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***NEBRASKA PUBLIC EMPLOYEES  
RETIREMENT SYSTEMS  
2003***

***State Employees' Retirement System  
Cash Balance Benefit Fund***

Actuarial Valuation Results  
as of January 1, 2003  
for State Fiscal Year Ending June 30, 2005

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April 2003



**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
**STATE EMPLOYEES' RETIREMENT SYSTEM**  
**CASH BALANCE BENEFIT FUND**

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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  
State Employees' Retirement System  
Cash Balance Benefit Fund**

Ladies and Gentlemen:

This report summarizes the results of the actuarial valuation of the State Employees' Retirement System Cash Balance Benefit Fund as of January 1, 2003, performed by Buck Consultants, Inc.

The actuarial valuation is based on unaudited financial and member data provided to us by the Ameritas Life Insurance Corporation, recordkeeper for the plan, as summarized in this report. The benefits considered are those delineated in Nebraska State Statutes, effective as amended January 1, 2003.

All costs, liabilities and other factors under the fund were determined in accordance with generally accepted actuarial principles and procedures, using actuarial cost methods which we believe are reasonable, and that follow the Nebraska State Statutes. This report fully and fairly discloses the actuarial position of the fund.

In our opinion, the actuarial assumptions used are reasonable, taking into account expected experience of the fund, and represent our best estimate of anticipated future experience. A summary of the actuarial assumptions used in this actuarial valuation are shown in Exhibit 9.

The contributions paid by the participating cash balance benefit members and the 156% matching State contributions 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 the unfunded liabilities over 25 years. The State is required to make any additional contribution necessary to meet the statutory funding requirement. For the 2004-2005 fiscal year, this additional 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. Slisinsky, A.S.A., E.A., M.A.A.A.  
Principal and Consulting Actuary



**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
**STATE EMPLOYEES' RETIREMENT SYSTEM**  
**CASH BALANCE BENEFIT FUND**

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**SUMMARY OF ACTUARIAL REPORT FOR CONTRIBUTION REQUIREMENTS AND  
FUNDED STATUS FOR THE 2003 PLAN YEAR**

The main purposes of this report are:

1. To determine the level of additional State contributions for the fiscal year ending June 30, 2005 sufficient to meet the funding policy defined under Nebraska State statutes;
2. To review the current funded status of the Cash Balance benefit; and
3. To quantify the contribution rate available for benefit improvements, if any.

The 2003 actuarial valuation is based upon the plan provisions as of January 1, 2003, as described in Exhibit 7. The actuarial methods and assumptions are described in Exhibit 8 and 9.

Highlights from the current valuation:

1. Under Legislative Bill 687, the Cash Balance benefit is established effective January 1, 2003. Active Members participating in the State Employees' Retirement System prior to January 1, 2003 were given a choice to remain covered by the Defined Contribution benefit or to transfer their account balances and become a participating member of the Cash Balance benefit effective January 1, 2003. All new State employees hired on or after January 1, 2003, will automatically participate in the Cash Balance benefit.
2. No additional State contribution is required for the 2004-2005 fiscal year to meet the actuarially required contribution. Expected member contributions and State contributions exceed the total funding requirement. The Reserve as of January 1, 2003, is \$11,675,840.
3. For the 2003 plan year, the actuarially required contribution is within 90% of the actual contributions. Therefore, no funding excess exists to provide benefit improvements during the 2003 plan year.
4. The funded status of the system is measured by the ratio of the system assets over the Pension Benefit Obligation (PBO). The PBO is calculated using the Projected Unit Credit Method, which determines the benefit by using accumulated cash balance account values at the valuation date and projecting salary, contribution credits, and interest credits to assumed termination or retirement, and prorating the projected balances by service earned at the valuation date to service expected at termination or retirement. As of January 1, 2003, the funded percentage on Actuarial Value is 104.3%.





