

**NEBRASKA PUBLIC EMPLOYEES  
RETIREMENT SYSTEMS  
2012**

**State Employees' Retirement System  
Cash Balance Benefit Fund**  
Actuarial Valuation Results  
as of January 1, 2012  
for State Fiscal Year Ending June 30, 2014

May 2012

**buck**consultants®

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Denver, Colorado 80202

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

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May 4, 2012

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, 2012, performed by Buck Consultants.

The actuarial valuation is based on member data provided to us by UNIFI Companies, recordkeeper for the plan, and unaudited financial information provided by Nebraska Retirement Systems as summarized in this report. The benefits considered are those delineated in Nebraska State Statutes, effective as amended January 1, 2012.

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 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 2013-2014 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.

Respectfully submitted,



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



Douglas J. Fiddler, A.S.A., E.A., M.A.A.A.  
Director, Retirement Actuary



**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
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**SUMMARY OF ACTUARIAL REPORT FOR CONTRIBUTION REQUIREMENTS  
AND FUNDED STATUS FOR THE 2012 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, 2014 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 compare actual and expected experience under the plan during the plan year beginning January 1, 2011 and ending December 31, 2011.
4. To quantify the contribution rate available for benefit improvements, if any.

The 2012 actuarial valuation is based upon the plan provisions as of January 1, 2012, as described in Exhibit 8. The actuarial methods and assumptions are described in Exhibits 9 and 10.

Highlights from the current valuation:

1. No additional State contribution is required for the 2013-2014 fiscal year to meet the actuarially required contribution. Expected member contributions and State contributions exceed the total funding requirement. The Actuarial Liability as of January 1, 2012, is \$18,168,434.
2. For the 2012 plan year, the actuarially required contribution is over 90% of the actual contributions. Therefore, a funding excess does not exist to provide benefit improvements during the 2012 plan year.
3. One measure of the funded status of the system is 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, 2012, the funded percentage on Actuarial Value of Assets is 92.9%.
4. An asset loss was experienced on the Actuarial Value of Assets during the 2011 plan year. The rate of return on Actuarial Value of 2.54% fell short of the 7.75% assumed asset return rate by 5.21%, resulting in a decrease to the Actuarial Value of \$37,496,396. A decremental gain of \$11,600,984 was experienced on the actuarial accrued liability due to salary increases less than expected, and the actual interest credit rate of 5.0% was less than the assumed interest credit rate of 7.0%. The net actuarial loss for the year was \$21,541,093. As a result, the actuarial funding ratio declined from 93.6% as of January 1, 2011 to 91.5% as of January 1, 2012.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS  
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***SUMMARY OF ACTUARIAL REPORT FOR CONTRIBUTION REQUIREMENTS  
AND FUNDED STATUS FOR THE 2012 PLAN YEAR***

5. An investment loss was experienced on the Market Value of Assets during the 2011 plan year. The annual rate of return on Market Value was 0.26% for the year, falling short of the assumed investment return of 7.75% by 7.49%. As a result of this loss, the Market Value funded ratio on the Accumulated Benefit Obligation decreased from 90.0% as of January 1, 2011 to 86.1% as of January 1, 2012.

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**Basic Actuarial Valuation Results**

The 2012 actuarial valuation results are based upon the plan provisions as of January 1, 2012, as described in Exhibit 8. The actuarial methods and assumptions are described in detail in Exhibits 9 and 10, 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 2012 plan year is \$34,366,120. Member contributions and matching State contributions are expected to exceed the total actuarially required funding.

Assets do not exceed the actuarial accrued liability as of the valuation date. As a result, the unfunded actuarial accrued liability is \$69,314,556. No additional payment is required for the 2012 plan year.

<b>History of Expected State Contributions</b>			
<b>Plan Year</b>	<b>State Contribution</b>	<b>Additional Contributions</b>	<b>Total</b>
2004	\$ 12,112,627	\$ 0	\$ 12,112,627
2005	\$ 13,618,155	\$ 0	\$ 13,618,155
2006	\$ 16,912,304	\$ 0	\$ 16,912,304
2007	\$ 24,266,326	\$ 0	\$ 24,266,326
2008	\$ 28,814,683	\$ 0	\$ 28,814,683
2009	\$ 32,461,469	\$ 0	\$ 32,461,469
2010	\$ 34,062,751	\$ 0	\$ 34,062,751
2011	\$ 33,645,530	\$ 0	\$ 33,645,530
2012	\$ 34,366,120	\$ 0	\$ 34,366,120

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**2. Asset Values**

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

	January 1, 2011	January 1, 2012	Annual Rate of Return
(a) Market value	\$ 689,162,482	\$ 702,495,027	0.26%
(b) Actuarial value, an adjusted value intended to reduce the effect of market fluctuations (See Exhibit 9)	\$ 714,131,805	\$ 743,970,954	2.54%

