Fifty-third Actuarial Report for State Fiscal Year Ending June 30, 2011 and System Plan Year Beginning July 1, 2009

December 2009

Submitted By: Buck Consultants 1200 Seventeenth Street, Suite 1200 Denver, CO 80202



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December 7, 2009

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, 2009 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, 2009.

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 2010/2011 fiscal year, the State's additional payment requirement is \$1,801,610. Significant investment losses experienced during the prior year are recognized over a five-year period. As these losses are recognized, additional state contributions may be required in future years.

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,

BUCK CONSULTANTS David H. Alaskinsky

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

SUMMARY OF ACTUARIAL REPORT FOR CONTRIBUTION REQUIREMENTS AND FUNDED STATUS FOR PLAN YEAR 2009/2010

The main purposes of this report are:

- 1. To determine the level of State contributions for the fiscal year ending June 30, 2011, 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, 2008 and ending June 30, 2009.

The 2009 actuarial valuation is based upon the plan provisions as of July 1, 2009, 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 188 passed during the 2009 Legislative session, the member contribution rate increased from 13% to 15% on July 1, 2009. The employer contribution rate remains unchanged at 15%. Effective July 1, 2010, both the member and employer contribution rates increase to 16%.
- 2. An additional State contribution of \$1,801,610 is required for the 2010/2011 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 \$4,095,452 from \$17,440,826 as of July 1, 2008 to \$21,536,278 as of July 1, 2009.
- 3. A loss was experienced on the Actuarial Value of Assets during the 2008/2009 plan year. The annual rate of return on Market Value was (19.4%). The rate of return on Actuarial Value of 1.9% fell short of the 8.0% assumed investment return rate by 6.1%, resulting in a decrease to the Actuarial Value by \$16,641,461.
- 4. The plan experienced a decremental gain in the actuarial accrued liability since the July 1, 2008 actuarial valuation. The actuarial accrued liability decreased by \$3,450,287 as a result of favorable decremental experience. This increase is due primarily to the fact that no Cost of Living increases were granted to members currently in receipt.
- 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, 2008 actuarial valuation, the funded percentage on Actuarial Value decreased from 94.5% to 90.8%. This decrease was primarily due to unfavorable asset performance.



Basic Actuarial Valuation Results

The 2009 actuarial valuation results are based upon the plan provisions as of July 1, 2009 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 15% of pay and make additional payments if necessary, to meet the actuarially required contribution. The member contribution rate is 15% of pay effective July 1, 2009. Both contribution rates will be increasing to 16% effective July 1, 2010. 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 2009/2010 plan year is \$6,004,776. 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 2009/2010 plan year, payable July 1, 2010, is \$1,801,610.

Hi	History of Expected State Contributions								
Plan Year	State Contribution*	Additional Contributions	Total						
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						
2000/2001	1,958,304	0	1,958,304						
1999/2000	2,298,256**	0	2,298,256						

* Includes State Appropriations.

** Includes accrued State contributions of \$436,759.



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:

		J	luly 1, 2008	July 1, 2009	Annual Rate of Return
(a)	Market value	\$	259,479,803	\$ 205,033,476	(19.4%)
(b)	Actuarial value, an adjusted value intended to reduce the effect of market fluctuations (See Exhibit 1B)	\$	273,393,928	\$ 274,119,906	1.9%

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, 2008	July 1, 2009
(a)	Present value of future benefits	\$ 356,942,151	\$ 369,921,941
(b)	Actuarial value of assets	273,393,928	274,119,906
(c)	Present value of future member contributions	30,169,683	36,665,564
(d)	Present value of matching State contributions	34,811,173	36,665,564
(e)	Present value of future State appropriations*	1,126,541	934,629
(f)	Actuarial Liability/(Reserve) [(a) - (b) - (c) - (d) - (e)]	\$ 17,440,826	\$ 21,536,278

* Includes appropriation for COLA benefit under LB 137.



