

***NEBRASKA PUBLIC EMPLOYEES
RETIREMENT SYSTEMS***
STATE PATROL RETIREMENT SYSTEM
2000

Forty-fifth Actuarial Report for
State Fiscal Year Ending June 30, 2002
and
System Plan Year Beginning July 1, 2000

November 2000

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

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November 6, 2000

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

**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, 2000 performed by Buck Consultants, Inc.

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, 1999, including the plan changes made by LB 674 effective July 1, 2000.

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

In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the plan and reasonable expectations, and represent our best estimate of the anticipated experience under the plan. A summary of the actuarial assumptions used in this actuarial valuation are shown in Exhibit 11.

Based on the results of our actuarial valuation, the State Patrol Retirement System is actuarially sound. Annual funding required from the State as defined under statute for current plan members is equal to the member contributions and appropriations to the Purchasing Power Stabilization Fund, plus an amortization payment for any unfunded liabilities. For the 2001 - 2002 fiscal year, the State amortization payment is \$0.

We are available to answer any questions on the material contained in this report, or to provide explanations to further details as may be appropriate.

Respectively submitted,

BUCK CONSULTANTS, INC.

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

William B. Fornia, F.S.A., E.A., M.A.A.A.
Principal and Consulting Actuary

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

**SUMMARY OF ACTUARIAL REPORT FOR CONTRIBUTION REQUIREMENTS AND
FUNDED STATUS FOR PLAN YEAR 2000/2001**

The main purposes of this report are:

1. To determine the level of State contributions for the fiscal year ending June 30, 2002 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, 1999 and ending June 30, 2000.

The 2000 actuarial valuation is based upon the plan provisions as of July 1, 2000, as described in Exhibit 9. The actuarial methods and assumptions are described in Exhibit 10 and 11.

Highlights from the current valuation:

1. No State contribution is required for the 2000-2001 fiscal year to amortize any unfunded liabilities. Expected member contributions and State contributions exceed the total funding requirement. The system reserve has increased from \$8,901,665 as of July 1, 1999 to \$23,473,872 as of July 1, 2000.
2. Asset gains which exceeded actuarial assumptions were experienced during the 1999/2000 plan year. The annual rate of return on Market Value was 8.3%. The rate of return on Actuarial Value of 14.7% exceeded the 8% assumed investment return rate by 6.7%, resulting in an increase to the actuarial reserve of \$9,842,503.
3. The Asset Valuation Method was modified, effective July 1, 2000, to include interest on the previous year's unrecognized return in determining the expected return. The effect of this change was to increase the Actuarial Value of Assets by \$1,476,641.
4. The plan experienced a decremental and salary loss over the period, primarily due to new patrol officers being added to the system and a salary loss for increases that were larger than expected in a one-year period. The actuarial reserve decreased by \$1,450,571 as a result of total liability experience.
5. The funded status of the system as measured by the ratio of the system assets over the Pension Benefit Obligation (PBO) also 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, 1999 actuarial valuation, the funded percentage on Actuarial Value increased from 104.8% to 113.3%. This increase was primarily due to better than expected return on the Actuarial Value of Assets.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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EXECUTIVE SUMMARY

Basic Actuarial Valuation Results

The 2000 actuarial valuation results are based upon the plan provisions as of July 1, 2000 as described in Exhibit 9. The actuarial methods and assumptions are described in detail in Exhibits 10 and 11, respectively.

1. State Contribution

The State's funding policy is to match the 11% of pay contributions paid by members, pay appropriations to the State Patrol Purchasing Power Stabilization Fund through the 2010-2011 Fiscal Year, and make additional payments if necessary, to fund any unfunded actuarial accrued liability. Unfunded liabilities created due to plan changes or assumption changes are amortized over 25 years.

Total expected State funding for 2000-2001 plan year is \$1,958,304. Member contributions and matching State contributions are expected to exceed the total actuarially required funding.

Assets continue to exceed the actuarial accrued liability as of the valuation date. As a result, the unfunded actuarial accrued liability is less than \$0. Therefore, no additional payment is required toward unfunded actuarial accrued liabilities for the 2000-2001 plan year.

History of Expected State Contributions			
Plan Year	State Contribution*	Amortization Payment	Total
2000-2001	\$ 1,958,304	\$ 0	\$ 1,958,304
1999-2000	2,298,256**	0	2,298,256**
1998-1999	1,753,478	0	1,753,478
1997-1998	1,714,946	0	1,714,946
1996-1997	1,728,778	0	1,728,778
1995-1996	1,340,120	0	1,340,120
1994-1995	1,021,870	125,897	1,147,767
1993-1994	1,063,484	0	1,063,484

* Includes contributions to the State Patrol Purchasing Power Stabilization Fund since the 1996-1997 plan year.

