Fiftieth Actuarial Report for State Fiscal Year Ending June 30, 2004 and System Plan Year Beginning July 1, 2002

December 2002



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LETTER OF CERTIFICATION

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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. Principal and Consulting Actuary Koren L. Holden, E.A., M.A.A.A. Senior Consultant, Actuary

SUMMARY OF ACTUARIAL REPORT FOR CONTRIBUTION REQUIREMENTS 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 June 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 June 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.

EXECUTIVE 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 and Additional State Funding					
Fiscal Year	al Year Total Contribution				
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			
1997-1998	13.94	0			
1996-1997	14.53*	809,350			
1995-1996	14.69*	4,413,418			
1994-1995	14.59*	1,709,842			

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

EXECUTIVE 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 of Return
(a) Market value	\$ 4,270,376,860	\$ 4,041,641,782	-6.1%
(b) Actuarial value, an adjusted value intended to reduce the effect of market fluctuations			
(Exhibit 1B)	\$ 4,579,772,296	\$ 4,825,628,742	4.6%

EXECUTIVE SUMMARY

3. Actuarial Liability/(Reserve)

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

		E	July 1, 2001 xcess Formula Annuity Only	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)

EXECUTIVE SUMMARY

4. Pension Benefit Obligation (PBO)

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

Funded Status	July 1, 2001	July 1, 2002
 (a) Pension Benefit Obligation i) retirees, disabled members and beneficiaries receiving benefits and deferred vested members 		
not yet receiving benefits ii) active members iii) total pension benefit obligation	\$ 1,606,064,525 <u>2,643,985,618</u> \$ 4,250,050,143	\$ 1,836,865,187 2,837,279,509 \$ 4,674,144,696
 (b) Net assets available for benefits (actuarial value) 	4,553,865,903	4,799,789,893
(c) Unfunded Pension Benefit Obligation/(Reserve)	\$ (303,815,760)	\$ (125,645,197)
(d) Funded percentage on actuarial value of assets: (b)÷(a)(iii)	107.1%	102.7%

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.

EXECUTIVE 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 normal retirement age:	\$	1,049,876,059	\$ 1,123,295,414
(c)	Benefit accrual cost rate as a level percentage of compensation (a) ÷ (b):		12.216%	11.392%

Service Annuity Benefit*			July 1, 2001	July 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) ÷ (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.

EXECUTIVE 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.

Α.	Summary of Assets	Market Value as of June 30, 2001		Market Value as of June 30, 2001Market V of June 3	
1.	Cash and Equivalents		\$ 5,767,554	\$	5 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

SYSTEM ASSETS

В.	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		
	(a) Member	\$	81,515,860
	(b) Employer		80,201,908
	(c) State appropriations		12,659,281
	(d) Total $(a + b + c)$	\$	174,377,049
4.	Benefit Payments (including transfers to Omaha)	\$	139,927,582
5.	Expected Return at 8% on:		
	(a) Item 1	\$	366,381,784
	(b) Item 2		(24,751,635)
	(c) Item 3(e)		6,840,896
	(d) Item 4	-	5,023,864
	(e) Total (a+b+c-d)	\$	343,447,181
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)

SYSTEM ASSETS

В.	Development	Amount						
8.	Total Market Val	otal Market Value of Assets as of July 1, 2002						
9.	Return to be Spr	Return to be Spread:						
	Plan Year	Unr	recognized Return					
	2001/2002 2000/2001 1999/2000 1998/1999	\$ (606,631,726) (544,586,637) 11,721,551 116,908,917	\$(485,305,381) 326,751,982) 4,688,620 23,381,783				
		· · · · · · ·	Total	\$ (7	83,986,960)			
10.	Total Actuarial V	Value of Assets at July 1,	2002 (8-9)		\$ 4,825,628,742			
11.	Actuarial Value of Fund (RSRF)	of School Retirement Syst	lem Reserve					
	(a) Market valu	ie of RSRF	\$ 21,6	40,988				
	(b) Ratio of tota market valu	al actuarial value to total Je	<u>119.397</u>	<u>'7349%</u>				
	(c) Actuarial va	llue of RSRF: (a) x (b)			25,838,849			
12.	Net Actuarial \ [10-11(c)]	/alue of Assets at July	1, 2002		\$4,799,789,893			