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, 2008	July 1, 2009
 (a) Pension Benefit Obligation i) retirees, disabled members and beneficiaries receiving benefits and deferred vested members not yet receiving benefits* ii) active members iii) total pension benefit obligation 	\$ 172,308,606 \$ 289,426,161	\$ 186,606,131 <u>115,288,153</u> \$ 301,894,284
(b) Assets available for benefit (actuarial value)	273,393,928	274,119,906
(c) Unfunded Pension Benefit Obligation/(Reserve)	\$ 16,032,233	\$ 27,774,378
 (d) Funded percentage on actuarial value of assets [(b) ÷ (a)(iii)] 	94.5%	90.8%

* Includes the value of DROP account balances as of June 30, 2009.



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, 2008	July 1, 2009
(a)	Benefit accrual cost amount	\$ 7,070,557	\$ 7,193,156
(b)	Annual compensation before assumed retirement age	\$ 26,979,643	\$ 25,922,439
(C)	Benefit accrual cost rate [(a) ÷ (b)]	26.207%	27.749%

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.



8. Changes Since the Last Actuarial Valuation

There have been no changes in the actuarial cost method since the last actuarial valuation as of July 1, 2008.

The changes in plan provisions and assumptions that have been adopted, effective July 1, 2009 are:

• Under Legislative Bill 188, the member contribution rate increases from 13% to 15% on July 1, 2009. The employer contribution rate remains unchanged at 15%. Effective July 1, 2010, both the member and employer contribution rates increase to 16%.



А.	Summary of Assets	Market Value as of June 30, 2008	Market Value as of June 30, 2009
1.	Cash and Equivalents	\$ 179,527	\$ 162,950
2.	Investments	262,833,561	208,553,376
3.	Capital Assets	428,527	232,617
4.	Receivables and Prepaids	16,379,019	8,185,031
5.	Accounts Payable	(20,340,831)	(12,100,498)
6.	Net Assets Available for Pension Benefits Considered [1 + 2 + 3 + 4 + 5]	\$ 259,479,803	\$ 205,033,476

SYSTEM ASSETS

В.	Development of Actuarial Value of Assets	Amount
1.	Actuarial Value of Assets as of July 1, 2008	\$ 273,393,928
2.	Unrecognized Return as of July 1, 2008	\$ (13,914,125)
3.	Contributions	
	(a) Member (includes purchased service)	\$ 3,688,593
	(b) State	4,257,902
	(c) State appropriations	 1,126,887
	(d) Total	\$ 9,073,382
4.	Distributions	
	(a) Benefit payments	\$ 13,347,738
	(b) Refund of contributions	 <u>102,755</u>
	(c) Total	\$ 13,450,493
5.	Expected Return at 8.0% on	
	(a) Item 1	\$ 21,871,514
	(b) Item 2	(1,113,130)
	(c) Item 3 (d)	355,953
	(d) Item 4 (c)	 482,917
	(e) Total [(a) + (b) + (c) - (d)]	\$ 20,631,420
6.	Actual Return on Market Value for Plan Year, Net of Expenses	\$ (50,069,216)
7.	Return to be Spread for Plan Year [6 - 5(e)]	\$ (70,700,636)



Exhibit 1 (cont'd)

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS STATE PATROL SYSTEM

SYSTEM ASSETS

В.	Development of Ac	Amount						
8.	Total Market Value of	f Assets as of July 1, 20	09		\$ 205,033,476			
9.	P. Return to be Spread							
	Plan Year	Return to be Spread						
	2008/2009	\$ (70,700,636)	80%	\$	(56,560,509) (22,780,538)			
	2007/2008	• • • •	(37,967,563) 60%					
	2006/2007	23,067,019	40%		9,226,808			
	2005/2006	5,139,046	20%		1,027,809			
			Total	\$	(69,086,430)			
10. Total Actuarial Value of Assets at July 1, 2009 [8 - 9] \$ 274,119,906								
11.	Asset Ratios							
	(a) Actuarial Value t	o Market Value [10 ÷ 8]			133.7%			
	(b) Market Value to	Actuarial Value [8 ÷ 10]			74.8%			



