## NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS 2007

### County Employees' Retirement System Cash Balance Benefit Fund

Actuarial Valuation Results as of January 1, 2007 for County Fiscal Year Ending June 30, 2009

May 2007



1200 Seventeenth Street Suite 1200 Denver, Colorado 80202

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May 10, 2007

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

Certification of Actuarial Valuation County Employees' Retirement System Cash Balance Benefit Fund

Ladies and Gentlemen:

This report summarizes the results of the actuarial valuation of the County Employees' Retirement System Cash Balance Benefit Fund as of January 1, 2007, performed by Buck Consultants.

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, 2007.

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 10.

The contributions paid by the participating cash balance benefit members and the 150% matching County 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 2008-2009 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,

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David W. Slickmicky

Principal and Consulting Actuary

Koren L. Holden, E.A., M.A.A.A. Director, Retirement Actuary

### SUMMARY OF ACTUARIAL REPORT FOR CONTRIBUTION REQUIREMENTS AND FUNDED STATUS FOR THE 2007 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, 2009 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 2007 actuarial valuation is based upon the plan provisions as of January 1, 2007, as described in Exhibit 8. The actuarial methods and assumptions are described in Exhibits 9 and 10.

Highlights from the current valuation:

- 1. Under Legislative Bill 687, enacted in 2002, the Cash Balance benefit is established effective January 1, 2003. Active members participating in the County 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 County employees hired on or after January 1, 2003, will automatically participate in the Cash Balance benefit.
  - In addition, Legislative Bill 366, enacted in 2006, eliminates the 12-month waiting period for participation. Effective January 1, 2007, any County employee who has not completed 12 continuous months of employment will begin immediate plan participation and if hired in 2007 or later will join the plan upon date of hire.
- 2. No additional State contribution is required for the 2008-2009 fiscal year to meet the actuarially required contribution. Expected member contributions and County contributions exceed the total funding requirement. The Reserve as of January 1, 2007, is \$13,440,061.
- 3. For the 2007 plan year, the actuarially required contribution is under 90% of the actual contributions. Therefore, a funding excess exists to provide benefit improvements during the 2007 plan year of 0.94% of payroll.
- 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, 2007, the funded percentage on Actuarial Value of Assets is 103.5%.



### **EXECUTIVE SUMMARY**

### **Basic Actuarial Valuation Results**

The 2007 actuarial valuation results are based upon the plan provisions as of January 1, 2007, as described in Exhibit 8. The actuarial methods and assumptions are described in detail in Exhibits 9 and 10, respectively.

### 1. County Contribution

The funding policy defined under State Statutes is for the counties to match the contributions paid by members at a rate of 150% of the member contribution, and for the State to 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 County contribution for the 2007 plan year is \$7,659,110. Member contributions and matching County 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 from the State is required for the 2007 plan year.

History of Expected County Contributions							
Plan Year	County Contribution					Total	
2004	\$	4,092,294	\$	0	\$	4,092,294	
2005	\$	4,577,184	\$	0	\$	4,577,184	
2006	\$	5,949,740	\$	0	\$	5,949,740	
2007	\$	7,659,110	\$	0	\$	7,659,110	

### **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:

		Ja	nuary 1, 2006	Ja	nuary 1, 2007	Annual Rate of Return
(a)	Market value	\$	103,253,940	\$	124,669,976	15.13%
(b)	Actuarial value, an adjusted value intended to reduce the effect of market fluctuations (See Exhibit 9)	\$	99,464,149	\$	116,379,465	11.29%

### 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 County 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:

		January 1, 2006	January 1, 2007
(a)	Present value of future benefits	\$ 166,445,890	\$ 219,726,127
(b)	Actuarial value of assets	99,464,149	116,379,465
(c)	Present value of future member contributions	35,275,508	46,714,689
(d)	Present value of matching County contributions	52,913,262	70,072,034
(e)	Actuarial Liability/(Reserve) [(a) - (b) - (c) - (d)]	\$ (21,207,029)	\$ (13,440,061)

