

***NEBRASKA PUBLIC EMPLOYEES
RETIREMENT SYSTEMS***
**STATE PATROL RETIREMENT SYSTEM
2011**

**Fifty-sixth Actuarial Report for
State Fiscal Year Ending June 30, 2013
and
System Plan Year Beginning July 1, 2011**

December 2011

Submitted By:
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buckconsultants®

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM**

TABLE OF CONTENTS

LETTER OF CERTIFICATION

SUMMARY OF ACTUARIAL REPORT

EXECUTIVE SUMMARY

<u>Exhibit Number</u>	<u>Title</u>	<u>Page</u>
1	System Assets _____	1
2	Actuarial Contribution Requirement _____	4
3	Actuarial (Gain)/Loss _____	7
4	Actuarial Balance Sheet _____	8
5	Accounting Information _____	9
6	Summary of Member Data _____	12
7	Forecast of Expected Disbursements _____	16
8	Summary of Plan Provisions _____	17
9	Summary of Actuarial Methods and Procedures as of July 1, 2011 _____	21
10	Summary of Actuarial Assumptions as of July 1, 2011 _____	23
11	Glossary of Terms _____	28

December 7, 2011

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

**RE Certification of Actuarial Valuation
State Patrol Retirement System**

Ladies and Gentlemen:

This report summarizes the results of the actuarial valuation of the State Patrol Retirement System as of July 1, 2011 performed by Buck Consultants.

The actuarial valuation is based on unaudited financial and member data provided to us by the Nebraska Public Employees Retirement System as summarized in this report. The benefits considered are those delineated in Nebraska State Statutes, effective as amended July 1, 2011.

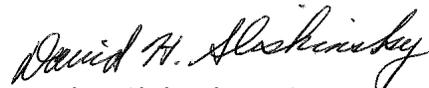
All costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures. This report fully and fairly discloses the actuarial position of the plan.

Based on the results of our actuarial valuation, an additional contribution to the State Patrol Retirement System will keep it actuarially sound. Annual funding required from the State as defined under statute for current plan members is equal to the member contributions and appropriations, plus an additional payment necessary to meet the actuarially required contribution. For the 2012/2013 fiscal year, the State's additional payment requirement is \$2,255,430.

The undersigned are Enrolled Actuaries, Associates of the Society of Actuaries and Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all Applicable Standards of Practice. We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

Respectfully submitted,

BUCK CONSULTANTS



David H. Sliskinsky, A.S.A., E.A., M.A.A.A.
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Director, Retirement Actuary

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

**SUMMARY OF ACTUARIAL REPORT FOR CONTRIBUTION REQUIREMENTS AND
FUNDED STATUS FOR PLAN YEAR 2011/2012**

The main purposes of this report are:

1. To determine the level of State contributions for the fiscal year ending June 30, 2013, sufficient to meet the funding policy defined under Nebraska State statutes;
2. To review the current funded status of the system; and
3. To compare actual and expected experience under the plan during the plan year beginning July 1, 2010 and ending June 30, 2011.

The 2011 actuarial valuation is based upon the plan provisions as of July 1, 2011, 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 382 passed during the 2011 Legislative session, both the member and employer contribution rates increased from 16% to 19% on July 1, 2011. Effective July 1, 2013, both the member and employer contribution rates decrease to 16%.
2. An additional State contribution of \$2,255,430 is required for the 2012/2013 fiscal year to meet the actuarially required contribution. Expected member contributions and State contributions and appropriations fall short of the total funding requirement. The system's actuarial liability has increased by \$9,272,633 from \$38,726,345 as of July 1, 2010 to \$47,998,978 as of July 1, 2011.
3. The annual rate of return on Market Value was 23.3%, resulting in a Market Value of \$278,146,750 as of June 30, 2011. A loss was experienced on the Actuarial Value of Assets during the 2010/2011 plan year. The rate of return on Actuarial Value of 3.8% fell short of the 8.0% assumed investment return rate by 4.2%, resulting in a decrease to the Actuarial Value by \$11,332,998, and an Actuarial Value of \$279,192,669 as of July 1, 2011. The funded ratio based on disclosure requirements under GASB No. 25 using the Actuarial Value of Assets and the Actuarial Accrued Liability decreased from 84.9% as of July 1, 2010 to 82.2% as of July 1, 2011 (see page 11). The reconciliation of these asset values can be found in Exhibit 1 on page 3.
4. The plan experienced a decremental gain in the actuarial accrued liability since the July 1, 2010 actuarial valuation. The actuarial accrued liability decreased by \$416,032 as a result of favorable decremental experience. This increase is due primarily to salary increases less than assumed.
5. The funded status of the system as measured by the ratio of the system assets over the Pension Benefit Obligation (PBO) decreased. The PBO is calculated using the Projected Unit Credit Method, which determines the benefit by using service at the valuation date and projecting salary to assumed termination or retirement. Since the July 1, 2010 actuarial valuation, the funded percentage on Actuarial Value decreased from 86.0% to 83.4%.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

EXECUTIVE SUMMARY

Basic Actuarial Valuation Results

The 2011 actuarial valuation results are based upon the plan provisions as of July 1, 2011 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 contribute 19% of pay and make additional payments if necessary, to meet the actuarially required contribution. The member contribution rate is 19% of pay effective July 1, 2011. On July 1, 2013, both the member and employer contribution rates decrease to 16%. 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 30 years.

Total expected State funding for the 2011/2012 plan year is \$7,547,370. Member contributions and matching State contributions and appropriations are not expected to meet the total actuarially required funding. The additional State funding required for the 2011/2012 plan year, payable July 1, 2012, is \$2,255,430.