** Includes contributions to the State Patrol Purchasing Power Stabilization Fund and accrued State contributions of \$436,759.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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2. Asset Values

The total assets of the system as of the current and prior valuation date including the Purchasing Power Stabilization Fund (PPSF), and the rate of return during the period is as follows:

	July 1, 1999	July 1, 2000	Annual Rate of Return
(a) Market value	\$ 194,196,740	\$ 207,164,974	8.3%
(b) Actuarial value, an adjusted value intended to reduce the effect of market fluctuations (See Exhibit 1)	\$ 171,124,224	\$ 193,019,673	14.7%

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 to the PPSF). 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, 1999	July 1, 2000
(a) Present value of future benefits	\$ 197,182,201	\$ 207,075,040
(b) Actuarial value of assets*	171,124,224	193,019,673
(c) Present value of future member contributions	16,687,704	18,014,243
(d) Present value of matching State contributions	16,687,704	18,014,243
(e) Present value of future State PPSF appropriations	<u>1,584,234</u>	<u>1,500,753</u>
(f) Actuarial liability/(Reserve) (a-b-c-d-e)	\$ (8,901,665)	\$ (23,473,872)

*The Actuarial Value of Assets includes the PPSF as of July 1, 1999 and July 1, 2000.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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4. Unfunded Frozen Actuarial Accrued Liability

Under the Frozen Entry Age Actuarial Cost Method, changes in the Entry Age Actuarial Accrued Liability due to plan or assumption changes are frozen and amortized pursuant to Nebraska State Statutes. When the unfunded actuarial accrued liability under the Entry Age Cost Method is less than \$0, all prior unfunded frozen actuarial accrued liability bases are considered fully amortized, and the unfunded frozen actuarial accrued liability is set equal to the entry age unfunded actuarial accrued liability. The unfunded frozen actuarial accrued liability as of the current and prior valuation dates follows:

July 1, 1999	July 1, 2000
\$ (8,901,665)	\$ (23,473,872)

5. 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, 1999	July 1, 2000
(a) Pension Benefit Obligation		
i) retirees, disabled members and beneficiaries receiving benefits and deferred vested members not yet receiving benefits	\$ 94,582,661	\$ 101,237,113
ii) active members	<u>68,696,626</u>	<u>69,060,224</u>
iii) total pension benefit obligation	\$ 163,279,287	\$ 170,297,337
(b) Assets available for benefit (actuarial value)*	<u>171,124,224</u>	<u>193,019,673</u>
(c) Unfunded Pension Benefit Obligation/(Reserve)	\$ (7,844,937)	\$ (22,722,336)
(d) Funded percentage on actuarial value of assets: (b) ÷ (a)(iii)	104.8%	113.3%

*The Actuarial Value of Assets includes the PPSF as of July 1, 1999 and July 1, 2000.

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6. Benefit Accrual Cost

The cost of benefits accruing over an active member's working career can be expressed as a level percentage of compensation. This cost represents the true cost of accruing benefits since it is not adjusted for any overfunding or underfunding which may exist on the valuation date. It is determined using the Entry Age Actuarial Cost Method and is also called the Normal Cost. The level benefit accrual cost determined during the current and prior valuation dates are as follows:

	July 1, 1999*	July 1, 2000
(a) Benefit accrual cost amount:	\$ 3,725,806	\$ 3,959,055
(b) Annual compensation:	\$ 14,986,973	\$ 15,789,104
(c) Benefit accrual cost rate (a) ÷ (b):	24.860%	25.075%

*Includes benefit increases granted under LB 674.

7. Forecast of Disbursements

A forecast of the annual benefit disbursements expected over the next thirty years is presented in Exhibit 8. This forecast is based on the same actuarial assumptions with respect to salary increases and decrement rates used to determine the State normal cost contribution and actuarial accrued liability including the new plan provisions implemented by Legislative Bill 674. The forecast should be a useful guide in discussing the cash-flow needs of the system with investment managers and in projecting the future financing needs of the system.

8. Actuarial Methods and Assumptions

The State 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 State contribution is the Frozen 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 10 and 11, respectively.