### **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.

Funded Status	January 1, 2006	January 1, 2007
<ul> <li>(a) Pension Benefit Obligation</li> <li>i) retirees, disabled members and beneficiaries receiving benefits and deferred vested members</li> </ul>		
not yet receiving benefits ii) active members	\$ 6,168,469 79,418,603	\$ 11,014,455 <u>101,436,234</u>
iii) total pension benefit obligation	\$ 85,587,072	\$ 112,450,689
(b) Assets available for benefits (actuarial value)	99,464,149	<u>116,379,465</u>
(c) Unfunded Pension Benefit Obligation	\$ (13,877,077)	\$ (3,928,776)
(d) Funded percentage on actuarial value of assets [(b) ÷ (a)(iii)]	116.2%	103.5%

### **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:

		January 1, 2006	January 1, 2007
(a)	Benefit accrual cost amount	\$ 8,514,698	\$ 10,932,093
(b)	Annual compensation before assumed retirement age	\$ 85,465,599	\$ 109,999,228
(c)	Benefit accrual cost rate [(a) ÷ (b)]	9.963%	9.938%

### 6. Forecast of Disbursements

A forecast of the annual benefit disbursements expected over the next ten years is presented in Exhibit 7. This forecast is based on the same actuarial assumptions with respect to salary increases and decrement rates used to determine the funding requirements. The forecast should be a useful guide in discussing the cash-flow needs of the system with investment managers and in projecting the future financing needs of the system.

### 7. Actuarial Methods and Assumptions

The required 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 9 and 10, respectively.



### SYSTEM ASSETS

Α.	Summary of Market Value of Assets	Market Value as of December 31, 2005		cet Value as of mber 31, 2006
1.	Cash and Equivalents	\$	42,683	\$ 32,767
2.	Investments		106,093,531	131,664,250
3.	Receivables and Prepaids		2,405,697	4,963,899
4.	Accounts Payable		(5,287,971)	(11,990,940)
5.	Net Assets Available for Pension Benefits			
	Considered [1 + 2 + 3 + 4]	\$	103,253,940	\$ 124,669,976

B.	Development of Actuarial Value of Assets	Amount
1.	Actuarial Value of Assets as of January 1, 2006	\$ 99,464,149
2.	Unrecognized return as of January 1, 2006	\$ 3,789,791
3.	Contributions (a) Employee (b) Employer (c) Total	\$ 4,224,320 <u>6,251,727</u> 10,476,047
4.	Transfers In	\$ 1,269,717
5.	Disbursements (a) Distributions (b) Benefit Payments (c) Total	\$ 5,658,929 <u>701,361</u> 6,360,290
6.	Expected Return at 7.6% on:  (a) Item 1  (b) Item 2  (c) Item 3(c)  (d) Item 4  (e) Item 5(c)  (f) Total [(a) + (b) + (c) + (d) + (e)]	\$ 7,559,275 288,024 390,801 47,365 (237,266) 8,048,199
7.	Actual Return on Market Value for 2006 Plan Year, net of expenses*	\$ 16,030,562
8.	Return to be Spread for 2006 Plan Year [7 - 6(f)]	\$ 7,982,363

<sup>\*</sup> Includes adjustment on the Market Value of Assets of \$5,125.

### **SYSTEM ASSETS**

B.	Development of Actuarial Value of Assets (continued)		Amount		
9.	Total Market Value of Assets as of January 1, 2007	\$	124,669,976		

### 10. Return to be Spread:

Plan Year	Re	eturn to be Spread	Unrecognized Percent	Uı	nrecognized Return
2006	\$	7,982,363	80%	\$	6,385,890
2005		(1,218,240)	60%		(730,944)
2004		2,533,733	40%		1,013,493
2003		8,110,358	20%		1,622,072
Total					8,290,511