**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
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**EXECUTIVE SUMMARY**

**Basic Actuarial Valuation Results**

The 2003 actuarial valuation results are based upon the plan provisions as of January 1, 2003, as described in Exhibit 7. The actuarial methods and assumptions are described in detail in Exhibits 8 and 9, respectively.

**1. State Contribution**

The State's funding policy is to match the contributions paid by members at a rate of 156% of the member contribution, and make additional payments if necessary, to meet the actuarially required contribution. The 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 total expected State contribution for the 2003 plan year is \$9,622,709. Member contributions and matching State contributions are expected to exceed the total actuarially required funding.

Assets exceed the actuarial accrued liability as of the valuation date. As a result, the unfunded actuarial accrued liability is less than \$0. No additional payment is required for the 2003 plan year.

<b>History of Expected State Contributions</b>			
<b>Plan Year</b>	<b>State Contribution</b>	<b>Additional Contributions</b>	<b>Total</b>
2003	\$ 9,622,709	\$ 0	\$ 9,622,709

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
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**EXECUTIVE SUMMARY**

**2. Asset Values**

The total assets of the system as of the valuation date at both market value and actuarial value is as follows:

	<b>January 1, 2003</b>
(a) Market value	\$ 216,677,627
(b) Actuarial value, an adjusted value intended to reduce the effect of market fluctuations (See Exhibit 8)	\$ 216,677,627

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

The actuarial liability of the system 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 and matching State contributions). If the projected financial resources exceed the total benefit obligation, the system has a Reserve. The actuarial position of the system as of the valuation date is as follows:

	<b>January 1, 2003</b>
(a) Present value of future benefits	\$ 333,085,896
(b) Actuarial value of assets	216,677,627
(c) Present value of future member contributions	50,032,856
(d) Present value of matching State contributions	<u>78,051,253</u>
(e) Actuarial Liability/(Reserve) (a-b-c-d)	\$ (11,675,840)

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
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**EXECUTIVE SUMMARY**

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

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

<b>Funded Status</b>	<b>January 1, 2003</b>
(a) Pension Benefit Obligation	
i) retirees, disabled members and beneficiaries receiving benefits and deferred vested members not yet receiving benefits	\$ 2,096,691
ii) active members	<u>205,731,046</u>
iii) total pension benefit obligation	\$ 207,827,737
(b) Assets available for benefits (actuarial value)	<u>216,677,627</u>
(c) Unfunded Pension Benefit Obligation	\$ (8,849,890)
(d) Funded percentage on actuarial value of assets: (b) ÷ (a)(iii)	104.3%

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
**STATE EMPLOYEES' RETIREMENT SYSTEM**  
**CASH BALANCE BENEFIT FUND**

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**EXECUTIVE SUMMARY**

**5. Benefit Accrual Cost**

The cost of benefits accruing over an active member's working career can be expressed as a level percentage of compensation. 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 at the valuation date is as follows:

	<b>January 1, 2003</b>
(a) Benefit accrual cost amount:	\$ 14,272,551
(b) Annual compensation before assumed retirement age:	\$ 134,774,460
(c) Benefit accrual cost rate (a) ÷ (b):	10.590%

**6. Forecast of Disbursements**

A forecast of the annual benefit disbursements expected over the next ten years is presented in Exhibit 6. This forecast is based on the same actuarial assumptions with respect to salary increases and decrement rates used to determine the funding requirements. The forecast should be a useful guide in discussing the cash-flow needs of the system with investment managers and in projecting the future financing needs of the system.

**7. Actuarial Methods and Assumptions**

The required contribution developed in this report is an estimate of the amount 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 Cash Balance Benefit to various years and actuarial assumptions regarding the return on investments, salary rates, employee termination rates, mortality rates and other risk factors. The actuarial method used to determine the actuarial contribution requirement is the Entry Age Actuarial Cost Method.

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.

A summary of the actuarial methods and assumptions used in the current valuation is presented in Exhibits 8 and 9, respectively.