**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:

	January 1, 2011	January 1, 2012
(a) Present value of future benefits	\$ 1,137,134,307	\$ 1,196,796,425
(b) Actuarial value of assets	714,131,805	743,970,954
(c) Present value of future member contributions	165,548,693	169,787,905
(d) Present value of matching State contributions	<u>258,255,961</u>	<u>264,869,132</u>
(e) Actuarial Liability/(Reserve) [(a) – (b) – (c) – (d)]	\$ (802,152)	\$ 18,168,434

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS  
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**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, 2011	January 1, 2012
(a) Pension Benefit Obligation		
i) retirees, disabled members and beneficiaries receiving benefits and deferred vested members not yet receiving benefits	\$ 136,776,399	\$ 178,128,167
ii) active members	<u>614,338,673</u>	<u>623,044,025</u>
iii) total pension benefit obligation	\$ 751,115,072	\$ 801,172,192
(b) Assets available for benefits (actuarial value)	<u>714,131,805</u>	<u>743,970,954</u>
(c) Unfunded Pension Benefit Obligation	\$ 36,983,267	\$ 57,201,238
(d) Funded percentage on actuarial value of assets [(b) ÷ (a)(iii)]	95.1%	92.9%

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**5. Accumulated Benefit Obligation**

The accumulated benefit obligation represents another measure of the value of the benefits provided under the plan, based on the account balances and retiree benefits as of the valuation date. The measure is intended to provide information regarding the Cash Balance Benefits funded status on an immediate basis, progress on securing the current benefit obligation and comparability to similar individual account plans.

Funded Status	January 1, 2011	January 1, 2012
(a) Cash Balance Accounts		
i) Actives	\$ 628,728,170	\$ 637,533,581
ii) Inactives	<u>61,128,218</u>	<u>81,557,720</u>
iii) Total	\$ 689,856,388	\$ 719,091,301
(b) Retirees, disabilities, and beneficiaries	<u>75,648,181</u>	<u>96,570,447</u>
(c) Total accumulated benefit obligation	\$ 765,504,569	\$ 815,661,748
(d) Market Value of Assets	<u>689,162,482</u>	<u>702,495,027</u>
(e) Deficit/(Reserve) [(c) – (d)]	\$ 76,342,087	\$ 113,166,721
(f) Funded percentage on Market Value of Assets [(d) ÷ (c)]	90.0%	86.1%

**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. 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, 2011	January 1, 2012
(a) Benefit accrual cost amount	\$ 46,294,610	\$ 47,386,830
(b) Annual compensation before assumed retirement age	\$ 443,043,773	\$ 453,855,808
(c) Benefit accrual cost rate [(a) ÷ (b)]	10.45%	10.44%

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**EXECUTIVE SUMMARY**

**7. 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.

**8. 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.

**9. Changes Since the Last Actuarial Valuation**

There have been no changes in the actuarial cost method, plan provisions, or actuarial assumptions since the last actuarial valuation as of January 1, 2011.



**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
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**SYSTEM ASSETS**

A. Summary of Market Value of Assets	Market Value as of December 31, 2010	Market Value as of December 31, 2011
1. Cash and Equivalents	\$ 1,456,738	\$ 1,224,945
2. Investments	699,219,484	703,007,318
3. Receivables and Prepays	24,577,487	40,683,027
4. Accounts Payable	(36,091,227)	(42,420,263)
<b>5. Net Assets Available for Pension Benefits Considered [1 + 2 + 3 + 4]</b>	<b>\$ 689,162,482</b>	<b>\$ 702,495,027</b>

B. Development of Actuarial Value of Assets	Amount
1. Actuarial Value of Assets as of January 1, 2011	\$ 714,131,805
2. Unrecognized return as of January 1, 2011	\$ (24,969,323)
3. Contributions	
(a) Employee	\$ 19,998,387
(b) Employer	<u>31,088,483</u>
(c) Total	\$ 51,086,870
4. Transfers In	\$ 6,684,594
5. Disbursements	
(a) Distributions	\$ 36,592,043
(b) Benefit Payments	9,628,344
(c) Total	\$ 46,220,387
6. Expected Return at 7.75% on:	
(a) Item 1	\$ 55,345,215
(b) Item 2	(1,935,123)
(c) Item 3(c)	1,942,679
(d) Item 4	254,195
(e) Item 5(c)	<u>(1,757,621)</u>
(f) Total [(a) + (b) + (c) + (d) + (e)]	\$ 53,849,345
7. Actual Return on Market Value for 2011 Plan Year, net of expenses*	\$ 1,781,468
8. Return to be Spread for 2011 Plan Year [7 - 6(f)]	\$ (52,067,877)

\* Includes adjustment on the Market Value of Assets of \$0.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
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**SYSTEM ASSETS**