SYSTEM ASSETS

C .	Change in Asset Values During 2001/2002		Actuarial Value		Market Value	
1.	Total asset value as of July 1, 2001	\$	4,579,772,296	\$	4,270,376,860	
2.	Contributions for 2001/2002:					
	(a) Member contributions paid during the year	\$	81,515,860	\$	81,515,860	
	(b) Employer contributions paid during the year		80,201,908		80,201,908	
	(c) State appropriations for the year					
	(d) Contributions for 2001/2002: (a) + (b) + (c)		12,659,281		<u>12,659,281</u>	
		\$	174,377,049	\$	174,377,049	
3.	Disbursements for 2001/2002:					
	(a) Benefit payments*	\$	139,927,582	\$	139,927,582	
	(b) Expenses and fees		10,972,242		10,972,242	
	(c) Disbursements for 2001/2002: (a) + (b)	\$	150,899,824	\$	150,899,824	
4.	Investment return for 2001/2002:	\$	222,379,221	\$	(252,212,303)	
5.	Total asset value as of July 1, 2002:					
	[1 + 2(d) - 3(c) + 4]	\$	4,825,628,742	\$	4,041,641,782	
6.	Asset value of RSRF		25,838,849		21,640,988	
7.	Net asset value as of July 1, 2002: (5) - (6)	\$	4,799,789,893	\$	4,020,000,794	
8.	Approximate rate of investment return, net of expenses		4.6%		(6.1%)	

*Includes transfers to Omaha and distributions from RSRF.

ACTUARIAL CONTRIBUTION REQUIREMENT

Α.	Development of Actuarially Required Funding Rate		July 1, 2002
1.	Actuarial present value of benefits (a) Active members (b) Inactive members (c) Retired members, disabilities and beneficiaries (d) Total	↔ ↔	4,174,143,823 268,822,301 <u>1,568,042,886</u> 6,011,009,010
2.	Present Value of Future Normal Costs		<u>955,141,017</u>
3.	Total Actuarial Accrued Liability [1(d) - 2]	\$	5,055,867,993
4.	Net Actuarial Value of Assets*		<u>4,799,789,893</u>
5.	Unfunded Actuarial Accrued Liability [3 - 4]	\$	256,078,100
6.	25-Year Amortization of the Unfunded Actuarial Accrued Liability (a) Amount (b) Amount as % of Pay	\$	23,083,507 2.05%
7.	Normal Cost (a) Amount (b) Amount as % of Pay	\$	127,964,984 11.40%
8.	Total Actuarially Required Contribution (a) Amount (b) Amount as % of Pay	\$	151,048,491 13.45%

* Excludes Retirement System Reserve Fund.

ACTUARIAL CONTRIBUTION REQUIREMENT

B.	Development of Additional State Contributions for 2003/2004	Annual Amount as a % of Pay
1.	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

ACTUARIAL CONTRIBUTION REQUIREMENT

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

Actuarial (Gain)/Loss

Α.	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		123,415,892
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 (b) Termination (c) Disability (d) Pre-retirement mortality (e) Post-retirement mortality (f) Salary (g) New entrants (h) Retiree Cola (i) Data changes/miscellaneous (j) Total decremental (gain)/loss	\$ (19,804,463) (27,387,018) (1,901,912) (3,885,574) 5,279,968 116,823,728 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		0
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.

Actuarial (Gain)/Loss

В.	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 (a) Member (b) Employer	\$ 81,515,860 80,201,908
	(c) State appropriation*(d) Total	<u>12,659,281</u> \$ 174,377,049
3.	Benefit Payments**	\$ 137,343,144
4.	Expected Return at 8% on: (a) Item 1 (b) Item 2(e) (c) Item 3 (d) Total (a) + (b) - (c)	<pre>\$ 363,273,475 6,840,896 <u>4,931,074</u> \$ 365,183,297</pre>
5.	Expected Net Actuarial Value of Assets at June 30, 2002 [1 + 2(e) - 3 + 4(d)]	\$ 4,943,135,640
6.	Actual Net Actuarial Value of Assets at June 30, 2002	4,799,789,893
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)]	\$ 191,715,103