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9. Changes Since the Last Actuarial Valuation

There have been no changes in the actuarial cost method or assumptions since the last actuarial valuation as of July 1, 1999. Effective July 1, 2000, the Asset Valuation Method has been modified to include interest on the previous year's unrecognized return for determining the expected return.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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SYSTEM ASSETS

A. Summary of Assets	Market Value as of June 30, 1999	Market Value as of June 30, 2000
1. Cash and Equivalents	\$ 342,780	\$ 753,527
2. Investments	191,885,434	204,814,960
3. Receivables and Prepaids	2,022,330	1,648,150
4. Accounts Payable	(53,804)	(51,663)
5. Net Assets Available for Pension Benefits Considered (1+2+3+4)	\$ 194,196,740	\$ 207,164,974

B. Development of Actuarial Value of Assets*	Amount
1. Actuarial Value of Assets as of July 1, 1999	\$ 171,124,224
2. Unrecognized Return as of July 1, 1999	23,072,516
3. Contributions	
(a) Member	\$ 1,855,688
(b) State	1,855,707
(c) State appropriation to PPSF	<u>348,028</u>
(d) Total	\$ 4,059,423
4. Distributions	
(a) Benefit payments	\$ 7,078,179
(b) Other	<u>0</u>
(c) Total	\$ 7,078,179
5. Expected Return at 8% on:	
(a) Item 1	\$ 13,689,938
(b) Item 2	1,845,801
(c) Item 3 (d)	159,253
(d) Item 4 (c)	<u>254,130</u>
(e) Total (a) + (b) + (c) - (d)	\$ 15,440,862
6. Actual Return on Market Value for 1999/2000 Plan Year, Net of Expenses	\$ 15,986,990
7. Return to be Spread for 1999/2000 Plan Year [6-5(e)]	\$ 546,128

* Reflects a change in the asset valuation method to include interest on the previous year's unrecognized return.

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B. Development of Actuarial Value of Assets		Amount																								
8.	Total Market Value of Assets as of July 1, 2000	\$ 207,164,974																								
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>1999/2000</td> <td>\$ 546,128</td> <td>80%</td> <td>\$ 436,902</td> </tr> <tr> <td>1998/1999</td> <td>5,635,401</td> <td>60%</td> <td>3,381,241</td> </tr> <tr> <td>1997/1998</td> <td>18,375,858</td> <td>40%</td> <td>7,350,343</td> </tr> <tr> <td>1996/1997</td> <td>14,884,075</td> <td>20%</td> <td>2,976,815</td> </tr> <tr> <td colspan="3">Total</td> <td>\$ 14,145,301</td> </tr> </tbody> </table>	Plan Year	Return to be Spread	Unrecognized Percent	Unrecognized Return	1999/2000	\$ 546,128	80%	\$ 436,902	1998/1999	5,635,401	60%	3,381,241	1997/1998	18,375,858	40%	7,350,343	1996/1997	14,884,075	20%	2,976,815	Total			\$ 14,145,301	
Plan Year	Return to be Spread	Unrecognized Percent	Unrecognized Return																							
1999/2000	\$ 546,128	80%	\$ 436,902																							
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1996/1997	14,884,075	20%	2,976,815																							
Total			\$ 14,145,301																							
10.	Total Actuarial Value of Assets at July 1, 2000 (8-9)	\$ 193,019,673																								
11.	Ratio of total actuarial value to market value (10÷8)	93.2%																								

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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C. Change in Asset Values During 1999/2000	Actuarial Value	Market Value
1. Asset value as of July 1, 1999	\$ 171,124,224	\$ 194,196,740
2. Contributions for 1999/2000:		
(a) Member contributions paid during the year	\$ 1,855,688	\$ 1,855,688
(b) State contributions paid	1,855,707	1,855,707
(c) State appropriation to PPSF during the year	<u>348,028</u>	<u>348,028</u>
(d) Contributions for 1999/2000: (a) + (b) + (c)	\$ 4,059,423	\$ 4,059,423
3. Disbursements for 1999/2000:		
(a) Benefit payments	\$ 7,078,179	\$ 7,078,179
(b) Expenses and fees	468,376	468,376
(c) Other	<u>0</u>	<u>0</u>
(d) Disbursements for 1999/2000: (a) + (b) + (c)	\$ 7,546,555	\$ 7,546,555
4. Investment return for 1999/2000:	\$ 25,382,581	\$ 16,455,366
5. Asset value as of July 1, 2000: [1 + 2(d) - 3(d) + 4]	\$ 193,019,673	\$ 207,164,974
6. Approximate rate of investment return, net of expenses	14.7%	8.3%