<b>B. Development of Actuarial Value of Assets (continued)</b>		<b>Amount</b>																								
9.	Total Market Value of Assets as of January 1, 2012	\$ 702,495,027																								
10.	Return to be Spread																									
	<table border="1"> <thead> <tr> <th align="center">Plan Year</th> <th align="center">Return to be Spread</th> <th align="center">Unrecognized Percent</th> <th align="center">Unrecognized Return</th> </tr> </thead> <tbody> <tr> <td align="center">2011</td> <td align="right">\$ (52,067,877)</td> <td align="center">80%</td> <td align="right">\$ (41,654,302)</td> </tr> <tr> <td align="center">2010</td> <td align="right">31,579,623</td> <td align="center">60%</td> <td align="right">18,947,774</td> </tr> <tr> <td align="center">2009</td> <td align="right">64,618,375</td> <td align="center">40%</td> <td align="right">25,847,350</td> </tr> <tr> <td align="center">2008</td> <td align="right">(223,083,744)</td> <td align="center">20%</td> <td align="right">(44,616,749)</td> </tr> <tr> <td align="center" colspan="3"><b>Total</b></td> <td align="right"><b>\$ (41,475,927)</b></td> </tr> </tbody> </table>	Plan Year	Return to be Spread	Unrecognized Percent	Unrecognized Return	2011	\$ (52,067,877)	80%	\$ (41,654,302)	2010	31,579,623	60%	18,947,774	2009	64,618,375	40%	25,847,350	2008	(223,083,744)	20%	(44,616,749)	<b>Total</b>			<b>\$ (41,475,927)</b>	
Plan Year	Return to be Spread	Unrecognized Percent	Unrecognized Return																							
2011	\$ (52,067,877)	80%	\$ (41,654,302)																							
2010	31,579,623	60%	18,947,774																							
2009	64,618,375	40%	25,847,350																							
2008	(223,083,744)	20%	(44,616,749)																							
<b>Total</b>			<b>\$ (41,475,927)</b>																							
11.	<b>Total Actuarial Value of Assets at January 1, 2012 [9 – 10]</b>	<b>\$ 743,970,954</b>																								
12.	<b>Asset Ratios</b>																									
	<b>(a) Actuarial Value to Market Value [11 ÷ 9]</b>	<b>105.9%</b>																								
	<b>(b) Market Value to Actuarial Value [9 ÷ 11]</b>	<b>94.4%</b>																								

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

**SYSTEM ASSETS**

<b>C. Change in Asset Values During 2011</b>	<b>Actuarial Value</b>	<b>Market Value</b>
1. Asset value as of January 1, 2011		
(a) Reported last year	\$ 714,131,805	\$ 689,162,482
(b) Adjustment	<u>n/a</u>	<u>0</u>
(c) Reported this year [(a) + (b)]	\$ 714,131,805	\$ 689,162,482
2. Contributions for 2011		
(a) Employee contributions paid	\$ 19,998,387	\$ 19,998,387
(b) Employer contributions collected	<u>31,088,483</u>	<u>31,088,483</u>
(c) Contributions for 2011 [(a) + (b)]	\$ 51,086,870	\$ 51,086,870
3. Transfers In	\$ 6,684,594	\$ 6,684,594
4. Disbursements for 2011		
(a) Benefit payments	\$ 46,220,387	\$ 46,220,387
(b) Expenses and fees	<u>2,725,402</u>	<u>2,725,402</u>
(c) Disbursements for 2011 [(a) + (b)]	\$ 48,945,789	\$ 48,945,789
5. Investment return for 2011	\$ 21,013,474	\$ 4,506,870
6. Asset value as of January 1, 2012 [1(c) + 2(c) + 3 - 4(c) + 5]	\$ 743,970,954	\$ 702,495,027
7. Approximate rate of investment return, net of expenses	2.54%	0.26%

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

<b>A. Development of Actuarially Required Funding Rate</b>	<b>January 1, 2012</b>
1. Actuarial present value of benefits	
(a) Active members	\$ 1,018,668,258
(b) Inactive members	81,557,720
(c) Retired members, disabilities and beneficiaries	<u>96,570,447</u>
(d) Total	\$ 1,196,796,425
2. Present Value of Future Normal Costs	<u>383,510,915</u>
3. Total Actuarial Accrued Liability [1(d) - 2]	\$ 813,285,510
4. Actuarial Value of Assets	<u>743,970,954</u>
5. Unfunded Actuarial Accrued Liability [3 - 4]	\$ 69,314,556
6. 25-Year Amortization of the Unfunded Actuarial Accrued Liability	
(a) Amount	\$ 6,274,089
(b) Amount as % of Pay	1.37%
7. Normal Cost	
(a) Amount	\$ 47,386,830
(b) Amount as % of Pay	10.33%
8. Total Actuarially Required Contribution	
(a) Amount [6(a) + 7(a)]	\$ 53,660,919
(b) Amount as % of Pay	11.70%

