Also Listed as Deaths <br> b) Also Listed as Retirees <br> c) Also Listed as Contribution Refunds <br> d) Benefits Expired <br> Total Subtractions | 0 <br> $(26)$ <br>  <br> $(5)$ <br> 0 <br> $(31)$ | $\begin{gathered} 0 \\ (32) \\ \\ (22) \\ 0 \\ \hline(54) \end{gathered}$ | $(5)$ <br> 0 <br>  <br> $(12)$ <br> $(50)$ <br> $(67)$ | $(5)$ <br> $(58)$ <br>  <br> $(39)$ <br> $(50)$ <br> $(152)$ |
| Net change | (26) | (49) | (59) | (134) |
| Number of Members Included in the Valuation As of July 1, 2002 | 35,974 | 14,302 | 11,360 | 61,636 |

## Summary of Member Data

G. Age and Service Distribution of Active Members as of July 1, 2002

| Age Last Birthday |  |  | 0-4 |  | 5-9 |  | 10-14 |  | 15-19 |  | 20-24 |  | 25-29 |  | 30-34 |  | Over 34 |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-19 | Number |  | 14 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 14 |
|  | Total Salary | \$ | 92,466 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 92,466 |
|  | Average Salary | \$ | 6,605 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 6,605 |
| 20-24 | Number |  | 886 |  | 2 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 888 |
|  | Total Salary | \$ | 15,702,809 | \$ | 42,857 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 15,745,666 |
|  | Average Salary | \$ | 17,723 | \$ | 21,429 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 17,732 |
| 25-29 | Number |  | 2,385 |  | 544 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 2,929 |
|  | Total Salary | \$ | 62,859,855 | \$ | 18,502,042 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 81,361,897 |
|  | Average Salary | \$ | 26,356 | \$ | 34,011 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 27,778 |
| 30-34 | Number |  | 1,547 |  | 1,479 |  | 461 |  | 1 |  | 0 |  | 0 |  | 0 |  | 0 |  | 3,488 |
|  | Total Salary | \$ | 31,549,718 | \$ | 51,903,162 | \$ | 18,251,301 | \$ | 23,214 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 101,727,395 |
|  | Average Salary | \$ | 20,394 | \$ | 35,093 | \$ | 39,591 | \$ | 23,214 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 29,165 |
| 35-39 | Number |  | 1,601 |  | 729 |  | 1,092 |  | 426 |  | 1 |  | 0 |  | 0 |  | 0 |  | 3,849 |
|  | Total Salary | \$ | 27,446,518 | \$ | 22,742,570 | \$ | 43,592,805 | \$ | 18,539,670 | \$ | 25,923 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 112,347,486 |
|  | Average Salary | \$ | 17,143 | \$ | 31,197 | \$ | 39,920 | \$ | 43,520 | \$ | 25,923 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 29,189 |
| 40-44 | Number |  | 1,901 |  | 957 |  | 792 |  | 1,035 |  | 613 |  | 1 |  | 0 |  | 0 |  | 5,299 |
|  | Total Salary | \$ | 30,529,705 | \$ | 24,923,427 | \$ | 28,020,130 | \$ | 44,267,136 | \$ | 27,770,857 | \$ | 25,735 | \$ | 0 | \$ | 0 | \$ | 155,536,990 |
|  | Average Salary | \$ | 16,060 | \$ | 26,043 | \$ | 35,379 | \$ | 42,770 | \$ | 45,303 | \$ | 25,735 | \$ | 0 | \$ | 0 | \$ | 29,352 |
| 45-49 | Number |  | 1,645 |  | 1,025 |  | 937 |  | 664 |  | 1,088 |  | 783 |  | 2 |  | 0 |  | 6,144 |