**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
**STATE EMPLOYEES' RETIREMENT SYSTEM**  
**CASH BALANCE BENEFIT FUND**

**SYSTEM ASSETS**

<b>A. Summary of Assets</b>	<b>Market Value as of December 31, 2002</b>
1. Cash and Equivalents	\$ 0
2. Investments	216,677,627
3. Receivables and Prepaids	0
4. Accounts Payable	0
<b>5. Net Assets Available for Pension Benefits Considered (1 + 2 + 3 + 4)</b>	<b>\$ 216,677,627</b>

Note: The actuarial value of assets have been initialized at market value.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
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**ACTUARIAL CONTRIBUTION REQUIREMENT**

A. Development of Actuarially Required Funding Rate	January 1, 2003
1. Actuarial present value of benefits	
(a) Active members	\$ 330,989,205
(b) Inactive members	2,096,691
(c) Retired members, disabilities and beneficiaries	<u>0</u>
(d) Total	\$ 333,085,896
2. Present Value of Future Normal Costs	<u>116,882,169</u>
3. Total Actuarial Accrued Liability [1(d) - 2]	\$ 216,203,727
4. Actuarial Value of Assets	<u>216,677,627</u>
5. Unfunded Actuarial Accrued Liability [3-4]	\$ (473,900)
6. 25-Year Amortization of the Unfunded Actuarial Accrued Liability	
(a) Amount	\$ (41,345)
(b) Amount as % of Pay	(0.03%)
7. Normal Cost	
(a) Amount	\$ 14,272,551
(b) Amount as % of Pay	10.50%
8. Total Actuarially Required Contribution	
(a) Amount [6(a) + 7(a)]	\$ 14,231,206
(b) Amount as % of Pay	10.47%

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
**STATE EMPLOYEES' RETIREMENT SYSTEM**  
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**ACTUARIAL CONTRIBUTION REQUIREMENT**

<b>B. Development of Additional State Contribution for 2004/2005</b>	<b>Annual Amount as a % of Pay</b>
1. Actuarially Required Contribution	
(a) Total Contribution Amount	\$ 14,231,206
(b) Amount as % of Pay	10.47%
2. Statutory Contribution Rates	
(a) Employee Contribution Rate	4.54%
(b) Employer Contribution Rate	7.08%
(c) Total Employee/Employer Contribution Rate 2(a) + 2(b)	11.62%
3. Additional Required State Contribution	
(a) Additional Required State Contribution Rate [1(b)-2(c), not less than 0.00%]	0.00%
(b) Additional Required State Contribution Amount for the 2003 plan year	\$ 0
4. Additional Required State Contribution Amount for the 2004/2005 fiscal year [item 3(b) with interest]	\$ 0
<b>C. Development of Excess Contribution Rate Available for Benefit Improvements</b>	<b>Annual Amount as a % of Pay</b>
1. Total Statutory Contribution Rate	11.62%
2. Benefit Improvement Threshold Rate [90% of (1)]	10.46%
3. Actuarially Required Contribution Rate	10.47%
4. Funding Excess Available for Benefit Improvement	
(a) As a Rate of Pay [(2)-(3), not less than 0%]	0.00%
(b) Annual Amount	\$ 0



**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
**STATE EMPLOYEES' RETIREMENT SYSTEM**  
**CASH BALANCE BENEFIT FUND**

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**ACTUARIAL CONTRIBUTION REQUIREMENT**

<b>D. Schedule of Amortization Bases</b>	<b>January 1, 2003 Remaining Payments</b>	<b>Date of Last Payment</b>	<b>Outstanding Balance as of January 1, 2003</b>	<b>Annual Contribution</b>
1. 2003 Initial Unfunded Actuarial Accrued Liability base	25	07/01/2027	\$ (473,900)	\$ (41,345)
<b>Total</b>			<b>\$ (473,900)</b>	<b>\$ (41,345)</b>

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
**STATE EMPLOYEES' RETIREMENT SYSTEM**  
**CASH BALANCE BENEFIT FUND**