ACTUARIAL BALANCE SHEET

Α.	Financial Resources	July 1, 2002
1.	Net Actuarial Value of Assets	\$ 4,799,789,893
2.	Present Value of Future Contributions(a) Member\$ 60(b) Employer60(c) State5(d) State PPSF Appropriations3(e) Total3)0,489,138)6,286,964 57,978,262 <u>35,227,663</u> 1,299,982,027
3.	Actuarial Liability/(Reserve)	(88,762,910)
4.	Total Assets [1 + 2(e) + 3]	\$ 6,011,009,010

В.	Benefit Obligations		July 1, 2002
1.	Present Value of Future Benefits (a) Active members (b) Inactive members (c) Retirees, disabilities and beneficiaries (d) Omaha (i) active (ii) retired (e) Total	\$ 4,159,344,250 268,822,301 1,567,986,453 14,799,573 <u>56,433</u>	\$ 6,011,009,010

ACCOUNTING INFORMATION

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

		July 1, 2001		July 1, 2002
Pension Benefit Obligation (PBO):				
Vested PBO		1 355 423 875	\$	1 568 042 886
(b) other members	Ψ	1,000,420,070	Ψ	1,500,042,000
(i) accumulated member contributions		1,137,561,776		1,196,831,186
(ii) employer financed vested		<u>1,584,717,814</u>		<u>1,787,668,385</u>
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*		<u>4,553,865,903</u>		<u>4,799,789,893</u>
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 July 1, 2002

Pension Benefit Obligation at July 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*	(137,343,144)
Interest Cost	346,896,843
Plan Experience	18,446,988
Total Change	\$ 424,094,553
Pension Benefit Obligation at July 1, 2002	\$ 4,674,144,696

* Excludes transfer to Omaha and distributions from RSRF.

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

	Annual			
Plan Year Ending	School	State	Total	Percentage Contributed
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: Investment rate of return* Projected salary increases*	8.0% 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

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.

SUMMARY OF MEMBER DATA

Α.	Active Members		July 1, 2001		July 1, 2002			
1.	Number of Active Members (a) Before assumed retirement age (b) Beyond assumed retirement age (c) Total		35,361 <u>228</u> 35,589		35,714 <u>260</u> 35,974			
2.	 Annual Considered Compensation* (a) Before assumed retirement age (b) Beyond assumed retirement age (c) Total 	\$ \$	1,049,876,059 <u>2,834,050</u> 1,052,710,109	\$ \$	1,123,295,414 <u>3,447,905</u> 1,126,743,319			
3.	Accumulated Contributions	\$	938,051,273	\$	1,057,037,368			
4.	 Active Member Averages (a) Age (b) Service (c) Compensation (d) Accumulated Contributions 	\$	45.0 11.5 29,580 27,019	\$	45.3 11.7 31,321 29,383			
В.	Inactive Members	-						
1.	Number of inactive members		15,158		14,302			
2.	Accumulated member contributions	\$	133,643,951	\$	139,793,818			
3.	Inactive member averages (a) Age (b) Accumulated member contributions	\$	50.0 8,817	\$	50.4 9,774			
C.	Retired Members and Beneficiaries							
1.	Number of members (a) System retirees (b) Omaha retirees		10,925 4		11,360 3			
2.	Annual benefits - regular(a) System retirees(b) Omaha retirees(c) Total	\$ \$	108,264,586 <u>3,027</u> 108,267,613	\$ \$	120,709,781 <u>3,319</u> 120,713,100			
3.	Annual benefits-supplemental(a) System retirees(b) Omaha retirees(c) Total	\$ \$	9,513,920 <u>4,036</u> 9,517,956	\$	10,083,770 0 10,083,770			

SUMMARY OF MEMBER DATA

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

Age Range	Number	-	Annual Benefit	4	Average Annual Benefit
59 & Under	688	\$	16,718,783	\$	24,301
60-64	1,687		31,220,493		18,507
65-69	2,392		33,414,884		13,969
70-74	2,324		23,700,599		10,198
75-80	1,659		13,510,868		8,144
80-84	1,210		7,046,439		5,824
85-89	789		3,031,488		3,842
90 & Over	611		2,149,997		3,519
Total	11,360	\$	130,793,551	\$	11,514