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

<b>B. Development of Additional State Contribution for 2013/2014</b>	<b>Annual Amount as a % of Pay</b>
1. Actuarially Required Contribution	
(a) Total Contribution Amount	\$ 53,660,919
(b) Amount as % of Pay	11.70%
2. Statutory Contribution Rates	
(a) Employee Contribution Rate	4.80%
(b) Employer Contribution Rate	7.49%
(c) Total Employee/Employer Contribution Rate [2(a) + 2(b)]	<u>12.29%</u>
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 2012 plan year	\$ 0
4. Additional Required State Contribution Amount for the 2013/2014 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	12.29%
2. Benefit Improvement Threshold Rate [90% of 1]	11.06%
3. Actuarially Required Contribution Rate	11.70%
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  
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**ACTUARIAL CONTRIBUTION REQUIREMENT**

<b>D. Schedule of Amortization Bases</b>	<b>Original Amount</b>	<b>January 1, 2012 Remaining Payments</b>	<b>Date of Last Payment</b>	<b>Outstanding Balance as of January 1, 2012</b>	<b>Annual Contribution</b>
1. 2009 Unfunded Accrued Liability Base	\$ 20,710,304	22	07/01/2033	\$ 19,758,815	\$ 1,829,291
2. 2010 Unfunded Accrued Liability Base	\$ 23,400,784	23	07/01/2034	\$ 22,711,110	\$ 2,066,935
3. 2011 Unfunded Accrued Liability Base	\$ 5,379,859	24	07/01/2035	\$ 5,303,538	\$ 475,190
4. 2012 Unfunded Accrued Liability Base	\$ 21,541,093	25	07/01/2036	\$ 21,541,093	\$ 1,902,673
<b>Total</b>				<b>\$ 69,314,556</b>	<b>\$ 6,274,089</b>

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
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**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, 2012.

<b>1. Expected Actuarial Accrued Liability</b>	
a. Actuarial Accrued Liability as of January 1, 2011	\$ 762,680,399
b. Normal Cost during 2011 Adjusted for Actual Pay and Transfers	49,205,246
c. Benefit Payments for Plan Year Ending December 31, 2011	46,220,387
d. Interest on a, b, and c to End of Year	<u>59,221,236</u>
e. Expected Actuarial Accrued Liability at January 1, 2012 [a + b - c + d]	\$ 824,886,494
2. Actuarial Accrued Liability at January 1, 2012	<u>813,285,510</u>
<b>3. Liability Gain/(Loss) [1e - 2]</b>	<b>\$ 11,600,984</b>
<b>4. Expected Actuarial Value of Assets</b>	
a. Actuarial Value of Assets as of January 1, 2011	\$ 714,131,805
b. Contributions and Transfers In During Plan Year	57,771,464
c. Benefit Payments During Plan Year	46,220,387
d. Interest on a, b, and c to End of Year	<u>55,784,468</u>
e. Expected Actuarial Value of Assets at January 1, 2012 [a + b - c + d]	\$ 781,467,350
5. Actuarial Value of Assets as of January 1, 2012	<u>743,970,954</u>
<b>6. Actuarial Asset Gain/(Loss) [5 - 4e]</b>	<b>\$ (37,496,396)</b>
<b>7. Contributions</b>	
a. Statutory Contribution	\$ 51,086,870
b. Actuarial Contribution Adjusted for Actual Pay	<u>46,892,067</u>
c. Excess Contribution [a - b]	\$ 4,194,803
d. Interest on e to End of Year	159,516
<b>8. Contribution Gain/(Loss) [c + d]</b>	<b>\$ 4,354,319</b>
<b>9. Actuarial Gain/(Loss) [3 + 6 + 8]</b>	<b>\$ (21,541,093)</b>

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS**  
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**ACTUARIAL BALANCE SHEET**

<b>A. Financial Resources</b>	<b>January 1, 2012</b>
1. Actuarial Value of Assets	\$ 743,970,954
2. Present Value of Future Normal Cost Contributions	
(a) Member	\$ 169,787,905
(b) Employer	<u>213,723,010</u>
(c) Total	383,510,915
3. Unfunded Actuarial Accrued Liability	69,314,556
4. Total Assets [1 + 2(c) + 3]	\$ 1,196,796,425

<b>B. Benefit Obligations</b>	<b>January 1, 2012</b>
1. Present Value of Future Benefits	
(a) Active members	\$ 1,018,668,258
(b) Inactive members	81,557,720
(c) Retirees, disabilities and beneficiaries	<u>96,570,447</u>
(d) Total	\$ 1,196,796,425

**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, 2011	January 1, 2012
<b>Pension Benefit Obligation (PBO)</b>		
Vested PBO		
(a) members currently receiving payments	\$ 75,648,181	\$ 96,570,447
(b) other members		
i) accumulated member contributions	270,834,228	282,210,045
ii) employer financed vested	<u>394,817,866</u>	<u>413,623,673</u>
Total Vested PBO	\$ 741,300,275	\$ 792,404,165
Non-vested PBO	<u>9,814,797</u>	<u>8,768,027</u>
Total PBO	\$ 751,115,072	\$ 801,172,192
Actuarial Value of Assets	<u>714,131,805</u>	<u>743,970,954</u>
Unfunded Pension Benefit Obligation	\$ 36,983,267	\$ 57,201,238
Funded Percentage		
(a) on vested PBO	96.3%	93.9%
(b) on total PBO	95.1%	92.9%