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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SUMMARY OF UNFUNDED FROZEN ACTUARIAL ACCRUED LIABILITY

Development of Unfunded Frozen Actuarial Accrued Liability	July 1, 2000
1. Actuarial present value of benefits	
(a) Active members	\$ 105,837,927
(b) Inactive members	521,797
(c) Retired members and beneficiaries	99,221,510
(d) Disabled members	<u>1,493,806</u>
(e) Total	\$ 207,075,040
2. Present value of future State normal costs	18,014,243
3. Present value of future member contributions	18,014,243
4. Present value of future State PPSF appropriations	<u>1,500,753</u>
5. Total Actuarial Accrued Liability [1(e) - 2 - 3 - 4]	\$ 169,545,801
6. Actuarial value of assets*	<u>193,019,673</u>
7. Unfunded actuarial accrued liability (5 - 6)	\$ (23,473,872)
8. Unfunded frozen actuarial accrued liability	\$ (23,473,872)
9. Amortization period (lesser of 25 years or average expected future service of active members)	14
10. Payment required to amortize unfunded frozen actuarial accrued liability over the amortization period (mid-year payment) [8÷9, not less than \$0]	\$ 0

*Includes Purchasing Power Stabilization Fund, per LB 674.

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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SUMMARY OF NORMAL COST AND STATE CONTRIBUTION

A. Development of Total Normal Cost	July 1, 2000
1. Expected member contributions	\$ 1,748,084
2. Expected matching State contributions	<u>1,748,084</u>
3. Total normal cost (1 + 2)	\$ 3,496,168
B. Development of State Contribution (mid-year)	
1. State normal cost	\$ 1,748,084
2. State PPSF appropriation	210,220
3. State amortization payment (From Exhibit 2)	<u>0</u>
4. State contribution (1 + 2 + 3)	\$ 1,958,304

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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ACTUARIAL (GAIN)/LOSS

A. Change in Actuarial Liability		
1.	Actual Actuarial Liability as of July 1, 1999	\$ 197,182,201
2.	Benefit payments during the 1999/2000 plan year	7,078,179
3.	Interest at 8%	<u>15,520,447</u>
4.	Expected Actuarial Liability as of July 1, 2000 (1 - 2 + 3)	\$ 205,624,469
5.	Change in Actuarial Liability by Source	
	(a) Retirement	\$ 1,572,400
	(b) Termination	(1,839,836)
	(c) Disability	110,029
	(d) Pre-retirement mortality	(134,319)
	(e) Post-retirement mortality	(655,421)
	(f) Salary	1,332,614
	(g) New Entrants	4,272,937
	(h) Data changes/miscellaneous	<u>(3,207,833)</u>
	(i) Total	\$ 1,450,571
6.	Change in Actuarial Assumptions	\$ 0
7.	Change in Plan Provisions	0
8.	Change in Actuarial Methods	<u>0</u>
9.	Actual Actuarial Liability as of July 1, 2000 [4 + 5(i) + 6 + 7 + 8]	\$ 207,075,040
B. Change in Actuarial Value of Assets		
1.	Expected Actuarial Value of Assets as of July 1, 2000	\$ 181,700,529
2.	Actual Actuarial Value of Assets as of July 1, 2000, before change in Asset Valuation Method	<u>191,543,032</u>
3.	Actuarial (Gain)/Loss from Asset Sources (1 - 2)	\$ (9,842,503)
C. Total Actuarial (Gain)/Loss for the 1999/2000 plan year [A(5)(i) + B(3)]		
		\$ (8,391,932)

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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ACTUARIAL BALANCE SHEET

A. Financial Resources	July 1, 2000
1. Actuarial value of assets	\$ 193,019,673
2. Present value of future member contributions	18,014,243
3. Present value of future matching State contributions	18,014,243
4. Present value of future State PPSF appropriations	1,500,753
5. Actuarial reserve	(23,473,872)
6. Total Assets (1 + 2 + 3 + 4 + 5)	\$ 207,075,040
B. Benefit Obligations	
1. Actuarial present value of future benefits	
(a) Active members	\$ 105,837,927
(b) Inactive members	521,797
(c) Retired and disabled members and beneficiaries	100,715,316
2. Total Liabilities [1(a) + 1(b) + 1(c)]	\$ 207,075,040

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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ACCOUNTING INFORMATION