E. Member Data Reconciliation

	Active Members	With Deferred Benefits	Terminated with Balance	Retired Members and Beneficiaries	Total
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
 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	Inactive Members	Retired Members, Beneficiaries, and Disabled	Total
Number of Data Records				
Submitted By NPERS	36,000	14,351	11,419	61,770
Additions				
a) Active & Retired	4	0	0	4
b) 2001 Active	1	0	0	1
c) 2001 Balance Only	0	2	0	2
d) 2001 Deferred Vested	0	3	0	3
e) 2001 Retirees	0	0	1	1
f) 2001 Beneficiaries	0	0	7	7
Total Additions	5	5	8	18
Subtractions				
 a) Also Listed as Deaths 	0	0	(5)	(5)
b) Also Listed as Retirees	(26)	(32)	0	(58)
c) Also Listed as				
Contribution Refunds	(5)	(22)	(12)	(39)
 d) Benefits Expired 	0	0	(50)	(50)
Total Subtractions	(31)	(54)	(67)	(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 Birthdav		0-4	5-9		10-14		15-19		20-24		25-29		30-34		Over 34		Total
15-19	Number	14		0	0	T	0		0		0		0		0		14
	Total Salary	\$ 92,466	\$	0 9	\$ O	\$	0	\$	0	\$	0	\$	0	\$	0	\$	92,466
	Average Salary	\$ 6,605	\$	0 9	\$ O	\$	0	\$	0	\$	0	\$	0	\$	0	\$	6,605
20-24	Number	886		2	0		0		0		0		0		0		888
	Total Salary	\$ 15,702,809	\$ 42,8	57 \$	\$ O	\$	0	\$	0	\$	0	\$	0	\$	0	\$	15,745,666
	Average Salary	\$ 17,723	\$ 21,4	29 3	\$ O	\$	0	\$	0	\$	0	\$	0	\$	0	\$	17,732
25-29	Number	2,385	Į	44	0		0		0		0		0		0		2,929
	Total Salary	\$ 62,859,855	\$ 18,502,0	42 \$	\$ O	\$	0	\$	0	\$	0	\$	0	\$	0	\$	81,361,897
	Average Salary	\$ 26,356	\$ 34,0	11 5	\$0	\$	0	\$	0	\$	0	\$	0	\$	0	\$	27,778
30-34	Number	1,547	1,4	79	461		1		0		0		0		0		3,488
	Total Salary	\$ 31,549,718	\$ 51,903, [*]	62	\$ 18,251,301	\$	23,214	\$	0	\$	0	\$	0	\$	0	\$	101,727,395
	Average Salary	\$ 20,394	\$ 35,0	93 3	\$ 39,591	\$	23,214	\$	0	\$	0	\$	0	\$	0	\$	29,165
35-39	Number	1,601	-	29	1,092		426		1		0		0		0		3,849
	Total Salary	\$ 27,446,518	\$ 22,742,5	70	\$ 43,592,805	\$	18,539,670	\$	25,923	\$	0	\$	0	\$	0	\$	112,347,486
	Average Salary	\$ 17,143	\$ 31,7	97 3	\$ 39,920	\$	43,520	\$	25,923	\$	0	\$	0	\$	0	\$	29,189
40-44	Number	1,901		57	792		1,035		613		1		0		0		5,299
	Total Salary	\$ 30,529,705	\$ 24,923,4	2/	\$ 28,020,130	\$	44,267,136	\$	27,770,857	\$	25,735	\$	0	\$	0	\$	155,536,990
15.10	Average Salary	\$ 16,060	\$ 26,0	43 3	<u>\$ 35,379</u>	\$	42,770	\$	45,303	\$	25,735	\$	0	\$	0	\$	29,352
45-49	Number	1,645		25	937	¢	664	¢	1,088	¢	/83	¢	2	¢	0	<u>۴</u>	6,144
	Total Salary	\$ 28,814,635	\$ 25,598,8		♦ 29,325,053	\$	25,279,946	\$	49,663,583	\$ ¢	38,226,078	\$ ¢	156,026	\$ ¢	0	⇒	197,064,124
E0 E4	Average Salary	\$ 17,516	\$ 24,9	14 3	<u>\$ 31,297</u>	\$	38,072	\$	45,647	\$	48,820	\$	/8,013	\$	0	\$	32,074
50-54	Number	992 ¢ 17 055 441				¢	0/3 22 E47 104	¢	192 דחב דבס בב	¢	1,323	¢	800 41.042.E10	¢	0	¢	0,029
	Avorago Salary	\$ 17,655,041 \$ 19,000	\$ 20,990, \$ 25,4	20 3	b 33,403,030 b 20,601	ф Ф	33,307,190	ф Ф	33,037,297	¢ Þ	50 700	¢ ¢	41,003,319 50 047	Φ Φ	0	ф Ф	247,793,907
55-59	Number	\$ 10,000 610	φ 25,0	27 .	577 <u>577</u>	Ψ	625	ψ	503	Ψ	105	Ψ	570	φ	<u>_</u>	Ψ	4 145
33-37	Total Salary	\$ 10 689 497	\$ 10 703 3	80 4	\$ 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	81	29 465	\$	35 492	\$	38 149	\$	47 885	\$	53 648	\$	53 869	\$	36 235
60-64	Number	372	+	92	239	Ť	294	Ŧ	276	Ť	152	+	82	Ť	139	Ť	1,746
	Total Salary	\$ 5,735,909	\$ 3.744.1	49	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	\$ 19,5	01	\$ 25,290	\$	30,200	\$	32,761	\$	41,745	\$	46,414	\$	54,280	\$	29,291
65-69	Number	333		47	118		101		77		25		9		33		843
	Total Salary	\$ 3,662,561	\$ 1,971,0	39 9	\$ 2,096,075	\$	2,065,532	\$	1,458,602	\$	774,085	\$	262,103	\$	1,448,820	\$	13,738,817
	Average Salary	\$ 10,999	\$ 13,4	08	\$	\$	<u>20,4</u> 51	\$	<u>18,9</u> 43	\$	<u>30,9</u> 63	\$	<u>29,1</u> 23	\$	43,904	\$	<u>16,</u> 298
TOTAL	Number	12,286	6,3	33	5,240		4,019		3,440		2,779		1,478		399		35,974
	Total Salary	\$ 234,939,314	\$ 181,121,4	87 3	\$ 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	\$ 28,6	00 9	\$ 33,919	\$	38,518	\$	41,983	\$	48,993	\$	51,658	\$	53,188	\$	31,321