**B. Change in Pension Benefit Obligation from January 1, 2011 to January 1, 2012.**

<b>Pension Benefit Obligation at January 1, 2011</b>	\$ 751,115,072
Increase/(Decrease) during Period	
Plan Provision Changes	\$ 0
Benefits Accumulated	43,733,818
Benefits Paid	(46,220,387)
Interest Cost	59,843,167
Plan Experience	<u>(7,299,478)</u>
Total Change	\$ 50,057,120
<b>Pension Benefit Obligation at January 1, 2012</b>	\$ 801,172,192

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS  
STATE EMPLOYEES' RETIREMENT SYSTEM  
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**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, 2012, 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**

<b>Plan Year Ending</b>	<b>Annual Required Contributions</b>	<b>Percentage Contributed</b>
December 31, 2006	\$ 16,001,418	100%
December 31, 2007	\$ 22,913,163	100%
December 31, 2008	\$ 29,208,772	100%
December 31, 2009	\$ 30,321,032	100%
December 31, 2010	\$ 30,679,003	100%
December 31, 2011	\$ 31,088,483	100%

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

Valuation Date	December 31, 2011
Actuarial Cost Method	Entry Age
Amortization Method	Level dollar amount, closed
Equivalent Single Amortization Period	23 years
Asset Valuation Method	5 year smoothing of market value
Actuarial Assumptions:	
Investment rate of return*	7.75%
Projected salary increases*	4.5% – 5.9%
*Includes inflation at	3.5%
Cost-of-living adjustment	None, except 2.5% per year is used for retirees electing annuity payments with a COLA feature.

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

**ACCOUNTING INFORMATION**

**E. 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, 2006	\$ 392,442,206	\$ 379,734,639	\$ (12,707,567)	103.3%	\$ 323,982,997	(3.9%)
December 31, 2007	\$ 606,552,428	\$ 586,829,526	\$ (19,722,902)	103.4%	\$ 384,708,712	(5.1%)
December 31, 2008	\$ 637,539,094	\$ 658,249,398	\$ 20,710,304	96.9%	\$ 433,397,447	4.8%
December 31, 2009	\$ 670,591,669	\$ 714,408,952	\$ 43,817,283	93.9%	\$ 454,776,381	9.6%
December 31, 2010	\$ 714,131,805	\$ 762,680,399	\$ 48,548,594	93.6%	\$ 449,206,006	10.8%
December 31, 2011	\$ 743,970,954	\$ 813,285,510	\$ 69,314,556	91.5%	\$ 458,826,702	15.1%

**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, 2011</b>	<b>January 1, 2012</b>
1. Number of active members		
(a) Before assumed retirement age	11,077	11,155
(b) Beyond assumed retirement age	<u>123</u>	<u>108</u>
(c) Total	11,200	11,263
2. Annual considered compensation		
(a) Before assumed retirement age	\$ 443,043,773	\$ 453,855,808
(b) Beyond assumed retirement age	<u>6,162,233</u>	<u>4,970,894</u>
(c) Total	\$ 449,206,006	\$ 458,826,702
3. Accumulated contributions		
(a) Employee Cash Balance Account	\$ 245,985,324	\$ 248,928,183
(b) Employer Cash Balance Account	<u>382,742,846</u>	<u>388,605,398</u>
(c) Total Cash Balance Account	\$ 628,728,170	\$ 637,533,581
4. Active member averages		
(a) Age	44.7	44.7
(b) Service	8.4	8.3
(c) Compensation	\$ 40,108	\$ 40,738
(d) Cash Balance Account	\$ 56,136	\$ 56,604
<b>B. Inactive Members</b>		
1. Number of inactive members	2,797	3,380
2. Total Vested Cash Balance Account	\$ 61,128,218	\$ 81,557,720
3. Inactive member averages		
(a) Age	40.7	41.2
(b) Vested Cash Balance Account	\$ 21,855	\$ 24,130
<b>C. Retired and Disabled Members and Beneficiaries</b>		
1. Number of members		
(a) Retired	576	701
(b) Disabled	0	0
(c) Beneficiaries	<u>23</u>	<u>36</u>
(d) Total	599	737
2. Annual benefits		
(a) Retired	\$ 7,888,616	\$ 10,030,385
(b) Disabled	0	0
(c) Beneficiaries	<u>285,967</u>	<u>471,584</u>
(d) Total	\$ 8,174,583	\$ 10,501,969