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

	July 1, 1999	July 1, 2000
Pension Benefit Obligation (PBO):		
Vested PBO		
(a) members currently receiving payments	\$ 94,158,605	\$ 100,715,316
(b) other members		
i) accumulated member contributions	21,098,744	21,598,733
ii) employer financed vested	<u>37,443,084</u>	<u>37,125,482</u>
Total Vested PBO	\$ 152,700,433	\$ 159,439,531
Nonvested PBO	<u>10,578,854</u>	<u>10,857,806</u>
Total PBO	\$ 163,279,287	\$ 170,297,337
Actuarial Value of Assets*	<u>171,124,224</u>	<u>193,019,673</u>
Unfunded Pension Benefit Obligation (Reserve)	\$ (7,844,937)	\$ (22,722,336)
Funded Percentage		
(a) on vested PBO	112.1%	121.1%
(b) on total PBO	104.8%	113.3%

* The Actuarial Value of Assets includes the PPSF as of July 1, 1999 and July 1, 2000.

B. Change in Pension Benefit Obligation from July 1, 1999 to July 1, 2000.

Pension Benefit Obligation at July 1, 1999	\$ 163,279,287
Increase/(Decrease) during Period:	
Plan Provision Changes	\$ 0
Assumption Changes	0
Benefits Accumulated	3,351,002
Benefits Paid	(7,078,179)
Interest Cost	13,076,293
Plan Experience	<u>(2,331,066)</u>
Total Change	\$ 7,018,050
Pension Benefit Obligation at July 1, 2000	\$ 170,297,337

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Exhibit 10 and 11 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, 2000 and 1999, respectively, including the changes provided in LB 674, as outlined in Exhibit 9. The determination of the Pension Benefit Obligation has been made in accordance with generally accepted actuarial principles and practices.

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

Plan Year Ending	Annual Required Contributions*	Percentage Contributed
June 30, 2000	2,203,735	100%
June 30, 1999	\$ 2,190,237**	100%
June 30, 1998	1,714,946	100%
June 30, 1997	1,728,778	100%
June 30, 1996	1,340,120	100%
June 30, 1995	1,147,767	100%
June 30, 1994	1,063,484	100%

* Includes contributions to the Purchasing Power Stabilization Fund beginning with the plan year ending June 30, 1997 and matching State contributions.

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

D. Actuarial Assumptions, Method and Additional Information under GASB No. 25	
Valuation Date	June 30, 2000
Actuarial Cost Method	Frozen Entry Age
Amortization Method	Level dollar amount, closed
Amortization period	Lesser of 25 years or the average expected future service of active members
Asset Valuation Method	5 year smoothing
Actuarial Assumptions:	
Investment rate of return*	8.0%
Projected salary increases*	4.5% - 7.0%
*Includes inflation at	3.8%
Cost-of-living adjustment	2% with a floor benefit equal to 60% purchasing power of original benefit

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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, 2000	\$ 193,019,673	\$ 169,545,801	\$ (23,473,872)	113.8%	\$ 15,789,104	(148.7%)
June 30, 1999	171,124,224	162,222,559	(8,901,665)	105.5	14,986,973	(59.4%)
June 30, 1998	150,958,315	108,660,934	(42,297,381)	138.9	13,995,091	(302.2%)
June 30, 1997	134,721,462	100,796,787	(33,924,675)	133.7	13,768,486	(246.4%)
June 30, 1996	123,349,173	110,301,906	(13,047,267)	111.8	13,905,497	(93.8%)
June 30, 1995	111,880,500	105,354,440	(6,526,060)	106.2	13,512,985	(48.3%)

**NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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SUMMARY OF MEMBER DATA

A. Active Members	July 1, 1999	July 1, 2000
1. Number of Active Members		
(a) Before assumed retirement age	382	386
(b) Beyond assumed retirement age	<u>0</u>	<u>0</u>
(c) Total	382	386
2. Annual Considered Compensation		
(a) Before assumed retirement age	\$ 14,986,973	\$ 15,789,104
(b) Beyond assumed retirement age	<u>0</u>	<u>0</u>
(c) Total	\$ 14,986,973	\$ 15,789,104
3. Active member Averages		
(a) Age	38.7	38.5
(b) Service	13.4	12.8
(c) Compensation	\$ 39,233	\$ 40,904
B. Inactive Members		
1. Number of inactive members	11	16
2. Accumulated member contributions	\$ 424,056	\$ 521,797
3. Inactive member averages		
(a) Age	40.3	42.9
(b) Accumulated member contributions	\$ 38,551	\$ 32,612
C. Retired and Disabled Members and Beneficiaries		
1. Number of members		
(a) Retired	207	220
(b) Disabled	4	4
(c) Beneficiaries	<u>41</u>	<u>45</u>
(d) Total	252	269
2. Annual benefits		
(a) Retired	\$ 5,890,667	\$ 6,732,005
(b) Disabled	99,703	102,528
(c) Beneficiaries	<u>520,938</u>	<u>695,570</u>
(d) Total	\$ 6,511,308	\$ 7,530,103