SYSTEM ASSETS

C.	Change in Asset Values During 2008/2009	Ac	tuarial Value	/alue Market \	
1.	Asset value as of July 1, 2008				
	(a) Reported last year	\$	273,393,928	\$	259,479,803
	(b) Adjustment		N/A		(2)
	(c) Reported this year [(a) + (b)]	\$	273,393,928	\$	259,479,801
2.	Contributions for 2008/2009				
	(a) Member contributions paid during the year	\$	3,688,593	\$	3,688,593
	(b) State contributions paid		4,257,902		4,257,902
	(c) State appropriations for the year		1,126,887		1,126,887
	(d) Contributions for 2008/2009 [(a) + (b) + (c)]	\$	9,073,382	\$	9,073,382
3.	Disbursements for 2008/2009				
	(a) Benefit payments	\$	13,347,738	\$	13,347,738
	(b) Expenses and fees		1,041,346		1,041,346
	(c) Refund of contributions		102,755		102,755
	(d) Disbursements for 2008/2009 [(a) + (b) + (c)]	\$	14,491,839	\$	14,491,839
4.	Investment return for 2008/2009				
	(a) Investment income	\$	5,097,630	\$	5,097,630
	(b) Securities lending income		140,444		140,444
	(c) Securities lending expense		(140,444)		(140,444)
	(d) Net appreciation/(depreciation) in fair value				
	of investments		(54,125,503)		(54,125,503)
	(e) Other		5		5
	(f) Unrecognized return including adjustment		<u>55,172,303</u>		<u>N/A</u>
	(g) Investment return for 2008/2009				
	[(a) + (b) + (c) + (d) + (e) + (f)]	\$	6,144,435	\$	(49,027,868)
5.	Asset value as of July 1, 2009				
	[1(c) + 2(d) - 3(d) + 4(g)]	\$	274,119,906	\$	205,033,476
6.	Approximate rate of investment return,				
	net of expenses		1.9%		(19.4%)



ACTUARIAL CONTRIBUTION REQUIREMENT

Α.	Development of Actuarially Required Funding Rate	July 1, 2009
1.	Actuarial present value of benefits	
	 (a) Active members (b) Inactive members (c) Retired members, disabilities and beneficiaries* (d) Total 	<pre>\$ 183,315,810 527,183 <u>186,078,948</u> \$ 369,921,941</pre>
2.	Present Value of Future Normal Costs	<u>64,630,876</u>
3.	Total Actuarial Accrued Liability [1(d) - 2]	\$ 305,291,065
4.	Actuarial Value of Assets	274,119,906
5.	Unfunded Actuarial Accrued Liability/(Reserve) [3 - 4]	\$ 31,171,159
6.	30-Year Amortization of the Unfunded Actuarial Accrued Liability/(Reserve) (a) Amount (b) Amount as % of Pay	\$ 2,699,749 10.41%
7.	Normal Cost (a) Amount (b) Amount as % of Pay	\$ 7,193,156 27.75%
8.	Total Actuarially Required Contribution (a) Amount (b) Amount as % of Pay	\$ 9,892,905 38.16%

* Includes the value of DROP account balances as of June 30, 2009.



ACTUARIAL CONTRIBUTION REQUIREMENT

В.	Development of Additional State Contributions for Fiscal Year 2010/2011	Annual Amount as a % of Pay		
1.	 Actuarially Required Contribution (a) Total Contribution Amount (b) State Appropriations (c) Expected State Appropriation for LB 137 COLA benefit (d) Net Contribution Amount [(a) - (b) - (c)] (e) Net Amount as % of Pay 	\$ \$	9,892,905 210,220 <u>104,580</u> 9,578,105 36.95%	
2.	 Statutory Contribution Rates during 2009/2010 (a) Employee Contribution Rate (b) Employer Contribution Rate (c) Total Employee/Employer Contribution Rate [(a) + (b)] 		15.00% <u>15.00%</u> 30.00%	
3.	 Additional Required State Contribution (a) Additional Required State Contribution Rate [1(e) - 2(c), not less than 0.00%] (b) Additional Required State Contribution Amount 	\$	6.95% 1,801,610	
4.	Expected Statutory Employer Contribution (a) Annual Compensation (b) Employer Contribution Amount [2(b) x 4(a)]	\$ \$	25,922,439 3,888,366	
5.	Total Expected Employer Contribution Amount and State Appropriations [1(b) + 1(c) + 3(b) + 4(b)]	\$	6,004,776	