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

**SUMMARY OF MEMBER DATA**

**D. Distribution of Retired and Disabled Members and Beneficiaries as of January 1, 2012**

<b>Age Range</b>	<b>Number</b>	<b>Annual Benefit</b>	<b>Average Annual Benefit</b>
Under 50	10	\$ 50,399	\$ 5,040
50 – 54	5	43,613	8,723
55 – 59	33	336,157	10,187
60 – 64	156	2,439,437	15,637
65 – 69	272	3,886,304	14,288
70 – 74	198	2,863,294	14,461
75 – 79	50	678,901	13,578
80 and Over	<u>13</u>	<u>203,864</u>	<u>15,682</u>
<b>Total</b>	<b>737</b>	<b>\$ 10,501,969</b>	<b>\$ 14,250</b>

**E. Member Data Reconciliation**

	<b>Active Members</b>	<b>Inactive Members</b>				<b>Total</b>
		<b>Terminated With Vested Employer Balances</b>	<b>Terminated With Non-Vested Employer Balances</b>	<b>Retired and Disabled Members</b>	<b>Beneficiaries</b>	
As of January 1, 2011	11,200	1,108	1,689	576	23	14,596
Changes in status						
a) Normal & early retirements	(89)	(13)	0	102	0	0
b) Became payable	0	0	0	0	0	0
c) Deaths	(19)	0	0	(11)	0	(30)
d) Nonvested terminations	(451)	0	451	0	0	0
e) Vested terminations	(402)	402	0	0	0	0
f) Contribution refund	(789)	(136)	(206)	0	0	(1,131)
g) New Beneficiaries	0	0	0	0	11	11
h) Disability retirements	0	0	0	0	0	0
i) DC retirements	0	0	0	39	0	39
j) Return to active service	48	(19)	(29)	0	0	0
k) Data Change	<u>0</u>	<u>0</u>	<u>0</u>	<u>(5)</u>	<u>2</u>	<u>(3)</u>
Total changes in status	(1,702)	234	216	125	13	(1,114)
New entrants	1,765	30	103	0	0	1,898
Net change	63	264	319	125	13	784
As of January 1, 2012	11,263	1,372	2,008	701	36	15,380

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

**SUMMARY OF MEMBER DATA**

**F. Age and Service Distribution of Active Members as of January 1, 2012**

Age Last Birthday		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 and Over	Grand Total
<25	Number	679	5	0	0	0	0	0	0	0	684
	Total Salary	\$ 20,867,508	\$ 125,384	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 20,992,892
	Average Sal.	\$ 30,733	\$ 25,077	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 30,691
25-29	Number	1,190	243	0	0	0	0	0	0	0	1,433
	Total Salary	\$ 41,100,061	\$ 9,111,626	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 50,211,687
	Average Sal.	\$ 34,538	\$ 37,496	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 35,040
30-34	Number	786	587	10	0	0	0	0	0	0	1,383
	Total Salary	\$ 28,575,812	\$ 23,330,103	\$ 423,395	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 52,329,310
	Average Sal.	\$ 36,356	\$ 39,745	\$ 42,340	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 37,838
35-39	Number	526	444	51	3	0	0	0	0	0	1,024
	Total Salary	\$ 19,340,805	\$ 18,312,124	\$ 2,315,509	\$ 140,185	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 40,108,623
	Average Sal.	\$ 36,770	\$ 41,244	\$ 45,402	\$ 46,728	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 39,169
40-44	Number	504	376	104	36	3	0	0	0	0	1,023
	Total Salary	\$ 18,627,967	\$ 16,052,546	\$ 4,924,494	\$ 1,709,780	\$ 170,479	\$ 0	\$ 0	\$ 0	\$ 0	\$ 41,485,266
	Average Sal.	\$ 36,960	\$ 42,693	\$ 47,351	\$ 47,494	\$ 56,826	\$ 0	\$ 0	\$ 0	\$ 0	\$ 40,553
45-49	Number	508	335	112	133	62	2	0	0	0	1,152
	Total Salary	\$ 18,397,316	\$ 13,418,713	\$ 4,914,032	\$ 6,368,873	\$ 2,956,088	\$ 80,953	\$ 0	\$ 0	\$ 0	\$ 46,135,975
	Average Sal.	\$ 36,215	\$ 40,056	\$ 43,875	\$ 47,886	\$ 47,679	\$ 40,477	\$ 0	\$ 0	\$ 0	\$ 40,049
50-54	Number	432	383	116	94	233	70	0	0	0	1,328
	Total Salary	\$ 16,063,979	\$ 15,346,164	\$ 5,244,564	\$ 4,379,922	\$ 11,832,284	\$ 3,726,586	\$ 0	\$ 0	\$ 0	\$ 56,593,499
	Average Sal.	\$ 37,185	\$ 40,068	\$ 45,212	\$ 46,595	\$ 50,782	\$ 53,237	\$ 0	\$ 0	\$ 0	\$ 42,616
55-59	Number	390	374	133	100	140	376	6	1	0	1,520
	Total Salary	\$ 15,629,744	\$ 14,974,424	\$ 5,708,146	\$ 4,623,723	\$ 6,926,709	\$ 20,137,866	\$ 326,933	\$ 101,513	\$ 0	\$ 68,429,058
	Average Sal.	\$ 40,076	\$ 40,039	\$ 42,918	\$ 46,237	\$ 49,476	\$ 53,558	\$ 54,489	\$ 101,513	\$ 0	\$ 45,019
60-64	Number	225	289	124	89	120	107	283	6	0	1,243
	Total Salary	\$ 9,210,022	\$ 11,642,891	\$ 5,105,285	\$ 4,302,390	\$ 5,818,980	\$ 6,050,607	\$ 17,240,372	\$ 348,658	\$ 0	\$ 59,719,205
	Average Sal.	\$ 40,933	\$ 40,287	\$ 41,172	\$ 48,341	\$ 48,492	\$ 56,548	\$ 60,920	\$ 58,110	\$ 0	\$ 48,044
65-69	Number	44	76	31	33	54	38	34	65	3	378
	Total Salary	\$ 1,967,781	\$ 2,850,707	\$ 1,243,448	\$ 1,482,575	\$ 2,728,771	\$ 2,032,994	\$ 2,072,430	\$ 4,178,455	\$ 197,134	\$ 18,754,295
	Average Sal.	\$ 44,722	\$ 37,509	\$ 40,111	\$ 44,927	\$ 50,533	\$ 53,500	\$ 60,954	\$ 64,284	\$ 65,711	\$ 49,615
70 & Up	Number	12	21	12	7	11	11	4	6	11	95
	Total Salary	\$ 485,651	\$ 714,321	\$ 553,099	\$ 216,465	\$ 404,154	\$ 512,866	\$ 224,167	\$ 280,393	\$ 675,776	\$ 4,066,892
	Average Sal.	\$ 40,471	\$ 34,015	\$ 46,092	\$ 30,924	\$ 36,741	\$ 46,624	\$ 56,042	\$ 46,732	\$ 61,434	\$ 42,809
Total	Number	5,296	3,133	693	495	623	604	327	78	14	11,263
	Total Salary	\$ 190,266,646	\$ 125,879,003	\$ 30,431,972	\$ 23,223,913	\$ 30,837,465	\$ 32,541,872	\$ 19,863,902	\$ 4,909,019	\$ 872,910	\$ 458,826,702
	Average Sal.	\$ 35,926	\$ 40,178	\$ 43,913	\$ 46,917	\$ 49,498	\$ 53,877	\$ 60,746	\$ 62,936	\$ 62,351	\$ 40,738