11. Total Actuarial Value of Assets at January 1, 2007 [9 – 10]

\$ 116,379,465

12. Ratio of Actuarial Value to Market Value [11 ÷ 9]

93.4%

### **S**YSTEM **A**SSETS

C.	Change in Asset Values During 2006	A	ctuarial Value	Market Value	
1.	Asset value as of January 1, 2006				
	(a) Reported last year	\$	99,464,149	\$	103,253,940
	(b) Adjustment		<u>n/a</u>		<u>5,125</u>
	(c) Reported this year [(a) + (b)]	\$	99,464,149	\$	103,259,065
2.	Contributions for 2006				
	(a) Employee contributions paid	\$	4,224,320	\$	4,224,320
	(b) Employer contributions collected		<u>6,251,727</u>		<u>6,251,727</u>
	(c) Contributions for 2006 [(a) + (b)]	\$	10,476,047	\$	10,476,047
3.	Transfers In	\$	1,269,717	\$	1,269,717
4.	Disbursements for 2006				
	(a) Benefit disbursements	\$	6,360,290	\$	6,360,290
	(b) Expenses and fees		<u>465,706</u>		<u>465,706</u>
	(c) Disbursements for 2006 [(a) + (b)]	\$	6,825,996	\$	6,825,996
5.	Investment return for 2006	\$	11,995,548	\$	16,491,143
6.	Asset value as of January 1, 2007 [1(c) + 2(c) + 3 - 4(c) + 5]	\$	116,379,465	\$	124,669,976
	[1(0) - 2(0) - 0 - 1(0) - 0]	Ψ	110,017,400	Ψ	124,007,710
7.	Approximate rate of investment return, net of expenses		11.29%		15.13%

### **ACTUARIAL CONTRIBUTION REQUIREMENT**

A.	Development of Actuarially Required Funding Rate	January 1, 2007
1.	Actuarial present value of benefits	
	<ul><li>(a) Active members</li><li>(b) Inactive members</li><li>(c) Retired members, disabilities and beneficiaries</li><li>(d) Total</li></ul>	\$ 208,711,672 5,209,662 5,804,793 \$ 219,726,127
2.	Present Value of Future Normal Costs	109,095,849
3.	Total Actuarial Accrued Liability [1(d) - 2]	\$ 110,630,278
4.	Actuarial Value of Assets	<u>116,379,465</u>
5.	Unfunded Actuarial Accrued Liability [3 – 4]	\$ (5,749,187)
6.	<ul><li>25-Year Amortization of the Unfunded Actuarial Accrued Liability</li><li>(a) Amount</li><li>(b) Amount as % of Total Pay</li></ul>	\$ (501,584) (0.44%)
7.	Normal Cost (a) Amount (b) Amount as % of Total Pay	\$ 10,932,093 9.63%
8.	Total Actuarially Required Contribution  (a) Amount [6(a) + 7(a)]  (b) Amount as % of Total Pay	\$ 10,430,509 9.19%

### **ACTUARIAL CONTRIBUTION REQUIREMENT**

В.	Development of Additional State Contribution for 2008/2009	Annual Amount as a % of Pay
1.	Actuarially Required Contribution  (a) Total Contribution Amount  (b) Amount as % of Pay	\$ 10,430,509 9.19%
2.	Statutory Contribution Rates  (a) Employee Contribution Rate  (b) Employer Contribution Rate  (c) Total Employee/Employer Contribution Rate [2(a) + 2(b)]	4.50% <u>6.75%</u> 11.25%
3.	Additional Required State Contribution  (a) Additional Required State Contribution Rate [1(b) - 2(c), not less than 0.00%]  (b) Additional Required State Contribution Amount for the 2007 plan year	0.00%
4.	Additional Required State Contribution Amount for the 2008/2009 fiscal year [item 3(b) with interest]	\$ 0
C.	Development of Excess Contribution Rate Available for Benefit Improvements	Annual Amount as a % of Pay
1.	Total Statutory Contribution Rate	11.25%
2.	Benefit Improvement Threshold Rate [90% of 1]	10.13%
3.	Actuarially Required Contribution Rate	9.19%
4.	Funding Excess Available for Benefit Improvement (a) As a Rate of Total Pay [2 - 3, not less than 0%] (b) Annual Amount	0.94% \$ 1,066,602

### ACTUARIAL CONTRIBUTION REQUIREMENT

D.	Schedule of Amortization Bases	January 1, 2007 Remaining Payments	Date of Last Payment	E	Outstanding Balance as of nuary 1, 2007	Annual Contribution
1.	2007 Unfunded Actuarial Accrued Liability base	25	07/01/2031	\$	(5,749,187)	\$ (501,584)
Tot	al			\$	(5,749,187)	\$ (501,584)

NOTE: Per Section 23-2517(4)(b) of the Nebraska Revised Statutes, since the unfunded actuarial accrued liability on the valuation date is less than \$0, all prior amortization bases are considered fully amortized and the 2007 amortization base is set equal to the unfunded actuarial accrued liability at January 1, 2007, and amortized over 25 years on a level dollar basis.