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

D. Distribution of Retired and Disabled Members and Beneficiaries as of July 1, 2000

Age Range	Number	Annual Benefit	Average Annual Benefit
59 & Under	101	\$ 3,485,206	\$ 34,507
60-64	54	1,527,539	28,288
65-69	35	824,043	23,544
70-74	36	787,366	21,871
75-79	26	566,250	21,779
80-84	12	254,546	21,212
85-89	4	74,507	18,627
90 & Over	1	10,646	10,646
Total	269	\$ 7,530,103	\$ 27,993

E. Member Data Reconciliation

	Active Members	Inactive Members				Total
		With Deferred Benefits	Terminated With Balance	Retired Members and Beneficiaries	Disabled Members	
As of July 1, 1999	382	11	0	248	4	645
Changes in status						
a) Normal & early retirements	(16)	0	0	16	0	0
b) Became payable	0	(1)	0	1	0	0
c) Deaths	0	0	0	(5)	0	(5)
d) Nonvested terminations	(1)	0	1	0	0	0
e) Vested terminations	(4)	4	0	0	0	0
f) Contribution refund	(6)	(2)	0	0	0	(8)
g) Beneficiaries in receipt	0	0	0	5	0	5
h) Disability retirements	0	0	0	0	0	0
i) Return to active service	2	(2)	0	0	0	0
j) Expired or forfeited benefits	<u>0</u>	<u>0</u>	<u>0</u>	<u>(1)</u>	<u>0</u>	<u>(1)</u>
Total changes in status	(25)	(1)	1	16	0	(9)
New entrants						
a) Without prior service	29	0	0	0	0	29
b) With prior service	<u>0</u>	<u>0</u>	<u>5</u>	<u>1</u>	<u>0</u>	<u>6</u>
Total new members	29	0	5	1	0	35
Net change	4	(1)	6	17	0	26
As of July 1, 2000	386	10	6	265	4	671

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

F. Age and Service Distribution of Active Members as of July 1, 2000

Age Last Birthday		0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
20-24	Number	5	0	0	0	0	0	0	0	5
	Total Salary	\$ 147,568	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 147,568
	Average Sal.	\$ 29,514	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 29,514
25-29	Number	57	2	0	0	0	0	0	0	59
	Total Salary	\$ 1,719,850	\$ 66,450	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,786,300
	Average Sal.	\$ 30,173	\$ 33,225	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 30,276
30-34	Number	29	33	10	0	0	0	0	0	72
	Total Salary	\$ 953,840	\$ 1,230,301	\$ 374,323	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 2,558,464
	Average Sal.	\$ 32,891	\$ 37,282	\$ 37,432	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 35,534
35-39	Number	9	15	39	15	0	0	0	0	78
	Total Salary	\$ 317,103	\$ 562,040	\$ 1,657,482	\$ 645,971	\$ 0	\$ 0	\$ 0	\$ 0	\$ 3,182,596
	Average Sal.	\$ 35,234	\$ 37,469	\$ 42,500	\$ 43,065	\$ 0	\$ 0	\$ 0	\$ 0	\$ 40,803
40-44	Number	3	5	15	26	27	0	0	0	76
	Total Salary	\$ 107,790	\$ 180,008	\$ 602,204	\$ 1,145,711	\$ 1,359,625	\$ 0	\$ 0	\$ 0	\$ 3,395,338
	Average Sal.	\$ 35,930	\$ 36,002	\$ 40,147	\$ 44,066	\$ 50,356	\$ 0	\$ 0	\$ 0	\$ 44,676
45-49	Number	2	2	3	11	40	16	0	0	74
	Total Salary	\$ 77,092	\$ 70,096	\$ 117,822	\$ 479,976	\$ 1,938,705	\$ 797,853	\$ 0	\$ 0	\$ 3,481,544
	Average Sal.	\$ 38,546	\$ 35,048	\$ 39,274	\$ 43,634	\$ 48,468	\$ 49,866	\$ 0	\$ 0	\$ 47,048
50 - 54	Number	1	0	2	0	5	8	4	0	20
	Total Salary	\$ 36,715	\$ 0	\$ 70,644	\$ 0	\$ 207,394	\$ 582,922	\$ 254,443	\$ 0	\$ 1,152,118
	Average Sal.	\$ 36,715	\$ 0	\$ 35,322	\$ 0	\$ 41,479	\$ 72,865	\$ 63,611	\$ 0	\$ 57,606
55 &	Number	0	0	0	0	1	0	1	0	2
	Total Salary	\$ 0	\$ 0	\$ 0	\$ 0	\$ 39,000	\$ 0	\$ 46,176	\$ 0	\$ 85,176
	Average Sal.	\$ 0	\$ 0	\$ 0	\$ 0	\$ 39,000	\$ 0	\$ 46,176	\$ 0	\$ 42,588
TOTAL	Number	106	57	69	52	73	24	5	0	386
	Total Salary	\$ 3,359,958	\$ 2,108,895	\$ 2,822,475	\$ 2,271,658	\$ 3,544,724	\$ 1,380,775	\$ 300,619	\$ 0	\$15,789,104
	Average Sal.	\$ 31,698	\$ 36,998	\$ 40,905	\$ 43,696	\$ 48,558	\$ 57,532	\$ 60,124	\$ 0	\$ 40,904