**ACTUARIAL BALANCE SHEET**

<b>A. Financial Resources</b>	<b>January 1, 2003</b>
1. Actuarial Value of Assets	\$ 216,677,627
2. Present Value of Future Normal Cost Contributions	
(a) Member	\$ 50,032,856
(b) Employer	<u>66,849,313</u>
(c) Total	116,882,169
3. Unfunded Actuarial Accrued Liability	(473,900)
4. Total Assets [1 + 2(c) + 3]	\$ 333,085,896

<b>B. Benefit Obligations</b>	<b>January 1, 2003</b>
1. Present Value of Future Benefits	
(a) Active members	\$ 330,989,205
(b) Inactive members	2,096,691
(c) Retirees, disabilities and beneficiaries	<u>0</u>
(d) Total	\$ 333,085,896

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
**STATE EMPLOYEES' RETIREMENT SYSTEM**  
**CASH BALANCE BENEFIT FUND**

**ACCOUNTING INFORMATION**

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

	January 1, 2003
<b>Pension Benefit Obligation (PBO):</b>	
Vested PBO	
(a) members currently receiving payments	\$ 0
(b) other members	
i) accumulated member contributions	87,167,690
ii) employer financed vested	<u>118,359,472</u>
Total Vested PBO	\$ 205,527,162
Nonvested PBO	<u>2,300,575</u>
Total PBO	\$ 207,827,737
Actuarial Value of Assets	<u>216,677,627</u>
Unfunded Pension Benefit Obligation	\$ (8,849,890)
Funded Percentage	
(a) on vested PBO	105.4%
(b) on total PBO	104.3%

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS  
STATE EMPLOYEES' RETIREMENT SYSTEM  
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**ACCOUNTING INFORMATION**

Exhibits 8 and 9 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 January 1, 2003, as outlined in Exhibit 7. The determination of the Pension Benefit Obligation has been made in accordance with generally accepted actuarial principles and practices.

**B. Schedule of Employer Contributions - Disclosure Requirements Under GASB No. 25**

<b>Plan Year Ending</b>	<b>Annual Required Contributions</b>	<b>Percentage Contributed</b>
December 31, 2002	\$ 9,307,484	100%

**C. Actuarial Assumptions, Method and Additional Information under GASB No. 25**

Valuation Date	December 31, 2002
Actuarial Cost Method	Entry Age
Amortization Method	Level dollar amount, closed
Amortization period	25 years
Asset Valuation Method	5 year smoothing of market value
Actuarial Assumptions:	
Investment rate of return*	7.6%
Projected salary increases*	4.5% - 9.1%
*Includes inflation at	3.5%
Cost-of-living adjustment	None

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS  
STATE EMPLOYEES' RETIREMENT SYSTEM  
CASH BALANCE BENEFIT FUND**

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**ACCOUNTING INFORMATION**

**D. Schedule of Funding Progress Under GASB No. 25**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded Accrued Liabilities (UAL) (b-a)</b>	<b>Funded Ratio (a÷b)</b>	<b>Covered Payroll (c)</b>	<b>UAL as a % of Covered Payroll [(b-a)/c]</b>
December 31, 2002	\$ 216,677,627	\$ 216,203,727	\$ (473,900)	100.2%	\$ 135,913,965	(3.5)%

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
**STATE EMPLOYEES' RETIREMENT SYSTEM**  
**CASH BALANCE BENEFIT FUND**