ACTUARIAL CONTRIBUTION REQUIREMENT

C. Schedule of Amortization Bases	Original Amount	July 1, 2009 Remaining Payments	Date of Last Payment	Outstanding Balance as of July 1, 2009	Annual Contribution
2006 Unfunded Actuarial Accrued Liability Base	\$ 13,632,330	27	07/01/2036	\$ 13,241,662	\$ 1,165,213
2007 Unfunded Actuarial Accrued Liability Base	\$ (2,328,213)	28	07/01/2037	\$ (2,285,465)	\$ (199,002)
2008 Unfunded Actuarial Accrued Liability Base	\$ 7,528,427	29	07/01/2038	\$ 7,461,971	\$ 643,486
2009 Unfunded Actuarial Accrued Liability Base	\$ 12,752,991	30	07/01/2039	\$ 12,752,991	\$ 1,090,052
Total				\$ 31,171,159	\$ 2,699,749

ACTUARIAL (GAIN)/LOSS

Α.	Change in Actuarial Accrued Liability	-	
1.	Actual Actuarial Accrued Liability as of July 1, 2008	\$	291,996,719
2.	Benefits accrued during the 2008/2009 plan year		7,070,557
3.	Benefit payments during the 2008/2009 plan year		13,450,493
4.	Interest at 8%		23,154,201
5.	Expected Actuarial Accrued Liability as of July 1, 2009 [1 + 2 - 3 + 4]	\$	308,770,984
6.	Decremental (Gain)/Loss by Source(a) Retirement\$ 190,734(b) Termination(199,571)(c) Disability111,884(d) Pre-retirement mortality(35,058)(e) Post-retirement mortality(253,242)(f) Salary180,388(g) New Entrants/Rehires534,558(h) Data changes/COLA/miscellaneous(3,979,980)(i) Total decremental (gain)/loss(3,979,980)	\$	(3,450,287)
7.	Change in Plan Provisions		<u>(29,632)</u>
8.	Actual Actuarial Accrued Liability as of July 1, 2009 [5 + 6(i) + 7]	\$	305,291,065
В.	Change in Actuarial Value of Assets		
1.	Expected Actuarial Value of Assets as of July 1, 2009	\$	290,761,367
2.	Actual Actuarial Value of Assets as of July 1, 2009		274,119,906
3.	Actuarial (Gain)/Loss from Asset Sources [1 – 2]	\$	16,641,461
C.	Total Actuarial (Gain)/Loss for the 2008/2009 plan year [A(6)(i) + B(3)]	\$	13,191,174



ACTUARIAL BALANCE SHEET

Α.	Financial Resources	July 1, 2009				
1.	Actuarial Value of Assets		\$	274,119,906		
2.	 Present Value of Future Contributions (a) Member (b) Employer (c) State Appropriations (d) Total 	\$ 36,665,564 36,665,564 <u>934,629</u>		74,265,757		
3.	Actuarial Liability/(Reserve)			21,536,278		
4.	Total Assets [1 + 2(d) + 3]		\$	369,921,941		
		 	-			
В.	Benefit Obligations			July 1, 2009		
1.	 Present Value of Future Benefits (a) Active members (b) Inactive members (c) Retirees, disabilities and beneficiaries* (d) Total 	\$ 183,315,810 527,183 <u>186,078,948</u>	\$	369,921,941		

* Includes the DROP account balances included in the assets.



ACCOUNTING INFORMATION

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

	July 1, 2008	July 1, 2009
Pension Benefit Obligation (PBO)		
Vested PBO		
(a) members currently receiving payments*	\$ 171,898,267	\$ 186,078,948
(b) other members		
i) accumulated member contributions	34,609,596	34,800,140
ii) employer financed vested	59,529,238	56,963,398
Total Vested PBO	\$ 266,037,101	\$ 277,842,486
Nonvested PBO	23,389,060	24,051,798
Total PBO	\$ 289,426,161	\$ 301,894,284
Actuarial Value of Assets	273,393,928	274,119,906
Unfunded Pension Benefit Obligation/(Reserve)	\$ 16,032,233	\$ 27,774,378
Funded Percentage		
(a) on vested PBO	102.8%	98.7%
(b) on total PBO	94.5%	90.8%

B. Change in Pension Benefit Obligation from July 1, 2008 to July 1, 2009

Pension Benefit Obligation at July 1, 2008	\$ 289,426,161
Increase/(Decrease) during Period	
Plan Provision Changes	\$ 20,411
Benefits Accumulated	6,147,490
Benefits Paid	(13,450,493)
Interest Cost	23,162,975
Plan Experience	 (3,412,260)
Total Change	\$ 12,468,123
Pension Benefit Obligation at July 1, 2009	\$ 301,894,284

*Includes the DROP account balances included in the assets.