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

**SUMMARY OF MEMBER DATA**

**G. Reconciliation of Data Submitted By NPERS and Valuation Data**

	<b>Active Members</b>	<b>Inactive Members</b>	<b>Retired Members, Beneficiaries, and Disabled</b>	<b>Total</b>
Number of Data Records Submitted By NPERS	11,341	4,267	737	16,345
a) Deaths	(5)	(12)	0	(17)
b) Active/Inactive Death – Benefit Payable	0	(1)	0	(1)
c) Retiree Death – Assumed Beneficiary	0	0	0	0
d) Assumed Inactive	(1)	1	0	0
e) Assumed Refunded	(29)	(620)	0	(649)
f) Null Balance	(38)	(182)	0	(220)
g) Not a Member	0	0	0	0
h) Also Listed as Retired	0	(80)	0	(80)
i) Represents Dividend	0	0	0	0
j) QDRO Spouse	(5)	5	0	0
k) DC Member with Balance	0	2	0	2
Net change	(78)	(887)	0	(965)
Number of Members Included in the Valuation as of January 1, 2012	11,263	3,380	737	15,380

**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
2012	\$ 27,686,515	\$ 10,437,338	\$ 38,123,853
2013	33,517,152	10,356,561	43,873,713
2014	39,702,497	10,140,235	49,842,732
2015	45,767,113	9,964,688	55,731,801
2016	51,247,583	9,731,216	60,978,799
2017	56,618,154	9,500,787	66,118,941
2018	62,554,600	9,308,337	71,862,937
2019	68,386,626	9,125,928	77,512,554
2020	73,905,262	8,886,071	82,791,333
2021	79,242,751	8,445,878	87,688,629

**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 non-vested members are excluded from the disbursement forecast.

**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 shall begin immediate participation in the State Employees' Retirement System as of January 1, 2007 or date of hire, if later, and all permanent full-time or permanent part-time employees who have attained the age of twenty may exercise the option to begin immediate participation in the State Employees' Retirement System.

Existing members of the State Employees' Retirement System may elect, during the period beginning November 1, 2007 and ending December 31, 2007 to participate in the Cash Balance benefit. If no election is made by December 31, 2007, 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.

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 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 State retirement system shall contribute an amount equal to four and eight-tenths percent (4.8%) of annual compensation 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.