|  | Total Salary | \$ | 28,814,635 | \$ | 25,598,803 | \$ | 29,325,053 | \$ | 25,279,946 | \$ | 49,663,583 | \$ | 38,226,078 | \$ | 156,026 | \$ | 0 | \$ | 197,064,124 |
|  | Average Salary | \$ | 17,516 | \$ | 24,974 | \$ | 31,297 | \$ | 38,072 | \$ | 45,647 | \$ | 48,820 | \$ | 78,013 | \$ | 0 | \$ | 32,074 |
| 50-54 | Number |  | 992 |  | 819 |  | 1,024 |  | 873 |  | 792 |  | 1,323 |  | 806 |  | 0 |  | 6,629 |
|  | Total Salary | \$ | 17,855,641 | \$ | 20,990,158 | \$ | 33,403,538 | \$ | 33,567,196 | \$ | 33,837,297 | \$ | 67,076,558 | \$ | 41,063,519 | \$ | 0 | \$ | 247,793,907 |
|  | Average Salary | \$ | 18,000 | \$ | 25,629 | \$ | 32,621 | \$ | 38,450 | \$ | 42,724 | \$ | 50,700 | \$ | 50,947 | \$ | 0 | \$ | 37,380 |
| 55-59 | Number |  | 610 |  | 439 |  | 577 |  | 625 |  | 593 |  | 495 |  | 579 |  | 227 |  | 4,145 |
|  | Total Salary | \$ | 10,689,497 | \$ | 10,703,280 | \$ | 17,001,489 | \$ | 22,182,559 | \$ | 22,622,606 | \$ | 23,703,087 | \$ | 31,062,410 | \$ | 12,228,339 | \$ | 150,193,267 |
|  | Average Salary | \$ | 17,524 | \$ | 24,381 | \$ | 29,465 | \$ | 35,492 | \$ | 38,149 | \$ | 47,885 | \$ | 53,648 | \$ | 53,869 | \$ | 36,235 |
| 60-64 | Number |  | 372 |  | 192 |  | 239 |  | 294 |  | 276 |  | 152 |  | 82 |  | 139 |  | 1,746 |
|  | Total Salary | \$ | 5,735,909 | \$ | 3,744,149 | \$ | 6,044,294 | \$ | 8,878,706 | \$ | 9,042,084 | \$ | 6,345,253 | \$ | 3,805,943 | \$ | 7,544,966 | \$ | 51,141,304 |
|  | Average Salary | \$ | 15,419 | \$ | 19,501 | \$ | 25,290 | \$ | 30,200 | \$ | 32,761 | \$ | 41,745 | \$ | 46,414 | \$ | 54,280 | \$ | 29,291 |
| 65-69 | Number |  | 333 |  | 147 |  | 118 |  | 101 |  | 77 |  | 25 |  | 9 |  | 33 |  | 843 |
|  | Total Salary | \$ | 3,662,561 | \$ | 1,971,039 | \$ | 2,096,075 | \$ | 2,065,532 | \$ | 1,458,602 | \$ | 774,085 | \$ | 262,103 | \$ | 1,448,820 | \$ | 13,738,817 |
|  | Average Salary | \$ | 10,999 | \$ | 13,408 | \$ | 17,763 | \$ | 20,451 | \$ | 18,943 | \$ | 30,963 | \$ | 29,123 | \$ | 43,904 | \$ | 16,298 |
| TOTAL | Number |  | 12,286 |  | 6,333 |  | 5,240 |  | 4,019 |  | 3,440 |  | 2,779 |  | 1,478 |  | 399 |  | 35,974 |
|  | Total Salary | \$ | 234,939,314 | \$ | 181,121,487 | \$ | 177,734,685 | \$ | 154,803,959 | \$ | 144,420,952 | \$ | 136,150,796 | \$ | 76,350,001 | \$ | 21,222,125 | \$ | 1,126,743,319 |
|  | Average Salary | \$ | 19,123 | \$ | 28,600 | \$ | 33,919 | \$ | 38,518 | \$ | 41,983 | \$ | 48,993 | \$ | 51,658 | \$ | 53,188 | \$ | 31,321 |

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

## Forecast of Expected Disbursements



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 Retirement 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 and age 21 by August 15 preceding the school year 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.
Beginning with 1996-97 fiscal year, members contribute at a rate equal to $49.75 \%$ of the greater of (i) the overall rate necessary to fund the liability attributable to benefits in excess of the service annuities, or (ii) $7.25 \%$ of pensionable 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 Retirement 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 with five years of service.