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, 2009 and 2008, 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.



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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, 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%
June 30, 2005	3,868,904	82%
June 30, 2004	3,018,366	96%

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

Valuation Date	June 30, 2009						
Actuarial Cost Method	Entry Age						
Amortization Method	Level dollar amount, closed						
Equivalent Single Amortization Period	29 years						
Asset Valuation Method	5 year smoothed market						
Actuarial Assumptions: Investment rate of return* Projected salary increases*	8.0% 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						



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, 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%
June 30, 2005	219,831,273	236,026,471	16,195,198	93.1%	22,882,413	70.8%
June 30, 2004	216,422,556	222,161,512	5,738,956	97.4%	22,640,907	25.3%

SUMMARY OF MEMBER DATA

Α.	Active Members		July 1, 2008		July 1, 2009
1.	Number of active members (a) Before assumed retirement age (b) Beyond assumed retirement age (c) Total		484 <u>12</u> 496		445 <u>23</u> 468
2.	 Annual considered compensation (a) Before assumed retirement age (b) Beyond assumed retirement age* (c) Total 	\$ \$	26,979,643 <u>683,569</u> 27,663,212	\$ \$	25,922,439 <u>1,582,698</u> 27,505,137
3.	Accumulated contributions	\$	34,199,257	\$	34,272,957
4.	 Active member averages (a) Age (b) Service (c) Compensation (d) Accumulated contributions 	\$	39.0 11.4 55,773 68,950	\$	39.4 11.7 58,772 73,233
В.	Inactive Members				
1. 2. 3.	Number of inactive members Accumulated member contributions Inactive member averages	\$	9 410,339	\$	11 527,183
0.	(a) Age (vesteds only)(b) Accumulated member contributions	\$	44.2 45,593	\$	42.3 47,926
C.	Retired and Disabled Members and Beneficiaries	s		<u>.</u>	
1.	Number of members (a) Retired (b) Disabled (c) Beneficiaries (d) DROP (e) Total		283 8 61 <u>0</u> 352		282 9 66 <u>15</u> 372
2.	 Annual benefits (a) Retired (b) Disabled (c) Beneficiaries (d) DROP (e) Total DROP Account Balances 	\$	11,715,908 242,068 1,264,922 0 13,222,898 0	\$ \$ \$ \$	11,762,817 275,348 1,428,529 <u>811,407</u> 14,278,101 584,753

* For 2008, compensation beyond assumed retirement age only includes compensation payable to DROP participants after their DROP date.

SUMMARY OF MEMBER DATA

D. Distribution of Retired and Disabled Members and Beneficiaries as of July 1, 2009

Age Range	Number	Annual Benefit	Average Annual Benefit
59 & Under	128	\$ 5,750,767	\$ 44,928
60-64	69	2,908,287	42,149
65-69	48	1,920,572	40,012
70-74	49	1,562,781	31,893
75-79	30	849,875	28,329
80-84	33	897,238	27,189
85-89	12	344,083	28,674
90 & Over	3	44,498	14,833
Total	372	\$ 14,278,101	\$ 38,382

E. Member Data Reconciliation

	Inactive Members										
	Active Members	With Deferred Benefits	Terminated With Balance	Retired Members, DROP and Beneficiaries	Disabled Members	Total					
As of July 1, 2008	496	5	4	344	8	857					
Changes in status a) Normal & early retirements b) Deaths c) Nonvested terminations d) Vested terminations e) Contribution refund f) Beneficiaries in receipt g) Disability retirements h) Return to active service i) Expired or forfeited benefits Total changes in status	(20) (1) 0 (5) (2) 0 (1) 1 <u>0</u> (28)	(1) 0 5 0 0 (1) <u>0</u> 3	0 0 0 (1) 0 0 0 0 (1)	21 (11) 0 0 9 0 0 0 0 19	0 0 0 0 0 1 0 <u>0</u> 1	0 (12) 0 (3) 9 0 0 0 (6)					
New entrants / Data Changes a) Without prior service b) With prior service Total new members Net change	0 _0 0 (28)	0 1 1 	0 (1) (1) (2)	0 0 0 	0 _0 0	0 0 (6)					
As of July 1, 2009	468	9	2	363	9	851					