Plan Year Ending June 30	Active Employees	Retired and Disabled Members and Beneficiaries	Total
2003	\$ 13,041,869	\$ 133,841,409	\$ 146,883,278
2004	30,017,950	135,597,768	165,615,718
2005	49,214,600	137,037,995	186,252,595
2006	71,235,395	138,590,261	209,825,656
2007	96,184,121	139,806,881	235,991,002
2008	124,372,634	140,969,799	265,342,433
2009	155,231,345	141,484,568	296,715,913
2010	188,457,420	142,132,455	330,589,875
2011	224,245,539	142,496,747	366,742,286
2012	262,310,272	142,558,701	404,868,973
2013	\$ 301,985,794	\$ 141,806,172	\$ 443,791,966
2014	343,251,491	140,611,284	483,862,775
2015	385,091,637	139,062,072	524,153,709
2016	426,541,300	137,210,296	563,751,596
2017	467,483,892	135,083,542	602,567,434
2018	508,428,318	132,850,583	641,278,901
2019	549,968,081	130,499,066	680,467,147
2020	592,793,238	127,752,940	720,546,178
2021	634,344,359	124,643,658	758,988,017
2022	676,217,307	121,215,281	797,432,588
2023	\$ 718,128,953	\$ 117,341,480	\$ 835,470,433
2024	758,678,559	113,203,848	871,882,407
2025	798,141,434	108,629,867	906,771,301
2026	835,887,581	103,658,567	939,546,148
2027	872,767,235	98,313,368	971,080,603
2028	908,907,158	92,765,085	1,001,672,243
2029	944,114,867	86,945,779	1,031,060,646
2030	979,174,946	80,905,113	1,060,080,059
2031	1,011,506,446	74,814,142	1,086,320,588
2032	1,044,543,321	68,726,173	1,113,269,494

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.

SUMMARY OF PLAN PROVISIONS

Member	Any person employed by a public school 15 or more hours per week and age 21 by August 15 preceding the school year shal be a member of the system. Employees at the date of establishment could have elected not to participate, and those covered under another system do not participate.					
Participation Date	Date of becoming a member.					
Definitions						
Final average earnings	The average of the highest three fiscal years after July 1, 1968 of pensionable pay during the period ending on the earlier of the participant's termination date or retirement date. For employees who become a member on or after July 1, 1996, earnings will be capped at the maximum earnings defined in Code $401(a)(17)$.					
Fiscal year	Twelve month period ending June 30.					
Member contributions	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.					
Monthly pension benefit	The greater of (1) or (2).					
	(1) Amount: A monthly benefit equal to the sum of:					
	 (a) A savings annuity which is the actuarial equivalent of the member's accumulated contributions, and 					
	(b) A service annuity equal to \$3.50 per year of					

service.