History of Expected State Contributions			
Plan Year	State Contribution*	Additional Contributions	Total
2011/2012	\$ 5,291,940	\$ 2,255,430	\$ 7,547,370
2010/2011	4,597,331	2,770,262	7,367,593
2009/2010	4,203,166	1,801,610	6,004,776
2008/2009	4,361,746	812,087	5,173,833
2007/2008	4,225,729	365,020	4,590,749
2006/2007	3,942,430	813,159	4,755,589
2005/2006	3,766,098	1,080,050	4,846,148
2004/2005	3,050,645	948,654	3,999,299
2003/2004	2,745,970	434,202	3,180,172
2002/2003	2,413,762	0	2,413,762
2001/2002	2,257,610	0	2,257,610

* Includes State Appropriations.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

EXECUTIVE SUMMARY

2. Asset Values

The total assets of the system as of the current and prior valuation date at both market value and actuarial value, and the rate of return during the period is as follows:

	July 1, 2010	July 1, 2011	Annual Rate of Return
(a) Market value	\$ 229,574,640	\$ 278,146,750	23.3%
(b) Actuarial value, an adjusted value intended to reduce the effect of market fluctuations (See Exhibit 1B)	\$ 273,306,925	\$ 279,192,669	3.8%

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, (ii) the present value of future member and matching State contributions, and (iii) the present value of future State appropriations). If the projected financial resources exceed the total benefit obligation, the system has a Reserve. The actuarial position of the system as of the current and prior valuation dates are as follows:

	July 1, 2010	July 1, 2011
(a) Present value of future benefits	\$ 384,188,365	\$ 399,787,021
(b) Actuarial value of assets	273,306,925	279,192,669
(c) Present value of future member contributions	35,538,947	35,854,719
(d) Present value of matching State contributions	35,538,947	35,854,719
(e) Present value of future State appropriations*	<u>1,077,201</u>	<u>885,936</u>
(f) Actuarial Liability/(Reserve) [(a) - (b) - (c) - (d) - (e)]	\$ 38,726,345	\$ 47,998,978

* Includes appropriation for COLA benefit under LB 137.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

EXECUTIVE SUMMARY

4. Pension Benefit Obligation (PBO)

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

Funded Status	July 1, 2010	July 1, 2011
(a) Pension Benefit Obligation		
i) retirees, disabled members and beneficiaries receiving benefits and deferred vested members not yet receiving benefits*	\$ 202,494,442	\$ 211,488,699
ii) active members	<u>115,219,645</u>	<u>123,427,982</u>
iii) total pension benefit obligation	\$ 317,714,087	\$ 334,916,681
(b) Assets available for benefit (actuarial value)	<u>273,306,925</u>	<u>279,192,669</u>
(c) Unfunded Pension Benefit Obligation/(Reserve)	\$ 44,407,162	\$ 55,724,012
(d) Funded percentage on actuarial value of assets [(b) ÷ (a)(iii)]	86.0%	83.4%

* Includes actuarial value of the DROP account balances of \$3,077,141.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

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 during the current and prior valuation dates are as follows:

	July 1, 2010	July 1, 2011
(a) Benefit accrual cost amount	\$ 7,434,614	\$ 7,261,455
(b) Annual compensation before assumed retirement age	\$ 26,765,816	\$ 26,195,473
(c) Benefit accrual cost rate [(a) ÷ (b)]	27.777%	27.720%

6. Forecast of Disbursements

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

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 plan 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.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

EXECUTIVE SUMMARY

8. Changes Since the Last Actuarial Valuation

There have been no changes in the actuarial assumptions since the last actuarial valuation as of July 1, 2010.

The following plan provision changes were reflected as of July 1, 2011:

- Under LB 382 passed during the 2011 Legislative session, both the member and employer contribution rates increased from 16% to 19% in July 1, 2011. Effective July 1, 2013, both the member and employer contribution rates decrease to 16%.

The following actuarial method changes were reflected as of July 1, 2011:

- The DROP account balances from the assets are multiplied by the ratio of actuarial value of assets to market value of assets before being added to the liabilities.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

SYSTEM ASSETS

A. Summary of Assets	Market Value as of June 30, 2010	Market Value as of June 30, 2011
1. Cash and Equivalents	\$ 115,983	\$ 312,263
2. Investments	228,675,981	278,861,480
3. Capital Assets	64,986	14,607
4. Receivables and Prepaids	9,807,267	20,335,760
5. Accounts Payable	(9,089,577)	(21,377,360)
6. Net Assets Available for Pension Benefits Considered [1 + 2 + 3 + 4 + 5]	\$ 229,574,640	\$ 278,146,750

B. Development of Actuarial Value of Assets	Amount
1. Actuarial Value of Assets as of July 1, 2010	\$ 273,306,925
2. Unrecognized Return as of July 1, 2010	\$ (43,732,285)
3. Contributions	
(a) Member (includes purchased service)	\$ 4,476,933
(b) State	4,478,064
(c) State appropriations	1,478,683
(d) Total	\$ 10,433,680
4. Distributions	
(a) Benefit payments	\$ 14,139,558
(b) Refund of contributions	812,426
(c) Total	\$ 14,951,984
5. Expected Return at 8.0% on	
(a) Item 1	\$ 21,864,555
(b) Item 2	(3,498,583)
(c) Item 3 (d)	409,318
(d) Item 4 (c)	536,826
(e) Total [(a) + (b) + (c) - (d)]	\$ 18,238,464
6. Actual Return on Market Value for Plan Year, Net of Expenses	\$ 53,090,414
7. Return to be Spread for Plan Year [6 - 5(e)]	\$ 34,851,950

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

SYSTEM ASSETS

B. Development of Actuarial Value of Assets		Amount																								
8.	Total Market Value of Assets as of July 1, 2011	\$ 278,146,750																								
9.	Return to be Spread																									
<table border="1"> <thead> <tr> <th>Plan Year</th> <th>Return to be Spread</th> <th>Unrecognized Percent</th> <th>Unrecognized Return</th> </tr> </thead> <tbody> <tr> <td>2010/2011</td> <td>\$ 34,851,950</td> <td>80%</td> <td>\$ 27,881,560</td> </tr> <tr> <td>2009/2010</td> <td>11,577,147</td> <td>60%</td> <td>6,946,288</td> </tr> <tr> <td>2008/2009</td> <td>(70,700,636)</td> <td>40%</td> <td>(28,280,254)</td> </tr> <tr> <td>2007/2008</td> <td>(37,967,563)</td> <td>20%</td> <td>(7,593,513)</td> </tr> <tr> <td colspan="3">Total</td> <td>\$ (1,045,919)</td> </tr> </tbody> </table>			Plan Year	Return to be Spread	Unrecognized Percent	Unrecognized Return	2010/2011	\$ 34,851,950	80%	\$ 27,881,560	2009/2010	11,577,147	60%	6,946,288	2008/2009	(70,700,636)	40%	(28,280,254)	2007/2008	(37,967,563)	20%	(7,593,513)	Total			\$ (1,045,919)
Plan Year	Return to be Spread	Unrecognized Percent	Unrecognized Return																							
2010/2011	\$ 34,851,950	80%	\$ 27,881,560																							
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2008/2009	(70,700,636)	40%	(28,280,254)																							
2007/2008	(37,967,563)	20%	(7,593,513)																							
Total			\$ (1,045,919)																							
10.	Total Actuarial Value of Assets at July 1, 2011 [8 - 9]	\$ 279,192,669																								
11.	Asset Ratios																									
	(a) Actuarial Value to Market Value [10 ÷ 8]	100.4%																								
	(b) Market Value to Actuarial Value [8 ÷ 10]	99.6%																								