Exhibit 6 (cont'd)

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS STATE PATROL SYSTEM

SUMMARY OF MEMBER DATA

F. Age and Service Distribution of Active Members as of July 1, 2009

Age Last		0.4	- 0		10.11	45 40		20.24		25.20	20.24		0		Tatal
Birthday		0-4	 5-9		10-14	15-19		20-24		25-29	30-34	_	Over 34		Total
20-24	Number	4	0	<i>•</i>	0	0		0	<i>•</i>	0	0		0	<i>•</i>	4
	Total Salary	\$ 177,810	\$ 0	\$	0	\$ 0	\$	0	\$	0	\$ 0			\$	177,810
	Average Sal.	\$ 44,453	\$ 0	\$	0	\$ 0	\$	0	\$	0	\$ 0		, -	\$	44,453
25-29	Number	47	13		0	0		0		0	0		0		60
	Total Salary	\$ 2,182,710	\$ 676,600	\$	0	\$ 0	\$	0	\$	0	\$ 0	\$	\$ O	\$	2,859,310
	Average Sal.	\$ 46,441	\$ 52,046	\$	0	\$ 0	\$	0	\$	0	\$ 0	\$	\$ O	\$	47,655
30-34	Number	12	74		5	0		0		0	0		0		91
	Total Salary	\$ 554,450	\$ 3,987,237	\$	279,861	\$ 0	\$	0	\$	0	\$ 0	\$	\$ O	\$	4,821,548
	Average Sal.	\$ 46,204	\$ 53,882	\$	55,972	\$ 0	\$	0	\$	0	\$ 0	\$	\$ O	\$	52,984
35-39	Number	11	41		43	5		0		0	0		0		100
	Total Salary	\$ 525,690	\$ 2,225,469	\$	2,529,000	\$ 316,369	\$	0	\$	0	\$ 0	\$	\$ O	\$	5,596,528
	Average Sal.	\$ 47,790	\$ 54,280	\$	58,814	\$ 63,274	\$	0	\$	0	\$ 0	\$	6 0	\$	55,965
40-44	Number	2	22		18	34		8		0	0		0		84
	Total Salary	\$ 92,506	\$ 1,240,562	\$	1,085,318	\$ 2,260,789	\$	581,142	\$	0	\$ 0	\$	\$ O	\$	5,260,317
	Average Sal.	\$ 46,253	\$ 56,389	\$	60,295	\$ 66,494	\$	72,643	\$	0	\$ 0	\$	5 O	\$	62,623
45-49	Number	0	8		5	16		34		18	0		0		81
	Total Salary	\$ 0	\$ 484,166	\$	307,292	\$ 1,119,344	\$	2,436,274	\$	1,301,146	\$ 0	\$	6 O	\$	5,648,222
	Average Sal.	\$ 0	\$ 60,521	\$	61,458	\$ 69,959	\$	71,655	\$	72,286	\$ 0	\$	5 0	\$	69,731
50-54	Number	0	6		1	6		8		14	2		0		37
	Total Salary	\$ 0	\$ 368,924	\$	60,209	\$ 344,835	\$	536,802	\$	959,279	\$ 146,644	\$	6 O	\$	2,416,693
	Average Sal.	\$ 0	\$ 61,487	\$	60,209	\$ 57,472	\$	67,100	\$	68,520	\$ 73,322	\$	5 0	\$	65,316
55 &	Number	0	5		1	0		2		3	0		0		11
Up	Total Salary	\$ 0	\$ 352,272	\$	55,884	\$ 0	\$	112,459	\$	204,094	\$ 0	\$	\$ O	\$	724,709
	Average Sal.	\$ 0	\$ 70,454	\$	55,884	\$ 0	\$	56,230	\$	68,031	\$ 0	\$	5 O	\$	65,883
TOTAL	Number	76	169		73	61		52		35	2	1	0		468
	Total Salary	\$ 3,533,166	\$ 9,335,230	\$	4,317,564	\$ 4,041,337	\$	3,666,677	\$	2,464,519	\$ 146,644	\$	6 0	\$	27,505,137
	Average Sal.	\$ 46,489	\$ 55,238	\$	59,145	\$ 66,251	\$	70,513	\$	70,415	\$ 73,322	\$	\$ 0	\$	58,772