### ACTUARIAL GAIN/(LOSS)

The actuarial gain/(loss) is comprised of both the liability gain/(loss) and the actuarial asset gain/(loss). Each of these represents the difference between the expected and actual values as of January 1, 2007.

1.	Ехре	cted Actuarial Accrued Liability	
	a.	Actuarial Accrued Liability as of January 1, 2006	\$ 84,817,488
	b.	Normal Cost during 2006	8,514,698
	C.	Benefit Payments for Plan Year Ending December 31, 2006	6,360,290
	d.	Interest on a, b, and c to End of Year	<u>6,526,498</u>
	e.	Expected Actuarial Accrued Liability Before Changes [a + b - c + d]	\$ 93,498,394
	f.	Change in Actuarial Accrued Liability at January 1, 2007 Due to Change in Actuarial Assumptions	0
	g.	Change in Actuarial Accrued Liability at January 1, 2007 Due to 16.40% Dividend Paid in 2006*	<u>17,824,772</u>
	h.	Expected Actuarial Accrued Liability at January 1, 2007	\$ 111,323,166
2.	Actu	arial Accrued Liability at January 1, 2007	<u>110,630,278</u>
3.	Liab	ility Gain/(Loss) [1h – 2]	\$ 692,888
4.	Ехре	ected Actuarial Value of Assets	
	a.	Actuarial Value of Assets as of January 1, 2006	\$ 99,464,149
	b.	Contributions and Transfers In During Plan Year	11,745,764
	C.	Benefit Payments During Plan Year	6,360,290
	d.	Interest on a, b, and c to End of Year	<u>7,760,175</u>
	e.	Expected Actuarial Value of Assets at January 1, 2007 $[a + b - c + d]$	\$ 112,609,798
5.	Actu	arial Value of Assets as of January 1, 2007	<u>116,379,465</u>
6.	Actu	uarial Asset Gain/(Loss) [5 - 4e]	\$ 3,769,667
7.	Actu	uarial Gain/(Loss) [3 + 6]	\$ 4,462,555

<sup>\*</sup> Includes \$3,548,905 for increase in Actuarial Accrued Liability due to change in eligibility requirements as of January 1, 2007.

### ACTUARIAL BALANCE SHEET

A.	Financial Resources		Ja	nuary 1, 2007
1.	Actuarial Value of Assets		\$	116,379,465
2.	Present Value of Future Normal Cost Contributions (a) Member \$ (b) Employer (c) Total	46,714,689 <u>62,381,160</u>		109,095,849
3.	Unfunded Actuarial Accrued Liability			(5,749,187)
4.	Total Assets [1 + 2(c) + 3]		\$	219,726,127

В.	Benefit Obligations		Ja	nuary 1, 2007
1.	Present Value of Future Benefits (a) Active members (b) Inactive members (c) Retirees, disabilities and beneficiaries (d) Total	\$ 208,711,672 5,209,662 <u>5,804,793</u>	\$	219,726,127

### **ACCOUNTING INFORMATION**

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

	J	January 1, 2006	Já	anuary 1, 2007
Pension Benefit Obligation (PBO)				
Vested PBO (a) members currently receiving payments	\$	4,570,245	\$	5,804,793
(b) other members i) accumulated member contributions ii) employer financed vested		34,179,745 45,538,758		45,072,456 60,200,074
Total Vested PBO	\$	84,288,748	\$	111,077,323
Nonvested PBO		<u>1,298,324</u>		<u>1,373,366</u>
Total PBO	\$	85,587,072	\$	112,450,689
Actuarial Value of Assets		99,464,149		116,379,465
Unfunded Pension Benefit Obligation	\$	(13,877,077)	\$	(3,928,776)
Funded Percentage				
(a) on vested PBO		118.0%		104.8%
(b) on total PBO		116.2%		103.5%