SUMMARY OF PLA	<i>AN PROVISIONS</i>
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	(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.					
	An automatic annual cost-of-living adjustment (COLA) equal the CPI-W index, with a maximum increase of 2.5% in any or year is provided for current and future retirees. Also provide is a minimum floor benefit equal to 75% of the purchasin power of the original benefit.					
Normal Retirement Date (NRD)	First of month coinciding with or next following the attainment of age 65 with five years of pension service.					
Service	Length of service includes all service as a school employee for which contributions have been made. This service only includes years for which the member was employed on at least a half-time basis, and includes declared emergency service in the armed forces, provided certain conditions are met. Special provisions allow credit for service prior to 1945 and for up to ten years of service in another State upon payment of required member contributions and corninge					
Pensionable pay	Gross earnings subject to contributions.					
Eligibility for Benefits						
Deferred vested	Termination for reasons other than death or disability retirement after completing five years of service.					
Disability retirement	Retirement by reason of disability.					
Early retirement	Retirement before NRD and on or after both attaining age 60 and completing five years of service, or attaining 35 years of service regardless of age, or attaining age 55 and age plus service equals at least 85 (Rule of 85).					
Normal retirement	Retire on NRD.					

SUMMARY OF PLAN PROVISIONS								
Postponed retirement	Retire after NRD.							
Pre-retirement spouse benefit	Death prior to retirement.							
Monthly Benefits Paid Upon the	Following Events							
Normal retirement	Monthly pension benefit determined as of NRD.							
Early retirement	Monthly pension benefit determined as of early retirement date, reduced by 3% for each year that commencement of payment precedes age 65 (member must be age 60 with five years of service). Unreduced benefits are available to members who have attained age 55 and whose age plus service is greater than or equal to 85. Benefits payable upon retirement prior to age 60 (based on the 35 year service rule) are actuarially reduced from age 65.							
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 the earlier of the Rule of 90 or age 65 (Early Commencement requires attainment of age 60).							
Disability retirement	Monthly pension benefit determined as of disability retirement date.							
Death with pre-retirement benefits	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:							
	 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.							

SUMMARY OF PLAN PROVISIONS

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

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 July 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.

SUMMARY OF ACTUARIAL METHODS AND PROCEDURES AS OF JULY 1, 2002

A. ACTUARIAL METHODS

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

Entry Age Actuarial Cost Method

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

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.

SUMMARY OF ACTUARIAL METHODS AND PROCEDURES AS OF JULY 1, 2002

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 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.

SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2002

ECONOMIC ASSUMPTIONS

- 1. Investment Return
- 2. Inflation
- 3. Salary Increases

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%

4. Interest on Employee Contributions

5.5% per annum, compounded annually.

DEMOGRAPHIC ASSUMPTIONS

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

1994 Group Annuity Mortality Table, with two year setback.

1971 Group Annuity Mortality Table, without setback.

SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2002

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

	Mortality Rate								
	Healthy	Members	Disabled	Members					
Sample Age	Males	Females	Males	Females					
30	.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)			
	Healthy Members		Disabled	Members
Sample Age	Males	Females	Males	Females
30	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

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 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 for Reduced Benefits			
Age Male Female		Female	
60	6%	6%	
61	6%	6%	
62	18%	18%	
63	14%	14%	
64	10%	10%	

SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 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 Service	Multiplier	
1 st	2.00	
2 nd	1.50	
3 rd	1.25	
4 th or more	1.00	

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%

4. Disability:

SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2002

OTHER ASSUMPTIONS

1. Form of Payment:

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

- 2. Marital Status
 - a. Percent married
 - b. Spouse's age

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

3. Administrative Expense Investment return is assumed to be net of expenses.

Age 62.

- 4. Commencement age for deferred vested benefit
- 5. Cost of Living Adjustment

Service annuity – none Formula annuity – 2.5% per annum, compounded annually, and 3.5% per annum, compounded annually, after reaching 75% purchasing power floor benefit.

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.