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

FORECAST OF EXPECTED DISBURSEMENTS

Plan Year Ending June 30	Active Employees	Retired and Disabled Members and Beneficiaries	Total
2001	\$ 160,518	\$ 7,810,864	\$ 7,971,382
2002	449,707	7,925,806	8,375,513
2003	735,005	8,034,744	8,769,749
2004	1,102,055	8,136,637	9,238,692
2005	1,597,745	8,230,434	9,828,179
2006	2,228,794	8,315,088	10,543,882
2007	2,880,867	8,389,548	11,270,415
2008	3,492,821	8,452,808	11,945,629
2009	4,300,604	8,503,900	12,804,504
2010	5,172,989	8,541,922	13,714,911
2011	\$ 5,835,030	\$ 8,566,062	\$ 14,401,092
2012	6,547,978	8,575,562	15,123,540
2013	7,567,106	8,569,709	16,136,815
2014	8,686,404	8,547,854	17,234,258
2015	9,777,919	8,509,407	18,287,326
2016	10,740,268	8,453,861	19,194,129
2017	11,755,481	8,380,735	20,136,216
2018	12,760,375	8,289,616	21,049,991
2019	13,712,613	8,314,994	22,027,607
2020	14,860,416	8,321,341	23,181,757
2021	\$ 16,163,280	\$ 8,307,183	\$ 24,470,463
2022	17,419,270	8,271,050	25,690,320
2023	18,561,330	8,211,446	26,772,776
2024	19,695,048	8,126,888	27,821,936
2025	21,209,246	8,016,024	29,225,270
2026	22,647,353	7,877,702	30,525,055
2027	23,611,372	7,711,057	31,322,429
2028	24,458,200	7,515,602	31,973,802
2029	25,223,803	7,291,259	32,515,062
2030	25,912,569	7,038,430	32,950,999

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.

**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 contributions</i>	11% of monthly salary plus 11% of pay received at termination for unused sick leave and vacation leave. Such contributions are credited with regular interest in conformity with the statutes.
<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, 2000, an automatic annual cost-of-living adjustment (COLA) equal to the CPI-W index, with a maximum increase of 2% in any one year is provided for current and future retirees by LB 674. 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 the completion of ten years of service and attaining age 55, or 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

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
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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>
0 - 5	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.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

State Patrol Purchasing Power Stabilization Fund

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 1996-97 fiscal year, the funding shall be 3.04888% of \$6,895,000 each year through the 2010-2011 Fiscal Year.

LB 674, passed in 1999 (effective July 1, 2000), provides 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 are to be transferred to the Nebraska State Patrol Retirement Fund. The State appropriation to the PPSF, as defined above, will be directed to the Nebraska Patrol Retirement Fund through the 2010-2011 Fiscal Year.

Benefits Reflected in Valuation

All benefits were valued, including future cost of living increases granted by LB 674.

Plan Provisions Effective After June 30, 2000

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 Prior Year

There have been no changes in plan provisions considered for valuation purposes since the July 1, 1999 valuation.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
STATE PATROL SYSTEM

SUMMARY OF ACTUARIAL METHODS AND PROCEDURES AS OF JULY 1, 2000

A. ACTUARIAL METHODS

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

Frozen Entry Age Actuarial Cost Method

Sometimes called "funding method," a cost method is a particular technique used by actuaries for establishing the amount and incidence of the annual actuarial cost of pension plan benefits or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the actuarially required annual contribution to the plan is the sum of (1) the normal cost and (2) an amortization payment on the unfunded actuarial accrued liability.