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

SYSTEM ASSETS

C. Change in Asset Values During 2010/2011	Actuarial Value	Market Value
1. Asset value as of July 1, 2010		
(a) Reported last year	\$ 273,306,925	\$ 229,574,640
(b) Adjustment	N/A	(2)
(c) Reported this year [(a) + (b)]	\$ 273,306,925	\$ 229,574,638
2. Contributions for 2010/2011		
(a) Member contributions paid during the year	\$ 4,476,933	\$ 4,476,933
(b) State contributions paid	4,478,064	4,478,064
(c) State appropriations for the year	<u>1,478,683</u>	<u>1,478,683</u>
(d) Contributions for 2010/2011 [(a) + (b) + (c)]	\$ 10,433,680	\$ 10,433,680
3. Disbursements for 2010/2011		
(a) Benefit payments	\$ 14,139,558	\$ 14,139,558
(b) Expenses and fees	828,794	828,794
(c) Refund of contributions	<u>812,426</u>	<u>812,426</u>
(d) Disbursements for 2010/2011 [(a) + (b) + (c)]	\$ 15,780,778	\$ 15,780,778
4. Investment return for 2010/2011		
(a) Investment income	\$ 4,434,834	\$ 4,434,834
(b) Securities lending income	86,422	86,422
(c) Securities lending expense	(28,137)	(28,137)
(d) Net appreciation/(depreciation) in fair value of investments	49,417,241	49,417,241
(e) Other	8,850	8,850
(f) Unrecognized return including adjustment	<u>(42,686,368)</u>	<u>N/A</u>
(g) Investment return for 2010/2011 [(a) + (b) + (c) + (d) + (e) + (f)]	\$ 11,232,842	\$ 53,919,210
5. Asset value as of July 1, 2011 [1(c) + 2(d) - 3(d) + 4(g)]	\$ 279,192,669	\$ 278,146,750
6. Approximate rate of investment return, net of expenses	3.8%	23.3%

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

ACTUARIAL CONTRIBUTION REQUIREMENT

A. Development of Actuarially Required Funding Rate	July 1, 2011
1. Actuarial present value of benefits	
(a) Active members	\$ 188,298,322
(b) Inactive members	893,623
(c) Retired members, disabilities and beneficiaries*	<u>210,595,076</u>
(d) Total	\$ 399,787,021
2. Present Value of Future Normal Costs	<u>60,232,565</u>
3. Total Actuarial Accrued Liability [1(d) - 2]	\$ 339,554,456
4. Actuarial Value of Assets	<u>279,192,669</u>
5. Unfunded Actuarial Accrued Liability/(Reserve) [3 - 4]	\$ 60,361,787
6. 30-Year Amortization of the Unfunded Actuarial Accrued Liability/(Reserve)	
(a) Amount	\$ 5,263,642
(b) Amount as % of Pay	20.09%
7. Normal Cost	
(a) Amount	\$ 7,261,455
(b) Amount as % of Pay	27.72%
8. Total Actuarially Required Contribution	
(a) Amount	\$ 12,525,097
(b) Amount as % of Pay	47.81%

* Includes actuarial value of the DROP account balances of \$3,077,141.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

ACTUARIAL CONTRIBUTION REQUIREMENT

B. Development of Additional State Contributions for Fiscal Year 2012/2013	Annual Amount as a % of Pay
1. Actuarially Required Contribution	
(a) Total Contribution Amount	\$ 12,525,097
(b) State Appropriations	210,220
(c) Expected State Appropriation for LB 137 COLA benefit	<u>104,580</u>
(d) Net Contribution Amount [(a) - (b) - (c)]	\$ 12,210,297
(e) Net Amount as % of Pay	46.61%
2. Statutory Contribution Rates during 2011/2012	
(a) Employee Contribution Rate	19.00%
(b) Employer Contribution Rate	<u>19.00%</u>
(c) Total Employee/Employer Contribution Rate [(a) + (b)]	38.00%
3. Additional Required State Contribution	
(a) Additional Required State Contribution Rate [1(e) - 2(c), not less than 0.00%]	8.61%
(b) Additional Required State Contribution Amount	\$ 2,255,430
4. Expected Statutory Employer Contribution	
(a) Annual Compensation	\$ 26,195,473
(b) Employer Contribution Amount [2(b) x 4(a)]	\$ 4,977,140
5. Total Expected Employer Contribution Amount and State Appropriations [1(b) + 1(c) + 3(b) + 4(b)]	\$ 7,547,370

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

ACTUARIAL CONTRIBUTION REQUIREMENT

C. Schedule of Amortization Bases	Original Amount	July 1, 2011 Remaining Payments	Date of Last Payment	Outstanding Balance as of July 1, 2011	Annual Contribution
2006 Unfunded Actuarial Accrued Liability Base	\$ 13,632,330	25	07/01/2036	\$ 12,926,350	\$ 1,165,213
2007 Unfunded Actuarial Accrued Liability Base	\$ (2,328,213)	26	07/01/2037	\$ (2,235,603)	\$ (199,002)
2008 Unfunded Actuarial Accrued Liability Base	\$ 7,528,427	27	07/01/2038	\$ 7,312,683	\$ 643,486
2009 Unfunded Actuarial Accrued Liability Base	\$ 12,752,991	28	07/01/2039	\$ 12,518,833	\$ 1,090,052
2010 Unfunded Actuarial Accrued Liability Base	\$ 17,735,331	29	07/01/2040	\$ 17,578,774	\$ 1,515,914
2011 Unfunded Actuarial Accrued Liability Base	\$ 12,260,750	30	07/01/2041	\$ 12,260,750	\$ 1,047,979
Total				\$ 60,361,787	\$ 5,263,642