### B. Change in Pension Benefit Obligation from January 1, 2006 to January 1, 2007.

Pension Benefit Obligation at January 1, 2006	\$ 85,587,072
Increase/(Decrease) during Period	
Plan Provision Changes	\$ 13,267,534
Assumption Changes	0
Benefits Accumulated	7,863,541
Benefits Paid	(6,360,290)
Interest Cost	7,873,314
Plan Experience	<u>4,219,518</u>
Total Change	\$ 26,863,617
Pension Benefit Obligation at January 1, 2007	\$ 112,450,689



### **ACCOUNTING INFORMATION**

Exhibits 9 and 10 provide a more detailed summary of the underlying actuarial methods and assumptions used in the calculations of the Pension Benefit Obligation. The benefits valued are those in effect on January 1, 2007, 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 Employer Contributions – Disclosure Requirements Under GASB No. 25

Plan Year Ending	A	nnual Required Contributions	Percentage Contributed
December 31, 2003	\$	4,083,840	100%
December 31, 2004	\$	4,845,003	100%
December 31, 2005	\$	5,513,254	100%
December 31, 2006	\$	6,251,727	100%

D. Actuarial Assumptions, Method and Additional Information under GASB No. 25		
Valuation Date	December 31, 2006	
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* Projected salary increases*	7.6% 4.5% - 9.1%	
*Includes inflation at	3.5%	
Cost-of-living adjustment	None	



### **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)]
December 31, 2003	\$ 69,761,178	\$ 63,270,991	\$ (6,490,187)	110.3%	\$ 60,626,584	(10.7%)
December 31, 2004	\$ 83,869,272	\$ 73,913,434	\$ (9,955,838)	113.5%	\$ 67,810,140	(14.7%)
December 31, 2005	\$ 99,464,149	\$ 84,817,488	\$(14,646,661)	117.3%	\$ 88,144,293	(16.6%)
December 31, 2006	\$ 116,379,465	\$ 110,630,278	\$ (5,749,187)	105.2%	\$ 113,468,303	(5.1%)



### SUMMARY OF MEMBER DATA

A.	Active Members	Ja	nuary 1, 2006	J	anuary 1, 2007
1.	Number of active members  (a) Before assumed retirement age  (b) Beyond assumed retirement age  (c) Total		3,228 154 3,382		3,974 <u>182</u> 4,156
2.	Annual considered compensation  (a) Before assumed retirement age  (b) Beyond assumed retirement age  (c) Total	\$	85,465,599 2,678,694 88,144,293	\$	109,999,228 3,469,075 113,468,303
3.	Accumulated contributions  (a) Employee Cash Balance Account  (b) Employer Cash Balance Account  (c) Total Cash Balance Account	\$	33,510,237 49,405,450 82,915,687	\$	42,854,642 <u>63,378,186</u> 106,232,828
4.	Active member averages  (a) Age  (b) Service  (c) Compensation  (d) Cash Balance Account	\$	48.4 7.6 26,063 24,517	\$	47.2 6.6 27,302 25,561
B.	Inactive Members				
1. 2. 3.	Number of inactive members  Total vested Cash Balance Account  Inactive member averages  (a) Age  (b) Vested Cash Balance Account	\$	99 1,598,224 47.6 16,144	\$	540* 5,209,662 45.6 9,648
C.	Retired and Disabled Members and Beneficial	ries			
1.	Number of members  (a) Retired  (b) Disabled  (c) Beneficiaries  (d) Total		96 0 <u>3</u> 99		116 0 <u>6</u> 122
2.	Annual benefits  (a) Retired  (b) Disabled  (c) Beneficiaries  (d) Total	\$	575,612 0 <u>15,091</u> 590,703	\$	709,579 0 <u>22,851</u> 732,430

<sup>\*</sup> Includes an additional 162 members who received a dividend in 2006.

### SUMMARY OF MEMBER DATA

### D. Distribution of Retired and Disabled Members and Beneficiaries as of January 1, 2007.

Age Range	Number	Annual Benefit	Average Annual Benefit
Under 50	1	\$ 3,620	\$ 3,620
50 – 54	1	2,504	2,504
55 – 59	6	27,706	4,618
60 – 64	20	118,776	5,939
65 – 69	49	314,619	6,421
70 – 74	25	163,808	6,552
75 – 79	13	64,827	4,987
80 and Over	<u>7</u>	<u>36,570</u>	5,224
Total	122	732,430	6,004