SUMMARY OF MEMBER DATA

G. Reconciliation of Data Submitted By NPERS and Valuation Data

		Inactive	Retired Members, DROP, Disabled Members and	
	Active Members	Members	Beneficiaries	Total
Number of Data Records Submitted By NPERS	468	11	404	883
Additions a) 2009 Active b) 2008 Balance Only c) 2008 Deferred Vested d) 2008 Retired Total	0 0 <u>0</u> 0	0 0 0 0	0 0 <u>0</u> 0	0 0 0 0
Subtractions a) Also Listed as Deaths b) Also Listed as Inactives or Retirees	0	0	0	0
 c) Also Listed as Contribution Refunds d) Benefits Expired e) Dependents not in receipt f) Also Listed as Active g) Assumed Terminated 	0 0 0 0	0 0 0 0	0 0 (32) 0	0 0 (32) 0
based on Date of Last Contribution	0 0	0 0	<u>0</u> (32)	 (32)
Net change	0	0	(32)	(32)
Number of Members Included in the Valuation as of July 1, 2009	468	11	372	851



Plan Year Ending June 30	Act	ive Employees	DF N	ired Members, ROP, Disabled Iembers and Beneficiaries	Total
2010	\$	1,181,760	\$	14,224,838	\$ 15,406,598
2011		1,411,752		14,436,558	15,848,310
2012		2,492,484		14,639,893	17,132,377
2013		3,328,935		14,846,599	18,175,534
2014		4,802,379		15,048,944	19,851,323
2015		5,715,476		15,238,911	20,954,387
2016		6,623,775		15,415,194	22,038,969
2017		7,540,920		15,578,603	23,119,523
2018		8,270,400		15,728,783	23,999,183
2019		9,154,821		15,861,532	25,016,353
2020	\$	10,737,041	\$	15,975,951	\$ 26,712,992
2021		12,006,029		16,069,677	28,075,706
2022		13,409,583		16,141,390	29,550,973
2023		14,614,191		16,188,007	30,802,198
2024		16,479,726		16,207,270	32,686,996
2025		18,611,203		16,197,094	34,808,297
2026		20,735,343		16,155,239	36,890,582
2027		22,603,270		16,078,426	38,681,696
2028		26,306,635		15,966,286	42,272,921
2029		27,944,747		15,814,224	43,758,971
2030	\$	29,623,560	\$	15,619,733	\$ 45,243,293
2031		31,552,611		15,381,193	46,933,804
2032		33,312,358		15,099,370	48,411,728
2033		35,618,486		14,771,424	50,389,910
2034		37,453,733		14,397,312	51,851,045
2035		38,775,164		13,977,243	52,752,407
2036		39,872,981		13,512,216	53,385,197
2037		40,716,980		13,004,412	53,721,392
2038		41,611,796		12,455,222	54,067,018
2039		42,462,786		11,868,034	54,330,820

FORECAST OF EXPECTED DISBURSEMENTS

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



SUMMARY OF PLAN PROVISIONS

Member	Any member of the Nebraska State Patrol, permanent force.	
Participation Date	Date of becoming a member.	
Definitions		
Covered pay	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).	
Final average earnings	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).	
Fiscal year	Twelve month period ending June 30.	
<i>Member and employer contributions</i>	15% of monthly salary plus 15% 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 regular interest in conformity with the statutes. Employer contributions are 15% of monthly salary. The State makes any additional contributions that are actuarially required. Effective July 1, 2010, both member and employer contribution rates will increase to 16%.	
Pension benefit	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.	
Normal Retirement Date (NRD)	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.	
Pension service	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.	