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM**

ACTUARIAL (GAIN)/LOSS

A. Change in Actuarial Accrued Liability		
1.	Actual Actuarial Accrued Liability as of July 1, 2010	\$ 321,901,446
2.	Benefits accrued during the 2010/2011 plan year	7,434,614
3.	Benefit payments during the 2010/2011 plan year	14,951,984
4.	Interest at 8%	<u>25,506,953</u>
5.	Expected Actuarial Accrued Liability as of July 1, 2011 [1 + 2 - 3 + 4]	\$ 339,891,029
6.	Decremental (Gain)/Loss by Source	
	(a) Retirement	\$ 570,912
	(b) Termination	(149,553)
	(c) Disability	(95,233)
	(d) Pre-retirement mortality	(88,690)
	(e) Post-retirement mortality	350,206
	(f) Salary	(1,231,358)
	(g) New Entrants/Rehires	99,359
	(h) Data changes/COLA/miscellaneous	<u>128,325</u>
	(i) Total decremental (gain)/loss	\$ (416,032)
7.	Change in Plan Provisions	<u>79,459</u>
8.	Actual Actuarial Accrued Liability as of July 1, 2011 [5 + 6(i) + 7]	\$ 339,554,456
B. Change in Actuarial Value of Assets		
1.	Expected Actuarial Value of Assets as of July 1, 2011	\$ 290,525,667
2.	Actual Actuarial Value of Assets as of July 1, 2011	<u>279,192,669</u>
3.	Actuarial (Gain)/Loss from Asset Sources [1 - 2]	\$ 11,332,998
C. Total Actuarial (Gain)/Loss for the 2010/2011 plan year [A(6)(i) + B(3)]		
		\$ 10,916,966

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM**

ACTUARIAL BALANCE SHEET

A. Financial Resources	July 1, 2011
1. Actuarial Value of Assets	\$ 279,192,669
2. Present Value of Future Contributions	
(a) Member	\$ 35,854,719
(b) Employer	35,854,719
(c) State Appropriations	<u>885,936</u>
(d) Total	72,595,374
3. Actuarial Liability/(Reserve)	<u>47,998,978</u>
4. Total Assets [1 + 2(d) + 3]	\$ 399,787,021

B. Benefit Obligations	July 1, 2011
1. Present Value of Future Benefits	
(a) Active members	\$ 188,298,322
(b) Inactive members	893,623
(c) Retirees, disabilities and beneficiaries*	<u>210,595,076</u>
(d) Total	\$ 399,787,021

* Includes actuarial value of the DROP account balances of \$3,077,141.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM**

ACCOUNTING INFORMATION

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

	July 1, 2010	July 1, 2011
Pension Benefit Obligation (PBO)		
Vested PBO		
(a) members currently receiving payments*	\$ 201,734,175	\$ 210,595,076
(b) other members		
i) accumulated member contributions	35,731,128	38,753,804
ii) employer financed vested	<u>52,232,191</u>	<u>62,817,445</u>
Total Vested PBO	\$ 289,697,493	\$ 312,166,325
Nonvested PBO	<u>28,016,594</u>	<u>22,750,356</u>
Total PBO	\$ 317,714,087	\$ 334,916,681
Actuarial Value of Assets	<u>273,306,925</u>	<u>279,192,669</u>
Unfunded Pension Benefit Obligation/(Reserve)	\$ 44,407,162	\$ 55,724,012
Funded Percentage		
(a) on vested PBO	94.3%	89.4%
(b) on total PBO	86.0%	83.4%

*Includes the DROP account balances included in the assets.

B. Change in Pension Benefit Obligation from July 1, 2010 to July 1, 2011

Pension Benefit Obligation at July 1, 2010	\$ 317,714,087
Increase/(Decrease) during Period	
Plan Provision Changes	\$ (4,953)
Benefits Accumulated	6,971,251
Benefits Paid	(14,951,984)
Interest Cost	25,438,001
Plan Experience	<u>(249,721)</u>
Total Change	\$ 17,202,594
Pension Benefit Obligation at July 1, 2011	\$ 334,916,681

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 July 1, 2011 and 2010, respectively, as outlined in Exhibit 8. The determination of the Pension Benefit Obligation has been made in accordance with generally accepted actuarial principles and practices.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

ACCOUNTING INFORMATION

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

Plan Year Ending	Annual Required Contributions	Percentage Contributed
June 30, 2011	\$ 7,173,344	83%
June 30, 2010	6,260,122	100%
June 30, 2009	5,384,789	100%
June 30, 2008	4,855,700	100%
June 30, 2007	5,058,621	100%
June 30, 2006	5,081,930	100%

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

Valuation Date	June 30, 2011
Actuarial Cost Method	Entry Age
Amortization Method	Level dollar amount, closed
Equivalent Single Amortization Period	28 years
Asset Valuation Method	5 year smoothed market
Actuarial Assumptions:	
Investment rate of return*	8.0%
Projected salary increases*	4.5% - 9.0%
*Includes inflation at	3.5%
Cost-of-living adjustment	2.5% with a floor benefit equal to 60% purchasing power of original benefit

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

ACCOUNTING INFORMATION

E. Schedule of Funding Progress Under GASB No. 25

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded Accrued Liabilities (UAL) (b-a)	Funded Ratio (a÷b)	Covered Payroll (c)	UAL as a % of Covered Payroll [(b-a)/c]
June 30, 2011	\$ 279,192,669	\$ 339,554,456	\$ 60,361,787	82.2%	\$ 26,195,473	230.4%
June 30, 2010	273,306,925	321,901,446	48,594,521	84.9%	26,765,816	181.6%
June 30, 2009	274,119,906	305,291,065	31,171,159	89.8%	25,922,439	120.2%
June 30, 2008	273,393,928	291,996,719	18,602,791	93.6%	26,979,643	69.0%
June 30, 2007	254,662,819	265,846,597	11,183,778	95.8%	26,072,859	42.9%
June 30, 2006	231,740,772	245,373,102	13,632,330	94.4%	24,057,960	56.7%