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

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**SUMMARY OF PLAN PROVISIONS**

**Retirement Age**

A member is eligible for retirement after attaining age 55.

**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.

**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.

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

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***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 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**  
**STATE EMPLOYEES' RETIREMENT SYSTEM**  
**CASH BALANCE BENEFIT FUND**

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**SUMMARY OF ACTUARIAL METHODS AND PROCEDURES AS OF JANUARY 1, 2012**

**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, 2012.

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**  
**STATE EMPLOYEES' RETIREMENT SYSTEM**  
**CASH BALANCE BENEFIT FUND**

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***SUMMARY OF ACTUARIAL METHODS AND PROCEDURES AS OF JANUARY 1, 2012***

**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  
STATE EMPLOYEES' RETIREMENT SYSTEM  
CASH BALANCE BENEFIT FUND**

**SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JANUARY 1, 2012**

**ECONOMIC ASSUMPTIONS**

- |   |  |
|---|--|
| 1. Investment Return  | 7.75% 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 | 7.75% per annum, compounded annually.                  |
| 5. Salary Scale   | Graduated rates by service.                            |

Service	Annual Increase in Salary		
	Merit & Productivity	Inflation	Total
0	2.3%	3.5%	5.9%
1	2.2%	3.5%	5.8%
2	2.0%	3.5%	5.6%
3	1.7%	3.5%	5.3%
4	1.5%	3.5%	5.1%
5	1.4%	3.5%	5.0%
6	1.4%	3.5%	4.9%
7	1.4%	3.5%	4.9%
8	1.3%	3.5%	4.9%
9	1.3%	3.5%	4.8%
10	1.3%	3.5%	4.8%
11	1.3%	3.5%	4.8%
12	1.2%	3.5%	4.8%
13	1.2%	3.5%	4.7%
14	1.2%	3.5%	4.7%
15	1.1%	3.5%	4.7%
16	1.1%	3.5%	4.6%
17	1.1%	3.5%	4.6%
18	1.0%	3.5%	4.6%
19	1.0%	3.5%	4.6%
20	1.0%	3.5%	4.5%



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

**SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JANUARY 1, 2012**

2. Retirement

Graduated rates by retirement age after 5 years of service.

Age	Annual Rates
55	5.0%
56	5.0%
57	5.0%
58	5.0%
59	5.0%
60	5.0%
61	8.0%
62	15.0%
63	10.0%
64	15.0%
65	20.0%
66	20.0%
67	15.0%
68	15.0%
69	15.0%
70	100.0%

3. Termination

Graduated rates by age and service.

Age	Annual Rate Per 100 Members					
	<1	1-<2	2-<3	3-<4	4-<5	5+
20	15.0	14.0	13.0	11.5	10.0	10.0
25	15.0	14.0	13.0	11.5	10.0	10.0
30	15.0	14.0	13.0	11.5	10.0	7.8
35	15.0	14.0	13.0	11.5	10.0	5.7
40	15.0	14.0	13.0	11.5	10.0	4.8
45	15.0	14.0	13.0	11.5	10.0	3.6
50	15.0	14.0	13.0	11.5	10.0	3.0
55	15.0	14.0	13.0	11.5	10.0	3.0

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

**SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JANUARY 1, 2012**

4. Disability

Graduated rates for all disabilities by age.

<b>Age</b>	<b>Annual Rate Per 1,000 Members</b>
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 non-vested members are assumed to take a refund of their account balance as of the valuation date.

<b>Benefit</b>	<b>Assumed Form of Payment</b>
Retirement	Annuity*
Vested	Lump Sum
Non-vested	Lump Sum
Disability	Lump Sum
Death	Lump Sum

\*Five-year certain and life annuity.

2. Cost of Living Adjustment

None assumed, except 2.5% per year is used for retirees electing annuity payments with a COLA feature.

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

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**GLOSSARY OF TERMS**

<i>Actuarial Accrued Liability</i>	Total accumulated cost to fund pension benefits arising from service in all prior years.
<i>Actuarial Cost Method</i>	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.
<i>Actuarial Present Value of Future Benefits</i>	Amount which, together with future interest, is expected to be sufficient to pay all future benefits.
<i>Actuarial Valuation</i>	Study of probable amounts of future pension benefits and the necessary amount of contributions to fund those benefits.
<i>Actuary</i>	Person who performs mathematical calculations pertaining to pension and insurance benefits based on specific procedures and assumptions.
<i>Annual Required Contribution</i>	Disclosure measure of annual pension cost.
<i>GASB 25 and GASB 27</i>	Governmental Accounting Standards Board Statement numbers 25 and 27 which specify how the Net Pension Obligation and Annual Required Contribution are to be calculated.
<i>Normal Cost</i>	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.
<i>Unfunded Actuarial Accrued Liability</i>	The portion of the actuarial accrued liability not offset by plan assets.
<i>Vested Benefits</i>	Benefits which are unconditionally guaranteed regardless of employment status.