Normal Retirement Date (NRD)

Service

Pensionable pay
Eligibility for Benefits

| Deferred vested | Termination for reasons other than death or disability <br> 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 <br> and completing five years of service, or attaining 35 years of <br> service regardless of age, or attaining age 55 and age plus <br> service equals at least 85 (Rule of 85 ). |
| Normal retirement | 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.

Postponed retirement
Monthly pension benefit determined as of actual retirement date.

Termination with deferred vested benefit

Disability retirement
Monthly pension benefit determined as of termination date, reduced by $3 \%$ for each year that commencement of payment precedes the earlier of the Rule of 90 or age 65 (Early Commencement requires attainment of age 60).

Monthly pension benefit determined as of disability retirement date.

Death with pre-retirement benefits 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 when the member would have been age 60, or age at death if greater, reduced for commencement before age 65 and the $100 \%$ joint and survivor form of payment.

## Nebraska Public Employees Retirement 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.

## Funding Arrangement

Pursuant to LB407 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:

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.

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

## Summary of Plan Provisions

## State Appropriation

LB700, 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 1996-97 fiscal year, the funding shall be $81.7873 \%$ of $\$ 6,895,000$ or $\$ 5,639,235$ annually, for each year through the 2010-11 fiscal year.

## Benefits Reflected in Valuation

All benefits were valued, excluding the $3 \%$ cost-of-living adjustment funded by the RSRF and including future cost-of-living increases as provided for by LB 674 and LB 711. With the transfer of assets from the RSRF to the School Retirement Fund, future valuations will recognize the assets of the RSRF and include the $3 \%$ cost-of-living benefit for actuarial valuation purposes.

## Plan Provisions Effective after J uly 1, 2002

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 Prior Year

There have been no changes in plan provisions since the July 1, 2001 valuation.

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

## Summary of Actuarial Methods and Procedures as ofj uly 1, 2002

## 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 normal costs are now 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 unfunded actuarial accrued liability is funded with a level dollar payment amount over 25 years from July 1, 2002.

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 of July 1, 2002

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.
(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.

## Exhibit 9

(cont'd)

## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

## Summary of Actuarial Methods and Procedures as ofjuly 1, 2002

## B. VALUATI ON 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 prior plan year compensations increased one year with the salary scale.

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

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

There were approximately 300 active participants with missing dates of birth and gender codes. They were assumed to be age 33 (the average entry age for the group as a whole) and gender codes were randomly assigned in the ratio 75\% female/ $25 \%$ male.

## Nebraska Public Employees Reti rement Systems

SCHOOL SYSTEM

## Summary of Actuarial Assumptions as of july 1, 2002

## ECONOMIC ASSUMPTIONS

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

## DEMOGRAPHIC ASSUMPTI ONS

1. Mortality
a. Healthy lives - active and retired members and beneficiaries
b. Disabled lives

8\% per annum, compounded annually, net of expenses.
$3.5 \%$ per annum, compounded annually.
Rates vary by age.
Sample ages are as follows:

| Age | Rate |
| :---: | :---: |
|  |  |
| 25 | $9.10 \%$ |
| 30 | $8.00 \%$ |
| 35 | $7.10 \%$ |
| 40 | $6.40 \%$ |
| 45 | $5.80 \%$ |
| 50 | $5.30 \%$ |
| 55 | $5.00 \%$ |
| 60 | $4.70 \%$ |
| $65+$ | $4.50 \%$ |

5.5\% per annum, compounded annually.

1994 Group Annuity Mortality Table, with two year setback.

1971 Group Annuity Mortality Table, without setback.

## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

## Summary of Actuarial Assumptions as of July 1, 2002

c. Mortality rates under the mortality tables are shown below at sample ages:

|  | Mortality Rate |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Sample Age | Healthy Members |  | Disabled Members |  |
|  | Males | Females | Males | Females |
|  | $.08 \%$ | $.03 \%$ | $.08 \%$ | $.05 \%$ |
| 40 | .09 | .06 | .16 | .09 |
| 50 | .21 | .12 | .53 | .22 |
| 60 | .63 | .34 | 1.31 | .55 |
| 70 | 1.99 | 1.18 | 3.61 | 1.65 |
| 80 | 5.02 | 3.17 | 8.74 | 5.61 |

d. Life expectancies under the mortality tables are shown below at sample ages:

|  | Life Expectancy (Years) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Sample Age | Healthy Members |  | Disabled Members |  |
|  | Males | Females | Males | Females |
|  | 51.7 | 56.2 | 45.6 | 51.0 |
| 40 | 42.1 | 46.4 | 36.0 | 41.3 |
| 50 | 32.5 | 36.8 | 26.9 | 31.8 |
| 60 | 23.5 | 27.4 | 18.8 | 23.5 |
| 70 | 15.7 | 18.9 | 11.9 | 15.3 |
| 80 | 9.4 | 11.6 | 7.0 | 8.9 |