### E. Member Data Reconciliation

			Inactive	Members		
	Active Members	Terminated With Vested Employer Balances	Terminated With Non-Vested Employer Balances	Retired and Disabled Members	Bene- ficiaries	Total
As of January 1, 2006	3,382	55	44	96	3	3,580
Changes in status  a) Normal & early retirements b) Became payable c) Deaths d) Nonvested terminations e) Vested terminations f) Contribution refund g) Beneficiaries in receipt h) Disability retirements i) DC retirements j) Return to active service k) Data Change	(6) 0 0 (121) (167) (69) 0 0 2 (1)	(2) 0 0 0 167 (2) 0 0 0 (1) 1	0 0 0 121 0 (3) 0 0 0 (1) (1)	8 0 (4) 0 0 0 0 0 14 0 2	0 0 0 0 0 0 3 0 0 0	0 0 (4) 0 0 (74) 3 0 14 0
Total changes in status	(362)	163	116	20	3	(60)
New entrants*  Net change	1,136 774	95 258	67 183	0 20	0	1,298 1,238
As of January 1, 2007	4,156	313	227	116	6	4,818

<sup>\*</sup> Includes an additional 162 members who received a dividend in 2006.



## Nebraska Public Employees Retirement Systems County Employees' Retirement System Cash Balance Benefit Fund

# SUMMARY OF MEMBER DATA

F. Age and Service Distribution of Active Members as of January 1, 2007.

Age Last Birthday		0-4	2-9	10-14	15-19	20-24	25-29	30-34	35-39	40 and Over	Grand Total
	Number	199	0	0	0	0	0	0	0	0	199
20-24	Total Salary	\$4,932,480	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,932,480
	Average Sal.	\$24,786	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,786
	Number	380	<i>L</i>	0	0	0	0	0	0	0	288
25-29	Total Salary	\$10,596,579	\$215,803	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,812,382
	Average Sal.	\$27,886	\$30,829	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,939
	Number	331	45	10	0	0	0	0	0	0	988
30-34	Total Salary	\$9,075,861	\$1,671,660	\$309,870	\$0	\$0	\$0	\$0	\$0	\$0	\$11,057,391
	Average Sal.	\$27,420	\$37,148	\$30,987	\$0	\$0	\$0	\$0	\$0	\$0	\$28,646
	Number	295	46	13	9	0	0	0	0	0	390
35-39	Total Salary	\$8,143,443	\$1,604,480	\$257,895	\$152,472	\$0	\$0	\$0	0\$	0\$	\$10,458,290
	Average Sal.	\$27,605	\$34,880	\$42,915	\$25,412	\$0	\$0	\$0	\$0	\$0	\$29,051
	Number	270	99	30		6	0	0	0	0	401
40-44	Total Salary	\$7,187,274	\$1,942,980	\$938,430	\$1,277,289	\$300,663	\$0	\$0	0\$	\$0	\$11,646,636
	Average Sal.	\$26,620	\$29,892	\$31,281	\$47,307	\$33,407	\$0	\$0	\$0	\$0	\$29,044
	Number	334	58	30	48	44	0	0	0	0	514
45-49	Total Salary	\$8,425,516	\$1,607,992	\$809,490	\$1,701,264	\$1,438,184	\$0	\$0	0\$	0\$	\$13,982,446
	Average Sal.	\$25,226	\$27,724	\$26,983	\$35,443	\$32,686	\$0	\$0	\$0	\$0	\$27,203
	Number	319	81	52		52	29	0	0	0	294
50-54	Total Salary	\$8,159,912	\$2,196,315	\$1,434,420	\$1,892,769	\$1,875,848	\$1,066,359	\$0	0\$	\$0	\$16,625,623
	Average Sal.	\$25,580	\$27,115	\$27,585	\$31,029	\$36,074	\$36,771	\$0	\$0	\$0	\$27,989
	Number	225	73	52	81	72	26	12	0	0	541
22-26	Total Salary	\$5,786,550	\$1,887,488	\$1,453,192	\$2,691,306	\$2,129,616	\$1,079,078	\$471,204	\$0	\$0	\$15,498,434
	Average Sal.	\$25,718	\$25,856	\$27,946	\$33,226	\$29,578	\$41,503	\$39,267	\$0	\$0	\$28,648
	Number	141	47	36			13	15	3	0	388
60-64	Total Salary	\$2,876,874	\$1,167,433	\$990,864	\$1,879,560	\$2,288,185	\$482,820	\$557,670	\$138,318	\$0	\$10,381,724
	Average Sal.	\$20,403	\$24,839	\$27,524	\$31,326	\$31,345	\$37,140	\$37,178	\$46,106	\$0	\$26,757
	Number	78	33	29			8	2	2	0	221
69-29	Total Salary	\$1,352,912	\$681,846	\$651,253	\$631,925	\$1,171,105	\$233,816	\$174,950	\$66,394	\$0	\$4,964,201
	Average sal.	\$17,345	\$20,02\$	\$22,45/	\$21,475	\$27,125	177'67\$	\$34,990	\$33,197		\$22,462
	Number	51	18	27	30		2	9	0	0	165
70 & Up	Total Salary	\$840,477	\$257,076	\$542,457	\$581,250	\$665,570	\$44,812	\$177,054	\$0	\$0	\$3,108,696
	Average Sal.	\$16,480	\$14,282	\$20,091	\$19,375	\$21,470	\$22,406	\$29,509	\$0	\$0	\$18,841
	Number	2,623	473	279			78	38	5	0	4,156
Total	Total Salary	\$67,377,878	\$13,233,073	\$7,687,871	\$10,807,835	\$9,869,171	\$2,906,885	\$1,380,878	\$204,712	\$0	\$113,468,303
	Average Sal.	\$25,687	\$27,977	\$27,555	\$32,166	\$30,460	\$37,268	\$36,339	\$40,942	\$0	\$27,302