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

SUMMARY OF MEMBER DATA

A. Active Members	July 1, 2010	July 1, 2011
1. Number of active members		
(a) Before assumed retirement age	440	418
(b) Beyond assumed retirement age	4	15
(c) Total	<u>444</u>	<u>433</u>
2. Annual considered compensation		
(a) Before assumed retirement age	\$ 26,765,816	\$ 26,195,473
(b) Beyond assumed retirement age	315,568	1,161,376
(c) Total	<u>\$ 27,081,384</u>	<u>\$ 27,356,849</u>
3. Accumulated contributions	\$ 34,970,861	\$ 37,860,181
4. Active member averages		
(a) Age	39.8	40.3
(b) Service	12.1	12.7
(c) Compensation	\$ 60,994	\$ 63,180
(d) Accumulated contributions	\$ 78,763	\$ 87,437
B. Inactive Members		
1. Number of inactive members	13	17
2. Accumulated member contributions	\$ 760,267	\$ 893,623
3. Inactive member averages		
(a) Age (vesteds only)	45.6	42.7
(b) Accumulated member contributions	\$ 58,482	\$ 52,566
C. Retired and Disabled Members and Beneficiaries		
1. Number of members		
(a) Retired	284	293
(b) Disabled	10	11
(c) Beneficiaries	68	70
(d) DROP	28	28
(e) Total	<u>390</u>	<u>402</u>
2. Annual benefits		
(a) Retired	\$ 12,109,974	\$ 12,733,251
(b) Disabled	305,218	345,409
(c) Beneficiaries	1,495,022	1,545,226
(d) DROP	1,495,525	1,518,052
(e) Total	<u>\$ 15,405,739</u>	<u>\$ 16,141,938</u>
3. Market Value of DROP Account Balances	\$ 1,949,069	\$ 3,065,613

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM**

SUMMARY OF MEMBER DATA

D. Distribution of Retired and Disabled Members and Beneficiaries as of July 1, 2011

Age Range	Number	Annual Benefit	Average Annual Benefit
59 & Under	136	\$ 6,263,229	\$ 46,053
60-64	75	3,296,419	43,952
65-69	53	2,189,497	41,311
70-74	54	1,928,800	35,719
75-79	34	1,067,281	31,391
80-84	24	693,475	28,895
85-89	23	638,399	27,756
90 & Over	3	64,838	21,613
Total	402	\$ 16,141,938	\$ 40,154

E. Member Data Reconciliation

	Active Members	Inactive Members				Total
		With Deferred Benefits	Terminated With Balance	Retired Members, DROP and Beneficiaries	Disabled Members	
As of July 1, 2010	444	10	3	380	10	847
Changes in status						
a) Normal & early retirements	(10)	(1)	0	11	0	0
b) Deaths	(1)	0	0	(6)	0	(7)
c) Nonvested terminations	(3)	(1)	4	0	0	0
d) Vested terminations	(4)	4	0	0	0	0
e) Contribution refund	(4)	(1)	0	0	0	(5)
f) Beneficiaries in receipt	0	0	0	6	0	6
g) Disability retirements	(1)	0	0	0	1	0
h) Return to active service	1	(1)	0	0	0	0
i) Expired or forfeited benefits	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total changes in status	(22)	0	4	11	1	(6)
New entrants / Data Changes						
a) Without prior service	11	0	0	0	0	11
b) With prior service	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total new members	11	0	0	0	0	11
Net change	(11)	0	4	11	1	5
As of July 1, 2011	433	10	7	391	11	852

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

SUMMARY OF MEMBER DATA

F. Age and Service Distribution of Active Members as of July 1, 2011

Age Last Birthday		0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
20-24	Number	4	0	0	0	0	0	0	0	4
	Total Salary	\$ 174,121	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 174,121
	Average Sal.	\$ 43,530	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 43,530
25-29	Number	30	10	0	0	0	0	0	0	40
	Total Salary	\$ 1,444,563	\$ 538,936	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,983,499
	Average Sal.	\$ 48,152	\$ 53,894	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 49,587
30-34	Number	13	57	5	0	0	0	0	0	75
	Total Salary	\$ 647,480	\$ 3,255,980	\$ 288,446	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 4,191,906
	Average Sal.	\$ 49,806	\$ 57,122	\$ 57,689	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 55,892
35-39	Number	2	40	46	5	0	0	0	0	93
	Total Salary	\$ 92,136	\$ 2,246,325	\$ 2,963,063	\$ 327,794	\$ 0	\$ 0	\$ 0	\$ 0	\$ 5,629,318
	Average Sal.	\$ 46,068	\$ 56,158	\$ 64,414	\$ 65,559	\$ 0	\$ 0	\$ 0	\$ 0	\$ 60,530
40-44	Number	4	16	33	23	18	0	0	0	94
	Total Salary	\$ 191,678	\$ 893,313	\$ 2,076,499	\$ 1,622,235	\$ 1,308,042	\$ 0	\$ 0	\$ 0	\$ 6,091,767
	Average Sal.	\$ 47,919	\$ 55,832	\$ 62,924	\$ 70,532	\$ 72,669	\$ 0	\$ 0	\$ 0	\$ 64,806
45-49	Number	0	10	8	10	34	20	0	0	82
	Total Salary	\$ 0	\$ 696,366	\$ 495,778	\$ 692,825	\$ 2,633,060	\$ 1,554,103	\$ 0	\$ 0	\$ 6,072,132
	Average Sal.	\$ 0	\$ 69,637	\$ 61,972	\$ 69,282	\$ 77,443	\$ 77,705	\$ 0	\$ 0	\$ 74,050
50-54	Number	0	5	3	6	12	7	1	0	34
	Total Salary	\$ 0	\$ 318,655	\$ 189,844	\$ 437,722	\$ 873,171	\$ 571,685	\$ 73,922	\$ 0	\$ 2,464,999
	Average Sal.	\$ 0	\$ 63,731	\$ 63,281	\$ 72,954	\$ 72,764	\$ 81,669	\$ 73,922	\$ 0	\$ 72,500
55 & Up	Number	0	4	2	1	3	1	0	0	11
	Total Salary	\$ 0	\$ 278,144	\$ 133,486	\$ 62,965	\$ 214,149	\$ 60,363	\$ 0	\$ 0	\$ 749,107
	Average Sal.	\$ 0	\$ 69,536	\$ 66,743	\$ 62,965	\$ 71,383	\$ 60,363	\$ 0	\$ 0	\$ 68,101
TOTAL	Number	53	142	97	45	67	28	1	0	433
	Total Salary	\$ 2,549,978	\$ 8,227,719	\$ 6,147,116	\$ 3,143,541	\$ 5,028,422	\$ 2,186,151	\$ 73,922	\$ 0	\$ 27,356,849
	Average Sal.	\$ 48,113	\$ 57,942	\$ 63,372	\$ 69,856	\$ 75,051	\$ 78,077	\$ 73,922	\$ 0	\$ 63,180