**SUMMARY OF MEMBER DATA**

<b>A. Active Members</b>	<b>January 1, 2003</b>
1. Number of active members	
(a) Before assumed retirement age	3,927
(b) Beyond assumed retirement age	<u>37</u>
(c) Total	3,964
2. Annual considered compensation	
(a) Before assumed retirement age	\$ 134,774,460
(b) Beyond assumed retirement age	<u>1,139,505</u>
(c) Total	\$ 135,913,965
3. Accumulated contributions	
(a) Employee Cash Balance Account	\$ 86,358,395
(b) Employer Cash Balance Account	<u>128,222,541</u>
(c) Total Cash Balance Account	\$ 214,580,936
4. Active member averages	
(a) Age	49.7
(b) Service	12.4
(c) Compensation	\$ 34,287
(d) Cash Balance Account	\$ 54,132
<b>B. Inactive Members</b>	
1. Number of inactive members	70
2. Total vested Cash Balance Account	\$ 2,096,691
3. Inactive member averages	
(a) Age	45.9
(b) Vested Cash Balance Account	\$ 29,953
<b>C. Retired and Disabled Members and Beneficiaries</b>	
1. Number of members	
(a) Retired	0
(b) Disabled	0
(c) Beneficiaries	<u>0</u>
(d) Total	0
2. Annual benefits	
(a) Retired	\$ 0
(b) Disabled	0
(c) Beneficiaries	<u>0</u>
(d) Total	\$ 0

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
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***SUMMARY OF MEMBER DATA***

**D. Distribution of Retired and Disabled Members and Beneficiaries as of  
January 1, 2003.**

Age Range	Number	Annual Benefit	Average Annual Benefit
None.			

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS  
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CASH BALANCE BENEFIT FUND**

**SUMMARY OF MEMBER DATA**

**E. Age and Service Distribution of Active Members as of January 1, 2003.**

Age Last Birthday		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 and Over	Grand Total
20-24	Number Total Salary Average Sal.	38 \$949,588 \$24,989	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	38 \$949,588 \$24,989
25-29	Number Total Salary Average Sal.	135 \$3,730,615 \$27,634	10 \$324,226 \$32,423	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	145 \$4,054,841 \$27,964
30-34	Number Total Salary Average Sal.	154 \$4,450,688 \$28,901	46 \$1,427,091 \$31,024	3 \$121,953 \$40,651	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	203 \$5,999,732 \$29,555
35-39	Number Total Salary Average Sal.	110 \$3,222,189 \$29,293	109 \$3,709,440 \$34,032	54 \$1,863,557 \$34,510	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	273 \$8,795,186 \$32,217
40-44	Number Total Salary Average Sal.	139 \$3,913,231 \$28,153	94 \$2,793,316 \$29,716	181 \$5,971,777 \$32,993	51 \$1,814,405 \$35,577	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	465 \$14,492,729 \$31,167
45-49	Number Total Salary Average Sal.	148 \$4,210,052 \$28,446	111 \$3,393,399 \$30,571	132 \$4,676,112 \$35,425	310 \$11,338,170 \$36,575	5 \$138,912 \$27,782	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	706 \$23,756,645 \$33,650
50-54	Number Total Salary Average Sal.	178 \$5,528,901 \$31,061	101 \$3,268,957 \$32,366	128 \$4,195,352 \$32,776	135 \$5,065,572 \$37,523	293 \$11,916,425 \$40,670	5 \$179,342 \$35,868	0 \$0 \$0	0 \$0 \$0	0 \$0 \$0	840 \$30,154,549 \$35,898
55-59	Number Total Salary Average Sal.	104 \$3,268,792 \$31,431	92 \$2,897,218 \$31,491	119 \$4,071,837 \$34,217	131 \$4,692,052 \$35,817	80 \$3,400,317 \$42,504	170 \$7,668,556 \$45,109	2 \$74,923 \$37,461	0 \$0 \$0	0 \$0 \$0	698 \$26,073,695 \$37,355
60-64	Number Total Salary Average Sal.	35 \$1,012,503 \$28,929	51 \$1,551,157 \$30,415	77 \$2,622,315 \$34,056	90 \$3,168,712 \$35,208	61 \$2,347,606 \$38,485	42 \$1,766,899 \$42,069	86 \$3,811,364 \$44,318	2 \$142,086 \$71,043	1 \$5,413 \$5,413	445 \$16,428,054 \$36,917
65-69	Number Total Salary Average Sal.	13 \$429,110 \$33,008	13 \$332,839 \$25,603	19 \$689,926 \$36,312	23 \$696,762 \$30,294	15 \$561,288 \$37,419	12 \$473,712 \$39,476	7 \$296,259 \$42,323	12 \$589,544 \$49,129	0 \$0 \$0	114 \$4,069,441 \$35,697
70 & Up	Number Total Salary Average Sal.	4 \$51,358 \$12,840	6 \$64,298 \$10,716	5 \$204,196 \$40,839	6 \$173,766 \$28,961	5 \$120,953 \$24,191	3 \$141,663 \$47,221	3 \$190,104 \$63,368	5 \$193,168 \$38,634	0 \$0 \$0	37 \$1,139,506 \$30,797
Total	Number Total Salary Average Sal.	1058 \$30,767,028 \$29,080	633 \$19,761,941 \$31,219	718 \$24,417,024 \$34,007	746 \$26,949,439 \$36,125	459 \$18,485,502 \$40,273	232 \$10,230,172 \$44,096	98 \$4,372,650 \$44,619	19 \$924,798 \$48,674	1 \$5,413 \$5,413	3,964 \$135,913,965 \$34,287