### FORECAST OF EXPECTED DISBURSEMENTS

Plan Year Ending December 31	Active Employees	Retired and Disabled Members and Beneficiaries	Total
2007	\$ 4,983,932	\$ 731,892	\$ 5,715,824
2008	6,077,378	709,189	6,786,567
2009	7,133,785	656,975	7,790,760
2010	8,279,933	619,953	8,899,886
2011	9,237,891	570,650	9,808,541
2012	10,046,514	549,704	10,596,218
2013	10,991,625	522,157	11,513,782
2014	11,922,434	505,240	12,427,674
2015	12,776,465	476,134	13,252,599
2016	13,693,470	457,539	14,151,009

**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. Deferred vested and nonvested members are excluded from the disbursements.

### SUMMARY OF PLAN PROVISIONS

### Membership

All permanent full-time employees of a participating County shall begin immediate participation in the County Employees' Retirement System as of January 1, 2007, or date of hire if later, and all permanent part-time employees who have attained the age of twenty-five, may exercise the option to begin immediate participation in the County Employees' Retirement System. Full-time elected officials shall begin participation upon taking office.

Existing members of the County 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 County 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 subject to 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 County retirement system shall contribute an amount equal to four and one-half percent (4.5%) of annual compensation to the fund. The member contribution shall be credited to the employee cash balance account.

### **Employer Contributions**

The participating counties shall contribute at a rate of 150% of the members' contributions to the fund. The County 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.



### SUMMARY OF PLAN PROVISIONS

### Service

Service is defined to mean the actual total length of employment with a participating County 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.

### **Optional Form of Payment**

Optional forms of payment include a lump sum and the following annuities (with or without a 2.5% COLA): life annuity, modified cash refund, certain and life annuity (5, 10 or 15 years), certain only annuity (5, 10, 15 or 20 years) and joint and survivor annuity (50%, 75% or 100%).

### **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.



### SUMMARY OF PLAN PROVISIONS

### **Pre-retirement 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.

### **Defined Contribution Transfers at Retirement**

Upon retirement, members participating in the Defined Contribution Benefit Fund may elect to annuitize their accumulated account balance and receive a monthly benefit payment from the Cash Balance Benefit Fund. The accumulated account balance is transferred from the Defined Contribution Benefit Fund to the Cash Balance Benefit Fund upon the retirement of a DC member electing an annuity. The actuarial assumptions used to convert the accumulated account balance are (i) the 1994 Group Annuity Mortality Table with a 50% male / 50% female mix, and (ii) the PBGC Table 2 rate at the beginning of the year plus 0.75%.