Under the Frozen Entry Age Actuarial Cost Method, the excess of the Actuarial Present Value of Future Benefits for all members on the valuation date, over the sum of (1) the Actuarial Value of Assets and (2) the Unfunded Frozen Actuarial Accrued Liability, is allocated as a level percentage over the expected future compensation of the membership group between the valuation date and assumed termination or retirement, and is called the Normal Cost. Section 81-2017 of the law requires that the State make monthly deposits matching the contributions of members at 11% of compensation (effective with the 1996/1997 plan year). These requirements have been interpreted as requiring a fixed normal cost rate of 22% of compensation.

The initial unfunded actuarial accrued liability is determined under the Entry Age Actuarial Cost Method, frozen as of the valuation date, and is referred to as the Unfunded Frozen Actuarial Accrued Liability. Future changes in the actuarial accrued liability due to changes in plan benefits, actuarial assumptions, or methods adjust the Unfunded Frozen Actuarial Accrued Liability. The amount of change or base, established as of the valuation date is amortized over the lesser of (i) a 25 year period, or (ii) the average expected future service of the active membership group. The Unfunded Frozen Actuarial Accrued Liability remaining at each subsequent valuation date is determined after the addition of interest and the deduction of amortization payments. If the Unfunded Actuarial Accrued Liability under the Entry Age Method is less than \$0 on any valuation date, all prior bases are considered fully amortized and the Unfunded Frozen Actuarial Accrued Liability is set equal to the unfunded actuarial accrued liability determined under the Entry Age Actuarial Cost Method.

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 future normal costs.

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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- 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.
 - (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 prior plan year compensations.

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

Projected benefits were limited by the dollar limitation required by the Internal Revenue Code Section 415 as it applies to governmental plans.

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

SUMMARY OF ACTUARIAL ASSUMPTIONS AS OF JULY 1, 2000

ECONOMIC ASSUMPTIONS

- 1. Investment Return 8% per annum, compounded annually, net of expenses.
- 2. Inflation 3.8% per annum, compounded annually.
- 3. Salary Increases Rates vary by age.
Sample rates are as follows:

Age	Rate*
25	7.00%
30	6.75%
35	6.50%
40	5.75%
45	5.30%
50	4.50%
55	4.50%
60	4.50%
65+	4.50%

*Projected pay at retirement is adjusted by 8.7% to reflect Halpin decision.

DEMOGRAPHIC ASSUMPTIONS

- 1. Mortality
 - a. Healthy lives - active and retired members 1983 Group Annuity Mortality Table.
 - b. Disabled lives 1983 Group Annuity Mortality Table.
 - c. Mortality rates and life expectancies under the mortality tables are shown below at sample ages:

Sample Age	Mortality Rate		Life Expectancy (years)	
	Males	Females	Males	Females
30	.06%	.03%	48.1	54.3
40	.12	.07	38.5	44.5
50	.39	.17	29.2	34.9
60	.92	.42	20.6	25.7
70	2.75	1.24	13.2	17.1
80	7.41	4.30	7.6	10.2

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2. Retirement

Retirement is assumed to occur upon attaining certain age and service requirements. The retirement assumption varies depending on the age of entry into the plan and years elapsed since first eligible for unreduced benefits (age 50 or greater and 25 years of service).

<i>Years Since Eligible for Unreduced Benefits</i>	<i>Retirement Rate</i>
0 - 1	.5
>1	.1

The retirement rate is 1 at:

<i>Entry Age</i>	<i>Date</i>
Entry prior to age 25	Age 55
Entry at age 25 or later	Earlier of: (1) age 57 or greater with 20 years of service, or (2) age 60.

3. Termination

Rates vary by service. Sample rates are as follows:

Select Rates by Service	
Years of Service	Rate
Less than 15	2%
15 or more	0%

NEBRASKA PUBLIC EMPLOYEES RETIREMENT SYSTEMS
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4. Disability

Rates vary by age according to OASDI Actuarial study No. 74. Sample rates are as follows:

Age	Rate
25	.15%
30	.19%
35	.26%
40	.40%
45	.62%
50	1.04%
55	1.82%
60	2.72%

OTHER ASSUMPTIONS

1. Form of Payment

Joint & Survivor Annuity.

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% per annum, compounded annually, and 3.8% per annum, compounded annually, after reaching 60% purchasing power floor benefit.