**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
**STATE EMPLOYEES' RETIREMENT SYSTEM**  
**CASH BALANCE BENEFIT FUND**

**FORECAST OF EXPECTED DISBURSEMENTS**

Plan Year Ending December 31	Active Employees	Retired and Disabled Members and Beneficiaries	Total
2003	\$ 10,144,073	\$ 0	\$ 10,144,073
2004	9,721,349	0	9,721,349
2005	11,579,909	0	11,579,909
2006	13,333,386	0	13,333,386
2007	15,149,213	0	15,149,213
2008	16,990,213	0	16,990,213
2009	18,825,268	0	18,825,268
2010	20,778,480	0	20,778,480
2011	22,744,532	0	22,744,532
2012	24,734,610	0	24,734,610

**Note:** These amounts are based on the assumption members terminating before reaching retirement eligibility will elect a lump sum distribution of their cash balance account. Members eligible for retirement will elect a monthly annuity, payable for life with five years certain.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
**STATE EMPLOYEES' RETIREMENT SYSTEM**  
**CASH BALANCE BENEFIT FUND**

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**SUMMARY OF PLAN PROVISIONS**

**Membership**

All permanent full-time employees of the State who have twelve continuous months of service shall begin participation in the State Employees' Retirement System and all permanent full-time or permanent part-time employees who have twelve months of service within a five-year period, and who have attained the age of twenty, may exercise the option to begin participation in the State Employees' Retirement System.

Existing members of the State Employees' Retirement System may elect, during the period beginning October 1, 2002, and ending December 31, 2002, to participate in the Cash Balance benefit. If no election is made by January 1, 2003, the member shall be treated as though he or she elected to continue participating in the defined contribution benefit as provided in the State Employees' Retirement Act. For a member who first participates in the Retirement System on or after January 1, 2003, he or she shall automatically participate in the Cash Balance benefit once they have met the plan eligibility requirements.

**Compensation Considered**

Compensation means gross wages or salaries payable to the member for personal services performed during the plan year, overtime pay, member retirement contributions, and amounts contributed by the member to plans under sections 125, 403(b) and 457 of the Internal Revenue Code or any other section of the code which defers or excludes such amounts from income.

**Member Contributions**

Members of the State retirement system shall contribute an amount equal to four and one-third percent (4.33%) of annual compensation up to \$19,954, plus four and eight-tenths percent (4.8%) of annual compensation in excess of \$19,954 to the fund. The member contribution shall be credited to the employee cash balance account.

**Employer Contributions**

The State shall contribute at a rate of 156% of the members' contributions to the fund. The State contribution shall be credited to the employer cash balance account.