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM**

SUMMARY OF MEMBER DATA

G. Reconciliation of Data Submitted By NPERS and Valuation Data

	Active Members	Inactive Members	Retired Members, DROP, Disabled Members and Beneficiaries	Total
Number of Data Records Submitted By NPERS	434	16	446	896
Additions				
a) 2011 Active	0	0	0	0
b) 2010 Balance Only	0	0	0	0
c) 2010 Deferred Vested	0	0	0	0
d) 2010 Retired	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	0	0	0
Subtractions				
a) Also Listed as Deaths	0	0	0	0
b) Also Listed as Inactives or Retirees	0	0	0	0
c) Also Listed as Contribution Refunds	0	0	1	1
d) Benefits Expired	0	0	0	0
e) Dependents not in receipt	0	0	(45)	(45)
f) Also Listed as Active	0	0	0	0
g) Assumed Terminated based on Date of Last Contribution	<u>(1)</u>	<u>1</u>	<u>0</u>	<u>0</u>
Total	(1)	1	(44)	(44)
Net change	(1)	1	(44)	(44)
Number of Members Included in the Valuation as of July 1, 2011	433	17	402	852

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

FORECAST OF EXPECTED DISBURSEMENTS

Plan Year Ending June 30	Active Employees	Retired Members, DROP, Disabled Members and Beneficiaries	Total
2012	\$ 906,726	\$ 16,080,225	\$ 16,986,951
2013	1,688,936	16,309,903	17,998,839
2014	3,131,100	16,541,620	19,672,720
2015	4,025,475	16,764,680	20,790,155
2016	4,850,961	16,982,198	21,833,159
2017	5,660,071	17,184,535	22,844,606
2018	6,278,070	17,373,885	23,651,955
2019	7,067,049	17,547,632	24,614,681
2020	8,521,439	17,697,458	26,218,897
2021	9,729,461	17,832,505	27,561,966
2022	\$ 11,037,474	\$ 17,944,868	\$ 28,982,342
2023	12,141,702	18,033,102	30,174,804
2024	13,833,703	18,093,808	31,927,511
2025	15,835,501	18,124,570	33,960,071
2026	17,818,750	18,123,213	35,941,963
2027	19,434,688	18,072,354	37,507,042
2028	22,978,090	17,998,630	40,976,720
2029	24,392,088	17,883,351	42,275,439
2030	25,969,987	17,724,478	43,694,465
2031	27,616,891	17,519,591	45,136,482
2032	\$ 29,177,489	\$ 17,267,088	\$ 46,444,577
2033	31,179,324	16,967,706	48,147,030
2034	32,809,208	16,618,750	49,427,958
2035	33,978,034	16,219,693	50,197,727
2036	35,116,734	15,770,858	50,887,592
2037	36,058,848	15,273,367	51,332,215
2038	36,916,045	14,728,039	51,644,084
2039	37,769,023	14,137,121	51,906,144
2040	38,506,405	13,503,535	52,009,940
2041	39,201,083	12,830,961	52,032,044

Note: These amounts exclude distributions for vested inactive members eligible to receive future benefit payments. Benefit amounts for these members have not yet been determined. These amounts include expected deposits to DROP accounts.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM**

SUMMARY OF PLAN PROVISIONS

Member	Any member of the Nebraska State Patrol, permanent force.
Participation Date	Date of becoming a member.
Definitions	
<i>Covered pay</i>	Gross annual earnings subject to contributions. For a patrol officer with service prior to January 4, 1979, total salary includes pay for unused sick leave accrued during his final three years of service, and pay for unused vacation leave (including leave not allowed to be carried over).
<i>Final average earnings</i>	The average of the highest three 12-month periods of covered pay, ending on the earlier of the participant's termination date or retirement date. For a patrol officer with service prior to January 4, 1979, it includes pay for 25% of unused sick leave accrued during his final three years of service, and pay for unused vacation leave (including leave not allowed to be carried over).
<i>Fiscal year</i>	Twelve month period ending June 30.
<i>Member and employer contributions</i>	19% of monthly salary plus 19% of pay received at termination for unused sick leave and vacation leave for a patrol officer with service prior to January 4, 1979. Such contributions are credited with interest based on the 1-year treasury yield curve on July 1 of each year, as determined by State Statutes. Employer contributions are 19% of monthly salary. Employee and employer contribution return to 16% of pay as of July 1, 2013. The State makes any additional contributions that are actuarially required.
<i>Pension benefit</i>	3% of final average salary times pension service. The benefit is subject to a maximum of 75% of Final Average Salary. Effective July 1, 2001, an automatic annual cost-of-living adjustment (COLA) equal to the CPI-W index, with a maximum increase of 2.5% in any one year is provided for current and future retirees by LB 711. Also provided is a minimum floor benefit equal to 60% of the purchasing power of the original benefit.
<i>Normal Retirement Date (NRD)</i>	First of month coinciding with or next following (a) the completion of 25 years of service and attaining age 50, (b) the completion of ten years of service and attaining age 55, or (c) attaining age 60 regardless of service.
<i>Pension service</i>	Length of service includes all service with the Nebraska State Patrol, permanent force, computed to the nearest one-twelfth year, plus declared emergency service in the armed forces.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

SUMMARY OF PLAN PROVISIONS

Eligibility for Benefits

<i>Deferred vested</i>	Termination for reasons other than death, disability, or retirement after completing at least six years of pension service.
<i>Disability retirement</i>	Retirement by reason of disability as defined by statute.
<i>Early retirement</i>	Retirement before NRD and on or after both attaining age 50 and completing ten years of pension service.
<i>Normal retirement</i>	Retire on NRD.
<i>Postponed retirement</i>	Retire after NRD.
<i>Post-retirement death benefit</i>	Death after retirement with surviving spouse or dependent children under age 19. For non-disability retirement, the surviving spouse must have been married to the member at the date of retirement.
<i>Pre-retirement death benefit</i>	Death prior to retirement.