### **Benefit Improvements**

In accordance with Section 23-2317 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.

### **Changes in Plan Provisions**

LB 366, enacted in 2006, made changes to the membership requirements of the plan.

Employees will be required to enroll and participate in the retirement plan immediately upon beginning employment. Previously, permanent employees participated in the plan only after having been employed by a participating county for at least 12 months.



### SUMMARY OF ACTUARIAL METHODS AND PROCEDURES AS OF JANUARY 1, 2007

### A. ACTUARIAL METHODS

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

### **Entry Age Actuarial Cost Method**

Projected pension 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, 2007.

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 JANUARY 1, 2007

- 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).



### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JANUARY 1, 2007

### **ECONOMIC ASSUMPTIONS**

- 1. Investment Return
- 2. Inflation
- 3. Interest Credit Rate on Cash Balance Accounts
- 4. Annuitization Rate of Member & Employer Accumulated Balances
- 5. Salary Scale

- 7.6% per annum, compounded annually, net of expenses.
- 3.5% per annum, compounded annually.
- 7.0% per annum, compounded annually.
- 7.6% per annum, compounded annually.

Graduated rates by age.

	Annual Ir	ncrease in S	alary
Age	Merit & Productivity	Inflation	Total
	Productivity	IIIIIation	TOLAI
20	4.7%	3.5%	8.2%
25	3.9%	3.5%	7.4%
30	3.0%	3.5%	6.5%
35	2.5%	3.5%	6.0%
40	2.3%	3.5%	5.8%
45	2.0%	3.5%	5.5%
50	1.6%	3.5%	5.1%
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%

### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JANUARY 1, 2007

### **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	Mortality Rate		
Age	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	Life Expectancy (Years)		
Age	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



### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JANUARY 1, 2007

2. Retirement

Graduated rates by retirement age.

	Annual Rates
Age	
55	3.0%
56	3.0%
57	3.0%
58	3.0%
59	3.0%
60	5.0%
61	8.0%
62	20.0%
63	12.0%
64	12.0%
65	30.0%
66	20.0%
67	20.0%
68	20.0%
69	20.0%
70	100.0%

3. Termination

Graduated rates by age and service.

	Annual Rate Per 1,000 Members			
Age	<1	1-<2	2-<3	3+
20	200.70	167.25	147.18	133.80
25	144.90	120.75	106.26	96.60
30	103.20	86.00	75.68	68.80
35	76.20	63.50	55.88	50.80
40	56.70	47.25	41.58	37.80
45	41.85	34.88	30.69	27.90
50	33.15	27.63	24.31	22.10
55	36.00	30.00	26.40	24.00
60	36.00	30.00	26.40	24.00
65	36.00	30.00	26.40	24.00
70	36.00	30.00	26.40	24.00

### SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JANUARY 1, 2007

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. Deferred vested and nonvested members are assumed to take a refund of their account balance as of the valuation date.

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

<sup>\*</sup>Five-year certain and life annuity.

2. Cost of Living Adjustment

None assumed.

### GLOSSARY OF TERMS

Actuarial Accrued Liability Total accumulated cost to fund pension benefits arising

from service in all prior years.

Actuarial Cost Method Technique used to assign or allocate, in a systematic and

consistent manner, the expected cost of a pension plan for a group of participants to the years of service that give rise

to that cost.

Actuarial Present Value

of Future Benefits

Amount which, together with future interest, is expected

to be sufficient to pay all future benefits.

Actuarial Valuation Study of probable amounts of future pension benefits and

the necessary amount of contributions to fund those

benefits.

Actuary Person who performs mathematical calculations pertaining

to pension and insurance benefits based on specific

procedures and assumptions.

Annual Required Contribution Disclosure measure of annual pension cost.

GASB 25 and GASB 27 Governmental Accounting Standards Board Statement

numbers 25 and 27 which specify how the Net Pension Obligation and Annual Required Contribution are to be

calculated.

Normal Cost That portion of the actuarial present value of benefits

assigned to a particular year in respect to an individual

participant or the plan as a whole.

Unfunded Actuarial

Accrued Liability

Vested Benefits

oor dod Lidemity

The portion of the actuarial accrued liability not offset by

plan assets.

Benefits which are unconditionally guaranteed regardless

of employment status.