**Interest Credit Rate**

Interest credit rate means the greater of (a) five percent or (b) the applicable federal mid-term rate as published by the Internal Revenue Service as of the first day of the calendar quarter for which interest credits are credited, plus one and one-half percent, such rate to be compounded annually.

**Interest Credits**

Interest credits means the amount credited to the employee cash balance account and the employer cash balance account at the end of each day. Such interest credit for each account shall be determined by applying the daily portion of the interest credit rate to the account balance at the end of the previous day.

**Retirement Age**

A member is eligible for retirement after attaining age 55.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS  
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**SUMMARY OF PLAN PROVISIONS**

**Service**

Service is defined to mean the actual total length of employment with the State and is not interrupted by a) temporary or seasonal suspension of service that does not terminate the member's employment, b) leave of absence authorized by the state for no longer than twelve months, c) leave of absence due to disability or d) leave due to military service.

**Retirement Allowance**

Upon attainment of age 55 regardless of service, the retirement allowance, shall be equal to the accumulated employee and employer cash balance accounts including interest credit, annuitized for payment in the normal form. Also available are additional forms of payment allowed under the plan which are actuarially equivalent to the normal form including the option of a lump sum or partial lump sum.

**Normal Form of Payment**

The normal form of payment under the Cash Balance benefit is a single life annuity with five-year certain, payable monthly. Members will have the option to convert their member cash balance account to a monthly annuity with built in cost-of-living adjustments of 2.5% annually. This monthly benefit and all other options allowed under the Plan will be of actuarial equivalence to the accumulated employee and employer cash balance accounts including interest credits.

**Deferred Vested Allowance**

A member who terminates with at least 3 years of participation in the system, including eligibility and vesting credit, may choose to leave his employee and employer cash balance accounts in the fund and be eligible to receive a vested monthly allowance at retirement age or request a distribution of his employee and employer cash balance accounts plus interest credit, with no future benefit payable from the plan.

**Severance Benefits**

A member who terminates with less than 3 years of participation in the system, including eligibility and vesting credit, may elect to receive a distribution of his/her employee cash balance account including interest credit, with no future benefit payable from the plan.

**Disability Allowance**

If a member becomes disabled prior to retirement, the member shall receive the total amount of his/her accumulated employee and employer cash balance accounts including interest credit, as a lump sum or converted into a monthly annuity, as defined under the retirement allowance.

**Preretirement Death Allowance**

If a member dies prior to retirement, the surviving spouse, designated beneficiary (if different), or estate shall receive the total amount of his/her accumulated employee and employer cash balance accounts including interest credit, as a lump sum or converted into a monthly annuity, as defined under the retirement allowance.

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***SUMMARY OF PLAN PROVISIONS***

**Benefit Improvements**

In accordance with Section 84-1319 of the Nebraska State Statutes, the Public Employees' Retirement Board may grant benefit improvements, but in no event will such improvement result in an actuarially required contribution rate in excess of 90% of the total statutory contribution rate.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
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**SUMMARY OF ACTUARIAL METHODS AND PROCEDURES AS OF JANUARY 1, 2003**

**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 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 9 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 January 1, 2003.

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 RETIREMENT SYSTEMS**  
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**SUMMARY OF ACTUARIAL METHODS AND PROCEDURES AS OF JANUARY 1, 2003**

2. **Calculation of the Actuarial Value of Assets:** Effective January 1, 2003, the actuarial value of assets was initialized at Market Value and equals the sum of the employee and employer cash balance accounts. In future years, the actuarial value of assets will be based on a five-year smoothing method with phase-in 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, each determined after January 1, 2003:
- (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 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 with service proration. Under this method, the benefit is based on salary projected to assumed termination or retirement and service as of the valuation date.

**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 the cash balance account.

The compensation amounts used in the projection of benefits and liabilities for active members were prior plan year compensations.

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).