SUMMARY OF PLAN PROVISIONS

Eligibility for Benefits	
Deferred vested	Termination for reasons other than death, disability, or retirement after completing at least six years of pension service.
Disability retirement	Retirement by reason of disability as defined by statute.
Early retirement	Retirement before NRD and on or after both attaining age 50 and completing ten years of pension service.
Normal retirement	Retire on NRD.
Postponed retirement	Retire after NRD.
Post-retirement death benefit	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.
Pre-retirement death benefit	Death prior to retirement.

Monthly Benefits Paid Upon the Following Events

Normal retirement	Pension benefit determined as of NRD.
Early retirement	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.
Postponed retirement	Monthly pension benefit determined as of actual retirement date.



SUMMARY OF PLAN PROVISIONS

Termination with deferred vested benefit	Refund of contributions with regular interest <u>or</u> 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>	Vested Percentage
	5 and under	0%
	6	20
	7	40
	8	60
	9	80
	10 or more	100
Disability retirement	J .	50% of current monthly salary at the nbers with less than 17 years of
	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.	



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 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 through the 2010/2011 Fiscal Year. 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, 2009

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 188 passed during the 2009 Legislative session, the member contribution rate increases from 13% to 15% on July 1, 2009. The employer contribution rate remains unchanged at 15%. Effective July 1, 2010, both the member and employer contribution rates increase to 16%.



SUMMARY OF ACTUARIAL METHODS AND PROCEDURES AS OF JULY 1, 2009

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.



SUMMARY OF ACTUARIAL METHODS AND PROCEDURES AS OF JULY 1, 2009

- 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

There have been no changes in the actuarial methods or procedures since the last actuarial valuation as of July 1, 2008.



SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2009

ECONOMIC ASSUMPTIONS

- 1. Investment Return
- 2. Inflation

3. Salary Increases

8.0% per annum, compounded annually, net of expenses.

3.5% per annum, compounded annually.

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

Rates vary by service. Sample rates are as follows:

* 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
 - b. Healthy lives Retired members and beneficiaries
 - c. Disabled lives

1994 Group Annuity Mortality Table, projected to 2010 using scale AA (65% of male rates for males, 50% of female rates for females)

1994 Group Annuity Mortality Table, projected to 2010 using scale AA (sex distinct)

1983 Railroad Retirement Board Disabled Annuitants Mortality (unisex)



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

	Pre-retirement Mortality			
	Mortality Rate		Life Expecta	ancy (Years)
Sample Age	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

	Post-retirement Mortality			
	Mortality Rate		Life Expecta	ancy (Years)
Sample Age	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:

	Disabled Mortality		
Sample Age	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	



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	 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		



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

3. Administrative Expense

- 4. Cost of living adjustments
- 5. DROP participation

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

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

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.

Investment return is assumed to be net of expenses.

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

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





CHANGES IN ASSUMPTIONS SINCE THE PRIOR YEAR

No changes were made to the actuarial assumptions since the last actuarial valuation performed July 1, 2008.



GLOSSARY OF TERMS	
Actuarial Accrued Liability	Total accumulated cost to fund pension benefits arising from service in all prior years.
Actuarial Cost Method	Technique used to assign or allocate, in a systematic and consistent manner, the expected cost of a pension plan for a group of participants to the years of service that give rise to that cost.
Actuarial Present Value of Future Benefits	Amount which, together with future interest, is expected to be sufficient to pay all future benefits.
Actuarial Valuation	Study of probable amounts of future pension benefits and the necessary amount of contributions to fund those benefits.
Actuary	Person who performs mathematical calculations pertaining to pension and insurance benefits based on specific procedures and assumptions.
Annual Required Contribution	Disclosure measure of annual pension cost.
GASB 25	Governmental Accounting Standards Board Statement number 25 which specifies how the Annual Required Contribution is to be calculated.
Normal Cost	That portion of the actuarial present value of benefits assigned to a particular year in respect to an individual participant or the plan as a whole.
Unfunded Actuarial Accrued Liability	The portion of the actuarial accrued liability not offset by plan assets.
Vested Benefits	Benefits which are unconditionally guaranteed regardless of employment status.