## Nebraska Public Employees Reti rement Systems

## SCHOOL SYSTEM

## Summary of Actuarial Assumptions as of july 1, 2002

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 | $20 \%$ | $20 \%$ |
| 56 | $20 \%$ | $20 \%$ |
| 57 | $22 \%$ | $22 \%$ |
| 58 | $25 \%$ | $25 \%$ |
| 59 | $28 \%$ | $28 \%$ |
| 60 | $35 \%$ | $35 \%$ |
| 61 | $30 \%$ | $30 \%$ |
| 62 | $40 \%$ | $40 \%$ |
| 63 | $30 \%$ | $30 \%$ |
| 64 | $30 \%$ | $30 \%$ |
| 65 | $35 \%$ | $35 \%$ |
| 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 | $6 \%$ | $6 \%$ |
| 61 | $6 \%$ | $6 \%$ |
| 62 | $18 \%$ | $18 \%$ |
| 63 | $14 \%$ | $14 \%$ |
| 64 | $10 \%$ | $10 \%$ |

## SCHOOL SYSTEM

## Summary of Actuarial Assumptions as of uly 1, 2002

3. Termination:

Rates vary by age and service, and are derived by taking the product of the select multiplier and the ultimate rate. Select multipliers are applied by service and ultimate rates are applied by age. Sample rates are as follows:

| Select Multipliers by Service: |  |
| :---: | :---: |
| Years of | Multiplier |
| Service | 2.00 |
| $1^{\text {st }}$ | 1.50 |
| $2^{\text {nd }}$ | 1.25 |
| $3^{\text {rd }}$ | 1.00 |
| $4^{\text {th }}$ or more |  |


| Ultimate Rates by Age |  |  |
| :---: | :---: | :---: |
|  | Rate |  |
| Age | Male | Female |
| 25 | $11.4 \%$ | $14.2 \%$ |
| 30 | $9.4 \%$ | $11.7 \%$ |
| 35 | $7.5 \%$ | $9.4 \%$ |
| 40 | $5.7 \%$ | $7.1 \%$ |
| 45 | $4.7 \%$ | $5.9 \%$ |
| 50 | $4.5 \%$ | $5.7 \%$ |
| 55 | $5.0 \%$ | $6.2 \%$ |
| 60 | $15.5 \%$ | $19.4 \%$ |

Rates vary by age. Sample rates are as follows:

| Age | Rate |
| :---: | :---: |
|  |  |
| 25 | $.00 \%$ |
| 30 | $.00 \%$ |
| 35 | $.06 \%$ |
| 40 | $.06 \%$ |
| 45 | $.12 \%$ |
| 50 | $.18 \%$ |
| 55 | $.27 \%$ |
| 60 | $.36 \%$ |

## Nebraska Public Employees Retirement Systems

## SCHOOL SYSTEM

## Summary of Actuarial Assumptions as of july 1, 2002

## OTHER ASSUMPTI ONS

1. Form of Payment:

> Service annuity - Life annuity Formula annuity - Five year certain and life annuity.
2. Marital Status
a. Percent married
b. Spouse's age
3. Administrative Expense

Investment return is assumed to be net of expenses.
4. Commencement age for deferred vested benefit
5. Cost of Living Adjustment

Age 62.
85\% married
Females assumed to be three years younger than males.

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.

Note: The actuarial assumptions for inflation, salary increase, mortality, retirement, withdrawal, and disability were changed for the July 1,2002 , valuation to better reflect expected plan experience.


[^0]:    *Includes transfers to Omaha and distributions from RSRF.

[^1]:    * Excludes Retirement System Reserve Fund.