Monthly Benefits Paid Upon the Following Events

<i>Normal retirement</i>	Pension benefit determined as of NRD.
<i>Early retirement</i>	Pension benefit determined as of early retirement date, reduced by 5/9% for each month that commencement (which must be after age 50 and ten years of service) of payment precedes the earlier of age 55 or completion of 25 years of service. No reduction is made after 25 years of service.
<i>Postponed retirement</i>	Monthly pension benefit determined as of actual retirement date.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

SUMMARY OF PLAN PROVISIONS

Termination with deferred vested benefit

Refund of contributions with regular interest or a percentage of the pension benefit determined as of termination date, reduced by 5/9% for each month that commencement (which must be after age 50 and ten years of service) of payment precedes the earlier of age 55 or completion of 25 years of service. This percentage is based upon completed years of pension service as follows:

<u>Years</u>	<u>Vested Percentage</u>
5 and under	0%
6	20
7	40
8	60
9	80
10 or more	100

Disability retirement

A monthly benefit equal to 50% of current monthly salary at the date of disablement for members with less than 17 years of service.

For members with more than 17 years of service, a monthly benefit equal to the product of 3% of final monthly salary, times total years of service subject to a maximum of 75% of final average monthly salary.

Pre-retirement death benefits

Surviving spouse or dependent children under age 19:

Benefit is computed as if member retired for disability on the date of death. This benefit is payable to the surviving spouse as long as spouse has dependent children under age 19. If spouse dies or remarries, 75% of this benefit continues to children until the youngest attains age 19. If there are no dependent children under age 19, 75% of this benefit is payable to the surviving spouse until death or remarriage.

No surviving spouse or dependent children under age 19: A lump sum equal to the member's contributions plus regular interest.

Post-retirement death benefits

100% of member's annuity is payable to the surviving spouse provided spouse has dependent children under 19. If there is no surviving spouse or spouse dies or remarries, 75% of member's annuity continues to children until the youngest attains age 19. If there are no dependent children under age 19, 75% of member's annuity continues to surviving spouse.

Forms of payment

Normal form is 75% Joint and Survivor benefit. Members may also elect a refund of contributions. If there is no surviving spouse or dependent children under age 19, the member's accumulated contributions with interest are paid to the beneficiary or estate.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

SUMMARY OF PLAN PROVISIONS

*Deferred Retirement Option Plan
(DROP)*

A member may elect to participate in the DROP after they attain age 50 with 25 years of service. A member can continue to work while participating in the DROP, but must terminate employment within 5 years of entry into the DROP. The member's retirement benefits would be calculated as of the DROP entry date. The monthly payments that begin at entry into the DROP are accumulated until the member terminates service, at which time the DROP accumulated benefits and investment income can be paid as a lump sum, rollover or annuity. The COLA for retirees would not apply to the member during participation in the DROP and both the member and employer contributions cease upon entry into the DROP.

State Appropriations

LB 700, passed in 1996, provided for annual cost of living increases of 0.3%, beginning in the sixth year after retirement for members ceasing employment on or after April 10, 1996. Funding for these benefits shall be made by the State into the State Patrol Purchasing Power Stabilization Fund. Beginning with the 1996/1997 fiscal year, the funding shall be 3.04888% of \$6,895,000, or \$210,220 will be made for each year through the 2010/2011 Fiscal Year. LB 950, passed in 2010, extended this contribution through the 2012/2013 fiscal year.

LB 137 provides cost-of-living benefits for members who retired prior to 1985. This benefit is funded by an annual state appropriation and declines over time.

LB 674, passed in 2000 (effective July 1, 2001), provided for an annual cost-of-living increase equal to the CPI-W index, with a maximum of 2% in any one year, a minimum floor benefit equal to 60% of the purchasing power of the original benefit and the elimination of the State Patrol Purchasing Power Stabilization Fund. The existing assets in the State Patrol PPSF were transferred to the Nebraska State Patrol Retirement Fund. The State appropriation continues, as defined above to the Nebraska Patrol Retirement Fund. LB 711, passed in 2001, increased the maximum annual cost-of-living increase in any one year from 2% to 2.5%.

Benefits Reflected in Valuation

All benefits were valued, including future cost of living increases granted by LB 711.

Plan Provisions Effective After July 1, 2011

No future changes in plan provisions were recognized in determining the GASB 25 funded status and in determining the actuarial soundness of statutory contribution levels.

Changes in Plan Provisions Since the Prior Year

Under Legislative Bill 382 passed during the 2011 Legislative session, both the member and employer contribution rates increased from 16% to 19% on July 1, 2011. Effective July 1, 2013, both the member and employer contribution rates decrease to 16%.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM**

SUMMARY OF ACTUARIAL METHODS AND PROCEDURES AS OF JULY 1, 2011

A. ACTUARIAL METHODS

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

Entry Age Actuarial Cost Method

Projected pension and preretirement spouse's death benefits were determined for all active members under age 60. 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 60 and determining an average normal cost rate which is then related to the total payroll of active members under age 60. The actuarial assumptions shown in Exhibit 10 were used in determining the projected benefits and cost factors. The actuarial accrued liability for active members (the portion of the total cost of the plan allocated to prior years under the method) was determined as the excess of the actuarial present value of projected benefits over the actuarial present value of future normal costs.

The actuarial accrued liability for retired members and their beneficiaries currently receiving benefits, active members age 60 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 future normal costs are 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 initial unfunded actuarial accrued liability established July 1, 2004, is amortized with a level dollar payment amount over 25 years. At subsequent valuation dates, amortization bases equal to changes in the unfunded actuarial accrued liability are established and amortized with a level dollar payment over a 25-year period. The unfunded liability was reinitialized as of July 1, 2006 and amortized over a 30-year period. At subsequent valuation dates, amortization bases equal to changes in the unfunded actuarial accrued liability are established and amortized over a level dollar payment over a 30-year period. If the unfunded actuarial accrued liability is \$0 or less on the valuation date, all previous amortization bases are considered fully amortized.