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS  
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***SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JANUARY 1, 2003***

**ECONOMIC ASSUMPTIONS**

- |   |   |
|---|---|
| 1. Investment Return  | 7.6% per annum, compounded annually, net of expenses. |
| 2. Inflation  | 3.5% per annum, compounded annually.                  |
| 3. Interest Credit Rate on Cash Balance Accounts                | 7.0% per annum, compounded annually.                  |
| 4. Annuitization Rate of Member & Employer Accumulated Balances | 7.6% per annum, compounded annually.                  |
| 5. Salary Scale   | Graduated rates by age.                               |

Age	Annual Increase in Salary		
	Merit & Productivity	Inflation	Total
20	5.6%	3.5%	9.1%
25	4.6%	3.5%	8.1%
30	3.5%	3.5%	7.0%
35	2.9%	3.5%	6.4%
40	2.6%	3.5%	6.1%
45	2.3%	3.5%	5.8%
50	1.7%	3.5%	5.2%
55	1.2%	3.5%	4.7%
60	1.0%	3.5%	4.5%
65	1.0%	3.5%	4.5%
70	1.0%	3.5%	4.5%

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS  
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**SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JANUARY 1, 2003**

**DEMOGRAPHIC ASSUMPTIONS**

1. Mortality

- a. Active and retired members and beneficiaries                      1994 Group Annuity Mortality Table, with one year setback, sex distinct.
- b. Mortality rates under the mortality tables are shown below at sample ages:

Sample Age	Mortality Rate	
	Males	Females
30	.08%	.03%
40	.10	.07
50	.23	.13
60	.71	.39
70	2.17	1.27
80	5.59	3.54

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

Sample Age	Life Expectancy (Years)	
	Males	Females
30	50.7	55.3
40	41.1	45.5
50	31.6	35.8
60	22.7	26.5
70	15.0	18.1
80	8.9	10.9

- d. Mortality for Annuitization of Employee and Employer Cash Balance Accounts                      1994 Group Annuity Mortality Table, with 50% Male, 50% Female blending.

Sample Age	Mortality Rate	Life Expectancy (Years)
55	.34%	28.0
60	.62%	23.5
65	1.16%	19.4
70	1.87%	15.7
75	2.99%	12.2
80	5.07%	9.3



**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS  
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**SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JANUARY 1, 2003**

2. Retirement

Graduated rates by retirement age.

Age	Annual Rates
55	5.0%
56	5.0%
57	5.0%
58	5.0%
59	5.0%
60	8.0%
61	10.0%
62	25.0%
63	15.0%
64	15.0%
65	35.0%
66	25.0%
67	25.0%
68	25.0%
69	25.0%
70	100.0%

3. Termination

Graduated rates by age and service.

Age	Annual Rate Per 1,000 Members			
	<1	1-<2	2-<3	3+
20	250.80	209.00	183.92	167.20
25	181.05	150.88	132.77	120.70
30	129.00	107.50	94.60	86.00
35	95.25	79.38	69.85	63.50
40	70.95	59.13	52.03	47.30
45	52.35	43.63	38.39	34.90
50	41.40	34.50	30.36	27.60
55	45.00	37.50	33.00	30.00
60	45.00	37.50	33.00	30.00
65	45.00	37.50	33.00	30.00
70	45.00	37.50	33.00	30.00

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS  
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**SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JANUARY 1, 2003**

4. Disability

Graduated rates for all disabilities by age.

Age	Annual Rate Per 1,000 Members
20	0.20
25	0.30
30	0.40
35	0.80
40	1.80
45	3.50
50	6.30
55	10.30
60	15.60
65	21.70
70	25.70

**OTHER ASSUMPTIONS**

1. Payment Assumptions

As shown in the table below, 100% of all members eligible for retirement are assumed to be paid in the form of an annuity and 100% of members eligible for all other types of benefits are assumed to be paid in the form of a lump sum.

Benefit	Assumed Form of Payment
Retirement	Annuity*
Vested	Lump Sum
Nonvested	Lump Sum
Disability	Lump Sum
Death	Lump Sum

\*Five-year certain and life annuity.

2. Cost of Living Adjustment

None assumed.