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 PATROL SYSTEM**

SUMMARY OF ACTUARIAL METHODS AND PROCEDURES AS OF JULY 1, 2011

- 2. Calculation of the Actuarial Value of Assets:** The actuarial value of assets is based on a five-year smoothing method and is determined by spreading the effect of each year's investment return in excess of or below the expected return. The Market Value of assets at the valuation date is reduced by the sum of the following:
- (i) 80% of the return to be spread during the first year preceding the valuation date,
 - (ii) 60% of the return to be spread during the second year preceding the valuation date,
 - (iii) 40% of the return to be spread during the third year preceding the valuation date, and
 - (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. Effective July 1, 2000, the expected return on Actuarial Value includes interest on the previous year's unrecognized return.

- 3. Calculation of Pension Benefit Obligation:** The method used to determine the Pension Benefit Obligation was the Projected Unit Credit Actuarial Cost Method without service proration. Under this method, the benefit is based on salary projected to assumed termination or retirement and service as of the valuation date.

B. VALUATION PROCEDURES

No actuarial liability is included for participants who terminated without being vested prior to the valuation date, except those due a refund of contributions.

The compensation amounts used in the projection of benefits and liabilities for active members were determined from the prior plan year compensation. Actual historical compensation is not included in our calculations.

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

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

Changes in Methods and Procedures Since the Prior Year

The DROP account balances from the assets are multiplied by the ratio of actuarial value of assets to market value of assets before being added to the liabilities.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM**

SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2011

ECONOMIC ASSUMPTIONS

- 1. Investment Return 8.0% per annum, compounded annually, net of expenses.
- 2. Inflation 3.5% per annum, compounded annually.
- 3. Salary Increases Rates vary by service.
Sample rates are as follows:

Rates by Service	
Years	Rate*
<1	9.0%
1	8.5
5	6.5
10	5.0
15	5.0
20	5.0
25+	4.5

* Projected pay at retirement is adjusted by 8.7% to reflect Halpin decision for members hired before January 4, 1979.

- 4. Interest on Employee Contributions 5.5% per annum, compounded annually.

DEMOGRAPHIC ASSUMPTIONS

- 1. Mortality
 - a. Healthy lives – Active members 1994 Group Annuity Mortality Table, projected to 2010 using scale AA (65% of male rates for males, 50% of female rates for females)
 - b. Healthy lives – Retired members and beneficiaries 1994 Group Annuity Mortality Table, projected to 2010 using scale AA (sex distinct)
 - c. Disabled lives 1983 Railroad Retirement Board Disabled Annuitants Mortality (unisex)

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2011

d. Healthy mortality rates and life expectancies are shown below at sample ages:

Sample Age	Pre-retirement Mortality			
	Mortality Rate		Life Expectancy (Years)	
	Males	Females	Males	Females
20	0.02%	0.01%	65.6	71.7
30	0.05	0.02	55.8	61.8
40	0.06	0.03	46.1	51.9
50	0.13	0.05	36.4	42.1
60	0.40	0.20	27.1	32.5
70	1.21	0.63	18.7	23.5

Sample Age	Post-retirement Mortality			
	Mortality Rate		Life Expectancy (Years)	
	Males	Females	Males	Females
50	0.19%	0.11%	32.4	35.7
60	0.62	0.41	23.3	26.3
70	1.86	1.27	15.4	17.9
80	5.28	3.52	8.9	10.7
90	14.34	11.08	4.6	5.5

e. Disabled mortality rates and life expectancies are shown below at sample ages:

Sample Age	Disabled Mortality	
	Mortality Rate	Life Expectancy (Years)
30	1.06%	30.5
40	1.35	23.6
50	3.16	17.7
60	4.25	13.6
70	6.75	9.6
80	10.77	6.3

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2. Retirement

Retirement is assumed to occur upon attaining certain age and service requirements. The retirement assumption varies depending on benefit eligibility age at retirement, and years elapsed since first eligible for benefits.

Early / Normal Retirement Eligibility	Age and Service Requirements	Retirement Assumption
Reduced	Age 50 Service: 10 years	2% at each age
Unreduced	Age 55 Service: 10 years	<ul style="list-style-type: none"> • 67% in the first year eligible • 37% in the second year eligible • 30% in the third year eligible • 16% thereafter
Unreduced (Eligible for DROP)	Age 50 Service: 25 years	100% at each age
Unreduced (Mandatory)	Age 60	100% at each age

3. Termination

Rates vary by service. Sample rates are as follows:

Rates by Service	
Years	Rate
<1	4.0%
1	3.8
5	2.0
10	1.5
15	1.0
20	1.0
25+	1.0

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SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2011

4. Disability

Rates vary by age. Sample rates are as follows:

Rates by Age	
Age	Rate
25	.08%
30	.10
35	.13
40	.20
45	.31
50	.52
55	.91
60	1.36

OTHER ASSUMPTIONS

1. Form of Payment

75% Joint & Survivor Annuity. Deferred vesteds are assumed to take a refund of contributions.

2. Marital Status

- a. Percent married
- b. Spouse's age

100% married
Females assumed to be three years younger than males.

3. Children

All members are assumed to have one dependent child at death or retirement. The child is assumed to be 28 years younger than the member, and is assumed to always survive until age 19.

3. Administrative Expense

Investment return is assumed to be net of expenses.

4. Cost of living adjustments

2.5% per annum, compounded annually, and 3.5% per annum, compounded annually, after reaching 60% purchasing power floor benefit.

5. DROP participation

All members elect the DROP at the earliest possible date and remain in the DROP for 4 years or to age 60, if earlier.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2011

CHANGES IN ASSUMPTIONS SINCE THE PRIOR YEAR

No changes were made to the actuarial assumptions since the last actuarial valuation performed July 1, 2010.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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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</i>	Governmental Accounting Standards Board Statement number 25 which specifies how the Annual Required Contribution is 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.